

# RedLine<sup>®</sup> Tools

PERFORMANCE MATTERS



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### General Purpose - Carbide Drills



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287

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Specials



Uncoated

AITiN Coated

### Micro-Drills, Solid Carbide, 135° Point, 12° Helix

(.0312-.0670)

| Drill Size | Decimal Equiv | FL     | OAL   | Shank ø | Uncoated |        | AITiN Coated |        |
|------------|---------------|--------|-------|---------|----------|--------|--------------|--------|
|            |               |        |       |         | Part #   | Item # | Part #       | Item # |
| 1/32       | .0312         | 0.400  | 1-1/2 | 1/8     | RDH0555  | 1      | RDH0755      | 40     |
| .80MM      | .0315         | 10.160 | 38    | 3.0     | RDH0556  | 2      | RDH0756      | 41     |
| #67        | .0320         | 0.400  | 1-1/2 | 1/8     | RDH0557  | 3      | RDH0757      | 42     |
| #66        | .0330         | 0.400  | 1-1/2 | 1/8     | RDH0558  | 4      | RDH0758      | 43     |
| .85MM      | .0335         | 10.160 | 38    | 3.0     | RDH0559  | 5      | RDH0759      | 44     |
| #65        | .0350         | 0.400  | 1-1/2 | 1/8     | RDH0560  | 6      | RDH0760      | 45     |
| .90MM      | .0354         | 10.160 | 38    | 3.0     | RDH0561  | 7      | RDH0761      | 46     |
| #64        | .0360         | 0.400  | 1-1/2 | 1/8     | RDH0562  | 8      | RDH0762      | 47     |
| #63        | .0370         | 0.400  | 1-1/2 | 1/8     | RDH0563  | 9      | RDH0763      | 48     |
| .95MM      | .0374         | 10.160 | 38    | 3.0     | RDH0564  | 10     | RDH0764      | 49     |
| #62        | .0380         | 0.400  | 1-1/2 | 1/8     | RDH0565  | 11     | RDH0765      | 50     |
| #61        | .0390         | 0.400  | 1-1/2 | 1/8     | RDH0566  | 12     | RDH0766      | 51     |
| 1.00MM     | .0394         | 10.160 | 38    | 3.0     | RDH0567  | 13     | RDH0767      | 52     |
| #60        | .0400         | 0.400  | 1-1/2 | 1/8     | RDH0568  | 14     | RDH0768      | 53     |
| #59        | .0410         | 0.400  | 1-1/2 | 1/8     | RDH0569  | 15     | RDH0769      | 54     |
| 1.05MM     | .0413         | 10.160 | 38    | 3.0     | RDH0570  | 16     | RDH0770      | 55     |
| #58        | .0420         | 0.400  | 1-1/2 | 1/8     | RDH0571  | 17     | RDH0771      | 56     |
| #57        | .0430         | 0.400  | 1-1/2 | 1/8     | RDH0572  | 18     | RDH0772      | 57     |
| 1.10MM     | .0433         | 10.160 | 38    | 3.0     | RDH0573  | 19     | RDH0773      | 58     |
| 1.15MM     | .0452         | 10.160 | 38    | 3.0     | RDH0574  | 20     | RDH0774      | 59     |
| #56        | .0465         | 0.400  | 1-1/2 | 1/8     | RDH0575  | 21     | RDH0775      | 60     |
| 3/64       | .0469         | 0.400  | 1-1/2 | 1/8     | RDH0576  | 22     | RDH0776      | 61     |
| 1.20MM     | .0472         | 10.160 | 38    | 3.0     | RDH0577  | 23     | RDH0777      | 62     |
| 1.25MM     | .0492         | 10.160 | 38    | 3.0     | RDH0578  | 24     | RDH0778      | 63     |
| 1.30MM     | .0511         | 10.160 | 38    | 3.0     | RDH0579  | 25     | RDH0779      | 64     |
| #55        | .0520         | 0.400  | 1-1/2 | 1/8     | RDH0580  | 26     | RDH0780      | 65     |
| 1.35MM     | .0531         | 10.160 | 38    | 3.0     | RDH0581  | 27     | RDH0781      | 66     |
| #54        | .0550         | 0.400  | 1-1/2 | 1/8     | RDH0582  | 28     | RDH0782      | 67     |
| 1.40MM     | .0551         | 10.160 | 38    | 3.0     | RDH0583  | 29     | RDH0783      | 68     |
| 1.45MM     | .0571         | 10.160 | 38    | 3.0     | RDH0584  | 30     | RDH0784      | 69     |
| 1.50MM     | .0590         | 10.160 | 38    | 3.0     | RDH0585  | 31     | RDH0785      | 70     |
| #53        | .0595         | 0.400  | 1-1/2 | 1/8     | RDH0586  | 32     | RDH0786      | 71     |
| 1.55MM     | .0610         | 10.160 | 38    | 3.0     | RDH0587  | 33     | RDH0787      | 72     |
| 1/16       | .0625         | 0.480  | 1-1/2 | 1/8     | RDH0588  | 34     | RDH0788      | 73     |
| 1.60MM     | .0630         | 12.190 | 38    | 3.0     | RDH0589  | 35     | RDH0789      | 74     |
| #52        | .0635         | 0.480  | 1-1/2 | 1/8     | RDH0590  | 36     | RDH0790      | 75     |
| 1.65MM     | .0649         | 12.190 | 38    | 3.0     | RDH0591  | 37     | RDH0791      | 76     |
| 1.70MM     | .0669         | 12.190 | 38    | 3.0     | RDH0592  | 38     | RDH0792      | 77     |
| #51        | .0670         | 0.480  | 1-1/2 | 1/8     | RDH0593  | 39     | RDH0793      | 78     |



Technical data found on page 256.

For detailed tolerance information, see page 256.





Specials



Uncoated

AITiN Coated



### Micro-Drills, Solid Carbide, 135° Point, 12° Helix

(.0689-.1094)

| Drill Size | Decimal Equiv | FL     | OAL   | Shank ø | Uncoated |        | AITiN Coated |        |
|------------|---------------|--------|-------|---------|----------|--------|--------------|--------|
|            |               |        |       |         | Part #   | Item # | Part #       | Item # |
| 1.75MM     | .0689         | 12.190 | 38    | 3.0     | RDH0594  | 1      | RDH0794      | 40     |
| #50        | .0700         | 0.480  | 1-1/2 | 1/8     | RDH0595  | 2      | RDH0795      | 41     |
| 1.80MM     | .0708         | 12.190 | 38    | 3.0     | RDH0596  | 3      | RDH0796      | 42     |
| 1.85MM     | .0728         | 12.190 | 38    | 3.0     | RDH0597  | 4      | RDH0797      | 43     |
| #49        | .0730         | 0.480  | 1-1/2 | 1/8     | RDH0598  | 5      | RDH0798      | 44     |
| 1.90MM     | .0748         | 12.190 | 38    | 3.0     | RDH0599  | 6      | RDH0799      | 45     |
| #48        | .0760         | 0.480  | 1-1/2 | 1/8     | RDH0600  | 7      | RDH0800      | 46     |
| 1.95MM     | .0767         | 12.190 | 38    | 3.0     | RDH0601  | 8      | RDH0801      | 47     |
| 5/64       | .0781         | 0.480  | 1-1/2 | 1/8     | RDH0602  | 9      | RDH0802      | 48     |
| #47        | .0785         | 0.480  | 1-1/2 | 1/8     | RDH0603  | 10     | RDH0803      | 49     |
| 2.00MM     | .0787         | 12.190 | 38    | 3.0     | RDH0604  | 11     | RDH0804      | 50     |
| 2.05MM     | .0807         | 12.190 | 38    | 3.0     | RDH0605  | 12     | RDH0805      | 51     |
| #46        | .0810         | 0.480  | 1-1/2 | 1/8     | RDH0606  | 13     | RDH0806      | 52     |
| #45        | .0820         | 0.480  | 1-1/2 | 1/8     | RDH0607  | 14     | RDH0807      | 53     |
| 2.10MM     | .0827         | 12.190 | 38    | 3.0     | RDH0608  | 15     | RDH0808      | 54     |
| 2.15MM     | .0846         | 12.190 | 38    | 3.0     | RDH0609  | 16     | RDH0809      | 55     |
| #44        | .0860         | 0.480  | 1-1/2 | 1/8     | RDH0610  | 17     | RDH0810      | 56     |
| 2.20MM     | .0866         | 12.190 | 38    | 3.0     | RDH0611  | 18     | RDH0811      | 57     |
| 2.25MM     | .0886         | 12.190 | 38    | 3.0     | RDH0612  | 19     | RDH0812      | 58     |
| #43        | .0890         | 0.480  | 1-1/2 | 1/8     | RDH0613  | 20     | RDH0813      | 59     |
| 2.30MM     | .0906         | 12.190 | 38    | 3.0     | RDH0614  | 21     | RDH0814      | 60     |
| 2.35MM     | .0925         | 12.190 | 38    | 3.0     | RDH0615  | 22     | RDH0815      | 61     |
| #42        | .0935         | 0.480  | 1-1/2 | 1/8     | RDH0616  | 23     | RDH0816      | 62     |
| 3/32       | .0938         | 0.480  | 1-1/2 | 1/8     | RDH0617  | 24     | RDH0817      | 63     |
| 2.40MM     | .0945         | 12.190 | 38    | 3.0     | RDH0618  | 25     | RDH0818      | 64     |
| #41        | .0960         | 0.480  | 1-1/2 | 1/8     | RDH0619  | 26     | RDH0819      | 65     |
| 2.45MM     | .0965         | 12.190 | 38    | 3.0     | RDH0620  | 27     | RDH0820      | 66     |
| #40        | .0980         | 0.480  | 1-1/2 | 1/8     | RDH0621  | 28     | RDH0821      | 67     |
| 2.50MM     | .0984         | 12.190 | 38    | 3.0     | RDH0622  | 29     | RDH0822      | 68     |
| #39        | .0995         | 0.480  | 1-1/2 | 1/8     | RDH0623  | 30     | RDH0823      | 69     |
| 2.55MM     | .1004         | 12.190 | 38    | 3.0     | RDH0624  | 31     | RDH0824      | 70     |
| #38        | .1015         | 0.480  | 1-1/2 | 1/8     | RDH0625  | 32     | RDH0825      | 71     |
| 2.60MM     | .1024         | 12.190 | 38    | 3.0     | RDH0626  | 33     | RDH0826      | 72     |
| #37        | .1040         | 0.480  | 1-1/2 | 1/8     | RDH0627  | 34     | RDH0827      | 73     |
| 2.65MM     | .1043         | 12.190 | 38    | 3.0     | RDH0628  | 35     | RDH0828      | 74     |
| 2.70MM     | .1063         | 12.190 | 38    | 3.0     | RDH0629  | 36     | RDH0829      | 75     |
| #36        | .1065         | 0.480  | 1-1/2 | 1/8     | RDH0630  | 37     | RDH0830      | 76     |
| 2.75MM     | .1083         | 12.190 | 38    | 3.0     | RDH0631  | 38     | RDH0831      | 77     |
| 7/64       | .1094         | 0.480  | 1-1/2 | 1/8     | RDH0632  | 39     | RDH0832      | 78     |



For detailed tolerance information, see page 256.



Technical data found on page 256.





Specials



Uncoated

AlTiN Coated



### Micro-Drills, Solid Carbide, 135° Point, 12° Helix

(.1100-.1250)

| Drill Size | Decimal Equiv | FL     | OAL   | Shank $\varnothing$ | Uncoated |        | AlTiN Coated |        |
|------------|---------------|--------|-------|---------------------|----------|--------|--------------|--------|
|            |               |        |       |                     | Part #   | Item # | Part #       | Item # |
| #35        | .1100         | 0.480  | 1-1/2 | 1/8                 | RDH0633  | 1      | RDH0833      | 12     |
| 2.80MM     | .1102         | 12.190 | 38    | 3.0                 | RDH0634  | 2      | RDH0834      | 13     |
| #34        | .1110         | 0.480  | 1-1/2 | 1/8                 | RDH0635  | 3      | RDH0835      | 14     |
| 2.85MM     | .1122         | 12.190 | 38    | 3.0                 | RDH0636  | 4      | RDH0836      | 15     |
| #33        | .1130         | 0.480  | 1-1/2 | 1/8                 | RDH0637  | 5      | RDH0837      | 16     |
| 2.90MM     | .1142         | 12.190 | 38    | 3.0                 | RDH0638  | 6      | RDH0838      | 17     |
| #32        | .1160         | 0.480  | 1-1/2 | 1/8                 | RDH0639  | 7      | RDH0839      | 18     |
| 2.95MM     | .1161         | 12.190 | 38    | 3.0                 | RDH0640  | 8      | RDH0840      | 19     |
| 3.00MM     | .1181         | 12.190 | 38    | 3.0                 | RDH0641  | 9      | RDH0841      | 20     |
| #31        | .1200         | 0.480  | 1-1/2 | 1/8                 | RDH0642  | 10     | RDH0842      | 21     |
| 1/8        | .1250         | 0.480  | 1-1/2 | 1/8                 | RDH0643  | 11     | RDH0843      | 22     |



Technical data found on page 256.

For detailed tolerance information, see page 256.





Specials



AITiN Coated

### Multi-Material, Solid Carbide, 142° Point, 3X Dia., 30° Helix (0.0984-.2165)

| Drill Size | Decimal Equiv | FL    | Drill Depth | OAL   | Shk ø | AITiN Coated |        |
|------------|---------------|-------|-------------|-------|-------|--------------|--------|
|            |               |       |             |       |       | Part #       | Item # |
| 2.5MM      | .0984         | 14    | 11          | 43    | 2.5   | RDH1021      | 1      |
| 2.9MM      | .1142         | 16    | 12          | 46    | 2.9   | RDH1024      | 2      |
| 3.0MM      | .1181         | 16    | 13          | 57    | 3.0   | RDH1026      | 3      |
| #31        | .1200         | 0.750 | .600        | 2.250 | 1/8   | RDH1028      | 4      |
| 3.1MM      | .1220         | 22    | 18          | 63    | 4.0   | RDH1030      | 5      |
| 1/8        | .1250         | 0.750 | .600        | 2.250 | 1/8   | RDH1032      | 6      |
| 3.2MM      | .1260         | 22    | 18          | 63    | 4.0   | RDH1034      | 7      |
| #30        | .1285         | 0.875 | .700        | 2.500 | 5/32  | RDH1036      | 8      |
| 3.3MM      | .1299         | 22    | 18          | 63    | 4.0   | RDH1038      | 9      |
| 3.4MM      | .1339         | 22    | 18          | 63    | 4.0   | RDH1040      | 10     |
| #29        | .1360         | 0.875 | .700        | 2.500 | 5/32  | RDH1042      | 11     |
| 3.5MM      | .1378         | 22    | 18          | 63    | 4.0   | RDH1044      | 12     |
| 9/64       | .1406         | 0.875 | .700        | 2.500 | 5/32  | RDH1046      | 13     |
| 3.6MM      | .1417         | 22    | 18          | 63    | 4.0   | RDH1048      | 14     |
| 3.7MM      | .1457         | 22    | 18          | 63    | 4.0   | RDH1050      | 15     |
| 3.8MM      | .1496         | 22    | 18          | 63    | 4.0   | RDH1052      | 16     |
| #24        | .1520         | 0.875 | .700        | 2.5   | 5/32  | RDH1054      | 17     |
| 3.9MM      | .1535         | 22    | 18          | 63    | 4.0   | RDH1056      | 18     |
| 5/32       | .1562         | 0.875 | .700        | 2.500 | 5/32  | RDH1058      | 19     |
| 4.0MM      | .1575         | 22    | 18          | 63    | 4.0   | RDH1060      | 20     |
| #21        | .1590         | 1.000 | .800        | 2.500 | 3/16  | RDH1062      | 21     |
| 4.1MM      | .1614         | 26    | 21          | 63    | 5.0   | RDH1064      | 22     |
| 4.2MM      | .1654         | 26    | 21          | 63    | 5.0   | RDH1066      | 23     |
| 4.3MM      | .1693         | 26    | 21          | 63    | 5.0   | RDH1068      | 24     |
| 11/64      | .1719         | 1.000 | .800        | 2.500 | 3/16  | RDH1070      | 25     |
| 4.4MM      | .1732         | 26    | 21          | 63    | 5.0   | RDH1072      | 26     |
| 4.5MM      | .1772         | 26    | 21          | 63    | 5.0   | RDH1074      | 27     |
| 4.6MM      | .1811         | 26    | 21          | 63    | 5.0   | RDH1076      | 28     |
| 4.7MM      | .1850         | 26    | 21          | 63    | 5.0   | RDH1078      | 29     |
| 3/16       | .1875         | 1.000 | .800        | 2.500 | 3/16  | RDH1080      | 30     |
| 4.8MM      | .1889         | 26    | 21          | 63    | 5.0   | RDH1082      | 31     |
| 4.9MM      | .1929         | 26    | 21          | 63    | 5.0   | RDH1084      | 32     |
| 5.0MM      | .1968         | 26    | 21          | 63    | 5.0   | RDH1086      | 33     |
| 5.1MM      | .2008         | 30    | 24          | 76    | 6.0   | RDH1088      | 34     |
| 13/64      | .2031         | 1.125 | .900        | 3.000 | 15/64 | RDH1090      | 35     |
| 5.2MM      | .2047         | 30    | 24          | 76    | 6.0   | RDH1092      | 36     |
| 5.3MM      | .2087         | 30    | 24          | 76    | 6.0   | RDH1094      | 37     |
| 5.4MM      | .2126         | 30    | 24          | 76    | 6.0   | RDH1096      | 38     |
| 5.5MM      | .2165         | 30    | 24          | 76    | 6.0   | RDH1098      | 39     |



| Tolerances | Drill ø | Shank ø |
|------------|---------|---------|
| All Sizes  | h7      | h6      |

For detailed tolerance information, see page 257.



Technical data found on page 257.





Specials



AlTiN Coated



### Multi-Material, Solid Carbide, 142° Point, 3X Dia., 30° Helix (2187-.3268)

| Drill Size | Decimal Equiv | FL    | Drill Depth | OAL   | Shk ø | AlTiN Coated |        |
|------------|---------------|-------|-------------|-------|-------|--------------|--------|
|            |               |       |             |       |       | Part #       | Item # |
| 7/32       | .2187         | 1.125 | .900        | 3.000 | 15/64 | RDH1100      | 1      |
| #2         | .2210         | 1.125 | .900        | 3.000 | 15/64 | RDH1102      | 2      |
| 5.7MM      | .2244         | 30    | 24          | 76    | 6.0   | RDH1104      | 3      |
| 5.8MM      | .2283         | 30    | 24          | 76    | 6.0   | RDH1106      | 4      |
| 5.9MM      | .2323         | 30    | 24          | 76    | 6.0   | RDH1108      | 5      |
| 15/64      | .2344         | 1.125 | .900        | 3.000 | 15/64 | RDH1110      | 6      |
| 6.0MM      | .2362         | 30    | 24          | 76    | 6.0   | RDH1112      | 7      |
| 6.1MM      | .2402         | 35    | 28          | 82    | 8.0   | RDH1114      | 8      |
| C          | .2420         | 1.250 | 1.000       | 3.000 | 1/4   | RDH1116      | 9      |
| 6.2MM      | .2441         | 35    | 28          | 82    | 8.0   | RDH1118      | 10     |
| D          | .2460         | 1.250 | 1.000       | 3.000 | 1/4   | RDH1120      | 11     |
| 6.3MM      | .2480         | 35    | 28          | 82    | 8.0   | RDH1122      | 12     |
| 1/4        | .2500         | 1.250 | 1.000       | 3.000 | 1/4   | RDH1124      | 13     |
| 6.4MM      | .2520         | 35    | 28          | 82    | 8.0   | RDH1126      | 14     |
| 6.5MM      | .2559         | 35    | 28          | 82    | 8.0   | RDH1128      | 15     |
| F          | .2570         | 1.375 | 1.100       | 3.250 | 5/16  | RDH1130      | 16     |
| 6.6MM      | .2598         | 35    | 28          | 82    | 8.0   | RDH1132      | 17     |
| G          | .2610         | 1.375 | 1.100       | 3.250 | 5/16  | RDH1134      | 18     |
| 6.7MM      | .2638         | 35    | 28          | 82    | 8.0   | RDH1136      | 19     |
| 17/64      | .2656         | 1.375 | 1.100       | 3.250 | 5/16  | RDH1138      | 20     |
| 6.8MM      | .2677         | 35    | 28          | 82    | 8.0   | RDH1140      | 21     |
| 6.9MM      | .2717         | 35    | 28          | 82    | 8.0   | RDH1142      | 22     |
| 7.0MM      | .2756         | 35    | 28          | 82    | 8.0   | RDH1144      | 23     |
| 7.1MM      | .2795         | 38    | 31          | 82    | 8.0   | RDH1146      | 24     |
| 9/32       | .2812         | 1.500 | 1.200       | 3.250 | 5/16  | RDH1148      | 25     |
| 7.2MM      | .2835         | 38    | 31          | 82    | 8.0   | RDH1150      | 26     |
| 7.3MM      | .2874         | 38    | 31          | 82    | 8.0   | RDH1152      | 27     |
| 7.4MM      | .2913         | 38    | 31          | 82    | 8.0   | RDH1154      | 28     |
| 7.5MM      | .2953         | 38    | 31          | 82    | 8.0   | RDH1156      | 29     |
| 19/64      | .2969         | 1.500 | 1.200       | 3.250 | 5/16  | RDH1158      | 30     |
| 7.6MM      | .2992         | 38    | 31          | 82    | 8.0   | RDH1160      | 31     |
| 7.7MM      | .3031         | 38    | 31          | 82    | 8.0   | RDH1162      | 32     |
| 7.8MM      | .3071         | 38    | 31          | 82    | 8.0   | RDH1164      | 33     |
| 7.9MM      | .3110         | 38    | 31          | 82    | 8.0   | RDH1166      | 34     |
| 5/16       | .3125         | 1.500 | 1.200       | 3.250 | 5/16  | RDH1168      | 35     |
| 8.0MM      | .3150         | 38    | 31          | 82    | 8.0   | RDH1170      | 36     |
| 8.1MM      | .3189         | 43    | 35          | 89    | 10.0  | RDH1172      | 37     |
| 8.2MM      | .3228         | 43    | 35          | 89    | 10.0  | RDH1174      | 38     |
| 8.3MM      | .3268         | 43    | 35          | 89    | 10.0  | RDH1176      | 39     |



Technical data found on page 257.

| Tolerances | Drill ø | Shank ø |
|------------|---------|---------|
| All Sizes  | h7      | h6      |

For detailed tolerance information, see page 257.







Specials



AlTiN Coated



### Multi-Material, Solid Carbide, 142° Point, 3X Dia., 30° Helix (S3281-.4409)

| Drill Size | Decimal Equiv | FL    | Drill Depth | OAL   | Shk ø | AlTiN Coated |        |
|------------|---------------|-------|-------------|-------|-------|--------------|--------|
|            |               |       |             |       |       | Part #       | Item # |
| 21/64      | .3281         | 1.687 | 1.350       | 3.500 | 25/64 | RDH1178      | 1      |
| 8.4MM      | .3307         | 43    | 35          | 89    | 10.0  | RDH1180      | 2      |
| Q          | .3320         | 1.687 | 1.350       | 3.500 | 25/64 | RDH1182      | 3      |
| 8.5MM      | .3346         | 43    | 35          | 89    | 10.0  | RDH1184      | 4      |
| 8.6MM      | .3386         | 43    | 35          | 89    | 10.0  | RDH1186      | 5      |
| 8.7MM      | .3425         | 43    | 35          | 89    | 10.0  | RDH1188      | 6      |
| 11/32      | .3438         | 1.687 | 1.350       | 3.500 | 25/64 | RDH1190      | 7      |
| 8.8MM      | .3465         | 43    | 35          | 89    | 10.0  | RDH1192      | 8      |
| 8.9MM      | .3504         | 43    | 35          | 89    | 10.0  | RDH1194      | 9      |
| 9.0MM      | .3543         | 43    | 35          | 89    | 10.0  | RDH1196      | 10     |
| 9.1MM      | .3583         | 43    | 35          | 89    | 10.0  | RDH1198      | 11     |
| 23/64      | .3594         | 1.687 | 1.350       | 3.500 | 25/64 | RDH1200      | 12     |
| 9.2MM      | .3622         | 43    | 35          | 89    | 10.0  | RDH1202      | 13     |
| 9.25MM     | .3642         | 43    | 35          | 89    | 10.0  | RDH1204      | 14     |
| 9.3MM      | .3661         | 43    | 35          | 89    | 10.0  | RDH1206      | 15     |
| 9.4MM      | .3701         | 43    | 35          | 89    | 10.0  | RDH1208      | 16     |
| 9.5MM      | .3740         | 43    | 35          | 89    | 10.0  | RDH1210      | 17     |
| 3/8        | .3750         | 1.687 | 1.350       | 3.500 | 25/64 | RDH1212      | 18     |
| 9.6MM      | .3780         | 43    | 35          | 89    | 10.0  | RDH1214      | 19     |
| 9.7MM      | .3819         | 43    | 35          | 89    | 10.0  | RDH1216      | 20     |
| 9.8MM      | .3858         | 43    | 35          | 89    | 10.0  | RDH1218      | 21     |
| 9.9MM      | .3898         | 43    | 35          | 89    | 10.0  | RDH1220      | 22     |
| 25/64      | .3906         | 1.687 | 1.350       | 3.500 | 25/64 | RDH1222      | 23     |
| 10.0MM     | .3937         | 43    | 35          | 89    | 10.0  | RDH1224      | 24     |
| 10.1MM     | .3976         | 51    | 41          | 101   | 12.0  | RDH1226      | 25     |
| 10.2MM     | .4016         | 51    | 41          | 101   | 12.0  | RDH1228      | 26     |
| 10.3MM     | .4055         | 51    | 41          | 101   | 12.0  | RDH1230      | 27     |
| 13/32      | .4062         | 2.000 | 1.600       | 4.000 | 15/32 | RDH1232      | 28     |
| 10.4MM     | .4094         | 51    | 41          | 101   | 12.0  | RDH1234      | 29     |
| 10.5MM     | .4134         | 51    | 41          | 101   | 12.0  | RDH1236      | 30     |
| 10.6MM     | .4173         | 51    | 41          | 101   | 12.0  | RDH1238      | 31     |
| 10.7MM     | .4213         | 51    | 41          | 101   | 12.0  | RDH1240      | 32     |
| 27/64      | .4219         | 2.000 | 1.600       | 4.000 | 15/32 | RDH1242      | 33     |
| 10.8MM     | .4252         | 51    | 41          | 101   | 12.0  | RDH1244      | 34     |
| 10.9MM     | .4291         | 51    | 41          | 101   | 12.0  | RDH1246      | 35     |
| 11.0MM     | .4331         | 51    | 41          | 101   | 12.0  | RDH1248      | 36     |
| 11.1MM     | .4370         | 51    | 41          | 101   | 12.0  | RDH1250      | 37     |
| 7/16       | .4375         | 2.000 | 1.600       | 4.000 | 15/32 | RDH1252      | 38     |
| 11.2MM     | .4409         | 51    | 41          | 101   | 12.0  | RDH1254      | 39     |



| Tolerances | Drill ø | Shank ø |
|------------|---------|---------|
| All Sizes  | h7      | h6      |

For detailed tolerance information, see page 257.



Technical data found on page 257.





Specials



AlTiN Coated



### Multi-Material, Solid Carbide, 142° Point, 3X Dia., 30° Helix (1.4449-.6875)

| Drill Size | Decimal Equiv | FL    | Drill Depth | OAL   | Shk ø | AlTiN Coated |        |
|------------|---------------|-------|-------------|-------|-------|--------------|--------|
|            |               |       |             |       |       | Part #       | Item # |
| 11.3MM     | .4449         | 51    | 41          | 101   | 12.0  | RDH1256      | 1      |
| 11.4MM     | .4488         | 51    | 41          | 101   | 12.0  | RDH1258      | 2      |
| 11.5MM     | .4527         | 51    | 41          | 101   | 12.0  | RDH1260      | 3      |
| 11.6MM     | .4567         | 51    | 41          | 101   | 12.0  | RDH1262      | 4      |
| 11.7MM     | .4606         | 51    | 41          | 101   | 12.0  | RDH1264      | 5      |
| 11.8MM     | .4646         | 51    | 41          | 101   | 12.0  | RDH1266      | 6      |
| 11.9MM     | .4685         | 51    | 41          | 101   | 12.0  | RDH1268      | 7      |
| 15/32      | .4688         | 2.000 | 1.600       | 4.000 | 15/32 | RDH1270      | 8      |
| 12.0MM     | .4724         | 51    | 41          | 101   | 12.0  | RDH1272      | 9      |
| 12.1MM     | .4764         | 54    | 43          | 107   | 14.0  | RDH1274      | 10     |
| 31/64      | .4844         | 2.000 | 1.600       | 4.000 | 1/2   | RDH1276      | 11     |
| 12.5MM     | .4921         | 54    | 43          | 107   | 14.0  | RDH1278      | 12     |
| 1/2        | .5000         | 2.000 | 1.600       | 4.000 | 1/2   | RDH1280      | 13     |
| 12.8MM     | .5039         | 54    | 43          | 107   | 14.0  | RDH1282      | 14     |
| 12.83MM    | .5051         | 54    | 43          | 107   | 14.0  | RDH1284      | 15     |
| 12.9MM     | .5079         | 54    | 43          | 107   | 14.0  | RDH1286      | 16     |
| 13.0MM     | .5118         | 54    | 43          | 107   | 14.0  | RDH1288      | 17     |
| 33/64      | .5156         | 2.125 | 1.700       | 4.250 | 35/64 | RDH1290      | 18     |
| 17/32      | .5312         | 2.125 | 1.700       | 4.250 | 35/64 | RDH1292      | 19     |
| 13.5MM     | .5315         | 54    | 43          | 107   | 14.0  | RDH1294      | 20     |
| 13.7MM     | .5394         | 54    | 43          | 107   | 14.0  | RDH1296      | 21     |
| 35/64      | .5469         | 2.125 | 1.700       | 4.250 | 35/64 | RDH1298      | 22     |
| 14.0MM     | .5512         | 54    | 43          | 107   | 14.0  | RDH1300      | 23     |
| 9/16       | .5625         | 2.375 | 1.900       | 4.625 | 5/8   | RDH1302      | 24     |
| 14.5MM     | .5709         | 60    | 48          | 117   | 16.0  | RDH1304      | 25     |
| 14.7MM     | .5787         | 60    | 48          | 117   | 16.0  | RDH1306      | 26     |
| 15.0MM     | .5905         | 60    | 48          | 117   | 16.0  | RDH1308      | 27     |
| 19/32      | .5938         | 2.375 | 1.900       | 4.625 | 5/8   | RDH1310      | 28     |
| 15.3MM     | .6024         | 60    | 48          | 117   | 16.0  | RDH1312      | 29     |
| 15.5MM     | .6102         | 60    | 48          | 117   | 16.0  | RDH1314      | 30     |
| 15.7MM     | .6181         | 60    | 48          | 117   | 16.0  | RDH1316      | 31     |
| 5/8        | .6250         | 2.375 | 1.900       | 4.625 | 5/8   | RDH1318      | 32     |
| 16.0MM     | .6299         | 60    | 48          | 117   | 16.0  | RDH1320      | 33     |
| 16.08MM    | .6331         | 63    | 51          | 122   | 18.0  | RDH1322      | 34     |
| 16.3MM     | .6417         | 63    | 51          | 122   | 18.0  | RDH1323      | 35     |
| 16.5MM     | .6496         | 63    | 51          | 122   | 18.0  | RDH1324      | 36     |
| 21/32      | .6562         | 2.500 | 2.000       | 4.810 | 45/64 | RDH1325      | 37     |
| 17.0MM     | .6693         | 63    | 51          | 122   | 18.0  | RDH1326      | 38     |
| 11/16      | .6875         | 2.500 | 2.000       | 4.810 | 45/64 | RDH1327      | 39     |



Technical data found on page 257.

| Tolerances | Drill ø | Shank ø |
|------------|---------|---------|
| All Sizes  | h7      | h6      |

For detailed tolerance information, see page 257.





Specials



AITiN Coated



### Multi-Material, Solid Carbide, 142° Point, 3X Dia., 30° Helix (.6890-.7874)

| Drill Size | Decimal Equiv | FL    | Drill Depth | OAL   | Shk ø | AITiN Coated |        |
|------------|---------------|-------|-------------|-------|-------|--------------|--------|
|            |               |       |             |       |       | Part #       | Item # |
| 17.5MM     | .6890         | 63    | 51          | 122   | 18.0  | RDH1328      | 1      |
| 18.0MM     | .7087         | 63    | 51          | 122   | 18.0  | RDH1329      | 2      |
| 18.5MM     | .7283         | 70    | 56          | 133   | 20.0  | RDH1330      | 3      |
| 3/4        | .7500         | 2.750 | 2.200       | 5.250 | 3/4   | RDH1331      | 4      |
| 19.16MM    | .7543         | 70    | 56          | 133   | 20.0  | RDH1332      | 5      |
| 19.25MM    | .7579         | 70    | 56          | 133   | 20.0  | RDH1333      | 6      |
| 19.3MM     | .7598         | 70    | 56          | 133   | 20.0  | RDH1334      | 7      |
| 19.5MM     | .7677         | 70    | 56          | 133   | 20.0  | RDH1335      | 8      |
| 20.0MM     | .7874         | 70    | 56          | 133   | 20.0  | RDH1336      | 9      |

Carbide Drills

| Tolerances | Drill ø | Shank ø |
|------------|---------|---------|
| All Sizes  | h7      | h6      |

For detailed tolerance information, see page 257.



Technical data found on page 257.





Specials



AlTiN Coated

### Multi-Material, Solid Carbide, 142° Point, 5X Dia., 30° Helix (0.0156-.1535)

| Drill Size | Decimal Equiv | FL    | Drill Depth | OAL   | Shk ø | AlTiN Coated |        |
|------------|---------------|-------|-------------|-------|-------|--------------|--------|
|            |               |       |             |       |       | Part #       | Item # |
| 1/64       | .0156         | 3/16  | .1406       | 1.500 | 1/64  | RDH1000      | 1      |
| .5MM       | .0197         | 6     | 5           | 26    | .5    | RDH1001      | 2      |
| .6MM       | .0236         | 7     | 5           | 26    | .6    | RDH1002      | 3      |
| .65MM      | .0256         | 8     | 6           | 26    | .65   | RDH1003      | 4      |
| 1/32       | .0312         | 0.375 | .2812       | 1.500 | 1/32  | RDH1004      | 5      |
| .95MM      | .0374         | 11    | 8           | 32    | .95   | RDH1005      | 6      |
| 1.0MM      | .0394         | 12    | 9           | 34    | 1.0   | RDH1006      | 7      |
| 1.05MM     | .0413         | 12    | 9           | 34    | 1.05  | RDH1007      | 8      |
| 3/64       | .0469         | 0.750 | .5625       | 1.500 | 3/64  | RDH1008      | 9      |
| 1.25MM     | .0492         | 16    | 12          | 38    | 1.25  | RDH1009      | 10     |
| 1.5MM      | .0590         | 18    | 14          | 40    | 1.5   | RDH1010      | 11     |
| 1/16       | .0625         | 0.750 | .5625       | 1.500 | 1/16  | RDH1011      | 12     |
| 1.6MM      | .0630         | 20    | 15          | 43    | 1.6   | RDH1012      | 13     |
| 1.8MM      | .0708         | 22    | 17          | 46    | 1.8   | RDH1013      | 14     |
| 1.9MM      | .0748         | 22    | 17          | 46    | 1.9   | RDH1014      | 15     |
| 5/64       | .0781         | 0.875 | .6562       | 1.750 | 5/64  | RDH1015      | 16     |
| 2.0MM      | .0787         | 24    | 18          | 49    | 2.0   | RDH1016      | 17     |
| 2.05MM     | .0807         | 24    | 18          | 49    | 2.05  | RDH1017      | 18     |
| 2.3MM      | .0906         | 27    | 20          | 53    | 2.3   | RDH1018      | 19     |
| 3/32       | .0938         | 1     | .7500       | 2     | 3/32  | RDH1019      | 20     |
| 2.4MM      | .0945         | 30    | 23          | 57    | 2.4   | RDH1020      | 21     |
| 7/64       | .1094         | 1.250 | .9375       | 2.250 | 7/64  | RDH1023      | 22     |
| 2.9MM      | .1142         | 33    | 25          | 61    | 2.9   | RDH1025      | 23     |
| 3.0MM      | .1181         | 24    | 19          | 63    | 3.0   | RDH1027      | 24     |
| #31        | .1200         | 1.125 | .900        | 2.500 | 1/8   | RDH1029      | 25     |
| 3.1MM      | .1220         | 32    | 26          | 69    | 4.0   | RDH1031      | 26     |
| 1/8        | .1250         | 1.125 | .900        | 2.500 | 1/8   | RDH1033      | 27     |
| 3.2MM      | .1260         | 32    | 26          | 69    | 4.0   | RDH1035      | 28     |
| #30        | .1285         | 1.260 | 1.000       | 2.750 | 5/32  | RDH1037      | 29     |
| 3.3MM      | .1299         | 32    | 26          | 69    | 4.0   | RDH1039      | 30     |
| 3.4MM      | .1339         | 32    | 26          | 69    | 4.0   | RDH1041      | 31     |
| #29        | .1360         | 1.260 | 1.000       | 2.750 | 5/32  | RDH1043      | 32     |
| 3.5MM      | .1378         | 32    | 26          | 69    | 4.0   | RDH1045      | 33     |
| 9/64       | .1406         | 1.260 | 1.000       | 2.750 | 5/32  | RDH1047      | 34     |
| 3.6MM      | .1417         | 32    | 26          | 69    | 4.0   | RDH1049      | 35     |
| 3.7MM      | .1457         | 32    | 26          | 69    | 4.0   | RDH1051      | 36     |
| 3.8MM      | .1496         | 32    | 26          | 69    | 4.0   | RDH1053      | 37     |
| #24        | .1520         | 1.260 | 1.000       | 2.750 | 5/32  | RDH1055      | 38     |
| 3.9MM      | .1535         | 32    | 26          | 69    | 4.0   | RDH1057      | 39     |



Technical data found on page 257.

| Tolerances | Drill ø | Shank ø |
|------------|---------|---------|
| All Sizes  | h7      | h6      |

For detailed tolerance information, see page 257.





Specials



AlTiN Coated



### Multi-Material, Solid Carbide, 142° Point, 5X Dia., 30° Helix (1562-.2610)

| Drill Size | Decimal Equiv | FL    | Drill Depth | OAL   | Shk ø | AlTiN Coated |        |
|------------|---------------|-------|-------------|-------|-------|--------------|--------|
|            |               |       |             |       |       | Part #       | Item # |
| 5/32       | .1562         | 1.260 | 1.000       | 2.750 | 5/32  | RDH1059      | 1      |
| 4.0MM      | .1575         | 32    | 26          | 69    | 4.0   | RDH1061      | 2      |
| #21        | .1590         | 1.500 | 1.200       | 3.150 | 3/16  | RDH1063      | 3      |
| 4.1MM      | .1614         | 38    | 30          | 80    | 5.0   | RDH1065      | 4      |
| 4.2MM      | .1654         | 38    | 30          | 80    | 5.0   | RDH1067      | 5      |
| 4.3MM      | .1693         | 38    | 30          | 80    | 5.0   | RDH1069      | 6      |
| 11/64      | .1719         | 1.500 | 1.200       | 3.150 | 3/16  | RDH1071      | 7      |
| 4.4MM      | .1732         | 38    | 30          | 80    | 5.0   | RDH1073      | 8      |
| 4.5MM      | .1772         | 38    | 30          | 80    | 5.0   | RDH1075      | 9      |
| 4.6MM      | .1811         | 38    | 30          | 80    | 5.0   | RDH1077      | 10     |
| 4.7MM      | .1850         | 38    | 30          | 80    | 5.0   | RDH1079      | 11     |
| 3/16       | .1875         | 1.500 | 1.200       | 3.150 | 3/16  | RDH1081      | 12     |
| 4.8MM      | .1889         | 38    | 30          | 80    | 5.0   | RDH1083      | 13     |
| 4.9MM      | .1929         | 38    | 30          | 80    | 5.0   | RDH1085      | 14     |
| 5.0MM      | .1968         | 38    | 30          | 80    | 5.0   | RDH1087      | 15     |
| 5.1MM      | .2008         | 40    | 32          | 82    | 6.0   | RDH1089      | 16     |
| 13/64      | .2031         | 1.580 | 1.260       | 3.230 | 15/64 | RDH1091      | 17     |
| 5.2MM      | .2047         | 40    | 32          | 82    | 6.0   | RDH1093      | 18     |
| 5.3MM      | .2087         | 40    | 32          | 82    | 6.0   | RDH1095      | 19     |
| 5.4MM      | .2126         | 40    | 32          | 82    | 6.0   | RDH1097      | 20     |
| 5.5MM      | .2165         | 40    | 32          | 82    | 6.0   | RDH1099      | 21     |
| 7/32       | .2187         | 1.580 | 1.260       | 3.230 | 15/64 | RDH1101      | 22     |
| #2         | .2210         | 1.580 | 1.260       | 3.230 | 15/64 | RDH1103      | 23     |
| 5.7MM      | .2244         | 40    | 32          | 82    | 6.0   | RDH1105      | 24     |
| 5.8MM      | .2283         | 40    | 32          | 82    | 6.0   | RDH1107      | 25     |
| 5.9MM      | .2323         | 40    | 32          | 82    | 6.0   | RDH1109      | 26     |
| 15/64      | .2344         | 1.580 | 1.260       | 3.230 | 15/64 | RDH1111      | 27     |
| 6.0MM      | .2362         | 40    | 32          | 82    | 6.0   | RDH1113      | 28     |
| 6.1MM      | .2402         | 48    | 38          | 91    | 8.0   | RDH1115      | 29     |
| C          | .2420         | 1.740 | 1.390       | 3.250 | 1/4   | RDH1117      | 30     |
| 6.2MM      | .2441         | 48    | 38          | 91    | 8.0   | RDH1119      | 31     |
| D          | .2460         | 1.740 | 1.390       | 3.250 | 1/4   | RDH1121      | 32     |
| 6.3MM      | .2480         | 48    | 38          | 91    | 8.0   | RDH1123      | 33     |
| 1/4        | .2500         | 1.740 | 1.390       | 3.250 | 1/4   | RDH1125      | 34     |
| 6.4MM      | .2520         | 48    | 38          | 91    | 8.0   | RDH1127      | 35     |
| 6.5MM      | .2559         | 48    | 38          | 91    | 8.0   | RDH1129      | 36     |
| F          | .2570         | 1.890 | 1.510       | 3.580 | 5/16  | RDH1131      | 37     |
| 6.6MM      | .2598         | 48    | 38          | 91    | 8.0   | RDH1133      | 38     |
| G          | .2610         | 1.890 | 1.510       | 3.580 | 5/16  | RDH1135      | 39     |



| Tolerances | Drill ø | Shank ø |
|------------|---------|---------|
| All Sizes  | h7      | h6      |

For detailed tolerance information, see page 257.



Technical data found on page 257.





Specials



AlTiN Coated



### Multi-Material, Solid Carbide, 142° Point, 5X Dia., 30° Helix (1/2"-.3750)

| Drill Size | Decimal Equiv | FL    | Drill Depth | OAL   | Shk ø | AlTiN Coated |        |
|------------|---------------|-------|-------------|-------|-------|--------------|--------|
|            |               |       |             |       |       | Part #       | Item # |
| 6.7MM      | .2638         | 48    | 38          | 91    | 8.0   | RDH1137      | 1      |
| 17/64      | .2656         | 1.890 | 1.510       | 3.580 | 5/16  | RDH1139      | 2      |
| 6.8MM      | .2677         | 48    | 38          | 91    | 8.0   | RDH1141      | 3      |
| 6.9MM      | .2717         | 48    | 38          | 91    | 8.0   | RDH1143      | 4      |
| 7.0MM      | .2756         | 48    | 38          | 91    | 8.0   | RDH1145      | 5      |
| 7.1MM      | .2795         | 48    | 38          | 91    | 8.0   | RDH1147      | 6      |
| 9/32       | .2812         | 1.890 | 1.510       | 3.580 | 5/16  | RDH1149      | 7      |
| 7.2MM      | .2835         | 48    | 38          | 91    | 8.0   | RDH1151      | 8      |
| 7.3MM      | .2874         | 48    | 38          | 91    | 8.0   | RDH1153      | 9      |
| 7.4MM      | .2913         | 48    | 38          | 91    | 8.0   | RDH1155      | 10     |
| 7.5MM      | .2953         | 48    | 38          | 91    | 8.0   | RDH1157      | 11     |
| 19/64      | .2969         | 1.890 | 1.510       | 3.580 | 5/16  | RDH1159      | 12     |
| 7.6MM      | .2992         | 48    | 38          | 91    | 8.0   | RDH1161      | 13     |
| 7.7MM      | .3031         | 48    | 38          | 91    | 8.0   | RDH1163      | 14     |
| 7.8MM      | .3071         | 48    | 38          | 91    | 8.0   | RDH1165      | 15     |
| 7.9MM      | .3110         | 48    | 38          | 91    | 8.0   | RDH1167      | 16     |
| 5/16       | .3125         | 1.890 | 1.510       | 3.580 | 5/16  | RDH1169      | 17     |
| 8.0MM      | .3150         | 48    | 38          | 91    | 8.0   | RDH1171      | 18     |
| 8.1MM      | .3189         | 55    | 44          | 103   | 10.0  | RDH1173      | 19     |
| 8.2MM      | .3228         | 55    | 44          | 103   | 10.0  | RDH1175      | 20     |
| 8.3MM      | .3268         | 55    | 44          | 103   | 10.0  | RDH1177      | 21     |
| 21/64      | .3281         | 2.170 | 1.740       | 4.060 | 25/64 | RDH1179      | 22     |
| 8.4MM      | .3307         | 55    | 44          | 103   | 10.0  | RDH1181      | 23     |
| Q          | .3320         | 2.170 | 1.740       | 4.060 | 25/64 | RDH1183      | 24     |
| 8.5MM      | .3346         | 55    | 44          | 103   | 10.0  | RDH1185      | 25     |
| 8.6MM      | .3386         | 55    | 44          | 103   | 10.0  | RDH1187      | 26     |
| 8.7MM      | .3425         | 55    | 44          | 103   | 10.0  | RDH1189      | 27     |
| 11/32      | .3438         | 2.170 | 1.740       | 4.060 | 25/64 | RDH1191      | 28     |
| 8.8MM      | .3465         | 55    | 44          | 103   | 10.0  | RDH1193      | 29     |
| 8.9MM      | .3504         | 55    | 44          | 103   | 10.0  | RDH1195      | 30     |
| 9.0MM      | .3543         | 55    | 44          | 103   | 10.0  | RDH1197      | 31     |
| 9.1MM      | .3583         | 55    | 44          | 103   | 10.0  | RDH1199      | 32     |
| 23/64      | .3594         | 2.170 | 1.740       | 4.060 | 25/64 | RDH1201      | 33     |
| 9.2MM      | .3622         | 55    | 44          | 103   | 10.0  | RDH1203      | 34     |
| 9.25MM     | .3642         | 55    | 44          | 103   | 10.0  | RDH1205      | 35     |
| 9.3MM      | .3661         | 55    | 44          | 103   | 10.0  | RDH1207      | 36     |
| 9.4MM      | .3701         | 55    | 44          | 103   | 10.0  | RDH1209      | 37     |
| 9.5MM      | .3740         | 55    | 44          | 103   | 10.0  | RDH1211      | 38     |
| 3/8        | .3750         | 2.170 | 1.740       | 4.060 | 25/64 | RDH1213      | 39     |



Technical data found on page 257.

| Tolerances | Drill ø | Shank ø |
|------------|---------|---------|
| All Sizes  | h7      | h6      |

For detailed tolerance information, see page 257.





Specials



AlTiN Coated



### Multi-Material, Solid Carbide, 142° Point, 5X Dia., 30° Helix (S3780-.5156)

| Drill Size | Decimal Equiv | FL    | Drill Depth | OAL   | Shk ø | AlTiN Coated |        |
|------------|---------------|-------|-------------|-------|-------|--------------|--------|
|            |               |       |             |       |       | Part #       | Item # |
| 9.6MM      | .3780         | 55    | 44          | 103   | 10.0  | RDH1215      | 1      |
| 9.7MM      | .3819         | 55    | 44          | 103   | 10.0  | RDH1217      | 2      |
| 9.8MM      | .3858         | 55    | 44          | 103   | 10.0  | RDH1219      | 3      |
| 9.9MM      | .3898         | 55    | 44          | 103   | 10.0  | RDH1221      | 4      |
| 25/64      | .3906         | 2.170 | 1.740       | 4.060 | 25/64 | RDH1223      | 5      |
| 10.0MM     | .3937         | 55    | 44          | 103   | 10.0  | RDH1225      | 6      |
| 10.1MM     | .3976         | 60    | 48          | 120   | 12.0  | RDH1227      | 7      |
| 10.2MM     | .4016         | 60    | 48          | 120   | 12.0  | RDH1229      | 8      |
| 10.3MM     | .4055         | 60    | 48          | 120   | 12.0  | RDH1231      | 9      |
| 13/32      | .4062         | 2.360 | 1.890       | 4.720 | 15/32 | RDH1233      | 10     |
| 10.4MM     | .4094         | 60    | 48          | 120   | 12.0  | RDH1235      | 11     |
| 10.5MM     | .4134         | 60    | 48          | 120   | 12.0  | RDH1237      | 12     |
| 10.6MM     | .4173         | 60    | 48          | 120   | 12.0  | RDH1239      | 13     |
| 10.7MM     | .4213         | 60    | 48          | 120   | 12.0  | RDH1241      | 14     |
| 27/64      | .4219         | 2.360 | 1.890       | 4.720 | 15/32 | RDH1243      | 15     |
| 10.8MM     | .4252         | 60    | 48          | 120   | 12.0  | RDH1245      | 16     |
| 10.9MM     | .4291         | 60    | 48          | 120   | 12.0  | RDH1247      | 17     |
| 11.0MM     | .4331         | 60    | 48          | 120   | 12.0  | RDH1249      | 18     |
| 11.1MM     | .4370         | 66    | 53          | 120   | 12.0  | RDH1251      | 19     |
| 7/16       | .4375         | 2.600 | 2.080       | 4.720 | 15/32 | RDH1253      | 20     |
| 11.2MM     | .4409         | 66    | 53          | 120   | 12.0  | RDH1255      | 21     |
| 11.3MM     | .4449         | 66    | 53          | 120   | 12.0  | RDH1257      | 22     |
| 11.4MM     | .4488         | 66    | 53          | 120   | 12.0  | RDH1259      | 23     |
| 11.5MM     | .4527         | 66    | 53          | 120   | 12.0  | RDH1261      | 24     |
| 11.6MM     | .4567         | 66    | 53          | 120   | 12.0  | RDH1263      | 25     |
| 11.7MM     | .4606         | 66    | 53          | 120   | 12.0  | RDH1265      | 26     |
| 11.8MM     | .4646         | 66    | 53          | 120   | 12.0  | RDH1267      | 27     |
| 11.9MM     | .4685         | 66    | 53          | 120   | 12.0  | RDH1269      | 28     |
| 15/32      | .4688         | 2.600 | 2.080       | 4.720 | 15/32 | RDH1271      | 29     |
| 12.0MM     | .4724         | 66    | 53          | 120   | 12.0  | RDH1273      | 30     |
| 12.1MM     | .4764         | 72    | 58          | 126   | 14.0  | RDH1275      | 31     |
| 31/64      | .4844         | 2.830 | 2.260       | 4.750 | 1/2   | RDH1277      | 32     |
| 12.5MM     | .4921         | 72    | 58          | 126   | 14.0  | RDH1279      | 33     |
| 1/2        | .5000         | 2.830 | 2.260       | 4.750 | 1/2   | RDH1281      | 34     |
| 12.8MM     | .5039         | 72    | 58          | 126   | 14.0  | RDH1283      | 35     |
| 12.83MM    | .5051         | 72    | 58          | 126   | 14.0  | RDH1285      | 36     |
| 12.9MM     | .5079         | 72    | 58          | 126   | 14.0  | RDH1287      | 37     |
| 13.0MM     | .5118         | 72    | 58          | 126   | 14.0  | RDH1289      | 38     |
| 33/64      | .5156         | 3.030 | 2.420       | 5.280 | 35/64 | RDH1291      | 39     |



| Tolerances | Drill ø | Shank ø |
|------------|---------|---------|
| All Sizes  | h7      | h6      |

For detailed tolerance information, see page 257.



Technical data found on page 257.





Specials



AlTiN Coated



### Multi-Material, Solid Carbide, 142° Point, 5X Dia., 30° Helix (5312-.6299)

| Drill Size | Decimal Equiv | FL    | Drill Depth | OAL   | Shk ø | AlTiN Coated |        |
|------------|---------------|-------|-------------|-------|-------|--------------|--------|
|            |               |       |             |       |       | Part #       | Item # |
| 17/32      | .5312         | 3.030 | 2.420       | 5.280 | 35/64 | RDH1293      | 1      |
| 13.5MM     | .5315         | 77    | 62          | 134   | 14.0  | RDH1295      | 2      |
| 13.7MM     | .5394         | 77    | 62          | 134   | 14.0  | RDH1297      | 3      |
| 35/64      | .5469         | 3.030 | 2.420       | 5.280 | 35/64 | RDH1299      | 4      |
| 14.0MM     | .5512         | 77    | 62          | 134   | 14.0  | RDH1301      | 5      |
| 9/16       | .5625         | 3.150 | 2.520       | 5.510 | 5/8   | RDH1303      | 6      |
| 14.5MM     | .5709         | 80    | 64          | 140   | 16.0  | RDH1305      | 7      |
| 14.7MM     | .5787         | 80    | 64          | 140   | 16.0  | RDH1307      | 8      |
| 15.0MM     | .5905         | 80    | 64          | 140   | 16.0  | RDH1309      | 9      |
| 19/32      | .5938         | 3.230 | 2.580       | 5.750 | 5/8   | RDH1311      | 10     |
| 15.3MM     | .6024         | 82    | 66          | 146   | 16.0  | RDH1313      | 11     |
| 15.5MM     | .6102         | 82    | 66          | 146   | 16.0  | RDH1315      | 12     |
| 15.7MM     | .6181         | 82    | 66          | 146   | 16.0  | RDH1317      | 13     |
| 5/8        | .6250         | 3.230 | 2.580       | 5.750 | 5/8   | RDH1319      | 14     |
| 16.0MM     | .6299         | 82    | 66          | 146   | 16.0  | RDH1321      | 15     |

Carbide Drills



Technical data found on page 257.

| Tolerances | Drill ø | Shank ø |
|------------|---------|---------|
| All Sizes  | h7      | h6      |

For detailed tolerance information, see page 257.







Specials



### Multi-Material, Solid Carbide, Coolant Fed, Stub Length, 142° Point, 3X Dia., 30° Helix (1181-.2210)

| Drill Size | Decimal Equiv | FL    | Drill Depth | OAL   | Shk ø | AlTiN Coated |        |
|------------|---------------|-------|-------------|-------|-------|--------------|--------|
|            |               |       |             |       |       | Part #       | Item # |
| 3.0MM      | .1181         | 16    | 13          | 57    | 3     | RDH5147      | 1      |
| #31        | .1200         | 0.750 | 0.600       | 2.250 | 1/8   | RDH5148      | 2      |
| 3.1MM      | .1220         | 22    | 18          | 63    | 4     | RDH5149      | 3      |
| 1/8        | .1250         | 0.750 | 0.600       | 2.250 | 1/8   | RDH5150      | 4      |
| 3.2MM      | .1260         | 22    | 18          | 63    | 4     | RDH5151      | 5      |
| #30        | .1285         | 0.875 | 0.700       | 2.500 | 5/32  | RDH5005      | 6      |
| 3.3MM      | .1299         | 22    | 18          | 63    | 4     | RDH5006      | 7      |
| 3.4MM      | .1339         | 22    | 18          | 63    | 4     | RDH5007      | 8      |
| #29        | .1360         | 0.875 | 0.700       | 2.500 | 5/32  | RDH5008      | 9      |
| 3.5MM      | .1378         | 22    | 18          | 63    | 4     | RDH5009      | 10     |
| 9/64       | .1406         | 0.875 | 0.700       | 2.500 | 5/32  | RDH5010      | 11     |
| 3.6MM      | .1417         | 22    | 18          | 63    | 4     | RDH5011      | 12     |
| 3.7MM      | .1457         | 22    | 18          | 63    | 4     | RDH5012      | 13     |
| 3.8MM      | .1496         | 22    | 18          | 63    | 4     | RDH5013      | 14     |
| #24        | .1520         | 0.875 | 0.700       | 2.500 | 5/32  | RDH5014      | 15     |
| 3.9MM      | .1535         | 22    | 18          | 63    | 4     | RDH5015      | 16     |
| 5/32       | .1562         | 0.875 | 0.700       | 2.500 | 5/32  | RDH5016      | 17     |
| 4.0MM      | .1575         | 22    | 18          | 63    | 4     | RDH5017      | 18     |
| #21        | .1590         | 1     | 0.800       | 2.500 | 3/16  | RDH5018      | 19     |
| 4.1MM      | .1614         | 26    | 21          | 63    | 5     | RDH5019      | 20     |
| 4.2MM      | .1654         | 26    | 21          | 63    | 5     | RDH5020      | 21     |
| 4.3MM      | .1693         | 26    | 21          | 63    | 5     | RDH5021      | 22     |
| 11/64      | .1719         | 1     | 0.800       | 2.500 | 3/16  | RDH5022      | 23     |
| 4.4MM      | .1732         | 26    | 21          | 63    | 5     | RDH5023      | 24     |
| 4.5MM      | .1772         | 26    | 21          | 63    | 5     | RDH5024      | 25     |
| 4.6MM      | .1811         | 26    | 21          | 63    | 5     | RDH5025      | 26     |
| 4.7MM      | .1850         | 26    | 21          | 63    | 5     | RDH5026      | 27     |
| 3/16       | .1875         | 1     | 0.800       | 2.500 | 3/16  | RDH5027      | 28     |
| 4.8MM      | .1890         | 26    | 21          | 63    | 5     | RDH5028      | 29     |
| 4.9MM      | .1929         | 26    | 21          | 63    | 5     | RDH5029      | 30     |
| 5.0MM      | .1968         | 26    | 21          | 63    | 5     | RDH5030      | 31     |
| 5.1MM      | .2008         | 28    | 20          | 66    | 6     | RDH5031      | 32     |
| 13/64      | .2031         | 1.102 | 0.787       | 2.598 | 15/64 | RDH5032      | 33     |
| 5.2MM      | .2047         | 28    | 20          | 66    | 6     | RDH5033      | 34     |
| 5.3MM      | .2087         | 28    | 20          | 66    | 6     | RDH5034      | 35     |
| 5.4MM      | .2126         | 28    | 20          | 66    | 6     | RDH5035      | 36     |
| 5.5MM      | .2165         | 28    | 20          | 66    | 6     | RDH5036      | 37     |
| 7/32       | .2187         | 1.102 | 0.787       | 2.598 | 15/64 | RDH5037      | 38     |
| #2         | .2210         | 1.102 | 0.787       | 2.598 | 15/64 | RDH5038      | 39     |



| Tolerances | Drill ø | Shank ø |
|------------|---------|---------|
| All Sizes  | h7      | h6      |

For detailed tolerance information, see page 258.



Technical data found on page 258.





Specials



AlTiN Coated



### Multi-Material, Solid Carbide, Coolant Fed, Stub Length, 142° Point, 3X Dia., 30° Helix (1.2244-.3307)

| Drill Size | Decimal Equiv | FL    | Drill Depth | OAL   | Shk ø | AlTiN Coated |        |
|------------|---------------|-------|-------------|-------|-------|--------------|--------|
|            |               |       |             |       |       | Part #       | Item # |
| 5.7MM      | .2244         | 28    | 20          | 66    | 6     | RDH5039      | 1      |
| 5.8MM      | .2283         | 28    | 20          | 66    | 6     | RDH5040      | 2      |
| 5.9MM      | .2323         | 28    | 20          | 66    | 6     | RDH5041      | 3      |
| 15/64      | .2344         | 1.102 | 0.787       | 2.598 | 15/64 | RDH5042      | 4      |
| 6.0MM      | .2362         | 28    | 20          | 66    | 6     | RDH5043      | 5      |
| 6.1MM      | .2402         | 34    | 24          | 79    | 8     | RDH5044      | 6      |
| C          | .2420         | 1.339 | 0.945       | 3.110 | 1/4   | RDH5045      | 7      |
| 6.2MM      | .2441         | 34    | 24          | 79    | 8     | RDH5046      | 8      |
| D          | .2460         | 1.339 | 0.945       | 3.110 | 1/4   | RDH5047      | 9      |
| 6.3MM      | .2480         | 34    | 24          | 79    | 8     | RDH5048      | 10     |
| 1/4        | .2500         | 1.339 | 0.945       | 3.110 | 1/4   | RDH5049      | 11     |
| 6.4MM      | .2520         | 34    | 24          | 79    | 8     | RDH5050      | 12     |
| 6.5MM      | .2559         | 34    | 24          | 79    | 8     | RDH5051      | 13     |
| F          | .2570         | 1.339 | 0.945       | 3.110 | 5/16  | RDH5052      | 14     |
| 6.6MM      | .2598         | 34    | 24          | 79    | 8     | RDH5053      | 15     |
| G          | .2610         | 1.339 | 0.945       | 3.110 | 5/16  | RDH5054      | 16     |
| 6.7MM      | .2638         | 34    | 24          | 79    | 8     | RDH5055      | 17     |
| 17/64      | .2656         | 1.339 | 0.945       | 3.110 | 5/16  | RDH5056      | 18     |
| 6.8MM      | .2677         | 34    | 24          | 79    | 8     | RDH5057      | 19     |
| 6.9MM      | .2717         | 34    | 24          | 79    | 8     | RDH5058      | 20     |
| 7.0MM      | .2756         | 34    | 24          | 79    | 8     | RDH5059      | 21     |
| 7.1MM      | .2795         | 41    | 29          | 79    | 8     | RDH5060      | 22     |
| 9/32       | .2812         | 1.614 | 1.142       | 3.110 | 5/16  | RDH5061      | 23     |
| 7.2MM      | .2835         | 41    | 29          | 79    | 8     | RDH5062      | 24     |
| 7.3MM      | .2874         | 41    | 29          | 79    | 8     | RDH5063      | 25     |
| 7.4MM      | .2913         | 41    | 29          | 79    | 8     | RDH5064      | 26     |
| 7.5MM      | .2953         | 41    | 29          | 79    | 8     | RDH5065      | 27     |
| 19/64      | .2969         | 1.614 | 1.142       | 3.110 | 5/16  | RDH5066      | 28     |
| 7.6MM      | .2992         | 41    | 29          | 79    | 8     | RDH5067      | 29     |
| 7.7MM      | .3031         | 41    | 29          | 79    | 8     | RDH5068      | 30     |
| 7.8MM      | .3071         | 41    | 29          | 79    | 8     | RDH5069      | 31     |
| 7.9MM      | .3110         | 41    | 29          | 79    | 8     | RDH5070      | 32     |
| 5/16       | .3125         | 1.614 | 1.142       | 3.110 | 5/16  | RDH5071      | 33     |
| 8.0MM      | .3150         | 41    | 29          | 79    | 8     | RDH5072      | 34     |
| 8.1MM      | .3189         | 47    | 35          | 89    | 10    | RDH5073      | 35     |
| 8.2MM      | .3228         | 47    | 35          | 89    | 10    | RDH5074      | 36     |
| 8.3MM      | .3268         | 47    | 35          | 89    | 10    | RDH5075      | 37     |
| 21/64      | .3281         | 1.850 | 1.378       | 3.504 | 25/64 | RDH5076      | 38     |
| 8.4MM      | .3307         | 47    | 35          | 89    | 10    | RDH5077      | 39     |



Technical data found on page 258.

| Tolerances | Drill ø | Shank ø |
|------------|---------|---------|
| All Sizes  | h7      | h6      |

For detailed tolerance information, see page 258.





Specials



AlTiN Coated



### Multi-Material, Solid Carbide, Coolant Fed, Stub Length, 142° Point, 3X Dia., 30° Helix (3320-.4488)

| Drill Size    | Decimal Equiv | FL    | Drill Depth  | OAL   | Shk ø | AlTiN Coated   |        |
|---------------|---------------|-------|--------------|-------|-------|----------------|--------|
|               |               |       |              |       |       | Part #         | Item # |
| <b>Q</b>      | .3320         | 1.850 | <b>1.378</b> | 3.504 | 25/64 | <b>RDH5078</b> | 1      |
| <b>8.5MM</b>  | .3346         | 47    | <b>35</b>    | 89    | 10    | <b>RDH5079</b> | 2      |
| <b>8.6MM</b>  | .3386         | 47    | <b>35</b>    | 89    | 10    | <b>RDH5080</b> | 3      |
| <b>8.7MM</b>  | .3425         | 47    | <b>35</b>    | 89    | 10    | <b>RDH5081</b> | 4      |
| <b>11/32</b>  | .3438         | 1.850 | <b>1.378</b> | 3.504 | 25/64 | <b>RDH5082</b> | 5      |
| <b>8.8MM</b>  | .3465         | 47    | <b>35</b>    | 89    | 10    | <b>RDH5083</b> | 6      |
| <b>8.9MM</b>  | .3504         | 47    | <b>35</b>    | 89    | 10    | <b>RDH5084</b> | 7      |
| <b>9.0MM</b>  | .3543         | 47    | <b>35</b>    | 89    | 10    | <b>RDH5085</b> | 8      |
| <b>9.1MM</b>  | .3583         | 47    | <b>35</b>    | 89    | 10    | <b>RDH5086</b> | 9      |
| <b>23/64</b>  | .3594         | 1.850 | <b>1.378</b> | 3.504 | 25/64 | <b>RDH5087</b> | 10     |
| <b>9.2MM</b>  | .3622         | 47    | <b>35</b>    | 89    | 10    | <b>RDH5088</b> | 11     |
| <b>9.25MM</b> | .3642         | 47    | <b>35</b>    | 89    | 10    | <b>RDH5089</b> | 12     |
| <b>9.3MM</b>  | .3661         | 47    | <b>35</b>    | 89    | 10    | <b>RDH5090</b> | 13     |
| <b>9.4MM</b>  | .3701         | 47    | <b>35</b>    | 89    | 10    | <b>RDH5091</b> | 14     |
| <b>9.5MM</b>  | .3740         | 47    | <b>35</b>    | 89    | 10    | <b>RDH5092</b> | 15     |
| <b>3/8</b>    | .3750         | 1.850 | <b>1.378</b> | 3.504 | 25/64 | <b>RDH5093</b> | 16     |
| <b>9.6MM</b>  | .3780         | 47    | <b>35</b>    | 89    | 10    | <b>RDH5094</b> | 17     |
| <b>9.7MM</b>  | .3819         | 47    | <b>35</b>    | 89    | 10    | <b>RDH5095</b> | 18     |
| <b>9.8MM</b>  | .3858         | 47    | <b>35</b>    | 89    | 10    | <b>RDH5096</b> | 19     |
| <b>9.9MM</b>  | .3898         | 47    | <b>35</b>    | 89    | 10    | <b>RDH5097</b> | 20     |
| <b>25/64</b>  | .3906         | 1.850 | <b>1.378</b> | 3.504 | 25/64 | <b>RDH5098</b> | 21     |
| <b>10.0MM</b> | .3937         | 47    | <b>35</b>    | 89    | 10    | <b>RDH5099</b> | 22     |
| <b>10.1MM</b> | .3976         | 55    | <b>40</b>    | 102   | 12    | <b>RDH5100</b> | 23     |
| <b>10.2MM</b> | .4016         | 55    | <b>40</b>    | 102   | 12    | <b>RDH5101</b> | 24     |
| <b>10.3MM</b> | .4055         | 55    | <b>40</b>    | 102   | 12    | <b>RDH5102</b> | 25     |
| <b>13/32</b>  | .4062         | 2.165 | <b>1.575</b> | 4.016 | 15/32 | <b>RDH5103</b> | 26     |
| <b>10.4MM</b> | .4094         | 55    | <b>40</b>    | 102   | 12    | <b>RDH5104</b> | 27     |
| <b>10.5MM</b> | .4134         | 55    | <b>40</b>    | 102   | 12    | <b>RDH5105</b> | 28     |
| <b>10.6MM</b> | .4173         | 55    | <b>40</b>    | 102   | 12    | <b>RDH5106</b> | 29     |
| <b>10.7MM</b> | .4213         | 55    | <b>40</b>    | 102   | 12    | <b>RDH5107</b> | 30     |
| <b>27/64</b>  | .4219         | 2.165 | <b>1.575</b> | 4.016 | 15/32 | <b>RDH5108</b> | 31     |
| <b>10.8MM</b> | .4252         | 55    | <b>40</b>    | 102   | 12    | <b>RDH5109</b> | 32     |
| <b>10.9MM</b> | .4291         | 55    | <b>40</b>    | 102   | 12    | <b>RDH5110</b> | 33     |
| <b>11.0MM</b> | .4331         | 55    | <b>40</b>    | 102   | 12    | <b>RDH5111</b> | 34     |
| <b>11.1MM</b> | .4370         | 55    | <b>40</b>    | 102   | 12    | <b>RDH5112</b> | 35     |
| <b>7/16</b>   | .4375         | 2.165 | <b>1.575</b> | 4.016 | 15/32 | <b>RDH5113</b> | 36     |
| <b>11.2MM</b> | .4409         | 55    | <b>40</b>    | 102   | 12    | <b>RDH5114</b> | 37     |
| <b>11.3MM</b> | .4449         | 55    | <b>40</b>    | 102   | 12    | <b>RDH5115</b> | 38     |
| <b>11.4MM</b> | .4488         | 55    | <b>40</b>    | 102   | 12    | <b>RDH5116</b> | 39     |



| Tolerances | Drill ø | Shank ø |
|------------|---------|---------|
| All Sizes  | h7      | h6      |

For detailed tolerance information, see page 258.



Technical data found on page 258.





Specials



AlTiN Coated



### Multi-Material, Solid Carbide, Coolant Fed, Stub Length, 142° Point, 3X Dia., 30° Helix (A4527-.6299)

| Drill Size | Decimal Equiv | FL    | Drill Depth | OAL   | Shk ø | AlTiN Coated |        |
|------------|---------------|-------|-------------|-------|-------|--------------|--------|
|            |               |       |             |       |       | Part #       | Item # |
| 11.5MM     | .4527         | 55    | 40          | 102   | 12    | RDH5117      | 1      |
| 11.6MM     | .4567         | 55    | 40          | 102   | 12    | RDH5118      | 2      |
| 11.7MM     | .4606         | 55    | 40          | 102   | 12    | RDH5119      | 3      |
| 11.8MM     | .4646         | 55    | 40          | 102   | 12    | RDH5120      | 4      |
| 11.9MM     | .4685         | 55    | 40          | 102   | 12    | RDH5121      | 5      |
| 15/32      | .4688         | 2.165 | 1.575       | 4.016 | 15/32 | RDH5122      | 6      |
| 12.0MM     | .4724         | 55    | 40          | 102   | 12    | RDH5123      | 7      |
| 12.1MM     | .4764         | 60    | 43          | 107   | 14    | RDH5124      | 8      |
| 31/64      | .4844         | 2.362 | 1.693       | 4.213 | 1/2   | RDH5125      | 9      |
| 12.5MM     | .4921         | 60    | 43          | 107   | 14    | RDH5126      | 10     |
| 1/2        | .5000         | 2.362 | 1.693       | 4.213 | 1/2   | RDH5127      | 11     |
| 12.8MM     | .5039         | 60    | 43          | 107   | 14    | RDH5128      | 12     |
| 12.83MM    | .5051         | 60    | 43          | 107   | 14    | RDH5129      | 13     |
| 12.9MM     | .5079         | 60    | 43          | 107   | 14    | RDH5130      | 14     |
| 13.0MM     | .5118         | 60    | 43          | 107   | 14    | RDH5131      | 15     |
| 33/64      | .5156         | 2.362 | 1.693       | 4.213 | 35/64 | RDH5132      | 16     |
| 13.5MM     | .5315         | 60    | 43          | 107   | 14    | RDH5133      | 17     |
| 13.7MM     | .5394         | 60    | 43          | 107   | 14    | RDH5134      | 18     |
| 35/64      | .5469         | 2.362 | 1.693       | 4.213 | 35/64 | RDH5135      | 19     |
| 14.0MM     | .5512         | 60    | 43          | 107   | 14    | RDH5136      | 20     |
| 9/16       | .5625         | 2.559 | 1.772       | 4.528 | 5/8   | RDH5137      | 21     |
| 14.5MM     | .5709         | 65    | 45          | 115   | 16    | RDH5138      | 22     |
| 14.7MM     | .5787         | 65    | 45          | 115   | 16    | RDH5139      | 23     |
| 15.0MM     | .5905         | 65    | 45          | 115   | 16    | RDH5140      | 24     |
| 19/32      | .5938         | 2.559 | 1.772       | 4.528 | 5/8   | RDH5141      | 25     |
| 15.3MM     | .6024         | 65    | 45          | 115   | 16    | RDH5142      | 26     |
| 15.5MM     | .6102         | 65    | 45          | 115   | 16    | RDH5143      | 27     |
| 15.7MM     | .6181         | 65    | 45          | 115   | 16    | RDH5144      | 28     |
| 5/8        | .6250         | 2.559 | 1.772       | 4.528 | 5/8   | RDH5145      | 29     |
| 16.0MM     | .6299         | 65    | 45          | 115   | 16    | RDH5146      | 30     |

Carbide Drills



Technical data found on page 258.

| Tolerances | Drill ø | Shank ø |
|------------|---------|---------|
| All Sizes  | h7      | h6      |

For detailed tolerance information, see page 258.





Specials



### Multi-Material, Solid Carbide, Coolant Fed, Reg. Length, 142° Point, 5X Dia., 30° Helix (1181-.2210)

| Drill Size | Decimal Equiv | FL    | Drill Depth | OAL   | Shk ø | AlTiN Coated |        |
|------------|---------------|-------|-------------|-------|-------|--------------|--------|
|            |               |       |             |       |       | Part #       | Item # |
| 3.0MM      | .1181         | 24    | 19          | 75    | 3.0   | RDH2020      | 1      |
| #31        | .1200         | 1.125 | .900        | 3.000 | 1/8   | RDH2022      | 2      |
| 3.1MM      | .1220         | 32    | 26          | 80    | 4.0   | RDH2024      | 3      |
| 1/8        | .1250         | 1.125 | .900        | 3.000 | 1/8   | RDH2026      | 4      |
| 3.2MM      | .1260         | 32    | 26          | 80    | 4.0   | RDH2028      | 5      |
| #30        | .1285         | 1.260 | 1.000       | 3.150 | 5/32  | RDH2030      | 6      |
| 3.3MM      | .1299         | 32    | 26          | 80    | 4.0   | RDH2032      | 7      |
| 3.4MM      | .1339         | 32    | 26          | 80    | 4.0   | RDH2034      | 8      |
| #29        | .1360         | 1.260 | 1.000       | 3.150 | 5/32  | RDH2036      | 9      |
| 3.5MM      | .1378         | 32    | 26          | 80    | 4.0   | RDH2038      | 10     |
| 9/64       | .1406         | 1.260 | 1.000       | 3.150 | 5/32  | RDH2040      | 11     |
| 3.6MM      | .1417         | 32    | 26          | 80    | 4.0   | RDH2042      | 12     |
| 3.7MM      | .1457         | 32    | 26          | 80    | 4.0   | RDH2044      | 13     |
| 3.8MM      | .1496         | 32    | 26          | 80    | 4.0   | RDH2046      | 14     |
| #24        | .1520         | 1.260 | 1.000       | 3.150 | 5/32  | RDH2048      | 15     |
| 3.9MM      | .1535         | 32    | 26          | 80    | 4.0   | RDH2050      | 16     |
| 5/32       | .1562         | 1.260 | 1.000       | 3.150 | 5/32  | RDH2052      | 17     |
| 4.0MM      | .1575         | 32    | 26          | 80    | 4.0   | RDH2054      | 18     |
| #21        | .1590         | 1.500 | 1.200       | 3.230 | 3/16  | RDH2056      | 19     |
| 4.1MM      | .1614         | 38    | 30          | 82    | 5.0   | RDH2058      | 20     |
| 4.2MM      | .1654         | 38    | 30          | 82    | 5.0   | RDH2060      | 21     |
| 4.3MM      | .1693         | 38    | 30          | 82    | 5.0   | RDH2062      | 22     |
| 11/64      | .1719         | 1.500 | 1.200       | 3.230 | 3/16  | RDH2064      | 23     |
| 4.4MM      | .1732         | 38    | 30          | 82    | 5.0   | RDH2066      | 24     |
| 4.5MM      | .1772         | 38    | 30          | 82    | 5.0   | RDH2068      | 25     |
| 4.6MM      | .1811         | 38    | 30          | 82    | 5.0   | RDH2070      | 26     |
| 4.7MM      | .1850         | 38    | 30          | 82    | 5.0   | RDH2072      | 27     |
| 3/16       | .1875         | 1.500 | 1.200       | 3.230 | 3/16  | RDH2074      | 28     |
| 4.8MM      | .1890         | 38    | 30          | 82    | 5.0   | RDH2076      | 29     |
| 4.9MM      | .1929         | 38    | 30          | 82    | 5.0   | RDH2078      | 30     |
| 5.0MM      | .1968         | 38    | 30          | 82    | 5.0   | RDH2080      | 31     |
| 5.1MM      | .2008         | 40    | 32          | 82    | 6.0   | RDH2082      | 32     |
| 13/64      | .2031         | 1.580 | 1.260       | 3.230 | 15/64 | RDH2084      | 33     |
| 5.2MM      | .2047         | 40    | 32          | 82    | 6.0   | RDH2086      | 34     |
| 5.3MM      | .2087         | 40    | 32          | 82    | 6.0   | RDH2088      | 35     |
| 5.4MM      | .2126         | 40    | 32          | 82    | 6.0   | RDH2090      | 36     |
| 5.5MM      | .2165         | 40    | 32          | 82    | 6.0   | RDH2092      | 37     |
| 7/32       | .2187         | 1.580 | 1.260       | 3.230 | 15/64 | RDH2094      | 38     |
| #2         | .2210         | 1.580 | 1.260       | 3.230 | 15/64 | RDH2096      | 39     |



| Tolerances | Drill ø | Shank ø |
|------------|---------|---------|
| All Sizes  | h7      | h6      |

For detailed tolerance information, see page 258.



Technical data found on page 258.





Specials



AlTiN Coated



### Multi-Material, Solid Carbide, Coolant Fed, Reg. Length, 142° Point, 5X Dia., 30° Helix (RDH2098-.3307)

| Drill Size | Decimal Equiv | FL    | Drill Depth | OAL   | Shk ø | AlTiN Coated |        |
|------------|---------------|-------|-------------|-------|-------|--------------|--------|
|            |               |       |             |       |       | Part #       | Item # |
| 5.7MM      | .2244         | 40    | 32          | 82    | 6.0   | RDH2098      | 1      |
| 5.8MM      | .2283         | 40    | 32          | 82    | 6.0   | RDH2100      | 2      |
| 5.9MM      | .2323         | 40    | 32          | 82    | 6.0   | RDH2102      | 3      |
| 15/64      | .2344         | 1.580 | 1.260       | 3.230 | 15/64 | RDH2104      | 4      |
| 6.0MM      | .2362         | 40    | 32          | 82    | 6.0   | RDH2106      | 5      |
| 6.1MM      | .2402         | 48    | 38          | 91    | 8.0   | RDH2108      | 6      |
| C          | .2420         | 1.740 | 1.390       | 3.300 | 1/4   | RDH2110      | 7      |
| 6.2MM      | .2441         | 48    | 38          | 91    | 8.0   | RDH2112      | 8      |
| D          | .2460         | 1.740 | 1.390       | 3.300 | 1/4   | RDH2114      | 9      |
| 6.3MM      | .2480         | 48    | 38          | 91    | 8.0   | RDH2116      | 10     |
| 1/4        | .2500         | 1.740 | 1.390       | 3.300 | 1/4   | RDH2118      | 11     |
| 6.4MM      | .2520         | 48    | 38          | 91    | 8.0   | RDH2120      | 12     |
| 6.5MM      | .2559         | 48    | 38          | 91    | 8.0   | RDH2122      | 13     |
| F          | .2570         | 1.890 | 1.510       | 3.580 | 5/16  | RDH2124      | 14     |
| 6.6MM      | .2598         | 48    | 38          | 91    | 8.0   | RDH2126      | 15     |
| G          | .2610         | 1.890 | 1.510       | 3.580 | 5/16  | RDH2128      | 16     |
| 6.7MM      | .2638         | 48    | 38          | 91    | 8.0   | RDH2130      | 17     |
| 17/64      | .2656         | 1.890 | 1.510       | 3.580 | 5/16  | RDH2132      | 18     |
| 6.8MM      | .2677         | 48    | 38          | 91    | 8.0   | RDH2134      | 19     |
| 6.9MM      | .2717         | 48    | 38          | 91    | 8.0   | RDH2136      | 20     |
| 7.0MM      | .2756         | 48    | 38          | 91    | 8.0   | RDH2138      | 21     |
| 7.1MM      | .2795         | 48    | 38          | 91    | 8.0   | RDH2140      | 22     |
| 9/32       | .2812         | 1.890 | 1.510       | 3.580 | 5/16  | RDH2142      | 23     |
| 7.2MM      | .2835         | 48    | 38          | 91    | 8.0   | RDH2144      | 24     |
| 7.3MM      | .2874         | 48    | 38          | 91    | 8.0   | RDH2146      | 25     |
| 7.4MM      | .2913         | 48    | 38          | 91    | 8.0   | RDH2148      | 26     |
| 7.5MM      | .2953         | 48    | 38          | 91    | 8.0   | RDH2150      | 27     |
| 19/64      | .2969         | 1.890 | 1.510       | 3.580 | 5/16  | RDH2152      | 28     |
| 7.6MM      | .2992         | 48    | 38          | 91    | 8.0   | RDH2154      | 29     |
| 7.7MM      | .3031         | 48    | 38          | 91    | 8.0   | RDH2156      | 30     |
| 7.8MM      | .3071         | 48    | 38          | 91    | 8.0   | RDH2158      | 31     |
| 7.9MM      | .3110         | 48    | 38          | 91    | 8.0   | RDH2160      | 32     |
| 5/16       | .3125         | 1.890 | 1.510       | 3.580 | 5/16  | RDH2162      | 33     |
| 8.0MM      | .3150         | 48    | 38          | 91    | 8.0   | RDH2164      | 34     |
| 8.1MM      | .3189         | 55    | 44          | 103   | 10.0  | RDH2166      | 35     |
| 8.2MM      | .3228         | 55    | 44          | 103   | 10.0  | RDH2168      | 36     |
| 8.3MM      | .3268         | 55    | 44          | 103   | 10.0  | RDH2170      | 37     |
| 21/64      | .3281         | 2.170 | 1.740       | 4.060 | 25/64 | RDH2172      | 38     |
| 8.4MM      | .3307         | 55    | 44          | 103   | 10.0  | RDH2174      | 39     |



Technical data found on page 258.

| Tolerances | Drill ø | Shank ø |
|------------|---------|---------|
| All Sizes  | h7      | h6      |

For detailed tolerance information, see page 258.





Specials



### Multi-Material, Solid Carbide, Coolant Fed, Reg. Length, 142° Point, 5X Dia., 30° Helix ( .3320-.4488)

| Drill Size | Decimal Equiv | FL    | Drill Depth | OAL   | Shk $\phi$ | AlTiN Coated |        |
|------------|---------------|-------|-------------|-------|------------|--------------|--------|
|            |               |       |             |       |            | Part #       | Item # |
| Q          | .3320         | 2.170 | 1.740       | 4.060 | 25/64      | RDH2176      | 1      |
| 8.5MM      | .3346         | 55    | 44          | 103   | 10.0       | RDH2178      | 2      |
| 8.6MM      | .3386         | 55    | 44          | 103   | 10.0       | RDH2180      | 3      |
| 8.7MM      | .3425         | 55    | 44          | 103   | 10.0       | RDH2182      | 4      |
| 11/32      | .3438         | 2.170 | 1.740       | 4.060 | 25/64      | RDH2184      | 5      |
| 8.8MM      | .3465         | 55    | 44          | 103   | 10.0       | RDH2186      | 6      |
| 8.9MM      | .3504         | 55    | 44          | 103   | 10.0       | RDH2188      | 7      |
| 9.0MM      | .3543         | 55    | 44          | 103   | 10.0       | RDH2190      | 8      |
| 9.1MM      | .3583         | 55    | 44          | 103   | 10.0       | RDH2192      | 9      |
| 23/64      | .3594         | 2.170 | 1.740       | 4.060 | 25/64      | RDH2194      | 10     |
| 9.2MM      | .3622         | 55    | 44          | 103   | 10.0       | RDH2196      | 11     |
| 9.25MM     | .3642         | 55    | 44          | 103   | 10.0       | RDH2198      | 12     |
| 9.3MM      | .3661         | 55    | 44          | 103   | 10.0       | RDH2200      | 13     |
| 9.4MM      | .3701         | 55    | 44          | 103   | 10.0       | RDH2202      | 14     |
| 9.5MM      | .3740         | 55    | 44          | 103   | 10.0       | RDH2204      | 15     |
| 3/8        | .3750         | 2.170 | 1.740       | 4.060 | 25/64      | RDH2206      | 16     |
| 9.6MM      | .3780         | 55    | 44          | 103   | 10.0       | RDH2208      | 17     |
| 9.7MM      | .3819         | 55    | 44          | 103   | 10.0       | RDH2210      | 18     |
| 9.8MM      | .3858         | 55    | 44          | 103   | 10.0       | RDH2212      | 19     |
| 9.9MM      | .3898         | 55    | 44          | 103   | 10.0       | RDH2214      | 20     |
| 25/64      | .3906         | 2.170 | 1.740       | 4.060 | 25/64      | RDH2216      | 21     |
| 10.0MM     | .3937         | 55    | 44          | 103   | 10.0       | RDH2218      | 22     |
| 10.1MM     | .3976         | 60    | 48          | 120   | 12.0       | RDH2220      | 23     |
| 10.2MM     | .4016         | 60    | 48          | 120   | 12.0       | RDH2222      | 24     |
| 10.3MM     | .4055         | 60    | 48          | 120   | 12.0       | RDH2224      | 25     |
| 13/32      | .4062         | 2.360 | 1.890       | 4.720 | 15/32      | RDH2226      | 26     |
| 10.4MM     | .4094         | 60    | 48          | 120   | 12.0       | RDH2228      | 27     |
| 10.5MM     | .4134         | 60    | 48          | 120   | 12.0       | RDH2230      | 28     |
| 10.6MM     | .4173         | 60    | 48          | 120   | 12.0       | RDH2232      | 29     |
| 10.7MM     | .4213         | 60    | 48          | 120   | 12.0       | RDH2234      | 30     |
| 27/64      | .4219         | 2.360 | 1.890       | 4.720 | 15/32      | RDH2236      | 31     |
| 10.8MM     | .4252         | 60    | 48          | 120   | 12.0       | RDH2238      | 32     |
| 10.9MM     | .4291         | 60    | 48          | 120   | 12.0       | RDH2240      | 33     |
| 11.0MM     | .4331         | 60    | 48          | 120   | 12.0       | RDH2242      | 34     |
| 11.1MM     | .4370         | 66    | 53          | 120   | 12.0       | RDH2244      | 35     |
| 7/16       | .4375         | 2.600 | 2.080       | 4.720 | 15/32      | RDH2246      | 36     |
| 11.2MM     | .4409         | 66    | 53          | 120   | 12.0       | RDH2248      | 37     |
| 11.3MM     | .4449         | 66    | 53          | 120   | 12.0       | RDH2250      | 38     |
| 11.4MM     | .4488         | 66    | 53          | 120   | 12.0       | RDH2252      | 39     |



| Tolerances | Drill $\phi$ | Shank $\phi$ |
|------------|--------------|--------------|
| All Sizes  | h7           | h6           |

For detailed tolerance information, see page 258.



Technical data found on page 258.





Specials



AlTiN Coated



### Multi-Material, Solid Carbide, Coolant Fed, Reg. Length, 142° Point, 5X Dia., 30° Helix (3) (.4527-.7087)

| Drill Size | Decimal Equiv | FL    | Drill Depth | OAL   | Shk ø | AlTiN Coated |        |
|------------|---------------|-------|-------------|-------|-------|--------------|--------|
|            |               |       |             |       |       | Part #       | Item # |
| 11.5MM     | .4527         | 66    | 53          | 120   | 12.0  | RDH2254      | 1      |
| 11.6MM     | .4567         | 66    | 53          | 120   | 12.0  | RDH2256      | 2      |
| 11.7MM     | .4606         | 66    | 53          | 120   | 12.0  | RDH2258      | 3      |
| 11.8MM     | .4646         | 66    | 53          | 120   | 12.0  | RDH2260      | 4      |
| 11.9MM     | .4685         | 66    | 53          | 120   | 12.0  | RDH2262      | 5      |
| 15/32      | .4688         | 2.600 | 2.080       | 4.720 | 15/32 | RDH2264      | 6      |
| 12.0MM     | .4724         | 66    | 53          | 120   | 12.0  | RDH2266      | 7      |
| 12.1MM     | .4764         | 72    | 58          | 126   | 14.0  | RDH2268      | 8      |
| 31/64      | .4844         | 2.830 | 2.260       | 4.750 | 1/2   | RDH2269      | 9      |
| 12.5MM     | .4921         | 72    | 58          | 126   | 14.0  | RDH2273      | 10     |
| 1/2        | .5000         | 2.830 | 2.260       | 4.750 | 1/2   | RDH2271      | 11     |
| 12.8MM     | .5039         | 72    | 58          | 126   | 14.0  | RDH2274      | 12     |
| 12.83MM    | .5051         | 72    | 58          | 126   | 14.0  | RDH2275      | 13     |
| 12.9MM     | .5079         | 72    | 58          | 126   | 14.0  | RDH2276      | 14     |
| 13.0MM     | .5118         | 72    | 58          | 126   | 14.0  | RDH2277      | 15     |
| 33/64      | .5156         | 3.030 | 2.420       | 5.280 | 35/64 | RDH2278      | 16     |
| 17/32      | .5312         | 3.030 | 2.420       | 5.280 | 35/64 | RDH2279      | 17     |
| 13.5MM     | .5315         | 77    | 62          | 134   | 14.0  | RDH2280      | 18     |
| 13.7MM     | .5394         | 77    | 62          | 134   | 14.0  | RDH2281      | 19     |
| 35/64      | .5469         | 3.030 | 2.420       | 5.280 | 35/64 | RDH2282      | 20     |
| 14.0MM     | .5512         | 77    | 62          | 134   | 14.0  | RDH2283      | 21     |
| 9/16       | .5625         | 3.150 | 2.520       | 5.510 | 5/8   | RDH2284      | 22     |
| 14.5MM     | .5709         | 80    | 64          | 140   | 16.0  | RDH2285      | 23     |
| 14.7MM     | .5787         | 80    | 64          | 140   | 16.0  | RDH2286      | 24     |
| 15.0MM     | .5905         | 80    | 64          | 140   | 16.0  | RDH2287      | 25     |
| 19/32      | .5938         | 3.230 | 2.580       | 5.750 | 5/8   | RDH2288      | 26     |
| 15.3MM     | .6024         | 82    | 66          | 146   | 16.0  | RDH2289      | 27     |
| 15.5MM     | .6102         | 82    | 66          | 146   | 16.0  | RDH2290      | 28     |
| 15.7MM     | .6181         | 82    | 66          | 146   | 16.0  | RDH2291      | 29     |
| 5/8        | .6250         | 3.230 | 2.580       | 5.750 | 5/8   | RDH2292      | 30     |
| 16.0MM     | .6299         | 82    | 66          | 146   | 16.0  | RDH2293      | 31     |
| 16.08MM    | .6331         | 90    | 72          | 158   | 18.0  | RDH2294      | 32     |
| 16.3MM     | .6417         | 90    | 72          | 158   | 18.0  | RDH2295      | 33     |
| 16.5MM     | .6496         | 90    | 72          | 158   | 18.0  | RDH2296      | 34     |
| 21/32      | .6562         | 3.540 | 2.830       | 6.220 | 45/64 | RDH2297      | 35     |
| 17.0MM     | .6693         | 90    | 72          | 158   | 18.0  | RDH2298      | 36     |
| 11/16      | .6875         | 3.740 | 3.000       | 6.220 | 45/64 | RDH2299      | 37     |
| 17.5MM     | .6890         | 95    | 76          | 158   | 18.0  | RDH2300      | 38     |
| 18.0MM     | .7087         | 95    | 76          | 158   | 18.0  | RDH2301      | 39     |



Technical data found on page 258.

| Tolerances | Drill ø | Shank ø |
|------------|---------|---------|
| All Sizes  | h7      | h6      |

For detailed tolerance information, see page 258.







Specials



AlTiN Coated



### Multi-Material, Solid Carbide, Coolant Fed, Reg. Length, 142° Point, 5X Dia., 30° Helix (7283-.7874)

| Drill Size | Decimal Equiv | FL    | Drill Depth | OAL   | Shk ø | AlTiN Coated |        |
|------------|---------------|-------|-------------|-------|-------|--------------|--------|
|            |               |       |             |       |       | Part #       | Item # |
| 18.5MM     | .7283         | 100   | 80          | 160   | 20.0  | RDH2302      | 1      |
| 3/4        | .7500         | 3.940 | 3.150       | 6.300 | 3/4   | RDH2303      | 2      |
| 19.16MM    | .7543         | 100   | 80          | 160   | 20.0  | RDH2304      | 3      |
| 19.25MM    | .7579         | 100   | 80          | 160   | 20.0  | RDH2305      | 4      |
| 19.3MM     | .7598         | 100   | 80          | 160   | 20.0  | RDH2306      | 5      |
| 19.5MM     | .7677         | 100   | 80          | 160   | 20.0  | RDH2307      | 6      |
| 20.0MM     | .7874         | 100   | 80          | 160   | 20.0  | RDH2308      | 7      |

Carbide Drills

| Tolerances | Drill ø | Shank ø |
|------------|---------|---------|
| All Sizes  | h7      | h6      |

For detailed tolerance information, see page 258.



Technical data found on page 258.





Specials



AlTiN Coated

### Multi-Material, Solid Carbide, Coolant Fed, Long Length, 142° Point, 7X + Dia., 30° Helix (1181-.2244)

| Drill Size | Decimal Equiv | FL    | Drill Depth | OAL   | Shk ø | AlTiN Coated |        |
|------------|---------------|-------|-------------|-------|-------|--------------|--------|
|            |               |       |             |       |       | Part #       | Item # |
| 3.0MM      | .1181         | 33    | 26          | 81    | 3.0   | RDH2021      | 1      |
| #31        | .1200         | 1.500 | 1.200       | 3.500 | 1/8   | RDH2023      | 2      |
| 3.1MM      | .1220         | 44    | 35          | 92    | 4.0   | RDH2025      | 3      |
| 1/8        | .1250         | 1.500 | 1.200       | 3.500 | 1/8   | RDH2027      | 4      |
| 3.2MM      | .1260         | 44    | 35          | 92    | 4.0   | RDH2029      | 5      |
| #30        | .1285         | 1.750 | 1.400       | 3.625 | 5/32  | RDH2031      | 6      |
| 3.3MM      | .1299         | 44    | 35          | 92    | 4.0   | RDH2033      | 7      |
| 3.4MM      | .1339         | 44    | 35          | 92    | 4.0   | RDH2035      | 8      |
| #29        | .1360         | 1.750 | 1.400       | 3.625 | 5/32  | RDH2037      | 9      |
| 3.5MM      | .1378         | 44    | 35          | 92    | 4.0   | RDH2039      | 10     |
| 9/64       | .1406         | 1.750 | 1.400       | 3.625 | 5/32  | RDH2041      | 11     |
| 3.6MM      | .1417         | 44    | 35          | 92    | 4.0   | RDH2043      | 12     |
| 3.7MM      | .1457         | 44    | 35          | 92    | 4.0   | RDH2045      | 13     |
| 3.8MM      | .1496         | 44    | 35          | 92    | 4.0   | RDH2047      | 14     |
| #24        | .1520         | 1.750 | 1.400       | 3.625 | 5/32  | RDH2049      | 15     |
| 3.9MM      | .1535         | 44    | 35          | 92    | 4.0   | RDH2051      | 16     |
| 5/32       | .1562         | 1.750 | 1.400       | 3.625 | 5/32  | RDH2053      | 17     |
| 4.0MM      | .1575         | 44    | 35          | 92    | 4.0   | RDH2055      | 18     |
| #21        | .1590         | 1.750 | 1.400       | 3.940 | 3/16  | RDH2057      | 19     |
| 4.1MM      | .1614         | 45    | 36          | 100   | 5.0   | RDH2059      | 20     |
| 4.2MM      | .1654         | 45    | 36          | 100   | 5.0   | RDH2061      | 21     |
| 4.3MM      | .1693         | 45    | 36          | 100   | 5.0   | RDH2063      | 22     |
| 11/64      | .1719         | 1.750 | 1.400       | 3.940 | 3/16  | RDH2065      | 23     |
| 4.4MM      | .1732         | 45    | 36          | 100   | 5.0   | RDH2067      | 24     |
| 4.5MM      | .1772         | 45    | 36          | 100   | 5.0   | RDH2069      | 25     |
| 4.6MM      | .1811         | 45    | 36          | 100   | 5.0   | RDH2071      | 26     |
| 4.7MM      | .1850         | 45    | 36          | 100   | 5.0   | RDH2073      | 27     |
| 3/16       | .1875         | 1.750 | 1.400       | 3.940 | 3/16  | RDH2075      | 28     |
| 4.8MM      | .1890         | 45    | 36          | 100   | 5.0   | RDH2077      | 29     |
| 4.9MM      | .1929         | 45    | 36          | 100   | 5.0   | RDH2079      | 30     |
| 5.0MM      | .1968         | 45    | 36          | 100   | 5.0   | RDH2081      | 31     |
| 5.1MM      | .2008         | 51    | 41          | 100   | 6.0   | RDH2083      | 32     |
| 13/64      | .2031         | 2.000 | 1.600       | 3.940 | 15/64 | RDH2085      | 33     |
| 5.2MM      | .2047         | 51    | 41          | 100   | 6.0   | RDH2087      | 34     |
| 5.3MM      | .2087         | 51    | 41          | 100   | 6.0   | RDH2089      | 35     |
| 5.4MM      | .2126         | 51    | 41          | 100   | 6.0   | RDH2091      | 36     |
| 5.5MM      | .2165         | 51    | 41          | 100   | 6.0   | RDH2093      | 37     |
| 7/32       | .2187         | 2.000 | 1.600       | 3.940 | 15/64 | RDH2095      | 38     |
| #2         | .2210         | 2.000 | 1.600       | 3.940 | 15/64 | RDH2097      | 39     |
| 5.7MM      | .2244         | 51    | 41          | 100   | 6.0   | RDH2099      | 40     |



Technical data found on page 259.

| Tolerances | Drill ø | Shank ø |
|------------|---------|---------|
| All Sizes  | h7      | h6      |

For detailed tolerance information, see page 259.





Specials



### Multi-Material, Solid Carbide, Coolant Fed, Long Length, 142° Point, 7X + Dia., 30° Helix (3) (.2283-.3320)

| Drill Size | Decimal Equiv | FL    | Drill Depth | OAL   | Shk ø | AITiN Coated |        |
|------------|---------------|-------|-------------|-------|-------|--------------|--------|
|            |               |       |             |       |       | Part #       | Item # |
| 5.8MM      | .2283         | 51    | 41          | 100   | 6.0   | RDH2101      | 1      |
| 5.9MM      | .2323         | 51    | 41          | 100   | 6.0   | RDH2103      | 2      |
| 15/64      | .2344         | 2.000 | 1.600       | 3.940 | 15/64 | RDH2105      | 3      |
| 6.0MM      | .2362         | 51    | 41          | 100   | 6.0   | RDH2107      | 4      |
| 6.1MM      | .2402         | 60    | 48          | 109   | 8.0   | RDH2109      | 5      |
| C          | .2420         | 2.250 | 1.800       | 4.310 | 1/4   | RDH2111      | 6      |
| 6.2MM      | .2441         | 60    | 48          | 109   | 8.0   | RDH2113      | 7      |
| D          | .2460         | 2.250 | 1.800       | 4.310 | 1/4   | RDH2115      | 8      |
| 6.3MM      | .2480         | 60    | 48          | 109   | 8.0   | RDH2117      | 9      |
| 1/4        | .2500         | 2.250 | 1.800       | 4.310 | 1/4   | RDH2119      | 10     |
| 6.4MM      | .2520         | 60    | 48          | 109   | 8.0   | RDH2121      | 11     |
| 6.5MM      | .2559         | 60    | 48          | 109   | 8.0   | RDH2123      | 12     |
| F          | .2570         | 2.375 | 1.900       | 4.310 | 5/16  | RDH2125      | 13     |
| 6.6MM      | .2598         | 60    | 48          | 109   | 8.0   | RDH2127      | 14     |
| G          | .2610         | 2.375 | 1.900       | 4.310 | 5/16  | RDH2129      | 15     |
| 6.7MM      | .2638         | 60    | 48          | 109   | 8.0   | RDH2131      | 16     |
| 17/64      | .2656         | 2.375 | 1.900       | 4.310 | 5/16  | RDH2133      | 17     |
| 6.8MM      | .2677         | 60    | 48          | 109   | 8.0   | RDH2135      | 18     |
| 6.9MM      | .2717         | 60    | 48          | 109   | 8.0   | RDH2137      | 19     |
| 7.0MM      | .2756         | 60    | 48          | 109   | 8.0   | RDH2139      | 20     |
| 7.1MM      | .2795         | 70    | 56          | 118   | 8.0   | RDH2141      | 21     |
| 9/32       | .2812         | 2.750 | 2.200       | 4.625 | 5/16  | RDH2143      | 22     |
| 7.2MM      | .2835         | 70    | 56          | 118   | 8.0   | RDH2145      | 23     |
| 7.3MM      | .2874         | 70    | 56          | 118   | 8.0   | RDH2147      | 24     |
| 7.4MM      | .2913         | 70    | 56          | 118   | 8.0   | RDH2149      | 25     |
| 7.5MM      | .2953         | 70    | 56          | 118   | 8.0   | RDH2151      | 26     |
| 19/64      | .2969         | 2.750 | 2.200       | 4.625 | 5/16  | RDH2153      | 27     |
| 7.6MM      | .2992         | 70    | 56          | 118   | 8.0   | RDH2155      | 28     |
| 7.7MM      | .3031         | 70    | 56          | 118   | 8.0   | RDH2157      | 29     |
| 7.8MM      | .3071         | 70    | 56          | 118   | 8.0   | RDH2159      | 30     |
| 7.9MM      | .3110         | 70    | 56          | 118   | 8.0   | RDH2161      | 31     |
| 5/16       | .3125         | 2.750 | 2.200       | 4.625 | 5/16  | RDH2163      | 32     |
| 8.0MM      | .3150         | 70    | 56          | 118   | 8.0   | RDH2165      | 33     |
| 8.1MM      | .3189         | 80    | 64          | 127   | 10.0  | RDH2167      | 34     |
| 8.2MM      | .3228         | 80    | 64          | 127   | 10.0  | RDH2169      | 35     |
| 8.3MM      | .3268         | 80    | 64          | 127   | 10.0  | RDH2171      | 36     |
| 21/64      | .3281         | 3.150 | 2.520       | 5.000 | 25/64 | RDH2173      | 37     |
| 8.4MM      | .3307         | 80    | 64          | 127   | 10.0  | RDH2175      | 38     |
| Q          | .3320         | 3.150 | 2.520       | 5.000 | 25/64 | RDH2177      | 39     |



| Tolerances | Drill ø | Shank ø |
|------------|---------|---------|
| All Sizes  | h7      | h6      |

For detailed tolerance information, see page 259.



Technical data found on page 259.





Specials



AlTiN Coated



### Multi-Material, Solid Carbide, Coolant Fed, Long Length, 142° Point, 7X + Dia., 30° Helix (3346-4527)

| Drill Size | Decimal Equiv | FL    | Drill Depth | OAL   | Shk ø | AlTiN Coated |        |
|------------|---------------|-------|-------------|-------|-------|--------------|--------|
|            |               |       |             |       |       | Part #       | Item # |
| 8.5MM      | .3346         | 80    | 64          | 127   | 10.0  | RDH2179      | 1      |
| 8.6MM      | .3386         | 80    | 64          | 127   | 10.0  | RDH2181      | 2      |
| 8.7MM      | .3425         | 80    | 64          | 127   | 10.0  | RDH2183      | 3      |
| 11/32      | .3438         | 3.150 | 2.520       | 5.000 | 25/64 | RDH2185      | 4      |
| 8.8MM      | .3465         | 80    | 64          | 127   | 10.0  | RDH2187      | 5      |
| 8.9MM      | .3504         | 80    | 64          | 127   | 10.0  | RDH2189      | 6      |
| 9.0MM      | .3543         | 80    | 64          | 127   | 10.0  | RDH2191      | 7      |
| 9.1MM      | .3583         | 85    | 68          | 136   | 10.0  | RDH2193      | 8      |
| 23/64      | .3594         | 3.340 | 2.670       | 5.312 | 25/64 | RDH2195      | 9      |
| 9.2MM      | .3622         | 85    | 68          | 136   | 10.0  | RDH2197      | 10     |
| 9.25MM     | .3642         | 85    | 68          | 136   | 10.0  | RDH2199      | 11     |
| 9.3MM      | .3661         | 85    | 68          | 136   | 10.0  | RDH2201      | 12     |
| 9.4MM      | .3701         | 85    | 68          | 136   | 10.0  | RDH2203      | 13     |
| 9.5MM      | .3740         | 85    | 68          | 136   | 10.0  | RDH2205      | 14     |
| 3/8        | .3750         | 3.340 | 2.670       | 5.312 | 25/64 | RDH2207      | 15     |
| 9.6MM      | .3780         | 85    | 68          | 136   | 10.0  | RDH2209      | 16     |
| 9.7MM      | .3819         | 85    | 68          | 136   | 10.0  | RDH2211      | 17     |
| 9.8MM      | .3858         | 85    | 68          | 136   | 10.0  | RDH2213      | 18     |
| 9.9MM      | .3898         | 85    | 68          | 136   | 10.0  | RDH2215      | 19     |
| 25/64      | .3906         | 3.340 | 2.670       | 5.312 | 25/64 | RDH2217      | 20     |
| 10.0MM     | .3937         | 85    | 68          | 136   | 10.0  | RDH2219      | 21     |
| 10.1MM     | .3976         | 93    | 74          | 149   | 12.0  | RDH2221      | 22     |
| 10.2MM     | .4016         | 93    | 74          | 149   | 12.0  | RDH2223      | 23     |
| 10.3MM     | .4055         | 93    | 74          | 149   | 12.0  | RDH2225      | 24     |
| 13/32      | .4062         | 3.625 | 2.900       | 5.875 | 15/32 | RDH2227      | 25     |
| 10.4MM     | .4094         | 93    | 74          | 149   | 12.0  | RDH2229      | 26     |
| 10.5MM     | .4134         | 93    | 74          | 149   | 12.0  | RDH2231      | 27     |
| 10.6MM     | .4173         | 93    | 74          | 149   | 12.0  | RDH2233      | 28     |
| 10.7MM     | .4213         | 93    | 74          | 149   | 12.0  | RDH2235      | 29     |
| 27/64      | .4219         | 3.625 | 2.900       | 5.875 | 15/32 | RDH2237      | 30     |
| 10.8MM     | .4252         | 93    | 74          | 149   | 12.0  | RDH2239      | 31     |
| 10.9MM     | .4291         | 93    | 74          | 149   | 12.0  | RDH2241      | 32     |
| 11.0MM     | .4331         | 93    | 74          | 149   | 12.0  | RDH2243      | 33     |
| 11.1MM     | .4370         | 102   | 82          | 155   | 12.0  | RDH2245      | 34     |
| 7/16       | .4375         | 4.000 | 3.200       | 6.100 | 15/32 | RDH2247      | 35     |
| 11.2MM     | .4409         | 102   | 82          | 155   | 12.0  | RDH2249      | 36     |
| 11.3MM     | .4449         | 102   | 82          | 155   | 12.0  | RDH2251      | 37     |
| 11.4MM     | .4488         | 102   | 82          | 155   | 12.0  | RDH2253      | 38     |
| 11.5MM     | .4527         | 102   | 82          | 155   | 12.0  | RDH2255      | 39     |



Technical data found on page 259.

| Tolerances | Drill ø | Shank ø |
|------------|---------|---------|
| All Sizes  | h7      | h6      |

For detailed tolerance information, see page 259.





Specials



**Multi-Material, Solid Carbide, Coolant Fed, Long Length, 142° Point, 7X + Dia., 30° Helix (14567-.5000)**

| Drill Size | Decimal Equiv | FL    | Drill Depth | OAL   | Shk ø | AlTiN Coated |        |
|------------|---------------|-------|-------------|-------|-------|--------------|--------|
|            |               |       |             |       |       | Part #       | Item # |
| 11.6MM     | .4567         | 102   | 82          | 155   | 12.0  | RDH2257      | 1      |
| 11.7MM     | .4606         | 102   | 82          | 155   | 12.0  | RDH2259      | 2      |
| 11.8MM     | .4646         | 102   | 82          | 155   | 12.0  | RDH2261      | 3      |
| 11.9MM     | .4685         | 102   | 82          | 155   | 12.0  | RDH2263      | 4      |
| 15/32      | .4688         | 4.000 | 3.200       | 6.100 | 15/32 | RDH2265      | 5      |
| 12.0MM     | .4724         | 102   | 82          | 155   | 12.0  | RDH2267      | 6      |
| 31/64      | .4844         | 4.312 | 3.450       | 6.299 | 1/2   | RDH2270      | 7      |
| 1/2        | .5000         | 4.312 | 3.450       | 6.299 | 1/2   | RDH2272      | 8      |

Carbide Drills

| Tolerances | Drill ø | Shank ø |
|------------|---------|---------|
| All Sizes  | h7      | h6      |

For detailed tolerance information, see page 259.



Technical data found on page 259.





Specials



### Multi-Material, Solid Carbide, Coolant Fed, X-Long Length, 142° Point, 12X + Dia., 30° Helix (1181-.3937)

| Drill Size | Decimal Equiv | FL    | Drill Depth | OAL   | Shk ø | AITiN Coated |        |
|------------|---------------|-------|-------------|-------|-------|--------------|--------|
|            |               |       |             |       |       | Part #       | Item # |
| 3.0MM      | .1181         | 75    | 60          | 125   | 3.0   | RDH4000      | 1      |
| 1/8        | .1250         | 3.94  | 3.150       | 6.417 | .1575 | RDH4001      | 2      |
| 3.2MM      | .1260         | 100   | 80          | 163   | 4.0   | RDH4002      | 3      |
| 3.3MM      | .1299         | 100   | 80          | 163   | 4.0   | RDH4003      | 4      |
| 3.4MM      | .1339         | 100   | 80          | 163   | 4.0   | RDH4004      | 5      |
| 3.6MM      | .1417         | 100   | 80          | 163   | 4.0   | RDH4005      | 6      |
| 3.8MM      | .1496         | 100   | 80          | 163   | 4.0   | RDH4006      | 7      |
| 3.9MM      | .1535         | 100   | 80          | 163   | 4.0   | RDH4007      | 8      |
| 4.0MM      | .1574         | 100   | 80          | 163   | 4.0   | RDH4008      | 9      |
| 4.2MM      | .1653         | 105   | 84          | 163   | 5.0   | RDH4009      | 10     |
| 4.3MM      | .1692         | 105   | 84          | 163   | 5.0   | RDH4010      | 11     |
| 4.4MM      | .1732         | 105   | 84          | 163   | 5.0   | RDH4011      | 12     |
| 4.6MM      | .1811         | 105   | 84          | 163   | 5.0   | RDH4012      | 13     |
| 3/16       | .1875         | 4.130 | 3.310       | 6.417 | .1968 | RDH4013      | 14     |
| 4.8MM      | .1889         | 105   | 84          | 163   | 5.0   | RDH4014      | 15     |
| 4.9MM      | .1929         | 105   | 84          | 163   | 5.0   | RDH4015      | 16     |
| 5.0MM      | .1968         | 105   | 84          | 163   | 5.0   | RDH4016      | 17     |
| 5.2MM      | .2050         | 110   | 88          | 163   | 6.0   | RDH4017      | 18     |
| 5.4MM      | .2125         | 110   | 88          | 163   | 6.0   | RDH4018      | 19     |
| 5.6MM      | .2204         | 110   | 88          | 163   | 6.0   | RDH4019      | 20     |
| 5.8MM      | .2283         | 110   | 88          | 163   | 6.0   | RDH4020      | 21     |
| 6.0MM      | .2362         | 110   | 88          | 163   | 6.0   | RDH4021      | 22     |
| 6.2MM      | .2440         | 110   | 88          | 163   | 8.0   | RDH4022      | 23     |
| 6.3MM      | .2480         | 110   | 88          | 163   | 8.0   | RDH4023      | 24     |
| 1/4        | .2500         | 4.330 | 3.460       | 6.417 | .3150 | RDH4024      | 25     |
| 6.8MM      | .2677         | 110   | 88          | 163   | 8.0   | RDH4025      | 26     |
| 7.0MM      | .2755         | 110   | 88          | 163   | 8.0   | RDH4026      | 27     |
| 7.6MM      | .2992         | 120   | 96          | 163   | 8.0   | RDH4027      | 28     |
| 7.8MM      | .3070         | 120   | 96          | 163   | 8.0   | RDH4028      | 29     |
| 5/16       | .3125         | 4.720 | 3.780       | 6.417 | .3150 | RDH4029      | 30     |
| 8.0MM      | .3149         | 120   | 96          | 163   | 8.0   | RDH4030      | 31     |
| 8.2MM      | .3228         | 135   | 108         | 180   | 10.0  | RDH4031      | 32     |
| 8.5MM      | .3346         | 135   | 108         | 180   | 10.0  | RDH4032      | 33     |
| 8.7MM      | .3425         | 135   | 108         | 180   | 10.0  | RDH4033      | 34     |
| 9.0MM      | .3543         | 135   | 108         | 180   | 10.0  | RDH4034      | 35     |
| 9.4MM      | .3700         | 150   | 120         | 195   | 10.0  | RDH4035      | 36     |
| 3/8        | .3750         | 5.900 | 4.720       | 7.677 | .3937 | RDH4036      | 37     |
| 9.8MM      | .3858         | 150   | 120         | 195   | 10.0  | RDH4037      | 38     |
| 10.0MM     | .3937         | 150   | 120         | 195   | 10.0  | RDH4038      | 39     |



Technical data found on pages 260-261.

| Tolerances | Drill ø | Shank ø |
|------------|---------|---------|
| All Sizes  | h7      | h6      |

For detailed tolerance information, see page 260.





Specials



### Multi-Material, Solid Carbide, Coolant Fed, X-Long Length, 142° Point, 12X + Dia., 30° Helix ( .4055-.5000 )

| Drill Size | Decimal Equiv | FL    | Drill Depth | OAL   | Shk ø | AlTiN Coated |        |
|------------|---------------|-------|-------------|-------|-------|--------------|--------|
|            |               |       |             |       |       | Part #       | Item # |
| 10.3MM     | .4055         | 160   | 128         | 210   | 12.0  | RDH4039      | 1      |
| 10.5MM     | .4133         | 160   | 128         | 210   | 12.0  | RDH4040      | 2      |
| 10.8MM     | .4251         | 160   | 128         | 210   | 12.0  | RDH4041      | 3      |
| 11.0MM     | .4330         | 160   | 128         | 210   | 12.0  | RDH4042      | 4      |
| 7/16       | .4375         | 6.300 | 5.040       | 8.268 | .4724 | RDH4043      | 5      |
| 11.5MM     | .4527         | 160   | 128         | 210   | 12.0  | RDH4044      | 6      |
| 11.8MM     | .4645         | 160   | 128         | 210   | 12.0  | RDH4045      | 7      |
| 12.0MM     | .4724         | 160   | 128         | 210   | 12.0  | RDH4046      | 8      |
| 1/2        | .5000         | 7.090 | 5.670       | 9.055 | .5512 | RDH4047      | 9      |

Carbide Drills

| Tolerances | Drill ø | Shank ø |
|------------|---------|---------|
| All Sizes  | h7      | h6      |

For detailed tolerance information, see page 260.



Technical data found on pages 260-261.





Specials



Uncoated

### Aluminum & Non-Ferrous, Solid Carbide, 3-Flute, Parabolic, 150° Point, 5X Dia., 30° Helix (0.0469-.1520)

| Drill Size | Decimal Equiv | FL    | Drill Depth | OAL   | Shk ø | Uncoated |        |
|------------|---------------|-------|-------------|-------|-------|----------|--------|
|            |               |       |             |       |       | Part #   | Item # |
| 3/64       | .0469         | 3/4   | 9/16        | 1-1/2 | .0469 | RDH3000  | 1      |
| #54        | .0550         | 3/4   | 9/16        | 1-1/2 | .0550 | RDH3001  | 2      |
| #53        | .0595         | 3/4   | 9/16        | 1-1/2 | .0595 | RDH3002  | 3      |
| 1/16       | .0625         | 3/4   | 9/16        | 1-1/2 | 1/16  | RDH3003  | 4      |
| #51        | .0670         | 3/4   | 9/16        | 1-1/2 | .0670 | RDH3004  | 5      |
| #50        | .0700         | 7/8   | 11/16       | 1-3/4 | .0700 | RDH3005  | 6      |
| #49        | .0730         | 7/8   | 11/16       | 1-3/4 | .0730 | RDH3006  | 7      |
| 2.0MM      | .0787         | 16    | 12          | 38    | 2.0   | RDH3007  | 8      |
| #45        | .0820         | 7/8   | 11/16       | 1-3/4 | .0820 | RDH3008  | 9      |
| #43        | .0890         | 1     | 3/4         | 2     | .0890 | RDH3009  | 10     |
| 2.3MM      | .0906         | 20.5  | 15          | 43    | 2.3   | RDH3010  | 11     |
| 3/32       | .0938         | 1     | 3/4         | 2     | 3/32  | RDH3011  | 12     |
| #41        | .0960         | 1     | 3/4         | 2     | .0960 | RDH3012  | 13     |
| #40        | .0980         | 1     | 3/4         | 2     | .0980 | RDH3013  | 14     |
| 2.5MM      | .0984         | 20.5  | 15          | 43    | 2.5   | RDH3014  | 15     |
| #39        | .0995         | 1-1/4 | 15/16       | 2-1/4 | .0995 | RDH3015  | 16     |
| #38        | .1015         | 1-1/4 | 15/16       | 2-1/4 | .1015 | RDH3016  | 17     |
| #37        | .1040         | 1-1/4 | 15/16       | 2-1/4 | .1040 | RDH3017  | 18     |
| #36        | .1065         | 1-1/4 | 15/16       | 2-1/4 | .1065 | RDH3018  | 19     |
| #35        | .1100         | 1-1/4 | 15/16       | 2-1/4 | .1100 | RDH3019  | 20     |
| #33        | .1130         | 1-1/4 | 15/16       | 2-1/4 | .1130 | RDH3020  | 21     |
| 2.9MM      | .1142         | 25    | 19          | 46    | 2.9   | RDH3021  | 22     |
| 3.0MM      | .1181         | 28    | 23          | 66    | 6     | RDH3022  | 23     |
| #31        | .1200         | 1-1/4 | 15/16       | 2-1/4 | .1200 | RDH3023  | 24     |
| 3.1MM      | .1220         | 28    | 23          | 66    | 6     | RDH3024  | 25     |
| 1/8        | .1250         | 1-1/4 | 15/16       | 2-1/4 | 1/8   | RDH3025  | 26     |
| 3.2MM      | .1260         | 28    | 23          | 66    | 6     | RDH3026  | 27     |
| #30        | .1285         | 1-1/4 | 15/16       | 2-1/4 | .1285 | RDH3027  | 28     |
| 3.3MM      | .1299         | 28    | 23          | 66    | 6     | RDH3028  | 29     |
| 3.4MM      | .1339         | 28    | 23          | 66    | 6     | RDH3029  | 30     |
| #29        | .1360         | 1-3/8 | 1-1/32      | 2-1/2 | .1360 | RDH3030  | 31     |
| 3.5MM      | .1378         | 28    | 23          | 66    | 6     | RDH3031  | 32     |
| 9/64       | .1406         | 1-3/8 | 1-1/32      | 2-1/2 | 9/64  | RDH3032  | 33     |
| 3.6MM      | .1417         | 28    | 23          | 66    | 6     | RDH3033  | 34     |
| #27        | .1440         | 1-3/8 | 1-1/32      | 2-1/2 | .1440 | RDH3034  | 35     |
| 3.7MM      | .1457         | 28    | 23          | 66    | 6     | RDH3035  | 36     |
| #25        | .1495         | 1-3/8 | 1-1/32      | 2-1/2 | .1495 | RDH3036  | 37     |
| 3.8MM      | .1496         | 36    | 29          | 74    | 6     | RDH3037  | 38     |
| #24        | .1520         | 1-3/8 | 1-1/32      | 2-1/2 | .1520 | RDH3038  | 39     |



Technical data found on page 262.

For detailed tolerance information, see page 262.



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Specials



Uncoated



### Aluminum & Non-Ferrous, Solid Carbide, 3-Flute, Parabolic, 150° Point, 5X Dia., 30° Helix (1.535-.2677)

| Drill Size | Decimal Equiv | FL    | Drill Depth | OAL   | Shk ø | Uncoated |        |
|------------|---------------|-------|-------------|-------|-------|----------|--------|
|            |               |       |             |       |       | Part #   | Item # |
| 3.9MM      | .1535         | 36    | 29          | 74    | 6     | RDH3039  | 1      |
| 5/32       | .1562         | 1-3/8 | 1-1/32      | 2-1/2 | 5/32  | RDH3040  | 2      |
| 4.0MM      | .1575         | 36    | 29          | 74    | 6     | RDH3041  | 3      |
| #21        | .1590         | 1-3/8 | 1-1/32      | 2-1/2 | .1590 | RDH3042  | 4      |
| #20        | .1610         | 1-3/8 | 1-1/32      | 2-1/2 | .1610 | RDH3043  | 5      |
| 4.1MM      | .1614         | 36    | 29          | 74    | 6     | RDH3044  | 6      |
| 4.2MM      | .1654         | 36    | 29          | 74    | 6     | RDH3045  | 7      |
| #19        | .1660         | 1-3/8 | 1-1/32      | 2-1/2 | .1660 | RDH3046  | 8      |
| #18        | .1695         | 1-5/8 | 1-7/32      | 2-3/4 | .1695 | RDH3047  | 9      |
| 11/64      | .1719         | 1-5/8 | 1-7/32      | 2-3/4 | 11/64 | RDH3048  | 10     |
| #17        | .1730         | 1-5/8 | 1-7/32      | 2-3/4 | .1730 | RDH3049  | 11     |
| 4.4MM      | .1732         | 36    | 29          | 74    | 6     | RDH3050  | 12     |
| #16        | .1770         | 1-5/8 | 1-7/32      | 2-3/4 | .1770 | RDH3051  | 13     |
| 4.5MM      | .1772         | 36    | 29          | 74    | 6     | RDH3052  | 14     |
| 4.6MM      | .1811         | 36    | 29          | 74    | 6     | RDH3053  | 15     |
| #13        | .1850         | 1-5/8 | 1-7/32      | 2-3/4 | .1850 | RDH3054  | 16     |
| .1875      | .1875         | 1-5/8 | 1-7/32      | 2-3/4 | 3/16  | RDH3055  | 17     |
| 4.8MM      | .1889         | 44    | 35          | 82    | 6     | RDH3056  | 18     |
| #12        | .1890         | 1-5/8 | 1-7/32      | 2-3/4 | .1890 | RDH3057  | 19     |
| #11        | .1910         | 1-5/8 | 1-7/32      | 2-3/4 | .1910 | RDH3058  | 20     |
| 4.9MM      | .1929         | 44    | 35          | 82    | 6     | RDH3059  | 21     |
| #10        | .1935         | 1-5/8 | 1-7/32      | 2-3/4 | .1935 | RDH3060  | 22     |
| 5.0MM      | .1968         | 44    | 35          | 82    | 6     | RDH3061  | 23     |
| #7         | .2010         | 1-3/4 | 1-5/16      | 3     | .2010 | RDH3062  | 24     |
| 5.2MM      | .2047         | 44    | 35          | 82    | 6     | RDH3063  | 25     |
| #3         | .2130         | 1-3/4 | 1-5/16      | 3     | .2130 | RDH3064  | 26     |
| 5.5MM      | .2165         | 44    | 35          | 82    | 6     | RDH3065  | 27     |
| 7/32       | .2187         | 1-3/4 | 1-5/16      | 3     | 7/32  | RDH3066  | 28     |
| 5.6MM      | .2205         | 44    | 35          | 82    | 6     | RDH3067  | 29     |
| #1         | .2280         | 1-3/4 | 1-5/16      | 3     | .2280 | RDH3068  | 30     |
| A          | .2340         | 2     | 1-1/2       | 3-1/4 | .2340 | RDH3069  | 31     |
| 6.0MM      | .2362         | 44    | 35          | 82    | 6     | RDH3070  | 32     |
| 6.2MM      | .2441         | 53    | 43          | 91    | 8     | RDH3071  | 33     |
| 1/4        | .2500         | 2     | 1-1/2       | 3-1/4 | 1/4   | RDH3072  | 34     |
| 6.5MM      | .2559         | 53    | 43          | 91    | 8     | RDH3073  | 35     |
| F          | .2570         | 2     | 1-1/2       | 3-1/4 | .2570 | RDH3074  | 36     |
| 6.7MM      | .2638         | 53    | 43          | 91    | 8     | RDH3075  | 37     |
| 17/64      | .2656         | 2-1/8 | 1-19/32     | 3-1/2 | 17/64 | RDH3076  | 38     |
| 6.8MM      | .2677         | 53    | 43          | 91    | 8     | RDH3077  | 39     |



For detailed tolerance information, see page 262.



Technical data found on page 262.





Specials



Uncoated



### Aluminum & Non-Ferrous, Solid Carbide, 3-Flute, Parabolic, 150° Point, 5X Dia., 30° Helix (2720-.4921)

| Drill Size | Decimal Equiv | FL    | Drill Depth | OAL   | Shk ø | Uncoated |        |
|------------|---------------|-------|-------------|-------|-------|----------|--------|
|            |               |       |             |       |       | Part #   | Item # |
| I          | .2720         | 2-1/8 | 1-19/32     | 3-1/2 | .2720 | RDH3078  | 1      |
| 7.0MM      | .2756         | 53    | 43          | 91    | 8     | RDH3079  | 2      |
| 9/32       | .2812         | 2-1/8 | 1-19/32     | 3-1/2 | 9/32  | RDH3080  | 3      |
| 7.2MM      | .2835         | 53    | 43          | 91    | 8     | RDH3081  | 4      |
| 7.3MM      | .2874         | 53    | 43          | 91    | 8     | RDH3082  | 5      |
| 7.4MM      | .2913         | 53    | 43          | 91    | 8     | RDH3083  | 6      |
| 7.5MM      | .2953         | 53    | 43          | 91    | 8     | RDH3084  | 7      |
| 19/64      | .2969         | 2-3/8 | 1-25/32     | 3-3/4 | 19/64 | RDH3085  | 8      |
| 7.8MM      | .3071         | 53    | 43          | 91    | 8     | RDH3086  | 9      |
| 5/16       | .3125         | 2-3/8 | 1-25/32     | 3-3/4 | 5/16  | RDH3087  | 10     |
| 8.0MM      | .3150         | 53    | 43          | 91    | 8     | RDH3088  | 11     |
| 8.1MM      | .3189         | 61    | 49          | 103   | 10    | RDH3089  | 12     |
| 21/64      | .3281         | 2-1/2 | 1-7/8       | 4     | 21/64 | RDH3090  | 13     |
| 8.4MM      | .3307         | 61    | 49          | 103   | 10    | RDH3091  | 14     |
| Q          | .3320         | 2-1/2 | 1-7/8       | 4     | .3320 | RDH3092  | 15     |
| 8.5MM      | .3346         | 61    | 49          | 103   | 10    | RDH3093  | 16     |
| 11/32      | .3438         | 2-1/2 | 1-7/8       | 4     | 11/32 | RDH3094  | 17     |
| 9.0MM      | .3543         | 61    | 49          | 103   | 10    | RDH3095  | 18     |
| 23/64      | .3594         | 2-3/4 | 2-1/16      | 4-1/4 | 23/64 | RDH3096  | 19     |
| U          | .3680         | 2-3/4 | 2-1/16      | 4-1/4 | .3680 | RDH3097  | 20     |
| 9.5MM      | .3740         | 61    | 49          | 103   | 10    | RDH3098  | 21     |
| 3/8        | .3750         | 2-3/4 | 2-1/16      | 4-1/4 | 3/8   | RDH3099  | 22     |
| 9.7MM      | .3819         | 61    | 49          | 103   | 10    | RDH3100  | 23     |
| 25/64      | .3906         | 2-7/8 | 2-5/32      | 4-1/2 | 25/64 | RDH3101  | 24     |
| 10.0MM     | .3937         | 61    | 49          | 103   | 10    | RDH3102  | 25     |
| 10.2MM     | .4016         | 71    | 56          | 118   | 12    | RDH3103  | 26     |
| 13/32      | .4062         | 2-7/8 | 2-5/32      | 4-1/2 | 13/32 | RDH3104  | 27     |
| 10.4MM     | .4094         | 71    | 56          | 118   | 12    | RDH3105  | 28     |
| 10.5MM     | .4134         | 71    | 56          | 118   | 12    | RDH3106  | 29     |
| 10.6MM     | .4173         | 71    | 56          | 118   | 12    | RDH3107  | 30     |
| 27/64      | .4219         | 2-7/8 | 2-5/32      | 4-1/2 | 27/64 | RDH3108  | 31     |
| 11.0MM     | .4331         | 71    | 56          | 118   | 12    | RDH3109  | 32     |
| 7/16       | .4375         | 2-7/8 | 2-5/32      | 4-1/2 | 7/16  | RDH3110  | 33     |
| 11.5MM     | .4528         | 71    | 56          | 118   | 12    | RDH3111  | 34     |
| 29/64      | .4531         | 3     | 2-1/4       | 4-3/4 | 29/64 | RDH3112  | 35     |
| 15/32      | .4688         | 3     | 2-1/4       | 4-3/4 | 15/32 | RDH3113  | 36     |
| 12.0MM     | .4724         | 71    | 56          | 118   | 12    | RDH3114  | 37     |
| 31/64      | .4844         | 3     | 2-1/4       | 4-3/4 | 31/64 | RDH3115  | 38     |
| 12.5MM     | .4921         | 77    | 60          | 124   | 14    | RDH3116  | 39     |



Technical data found on page 262.

For detailed tolerance information, see page 262.





Specials



Uncoated



### Aluminum & Non-Ferrous, Solid Carbide, 3-Flute, Parabolic, 150° Point, 5X Dia., 30° Helix (1.5000-.7500)

| Drill Size | Decimal Equiv | FL    | Drill Depth | OAL   | Shk ø | Uncoated |        |
|------------|---------------|-------|-------------|-------|-------|----------|--------|
|            |               |       |             |       |       | Part #   | Item # |
| 1/2        | .5000         | 3     | 2-1/4       | 4-3/4 | 1/2   | RDH3117  | 1      |
| 13.0MM     | .5118         | 77    | 60          | 124   | 14    | RDH3118  | 2      |
| 33/64      | .5156         | 3-1/4 | 2-7/16      | 5     | 33/64 | RDH3119  | 3      |
| 17/32      | .5312         | 3-1/4 | 2-7/16      | 5     | 17/32 | RDH3120  | 4      |
| 13.5MM     | .5315         | 77    | 60          | 124   | 14    | RDH3121  | 5      |
| 35/64      | .5469         | 3-1/4 | 2-7/16      | 5     | 35/64 | RDH3122  | 6      |
| 14.0MM     | .5512         | 77    | 60          | 124   | 14    | RDH3123  | 7      |
| 9/16       | .5625         | 3-1/4 | 2-7/16      | 5     | 9/16  | RDH3124  | 8      |
| 14.5MM     | .5709         | 83    | 63          | 133   | 16    | RDH3125  | 9      |
| 15.0MM     | .5906         | 83    | 63          | 133   | 16    | RDH3126  | 10     |
| 15.5MM     | .6102         | 83    | 63          | 133   | 16    | RDH3127  | 11     |
| 15.8MM     | .6220         | 83    | 63          | 133   | 16    | RDH3128  | 12     |
| 5/8        | .6250         | 3-1/2 | 2-5/8       | 5-1/4 | 5/8   | RDH3129  | 13     |
| 16.0MM     | .6299         | 83    | 63          | 133   | 16    | RDH3130  | 14     |
| 21/32      | .6562         | 3-5/8 | 2-23/32     | 5-1/2 | 21/32 | RDH3131  | 15     |
| 11/16      | .6875         | 3-5/8 | 2-23/32     | 5-1/2 | 11/16 | RDH3132  | 16     |
| 3/4        | .7500         | 3-7/8 | 2-29/32     | 5-3/4 | 3/4   | RDH3133  | 17     |

Carbide Drills

For detailed tolerance information, see page 262.



Technical data found on page 262.





Oxide



Bright



TiN Coated

HSS & Cobalt Drills

## HSS, Jobber Length, 118° Point (.0135-.0472)

| Drill Size | Decimal Equiv | FL    | OAL   | Pkg Qty | Oxide   |        | Bright  |        | TiN Coated |        |
|------------|---------------|-------|-------|---------|---------|--------|---------|--------|------------|--------|
|            |               |       |       |         | Part #  | Item # | Part #  | Item # | Part #     | Item # |
| #80        | .0135         | 1/8   | 3/4   | 12      | RD40080 | 1      | RD40380 | 34     | —          | —      |
| #79        | .0145         | 1/8   | 3/4   | 12      | RD40079 | 2      | RD40379 | 35     | —          | —      |
| 1/64       | .0156         | 3/16  | 3/4   | 12      | RD40201 | 3      | RD40501 | 36     | —          | —      |
| #78        | .0160         | 3/16  | 7/8   | 12      | RD40078 | 4      | RD40378 | 37     | —          | —      |
| #77        | .0180         | 3/16  | 7/8   | 12      | RD40077 | 5      | RD40377 | 38     | —          | —      |
| #76        | .0200         | 3/16  | 7/8   | 12      | RD40076 | 6      | RD40376 | 39     | —          | —      |
| #75        | .0210         | 1/4   | 1     | 12      | RD40075 | 7      | RD40375 | 40     | —          | —      |
| #74        | .0225         | 1/4   | 1     | 12      | RD40074 | 8      | RD40374 | 41     | —          | —      |
| #73        | .0240         | 5/16  | 1-1/8 | 12      | RD40073 | 9      | RD40373 | 42     | —          | —      |
| #72        | .0250         | 5/16  | 1-1/8 | 12      | RD40072 | 10     | RD40372 | 43     | —          | —      |
| #71        | .0260         | 3/8   | 1-1/4 | 12      | RD40071 | 11     | RD40371 | 44     | —          | —      |
| #70        | .0280         | 3/8   | 1-1/4 | 12      | RD40070 | 12     | RD40370 | 45     | —          | —      |
| #69        | .0292         | 1/2   | 1-3/8 | 12      | RD40069 | 13     | RD40369 | 46     | —          | —      |
| #68        | .0310         | 1/2   | 1-3/8 | 12      | RD40068 | 14     | RD40368 | 47     | —          | —      |
| 1/32       | .0312         | 1/2   | 1-3/8 | 12      | RD40202 | 15     | RD40502 | 48     | —          | —      |
| #67        | .0320         | 1/2   | 1-3/8 | 12      | RD40067 | 16     | RD40367 | 49     | —          | —      |
| #66        | .0330         | 1/2   | 1-3/8 | 12      | RD40066 | 17     | RD40366 | 50     | —          | —      |
| #65        | .0350         | 5/8   | 1-1/2 | 12      | RD40065 | 18     | RD40365 | 51     | —          | —      |
| #64        | .0360         | 5/8   | 1-1/2 | 12      | RD40064 | 19     | RD40364 | 52     | —          | —      |
| #63        | .0370         | 5/8   | 1-1/2 | 12      | RD40063 | 20     | RD40363 | 53     | —          | —      |
| #62        | .0380         | 5/8   | 1-1/2 | 12      | RD40062 | 21     | RD40362 | 54     | —          | —      |
| #61        | .0390         | 11/16 | 1-5/8 | 12      | RD40061 | 22     | RD40361 | 55     | —          | —      |
| 1.00MM     | .0394         | 18    | 41    | 12      | RD46300 | 23     | —       | —      | —          | —      |
| #60        | .0400         | 11/16 | 1-5/8 | 12      | RD40060 | 24     | RD40360 | 56     | RD41260    | 62     |
| #59        | .0410         | 11/16 | 1-5/8 | 12      | RD40059 | 25     | RD40359 | 57     | RD41259    | 63     |
| 1.05MM     | .0413         | 18    | 41    | 12      | RD46305 | 26     | —       | —      | —          | —      |
| #58        | .0420         | 11/16 | 1-5/8 | 12      | RD40058 | 27     | RD40358 | 58     | RD41258    | 64     |
| #57        | .0430         | 3/4   | 1-3/4 | 12      | RD40057 | 28     | RD40357 | 59     | RD41257    | 65     |
| 1.10MM     | .0433         | 19    | 44    | 12      | RD46310 | 29     | —       | —      | —          | —      |
| 1.15MM     | .0453         | 19    | 44    | 12      | RD46315 | 30     | —       | —      | —          | —      |
| #56        | .0465         | 3/4   | 1-3/4 | 12      | RD40056 | 31     | RD40356 | 60     | RD41256    | 66     |
| 3/64       | .0469         | 3/4   | 1-3/4 | 12      | RD40203 | 32     | RD40503 | 61     | —          | —      |
| 1.20MM     | .0472         | 22    | 48    | 12      | RD46320 | 33     | —       | —      | —          | —      |



Technical data found on page 264.





Oxide



Bright



TiN Coated



## HSS, Jobber Length, 118° Point (.0492-.0860)

| Drill Size | Decimal Equiv | FL    | OAL   | Pkg Qty | Oxide   |        | Bright  |        | TiN Coated |        |
|------------|---------------|-------|-------|---------|---------|--------|---------|--------|------------|--------|
|            |               |       |       |         | Part #  | Item # | Part #  | Item # | Part #     | Item # |
| 1.25MM     | .0492         | 22    | 48    | 12      | RD46325 | 1      | —       | —      | —          | —      |
| 1.30MM     | .0512         | 22    | 48    | 12      | RD46330 | 2      | —       | —      | —          | —      |
| #55        | .0520         | 7/8   | 1-7/8 | 12      | RD40055 | 3      | RD40355 | 34     | RD41255    | 48     |
| 1.35MM     | .0531         | 22    | 48    | 12      | RD46335 | 4      | —       | —      | —          | —      |
| #54        | .0550         | 7/8   | 1-7/8 | 12      | RD40054 | 5      | RD40354 | 35     | RD41254    | 49     |
| 1.40MM     | .0551         | 22    | 48    | 12      | RD46340 | 6      | —       | —      | —          | —      |
| 1.45MM     | .0571         | 22    | 48    | 12      | RD46345 | 7      | —       | —      | —          | —      |
| 1.50MM     | .0591         | 22    | 48    | 12      | RD46350 | 8      | —       | —      | —          | —      |
| #53        | .0595         | 7/8   | 1-7/8 | 12      | RD40053 | 9      | RD40353 | 36     | RD41253    | 50     |
| 1.55MM     | .0610         | 22    | 48    | 12      | RD46355 | 10     | —       | —      | —          | —      |
| 1/16       | .0625         | 7/8   | 1-7/8 | 12      | RD40204 | 11     | RD40504 | 37     | RD41404    | 51     |
| 1.60MM     | .0630         | 22    | 48    | 12      | RD46360 | 12     | —       | —      | —          | —      |
| #52        | .0635         | 7/8   | 1-7/8 | 12      | RD40052 | 13     | RD40352 | 38     | RD41252    | 52     |
| 1.65MM     | .0650         | 25    | 51    | 12      | RD46365 | 14     | —       | —      | —          | —      |
| 1.70MM     | .0669         | 25    | 51    | 12      | RD46370 | 15     | —       | —      | —          | —      |
| #51        | .0670         | 1     | 2     | 12      | RD40051 | 16     | RD40351 | 39     | RD41251    | 53     |
| 1.75MM     | .0689         | 25    | 51    | 12      | RD46375 | 17     | —       | —      | —          | —      |
| #50        | .0700         | 1     | 2     | 12      | RD40050 | 18     | RD40350 | 40     | RD41250    | 54     |
| 1.80MM     | .0709         | 25    | 51    | 12      | RD46380 | 19     | —       | —      | —          | —      |
| 1.85MM     | .0728         | 25    | 51    | 12      | RD46385 | 20     | —       | —      | —          | —      |
| #49        | .0730         | 1     | 2     | 12      | RD40049 | 21     | RD40349 | 41     | RD41249    | 55     |
| 1.90MM     | .0748         | 25    | 51    | 12      | RD46390 | 22     | —       | —      | —          | —      |
| #48        | .0760         | 1     | 2     | 12      | RD40048 | 23     | RD40348 | 42     | RD41248    | 56     |
| 1.95MM     | .0768         | 25    | 51    | 12      | RD46395 | 24     | —       | —      | —          | —      |
| 5/64       | .0781         | 1     | 2     | 12      | RD40205 | 25     | RD40505 | 43     | RD41405    | 57     |
| #47        | .0785         | 1     | 2     | 12      | RD40047 | 26     | RD40347 | 44     | RD41247    | 58     |
| 2.00MM     | .0787         | 25    | 51    | 12      | RD46400 | 27     | —       | —      | —          | —      |
| 2.05MM     | .0807         | 29    | 54    | 12      | RD46405 | 28     | —       | —      | —          | —      |
| #46        | .0810         | 1-1/8 | 2-1/8 | 12      | RD40046 | 29     | RD40346 | 45     | RD41246    | 59     |
| #45        | .0820         | 1-1/8 | 2-1/8 | 12      | RD40045 | 30     | RD40345 | 46     | RD41245    | 60     |
| 2.10MM     | .0827         | 29    | 54    | 12      | RD46410 | 31     | —       | —      | —          | —      |
| 2.15MM     | .0846         | 29    | 54    | 12      | RD46415 | 32     | —       | —      | —          | —      |
| #44        | .0860         | 1-1/8 | 2-1/8 | 12      | RD40044 | 33     | RD40344 | 47     | RD41244    | 61     |



Technical data found on page 264.





Oxide



Bright



TiN Coated



## HSS, Jobber Length, 118° Point (.0866-.1339)

| Drill Size | Decimal Equiv | FL     | OAL   | Pkg Qty | Oxide   |        | Bright  |        | TiN Coated |        |
|------------|---------------|--------|-------|---------|---------|--------|---------|--------|------------|--------|
|            |               |        |       |         | Part #  | Item # | Part #  | Item # | Part #     | Item # |
| 2.20MM     | .0866         | 32     | 57    | 12      | RD46420 | 1      | —       | —      | —          | —      |
| 2.25MM     | .0886         | 32     | 57    | 12      | RD46425 | 2      | —       | —      | —          | —      |
| #43        | .0890         | 1-1/4  | 2-1/4 | 12      | RD40043 | 3      | RD40343 | 34     | RD41243    | 51     |
| 2.30MM     | .0906         | 32     | 57    | 12      | RD46430 | 4      | —       | —      | —          | —      |
| 2.35MM     | .0925         | 32     | 57    | 12      | RD46435 | 5      | —       | —      | —          | —      |
| #42        | .0935         | 1-1/4  | 2-1/4 | 12      | RD40042 | 6      | RD40342 | 35     | RD41242    | 52     |
| 3/32       | .0938         | 1-1/4  | 2-1/4 | 12      | RD40206 | 7      | RD40506 | 36     | RD41406    | 53     |
| 2.40MM     | .0945         | 35     | 60    | 12      | RD46440 | 8      | —       | —      | —          | —      |
| #41        | .0960         | 1-3/8  | 2-3/8 | 12      | RD40041 | 9      | RD40341 | 37     | RD41241    | 54     |
| 2.45MM     | .0965         | 35     | 60    | 12      | RD46445 | 10     | —       | —      | —          | —      |
| #40        | .0980         | 1-3/8  | 2-3/8 | 12      | RD40040 | 11     | RD40340 | 38     | RD41240    | 55     |
| 2.50MM     | .0984         | 35     | 60    | 12      | RD46450 | 12     | —       | —      | —          | —      |
| #39        | .0995         | 1-3/8  | 2-3/8 | 12      | RD40039 | 13     | RD40339 | 39     | RD41239    | 56     |
| #38        | .1015         | 1-7/16 | 2-1/2 | 12      | RD40038 | 14     | RD40338 | 40     | RD41238    | 57     |
| 2.60MM     | .1024         | 37     | 64    | 12      | RD46460 | 15     | —       | —      | —          | —      |
| #37        | .1040         | 1-7/16 | 2-1/2 | 12      | RD40037 | 16     | RD40337 | 41     | RD41237    | 58     |
| 2.70MM     | .1063         | 37     | 64    | 12      | RD46470 | 17     | —       | —      | —          | —      |
| #36        | .1065         | 1-7/16 | 2-1/2 | 12      | RD40036 | 18     | RD40336 | 42     | RD41236    | 59     |
| 7/64       | .1094         | 1-1/2  | 2-5/8 | 12      | RD40207 | 19     | RD40507 | 43     | RD41407    | 60     |
| #35        | .1100         | 1-1/2  | 2-5/8 | 12      | RD40035 | 20     | RD40335 | 44     | RD41235    | 61     |
| 2.80MM     | .1102         | 38     | 67    | 12      | RD46480 | 21     | —       | —      | —          | —      |
| #34        | .1110         | 1-1/2  | 2-5/8 | 12      | RD40034 | 22     | RD40334 | 45     | RD41234    | 62     |
| #33        | .1130         | 1-1/2  | 2-5/8 | 12      | RD40033 | 23     | RD40333 | 46     | RD41233    | 63     |
| 2.90MM     | .1142         | 41     | 70    | 12      | RD46490 | 24     | —       | —      | —          | —      |
| #32        | .1160         | 1-5/8  | 2-3/4 | 12      | RD40032 | 25     | RD40332 | 47     | RD41232    | 64     |
| 3.00MM     | .1181         | 41     | 70    | 12      | RD46500 | 26     | —       | —      | —          | —      |
| #31        | .1200         | 1-5/8  | 2-3/4 | 12      | RD40031 | 27     | RD40331 | 48     | RD41231    | 65     |
| 3.10MM     | .1220         | 41     | 70    | 12      | RD46510 | 28     | —       | —      | —          | —      |
| 1/8        | .1250         | 1-5/8  | 2-3/4 | 12      | RD40208 | 29     | RD40508 | 49     | RD41408    | 66     |
| 3.20MM     | .1260         | 41     | 70    | 12      | RD46520 | 30     | —       | —      | —          | —      |
| #30        | .1285         | 1-5/8  | 2-3/4 | 12      | RD40030 | 31     | RD40330 | 50     | RD41230    | 67     |
| 3.30MM     | .1299         | 45     | 73    | 12      | RD46530 | 32     | —       | —      | —          | —      |
| 3.40MM     | .1339         | 45     | 73    | 12      | RD46540 | 33     | —       | —      | —          | —      |



Technical data found on page 264.





Oxide



Bright



TiN Coated



## HSS, Jobber Length, 118° Point (.1360-.1850)

| Drill Size | Decimal Equiv | FL     | OAL   | Pkg Qty | Oxide   |        | Bright  |        | TiN Coated |        |
|------------|---------------|--------|-------|---------|---------|--------|---------|--------|------------|--------|
|            |               |        |       |         | Part #  | Item # | Part #  | Item # | Part #     | Item # |
| #29        | .1360         | 1-3/4  | 2-7/8 | 12      | RD40029 | 1      | RD40329 | 34     | RD41229    | 54     |
| 3.50MM     | .1378         | 45     | 73    | 12      | RD46550 | 2      | —       | —      | —          | —      |
| #28        | .1405         | 1-3/4  | 2-7/8 | 12      | RD40028 | 3      | RD40328 | 35     | RD41228    | 55     |
| 9/64       | .1406         | 1-3/4  | 2-7/8 | 12      | RD40209 | 4      | RD40509 | 36     | RD41409    | 56     |
| 3.60MM     | .1417         | 48     | 76    | 12      | RD46560 | 5      | —       | —      | —          | —      |
| #27        | .1440         | 1-7/8  | 3     | 12      | RD40027 | 6      | RD40327 | 37     | RD41227    | 57     |
| 3.70MM     | .1457         | 48     | 76    | 12      | RD46570 | 7      | —       | —      | —          | —      |
| #26        | .1470         | 1-7/8  | 3     | 12      | RD40026 | 8      | RD40326 | 38     | RD41226    | 58     |
| #25        | .1495         | 1-7/8  | 3     | 12      | RD40025 | 9      | RD40325 | 39     | RD41225    | 59     |
| 3.80MM     | .1496         | 48     | 76    | 12      | RD46580 | 10     | —       | —      | —          | —      |
| #24        | .1520         | 2      | 3-1/8 | 12      | RD40024 | 11     | RD40324 | 40     | RD41224    | 60     |
| 3.90MM     | .1535         | 51     | 79    | 12      | RD46590 | 12     | —       | —      | —          | —      |
| #23        | .1540         | 2      | 3-1/8 | 12      | RD40023 | 13     | RD40323 | 41     | RD41223    | 61     |
| 5/32       | .1562         | 2      | 3-1/8 | 12      | RD40210 | 14     | RD40510 | 42     | RD41410    | 62     |
| #22        | .1570         | 2      | 3-1/8 | 12      | RD40022 | 15     | RD40322 | 43     | RD41222    | 63     |
| 4.00MM     | .1575         | 54     | 83    | 12      | RD46600 | 16     | —       | —      | —          | —      |
| #21        | .1590         | 2-1/8  | 3-1/4 | 12      | RD40021 | 17     | RD40321 | 44     | RD41221    | 64     |
| #20        | .1610         | 2-1/8  | 3-1/4 | 12      | RD40020 | 18     | RD40320 | 45     | RD41220    | 65     |
| 4.10MM     | .1614         | 54     | 83    | 12      | RD46610 | 19     | —       | —      | —          | —      |
| 4.20MM     | .1654         | 54     | 83    | 12      | RD46620 | 20     | —       | —      | —          | —      |
| #19        | .1660         | 2-1/8  | 3-1/4 | 12      | RD40019 | 21     | RD40319 | 46     | RD41219    | 66     |
| 4.30MM     | .1693         | 54     | 83    | 12      | RD46630 | 22     | —       | —      | —          | —      |
| #18        | .1695         | 2-1/8  | 3-1/4 | 12      | RD40018 | 23     | RD40318 | 47     | RD41218    | 67     |
| 11/64      | .1719         | 2-1/8  | 3-1/4 | 12      | RD40211 | 24     | RD40511 | 48     | RD41411    | 68     |
| #17        | .1730         | 2-3/16 | 3-3/8 | 12      | RD40017 | 25     | RD40317 | 49     | RD41217    | 69     |
| 4.40MM     | .1732         | 56     | 86    | 12      | RD46640 | 26     | —       | —      | —          | —      |
| #16        | .1770         | 2-3/16 | 3-3/8 | 12      | RD40016 | 27     | RD40316 | 50     | RD41216    | 70     |
| 4.50MM     | .1772         | 56     | 86    | 12      | RD46650 | 28     | —       | —      | —          | —      |
| #15        | .1800         | 2-3/16 | 3-3/8 | 12      | RD40015 | 29     | RD40315 | 51     | RD41215    | 71     |
| 4.60MM     | .1811         | 56     | 86    | 12      | RD46660 | 30     | —       | —      | —          | —      |
| #14        | .1820         | 2-3/16 | 3-3/8 | 12      | RD40014 | 31     | RD40314 | 52     | RD41214    | 72     |
| #13        | .1850         | 2-5/16 | 3-1/2 | 12      | RD40013 | 32     | RD40313 | 53     | RD41213    | 73     |
| 4.70MM     | .1850         | 59     | 89    | 12      | RD46670 | 33     | —       | —      | —          | —      |



Technical data found on page 264.





Oxide



Bright



TiN Coated



## HSS, Jobber Length, 118° Point (.1875-.2420)

| Drill Size | Decimal Equiv | FL     | OAL   | Pkg Qty | Oxide   |        | Bright  |        | TiN Coated |        |
|------------|---------------|--------|-------|---------|---------|--------|---------|--------|------------|--------|
|            |               |        |       |         | Part #  | Item # | Part #  | Item # | Part #     | Item # |
| 3/16       | .1875         | 2-5/16 | 3-1/2 | 12      | RD40212 | 1      | RD40512 | 34     | RD41412    | 53     |
| 4.80MM     | .1890         | 59     | 89    | 12      | RD46680 | 2      | —       | —      | —          | —      |
| #12        | .1890         | 2-5/16 | 3-1/2 | 12      | RD40012 | 3      | RD40312 | 35     | RD41212    | 54     |
| #11        | .1910         | 2-5/16 | 3-1/2 | 12      | RD40011 | 4      | RD40311 | 36     | RD41211    | 55     |
| 4.90MM     | .1929         | 62     | 92    | 12      | RD46690 | 5      | —       | —      | —          | —      |
| #10        | .1935         | 2-7/16 | 3-5/8 | 12      | RD40010 | 6      | RD40310 | 37     | RD41210    | 56     |
| #9         | .1960         | 2-7/16 | 3-5/8 | 12      | RD40009 | 7      | RD40309 | 38     | RD41209    | 57     |
| 5.00MM     | .1969         | 62     | 92    | 12      | RD46700 | 8      | —       | —      | —          | —      |
| #8         | .1990         | 2-7/16 | 3-5/8 | 12      | RD40008 | 9      | RD40308 | 39     | RD41208    | 58     |
| 5.10MM     | .2008         | 62     | 92    | 12      | RD46710 | 10     | —       | —      | —          | —      |
| #7         | .2010         | 2-7/16 | 3-5/8 | 12      | RD40007 | 11     | RD40307 | 40     | RD41207    | 59     |
| 13/64      | .2031         | 2-7/16 | 3-5/8 | 12      | RD40213 | 12     | RD40513 | 41     | RD41413    | 60     |
| #6         | .2040         | 2-1/2  | 3-3/4 | 12      | RD40006 | 13     | RD40306 | 42     | RD41206    | 61     |
| 5.20MM     | .2047         | 64     | 95    | 12      | RD46720 | 14     | —       | —      | —          | —      |
| #5         | .2055         | 2-1/2  | 3-3/4 | 12      | RD40005 | 15     | RD40305 | 43     | RD41205    | 62     |
| 5.30MM     | .2087         | 64     | 95    | 12      | RD46730 | 16     | —       | —      | —          | —      |
| #4         | .2090         | 2-1/2  | 3-3/4 | 12      | RD40004 | 17     | RD40304 | 44     | RD41204    | 63     |
| 5.40MM     | .2126         | 64     | 95    | 12      | RD46740 | 18     | —       | —      | —          | —      |
| #3         | .2130         | 2-1/2  | 3-3/4 | 12      | RD40003 | 19     | RD40303 | 45     | RD41203    | 64     |
| 5.50MM     | .2165         | 64     | 95    | 12      | RD46750 | 20     | —       | —      | —          | —      |
| 7/32       | .2188         | 2-1/2  | 3-3/4 | 12      | RD40214 | 21     | RD40514 | 46     | RD41414    | 65     |
| 5.60MM     | .2205         | 67     | 98    | 12      | RD46760 | 22     | —       | —      | —          | —      |
| #2         | .2210         | 2-5/8  | 3-7/8 | 12      | RD40002 | 23     | RD40302 | 47     | RD41202    | 66     |
| 5.70MM     | .2244         | 67     | 98    | 12      | RD46770 | 24     | —       | —      | —          | —      |
| #1         | .2280         | 2-5/8  | 3-7/8 | 12      | RD40001 | 25     | RD40301 | 48     | RD41201    | 67     |
| 5.80MM     | .2283         | 67     | 98    | 12      | RD46780 | 26     | —       | —      | —          | —      |
| 5.90MM     | .2323         | 67     | 98    | 12      | RD46790 | 27     | —       | —      | —          | —      |
| A          | .2340         | 2-5/8  | 3-7/8 | 12      | RD40101 | 28     | RD40401 | 49     | RD41301    | 68     |
| 15/64      | .2344         | 2-5/8  | 3-7/8 | 12      | RD40215 | 29     | RD40515 | 50     | RD41415    | 69     |
| 6.00MM     | .2362         | 70     | 102   | 12      | RD46800 | 30     | —       | —      | —          | —      |
| B          | .2380         | 2-3/4  | 4     | 12      | RD40102 | 31     | RD40402 | 51     | RD41302    | 70     |
| 6.10MM     | .2402         | 70     | 102   | 12      | RD46810 | 32     | —       | —      | —          | —      |
| C          | .2420         | 2-3/4  | 4     | 12      | RD40103 | 33     | RD40403 | 52     | RD41303    | 71     |



Technical data found on page 264.







Oxide



Bright



TiN Coated



## HSS, Jobber Length, 118° Point (.2441-.3110)

| Drill Size | Decimal Equiv | FL      | OAL   | Pkg Qty | Oxide   |        | Bright  |        | TiN Coated |        |
|------------|---------------|---------|-------|---------|---------|--------|---------|--------|------------|--------|
|            |               |         |       |         | Part #  | Item # | Part #  | Item # | Part #     | Item # |
| 6.20MM     | .2441         | 70      | 102   | 12      | RD46820 | 1      | —       | —      | —          | —      |
| D          | .2460         | 2-3/4   | 4     | 12      | RD40104 | 2      | RD40404 | 34     | RD41304    | 49     |
| 6.30MM     | .2480         | 70      | 102   | 12      | RD46830 | 3      | —       | —      | —          | —      |
| 1/4        | .2500         | 2-3/4   | 4     | 12      | RD40216 | 4      | RD40516 | 35     | RD41416    | 50     |
| E          | .2500         | 2-3/4   | 4     | 12      | RD40105 | 5      | RD40405 | 36     | RD41305    | 51     |
| 6.40MM     | .2520         | 73      | 105   | 6       | RD46840 | 6      | —       | —      | —          | —      |
| 6.50MM     | .2559         | 73      | 105   | 6       | RD46850 | 7      | —       | —      | —          | —      |
| F          | .2570         | 2-7/8   | 4-1/8 | 6       | RD40106 | 8      | RD40406 | 37     | RD41306    | 52     |
| 6.60MM     | .2598         | 73      | 105   | 6       | RD46860 | 9      | —       | —      | —          | —      |
| G          | .2610         | 2-7/8   | 4-1/8 | 6       | RD40107 | 10     | RD40407 | 38     | RD41307    | 53     |
| 6.70MM     | .2638         | 73      | 105   | 6       | RD46870 | 11     | —       | —      | —          | —      |
| 17/64      | .2656         | 2-7/8   | 4-1/8 | 6       | RD40217 | 12     | RD40517 | 39     | RD41417    | 54     |
| H          | .2660         | 2-7/8   | 4-1/8 | 6       | RD40108 | 13     | RD40408 | 40     | RD41308    | 55     |
| 6.80MM     | .2677         | 73      | 105   | 6       | RD46880 | 14     | —       | —      | —          | —      |
| 6.90MM     | .2717         | 73      | 105   | 6       | RD46890 | 15     | —       | —      | —          | —      |
| I          | .2720         | 2-7/8   | 4-1/8 | 6       | RD40109 | 16     | RD40409 | 41     | RD41309    | 56     |
| 7.00MM     | .2756         | 73      | 105   | 6       | RD46900 | 17     | —       | —      | —          | —      |
| J          | .2770         | 2-7/8   | 4-1/8 | 6       | RD40110 | 18     | RD40410 | 42     | RD41310    | 57     |
| 7.10MM     | .2795         | 75      | 108   | 6       | RD46910 | 19     | —       | —      | —          | —      |
| K          | .2810         | 2-15/16 | 4-1/4 | 6       | RD40111 | 20     | RD40411 | 43     | RD41311    | 58     |
| 9/32       | .2812         | 2-15/16 | 4-1/4 | 6       | RD40218 | 21     | RD40518 | 44     | RD41418    | 59     |
| 7.20MM     | .2835         | 75      | 108   | 6       | RD46920 | 22     | —       | —      | —          | —      |
| 7.30MM     | .2874         | 75      | 108   | 6       | RD46930 | 23     | —       | —      | —          | —      |
| L          | .2900         | 2-15/16 | 4-1/4 | 6       | RD40112 | 24     | RD40412 | 45     | RD41312    | 60     |
| 7.40MM     | .2913         | 78      | 111   | 6       | RD46940 | 25     | —       | —      | —          | —      |
| M          | .2950         | 3-1/16  | 4-3/8 | 6       | RD40113 | 26     | RD40413 | 46     | RD41313    | 61     |
| 7.50MM     | .2953         | 78      | 111   | 6       | RD46950 | 27     | —       | —      | —          | —      |
| 19/64      | .2969         | 3-1/16  | 4-3/8 | 6       | RD40219 | 28     | RD40519 | 47     | RD41419    | 62     |
| 7.60MM     | .2992         | 78      | 111   | 6       | RD46960 | 29     | —       | —      | —          | —      |
| N          | .3020         | 3-1/16  | 4-3/8 | 6       | RD40114 | 30     | RD40414 | 48     | RD41314    | 63     |
| 7.70MM     | .3031         | 81      | 114   | 6       | RD46970 | 31     | —       | —      | —          | —      |
| 7.80MM     | .3071         | 81      | 114   | 6       | RD46980 | 32     | —       | —      | —          | —      |
| 7.90MM     | .3110         | 81      | 114   | 6       | RD46990 | 33     | —       | —      | —          | —      |



Technical data found on page 264.





Oxide



Bright



TiN Coated



## HSS, Jobber Length, 118° Point (.3125-.3860)

| Drill Size | Decimal Equiv | FL     | OAL   | Pkg Qty | Oxide   |        | Bright  |        | TiN Coated |        |
|------------|---------------|--------|-------|---------|---------|--------|---------|--------|------------|--------|
|            |               |        |       |         | Part #  | Item # | Part #  | Item # | Part #     | Item # |
| 5/16       | .3125         | 3-3/16 | 4-1/2 | 6       | RD40220 | 1      | RD40520 | 34     | RD41420    | 48     |
| 8.00MM     | .3150         | 81     | 114   | 6       | RD47000 | 2      | —       | —      | —          | —      |
| O          | .3160         | 3-3/16 | 4-1/2 | 6       | RD40115 | 3      | RD40415 | 35     | RD41315    | 49     |
| 8.10MM     | .3189         | 84     | 117   | 6       | RD47010 | 4      | —       | —      | —          | —      |
| 8.20MM     | .3228         | 84     | 117   | 6       | RD47020 | 5      | —       | —      | —          | —      |
| P          | .3230         | 3-5/16 | 4-5/8 | 6       | RD40116 | 6      | RD40416 | 36     | RD41316    | 50     |
| 8.30MM     | .3268         | 84     | 117   | 6       | RD47030 | 7      | —       | —      | —          | —      |
| 21/64      | .3281         | 3-5/16 | 4-5/8 | 6       | RD40221 | 8      | RD40521 | 37     | RD41421    | 51     |
| 8.40MM     | .3307         | 87     | 121   | 6       | RD47040 | 9      | —       | —      | —          | —      |
| Q          | .3320         | 3-7/16 | 4-3/4 | 6       | RD40117 | 10     | RD40417 | 38     | RD41317    | 52     |
| 8.50MM     | .3346         | 87     | 121   | 6       | RD47050 | 11     | —       | —      | —          | —      |
| 8.60MM     | .3386         | 87     | 121   | 6       | RD47060 | 12     | —       | —      | —          | —      |
| R          | .3390         | 3-7/16 | 4-3/4 | 6       | RD40118 | 13     | RD40418 | 39     | RD41318    | 53     |
| 8.70MM     | .3425         | 87     | 121   | 6       | RD47070 | 14     | —       | —      | —          | —      |
| 11/32      | .3438         | 3-7/16 | 4-3/4 | 6       | RD40222 | 15     | RD40522 | 40     | RD41422    | 54     |
| 8.80MM     | .3465         | 89     | 124   | 6       | RD47080 | 16     | —       | —      | —          | —      |
| S          | .3480         | 3-1/2  | 4-7/8 | 6       | RD40119 | 17     | RD40419 | 41     | RD41319    | 55     |
| 8.90MM     | .3504         | 89     | 124   | 6       | RD47090 | 18     | —       | —      | —          | —      |
| 9.00MM     | .3543         | 89     | 124   | 6       | RD47100 | 19     | —       | —      | —          | —      |
| T          | .3580         | 3-1/2  | 4-7/8 | 6       | RD40120 | 20     | RD40420 | 42     | RD41320    | 56     |
| 9.10MM     | .3583         | 89     | 124   | 6       | RD47110 | 21     | —       | —      | —          | —      |
| 23/64      | .3594         | 3-1/2  | 4-7/8 | 6       | RD40223 | 22     | RD40523 | 43     | RD41423    | 57     |
| 9.20MM     | .3622         | 92     | 127   | 6       | RD47120 | 23     | —       | —      | —          | —      |
| 9.30MM     | .3661         | 92     | 127   | 6       | RD47130 | 24     | —       | —      | —          | —      |
| U          | .3680         | 3-5/8  | 5     | 6       | RD40121 | 25     | RD40421 | 44     | RD41321    | 58     |
| 9.40MM     | .3701         | 92     | 127   | 6       | RD47140 | 26     | —       | —      | —          | —      |
| 9.50MM     | .3740         | 92     | 127   | 6       | RD47150 | 27     | —       | —      | —          | —      |
| 3/8        | .3750         | 3-5/8  | 5     | 6       | RD40224 | 28     | RD40524 | 45     | RD41424    | 59     |
| V          | .3770         | 3-5/8  | 5     | 6       | RD40122 | 29     | RD40422 | 46     | RD41322    | 60     |
| 9.60MM     | .3780         | 95     | 130   | 6       | RD47160 | 30     | —       | —      | —          | —      |
| 9.70MM     | .3819         | 95     | 130   | 6       | RD47170 | 31     | —       | —      | —          | —      |
| 9.80MM     | .3858         | 95     | 130   | 6       | RD47180 | 32     | —       | —      | —          | —      |
| W          | .3860         | 3-3/4  | 5-1/8 | 6       | RD40123 | 33     | RD40423 | 47     | RD41323    | 61     |



Technical data found on page 264.





Oxide



Bright



TiN Coated



## HSS, Jobber Length, 118° Point (.3898-.6875)

| Drill Size | Decimal Equiv | FL      | OAL   | Pkg Qty | Oxide   |        | Bright  |        | TiN Coated |        |
|------------|---------------|---------|-------|---------|---------|--------|---------|--------|------------|--------|
|            |               |         |       |         | Part #  | Item # | Part #  | Item # | Part #     | Item # |
| 9.90MM     | .3898         | 95      | 130   | 6       | RD47190 | 1      | —       | —      | —          | —      |
| 25/64      | .3906         | 3-3/4   | 5-1/8 | 6       | RD40225 | 2      | RD40525 | 34     | RD41425    | 45     |
| 10.00MM    | .3937         | 95      | 130   | 6       | RD47200 | 3      | —       | —      | —          | —      |
| X          | .3970         | 3-3/4   | 5-1/8 | 6       | RD40124 | 4      | RD40424 | 35     | RD41324    | 46     |
| 10.20MM    | .4016         | 98      | 133   | 6       | RD47202 | 5      | —       | —      | —          | —      |
| Y          | .4040         | 3-7/8   | 5-1/4 | 6       | RD40125 | 6      | RD40425 | 36     | RD41325    | 47     |
| 13/32      | .4062         | 3-7/8   | 5-1/4 | 6       | RD40226 | 7      | RD40526 | 37     | RD41426    | 48     |
| Z          | .4130         | 3-7/8   | 5-1/4 | 6       | RD40126 | 8      | RD40426 | 38     | RD41326    | 49     |
| 10.50MM    | .4134         | 98      | 133   | 6       | RD47205 | 9      | —       | —      | —          | —      |
| 27/64      | .4219         | 3-15/16 | 5-3/8 | 6       | RD40227 | 10     | RD40527 | 39     | RD41427    | 50     |
| 11.00MM    | .4331         | 103     | 140   | 6       | RD47210 | 11     | —       | —      | —          | —      |
| 7/16       | .4375         | 4-1/16  | 5-1/2 | 6       | RD40228 | 12     | RD40528 | 40     | RD41428    | 51     |
| 11.20MM    | .4409         | 106     | 143   | 6       | RD47212 | 13     | —       | —      | —          | —      |
| 11.50MM    | .4528         | 106     | 143   | 6       | RD47215 | 14     | —       | —      | —          | —      |
| 29/64      | .4531         | 4-3/16  | 5-5/8 | 6       | RD40229 | 15     | RD40529 | 41     | RD41429    | 52     |
| 15/32      | .4688         | 4-5/16  | 5-3/4 | 6       | RD40230 | 16     | RD40530 | 42     | RD41430    | 53     |
| 12.00MM    | .4724         | 111     | 150   | 6       | RD47220 | 17     | —       | —      | —          | —      |
| 31/64      | .4844         | 4-3/8   | 5-7/8 | 6       | RD40231 | 18     | RD40531 | 43     | RD41431    | 54     |
| 12.50MM    | .4921         | 114     | 152   | 6       | RD47225 | 19     | —       | —      | —          | —      |
| 1/2        | .5000         | 4-1/2   | 6     | 6       | RD40232 | 20     | RD40532 | 44     | RD41432    | 55     |
| 13.00MM    | .5118         | 114     | 152   | 6       | RD47230 | 21     | —       | —      | —          | —      |
| 33/64      | .5156         | 4-13/16 | 6-5/8 | 1       | RD40233 | 22     | —       | —      | —          | —      |
| 17/32      | .5312         | 4-13/16 | 6-5/8 | 1       | RD40234 | 23     | —       | —      | —          | —      |
| 35/64      | .5469         | 4-13/16 | 6-5/8 | 1       | RD40235 | 24     | —       | —      | —          | —      |
| 9/16       | .5625         | 4-13/16 | 6-5/8 | 1       | RD40236 | 25     | —       | —      | —          | —      |
| 37/64      | .5781         | 4-13/16 | 6-5/8 | 1       | RD40237 | 26     | —       | —      | —          | —      |
| 19/32      | .5938         | 5-3/16  | 7-1/8 | 1       | RD40238 | 27     | —       | —      | —          | —      |
| 39/64      | .6094         | 5-3/16  | 7-1/8 | 1       | RD40239 | 28     | —       | —      | —          | —      |
| 5/8        | .6250         | 5-3/16  | 7-1/8 | 1       | RD40240 | 29     | —       | —      | —          | —      |
| 41/64      | .6406         | 5-3/16  | 7-1/8 | 1       | RD40241 | 30     | —       | —      | —          | —      |
| 21/32      | .6562         | 5-3/16  | 7-1/8 | 1       | RD40242 | 31     | —       | —      | —          | —      |
| 43/64      | .6719         | 5-5/8   | 7-5/8 | 1       | RD40243 | 32     | —       | —      | —          | —      |
| 11/16      | .6875         | 5-5/8   | 7-5/8 | 1       | RD40244 | 33     | —       | —      | —          | —      |



Technical data found on page 264.





Oxide



Black & Gold Finish

## HSS, Heavy Duty, Jobber Length, 135° Split Point (.0400-.1405)

| Drill Size | Decimal Equiv | FL    | OAL    | Pkg Qty | Oxide  |         | Black & Gold Finish |         |    |
|------------|---------------|-------|--------|---------|--------|---------|---------------------|---------|----|
|            |               |       |        |         | Part # | Item #  | Part #              | Item #  |    |
| †*         | #60           | .0400 | 11/16  | 1-5/8   | 12     | RD40660 | 1                   | RD40960 | 39 |
| †*         | #59           | .0410 | 11/16  | 1-5/8   | 12     | RD40659 | 2                   | RD40959 | 40 |
| †*         | #58           | .0420 | 11/16  | 1-5/8   | 12     | RD40658 | 3                   | RD40958 | 41 |
| †*         | #57           | .0430 | 3/4    | 1-3/4   | 12     | RD40657 | 4                   | RD40957 | 42 |
| †*         | #56           | .0465 | 3/4    | 1-3/4   | 12     | RD40656 | 5                   | RD40956 | 43 |
| †*         | #55           | .0520 | 7/8    | 1-7/8   | 12     | RD40655 | 6                   | RD40955 | 44 |
| †*         | #54           | .0550 | 7/8    | 1-7/8   | 12     | RD40654 | 7                   | RD40954 | 45 |
| †*         | #53           | .0595 | 7/8    | 1-7/8   | 12     | RD40653 | 8                   | RD40953 | 46 |
| †*         | 1/16          | .0625 | 7/8    | 1-7/8   | 12     | RD40804 | 9                   | RD41104 | 47 |
| *          | #52           | .0635 | 7/8    | 1-7/8   | 12     | RD40652 | 10                  | RD40952 | 48 |
| *          | #51           | .0670 | 1      | 2       | 12     | RD40651 | 11                  | RD40951 | 49 |
| *          | #50           | .0700 | 1      | 2       | 12     | RD40650 | 12                  | RD40950 | 50 |
| *          | #49           | .0730 | 1      | 2       | 12     | RD40649 | 13                  | RD40949 | 51 |
| *          | #48           | .0760 | 1      | 2       | 12     | RD40648 | 14                  | RD40948 | 52 |
| *          | 5/64          | .0781 | 1      | 2       | 12     | RD40805 | 15                  | RD41105 | 53 |
| *          | #47           | .0785 | 1      | 2       | 12     | RD40647 | 16                  | RD40947 | 54 |
| *          | #46           | .0810 | 1-1/8  | 2-1/8   | 12     | RD40646 | 17                  | RD40946 | 55 |
| *          | #45           | .0820 | 1-1/8  | 2-1/8   | 12     | RD40645 | 18                  | RD40945 | 56 |
| *          | #44           | .0860 | 1-1/8  | 2-1/8   | 12     | RD40644 | 19                  | RD40944 | 57 |
| *          | #43           | .0890 | 1-1/4  | 2-1/4   | 12     | RD40643 | 20                  | RD40943 | 58 |
| *          | #42           | .0935 | 1-1/4  | 2-1/4   | 12     | RD40642 | 21                  | RD40942 | 59 |
| *          | 3/32          | .0938 | 1-1/4  | 2-1/4   | 12     | RD40806 | 22                  | RD41106 | 60 |
| *          | #41           | .0960 | 1-3/8  | 2-3/8   | 12     | RD40641 | 23                  | RD40941 | 61 |
| *          | #40           | .0980 | 1-3/8  | 2-3/8   | 12     | RD40640 | 24                  | RD40940 | 62 |
| *          | #39           | .0995 | 1-3/8  | 2-3/8   | 12     | RD40639 | 25                  | RD40939 | 63 |
| *          | #38           | .1015 | 1-7/16 | 2-1/2   | 12     | RD40638 | 26                  | RD40938 | 64 |
| *          | #37           | .1040 | 1-7/16 | 2-1/2   | 12     | RD40637 | 27                  | RD40937 | 65 |
| *          | #36           | .1065 | 1-7/16 | 2-1/2   | 12     | RD40636 | 28                  | RD40936 | 66 |
| *          | 7/64          | .1094 | 1-1/2  | 2-5/8   | 12     | RD40807 | 29                  | RD41107 | 67 |
| *          | #35           | .1100 | 1-1/2  | 2-5/8   | 12     | RD40635 | 30                  | RD40935 | 68 |
| *          | #34           | .1110 | 1-1/2  | 2-5/8   | 12     | RD40634 | 31                  | RD40934 | 69 |
| *          | #33           | .1130 | 1-1/2  | 2-5/8   | 12     | RD40633 | 32                  | RD40933 | 70 |
| *          | #32           | .1160 | 1-5/8  | 2-3/4   | 12     | RD40632 | 33                  | RD40932 | 71 |
| *          | #31           | .1200 | 1-5/8  | 2-3/4   | 12     | RD40631 | 34                  | RD40931 | 72 |
| *          | 1/8           | .1250 | 1-5/8  | 2-3/4   | 12     | RD40808 | 35                  | RD41108 | 73 |
| *          | #30           | .1285 | 1-5/8  | 2-3/4   | 12     | RD40630 | 36                  | RD40930 | 74 |
| *          | #29           | .1360 | 1-3/4  | 2-7/8   | 12     | RD40629 | 37                  | RD40929 | 75 |
| *          | #28           | .1405 | 1-3/4  | 2-7/8   | 12     | RD40628 | 38                  | RD40928 | 76 |

\* These items do not have a split point. † Black & Gold models are in Gold Finish only.



Technical data found on page 264.





Oxide



Black & Gold Finish



## HSS, Heavy Duty, Jobber Length, 135° Split Point (.1406-.2460)

| Drill Size | Decimal Equiv | FL     | OAL   | Pkg Qty | Oxide   |        | Black & Gold Finish |        |
|------------|---------------|--------|-------|---------|---------|--------|---------------------|--------|
|            |               |        |       |         | Part #  | Item # | Part #              | Item # |
| 9/64       | .1406         | 1-3/4  | 2-7/8 | 12      | RD40809 | 1      | RD41109             | 39     |
| #27        | .1440         | 1-7/8  | 3     | 12      | RD40627 | 2      | RD40927             | 40     |
| #26        | .1470         | 1-7/8  | 3     | 12      | RD40626 | 3      | RD40926             | 41     |
| #25        | .1495         | 1-7/8  | 3     | 12      | RD40625 | 4      | RD40925             | 42     |
| #24        | .1520         | 2      | 3-1/8 | 12      | RD40624 | 5      | RD40924             | 43     |
| #23        | .1540         | 2      | 3-1/8 | 12      | RD40623 | 6      | RD40923             | 44     |
| 5/32       | .1562         | 2      | 3-1/8 | 12      | RD40810 | 7      | RD41110             | 45     |
| #22        | .1570         | 2      | 3-1/8 | 12      | RD40622 | 8      | RD40922             | 46     |
| #21        | .1590         | 2-1/8  | 3-1/4 | 12      | RD40621 | 9      | RD40921             | 47     |
| #20        | .1610         | 2-1/8  | 3-1/4 | 12      | RD40620 | 10     | RD40920             | 48     |
| #19        | .1660         | 2-1/8  | 3-1/4 | 12      | RD40619 | 11     | RD40919             | 49     |
| #18        | .1695         | 2-1/8  | 3-1/4 | 12      | RD40618 | 12     | RD40918             | 50     |
| 11/64      | .1719         | 2-1/8  | 3-1/4 | 12      | RD40811 | 13     | RD41111             | 51     |
| #17        | .1730         | 2-3/16 | 3-3/8 | 12      | RD40617 | 14     | RD40917             | 52     |
| #16        | .1770         | 2-3/16 | 3-3/8 | 12      | RD40616 | 15     | RD40916             | 53     |
| #15        | .1800         | 2-3/16 | 3-3/8 | 12      | RD40615 | 16     | RD40915             | 54     |
| #14        | .1820         | 2-3/16 | 3-3/8 | 12      | RD40614 | 17     | RD40914             | 55     |
| #13        | .1850         | 2-5/16 | 3-1/2 | 12      | RD40613 | 18     | RD40913             | 56     |
| 3/16       | .1875         | 2-5/16 | 3-1/2 | 12      | RD40812 | 19     | RD41112             | 57     |
| #12        | .1890         | 2-5/16 | 3-1/2 | 12      | RD40612 | 20     | RD40912             | 58     |
| #11        | .1910         | 2-5/16 | 3-1/2 | 12      | RD40611 | 21     | RD40911             | 59     |
| #10        | .1935         | 2-7/16 | 3-5/8 | 12      | RD40610 | 22     | RD40910             | 60     |
| #9         | .1960         | 2-7/16 | 3-5/8 | 12      | RD40609 | 23     | RD40909             | 61     |
| #8         | .1990         | 2-7/16 | 3-5/8 | 12      | RD40608 | 24     | RD40908             | 62     |
| #7         | .2010         | 2-7/16 | 3-5/8 | 12      | RD40607 | 25     | RD40907             | 63     |
| 13/64      | .2031         | 2-7/16 | 3-5/8 | 12      | RD40813 | 26     | RD41113             | 64     |
| #6         | .2040         | 2-1/2  | 3-3/4 | 12      | RD40606 | 27     | RD40906             | 65     |
| #5         | .2055         | 2-1/2  | 3-3/4 | 12      | RD40605 | 28     | RD40905             | 66     |
| #4         | .2090         | 2-1/2  | 3-3/4 | 12      | RD40604 | 29     | RD40904             | 67     |
| #3         | .2130         | 2-1/2  | 3-3/4 | 12      | RD40603 | 30     | RD40903             | 68     |
| 7/32       | .2188         | 2-1/2  | 3-3/4 | 12      | RD40814 | 31     | RD41114             | 69     |
| #2         | .2210         | 2-5/8  | 3-7/8 | 12      | RD40602 | 32     | RD40902             | 70     |
| #1         | .2280         | 2-5/8  | 3-7/8 | 12      | RD40601 | 33     | RD40901             | 71     |
| A          | .2340         | 2-5/8  | 3-7/8 | 12      | RD40701 | 34     | RD41001             | 72     |
| 15/64      | .2344         | 2-5/8  | 3-7/8 | 12      | RD40815 | 35     | RD41115             | 73     |
| B          | .2380         | 2-3/4  | 4     | 12      | RD40702 | 36     | RD41002             | 74     |
| C          | .2420         | 2-3/4  | 4     | 12      | RD40703 | 37     | RD41003             | 75     |
| D          | .2460         | 2-3/4  | 4     | 12      | RD40704 | 38     | RD41004             | 76     |



Technical data found on page 264.





Oxide



Black & Gold Finish



## HSS, Heavy Duty, Jobber Length, 135° Split Point (.2500-.5000)

| Drill Size | Decimal Equiv | FL      | OAL   | Pkg Qty | Oxide   |        | Black & Gold Finish |        |
|------------|---------------|---------|-------|---------|---------|--------|---------------------|--------|
|            |               |         |       |         | Part #  | Item # | Part #              | Item # |
| 1/4        | .2500         | 2-3/4   | 4     | 12      | RD40816 | 1      | RD41116             | 40     |
| E          | .2500         | 2-3/4   | 4     | 12      | RD40705 | 2      | RD41005             | 41     |
| F          | .2570         | 2-7/8   | 4-1/8 | 6       | RD40706 | 3      | RD41006             | 42     |
| G          | .2610         | 2-7/8   | 4-1/8 | 6       | RD40707 | 4      | RD41007             | 43     |
| 17/64      | .2656         | 2-7/8   | 4-1/8 | 6       | RD40817 | 5      | RD41117             | 44     |
| H          | .2660         | 2-7/8   | 4-1/8 | 6       | RD40708 | 6      | RD41008             | 45     |
| I          | .2720         | 2-7/8   | 4-1/8 | 6       | RD40709 | 7      | RD41009             | 46     |
| J          | .2770         | 2-7/8   | 4-1/8 | 6       | RD40710 | 8      | RD41010             | 47     |
| K          | .2810         | 2-15/16 | 4-1/4 | 6       | RD40711 | 9      | RD41011             | 48     |
| 9/32       | .2812         | 2-15/16 | 4-1/4 | 6       | RD40818 | 10     | RD41118             | 49     |
| L          | .2900         | 2-15/16 | 4-1/4 | 6       | RD40712 | 11     | RD41012             | 50     |
| M          | .2950         | 3-1/16  | 4-3/8 | 6       | RD40713 | 12     | RD41013             | 51     |
| 19/64      | .2969         | 3-1/16  | 4-3/8 | 6       | RD40819 | 13     | RD41119             | 52     |
| N          | .3020         | 3-1/16  | 4-3/8 | 6       | RD40714 | 14     | RD41014             | 53     |
| 5/16       | .3125         | 3-3/16  | 4-1/2 | 6       | RD40820 | 15     | RD41120             | 54     |
| O          | .3160         | 3-3/16  | 4-1/2 | 6       | RD40715 | 16     | RD41015             | 55     |
| P          | .3230         | 3-5/16  | 4-5/8 | 6       | RD40716 | 17     | RD41016             | 56     |
| 21/64      | .3281         | 3-5/16  | 4-5/8 | 6       | RD40821 | 18     | RD41121             | 57     |
| Q          | .3320         | 3-7/16  | 4-3/4 | 6       | RD40717 | 19     | RD41017             | 58     |
| R          | .3390         | 3-7/16  | 4-3/4 | 6       | RD40718 | 20     | RD41018             | 59     |
| 11/32      | .3438         | 3-7/16  | 4-3/4 | 6       | RD40822 | 21     | RD41122             | 60     |
| S          | .3480         | 3-1/2   | 4-7/8 | 6       | RD40719 | 22     | RD41019             | 61     |
| T          | .3580         | 3-1/2   | 4-7/8 | 6       | RD40720 | 23     | RD41020             | 62     |
| 23/64      | .3594         | 3-1/2   | 4-7/8 | 6       | RD40823 | 24     | RD41123             | 63     |
| U          | .3680         | 3-5/8   | 5     | 6       | RD40721 | 25     | RD41021             | 64     |
| 3/8        | .3750         | 3-5/8   | 5     | 6       | RD40824 | 26     | RD41124             | 65     |
| V          | .3770         | 3-5/8   | 5     | 6       | RD40722 | 27     | RD41022             | 66     |
| W          | .3860         | 3-3/4   | 5-1/8 | 6       | RD40723 | 28     | RD41023             | 67     |
| 25/64      | .3906         | 3-3/4   | 5-1/8 | 6       | RD40825 | 29     | RD41125             | 68     |
| X          | .3970         | 3-3/4   | 5-1/8 | 6       | RD40724 | 30     | RD41024             | 69     |
| Y          | .4040         | 3-7/8   | 5-1/4 | 6       | RD40725 | 31     | RD41025             | 70     |
| 13/32      | .4062         | 3-7/8   | 5-1/4 | 6       | RD40826 | 32     | RD41126             | 71     |
| Z          | .4130         | 3-7/8   | 5-1/4 | 6       | RD40726 | 33     | RD41026             | 72     |
| 27/64      | .4219         | 3-15/16 | 5-3/8 | 6       | RD40827 | 34     | RD41127             | 73     |
| 7/16       | .4375         | 4-1/16  | 5-1/2 | 6       | RD40828 | 35     | RD41128             | 74     |
| 29/64      | .4531         | 4-3/16  | 5-5/8 | 6       | RD40829 | 36     | RD41129             | 75     |
| 15/32      | .4688         | 4-5/16  | 5-3/4 | 6       | RD40830 | 37     | RD41130             | 76     |
| 31/64      | .4844         | 4-3/8   | 5-7/8 | 6       | RD40831 | 38     | RD41131             | 77     |
| 1/2        | .5000         | 4-1/2   | 6     | 6       | RD40832 | 39     | RD41132             | 78     |



Technical data found on page 264.





Straw Finish

| Cobalt, Jobber Length, 135° Split Point<br>(.0135-.0938) |               |       |       |         |              |        |
|--|---------------|-------|-------|---------|--------------|--------|
| Drill Size   | Decimal Equiv | FL    | OAL   | Pkg Qty | Straw Finish |        |
|  |               |       |       |         | Part #       | Item # |
| * #80  | .0135         | 1/8   | 3/4   | 12      | RD42380      | 1      |
| * #79  | .0145         | 1/8   | 3/4   | 12      | RD42379      | 2      |
| * #78  | .0160         | 3/16  | 7/8   | 12      | RD42378      | 3      |
| * #77  | .0180         | 3/16  | 7/8   | 12      | RD42377      | 4      |
| * #76  | .0200         | 3/16  | 7/8   | 12      | RD42376      | 5      |
| * #75  | .0210         | 1/4   | 1     | 12      | RD42375      | 6      |
| * #74  | .0225         | 1/4   | 1     | 12      | RD42374      | 7      |
| * #73  | .0240         | 5/16  | 1-1/8 | 12      | RD42373      | 8      |
| * #72  | .0250         | 5/16  | 1-1/8 | 12      | RD42372      | 9      |
| * #71  | .0260         | 3/8   | 1-1/4 | 12      | RD42371      | 10     |
| * #70  | .0280         | 3/8   | 1-1/4 | 12      | RD42370      | 11     |
| * #69  | .0292         | 1/2   | 1-3/8 | 12      | RD42369      | 12     |
| * #68  | .0310         | 1/2   | 1-3/8 | 12      | RD42368      | 13     |
| * #67  | .0320         | 1/2   | 1-3/8 | 12      | RD42367      | 14     |
| * #66  | .0330         | 1/2   | 1-3/8 | 12      | RD42366      | 15     |
| * #65  | .0350         | 5/8   | 1-1/2 | 12      | RD42365      | 16     |
| * #64  | .0360         | 5/8   | 1-1/2 | 12      | RD42364      | 17     |
| * #63  | .0370         | 5/8   | 1-1/2 | 12      | RD42363      | 18     |
| * #62  | .0380         | 5/8   | 1-1/2 | 12      | RD42362      | 19     |
| * #61  | .0390         | 11/16 | 1-5/8 | 12      | RD42361      | 20     |
| * #60  | .0400         | 11/16 | 1-5/8 | 12      | RD42360      | 21     |
| * #59  | .0410         | 11/16 | 1-5/8 | 12      | RD42359      | 22     |
| * #58  | .0420         | 11/16 | 1-5/8 | 12      | RD42358      | 23     |
| * #57  | .0430         | 3/4   | 1-3/4 | 12      | RD42357      | 24     |
| * #56  | .0465         | 3/4   | 1-3/4 | 12      | RD42356      | 25     |
| * 3/64   | .0469         | 3/4   | 1-3/4 | 12      | RD42503      | 26     |
| * #55  | .0520         | 7/8   | 1-7/8 | 12      | RD42355      | 27     |
| * #54  | .0550         | 7/8   | 1-7/8 | 12      | RD42354      | 28     |
| * #53  | .0595         | 7/8   | 1-7/8 | 12      | RD42353      | 29     |
| * 1/16   | .0625         | 7/8   | 1-7/8 | 12      | RD42504      | 30     |
| * #52  | .0635         | 7/8   | 1-7/8 | 12      | RD42352      | 31     |
| * #51  | .0670         | 1     | 2     | 12      | RD42351      | 32     |
| * #50  | .0700         | 1     | 2     | 12      | RD42350      | 33     |
| * #49  | .0730         | 1     | 2     | 12      | RD42349      | 34     |
| * #48  | .0760         | 1     | 2     | 12      | RD42348      | 35     |
| * 5/64   | .0781         | 1     | 2     | 12      | RD42505      | 36     |
| * #47  | .0785         | 1     | 2     | 12      | RD42347      | 37     |
| * #46  | .0810         | 1-1/8 | 2-1/8 | 12      | RD42346      | 38     |
| * #45  | .0820         | 1-1/8 | 2-1/8 | 12      | RD42345      | 39     |
| * #44  | .0860         | 1-1/8 | 2-1/8 | 12      | RD42344      | 40     |
| * #43  | .0890         | 1-1/4 | 2-1/4 | 12      | RD42343      | 41     |
| * #42  | .0935         | 1-1/4 | 2-1/4 | 12      | RD42342      | 42     |
| * 3/32   | .0938         | 1-1/4 | 2-1/4 | 12      | RD42506      | 43     |

\* These items do not have a split point.



Technical data found on page 265.





Straw Finish



## Cobalt, Jobber Length, 135° Split Point (.0960-.2040)

| Drill Size | Decimal Equiv | FL     | OAL   | Pkg Qty | Straw Finish |        |
|------------|---------------|--------|-------|---------|--------------|--------|
|            |               |        |       |         | Part #       | Item # |
| #41        | .0960         | 1-3/8  | 2-3/8 | 12      | RD42341      | 1      |
| #40        | .0980         | 1-3/8  | 2-3/8 | 12      | RD42340      | 2      |
| #39        | .0995         | 1-3/8  | 2-3/8 | 12      | RD42339      | 3      |
| #38        | .1015         | 1-7/16 | 2-1/2 | 12      | RD42338      | 4      |
| #37        | .1040         | 1-7/16 | 2-1/2 | 12      | RD42337      | 5      |
| #36        | .1065         | 1-7/16 | 2-1/2 | 12      | RD42336      | 6      |
| 7/64       | .1094         | 1-1/2  | 2-5/8 | 12      | RD42507      | 7      |
| #35        | .1100         | 1-1/2  | 2-5/8 | 12      | RD42335      | 8      |
| #34        | .1110         | 1-1/2  | 2-5/8 | 12      | RD42334      | 9      |
| #33        | .1130         | 1-1/2  | 2-5/8 | 12      | RD42333      | 10     |
| #32        | .1160         | 1-5/8  | 2-3/4 | 12      | RD42332      | 11     |
| #31        | .1200         | 1-5/8  | 2-3/4 | 12      | RD42331      | 12     |
| 1/8        | .1250         | 1-5/8  | 2-3/4 | 12      | RD42508      | 13     |
| #30        | .1285         | 1-5/8  | 2-3/4 | 12      | RD42330      | 14     |
| #29        | .1360         | 1-3/4  | 2-7/8 | 12      | RD42329      | 15     |
| #28        | .1405         | 1-3/4  | 2-7/8 | 12      | RD42328      | 16     |
| 9/64       | .1406         | 1-3/4  | 2-7/8 | 12      | RD42509      | 17     |
| #27        | .1440         | 1-7/8  | 3     | 12      | RD42327      | 18     |
| #26        | .1470         | 1-7/8  | 3     | 12      | RD42326      | 19     |
| #25        | .1495         | 1-7/8  | 3     | 12      | RD42325      | 20     |
| #24        | .1520         | 2      | 3-1/8 | 12      | RD42324      | 21     |
| #23        | .1540         | 2      | 3-1/8 | 12      | RD42323      | 22     |
| 5/32       | .1562         | 2      | 3-1/8 | 12      | RD42510      | 23     |
| #22        | .1570         | 2      | 3-1/8 | 12      | RD42322      | 24     |
| #21        | .1590         | 2-1/8  | 3-1/4 | 12      | RD42321      | 25     |
| #20        | .1610         | 2-1/8  | 3-1/4 | 12      | RD42320      | 26     |
| #19        | .1660         | 2-1/8  | 3-1/4 | 12      | RD42319      | 27     |
| #18        | .1695         | 2-1/8  | 3-1/4 | 12      | RD42318      | 28     |
| 11/64      | .1719         | 2-1/8  | 3-1/4 | 12      | RD42511      | 29     |
| #17        | .1730         | 2-3/16 | 3-3/8 | 12      | RD42317      | 30     |
| #16        | .1770         | 2-3/16 | 3-3/8 | 12      | RD42316      | 31     |
| #15        | .1800         | 2-3/16 | 3-3/8 | 12      | RD42315      | 32     |
| #14        | .1820         | 2-3/16 | 3-3/8 | 12      | RD42314      | 33     |
| #13        | .1850         | 2-5/16 | 3-1/2 | 12      | RD42313      | 34     |
| 3/16       | .1875         | 2-5/16 | 3-1/2 | 12      | RD42512      | 35     |
| #12        | .1890         | 2-5/16 | 3-1/2 | 12      | RD42312      | 36     |
| #11        | .1910         | 2-5/16 | 3-1/2 | 12      | RD42311      | 37     |
| #10        | .1935         | 2-7/16 | 3-5/8 | 12      | RD42310      | 38     |
| #9         | .1960         | 2-7/16 | 3-5/8 | 12      | RD42309      | 39     |
| #8         | .1990         | 2-7/16 | 3-5/8 | 12      | RD42308      | 40     |
| #7         | .2010         | 2-7/16 | 3-5/8 | 12      | RD42307      | 41     |
| 13/64      | .2031         | 2-7/16 | 3-5/8 | 12      | RD42513      | 42     |
| #6         | .2040         | 2-1/2  | 3-3/4 | 12      | RD42306      | 43     |



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Technical data found on page 265.







Straw Finish



## Cobalt, Jobber Length, 135° Split Point (.2055-.4062)

| Drill Size | Decimal Equiv | FL      | OAL   | Pkg Qty | Straw Finish |        |
|------------|---------------|---------|-------|---------|--------------|--------|
|            |               |         |       |         | Part #       | Item # |
| #5         | .2055         | 2-1/2   | 3-3/4 | 12      | RD42305      | 1      |
| #4         | .2090         | 2-1/2   | 3-3/4 | 12      | RD42304      | 2      |
| #3         | .2130         | 2-1/2   | 3-3/4 | 12      | RD42303      | 3      |
| 7/32       | .2188         | 2-1/2   | 3-3/4 | 12      | RD42514      | 4      |
| #2         | .2210         | 2-5/8   | 3-7/8 | 12      | RD42302      | 5      |
| #1         | .2280         | 2-5/8   | 3-7/8 | 12      | RD42301      | 6      |
| A          | .2340         | 2-5/8   | 3-7/8 | 12      | RD42401      | 7      |
| 15/64      | .2344         | 2-5/8   | 3-7/8 | 12      | RD42515      | 8      |
| B          | .2380         | 2-3/4   | 4     | 12      | RD42402      | 9      |
| C          | .2420         | 2-3/4   | 4     | 12      | RD42403      | 10     |
| D          | .2460         | 2-3/4   | 4     | 12      | RD42404      | 11     |
| 1/4        | .2500         | 2-3/4   | 4     | 12      | RD42516      | 12     |
| E          | .2500         | 2-3/4   | 4     | 12      | RD42405      | 13     |
| F          | .2570         | 2-7/8   | 4-1/8 | 6       | RD42406      | 14     |
| G          | .2610         | 2-7/8   | 4-1/8 | 6       | RD42407      | 15     |
| 17/64      | .2656         | 2-7/8   | 4-1/8 | 6       | RD42517      | 16     |
| H          | .2660         | 2-7/8   | 4-1/8 | 6       | RD42408      | 17     |
| I          | .2720         | 2-7/8   | 4-1/8 | 6       | RD42409      | 18     |
| J          | .2770         | 2-7/8   | 4-1/8 | 6       | RD42410      | 19     |
| K          | .2810         | 2-15/16 | 4-1/4 | 6       | RD42411      | 20     |
| 9/32       | .2812         | 2-15/16 | 4-1/4 | 6       | RD42518      | 21     |
| L          | .2900         | 2-15/16 | 4-1/4 | 6       | RD42412      | 22     |
| M          | .2950         | 3-1/16  | 4-3/8 | 6       | RD42413      | 23     |
| 19/64      | .2969         | 3-1/16  | 4-3/8 | 6       | RD42519      | 24     |
| N          | .3020         | 3-1/16  | 4-3/8 | 6       | RD42414      | 25     |
| 5/16       | .3125         | 3-3/16  | 4-1/2 | 6       | RD42520      | 26     |
| O          | .3160         | 3-3/16  | 4-1/2 | 6       | RD42415      | 27     |
| P          | .3230         | 3-5/16  | 4-5/8 | 6       | RD42416      | 28     |
| 21/64      | .3281         | 3-5/16  | 4-5/8 | 6       | RD42521      | 29     |
| Q          | .3320         | 3-7/16  | 4-3/4 | 6       | RD42417      | 30     |
| R          | .3390         | 3-7/16  | 4-3/4 | 6       | RD42418      | 31     |
| 11/32      | .3438         | 3-7/16  | 4-3/4 | 6       | RD42522      | 32     |
| S          | .3480         | 3-1/2   | 4-7/8 | 6       | RD42419      | 33     |
| T          | .3580         | 3-1/2   | 4-7/8 | 6       | RD42420      | 34     |
| 23/64      | .3594         | 3-1/2   | 4-7/8 | 6       | RD42523      | 35     |
| U          | .3680         | 3-5/8   | 5     | 6       | RD42421      | 36     |
| 3/8        | .3750         | 3-5/8   | 5     | 6       | RD42524      | 37     |
| V          | .3770         | 3-5/8   | 5     | 6       | RD42422      | 38     |
| W          | .3860         | 3-3/4   | 5-1/8 | 6       | RD42423      | 39     |
| 25/64      | .3906         | 3-3/4   | 5-1/8 | 6       | RD42525      | 40     |
| X          | .3970         | 3-3/4   | 5-1/8 | 6       | RD42424      | 41     |
| Y          | .4040         | 3-7/8   | 5-1/4 | 6       | RD42425      | 42     |
| 13/32      | .4062         | 3-7/8   | 5-1/4 | 6       | RD42526      | 43     |



Technical data found on page 265.





Straw Finish



## Cobalt, Jobber Length, 135° Split Point (.4130-.5000)

| Drill Size   | Decimal Equiv | FL             | OAL   | Pkg Qty | Straw Finish            |        |
|--------------|---------------|----------------|-------|---------|-------------------------|--------|
|              |               |                |       |         | Part #                  | Item # |
| <b>Z</b>     | .4130         | <b>3-7/8</b>   | 5-1/4 | 6       | <a href="#">RD42426</a> | 1      |
| <b>27/64</b> | .4219         | <b>3-15/16</b> | 5-3/8 | 6       | <a href="#">RD42527</a> | 2      |
| <b>7/16</b>  | .4375         | <b>4-1/16</b>  | 5-1/2 | 6       | <a href="#">RD42528</a> | 3      |
| <b>29/64</b> | .4531         | <b>4-3/16</b>  | 5-5/8 | 6       | <a href="#">RD42529</a> | 4      |
| <b>15/32</b> | .4688         | <b>4-5/16</b>  | 5-3/4 | 6       | <a href="#">RD42530</a> | 5      |
| <b>31/64</b> | .4844         | <b>4-3/8</b>   | 5-7/8 | 6       | <a href="#">RD42531</a> | 6      |
| <b>1/2</b>   | .5000         | <b>4-1/2</b>   | 6     | 6       | <a href="#">RD42532</a> | 7      |

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Technical data found on page 265.





AITiN Coated

## Cobalt, Jobber Length, 135° Split Point (.0400-.1520)

| Drill Size | Decimal Equiv | FL     | OAL   | Pkg Qty | AITiN Coated |        |
|------------|---------------|--------|-------|---------|--------------|--------|
|            |               |        |       |         | Part #       | Item # |
| * #60      | .0400         | 11/16  | 1-5/8 | 12      | RD45460      | 1      |
| * #59      | .0410         | 11/16  | 1-5/8 | 12      | RD45459      | 2      |
| * #58      | .0420         | 11/16  | 1-5/8 | 12      | RD45458      | 3      |
| * #57      | .0430         | 3/4    | 1-3/4 | 12      | RD45457      | 4      |
| * #56      | .0465         | 3/4    | 1-3/4 | 12      | RD45456      | 5      |
| * #55      | .0520         | 7/8    | 1-7/8 | 12      | RD45455      | 6      |
| * #54      | .0550         | 7/8    | 1-7/8 | 12      | RD45454      | 7      |
| * #53      | .0595         | 7/8    | 1-7/8 | 12      | RD45453      | 8      |
| * 1/16     | .0625         | 7/8    | 1-7/8 | 12      | RD45204      | 9      |
| * #52      | .0635         | 7/8    | 1-7/8 | 12      | RD45452      | 10     |
| * #51      | .0670         | 1      | 2     | 12      | RD45451      | 11     |
| * #50      | .0700         | 1      | 2     | 12      | RD45450      | 12     |
| * #49      | .0730         | 1      | 2     | 12      | RD45449      | 13     |
| * #48      | .0760         | 1      | 2     | 12      | RD45448      | 14     |
| * 5/64     | .0781         | 1      | 2     | 12      | RD45205      | 15     |
| * #47      | .0785         | 1      | 2     | 12      | RD45447      | 16     |
| * #46      | .0810         | 1-1/8  | 2-1/8 | 12      | RD45446      | 17     |
| * #45      | .0820         | 1-1/8  | 2-1/8 | 12      | RD45445      | 18     |
| * #44      | .0860         | 1-1/8  | 2-1/8 | 12      | RD45444      | 19     |
| * #43      | .0890         | 1-1/4  | 2-1/4 | 12      | RD45443      | 20     |
| * #42      | .0935         | 1-1/4  | 2-1/4 | 12      | RD45442      | 21     |
| * 3/32     | .0938         | 1-1/4  | 2-1/4 | 12      | RD45206      | 22     |
| * #41      | .0960         | 1-3/8  | 2-3/8 | 12      | RD45441      | 23     |
| * #40      | .0980         | 1-3/8  | 2-3/8 | 12      | RD45440      | 24     |
| * #39      | .0995         | 1-3/8  | 2-3/8 | 12      | RD45439      | 25     |
| * #38      | .1015         | 1-7/16 | 2-1/2 | 12      | RD45438      | 26     |
| * #37      | .1040         | 1-7/16 | 2-1/2 | 12      | RD45437      | 27     |
| * #36      | .1065         | 1-7/16 | 2-1/2 | 12      | RD45436      | 28     |
| * 7/64     | .1094         | 1-1/2  | 2-5/8 | 12      | RD45207      | 29     |
| * #35      | .1100         | 1-1/2  | 2-5/8 | 12      | RD45435      | 30     |
| * #34      | .1110         | 1-1/2  | 2-5/8 | 12      | RD45434      | 31     |
| * #33      | .1130         | 1-1/2  | 2-5/8 | 12      | RD45433      | 32     |
| * #32      | .1160         | 1-5/8  | 2-3/4 | 12      | RD45432      | 33     |
| * #31      | .1200         | 1-5/8  | 2-3/4 | 12      | RD45431      | 34     |
| * 1/8      | .1250         | 1-5/8  | 2-3/4 | 12      | RD45208      | 35     |
| * #30      | .1285         | 1-5/8  | 2-3/4 | 12      | RD45430      | 36     |
| * #29      | .1360         | 1-3/4  | 2-7/8 | 12      | RD45429      | 37     |
| * #28      | .1405         | 1-3/4  | 2-7/8 | 12      | RD45428      | 38     |
| * 9/64     | .1406         | 1-3/4  | 2-7/8 | 12      | RD45209      | 39     |
| * #27      | .1440         | 1-7/8  | 3     | 12      | RD45427      | 40     |
| * #26      | .1470         | 1-7/8  | 3     | 12      | RD45426      | 41     |
| * #25      | .1495         | 1-7/8  | 3     | 12      | RD45425      | 42     |
| * #24      | .1520         | 2      | 3-1/8 | 12      | RD45424      | 43     |

\* These items do not have a split point.



Technical data found on page 265.





AITiN Coated



## Cobalt, Jobber Length, 135° Split Point (.1540-.2812)

| Drill Size | Decimal Equiv | FL      | OAL   | Pkg Qty | AITiN Coated |        |
|------------|---------------|---------|-------|---------|--------------|--------|
|            |               |         |       |         | Part #       | Item # |
| #23        | .1540         | 2       | 3-1/8 | 12      | RD45423      | 1      |
| 5/32       | .1562         | 2       | 3-1/8 | 12      | RD45210      | 2      |
| #22        | .1570         | 2       | 3-1/8 | 12      | RD45422      | 3      |
| #21        | .1590         | 2-1/8   | 3-1/4 | 12      | RD45421      | 4      |
| #20        | .1610         | 2-1/8   | 3-1/4 | 12      | RD45420      | 5      |
| #19        | .1660         | 2-1/8   | 3-1/4 | 12      | RD45419      | 6      |
| #18        | .1695         | 2-1/8   | 3-1/4 | 12      | RD45418      | 7      |
| 11/64      | .1719         | 2-1/8   | 3-1/4 | 12      | RD45211      | 8      |
| #17        | .1730         | 2-3/16  | 3-3/8 | 12      | RD45417      | 9      |
| #16        | .1770         | 2-3/16  | 3-3/8 | 12      | RD45416      | 10     |
| #15        | .1800         | 2-3/16  | 3-3/8 | 12      | RD45415      | 11     |
| #14        | .1820         | 2-3/16  | 3-3/8 | 12      | RD45414      | 12     |
| #13        | .1850         | 2-5/16  | 3-1/2 | 12      | RD45413      | 13     |
| 3/16       | .1875         | 2-5/16  | 3-1/2 | 12      | RD45212      | 14     |
| #12        | .1890         | 2-5/16  | 3-1/2 | 12      | RD45412      | 15     |
| #11        | .1910         | 2-5/16  | 3-1/2 | 12      | RD45411      | 16     |
| #10        | .1935         | 2-7/16  | 3-5/8 | 12      | RD45410      | 17     |
| #9         | .1960         | 2-7/16  | 3-5/8 | 12      | RD45409      | 18     |
| #8         | .1990         | 2-7/16  | 3-5/8 | 12      | RD45408      | 19     |
| #7         | .2010         | 2-7/16  | 3-5/8 | 12      | RD45407      | 20     |
| 13/64      | .2031         | 2-7/16  | 3-5/8 | 12      | RD45213      | 21     |
| #6         | .2040         | 2-1/2   | 3-3/4 | 12      | RD45406      | 22     |
| #5         | .2055         | 2-1/2   | 3-3/4 | 12      | RD45405      | 23     |
| #4         | .2090         | 2-1/2   | 3-3/4 | 12      | RD45404      | 24     |
| #3         | .2130         | 2-1/2   | 3-3/4 | 12      | RD45403      | 25     |
| 7/32       | .2188         | 2-1/2   | 3-3/4 | 12      | RD45214      | 26     |
| #2         | .2210         | 2-5/8   | 3-7/8 | 12      | RD45402      | 27     |
| #1         | .2280         | 2-5/8   | 3-7/8 | 12      | RD45401      | 28     |
| A          | .2340         | 2-5/8   | 3-7/8 | 12      | RD45301      | 29     |
| 15/64      | .2344         | 2-5/8   | 3-7/8 | 12      | RD45215      | 30     |
| B          | .2380         | 2-3/4   | 4     | 12      | RD45302      | 31     |
| C          | .2420         | 2-3/4   | 4     | 12      | RD45303      | 32     |
| D          | .2460         | 2-3/4   | 4     | 12      | RD45304      | 33     |
| 1/4        | .2500         | 2-3/4   | 4     | 12      | RD45216      | 34     |
| E          | .2500         | 2-3/4   | 4     | 12      | RD45305      | 35     |
| F          | .2570         | 2-7/8   | 4-1/8 | 6       | RD45306      | 36     |
| G          | .2610         | 2-7/8   | 4-1/8 | 6       | RD45307      | 37     |
| 17/64      | .2656         | 2-7/8   | 4-1/8 | 6       | RD45217      | 38     |
| H          | .2660         | 2-7/8   | 4-1/8 | 6       | RD45308      | 39     |
| I          | .2720         | 2-7/8   | 4-1/8 | 6       | RD45309      | 40     |
| J          | .2770         | 2-7/8   | 4-1/8 | 6       | RD45310      | 41     |
| K          | .2810         | 2-15/16 | 4-1/4 | 6       | RD45311      | 42     |
| 9/32       | .2812         | 2-15/16 | 4-1/4 | 6       | RD45218      | 43     |



Technical data found on page 265.





AITiN Coated



## Cobalt, Jobber Length, 135° Split Point (.2900-.5000)

| Drill Size | Decimal Equiv | FL      | OAL   | Pkg Qty | AITiN Coated |        |
|------------|---------------|---------|-------|---------|--------------|--------|
|            |               |         |       |         | Part #       | Item # |
| L          | .2900         | 2-15/16 | 4-1/4 | 6       | RD45312      | 1      |
| M          | .2950         | 3-1/16  | 4-3/8 | 6       | RD45313      | 2      |
| 19/64      | .2969         | 3-1/16  | 4-3/8 | 6       | RD45219      | 3      |
| N          | .3020         | 3-1/16  | 4-3/8 | 6       | RD45314      | 4      |
| 5/16       | .3125         | 3-3/16  | 4-1/2 | 6       | RD45220      | 5      |
| O          | .3160         | 3-3/16  | 4-1/2 | 6       | RD45315      | 6      |
| P          | .3230         | 3-5/16  | 4-5/8 | 6       | RD45316      | 7      |
| 21/64      | .3281         | 3-5/16  | 4-5/8 | 6       | RD45221      | 8      |
| Q          | .3320         | 3-7/16  | 4-3/4 | 6       | RD45317      | 9      |
| R          | .3390         | 3-7/16  | 4-3/4 | 6       | RD45318      | 10     |
| 11/32      | .3438         | 3-7/16  | 4-3/4 | 6       | RD45222      | 11     |
| S          | .3480         | 3-1/2   | 4-7/8 | 6       | RD45319      | 12     |
| T          | .3580         | 3-1/2   | 4-7/8 | 6       | RD45320      | 13     |
| 23/64      | .3594         | 3-1/2   | 4-7/8 | 6       | RD45223      | 14     |
| U          | .3680         | 3-5/8   | 5     | 6       | RD45321      | 15     |
| 3/8        | .3750         | 3-5/8   | 5     | 6       | RD45224      | 16     |
| V          | .3770         | 3-5/8   | 5     | 6       | RD45322      | 17     |
| W          | .3860         | 3-3/4   | 5-1/8 | 6       | RD45323      | 18     |
| 25/64      | .3906         | 3-3/4   | 5-1/8 | 6       | RD45225      | 19     |
| X          | .3970         | 3-3/4   | 5-1/8 | 6       | RD45324      | 20     |
| Y          | .4040         | 3-7/8   | 5-1/4 | 6       | RD45325      | 21     |
| 13/32      | .4062         | 3-7/8   | 5-1/4 | 6       | RD45226      | 22     |
| Z          | .4130         | 3-7/8   | 5-1/4 | 6       | RD45326      | 23     |
| 27/64      | .4219         | 3-15/16 | 5-3/8 | 6       | RD45227      | 24     |
| 7/16       | .4375         | 4-1/16  | 5-1/2 | 6       | RD45228      | 25     |
| 29/64      | .4531         | 4-3/16  | 5-5/8 | 6       | RD45229      | 26     |
| 15/32      | .4688         | 4-5/16  | 5-3/4 | 6       | RD45230      | 27     |
| 31/64      | .4844         | 4-3/8   | 5-7/8 | 6       | RD45231      | 28     |
| 1/2        | .5000         | 4-1/2   | 6     | 6       | RD45232      | 29     |



Technical data found on page 265.





Oxide

## HSS, Screw Machine Length, 135° Split Point (.0400-.1520)

| Drill Size | Decimal Equiv | FL    | OAL     | Pkg Qty | Oxide   |        |
|------------|---------------|-------|---------|---------|---------|--------|
|            |               |       |         |         | Part #  | Item # |
| * #60      | .0400         | 1/2   | 1-3/8   | 12      | RD41860 | 1      |
| * #59      | .0410         | 1/2   | 1-3/8   | 12      | RD41859 | 2      |
| * #58      | .0420         | 1/2   | 1-3/8   | 12      | RD41858 | 3      |
| * #57      | .0430         | 1/2   | 1-3/8   | 12      | RD41857 | 4      |
| * #56      | .0465         | 1/2   | 1-3/8   | 12      | RD41856 | 5      |
| * #55      | .0520         | 5/8   | 1-5/8   | 12      | RD41855 | 6      |
| * #54      | .0550         | 5/8   | 1-5/8   | 12      | RD41854 | 7      |
| * #53      | .0595         | 5/8   | 1-5/8   | 12      | RD41853 | 8      |
| * 1/16     | .0625         | 5/8   | 1-5/8   | 12      | RD41904 | 9      |
| #52        | .0635         | 11/16 | 1-11/16 | 12      | RD41852 | 10     |
| #51        | .0670         | 11/16 | 1-11/16 | 12      | RD41851 | 11     |
| #50        | .0700         | 11/16 | 1-11/16 | 12      | RD41850 | 12     |
| #49        | .0730         | 11/16 | 1-11/16 | 12      | RD41849 | 13     |
| #48        | .0760         | 11/16 | 1-11/16 | 12      | RD41848 | 14     |
| 5/64       | .0781         | 11/16 | 1-11/16 | 12      | RD41905 | 15     |
| #47        | .0785         | 11/16 | 1-11/16 | 12      | RD41847 | 16     |
| #46        | .0810         | 3/4   | 1-3/4   | 12      | RD41846 | 17     |
| #45        | .0820         | 3/4   | 1-3/4   | 12      | RD41845 | 18     |
| #44        | .0860         | 3/4   | 1-3/4   | 12      | RD41844 | 19     |
| #43        | .0890         | 3/4   | 1-3/4   | 12      | RD41843 | 20     |
| #42        | .0935         | 3/4   | 1-3/4   | 12      | RD41842 | 21     |
| 3/32       | .0938         | 3/4   | 1-3/4   | 12      | RD41906 | 22     |
| #41        | .0960         | 13/16 | 1-13/16 | 12      | RD41841 | 23     |
| #40        | .0980         | 13/16 | 1-13/16 | 12      | RD41840 | 24     |
| #39        | .0995         | 13/16 | 1-13/16 | 12      | RD41839 | 25     |
| #38        | .1015         | 13/16 | 1-13/16 | 12      | RD41838 | 26     |
| #37        | .1040         | 13/16 | 1-13/16 | 12      | RD41837 | 27     |
| #36        | .1065         | 13/16 | 1-13/16 | 12      | RD41836 | 28     |
| 7/64       | .1094         | 13/16 | 1-13/16 | 12      | RD41907 | 29     |
| #35        | .1100         | 7/8   | 1-7/8   | 12      | RD41835 | 30     |
| #34        | .1110         | 7/8   | 1-7/8   | 12      | RD41834 | 31     |
| #33        | .1130         | 7/8   | 1-7/8   | 12      | RD41833 | 32     |
| #32        | .1160         | 7/8   | 1-7/8   | 12      | RD41832 | 33     |
| #31        | .1200         | 7/8   | 1-7/8   | 12      | RD41831 | 34     |
| 1/8        | .1250         | 7/8   | 1-7/8   | 12      | RD41908 | 35     |
| #30        | .1285         | 15/16 | 1-15/16 | 12      | RD41830 | 36     |
| #29        | .1360         | 15/16 | 1-15/16 | 12      | RD41829 | 37     |
| #28        | .1405         | 15/16 | 1-15/16 | 12      | RD41828 | 38     |
| 9/64       | .1406         | 15/16 | 1-15/16 | 12      | RD41909 | 39     |
| #27        | .1440         | 1     | 2-1/16  | 12      | RD41827 | 40     |
| #26        | .1470         | 1     | 2-1/16  | 12      | RD41826 | 41     |
| #25        | .1495         | 1     | 2-1/16  | 12      | RD41825 | 42     |
| #24        | .1520         | 1     | 2-1/16  | 12      | RD41824 | 43     |

\* These items do not have a split point.



Technical data found on page 264.





Oxide



## HSS, Screw Machine Length, 135° Split Point (.1540-.2812)

| Drill Size | Decimal Equiv | FL     | OAL     | Pkg Qty | Oxide   |        |
|------------|---------------|--------|---------|---------|---------|--------|
|            |               |        |         |         | Part #  | Item # |
| #23        | .1540         | 1      | 2-1/16  | 12      | RD41823 | 1      |
| 5/32       | .1562         | 1      | 2-1/16  | 12      | RD41910 | 2      |
| #22        | .1570         | 1-1/16 | 2-1/8   | 12      | RD41822 | 3      |
| #21        | .1590         | 1-1/16 | 2-1/8   | 12      | RD41821 | 4      |
| #20        | .1610         | 1-1/16 | 2-1/8   | 12      | RD41820 | 5      |
| #19        | .1660         | 1-1/16 | 2-1/8   | 12      | RD41819 | 6      |
| #18        | .1695         | 1-1/16 | 2-1/8   | 12      | RD41818 | 7      |
| 11/64      | .1719         | 1-1/16 | 2-1/8   | 12      | RD41911 | 8      |
| #17        | .1730         | 1-1/8  | 2-3/16  | 12      | RD41817 | 9      |
| #16        | .1770         | 1-1/8  | 2-3/16  | 12      | RD41816 | 10     |
| #15        | .1800         | 1-1/8  | 2-3/16  | 12      | RD41815 | 11     |
| #14        | .1820         | 1-1/8  | 2-3/16  | 12      | RD41814 | 12     |
| #13        | .1850         | 1-1/8  | 2-3/16  | 12      | RD41813 | 13     |
| 3/16       | .1875         | 1-1/8  | 2-3/16  | 12      | RD41912 | 14     |
| #12        | .1890         | 1-3/16 | 2-1/4   | 12      | RD41812 | 15     |
| #11        | .1910         | 1-3/16 | 2-1/4   | 12      | RD41811 | 16     |
| #10        | .1935         | 1-3/16 | 2-1/4   | 12      | RD41810 | 17     |
| #9         | .1960         | 1-3/16 | 2-1/4   | 12      | RD41809 | 18     |
| #8         | .1990         | 1-3/16 | 2-1/4   | 12      | RD41808 | 19     |
| #7         | .2010         | 1-3/16 | 2-1/4   | 12      | RD41807 | 20     |
| 13/64      | .2031         | 1-3/16 | 2-1/4   | 12      | RD41913 | 21     |
| #6         | .2040         | 1-1/4  | 2-3/8   | 12      | RD41806 | 22     |
| #5         | .2055         | 1-1/4  | 2-3/8   | 12      | RD41805 | 23     |
| #4         | .2090         | 1-1/4  | 2-3/8   | 12      | RD41804 | 24     |
| #3         | .2130         | 1-1/4  | 2-3/8   | 12      | RD41803 | 25     |
| 7/32       | .2188         | 1-1/4  | 2-3/8   | 12      | RD41914 | 26     |
| #2         | .2210         | 1-5/16 | 2-7/16  | 12      | RD41802 | 27     |
| #1         | .2280         | 1-5/16 | 2-7/16  | 12      | RD41801 | 28     |
| A          | .2340         | 1-5/16 | 2-7/16  | 12      | RD44501 | 29     |
| 15/64      | .2344         | 1-5/16 | 2-7/16  | 12      | RD41915 | 30     |
| B          | .2380         | 1-3/8  | 2-1/2   | 12      | RD44502 | 31     |
| C          | .2420         | 1-3/8  | 2-1/2   | 12      | RD44503 | 32     |
| D          | .2460         | 1-3/8  | 2-1/2   | 12      | RD44504 | 33     |
| 1/4        | .2500         | 1-3/8  | 2-1/2   | 12      | RD41916 | 34     |
| E          | .2500         | 1-3/8  | 2-1/2   | 12      | RD44505 | 35     |
| F          | .2570         | 1-7/16 | 2-5/8   | 6       | RD44506 | 36     |
| G          | .2610         | 1-7/16 | 2-5/8   | 6       | RD44507 | 37     |
| 17/64      | .2656         | 1-7/16 | 2-5/8   | 6       | RD41917 | 38     |
| H          | .2660         | 1-1/2  | 2-11/16 | 6       | RD44508 | 39     |
| I          | .2720         | 1-1/2  | 2-11/16 | 6       | RD44509 | 40     |
| J          | .2770         | 1-1/2  | 2-11/16 | 6       | RD44510 | 41     |
| K          | .2810         | 1-1/2  | 2-11/16 | 6       | RD44511 | 42     |
| 9/32       | .2812         | 1-1/2  | 2-11/16 | 6       | RD41918 | 43     |



Technical data found on page 264.





Oxide



## HSS, Screw Machine Length, 135° Split Point (.2900-.5000)

| Drill Size | Decimal Equiv | FL      | OAL     | Pkg Qty | Oxide   |        |
|------------|---------------|---------|---------|---------|---------|--------|
|            |               |         |         |         | Part #  | Item # |
| L          | .2900         | 1-9/16  | 2-3/4   | 6       | RD44512 | 1      |
| M          | .2950         | 1-9/16  | 2-3/4   | 6       | RD44513 | 2      |
| 19/64      | .2969         | 1-9/16  | 2-3/4   | 6       | RD41919 | 3      |
| N          | .3020         | 1-5/8   | 2-13/16 | 6       | RD44514 | 4      |
| 5/16       | .3125         | 1-5/8   | 2-13/16 | 6       | RD41920 | 5      |
| O          | .3160         | 1-11/16 | 2-15/16 | 6       | RD44515 | 6      |
| P          | .3230         | 1-11/16 | 2-15/16 | 6       | RD44516 | 7      |
| 21/64      | .3281         | 1-11/16 | 2-15/16 | 6       | RD41921 | 8      |
| Q          | .3320         | 1-11/16 | 3       | 6       | RD44517 | 9      |
| R          | .3390         | 1-11/16 | 3       | 6       | RD44518 | 10     |
| 11/32      | .3438         | 1-11/16 | 3       | 6       | RD41922 | 11     |
| S          | .3480         | 1-3/4   | 3-1/16  | 6       | RD44519 | 12     |
| T          | .3580         | 1-3/4   | 3-1/16  | 6       | RD44520 | 13     |
| 23/64      | .3594         | 1-3/4   | 3-1/16  | 6       | RD41923 | 14     |
| U          | .3680         | 1-13/16 | 3-1/8   | 6       | RD44521 | 15     |
| 3/8        | .3750         | 1-13/16 | 3-1/8   | 6       | RD41924 | 16     |
| V          | .3770         | 1-7/8   | 3-1/4   | 6       | RD44522 | 17     |
| W          | .3860         | 1-7/8   | 3-1/4   | 6       | RD44523 | 18     |
| 25/64      | .3906         | 1-7/8   | 3-1/4   | 6       | RD41925 | 19     |
| X          | .3970         | 1-15/16 | 3-5/16  | 6       | RD44524 | 20     |
| Y          | .4040         | 1-15/16 | 3-5/16  | 6       | RD44525 | 21     |
| 13/32      | .4062         | 1-15/16 | 3-5/16  | 6       | RD41926 | 22     |
| Z          | .4130         | 2       | 3-3/8   | 6       | RD44526 | 23     |
| 27/64      | .4219         | 2       | 3-3/8   | 6       | RD41927 | 24     |
| 7/16       | .4375         | 2-1/16  | 3-7/16  | 6       | RD41928 | 25     |
| 29/64      | .4531         | 2-1/8   | 3-9/16  | 6       | RD41929 | 26     |
| 15/32      | .4688         | 2-1/8   | 3-5/8   | 6       | RD41930 | 27     |
| 31/64      | .4844         | 2-3/16  | 3-11/16 | 6       | RD41931 | 28     |
| 1/2        | .5000         | 2-1/4   | 3-3/4   | 6       | RD41932 | 29     |

HSS & Cobalt Drills



Technical data found on page 264.







Straw Finish

## Cobalt, Screw Machine Length, 135° Split Point (.0400-.1520)

| Drill Size | Decimal Equiv | FL    | OAL     | Pkg Qty | Straw Finish |        |
|------------|---------------|-------|---------|---------|--------------|--------|
|            |               |       |         |         | Part #       | Item # |
| * #60      | .0400         | 1/2   | 1-3/8   | 12      | RD42060      | 1      |
| * #59      | .0410         | 1/2   | 1-3/8   | 12      | RD42059      | 2      |
| * #58      | .0420         | 1/2   | 1-3/8   | 12      | RD42058      | 3      |
| * #57      | .0430         | 1/2   | 1-3/8   | 12      | RD42057      | 4      |
| * #56      | .0465         | 1/2   | 1-3/8   | 12      | RD42056      | 5      |
| * #55      | .0520         | 5/8   | 1-5/8   | 12      | RD42055      | 6      |
| * #54      | .0550         | 5/8   | 1-5/8   | 12      | RD42054      | 7      |
| * #53      | .0595         | 5/8   | 1-5/8   | 12      | RD42053      | 8      |
| * 1/16     | .0625         | 5/8   | 1-5/8   | 12      | RD42204      | 9      |
| #52        | .0635         | 11/16 | 1-11/16 | 12      | RD42052      | 10     |
| #51        | .0670         | 11/16 | 1-11/16 | 12      | RD42051      | 11     |
| #50        | .0700         | 11/16 | 1-11/16 | 12      | RD42050      | 12     |
| #49        | .0730         | 11/16 | 1-11/16 | 12      | RD42049      | 13     |
| #48        | .0760         | 11/16 | 1-11/16 | 12      | RD42048      | 14     |
| 5/64       | .0781         | 11/16 | 1-11/16 | 12      | RD42205      | 15     |
| #47        | .0785         | 11/16 | 1-11/16 | 12      | RD42047      | 16     |
| #46        | .0810         | 3/4   | 1-3/4   | 12      | RD42046      | 17     |
| #45        | .0820         | 3/4   | 1-3/4   | 12      | RD42045      | 18     |
| #44        | .0860         | 3/4   | 1-3/4   | 12      | RD42044      | 19     |
| #43        | .0890         | 3/4   | 1-3/4   | 12      | RD42043      | 20     |
| #42        | .0935         | 3/4   | 1-3/4   | 12      | RD42042      | 21     |
| 3/32       | .0938         | 3/4   | 1-3/4   | 12      | RD42206      | 22     |
| #41        | .0960         | 13/16 | 1-13/16 | 12      | RD42041      | 23     |
| #40        | .0980         | 13/16 | 1-13/16 | 12      | RD42040      | 24     |
| #39        | .0995         | 13/16 | 1-13/16 | 12      | RD42039      | 25     |
| #38        | .1015         | 13/16 | 1-13/16 | 12      | RD42038      | 26     |
| #37        | .1040         | 13/16 | 1-13/16 | 12      | RD42037      | 27     |
| #36        | .1065         | 13/16 | 1-13/16 | 12      | RD42036      | 28     |
| 7/64       | .1094         | 13/16 | 1-13/16 | 12      | RD42207      | 29     |
| #35        | .1100         | 7/8   | 1-7/8   | 12      | RD42035      | 30     |
| #34        | .1110         | 7/8   | 1-7/8   | 12      | RD42034      | 31     |
| #33        | .1130         | 7/8   | 1-7/8   | 12      | RD42033      | 32     |
| #32        | .1160         | 7/8   | 1-7/8   | 12      | RD42032      | 33     |
| #31        | .1200         | 7/8   | 1-7/8   | 12      | RD42031      | 34     |
| 1/8        | .1250         | 7/8   | 1-7/8   | 12      | RD42208      | 35     |
| #30        | .1285         | 15/16 | 1-15/16 | 12      | RD42030      | 36     |
| #29        | .1360         | 15/16 | 1-15/16 | 12      | RD42029      | 37     |
| #28        | .1405         | 15/16 | 1-15/16 | 12      | RD42028      | 38     |
| 9/64       | .1406         | 15/16 | 1-15/16 | 12      | RD42209      | 39     |
| #27        | .1440         | 1     | 2-1/16  | 12      | RD42027      | 40     |
| #26        | .1470         | 1     | 2-1/16  | 12      | RD42026      | 41     |
| #25        | .1495         | 1     | 2-1/16  | 12      | RD42025      | 42     |
| #24        | .1520         | 1     | 2-1/16  | 12      | RD42024      | 43     |

\* These items do not have a split point.



Technical data found on page 265.





Straw Finish



## Cobalt, Screw Machine Length, 135° Split Point (.1540-.2812)

| Drill Size | Decimal Equiv | FL     | OAL     | Pkg Qty | Straw Finish |        |
|------------|---------------|--------|---------|---------|--------------|--------|
|            |               |        |         |         | Part #       | Item # |
| #23        | .1540         | 1      | 2-1/16  | 12      | RD42023      | 1      |
| 5/32       | .1562         | 1      | 2-1/16  | 12      | RD42210      | 2      |
| #22        | .1570         | 1-1/16 | 2-1/8   | 12      | RD42022      | 3      |
| #21        | .1590         | 1-1/16 | 2-1/8   | 12      | RD42021      | 4      |
| #20        | .1610         | 1-1/16 | 2-1/8   | 12      | RD42020      | 5      |
| #19        | .1660         | 1-1/16 | 2-1/8   | 12      | RD42019      | 6      |
| #18        | .1695         | 1-1/16 | 2-1/8   | 12      | RD42018      | 7      |
| 11/64      | .1719         | 1-1/16 | 2-1/8   | 12      | RD42211      | 8      |
| #17        | .1730         | 1-1/8  | 2-3/16  | 12      | RD42017      | 9      |
| #16        | .1770         | 1-1/8  | 2-3/16  | 12      | RD42016      | 10     |
| #15        | .1800         | 1-1/8  | 2-3/16  | 12      | RD42015      | 11     |
| #14        | .1820         | 1-1/8  | 2-3/16  | 12      | RD42014      | 12     |
| #13        | .1850         | 1-1/8  | 2-3/16  | 12      | RD42013      | 13     |
| 3/16       | .1875         | 1-1/8  | 2-3/16  | 12      | RD42212      | 14     |
| #12        | .1890         | 1-3/16 | 2-1/4   | 12      | RD42012      | 15     |
| #11        | .1910         | 1-3/16 | 2-1/4   | 12      | RD42011      | 16     |
| #10        | .1935         | 1-3/16 | 2-1/4   | 12      | RD42010      | 17     |
| #9         | .1960         | 1-3/16 | 2-1/4   | 12      | RD42009      | 18     |
| #8         | .1990         | 1-3/16 | 2-1/4   | 12      | RD42008      | 19     |
| #7         | .2010         | 1-3/16 | 2-1/4   | 12      | RD42007      | 20     |
| 13/64      | .2031         | 1-3/16 | 2-1/4   | 12      | RD42213      | 21     |
| #6         | .2040         | 1-1/4  | 2-3/8   | 12      | RD42006      | 22     |
| #5         | .2055         | 1-1/4  | 2-3/8   | 12      | RD42005      | 23     |
| #4         | .2090         | 1-1/4  | 2-3/8   | 12      | RD42004      | 24     |
| #3         | .2130         | 1-1/4  | 2-3/8   | 12      | RD42003      | 25     |
| 7/32       | .2188         | 1-1/4  | 2-3/8   | 12      | RD42214      | 26     |
| #2         | .2210         | 1-5/16 | 2-7/16  | 12      | RD42002      | 27     |
| #1         | .2280         | 1-5/16 | 2-7/16  | 12      | RD42001      | 28     |
| A          | .2340         | 1-5/16 | 2-7/16  | 12      | RD42101      | 29     |
| 15/64      | .2344         | 1-5/16 | 2-7/16  | 12      | RD42215      | 30     |
| B          | .2380         | 1-3/8  | 2-1/2   | 12      | RD42102      | 31     |
| C          | .2420         | 1-3/8  | 2-1/2   | 12      | RD42103      | 32     |
| D          | .2460         | 1-3/8  | 2-1/2   | 12      | RD42104      | 33     |
| 1/4        | .2500         | 1-3/8  | 2-1/2   | 12      | RD42216      | 34     |
| E          | .2500         | 1-3/8  | 2-1/2   | 12      | RD42105      | 35     |
| F          | .2570         | 1-7/16 | 2-5/8   | 6       | RD42106      | 36     |
| G          | .2610         | 1-7/16 | 2-5/8   | 6       | RD42107      | 37     |
| 17/64      | .2656         | 1-7/16 | 2-5/8   | 6       | RD42217      | 38     |
| H          | .2660         | 1-1/2  | 2-11/16 | 6       | RD42108      | 39     |
| I          | .2720         | 1-1/2  | 2-11/16 | 6       | RD42109      | 40     |
| J          | .2770         | 1-1/2  | 2-11/16 | 6       | RD42110      | 41     |
| K          | .2810         | 1-1/2  | 2-11/16 | 6       | RD42111      | 42     |
| 9/32       | .2812         | 1-1/2  | 2-11/16 | 6       | RD42218      | 43     |



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Straw Finish



## Cobalt, Screw Machine Length, 135° Split Point (.2900-.5000)

| Drill Size | Decimal Equiv | FL      | OAL     | Pkg Qty | Straw Finish |        |
|------------|---------------|---------|---------|---------|--------------|--------|
|            |               |         |         |         | Part #       | Item # |
| L          | .2900         | 1-9/16  | 2-3/4   | 6       | RD42112      | 1      |
| M          | .2950         | 1-9/16  | 2-3/4   | 6       | RD42113      | 2      |
| 19/64      | .2969         | 1-9/16  | 2-3/4   | 6       | RD42219      | 3      |
| N          | .3020         | 1-5/8   | 2-13/16 | 6       | RD42114      | 4      |
| 5/16       | .3125         | 1-5/8   | 2-13/16 | 6       | RD42220      | 5      |
| O          | .3160         | 1-11/16 | 2-15/16 | 6       | RD42115      | 6      |
| P          | .3230         | 1-11/16 | 2-15/16 | 6       | RD42116      | 7      |
| 21/64      | .3281         | 1-11/16 | 2-15/16 | 6       | RD42221      | 8      |
| Q          | .3320         | 1-11/16 | 3       | 6       | RD42117      | 9      |
| R          | .3390         | 1-11/16 | 3       | 6       | RD42118      | 10     |
| 11/32      | .3438         | 1-11/16 | 3       | 6       | RD42222      | 11     |
| S          | .3480         | 1-3/4   | 3-1/16  | 6       | RD42119      | 12     |
| T          | .3580         | 1-3/4   | 3-1/16  | 6       | RD42120      | 13     |
| 23/64      | .3594         | 1-3/4   | 3-1/16  | 6       | RD42223      | 14     |
| U          | .3680         | 1-13/16 | 3-1/8   | 6       | RD42121      | 15     |
| 3/8        | .3750         | 1-13/16 | 3-1/8   | 6       | RD42224      | 16     |
| V          | .3770         | 1-7/8   | 3-1/4   | 6       | RD42122      | 17     |
| W          | .3860         | 1-7/8   | 3-1/4   | 6       | RD42123      | 18     |
| 25/64      | .3906         | 1-7/8   | 3-1/4   | 6       | RD42225      | 19     |
| X          | .3970         | 1-15/16 | 3-5/16  | 6       | RD42124      | 20     |
| Y          | .4040         | 1-15/16 | 3-5/16  | 6       | RD42125      | 21     |
| 13/32      | .4062         | 1-15/16 | 3-5/16  | 6       | RD42226      | 22     |
| Z          | .4130         | 2       | 3-3/8   | 6       | RD42126      | 23     |
| 27/64      | .4219         | 2       | 3-3/8   | 6       | RD42227      | 24     |
| 7/16       | .4375         | 1-1/16  | 3-7/16  | 6       | RD42228      | 25     |
| 29/64      | .4531         | 2-1/8   | 3-9/16  | 6       | RD42229      | 26     |
| 15/32      | .4688         | 2-1/8   | 3-5/8   | 6       | RD42230      | 27     |
| 31/64      | .4844         | 2-3/16  | 3-11/16 | 6       | RD42231      | 28     |
| 1/2        | .5000         | 2-1/4   | 3-3/4   | 6       | RD42232      | 29     |

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AITiN Coated

## Cobalt, Screw Machine Length, 135° Split Point (.0400-.1520)

| Drill Size | Decimal Equiv | FL    | OAL     | Pkg Qty | AITiN Coated |        |
|------------|---------------|-------|---------|---------|--------------|--------|
|            |               |       |         |         | Part #       | Item # |
| * #60      | .0400         | 1/2   | 1-3/8   | 12      | RD45760      | 1      |
| * #59      | .0410         | 1/2   | 1-3/8   | 12      | RD45759      | 2      |
| * #58      | .0420         | 1/2   | 1-3/8   | 12      | RD45758      | 3      |
| * #57      | .0430         | 1/2   | 1-3/8   | 12      | RD45757      | 4      |
| * #56      | .0465         | 1/2   | 1-3/8   | 12      | RD45756      | 5      |
| * #55      | .0520         | 5/8   | 1-5/8   | 12      | RD45755      | 6      |
| * #54      | .0550         | 5/8   | 1-5/8   | 12      | RD45754      | 7      |
| * #53      | .0595         | 5/8   | 1-5/8   | 12      | RD45753      | 8      |
| * 1/16     | .0625         | 5/8   | 1-5/8   | 12      | RD45504      | 9      |
| #52        | .0635         | 11/16 | 1-11/16 | 12      | RD45752      | 10     |
| #51        | .0670         | 11/16 | 1-11/16 | 12      | RD45751      | 11     |
| #50        | .0700         | 11/16 | 1-11/16 | 12      | RD45750      | 12     |
| #49        | .0730         | 11/16 | 1-11/16 | 12      | RD45749      | 13     |
| #48        | .0760         | 11/16 | 1-11/16 | 12      | RD45748      | 14     |
| 5/64       | .0781         | 11/16 | 1-11/16 | 12      | RD45505      | 15     |
| #47        | .0785         | 11/16 | 1-11/16 | 12      | RD45747      | 16     |
| #46        | .0810         | 3/4   | 1-3/4   | 12      | RD45746      | 17     |
| #45        | .0820         | 3/4   | 1-3/4   | 12      | RD45745      | 18     |
| #44        | .0860         | 3/4   | 1-3/4   | 12      | RD45744      | 19     |
| #43        | .0890         | 3/4   | 1-3/4   | 12      | RD45743      | 20     |
| #42        | .0935         | 3/4   | 1-3/4   | 12      | RD45742      | 21     |
| 3/32       | .0938         | 3/4   | 1-3/4   | 12      | RD45506      | 22     |
| #41        | .0960         | 13/16 | 1-13/16 | 12      | RD45741      | 23     |
| #40        | .0980         | 13/16 | 1-13/16 | 12      | RD45740      | 24     |
| #39        | .0995         | 13/16 | 1-13/16 | 12      | RD45739      | 25     |
| #38        | .1015         | 13/16 | 1-13/16 | 12      | RD45738      | 26     |
| #37        | .1040         | 13/16 | 1-13/16 | 12      | RD45737      | 27     |
| #36        | .1065         | 13/16 | 1-13/16 | 12      | RD45736      | 28     |
| 7/64       | .1094         | 13/16 | 1-13/16 | 12      | RD45507      | 29     |
| #35        | .1100         | 7/8   | 1-7/8   | 12      | RD45735      | 30     |
| #34        | .1110         | 7/8   | 1-7/8   | 12      | RD45734      | 31     |
| #33        | .1130         | 7/8   | 1-7/8   | 12      | RD45733      | 32     |
| #32        | .1160         | 7/8   | 1-7/8   | 12      | RD45732      | 33     |
| #31        | .1200         | 7/8   | 1-7/8   | 12      | RD45731      | 34     |
| 1/8        | .1250         | 7/8   | 1-7/8   | 12      | RD45508      | 35     |
| #30        | .1285         | 15/16 | 1-15/16 | 12      | RD45730      | 36     |
| #29        | .1360         | 15/16 | 1-15/16 | 12      | RD45729      | 37     |
| #28        | .1405         | 15/16 | 1-15/16 | 12      | RD45728      | 38     |
| 9/64       | .1406         | 15/16 | 1-15/16 | 12      | RD45509      | 39     |
| #27        | .1440         | 1     | 2-1/16  | 12      | RD45727      | 40     |
| #26        | .1470         | 1     | 2-1/16  | 12      | RD45726      | 41     |
| #25        | .1495         | 1     | 2-1/16  | 12      | RD45725      | 42     |
| #24        | .1520         | 1     | 2-1/16  | 12      | RD45724      | 43     |

\* These items do not have a split point.



Technical data found on page 265.





AITiN Coated



## Cobalt, Screw Machine Length, 135° Split Point (.1540-.2813)

| Drill Size | Decimal Equiv | FL     | OAL     | Pkg Qty | AITiN Coated |        |
|------------|---------------|--------|---------|---------|--------------|--------|
|            |               |        |         |         | Part #       | Item # |
| #23        | .1540         | 1      | 2-1/16  | 12      | RD45723      | 1      |
| 5/32       | .1562         | 1      | 2-1/16  | 12      | RD45510      | 2      |
| #22        | .1570         | 1-1/16 | 2-1/8   | 12      | RD45722      | 3      |
| #21        | .1590         | 1-1/16 | 2-1/8   | 12      | RD45721      | 4      |
| #20        | .1610         | 1-1/16 | 2-1/8   | 12      | RD45720      | 5      |
| #19        | .1660         | 1-1/16 | 2-1/8   | 12      | RD45719      | 6      |
| #18        | .1695         | 1-1/16 | 2-1/8   | 12      | RD45718      | 7      |
| 11/64      | .1719         | 1-1/16 | 2-1/8   | 12      | RD45511      | 8      |
| #17        | .1730         | 1-1/8  | 2-3/16  | 12      | RD45717      | 9      |
| #16        | .1770         | 1-1/8  | 2-3/16  | 12      | RD45716      | 10     |
| #15        | .1800         | 1-1/8  | 2-3/16  | 12      | RD45715      | 11     |
| #14        | .1820         | 1-1/8  | 2-3/16  | 12      | RD45714      | 12     |
| #13        | .1850         | 1-1/8  | 2-3/16  | 12      | RD45713      | 13     |
| 3/16       | .1875         | 1-1/8  | 2-3/16  | 12      | RD45512      | 14     |
| #12        | .1890         | 1-3/16 | 2-1/4   | 12      | RD45712      | 15     |
| #11        | .1910         | 1-3/16 | 2-1/4   | 12      | RD45711      | 16     |
| #10        | .1935         | 1-3/16 | 2-1/4   | 12      | RD45710      | 17     |
| #9         | .1960         | 1-3/16 | 2-1/4   | 12      | RD45709      | 18     |
| #8         | .1990         | 1-3/16 | 2-1/4   | 12      | RD45708      | 19     |
| #7         | .2010         | 1-3/16 | 2-1/4   | 12      | RD45707      | 20     |
| 13/64      | .2031         | 1-3/16 | 2-1/4   | 12      | RD45513      | 21     |
| #6         | .2040         | 1-1/4  | 2-3/8   | 12      | RD45706      | 22     |
| #5         | .2055         | 1-1/4  | 2-3/8   | 12      | RD45705      | 23     |
| #4         | .2090         | 1-1/4  | 2-3/8   | 12      | RD45704      | 24     |
| #3         | .2130         | 1-1/4  | 2-3/8   | 12      | RD45703      | 25     |
| 7/32       | .2188         | 1-1/4  | 2-3/8   | 12      | RD45514      | 26     |
| #2         | .2210         | 1-5/16 | 2-7/16  | 12      | RD45702      | 27     |
| #1         | .2280         | 1-5/16 | 2-7/16  | 12      | RD45701      | 28     |
| A          | .2340         | 1-5/16 | 2-7/16  | 12      | RD45601      | 29     |
| 15/64      | .2344         | 1-5/16 | 2-7/16  | 12      | RD45515      | 30     |
| B          | .2380         | 1-3/8  | 2-1/2   | 12      | RD45602      | 31     |
| C          | .2420         | 1-3/8  | 2-1/2   | 12      | RD45603      | 32     |
| D          | .2460         | 1-3/8  | 2-1/2   | 12      | RD45604      | 33     |
| 1/4        | .2500         | 1-3/8  | 2-1/2   | 12      | RD45516      | 34     |
| E          | .2500         | 1-3/8  | 2-1/2   | 12      | RD45605      | 35     |
| F          | .2570         | 1-7/16 | 2-5/8   | 6       | RD45606      | 36     |
| G          | .2610         | 1-7/16 | 2-5/8   | 6       | RD45607      | 37     |
| 17/64      | .2656         | 1-7/16 | 2-5/8   | 6       | RD45517      | 38     |
| H          | .2660         | 1-1/2  | 2-11/16 | 6       | RD45608      | 39     |
| I          | .2720         | 1-1/2  | 2-11/16 | 6       | RD45609      | 40     |
| J          | .2770         | 1-1/2  | 2-11/16 | 6       | RD45610      | 41     |
| K          | .2810         | 1-1/2  | 2-11/16 | 6       | RD45611      | 42     |
| 9/32       | .2813         | 1-1/2  | 2-11/16 | 6       | RD45518      | 43     |



Technical data found on page 265.





AITiN Coated



## Cobalt, Screw Machine Length, 135° Split Point (.2900-.5000)

| Drill Size | Decimal Equiv | FL      | OAL     | Pkg Qty | AITiN Coated |        |
|------------|---------------|---------|---------|---------|--------------|--------|
|            |               |         |         |         | Part #       | Item # |
| L          | .2900         | 1-9/16  | 2-3/4   | 6       | RD45612      | 1      |
| M          | .2950         | 1-9/16  | 2-3/4   | 6       | RD45613      | 2      |
| 19/64      | .2969         | 1-9/16  | 2-3/4   | 6       | RD45519      | 3      |
| N          | .3020         | 1-5/8   | 2-13/16 | 6       | RD45614      | 4      |
| 5/16       | .3125         | 1-5/8   | 2-13/16 | 6       | RD45520      | 5      |
| O          | .3160         | 1-11/16 | 2-15/16 | 6       | RD45615      | 6      |
| P          | .3230         | 1-11/16 | 2-15/16 | 6       | RD45616      | 7      |
| 21/64      | .3281         | 1-11/16 | 2-15/16 | 6       | RD45521      | 8      |
| Q          | .3320         | 1-11/16 | 3       | 6       | RD45617      | 9      |
| R          | .3390         | 1-11/16 | 3       | 6       | RD45618      | 10     |
| 11/32      | .3438         | 1-11/16 | 3       | 6       | RD45522      | 11     |
| S          | .3480         | 1-3/4   | 3-1/16  | 6       | RD45619      | 12     |
| T          | .3580         | 1-3/4   | 3-1/16  | 6       | RD45620      | 13     |
| 23/64      | .3594         | 1-3/4   | 3-1/16  | 6       | RD45523      | 14     |
| U          | .3680         | 1-13/16 | 3-1/8   | 6       | RD45621      | 15     |
| 3/8        | .3750         | 1-13/16 | 3-1/8   | 6       | RD45524      | 16     |
| V          | .3770         | 1-7/8   | 3-1/4   | 6       | RD45622      | 17     |
| W          | .3860         | 1-7/8   | 3-1/4   | 6       | RD45623      | 18     |
| 25/64      | .3906         | 1-7/8   | 3-1/4   | 6       | RD45525      | 19     |
| X          | .3970         | 1-15/16 | 3-5/16  | 6       | RD45624      | 20     |
| Y          | .4040         | 1-15/16 | 3-5/16  | 6       | RD45625      | 21     |
| 13/32      | .4062         | 1-15/16 | 3-5/16  | 6       | RD45526      | 22     |
| Z          | .4130         | 2       | 3-3/8   | 6       | RD45626      | 23     |
| 27/64      | .4219         | 2       | 3-3/8   | 6       | RD45527      | 24     |
| 7/16       | .4375         | 2       | 3-7/16  | 6       | RD45528      | 25     |
| 29/64      | .4531         | 2-1/8   | 3-9/16  | 6       | RD45529      | 26     |
| 15/32      | .4688         | 2-1/8   | 3-5/8   | 6       | RD45530      | 27     |
| 31/64      | .4844         | 2-3/16  | 3-11/16 | 6       | RD45531      | 28     |
| 1/2        | .5000         | 2-1/4   | 3-3/4   | 6       | RD45532      | 29     |

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Technical data found on page 265.





Oxide

| HSS, Taper Length, 118° Point<br>(.0469-.1990) |               |       |       |         |         |        |
|--|---------------|-------|-------|---------|---------|--------|
| Drill Size                                     | Decimal Equiv | FL    | OAL   | Pkg Qty | Oxide   |        |
|  |               |       |       |         | Part #  | Item # |
| 3/64   | .0469         | 1-1/8 | 2-1/4 | 12      | RD41603 | 1      |
| 1/16   | .0625         | 1-3/4 | 3-3/4 | 12      | RD41604 | 2      |
| 5/64   | .0781         | 2     | 3-3/4 | 12      | RD41605 | 3      |
| 3/32   | .0938         | 2-1/4 | 4-1/4 | 12      | RD41606 | 4      |
| #40  | .0980         | 2-1/2 | 4-5/8 | 12      | RD41540 | 5      |
| #39  | .0995         | 2-1/2 | 4-5/8 | 12      | RD41539 | 6      |
| #38  | .1015         | 2-1/2 | 4-5/8 | 12      | RD41538 | 7      |
| #37  | .1040         | 2-1/2 | 4-5/8 | 12      | RD41537 | 8      |
| #36  | .1065         | 2-1/2 | 4-5/8 | 12      | RD41536 | 9      |
| 7/64   | .1094         | 2-1/2 | 4-5/8 | 12      | RD41607 | 10     |
| #35  | .1100         | 2-3/4 | 5-1/8 | 12      | RD41535 | 11     |
| #34  | .1110         | 2-3/4 | 5-1/8 | 12      | RD41534 | 12     |
| #33  | .1130         | 2-3/4 | 5-1/8 | 12      | RD41533 | 13     |
| #32  | .1160         | 2-3/4 | 5-1/8 | 12      | RD41532 | 14     |
| #31  | .1200         | 2-3/4 | 5-1/8 | 12      | RD41531 | 15     |
| 1/8  | .1250         | 2-3/4 | 5-1/8 | 12      | RD41608 | 16     |
| #30  | .1285         | 3     | 5-3/8 | 12      | RD41530 | 17     |
| #29  | .1360         | 3     | 5-3/8 | 12      | RD41529 | 18     |
| #28  | .1405         | 3     | 5-3/8 | 12      | RD41528 | 19     |
| 9/64   | .1406         | 3     | 5-3/8 | 12      | RD41609 | 20     |
| #27  | .1440         | 3     | 5-3/8 | 12      | RD41527 | 21     |
| #26  | .1470         | 3     | 5-3/8 | 12      | RD41526 | 22     |
| #25  | .1495         | 3     | 5-3/8 | 12      | RD41525 | 23     |
| #24  | .1520         | 3     | 5-3/8 | 12      | RD41524 | 24     |
| #23  | .1540         | 3     | 5-3/8 | 12      | RD41523 | 25     |
| 5/32   | .1562         | 3     | 5-3/8 | 12      | RD41610 | 26     |
| #22  | .1570         | 3-3/8 | 5-3/4 | 12      | RD41522 | 27     |
| #21  | .1590         | 3-3/8 | 5-3/4 | 12      | RD41521 | 28     |
| #20  | .1610         | 3-3/8 | 5-3/4 | 12      | RD41520 | 29     |
| #19  | .1660         | 3-3/8 | 5-3/4 | 12      | RD41519 | 30     |
| #18  | .1695         | 3-3/8 | 5-3/4 | 12      | RD41518 | 31     |
| 11/64  | .1719         | 3-3/8 | 5-3/4 | 12      | RD41611 | 32     |
| #17  | .1730         | 3-3/8 | 5-3/4 | 12      | RD41517 | 33     |
| #16  | .1770         | 3-3/8 | 5-3/4 | 12      | RD41516 | 34     |
| #15  | .1800         | 3-3/8 | 5-3/4 | 12      | RD41515 | 35     |
| #14  | .1820         | 3-3/8 | 5-3/4 | 12      | RD41514 | 36     |
| #13  | .1850         | 3-3/8 | 5-3/4 | 12      | RD41513 | 37     |
| 3/16   | .1875         | 3-3/8 | 5-3/4 | 12      | RD41612 | 38     |
| #12  | .1890         | 3-5/8 | 6     | 12      | RD41512 | 39     |
| #11  | .1910         | 3-5/8 | 6     | 12      | RD41511 | 40     |
| #10  | .1935         | 3-5/8 | 6     | 12      | RD41510 | 41     |
| #9   | .1960         | 3-5/8 | 6     | 12      | RD41509 | 42     |
| #8   | .1990         | 3-5/8 | 6     | 12      | RD41508 | 43     |



Technical data found on page 264.





Oxide



## HSS, Taper Length, 118° Point (.2010-.7500)

| Drill Size | Decimal Equiv | FL    | OAL   | Pkg Qty | Oxide   |        |
|------------|---------------|-------|-------|---------|---------|--------|
|            |               |       |       |         | Part #  | Item # |
| #7         | .2010         | 3-5/8 | 6     | 12      | RD41507 | 1      |
| 13/64      | .2031         | 3-5/8 | 6     | 12      | RD41613 | 2      |
| #6         | .2040         | 3-5/8 | 6     | 12      | RD41506 | 3      |
| #5         | .2055         | 3-5/8 | 6     | 12      | RD41505 | 4      |
| #4         | .2090         | 3-5/8 | 6     | 12      | RD41504 | 5      |
| #3         | .2130         | 3-5/8 | 6     | 12      | RD41503 | 6      |
| 7/32       | .2188         | 3-5/8 | 6     | 12      | RD41614 | 7      |
| #2         | .2210         | 3-3/4 | 6-1/8 | 12      | RD41502 | 8      |
| #1         | .2280         | 3-3/4 | 6-1/8 | 12      | RD41501 | 9      |
| 15/64      | .2344         | 3-3/4 | 6-1/8 | 12      | RD41615 | 10     |
| 1/4        | .2500         | 3-3/4 | 6-1/8 | 12      | RD41616 | 11     |
| 17/64      | .2656         | 3-7/8 | 6-1/4 | 6       | RD41617 | 12     |
| 9/32       | .2812         | 3-7/8 | 6-1/4 | 6       | RD41618 | 13     |
| 19/64      | .2969         | 4     | 6-3/8 | 6       | RD41619 | 14     |
| 5/16       | .3125         | 4     | 6-3/8 | 6       | RD41620 | 15     |
| 21/64      | .3281         | 4-1/8 | 6-1/2 | 6       | RD41621 | 16     |
| 11/32      | .3438         | 4-1/8 | 6-1/2 | 6       | RD41622 | 17     |
| 23/64      | .3594         | 4-1/4 | 6-3/4 | 6       | RD41623 | 18     |
| 3/8        | .3750         | 4-1/4 | 6-3/4 | 6       | RD41624 | 19     |
| 25/64      | .3906         | 4-3/8 | 6-3/4 | 6       | RD41625 | 20     |
| 13/32      | .4062         | 4-3/8 | 7     | 6       | RD41626 | 21     |
| 27/64      | .4219         | 4-5/8 | 7-1/4 | 6       | RD41627 | 22     |
| 7/16       | .4375         | 4-5/8 | 7-1/4 | 6       | RD41628 | 23     |
| 29/64      | .4531         | 4-3/4 | 7-1/2 | 6       | RD41629 | 24     |
| 15/32      | .4688         | 4-3/4 | 7-1/2 | 6       | RD41630 | 25     |
| 31/64      | .4844         | 4-3/4 | 7-3/4 | 6       | RD41631 | 26     |
| 1/2        | .5000         | 4-3/4 | 7-3/4 | 6       | RD41632 | 27     |
| 33/64      | .5156         | 4-3/4 | 8     | 1       | RD41633 | 28     |
| 17/32      | .5312         | 4-3/4 | 8     | 1       | RD41634 | 29     |
| 35/64      | .5469         | 4-7/8 | 8-1/4 | 1       | RD41635 | 30     |
| 9/16       | .5625         | 4-7/8 | 8-1/4 | 1       | RD41636 | 31     |
| 37/64      | .5781         | 4-7/8 | 8-3/4 | 1       | RD41637 | 32     |
| 19/32      | .5938         | 4-7/8 | 8-3/4 | 1       | RD41638 | 33     |
| 39/64      | .6094         | 4-7/8 | 8-3/4 | 1       | RD41639 | 34     |
| 5/8        | .6250         | 4-7/8 | 8-3/4 | 1       | RD41640 | 35     |
| 41/64      | .6406         | 5-1/8 | 9     | 1       | RD41641 | 36     |
| 21/32      | .6562         | 5-1/8 | 9     | 1       | RD41642 | 37     |
| 43/64      | .6719         | 5-3/8 | 9-1/4 | 1       | RD41643 | 38     |
| 11/16      | .6875         | 5-3/8 | 9-1/4 | 1       | RD41644 | 39     |
| 45/64      | .7031         | 5-5/8 | 9-1/2 | 1       | RD41645 | 40     |
| 23/32      | .7188         | 5-5/8 | 9-1/2 | 1       | RD41646 | 41     |
| 47/64      | .7344         | 5-7/8 | 9-3/4 | 1       | RD41647 | 42     |
| 3/4        | .7500         | 5-7/8 | 9-3/4 | 1       | RD41648 | 43     |



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Technical data found on page 264.







Oxide



## HSS, Taper Length, 118° Point (.7656-1.7500)

| Drill Size | Decimal Equiv | FL     | OAL    | Pkg Qty | Oxide   |        |
|------------|---------------|--------|--------|---------|---------|--------|
|            |               |        |        |         | Part #  | Item # |
| 49/64      | .7656         | 6      | 9-7/8  | 1       | RD41649 | 1      |
| 25/32      | .7812         | 6      | 9-7/8  | 1       | RD41650 | 2      |
| 51/64      | .7969         | 6-1/8  | 10     | 1       | RD41651 | 3      |
| 13/16      | .8125         | 6-1/8  | 10     | 1       | RD41652 | 4      |
| 53/64      | .8281         | 6-1/8  | 10     | 1       | RD41653 | 5      |
| 27/32      | .8438         | 6-1/8  | 10     | 1       | RD41654 | 6      |
| 55/64      | .8594         | 6-1/8  | 10     | 1       | RD41655 | 7      |
| 7/8        | .8750         | 6-1/8  | 10     | 1       | RD41656 | 8      |
| 57/64      | .8906         | 6-1/8  | 10     | 1       | RD41657 | 9      |
| 29/32      | .9062         | 6-1/8  | 10     | 1       | RD41658 | 10     |
| 59/64      | .9219         | 6-1/8  | 10-3/4 | 1       | RD41659 | 11     |
| 15/16      | .9375         | 6-1/8  | 10-3/4 | 1       | RD41660 | 12     |
| 61/64      | .9531         | 6-3/8  | 11     | 1       | RD41661 | 13     |
| 31/32      | .9688         | 6-3/8  | 11     | 1       | RD41662 | 14     |
| 63/64      | .9844         | 6-3/8  | 11     | 1       | RD41663 | 15     |
| 1          | 1.000         | 6-3/8  | 11     | 1       | RD41664 | 16     |
| 1-1/32     | 1.0312        | 6-1/2  | 11-1/8 | 1       | RD41666 | 17     |
| 1-1/16     | 1.0625        | 6-5/8  | 11-1/4 | 1       | RD41668 | 18     |
| 1-3/32     | 1.0938        | 6-7/8  | 11-1/2 | 1       | RD41670 | 19     |
| 1-1/8      | 1.1250        | 7-1/8  | 11-3/4 | 1       | RD41672 | 20     |
| 1-5/32     | 1.1562        | 7-1/4  | 11-7/8 | 1       | RD41674 | 21     |
| 1-3/16     | 1.1875        | 7-3/8  | 12     | 1       | RD41676 | 22     |
| 1-7/32     | 1.2188        | 7-1/2  | 12-1/8 | 1       | RD41678 | 23     |
| 1-1/4      | 1.2500        | 7-7/8  | 12-1/2 | 1       | RD41680 | 24     |
| 1-9/32     | 1.2812        | 8-1/2  | 14-1/8 | 1       | RD41682 | 25     |
| 1-5/16     | 1.3125        | 8-5/8  | 14-1/4 | 1       | RD41684 | 26     |
| 1-11/32    | 1.3438        | 8-3/4  | 14-3/8 | 1       | RD41686 | 27     |
| 1-3/8      | 1.3750        | 8-7/8  | 14-1/2 | 1       | RD41688 | 28     |
| 1-13/32    | 1.4062        | 9      | 14-5/8 | 1       | RD41690 | 29     |
| 1-7/16     | 1.4375        | 9-1/8  | 14-3/4 | 1       | RD41692 | 30     |
| 1-15/32    | 1.4688        | 9-1/4  | 14-7/8 | 1       | RD41694 | 31     |
| 1-1/2      | 1.5000        | 9-3/8  | 15     | 1       | RD41696 | 32     |
| 1-9/16     | 1.5625        | 9-5/8  | 15-1/4 | 1       | RD41697 | 33     |
| 1-5/8      | 1.6250        | 9-7/8  | 15-5/8 | 1       | RD41698 | 34     |
| 1-3/4      | 1.7500        | 10-1/2 | 16-1/4 | 1       | RD41699 | 35     |

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Technical data found on page 264.





Uncoated

## HSS, Straight Shank, X-Long Length, 118° Point, 5.5" Flute

| Drill Size | Decimal Equiv | FL    | OAL | Uncoated |        |
|------------|---------------|-------|-----|----------|--------|
|            |               |       |     | Part #   | Item # |
| 1/8        | .1250         | 5-1/2 | 8   | RD43858  | 1      |
| 9/64       | .1406         | 5-1/2 | 8   | RD43860  | 2      |
| 5/32       | .1562         | 5-1/2 | 8   | RD43862  | 3      |
| 11/64      | .1719         | 5-1/2 | 8   | RD43864  | 4      |
| 3/16       | .1875         | 5-1/2 | 8   | RD43866  | 5      |
| 13/64      | .2031         | 5-1/2 | 8   | RD43868  | 6      |
| 7/32       | .2188         | 5-1/2 | 8   | RD43870  | 7      |
| 15/64      | .2344         | 5-1/2 | 8   | RD43872  | 8      |
| 1/4        | .2500         | 5-1/2 | 8   | RD43874  | 9      |
| 17/64      | .2656         | 5-1/2 | 8   | RD43876  | 10     |
| 9/32       | .2812         | 5-1/2 | 8   | RD43878  | 11     |
| 19/64      | .2969         | 5-1/2 | 8   | RD43880  | 12     |
| 5/16       | .3125         | 5-1/2 | 8   | RD43882  | 13     |
| 21/64      | .3281         | 5-1/2 | 8   | RD43884  | 14     |
| 11/32      | .3438         | 5-1/2 | 8   | RD43886  | 15     |
| 23/64      | .3594         | 5-1/2 | 8   | RD43888  | 16     |
| 3/8        | .3750         | 5-1/2 | 8   | RD43890  | 17     |
| 25/64      | .3906         | 5-1/2 | 8   | RD43892  | 18     |
| 13/32      | .4062         | 5-1/2 | 8   | RD43893  | 19     |
| 7/16       | .4375         | 5-1/2 | 8   | RD43895  | 20     |
| 15/32      | .4688         | 5-1/2 | 8   | RD43897  | 21     |
| 1/2        | .5000         | 5-1/2 | 8   | RD43899  | 22     |

HSS & Cobalt Drills



Technical data found on page 264.





Uncoated

| <b>HSS, Straight Shank, X-Long Length, 118° Point, 7.5" Flute</b> |               |       |     |          |        |
|---|---------------|-------|-----|----------|--------|
| Drill Size  | Decimal Equiv | FL    | OAL | Uncoated |        |
|   |               |       |     | Part #   | Item # |
| 1/8   | .1250         | 7-1/2 | 10  | RD43702  | 1      |
| 9/64  | .1406         | 7-1/2 | 10  | RD43704  | 2      |
| 5/32  | .1562         | 7-1/2 | 10  | RD43706  | 3      |
| 11/64   | .1719         | 7-1/2 | 10  | RD43708  | 4      |
| 3/16  | .1875         | 7-1/2 | 10  | RD43710  | 5      |
| 13/64   | .2031         | 7-1/2 | 10  | RD43712  | 6      |
| 7/32  | .2188         | 7-1/2 | 10  | RD43714  | 7      |
| 15/64   | .2344         | 7-1/2 | 10  | RD43716  | 8      |
| 1/4   | .2500         | 7-1/2 | 10  | RD43718  | 9      |
| 17/64   | .2656         | 7-1/2 | 10  | RD43720  | 10     |
| 9/32  | .2812         | 7-1/2 | 10  | RD43722  | 11     |
| 19/64   | .2969         | 7-1/2 | 10  | RD43724  | 12     |
| 5/16  | .3125         | 7-1/2 | 10  | RD43726  | 13     |
| 21/64   | .3281         | 7-1/2 | 10  | RD43728  | 14     |
| 11/32   | .3438         | 7-1/2 | 10  | RD43730  | 15     |
| 23/64   | .3594         | 7-1/2 | 10  | RD43732  | 16     |
| 3/8   | .3750         | 7-1/2 | 10  | RD43734  | 17     |
| 25/64   | .3906         | 7-1/2 | 10  | RD43736  | 18     |
| 13/32   | .4062         | 7-1/2 | 10  | RD43738  | 19     |
| 27/64   | .4375         | 7-1/2 | 10  | RD43740  | 20     |
| 7/16  | .4688         | 7-1/2 | 10  | RD43742  | 21     |
| 29/64   | .5000         | 7-1/2 | 10  | RD43744  | 22     |
| 15/32   | .4688         | 7-1/2 | 10  | RD43746  | 23     |
| 31/64   | .4844         | 7-1/2 | 10  | RD43748  | 24     |
| 1/2   | .5000         | 7-1/2 | 10  | RD43750  | 25     |
| 33/64   | .5156         | 7-1/2 | 10  | RD43752  | 26     |
| 17/32   | .5312         | 7-1/2 | 10  | RD43754  | 27     |

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Technical data found on page 264.





Uncoated

## HSS, Straight Shank, X-Long Length, 118° Point, 9" Flute

| Drill Size | Decimal Equiv | FL | OAL | Uncoated |        |
|------------|---------------|----|-----|----------|--------|
|            |               |    |     | Part #   | Item # |
| 1/8        | .1250         | 9  | 12  | RD43608  | 1      |
| 9/64       | .1406         | 9  | 12  | RD43609  | 2      |
| 5/32       | .1562         | 9  | 12  | RD43610  | 3      |
| 11/64      | .1719         | 9  | 12  | RD43611  | 4      |
| 3/16       | .1875         | 9  | 12  | RD43612  | 5      |
| 13/64      | .2031         | 9  | 12  | RD43613  | 6      |
| 7/32       | .2188         | 9  | 12  | RD43614  | 7      |
| 15/64      | .2344         | 9  | 12  | RD43615  | 8      |
| 1/4        | .2500         | 9  | 12  | RD43616  | 9      |
| 17/64      | .2656         | 9  | 12  | RD43617  | 10     |
| 9/32       | .2812         | 9  | 12  | RD43618  | 11     |
| 19/64      | .2969         | 9  | 12  | RD43619  | 12     |
| 5/16       | .3125         | 9  | 12  | RD43620  | 13     |
| 21/64      | .3281         | 9  | 12  | RD43621  | 14     |
| 11/32      | .3438         | 9  | 12  | RD43622  | 15     |
| 23/64      | .3594         | 9  | 12  | RD43623  | 16     |
| 3/8        | .3750         | 9  | 12  | RD43624  | 17     |
| 25/64      | .3906         | 9  | 12  | RD43625  | 18     |
| 13/32      | .4062         | 9  | 12  | RD43626  | 19     |
| 27/64      | .4219         | 9  | 12  | RD43627  | 20     |
| 7/16       | .4375         | 9  | 12  | RD43628  | 21     |
| 29/64      | .4531         | 9  | 12  | RD43629  | 22     |
| 15/32      | .4688         | 9  | 12  | RD43630  | 23     |
| 31/64      | .4844         | 9  | 12  | RD43631  | 24     |
| 1/2        | .5000         | 9  | 12  | RD43632  | 25     |
| 33/64      | .5156         | 9  | 12  | RD43633  | 26     |
| 17/32      | .5312         | 9  | 12  | RD43634  | 27     |
| 35/64      | .5469         | 9  | 12  | RD43635  | 28     |
| 9/16       | .5625         | 9  | 12  | RD43636  | 29     |
| 19/32      | .5938         | 9  | 12  | RD43638  | 30     |
| 5/8        | .6250         | 9  | 12  | RD43640  | 31     |
| 21/32      | .6562         | 9  | 12  | RD43642  | 32     |
| 11/16      | .6875         | 9  | 12  | RD43644  | 33     |
| 23/32      | .7188         | 9  | 12  | RD43646  | 34     |
| 3/4        | .7500         | 9  | 12  | RD43648  | 35     |

HSS & Cobalt Drills



Technical data found on page 264.





Oxide

## HSS, Aircraft Extension Drills, 135° Point, 6" Long

| Drill Size | Decimal Equiv | FL      | OAL | Pkg Qty | Oxide   |        |
|------------|---------------|---------|-----|---------|---------|--------|
|            |               |         |     |         | Part #  | Item # |
| 3/32       | .0938         | 1-1/4   | 6   | 12      | RD43406 | 1      |
| #40        | .0960         | 1-5/8   | 6   | 12      | RD44640 | 2      |
| 7/64       | .1094         | 1-1/2   | 6   | 12      | RD43407 | 3      |
| 1/8        | .1250         | 1-5/8   | 6   | 12      | RD43408 | 4      |
| #30        | .1285         | 1-5/8   | 6   | 12      | RD44630 | 5      |
| #29        | .1360         | 1-3/4   | 6   | 12      | RD44629 | 6      |
| 9/64       | .1406         | 1-3/4   | 6   | 12      | RD43409 | 7      |
| 5/32       | .1562         | 2       | 6   | 12      | RD43410 | 8      |
| #21        | .1590         | 2-1/8   | 6   | 12      | RD44621 | 9      |
| #20        | .1610         | 2-1/8   | 6   | 12      | RD44620 | 10     |
| 11/64      | .1719         | 2-1/8   | 6   | 12      | RD43411 | 11     |
| 3/16       | .1875         | 2-5/16  | 6   | 12      | RD43412 | 12     |
| #11        | .1910         | 2-5/16  | 6   | 12      | RD44611 | 13     |
| #10        | .1935         | 2-7/16  | 6   | 12      | RD44610 | 14     |
| 13/64      | .2031         | 2-7/16  | 6   | 12      | RD43413 | 15     |
| 7/32       | .2188         | 2-1/2   | 6   | 12      | RD43414 | 16     |
| #2         | .2210         | 2-5/8   | 6   | 12      | RD44602 | 17     |
| #1         | .2280         | 2-5/8   | 6   | 12      | RD44601 | 18     |
| 15/64      | .2344         | 2-5/8   | 6   | 12      | RD43415 | 19     |
| 1/4        | .2500         | 2-3/4   | 6   | 12      | RD43416 | 20     |
| 17/64      | .2656         | 2-7/8   | 6   | 6       | RD43417 | 21     |
| 9/32       | .2812         | 2-15/16 | 6   | 6       | RD43418 | 22     |
| 19/64      | .2969         | 3-1/16  | 6   | 6       | RD43419 | 23     |
| 5/16       | .3125         | 3-3/16  | 6   | 6       | RD43420 | 24     |
| 21/64      | .3281         | 3-5/16  | 6   | 6       | RD43421 | 25     |
| 11/32      | .3438         | 3-7/16  | 6   | 6       | RD43422 | 26     |
| 23/64      | .3594         | 3-1/2   | 6   | 6       | RD43423 | 27     |
| 3/8        | .3750         | 3-5/8   | 6   | 6       | RD43424 | 28     |

HSS & Cobalt Drills



Technical data found on page 264.





Cobalt

## Cobalt, Aircraft Extension Drills, 135° Point, 6" Long

| Drill Size | Decimal Equiv | FL     | OAL | Pkg Qty | Cobalt  |        |
|------------|---------------|--------|-----|---------|---------|--------|
|            |               |        |     |         | Part #  | Item # |
| 3/32       | .0938         | 1-1/4  | 6   | 12      | RD44706 | 1      |
| #40        | .0960         | 1-5/8  | 6   | 12      | RD44840 | 2      |
| 7/64       | .1094         | 1-1/2  | 6   | 12      | RD44707 | 3      |
| 1/8        | .1250         | 1-5/8  | 6   | 12      | RD44708 | 4      |
| #30        | .1285         | 1-5/8  | 6   | 12      | RD44830 | 5      |
| #29        | .1360         | 1-3/4  | 6   | 12      | RD44829 | 6      |
| 9/64       | .1406         | 1-3/4  | 6   | 12      | RD44709 | 7      |
| 5/32       | .1562         | 2      | 6   | 12      | RD44710 | 8      |
| #21        | .1590         | 2-1/8  | 6   | 12      | RD44821 | 9      |
| #20        | .1610         | 2-1/8  | 6   | 12      | RD44820 | 10     |
| 11/64      | .1719         | 2-1/8  | 6   | 12      | RD44711 | 11     |
| 3/16       | .1875         | 2-5/16 | 6   | 12      | RD44712 | 12     |
| #11        | .1910         | 2-5/16 | 6   | 12      | RD44811 | 13     |
| #10        | .1935         | 2-7/16 | 6   | 12      | RD44810 | 14     |
| 13/64      | .2031         | 2-7/16 | 6   | 12      | RD44713 | 15     |
| 7/32       | .2188         | 2-1/2  | 6   | 12      | RD44714 | 16     |
| #2         | .2210         | 2-5/8  | 6   | 12      | RD44802 | 17     |
| #1         | .2280         | 2-5/8  | 6   | 12      | RD44801 | 18     |
| 15/64      | .2344         | 2-5/8  | 6   | 12      | RD44715 | 19     |
| 1/4        | .2500         | 2-3/4  | 6   | 12      | RD44716 | 20     |

HSS & Cobalt Drills



Technical data found on page 265.





Round Shank, No Flats - Oxide



Shank with 3 Flats - Oxide

## HSS, Silver & Deming Drill, 118° Point, Fractional

| Drill Size | Decimal Equiv | FL | OAL | Shk ø | Round Shank, No Flats |        | Shank with 3 Flats |        |
|------------|---------------|----|-----|-------|-----------------------|--------|--------------------|--------|
|            |               |    |     |       | Part #                | Item # | Part #             | Item # |
| 33/64      | .5156         | 3  | 6   | 1/2   | RD42833               | 1      | RD42933            | 45     |
| 17/32      | .5312         | 3  | 6   | 1/2   | RD42834               | 2      | RD42934            | 46     |
| 35/64      | .5469         | 3  | 6   | 1/2   | RD42835               | 3      | RD42935            | 47     |
| 9/16       | .5625         | 3  | 6   | 1/2   | RD42836               | 4      | RD42936            | 48     |
| 37/64      | .5781         | 3  | 6   | 1/2   | RD42837               | 5      | RD42937            | 49     |
| 19/32      | .5938         | 3  | 6   | 1/2   | RD42838               | 6      | RD42938            | 50     |
| 39/64      | .6094         | 3  | 6   | 1/2   | RD42839               | 7      | RD42939            | 51     |
| 5/8        | .6250         | 3  | 6   | 1/2   | RD42840               | 8      | RD42940            | 52     |
| 41/64      | .6406         | 3  | 6   | 1/2   | RD42841               | 9      | RD42941            | 53     |
| 21/32      | .6562         | 3  | 6   | 1/2   | RD42842               | 10     | RD42942            | 54     |
| 43/64      | .6719         | 3  | 6   | 1/2   | RD42843               | 11     | RD42943            | 55     |
| 11/16      | .6875         | 3  | 6   | 1/2   | RD42844               | 12     | RD42944            | 56     |
| 45/64      | .7031         | 3  | 6   | 1/2   | RD42845               | 13     | RD42945            | 57     |
| 23/32      | .7188         | 3  | 6   | 1/2   | RD42846               | 14     | RD42946            | 58     |
| 47/64      | .7344         | 3  | 6   | 1/2   | RD42847               | 15     | RD42947            | 59     |
| 3/4        | .7500         | 3  | 6   | 1/2   | RD42848               | 16     | RD42948            | 60     |
| 49/64      | .7656         | 3  | 6   | 1/2   | RD42849               | 17     | RD42949            | 61     |
| 25/32      | .7812         | 3  | 6   | 1/2   | RD42850               | 18     | RD42950            | 62     |
| 51/64      | .7969         | 3  | 6   | 1/2   | RD42851               | 19     | RD42951            | 63     |
| 13/16      | .8125         | 3  | 6   | 1/2   | RD42852               | 20     | RD42952            | 64     |
| 53/64      | .8281         | 3  | 6   | 1/2   | RD42853               | 21     | RD42953            | 65     |
| 27/32      | .8438         | 3  | 6   | 1/2   | RD42854               | 22     | RD42954            | 66     |
| 55/64      | .8594         | 3  | 6   | 1/2   | RD42855               | 23     | RD42955            | 67     |
| 7/8        | .8750         | 3  | 6   | 1/2   | RD42856               | 24     | RD42956            | 68     |
| 57/64      | .8906         | 3  | 6   | 1/2   | RD42857               | 25     | RD42957            | 69     |
| 29/32      | .9062         | 3  | 6   | 1/2   | RD42858               | 26     | RD42958            | 70     |
| 59/64      | .9219         | 3  | 6   | 1/2   | RD42859               | 27     | RD42959            | 71     |
| 15/16      | .9375         | 3  | 6   | 1/2   | RD42860               | 28     | RD42960            | 72     |
| 61/64      | .9531         | 3  | 6   | 1/2   | RD42861               | 29     | RD42961            | 73     |
| 31/32      | .9688         | 3  | 6   | 1/2   | RD42862               | 30     | RD42962            | 74     |
| 63/64      | .9844         | 3  | 6   | 1/2   | RD42863               | 31     | RD42963            | 75     |
| 1          | 1.000         | 3  | 6   | 1/2   | RD42864               | 32     | RD42964            | 76     |
| 1-1/32     | 1.0312        | 3  | 6   | 1/2   | RD42866               | 33     | —                  | —      |
| 1-1/16     | 1.0625        | 3  | 6   | 1/2   | RD42868               | 34     | —                  | —      |
| 1-3/32     | 1.0938        | 3  | 6   | 1/2   | RD42870               | 35     | —                  | —      |
| 1-1/8      | 1.1250        | 3  | 6   | 1/2   | RD42872               | 36     | —                  | —      |
| 1-5/32     | 1.1562        | 3  | 6   | 1/2   | RD42874               | 37     | —                  | —      |
| 1-3/16     | 1.1875        | 3  | 6   | 1/2   | RD42876               | 38     | —                  | —      |
| 1-7/32     | 1.2188        | 3  | 6   | 1/2   | RD42878               | 39     | —                  | —      |
| 1-1/4      | 1.2500        | 3  | 6   | 1/2   | RD42880               | 40     | —                  | —      |
| 1-5/16     | 1.3125        | 3  | 6   | 1/2   | RD42884               | 41     | —                  | —      |
| 1-3/8      | 1.3750        | 3  | 6   | 1/2   | RD42888               | 42     | —                  | —      |
| 1-7/16     | 1.4375        | 3  | 6   | 1/2   | RD42892               | 43     | —                  | —      |
| 1-1/2      | 1.5000        | 3  | 6   | 1/2   | RD42896               | 44     | —                  | —      |



Technical data found on page 264.





Round Shank, No Flats - Straw Finish

Shank with 3 Flats - Black & Gold Finish

## HSS & Cobalt, Silver & Deming Drill, 118° Point, Fractional

| Drill Size | Decimal Equiv | FL | OAL | Shk ø | Cobalt, Straw Finish<br>Round Shank, No Flats |        | HSS, Black & Gold<br>Finish with 3 Flats |        |
|------------|---------------|----|-----|-------|---|--------|--|--------|
|            |               |    |     |       | Part #  | Item # | Part #                                   | Item # |
| 33/64      | .5156         | 3  | 6   | 1/2   | RD43033                                       | 1      | RD43133                                  | 33     |
| 17/32      | .5312         | 3  | 6   | 1/2   | RD43034                                       | 2      | RD43134                                  | 34     |
| 35/64      | .5469         | 3  | 6   | 1/2   | RD43035                                       | 3      | RD43135                                  | 35     |
| 9/16       | .5625         | 3  | 6   | 1/2   | RD43036                                       | 4      | RD43136                                  | 36     |
| 37/64      | .5781         | 3  | 6   | 1/2   | RD43037                                       | 5      | RD43137                                  | 37     |
| 19/32      | .5938         | 3  | 6   | 1/2   | RD43038                                       | 6      | RD43138                                  | 38     |
| 39/64      | .6094         | 3  | 6   | 1/2   | RD43039                                       | 7      | RD43139                                  | 39     |
| 5/8        | .6250         | 3  | 6   | 1/2   | RD43040                                       | 8      | RD43140                                  | 40     |
| 41/64      | .6406         | 3  | 6   | 1/2   | RD43041                                       | 9      | RD43141                                  | 41     |
| 21/32      | .6562         | 3  | 6   | 1/2   | RD43042                                       | 10     | RD43142                                  | 42     |
| 43/64      | .6719         | 3  | 6   | 1/2   | RD43043                                       | 11     | RD43143                                  | 43     |
| 11/16      | .6875         | 3  | 6   | 1/2   | RD43044                                       | 12     | RD43144                                  | 44     |
| 45/64      | .7031         | 3  | 6   | 1/2   | RD43045                                       | 13     | RD43145                                  | 45     |
| 23/32      | .7188         | 3  | 6   | 1/2   | RD43046                                       | 14     | RD43146                                  | 46     |
| 47/64      | .7344         | 3  | 6   | 1/2   | RD43047                                       | 15     | RD43147                                  | 47     |
| 3/4        | .7500         | 3  | 6   | 1/2   | RD43048                                       | 16     | RD43148                                  | 48     |
| 49/64      | .7656         | 3  | 6   | 1/2   | RD43049                                       | 17     | RD43149                                  | 49     |
| 25/32      | .7812         | 3  | 6   | 1/2   | RD43050                                       | 18     | RD43150                                  | 50     |
| 51/64      | .7969         | 3  | 6   | 1/2   | RD43051                                       | 19     | RD43151                                  | 51     |
| 13/16      | .8125         | 3  | 6   | 1/2   | RD43052                                       | 20     | RD43152                                  | 52     |
| 53/64      | .8281         | 3  | 6   | 1/2   | RD43053                                       | 21     | RD43153                                  | 53     |
| 27/32      | .8438         | 3  | 6   | 1/2   | RD43054                                       | 22     | RD43154                                  | 54     |
| 55/64      | .8594         | 3  | 6   | 1/2   | RD43055                                       | 23     | RD43155                                  | 55     |
| 7/8        | .8750         | 3  | 6   | 1/2   | RD43056                                       | 24     | RD43156                                  | 56     |
| 57/64      | .8906         | 3  | 6   | 1/2   | RD43057                                       | 25     | RD43157                                  | 57     |
| 29/32      | .9062         | 3  | 6   | 1/2   | RD43058                                       | 26     | RD43158                                  | 58     |
| 59/64      | .9219         | 3  | 6   | 1/2   | RD43059                                       | 27     | RD43159                                  | 59     |
| 15/16      | .9375         | 3  | 6   | 1/2   | RD43060                                       | 28     | RD43160                                  | 60     |
| 61/64      | .9531         | 3  | 6   | 1/2   | RD43061                                       | 29     | RD43161                                  | 61     |
| 31/32      | .9688         | 3  | 6   | 1/2   | RD43062                                       | 30     | RD43162                                  | 62     |
| 63/64      | .9844         | 3  | 6   | 1/2   | RD43063                                       | 31     | RD43163                                  | 63     |
| 1          | 1.000         | 3  | 6   | 1/2   | RD43064                                       | 32     | RD43164                                  | 64     |

HSS & Cobalt Drills



Technical data found on page 264.







Oxide

## HSS, Taper Shank, 118° Point, Fractional (.1875-.8438)

| Drill Size | Decimal Equiv | FL    | OAL    | Shk | Oxide   |        |
|------------|---------------|-------|--------|-----|---------|--------|
|            |               |       |        |     | Part #  | Item # |
| 3/16       | .1875         | 2-1/2 | 5-3/4  | #1  | RD42612 | 1      |
| 13/64      | .2031         | 2-3/4 | 6      | #1  | RD42613 | 2      |
| 7/32       | .2188         | 2-3/4 | 6      | #1  | RD42614 | 3      |
| 15/64      | .2344         | 2-7/8 | 6-1/8  | #1  | RD42615 | 4      |
| 1/4        | .2500         | 2-7/8 | 6-1/8  | #1  | RD42616 | 5      |
| 17/64      | .2656         | 3     | 6-1/4  | #1  | RD42617 | 6      |
| 9/32       | .2812         | 3     | 6-1/4  | #1  | RD42618 | 7      |
| 19/64      | .2969         | 3-1/8 | 6-3/8  | #1  | RD42619 | 8      |
| 5/16       | .3125         | 3-1/8 | 6-3/8  | #1  | RD42620 | 9      |
| 21/64      | .3281         | 3-1/4 | 6-1/2  | #1  | RD42621 | 10     |
| 11/32      | .3438         | 3-1/4 | 6-1/2  | #1  | RD42622 | 11     |
| 23/64      | .3594         | 3-1/2 | 6-3/4  | #1  | RD42623 | 12     |
| 3/8        | .3750         | 3-1/2 | 6-3/4  | #1  | RD42624 | 13     |
| 25/64      | .3906         | 3-5/8 | 7      | #1  | RD42625 | 14     |
| 13/32      | .4062         | 3-5/8 | 7      | #1  | RD42626 | 15     |
| 27/64      | .4219         | 3-7/8 | 7-1/4  | #1  | RD42627 | 16     |
| 7/16       | .4375         | 3-7/8 | 7-1/4  | #1  | RD42628 | 17     |
| 29/64      | .4531         | 4-1/8 | 7-1/2  | #1  | RD42629 | 18     |
| 15/32      | .4688         | 4-1/8 | 7-1/2  | #2  | RD42630 | 19     |
| 31/64      | .4844         | 4-3/8 | 8-1/4  | #2  | RD42631 | 20     |
| 1/2        | .5000         | 4-3/8 | 8-1/4  | #2  | RD42632 | 21     |
| 33/64      | .5156         | 4-5/8 | 8-1/2  | #2  | RD42633 | 22     |
| 17/32      | .5312         | 4-5/8 | 8-1/2  | #2  | RD42634 | 23     |
| 35/64      | .5469         | 4-7/8 | 8-3/4  | #2  | RD42635 | 24     |
| 9/16       | .5625         | 4-7/8 | 8-3/4  | #2  | RD42636 | 25     |
| 37/64      | .5781         | 4-7/8 | 8-3/4  | #2  | RD42637 | 26     |
| 19/32      | .5938         | 4-7/8 | 8-3/4  | #2  | RD42638 | 27     |
| 39/64      | .6094         | 4-7/8 | 8-3/4  | #2  | RD42639 | 28     |
| 5/8        | .6250         | 4-7/8 | 8-3/4  | #2  | RD42640 | 29     |
| 41/64      | .6406         | 5-1/8 | 9      | #2  | RD42641 | 30     |
| 21/32      | .6562         | 5-1/8 | 9      | #2  | RD42642 | 31     |
| 43/64      | .6719         | 5-3/8 | 9-1/4  | #2  | RD42643 | 32     |
| 11/16      | .6875         | 5-3/8 | 9-1/4  | #2  | RD42644 | 33     |
| 45/64      | .7031         | 5-5/8 | 9-1/2  | #2  | RD42645 | 34     |
| 23/32      | .7188         | 5-5/8 | 9-1/2  | #2  | RD42646 | 35     |
| 47/64      | .7344         | 5-7/8 | 9-3/4  | #2  | RD42647 | 36     |
| 3/4        | .7500         | 5-7/8 | 9-3/4  | #2  | RD42648 | 37     |
| 49/64      | .7656         | 6     | 9-7/8  | #2  | RD42649 | 38     |
| 25/32      | .7812         | 6     | 9-7/8  | #2  | RD42650 | 39     |
| 51/64      | .7969         | 6-1/8 | 10-3/4 | #3  | RD42651 | 40     |
| 13/16      | .8125         | 6-1/8 | 10-3/4 | #3  | RD42652 | 41     |
| 53/64      | .8281         | 6-1/8 | 10-3/4 | #3  | RD42653 | 42     |
| 27/32      | .8438         | 6-1/8 | 10-3/4 | #3  | RD42654 | 43     |



Technical data found on page 264.





Oxide



## HSS, Taper Shank, 118° Point, Fractional (.8594-2.0000)

| Drill Size | Decimal Equiv | FL     | OAL    | Shk | Oxide   |        |
|------------|---------------|--------|--------|-----|---------|--------|
|            |               |        |        |     | Part #  | Item # |
| 55/64      | .8594         | 6-1/8  | 10-3/4 | #3  | RD42655 | 1      |
| 7/8        | .8750         | 6-1/8  | 10-3/4 | #3  | RD42656 | 2      |
| 57/64      | .8906         | 6-1/8  | 10-3/4 | #3  | RD42657 | 3      |
| 29/32      | .9062         | 6-1/8  | 10-3/4 | #3  | RD42658 | 4      |
| 59/64      | .9219         | 6-1/8  | 10-3/4 | #3  | RD42659 | 5      |
| 15/16      | .9375         | 6-1/8  | 10-3/4 | #3  | RD42660 | 6      |
| 61/64      | .9531         | 6-3/8  | 11     | #3  | RD42661 | 7      |
| 31/32      | .9688         | 6-3/8  | 11     | #3  | RD42662 | 8      |
| 63/64      | .9844         | 6-3/8  | 11     | #3  | RD42663 | 9      |
| 1          | 1.000         | 6-3/8  | 11     | #3  | RD42664 | 10     |
| 1-1/64     | 1.0156        | 6-1/2  | 11-1/8 | #3  | RD42665 | 11     |
| 1-1/32     | 1.0312        | 6-1/2  | 11-1/8 | #3  | RD42666 | 12     |
| 1-3/64     | 1.0469        | 6-5/8  | 11-1/4 | #3  | RD42667 | 13     |
| 1-1/16     | 1.0625        | 6-5/8  | 11-1/4 | #3  | RD42668 | 14     |
| 1-5/64     | 1.0781        | 6-7/8  | 12-1/2 | #4  | RD42669 | 15     |
| 1-3/32     | 1.0938        | 6-7/8  | 12-1/2 | #4  | RD42670 | 16     |
| 1-7/64     | 1.1094        | 7-1/8  | 12-3/4 | #4  | RD42671 | 17     |
| 1-1/8      | 1.1250        | 7-1/8  | 12-3/4 | #4  | RD42672 | 18     |
| 1-9/64     | 1.1406        | 7-1/4  | 12-7/8 | #4  | RD42673 | 19     |
| 1-5/32     | 1.1562        | 7-1/4  | 12-7/8 | #4  | RD42674 | 20     |
| 1-11/64    | 1.1719        | 7-3/8  | 13     | #4  | RD42675 | 21     |
| 1-3/16     | 1.1875        | 7-3/8  | 13     | #4  | RD42676 | 22     |
| 1-13/64    | 1.2031        | 7-1/2  | 13-1/8 | #4  | RD42677 | 23     |
| 1-7/32     | 1.2187        | 7-1/2  | 13-1/8 | #4  | RD42678 | 24     |
| 1-1/4      | 1.2500        | 7-7/8  | 13-1/2 | #4  | RD42680 | 25     |
| 1-5/16     | 1.3125        | 8-5/8  | 14-1/4 | #4  | RD42684 | 26     |
| 1-3/8      | 1.3750        | 8-7/8  | 14-1/2 | #4  | RD42688 | 27     |
| 1-7/16     | 1.4375        | 9-1/8  | 14-3/4 | #4  | RD42692 | 28     |
| 1-1/2      | 1.5000        | 9-3/8  | 15     | #4  | RD42696 | 29     |
| 1-9/16     | 1.5625        | 9-5/8  | 16-5/8 | #5  | RD42702 | 30     |
| 1-5/8      | 1.6250        | 10     | 17     | #5  | RD42706 | 31     |
| 1-11/16    | 1.6875        | 10-1/8 | 17-1/8 | #5  | RD42710 | 32     |
| 1-3/4      | 1.7500        | 10-1/8 | 17-1/8 | #5  | RD42714 | 33     |
| 1-13/16    | 1.8125        | 10-1/8 | 17-1/8 | #5  | RD42718 | 34     |
| 1-7/8      | 1.8750        | 10-3/8 | 17-3/8 | #5  | RD42722 | 35     |
| 1-15/16    | 1.9375        | 10-3/8 | 17-3/8 | #5  | RD42726 | 36     |
| 2          | 2.0000        | 10-3/8 | 17-3/8 | #5  | RD42730 | 37     |

HSS & Cobalt Drills



Technical data found on page 264.





29-Piece HSS Drill Set shown  
All sets are 118° Point unless otherwise noted.

## HSS Drill Sets, Jobber Length

| Drill Size Range                      | Description                              | # Pieces | Part #  | Item # |
|---------------------------------------|--|----------|---------|--------|
| 1/16" - 1/4" x 64ths                  | Oxided                                   | 13       | RD44010 | 1      |
| 1/16" - 1/4" x 64ths                  | Bright                                   | 13       | RD44011 | 2      |
| 1/16" - 1/4" x 64ths                  | Black/Gold Finish, H.D. 135° Split Point | 13       | RD44012 | 3      |
| 1/16" - 1/2" x 32nds                  | Oxided                                   | 15       | RD44014 | 4      |
| 1/16" - 1/2" x 32nds                  | Black/Gold Finish, H.D. 135° Split Point | 15       | RD44015 | 5      |
| 1/16" - 1/2" x 32nds                  | Bright                                   | 15       | RD44016 | 6      |
| 1/16" - 1/2" x 32nds                  | H.D. 135° Split Point                    | 15       | RD44017 | 7      |
| 1/16" - 3/8" x 64ths                  | Oxided                                   | 21       | RD44018 | 8      |
| 1/16" - 3/8" x 64ths                  | Bright                                   | 21       | RD44020 | 9      |
| 1/16" - 3/8" x 64ths                  | Black/Gold Finish                        | 21       | RD44021 | 10     |
| A-Z                                   | Oxided                                   | 26       | RD44022 | 11     |
| A-Z                                   | Bright                                   | 26       | RD44024 | 12     |
| 1/16" - 1/2" x 64ths                  | Oxided                                   | 29       | RD44026 | 13     |
| 1/16" - 1/2" x 64ths                  | Bright                                   | 29       | RD44028 | 14     |
| 1/16" - 1/2" x 64ths                  | Black/Gold Finish, H.D. 135° Split Point | 29       | RD44030 | 15     |
| 1/16" - 1/2" x 64ths                  | Black/Gold Finish, H.D. 135° Split Point | 29       | RD44431 | 16     |
| 1/16" - 1/2" x 64ths                  | H.D. 135° Split Point                    | 29       | RD44032 | 17     |
| 1/16" - 1/2" x 64ths                  | 3/8" REDUCED SHANK                       | 29       | RD44034 | 18     |
| 1/16" - 1/2" x 64ths                  | Titanium Finish, H.D. 135° Split Point   | 29       | RD44036 | 19     |
| #1 - #60                              | Oxided                                   | 60       | RD44038 | 20     |
| #1 - #60                              | Bright                                   | 60       | RD44040 | 21     |
| 1/16" - 1/2" x 64ths & #1 - #60 & A-Z | Oxided                                   | 115      | RD44042 | 22     |
| 1/16" - 1/2" x 64ths & #1 - #60 & A-Z | Bright                                   | 115      | RD44044 | 23     |
| 1/16" - 1/2" x 64ths                  | Black/Gold Finish, H.D. 135° Split Point | 115      | RD44046 | 24     |



Technical data found on page 264.





115-Piece Cobalt Drill Set shown

## Cobalt Drill Sets, Jobber Length

| Drill Size Range   | Description              | # Pieces | Part #                  | Item # |
|--|--------------------------|----------|-------------------------|--------|
| 1/16" - 1/4" x 64ths   | Straw Finish             | 13       | <a href="#">RD44151</a> | 1      |
| 1/16" - 1/2" x 32nds   | Straw Finish             | 15       | <a href="#">RD44153</a> | 2      |
| 1/16" - 1/4" x 64ths & 9/32" - 1/2" x 32nds & 13/32" & 7/16" & 15/32" & 1/2" | Straw Finish, 3/8" Shank | 21       | <a href="#">RD44155</a> | 3      |
| A-Z  | Straw Finish             | 26       | <a href="#">RD44157</a> | 4      |
| 1/16" - 1/2" x 64ths   | Straw Finish             | 29       | <a href="#">RD44159</a> | 5      |
| #1 - #60   | Straw Finish             | 60       | <a href="#">RD44161</a> | 6      |
| 1/16" - 1/2" x 64ths & #1 - #60 & A-Z  | Straw Finish             | 115      | <a href="#">RD44163</a> | 7      |

## Drill Indexes

| Drill Size Range                      | # Pieces | Part #                  | Item # |
|---------------------------------------|----------|-------------------------|--------|
| 1/16" - 3/8" x 64ths                  | 21       | <a href="#">RD44320</a> | 8      |
| A-Z                                   | 26       | <a href="#">RD44323</a> | 9      |
| 1/16" - 1/2" x 64ths                  | 29       | <a href="#">RD44326</a> | 10     |
| #1 - #60                              | n/a      | <a href="#">RD44329</a> | 11     |
| 1/16" - 1/2" x 64ths & #1 - #60 & A-Z | n/a      | <a href="#">RD44332</a> | 12     |



Technical data found on page 265.





Uncoated

AITiN Coated

## Carbide, Jobber Length, 118° Split Point (.0276-.0945)

| Drill Size | Decimal Equiv | FL  | OAL   | Uncoated |        | AITiN Coated |        |
|------------|---------------|-----|-------|----------|--------|--------------|--------|
|            |               |     |       | Part #   | Item # | Part #       | Item # |
| .7MM       | .0276         | 12  | 31    | RD22507  | 1      | RD22707      | 43     |
| 1/32       | .0312         | 1/2 | 1-1/4 | RD21402  | 2      | RD22402      | 44     |
| .8MM       | .0315         | 12  | 31    | RD22508  | 3      | RD22708      | 45     |
| .9MM       | .0354         | 16  | 38    | RD22509  | 4      | RD22709      | 46     |
| 1.0MM      | .0394         | 16  | 38    | RD22510  | 5      | RD22710      | 47     |
| #60        | .0400         | 3/4 | 1-1/2 | RD21260  | 6      | RD22260      | 48     |
| #59        | .0410         | 3/4 | 1-1/2 | RD21259  | 7      | RD22259      | 49     |
| #58        | .0420         | 3/4 | 1-1/2 | RD21258  | 8      | RD22258      | 50     |
| #57        | .0430         | 3/4 | 1-1/2 | RD21257  | 9      | RD22257      | 51     |
| 1.1MM      | .0433         | 19  | 38    | RD22511  | 10     | RD22711      | 52     |
| #56        | .0465         | 3/4 | 1-1/2 | RD21256  | 11     | RD22256      | 53     |
| 3/64       | .0469         | 3/4 | 1-1/2 | RD21403  | 12     | RD22403      | 54     |
| 1.2MM      | .0472         | 19  | 38    | RD22512  | 13     | RD22712      | 55     |
| 1.3MM      | .0512         | 19  | 38    | RD22513  | 14     | RD22713      | 56     |
| #55        | .0520         | 3/4 | 1-1/2 | RD21255  | 15     | RD22255      | 57     |
| #54        | .0550         | 3/4 | 1-1/2 | RD21254  | 16     | RD22254      | 58     |
| 1.4MM      | .0551         | 19  | 38    | RD22514  | 17     | RD22714      | 59     |
| 1.5MM      | .0591         | 19  | 38    | RD22515  | 18     | RD22715      | 60     |
| #53        | .0595         | 3/4 | 1-1/2 | RD21253  | 19     | RD22253      | 61     |
| 1/16       | .0625         | 3/4 | 1-1/2 | RD21404  | 20     | RD22404      | 62     |
| 1.6MM      | .0630         | 19  | 38    | RD22516  | 21     | RD22716      | 63     |
| #52        | .0635         | 3/4 | 1-1/2 | RD21252  | 22     | RD22252      | 64     |
| 1.7MM      | .0669         | 19  | 38    | RD22517  | 23     | RD22717      | 65     |
| #51        | .0670         | 3/4 | 1-1/2 | RD21251  | 24     | RD22251      | 66     |
| #50        | .0700         | 7/8 | 1-3/4 | RD21250  | 25     | RD22250      | 67     |
| 1.8MM      | .0709         | 22  | 38    | RD22518  | 26     | RD22718      | 68     |
| #49        | .0730         | 7/8 | 1-3/4 | RD21249  | 27     | RD22249      | 69     |
| 1.9MM      | .0748         | 22  | 38    | RD22519  | 28     | RD22719      | 70     |
| #48        | .0760         | 7/8 | 1-3/4 | RD21248  | 29     | RD22248      | 71     |
| 5/64       | .0781         | 7/8 | 1-3/4 | RD21405  | 30     | RD22405      | 72     |
| #47        | .0785         | 7/8 | 1-3/4 | RD21247  | 31     | RD22247      | 73     |
| 2.0MM      | .0787         | 22  | 44    | RD22520  | 32     | RD22720      | 74     |
| #46        | .0810         | 7/8 | 1-3/4 | RD21246  | 33     | RD22246      | 75     |
| #45        | .0820         | 7/8 | 1-3/4 | RD21245  | 34     | RD22245      | 76     |
| 2.1MM      | .0827         | 22  | 44    | RD22521  | 35     | RD22721      | 77     |
| #44        | .0860         | 1   | 2     | RD21244  | 36     | RD22244      | 78     |
| 2.2MM      | .0866         | 25  | 50    | RD22522  | 37     | RD22722      | 79     |
| #43        | .0890         | 1   | 2     | RD21243  | 38     | RD22243      | 80     |
| 2.3MM      | .0906         | 25  | 50    | RD22523  | 39     | RD22723      | 81     |
| #42        | .0935         | 1   | 2     | RD21242  | 40     | RD22242      | 82     |
| 3/32       | .0938         | 1   | 2     | RD21406  | 41     | RD22406      | 83     |
| 2.4MM      | .0945         | 25  | 50    | RD22524  | 42     | RD22724      | 84     |



NOTE: Sizes under 1/8" diameter are not split point.



Technical data found on page 263.





Uncoated

AITiN Coated



## Carbide, Jobber Length, 118° Split Point (.0960-.1730)

| Drill Size | Decimal Equiv | FL    | OAL   | Uncoated |        | AITiN Coated |        |
|------------|---------------|-------|-------|----------|--------|--------------|--------|
|            |               |       |       | Part #   | Item # | Part #       | Item # |
| #41        | .0960         | 1     | 2     | RD21241  | 1      | RD22241      | 43     |
| #40        | .0980         | 1     | 2     | RD21240  | 2      | RD22240      | 44     |
| 2.5MM      | .0984         | 25    | 50    | RD22525  | 3      | RD22725      | 45     |
| #39        | .0995         | 1-1/4 | 2-1/4 | RD21239  | 4      | RD22239      | 46     |
| #38        | .1015         | 1-1/4 | 2-1/4 | RD21238  | 5      | RD22238      | 47     |
| 2.6MM      | .1024         | 32    | 57    | RD22526  | 6      | RD22726      | 48     |
| #37        | .1040         | 1-1/4 | 2-1/4 | RD21237  | 7      | RD22237      | 49     |
| 2.7MM      | .1063         | 32    | 57    | RD22527  | 8      | RD22727      | 50     |
| #36        | .1065         | 1-1/4 | 2-1/4 | RD21236  | 9      | RD22236      | 51     |
| 7/64       | .1094         | 1-1/4 | 2-1/4 | RD21407  | 10     | RD22407      | 52     |
| #35        | .1100         | 1-1/4 | 2-1/4 | RD21235  | 11     | RD22235      | 53     |
| 2.8MM      | .1102         | 32    | 57    | RD22528  | 12     | RD22728      | 54     |
| #34        | .1110         | 1-1/4 | 2-1/4 | RD21234  | 13     | RD22234      | 55     |
| #33        | .1130         | 1-1/4 | 2-1/4 | RD21233  | 14     | RD22233      | 56     |
| 2.9MM      | .1142         | 32    | 57    | RD22529  | 15     | RD22729      | 57     |
| #32        | .1160         | 1-1/4 | 2-1/4 | RD21232  | 16     | RD22232      | 58     |
| 3.0MM      | .1181         | 32    | 57    | RD22530  | 17     | RD22730      | 59     |
| #31        | .1200         | 1-1/4 | 2-1/4 | RD21231  | 18     | RD22231      | 60     |
| 3.1MM      | .1220         | 32    | 57    | RD22531  | 19     | RD22731      | 61     |
| 1/8        | .1250         | 1-1/4 | 2-1/4 | RD21408  | 20     | RD22408      | 62     |
| 3.2MM      | .1260         | 32    | 57    | RD22532  | 21     | RD22732      | 63     |
| #30        | .1285         | 1-1/4 | 2-1/4 | RD21230  | 22     | RD22230      | 64     |
| 3.3MM      | .1299         | 32    | 57    | RD22533  | 23     | RD22733      | 65     |
| 3.4MM      | .1339         | 35    | 63    | RD22534  | 24     | RD22734      | 66     |
| #29        | .1360         | 1-3/8 | 2-1/2 | RD21229  | 25     | RD22229      | 67     |
| 3.5MM      | .1378         | 35    | 63    | RD22535  | 26     | RD22735      | 68     |
| #28        | .1405         | 1-3/8 | 2-1/2 | RD21228  | 27     | RD22228      | 69     |
| 9/64       | .1406         | 1-3/8 | 2-1/2 | RD21409  | 28     | RD22409      | 70     |
| #27        | .1440         | 1-3/8 | 2-1/2 | RD21227  | 29     | RD22227      | 71     |
| #26        | .1470         | 1-3/8 | 2-1/2 | RD21226  | 30     | RD22226      | 72     |
| #25        | .1495         | 1-3/8 | 2-1/2 | RD21225  | 31     | RD22225      | 73     |
| #24        | .1520         | 1-3/8 | 2-1/2 | RD21224  | 32     | RD22224      | 74     |
| #23        | .1540         | 1-3/8 | 2-1/2 | RD21223  | 33     | RD22223      | 75     |
| 5/32       | .1562         | 1-3/8 | 2-1/2 | RD21410  | 34     | RD22410      | 76     |
| #22        | .1570         | 1-3/8 | 2-1/2 | RD21222  | 35     | RD22222      | 77     |
| 4.0MM      | .1575         | 35    | 63    | RD22540  | 36     | RD22740      | 78     |
| #21        | .1590         | 1-3/8 | 2-1/2 | RD21221  | 37     | RD22221      | 79     |
| #20        | .1610         | 1-3/8 | 2-1/2 | RD21220  | 38     | RD22220      | 80     |
| #19        | .1660         | 1-5/8 | 2-3/4 | RD21219  | 39     | RD22219      | 81     |
| #18        | .1695         | 1-5/8 | 2-3/4 | RD21218  | 40     | RD22218      | 82     |
| 11/64      | .1719         | 1-5/8 | 2-3/4 | RD21411  | 41     | RD22411      | 83     |
| #17        | .1730         | 1-5/8 | 2-3/4 | RD21217  | 42     | RD22217      | 84     |



NOTE: Sizes under 1/8" diameter are not split point.



Technical data found on page 263.

| Tolerances       |
|------------------|
| + .0000, - .0005 |





Uncoated

AITiN Coated



## Carbide, Jobber Length, 118° Split Point (.1770-.2950)

| Drill Size | Decimal Equiv | FL    | OAL   | Uncoated |        | AITiN Coated |        |
|------------|---------------|-------|-------|----------|--------|--------------|--------|
|            |               |       |       | Part #   | Item # | Part #       | Item # |
| #16        | .1770         | 1-5/8 | 2-3/4 | RD21216  | 1      | RD22216      | 43     |
| 4.5MM      | .1772         | 41    | 70    | RD22545  | 2      | RD22745      | 44     |
| #15        | .1800         | 1-5/8 | 2-3/4 | RD21215  | 3      | RD22215      | 45     |
| #14        | .1820         | 1-5/8 | 2-3/4 | RD21214  | 4      | RD22214      | 46     |
| #13        | .1850         | 1-5/8 | 2-3/4 | RD21213  | 5      | RD22213      | 47     |
| 3/16       | .1875         | 1-5/8 | 2-3/4 | RD21412  | 6      | RD22412      | 48     |
| #12        | .1890         | 1-5/8 | 2-3/4 | RD21212  | 7      | RD22212      | 49     |
| #11        | .1910         | 1-5/8 | 2-3/4 | RD21211  | 8      | RD22211      | 50     |
| #10        | .1935         | 1-5/8 | 2-3/4 | RD21210  | 9      | RD22210      | 51     |
| #9         | .1960         | 1-3/4 | 3     | RD21209  | 10     | RD22209      | 52     |
| 5.0MM      | .1969         | 44    | 75    | RD22550  | 11     | RD22750      | 53     |
| #8         | .1990         | 1-3/4 | 3     | RD21208  | 12     | RD22208      | 54     |
| #7         | .2010         | 1-3/4 | 3     | RD21207  | 13     | RD22207      | 55     |
| 13/64      | .2031         | 1-3/4 | 3     | RD21413  | 14     | RD22413      | 56     |
| #6         | .2040         | 1-3/4 | 3     | RD21206  | 15     | RD22206      | 57     |
| #5         | .2055         | 1-3/4 | 3     | RD21205  | 16     | RD22205      | 58     |
| #4         | .2090         | 1-3/4 | 3     | RD21204  | 17     | RD22204      | 59     |
| #3         | .2130         | 1-3/4 | 3     | RD21203  | 18     | RD22203      | 60     |
| 5.5MM      | .2165         | 44    | 75    | RD22555  | 19     | RD22755      | 61     |
| 7/32       | .2188         | 1-3/4 | 3     | RD21414  | 20     | RD22414      | 62     |
| #2         | .2210         | 1-3/4 | 3     | RD21202  | 21     | RD22202      | 63     |
| #1         | .2280         | 1-3/4 | 3     | RD21201  | 22     | RD22201      | 64     |
| A          | .2340         | 2     | 3-1/4 | RD21301  | 23     | RD22301      | 65     |
| 15/64      | .2344         | 2     | 3-1/4 | RD21415  | 24     | RD22415      | 66     |
| 6.0MM      | .2362         | 50    | 82    | RD22560  | 25     | RD22760      | 67     |
| B          | .2380         | 2     | 3-1/4 | RD21302  | 26     | RD22302      | 68     |
| C          | .2420         | 2     | 3-1/4 | RD21303  | 27     | RD22303      | 69     |
| D          | .2460         | 2     | 3-1/4 | RD21304  | 28     | RD22304      | 70     |
| 1/4        | .2500         | 2     | 3-1/4 | RD21416  | 29     | RD22416      | 71     |
| E          | .2500         | 2     | 3-1/4 | RD21305  | 30     | RD22305      | 72     |
| 6.5MM      | .2559         | 50    | 82    | RD22565  | 31     | RD22765      | 73     |
| F          | .2570         | 2     | 3-1/4 | RD21306  | 32     | RD22306      | 74     |
| G          | .2610         | 2-1/8 | 3-1/2 | RD21307  | 33     | RD22307      | 75     |
| 17/64      | .2656         | 2-1/8 | 3-1/2 | RD21417  | 34     | RD22417      | 76     |
| H          | .2660         | 2-1/8 | 3-1/2 | RD21308  | 35     | RD22308      | 77     |
| I          | .2720         | 2-1/8 | 3-1/2 | RD21309  | 36     | RD22309      | 78     |
| 7.0MM      | .2756         | 54    | 89    | RD22570  | 37     | RD22770      | 79     |
| J          | .2770         | 2-1/8 | 3-1/2 | RD21310  | 38     | RD22310      | 80     |
| K          | .2810         | 2-1/8 | 3-1/2 | RD21311  | 39     | RD22311      | 81     |
| 9/32       | .2812         | 2-1/8 | 3-1/2 | RD21418  | 40     | RD22418      | 82     |
| L          | .2900         | 2-1/8 | 3-1/2 | RD21312  | 41     | RD22312      | 83     |
| M          | .2950         | 2-3/8 | 3-3/4 | RD21313  | 42     | RD22313      | 84     |



NOTE: Sizes under 1/8" diameter are not split point.

| Tolerances       |
|------------------|
| + .0000, - .0005 |



Technical data found on page 263.





Uncoated

AITiN Coated



## Carbide, Jobber Length, 118° Split Point (.2953-.5000)

| Drill Size | Decimal Equiv | FL    | OAL   | Uncoated |        | AITiN Coated |        |
|------------|---------------|-------|-------|----------|--------|--------------|--------|
|            |               |       |       | Part #   | Item # | Part #       | Item # |
| 7.5MM      | .2953         | 60    | 95    | RD22575  | 1      | RD22775      | 38     |
| 19/64      | .2969         | 2-3/8 | 3-3/4 | RD21419  | 2      | RD22419      | 39     |
| N          | .3020         | 2-3/8 | 3-3/4 | RD21314  | 3      | RD22314      | 40     |
| 5/16       | .3125         | 2-3/8 | 3-3/4 | RD21420  | 4      | RD22420      | 41     |
| 8.0MM      | .3150         | 60    | 95    | RD22580  | 5      | RD22780      | 42     |
| O          | .3160         | 2-3/8 | 3-3/4 | RD21315  | 6      | RD22315      | 43     |
| P          | .3230         | 2-3/8 | 3-3/4 | RD21316  | 7      | RD22316      | 44     |
| 21/64      | .3281         | 2-1/2 | 4     | RD21421  | 8      | RD22421      | 45     |
| Q          | .3320         | 2-1/2 | 4     | RD21317  | 9      | RD22317      | 46     |
| 8.5MM      | .3346         | 63    | 100   | RD22585  | 10     | RD22785      | 47     |
| R          | .3390         | 2-1/2 | 4     | RD21318  | 11     | RD22318      | 48     |
| 11/32      | .3438         | 2-1/2 | 4     | RD21422  | 12     | RD22422      | 49     |
| S          | .3480         | 2-1/2 | 4     | RD21319  | 13     | RD22319      | 50     |
| 9.0MM      | .3543         | 70    | 100   | RD22590  | 14     | RD22790      | 51     |
| T          | .3580         | 2-3/4 | 4-1/4 | RD21320  | 15     | RD22320      | 52     |
| 23/64      | .3594         | 2-3/4 | 4-1/4 | RD21423  | 16     | RD22423      | 53     |
| U          | .3680         | 2-3/4 | 4-1/4 | RD21321  | 17     | RD22321      | 54     |
| 9.5MM      | .3740         | 70    | 108   | RD22595  | 18     | RD22795      | 55     |
| 3/8        | .3750         | 2-3/4 | 4-1/4 | RD21424  | 19     | RD22424      | 56     |
| V          | .3770         | 2-3/4 | 4-1/4 | RD21322  | 20     | RD22322      | 57     |
| W          | .3860         | 2-7/8 | 4-1/2 | RD21323  | 21     | RD22323      | 58     |
| 25/64      | .3906         | 2-7/8 | 4-1/2 | RD21425  | 22     | RD22425      | 59     |
| 10.0MM     | .3937         | 73    | 114   | RD22600  | 23     | RD22800      | 60     |
| X          | .3970         | 2-7/8 | 4-1/2 | RD21324  | 24     | RD22324      | 61     |
| Y          | .4040         | 2-7/8 | 4-1/2 | RD21325  | 25     | RD22325      | 62     |
| 13/32      | .4062         | 2-7/8 | 4-1/2 | RD21426  | 26     | RD22426      | 63     |
| Z          | .4130         | 2-7/8 | 4-1/2 | RD21326  | 27     | RD22326      | 64     |
| 10.5MM     | .4134         | 73    | 114   | RD22605  | 28     | RD22805      | 65     |
| 27/64      | .4219         | 2-7/8 | 4-1/2 | RD21427  | 29     | RD22427      | 66     |
| 11.0MM     | .4331         | 73    | 114   | RD22610  | 30     | RD22810      | 67     |
| 7/16       | .4375         | 2-7/8 | 4-1/2 | RD21428  | 31     | RD22428      | 68     |
| 11.5MM     | .4528         | 76    | 120   | RD22615  | 32     | RD22815      | 69     |
| 29/64      | .4531         | 3     | 4-3/4 | RD21429  | 33     | RD22429      | 70     |
| 15/32      | .4688         | 3     | 4-3/4 | RD21430  | 34     | RD22430      | 71     |
| 12.0MM     | .4724         | 76    | 120   | RD22620  | 35     | RD22820      | 72     |
| 31/64      | .4844         | 3     | 4-3/4 | RD21431  | 36     | RD22431      | 73     |
| 1/2        | .5000         | 3     | 4-3/4 | RD21432  | 37     | RD22432      | 74     |

NOTE: Sizes under 1/8" diameter are not split point.



Technical data found on page 263.

| Tolerances       |
|------------------|
| + .0000, - .0005 |







Uncoated

AITiN Coated

## Carbide, Stub Length, 135° Split Point (.0312-.1440)

| Drill Size | Decimal Equiv | FL    | OAL   | Uncoated |        | AITiN Coated |        |
|------------|---------------|-------|-------|----------|--------|--------------|--------|
|            |               |       |       | Part #   | Item # | Part #       | Item # |
| 1/32       | .0312         | 3/8   | 1-1/2 | RD21102  | 1      | RD22102      | 43     |
| #60        | .0400         | 3/8   | 1-1/2 | RD20960  | 2      | RD22960      | 44     |
| #59        | .0410         | 3/8   | 1-1/2 | RD20959  | 3      | RD22959      | 45     |
| #58        | .0420         | 3/8   | 1-1/2 | RD20958  | 4      | RD22958      | 46     |
| #57        | .0430         | 3/8   | 1-1/2 | RD20957  | 5      | RD22957      | 47     |
| #56        | .0465         | 3/8   | 1-1/2 | RD20956  | 6      | RD22956      | 48     |
| 3/64       | .0469         | 3/8   | 1-1/2 | RD21103  | 7      | RD22103      | 49     |
| #55        | .0520         | 13/32 | 1-1/2 | RD20955  | 8      | RD22955      | 50     |
| #54        | .0550         | 13/32 | 1-1/2 | RD20954  | 9      | RD22954      | 51     |
| #53        | .0595         | 13/32 | 1-1/2 | RD20953  | 10     | RD22953      | 52     |
| 1/16       | .0625         | 13/32 | 1-1/2 | RD21104  | 11     | RD22104      | 53     |
| #52        | .0635         | 7/16  | 1-1/2 | RD20952  | 12     | RD22952      | 54     |
| #51        | .0670         | 7/16  | 1-1/2 | RD20951  | 13     | RD22951      | 55     |
| #50        | .0700         | 7/16  | 1-1/2 | RD20950  | 14     | RD22950      | 56     |
| #49        | .0730         | 7/16  | 1-1/2 | RD20949  | 15     | RD22949      | 57     |
| #48        | .0760         | 7/16  | 1-1/2 | RD20948  | 16     | RD22948      | 58     |
| 5/64       | .0781         | 7/16  | 1-1/2 | RD21105  | 17     | RD22105      | 59     |
| #47        | .0785         | 1/2   | 1-1/2 | RD20947  | 18     | RD22947      | 60     |
| #46        | .0810         | 1/2   | 1-1/2 | RD20946  | 19     | RD22946      | 61     |
| #45        | .0820         | 1/2   | 1-1/2 | RD20945  | 20     | RD22945      | 62     |
| #44        | .0860         | 1/2   | 1-1/2 | RD20944  | 21     | RD22944      | 63     |
| #43        | .0890         | 1/2   | 1-1/2 | RD20943  | 22     | RD22943      | 64     |
| #42        | .0935         | 1/2   | 1-1/2 | RD20942  | 23     | RD22942      | 65     |
| 3/32       | .0938         | 1/2   | 1-1/2 | RD21106  | 24     | RD22106      | 66     |
| #41        | .0960         | 5/8   | 2     | RD20941  | 25     | RD22941      | 67     |
| #40        | .0980         | 5/8   | 2     | RD20940  | 26     | RD22940      | 68     |
| #39        | .0995         | 5/8   | 2     | RD20939  | 27     | RD22939      | 69     |
| #38        | .1015         | 5/8   | 2     | RD20938  | 28     | RD22938      | 70     |
| #37        | .1040         | 5/8   | 2     | RD20937  | 29     | RD22937      | 71     |
| #36        | .1065         | 5/8   | 2     | RD20936  | 30     | RD22936      | 72     |
| 7/64       | .1094         | 5/8   | 2     | RD21107  | 31     | RD22107      | 73     |
| #35        | .1100         | 3/4   | 2     | RD20935  | 32     | RD22935      | 74     |
| #34        | .1110         | 3/4   | 2     | RD20934  | 33     | RD22934      | 75     |
| #33        | .1130         | 3/4   | 2     | RD20933  | 34     | RD22933      | 76     |
| #32        | .1160         | 3/4   | 2     | RD20932  | 35     | RD22932      | 77     |
| #31        | .1200         | 3/4   | 2     | RD20931  | 36     | RD22931      | 78     |
| 1/8        | .1250         | 3/4   | 2     | RD21108  | 37     | RD22108      | 79     |
| #30        | .1285         | 3/4   | 2     | RD20930  | 38     | RD22930      | 80     |
| #29        | .1360         | 3/4   | 2     | RD20929  | 39     | RD22929      | 81     |
| #28        | .1405         | 3/4   | 2     | RD20928  | 40     | RD22928      | 82     |
| 9/64       | .1406         | 3/4   | 2     | RD21109  | 41     | RD22109      | 83     |
| #27        | .1440         | 7/8   | 2     | RD20927  | 42     | RD22927      | 84     |



NOTE: Sizes under 1/8" diameter are not split point.

Tolerances  
+.0000, -.0005



Technical data found on page 263.





Uncoated

AlTiN Coated



## Carbide, Stub Length, 135° Split Point (.1470-.2660)

| Drill Size | Decimal Equiv | FL    | OAL   | Uncoated |        | AlTiN Coated |        |
|------------|---------------|-------|-------|----------|--------|--------------|--------|
|            |               |       |       | Part #   | Item # | Part #       | Item # |
| #26        | .1470         | 7/8   | 2     | RD20926  | 1      | RD22926      | 43     |
| #25        | .1495         | 7/8   | 2     | RD20925  | 2      | RD22925      | 44     |
| #24        | .1520         | 7/8   | 2     | RD20924  | 3      | RD22924      | 45     |
| #23        | .1540         | 7/8   | 2     | RD20923  | 4      | RD22923      | 46     |
| 5/32       | .1562         | 7/8   | 2     | RD21110  | 5      | RD22110      | 47     |
| #22        | .1570         | 7/8   | 2     | RD20922  | 6      | RD22922      | 48     |
| #21        | .1590         | 7/8   | 2     | RD20921  | 7      | RD22921      | 49     |
| #20        | .1610         | 7/8   | 2     | RD20920  | 8      | RD22920      | 50     |
| #19        | .1660         | 7/8   | 2     | RD20919  | 9      | RD22919      | 51     |
| #18        | .1695         | 7/8   | 2     | RD20918  | 10     | RD22918      | 52     |
| 11/64      | .1719         | 7/8   | 2     | RD21111  | 11     | RD22111      | 53     |
| #17        | .1730         | 7/8   | 2     | RD20917  | 12     | RD22917      | 54     |
| #16        | .1770         | 7/8   | 2     | RD20916  | 13     | RD22916      | 55     |
| #15        | .1800         | 7/8   | 2     | RD20915  | 14     | RD22915      | 56     |
| #14        | .1820         | 7/8   | 2     | RD20914  | 15     | RD22914      | 57     |
| #13        | .1850         | 7/8   | 2     | RD20913  | 16     | RD22913      | 58     |
| 3/16       | .1875         | 7/8   | 2     | RD21112  | 17     | RD22112      | 59     |
| #12        | .1890         | 1-1/8 | 2-1/2 | RD20912  | 18     | RD22912      | 60     |
| #11        | .1910         | 1-1/8 | 2-1/2 | RD20911  | 19     | RD22911      | 61     |
| #10        | .1935         | 1-1/8 | 2-1/2 | RD20910  | 20     | RD22910      | 62     |
| #9         | .1960         | 1-1/8 | 2-1/2 | RD20909  | 21     | RD22909      | 63     |
| #8         | .1990         | 1-1/8 | 2-1/2 | RD20908  | 22     | RD22908      | 64     |
| #7         | .2010         | 1-1/8 | 2-1/2 | RD20907  | 23     | RD22907      | 65     |
| 13/64      | .2031         | 1-1/8 | 2-1/2 | RD21113  | 24     | RD22113      | 66     |
| #6         | .2040         | 1-1/8 | 2-1/2 | RD20906  | 25     | RD22906      | 67     |
| #5         | .2055         | 1-1/8 | 2-1/2 | RD20905  | 26     | RD22905      | 68     |
| #4         | .2090         | 1-1/8 | 2-1/2 | RD20904  | 27     | RD22904      | 69     |
| #3         | .2130         | 1-1/8 | 2-1/2 | RD20903  | 28     | RD22903      | 70     |
| 7/32       | .2188         | 1-1/8 | 2-1/2 | RD21114  | 29     | RD22114      | 71     |
| #2         | .2210         | 1-1/4 | 2-1/2 | RD20902  | 30     | RD22902      | 72     |
| #1         | .2280         | 1-1/4 | 2-1/2 | RD20901  | 31     | RD22901      | 73     |
| A          | .2340         | 1-1/4 | 2-1/2 | RD21001  | 32     | RD23001      | 74     |
| 15/64      | .2344         | 1-1/4 | 2-1/2 | RD21115  | 33     | RD22115      | 75     |
| B          | .2380         | 1-1/4 | 2-1/2 | RD21002  | 34     | RD23002      | 76     |
| C          | .2420         | 1-1/4 | 2-1/2 | RD21003  | 35     | RD23003      | 77     |
| D          | .2460         | 1-1/4 | 2-1/2 | RD21004  | 36     | RD23004      | 78     |
| 1/4        | .2500         | 1-1/4 | 2-1/2 | RD21116  | 37     | RD22116      | 79     |
| E          | .2500         | 1-1/4 | 2-1/2 | RD21005  | 38     | RD23005      | 80     |
| F          | .2570         | 1-1/4 | 2-1/2 | RD21006  | 39     | RD23006      | 81     |
| G          | .2610         | 1-1/4 | 2-1/2 | RD21007  | 40     | RD23007      | 82     |
| 17/64      | .2656         | 1-1/4 | 2-1/2 | RD21117  | 41     | RD22117      | 83     |
| H          | .2660         | 1-1/4 | 2-1/2 | RD21008  | 42     | RD23008      | 84     |



NOTE: Sizes under 1/8" diameter are not split point.



Technical data found on page 263.

| Tolerances     |
|----------------|
| +0.000, -.0005 |





Uncoated



AITiN Coated



## Carbide, Stub Length, 135° Split Point (.2720-.5000)

| Drill Size | Decimal Equiv | FL    | OAL   | Uncoated |        | AITiN Coated |        |
|------------|---------------|-------|-------|----------|--------|--------------|--------|
|            |               |       |       | Part #   | Item # | Part #       | Item # |
| I          | .2720         | 1-1/4 | 2-1/2 | RD21009  | 1      | RD23009      | 34     |
| J          | .2770         | 1-1/4 | 2-1/2 | RD21010  | 2      | RD23010      | 35     |
| K          | .2810         | 1-1/4 | 2-1/2 | RD21011  | 3      | RD23011      | 36     |
| 9/32       | .2812         | 1-1/4 | 2-1/2 | RD21118  | 4      | RD22118      | 37     |
| L          | .2900         | 1-1/4 | 2-1/2 | RD21012  | 5      | RD23012      | 38     |
| M          | .2950         | 1-1/4 | 2-1/2 | RD21013  | 6      | RD23013      | 39     |
| 19/64      | .2969         | 1-1/4 | 2-1/2 | RD21119  | 7      | RD22119      | 40     |
| N          | .3020         | 1-1/4 | 2-1/2 | RD21014  | 8      | RD23014      | 41     |
| 5/16       | .3125         | 1-1/4 | 2-1/2 | RD21120  | 9      | RD22120      | 42     |
| O          | .3160         | 1-3/8 | 3     | RD21015  | 10     | RD23015      | 43     |
| P          | .3230         | 1-3/8 | 3     | RD21016  | 11     | RD23016      | 44     |
| 21/64      | .3281         | 1-3/8 | 3     | RD21121  | 12     | RD22121      | 45     |
| Q          | .3320         | 1-3/8 | 3     | RD21017  | 13     | RD23017      | 46     |
| R          | .3390         | 1-3/8 | 3     | RD21018  | 14     | RD23018      | 47     |
| 11/32      | .3438         | 1-3/8 | 3     | RD21122  | 15     | RD22122      | 48     |
| S          | .3480         | 1-3/8 | 3     | RD21019  | 16     | RD23019      | 49     |
| T          | .3580         | 1-3/8 | 3     | RD21020  | 17     | RD23020      | 50     |
| 23/64      | .3594         | 1-3/8 | 3     | RD21123  | 18     | RD22123      | 51     |
| U          | .3680         | 1-3/8 | 3     | RD21021  | 19     | RD23021      | 52     |
| 3/8        | .3750         | 1-3/8 | 3     | RD21124  | 20     | RD22124      | 53     |
| V          | .3770         | 1-3/8 | 3     | RD21022  | 21     | RD23022      | 54     |
| W          | .3860         | 1-3/8 | 3     | RD21023  | 22     | RD23023      | 55     |
| 25/64      | .3906         | 1-3/8 | 3     | RD21125  | 23     | RD22125      | 56     |
| X          | .3970         | 1-3/8 | 3     | RD21024  | 24     | RD23024      | 57     |
| Y          | .4040         | 1-3/8 | 3     | RD21025  | 25     | RD23025      | 58     |
| 13/32      | .4062         | 1-3/8 | 3     | RD21126  | 26     | RD22126      | 59     |
| Z          | .4130         | 1-3/8 | 3     | RD21026  | 27     | RD23026      | 60     |
| 27/64      | .4219         | 1-3/8 | 3     | RD21127  | 28     | RD22127      | 61     |
| 7/16       | .4375         | 1-3/8 | 3     | RD21128  | 29     | RD22128      | 62     |
| 29/64      | .4531         | 1-3/8 | 3     | RD21129  | 30     | RD22129      | 63     |
| 15/32      | .4688         | 1-3/8 | 3     | RD21130  | 31     | RD22130      | 64     |
| 31/64      | .4844         | 1-3/8 | 3     | RD21131  | 32     | RD22131      | 65     |
| 1/2        | .5000         | 1-3/8 | 3     | RD21132  | 33     | RD22132      | 66     |

NOTE: Sizes under 1/8" diameter are not split point.

| Tolerances       |
|------------------|
| + .0000, - .0005 |



Technical data found on page 263.





Uncoated

AITiN Coated

## Carbide, Straight Flute, 140° Split Point (.0312-.1440)

| Drill Size | Decimal Equiv | FL    | OAL   | Uncoated |        | AITiN Coated |        |
|------------|---------------|-------|-------|----------|--------|--------------|--------|
|            |               |       |       | Part #   | Item # | Part #       | Item # |
| 1/32       | .0312         | 3/8   | 1-1/2 | RD21702  | 1      | RD47802      | 43     |
| #60        | .0400         | 3/8   | 1-1/2 | RD21560  | 2      | RD48160      | 44     |
| #59        | .0410         | 3/8   | 1-1/2 | RD21559  | 3      | RD48159      | 45     |
| #58        | .0420         | 3/8   | 1-1/2 | RD21558  | 4      | RD48158      | 46     |
| #57        | .0430         | 3/8   | 1-1/2 | RD21557  | 5      | RD48157      | 47     |
| #56        | .0465         | 3/8   | 1-1/2 | RD21556  | 6      | RD48156      | 48     |
| 3/64       | .0469         | 3/8   | 1-1/2 | RD21703  | 7      | RD47803      | 49     |
| #55        | .0520         | 13/32 | 1-1/2 | RD21555  | 8      | RD48155      | 50     |
| #54        | .0550         | 13/32 | 1-1/2 | RD21554  | 9      | RD48154      | 51     |
| #53        | .0595         | 13/32 | 1-1/2 | RD21553  | 10     | RD48153      | 52     |
| 1/16       | .0625         | 13/32 | 1-1/2 | RD21704  | 11     | RD47804      | 53     |
| #52        | .0635         | 7/16  | 1-1/2 | RD21552  | 12     | RD48152      | 54     |
| #51        | .0670         | 7/16  | 1-1/2 | RD21551  | 13     | RD48151      | 55     |
| #50        | .0700         | 7/16  | 1-1/2 | RD21550  | 14     | RD48150      | 56     |
| #49        | .0730         | 7/16  | 1-1/2 | RD21549  | 15     | RD48149      | 57     |
| #48        | .0760         | 7/16  | 1-1/2 | RD21548  | 16     | RD48148      | 58     |
| 5/64       | .0781         | 7/16  | 1-1/2 | RD21705  | 17     | RD47805      | 59     |
| #47        | .0785         | 1/2   | 1-1/2 | RD21547  | 18     | RD48147      | 60     |
| #46        | .0810         | 1/2   | 1-1/2 | RD21546  | 19     | RD48146      | 61     |
| #45        | .0820         | 1/2   | 1-1/2 | RD21545  | 20     | RD48145      | 62     |
| #44        | .0860         | 1/2   | 1-1/2 | RD21544  | 21     | RD48144      | 63     |
| #43        | .0890         | 1/2   | 1-1/2 | RD21543  | 22     | RD48143      | 64     |
| #42        | .0935         | 1/2   | 1-1/2 | RD21542  | 23     | RD48142      | 65     |
| 3/32       | .0938         | 1/2   | 1-1/2 | RD21706  | 24     | RD47806      | 66     |
| #41        | .0960         | 5/8   | 2     | RD21541  | 25     | RD48141      | 67     |
| #40        | .0980         | 5/8   | 2     | RD21540  | 26     | RD48140      | 68     |
| #39        | .0995         | 5/8   | 2     | RD21539  | 27     | RD48139      | 69     |
| #38        | .1015         | 5/8   | 2     | RD21538  | 28     | RD48138      | 70     |
| #37        | .1040         | 5/8   | 2     | RD21537  | 29     | RD48137      | 71     |
| #36        | .1065         | 5/8   | 2     | RD21536  | 30     | RD48136      | 72     |
| 7/64       | .1094         | 5/8   | 2     | RD21707  | 31     | RD47807      | 73     |
| #35        | .1100         | 3/4   | 2     | RD21535  | 32     | RD48135      | 74     |
| #34        | .1110         | 3/4   | 2     | RD21534  | 33     | RD48134      | 75     |
| #33        | .1130         | 3/4   | 2     | RD21533  | 34     | RD48133      | 76     |
| #32        | .1160         | 3/4   | 2     | RD21532  | 35     | RD48132      | 77     |
| #31        | .1200         | 3/4   | 2     | RD21531  | 36     | RD48131      | 78     |
| 1/8        | .1250         | 3/4   | 2     | RD21708  | 37     | RD47808      | 79     |
| #30        | .1285         | 3/4   | 2     | RD21530  | 38     | RD48130      | 80     |
| #29        | .1360         | 3/4   | 2     | RD21529  | 39     | RD48129      | 81     |
| #28        | .1405         | 3/4   | 2     | RD21528  | 40     | RD48128      | 82     |
| 9/64       | .1406         | 3/4   | 2     | RD21709  | 41     | RD47809      | 83     |
| #27        | .1440         | 7/8   | 2     | RD21527  | 42     | RD48127      | 84     |



Carbide Drills



Technical data found on page 263.

Tolerances

+ .0000, - .0005





Uncoated

AlTiN Coated



## Carbide, Straight Flute, 140° Split Point (.1470-.2660)

| Drill Size | Decimal Equiv | FL    | OAL   | Uncoated |        | AlTiN Coated |        |
|------------|---------------|-------|-------|----------|--------|--------------|--------|
|            |               |       |       | Part #   | Item # | Part #       | Item # |
| #26        | .1470         | 7/8   | 2     | RD21526  | 1      | RD48126      | 43     |
| #25        | .1495         | 7/8   | 2     | RD21525  | 2      | RD48125      | 44     |
| #24        | .1520         | 7/8   | 2     | RD21524  | 3      | RD48124      | 45     |
| #23        | .1540         | 7/8   | 2     | RD21523  | 4      | RD48123      | 46     |
| 5/32       | .1562         | 7/8   | 2     | RD21710  | 5      | RD47810      | 47     |
| #22        | .1570         | 7/8   | 2     | RD21522  | 6      | RD48122      | 48     |
| #21        | .1590         | 7/8   | 2     | RD21521  | 7      | RD48121      | 49     |
| #20        | .1610         | 7/8   | 2     | RD21520  | 8      | RD48120      | 50     |
| #19        | .1660         | 7/8   | 2     | RD21519  | 9      | RD48119      | 51     |
| #18        | .1695         | 7/8   | 2     | RD21518  | 10     | RD48118      | 52     |
| 11/64      | .1719         | 7/8   | 2     | RD21711  | 11     | RD47811      | 53     |
| #17        | .1730         | 7/8   | 2     | RD21517  | 12     | RD48117      | 54     |
| #16        | .1770         | 7/8   | 2     | RD21516  | 13     | RD48116      | 55     |
| #15        | .1800         | 7/8   | 2     | RD21515  | 14     | RD48115      | 56     |
| #14        | .1820         | 7/8   | 2     | RD21514  | 15     | RD48114      | 57     |
| #13        | .1850         | 7/8   | 2     | RD21513  | 16     | RD48113      | 58     |
| 3/16       | .1875         | 7/8   | 2     | RD21712  | 17     | RD47812      | 59     |
| #12        | .1890         | 1-1/8 | 2-1/2 | RD21512  | 18     | RD48112      | 60     |
| #11        | .1910         | 1-1/8 | 2-1/2 | RD21511  | 19     | RD48111      | 61     |
| #10        | .1935         | 1-1/8 | 2-1/2 | RD21510  | 20     | RD48110      | 62     |
| #9         | .1960         | 1-1/8 | 2-1/2 | RD21509  | 21     | RD48109      | 63     |
| #8         | .1990         | 1-1/8 | 2-1/2 | RD21508  | 22     | RD48108      | 64     |
| #7         | .2010         | 1-1/8 | 2-1/2 | RD21507  | 23     | RD48107      | 65     |
| 13/64      | .2031         | 1-1/8 | 2-1/2 | RD21713  | 24     | RD47813      | 66     |
| #6         | .2040         | 1-1/8 | 2-1/2 | RD21506  | 25     | RD48106      | 67     |
| #5         | .2055         | 1-1/8 | 2-1/2 | RD21505  | 26     | RD48105      | 68     |
| #4         | .2090         | 1-1/8 | 2-1/2 | RD21504  | 27     | RD48104      | 69     |
| #3         | .2130         | 1-1/8 | 2-1/2 | RD21503  | 28     | RD48103      | 70     |
| 7/32       | .2188         | 1-1/8 | 2-1/2 | RD21714  | 29     | RD47814      | 71     |
| #2         | .2210         | 1-1/4 | 2-1/2 | RD21502  | 30     | RD48102      | 72     |
| #1         | .2280         | 1-1/4 | 2-1/2 | RD21501  | 31     | RD48101      | 73     |
| A          | .2340         | 1-1/4 | 2-1/2 | RD21601  | 32     | RD47901      | 74     |
| 15/64      | .2344         | 1-1/4 | 2-1/2 | RD21715  | 33     | RD47815      | 75     |
| B          | .2380         | 1-1/4 | 2-1/2 | RD21602  | 34     | RD47902      | 76     |
| C          | .2420         | 1-1/4 | 2-1/2 | RD21603  | 35     | RD47903      | 77     |
| D          | .2460         | 1-1/4 | 2-1/2 | RD21604  | 36     | RD47904      | 78     |
| 1/4        | .2500         | 1-1/4 | 2-1/2 | RD21716  | 37     | RD47816      | 79     |
| E          | .2500         | 1-1/4 | 2-1/2 | RD21605  | 38     | RD47905      | 80     |
| F          | .2570         | 1-1/4 | 2-1/2 | RD21606  | 39     | RD47906      | 81     |
| G          | .2610         | 1-1/4 | 2-1/2 | RD21607  | 40     | RD47907      | 82     |
| 17/64      | .2656         | 1-1/4 | 2-1/2 | RD21717  | 41     | RD47817      | 83     |
| H          | .2660         | 1-1/4 | 2-1/2 | RD21608  | 42     | RD47908      | 84     |



Tolerances  
+.0000, -.0005



Technical data found on page 263.



Carbide Drills



Uncoated

AITiN Coated



## Carbide, Straight Flute, 140° Split Point (.2720-.5000)

| Drill Size | Decimal Equiv | FL    | OAL   | Uncoated |        | AITiN Coated |        |
|------------|---------------|-------|-------|----------|--------|--------------|--------|
|            |               |       |       | Part #   | Item # | Part #       | Item # |
| I          | .2720         | 1-1/4 | 2-1/2 | RD21609  | 1      | RD47909      | 32     |
| J          | .2770         | 1-1/4 | 2-1/2 | RD21610  | 2      | RD47910      | 33     |
| K          | .2810         | 1-1/4 | 2-1/2 | RD21611  | 3      | RD47911      | 34     |
| 9/32       | .2812         | 1-1/4 | 2-1/2 | RD21718  | 4      | RD47818      | 35     |
| L          | .2900         | 1-1/4 | 2-1/2 | RD21612  | 5      | RD47912      | 36     |
| M          | .2950         | 1-1/4 | 2-1/2 | RD21613  | 6      | RD47913      | 37     |
| 19/64      | .2969         | 1-1/4 | 2-1/2 | RD21719  | 7      | RD47819      | 38     |
| N          | .3020         | 1-1/4 | 2-1/2 | RD21614  | 8      | RD47914      | 39     |
| 5/16       | .3125         | 1-1/4 | 2-1/2 | RD21720  | 9      | RD47820      | 40     |
| O          | .3160         | 1-3/8 | 3     | RD21615  | 10     | RD47915      | 41     |
| P          | .3230         | 1-3/8 | 3     | RD21616  | 11     | RD47916      | 42     |
| 21/64      | .3281         | 1-3/8 | 3     | RD21721  | 12     | RD47821      | 43     |
| Q          | .3320         | 1-3/8 | 3     | RD21617  | 13     | RD47917      | 44     |
| R          | .3390         | 1-3/8 | 3     | RD21618  | 14     | RD47918      | 45     |
| 11/32      | .3438         | 1-3/8 | 3     | RD21722  | 15     | RD47822      | 46     |
| S          | .3480         | 1-3/8 | 3     | RD21619  | 16     | RD47919      | 47     |
| T          | .3580         | 1-3/8 | 3     | RD21620  | 17     | RD47920      | 48     |
| 23/64      | .3594         | 1-3/8 | 3     | RD21723  | 18     | RD47823      | 49     |
| U          | .3680         | 1-3/8 | 3     | RD21621  | 19     | RD47921      | 50     |
| 3/8        | .3750         | 1-3/8 | 3     | RD21724  | 20     | RD47824      | 51     |
| V          | .3770         | 1-3/8 | 3     | RD21622  | 21     | RD47922      | 52     |
| W          | .3860         | 1-3/8 | 3     | RD21623  | 22     | RD47923      | 53     |
| 25/64      | .3906         | 1-3/8 | 3     | RD21725  | 23     | RD47825      | 54     |
| X          | .3970         | 1-3/8 | 3     | RD21624  | 24     | RD47924      | 55     |
| Y          | .4040         | 1-3/8 | 3     | RD21625  | 25     | RD47925      | 56     |
| 13/32      | .4062         | 1-3/8 | 3     | RD21726  | 26     | RD47826      | 57     |
| Z          | .4130         | 1-3/8 | 3     | RD21626  | 27     | RD47926      | 58     |
| 27/64      | .4219         | 1-3/8 | 3     | RD21727  | 28     | RD47827      | 59     |
| 7/16       | .4375         | 1-3/8 | 3     | RD21728  | 29     | RD47828      | 60     |
| 15/32      | .4688         | 1-3/8 | 3     | RD21730  | 30     | RD47830      | 61     |
| 1/2        | .5000         | 1-3/8 | 3     | RD21732  | 31     | RD47832      | 62     |

Carbide Drills



Technical data found on page 263.

Tolerances

+0.000, -0.005





90° Point Uncoated



90° Point AITiN Coated

## Carbide N/C Spotting, 90° Point

| Drill Size | Decimal Equiv | OAL | Length of Cut | Shk ø | Uncoated |        | AITiN Coated |        |
|------------|---------------|-----|---------------|-------|----------|--------|--------------|--------|
|            |               |     |               |       | Part #   | Item # | Part #       | Item # |
| 1/8        | .1250         | 2   | 1/4           | 1/8   | RD21808  | 1      | RD47308      | 8      |
| 3/16       | .1875         | 2   | 3/8           | 3/16  | RD21812  | 2      | RD47312      | 9      |
| 1/4        | .2500         | 3   | 3/8           | 1/4   | RD21816  | 3      | RD47316      | 10     |
| 3/8        | .3750         | 4   | 1/2           | 3/8   | RD21824  | 4      | RD47324      | 11     |
| 1/2        | .5000         | 4   | 3/4           | 1/2   | RD21832  | 5      | RD47332      | 12     |
| 5/8        | .6250         | 4   | 1             | 5/8   | RD21840  | 6      | RD47340      | 13     |
| 3/4        | .7500         | 4   | 1             | 3/4   | RD21848  | 7      | RD47348      | 14     |



120° Point Uncoated



120° Point AITiN Coated

## Carbide N/C Spotting, 120° Point

| Drill Size | Decimal Equiv | OAL | Length of Cut | Shk ø | Uncoated |        | AITiN Coated |        |
|------------|---------------|-----|---------------|-------|----------|--------|--------------|--------|
|            |               |     |               |       | Part #   | Item # | Part #       | Item # |
| 1/8        | .1250         | 2   | 1/4           | 1/8   | RD21908  | 15     | RD47408      | 22     |
| 3/16       | .1875         | 2   | 3/8           | 3/16  | RD21912  | 16     | RD47412      | 23     |
| 1/4        | .2500         | 3   | 3/8           | 1/4   | RD21916  | 17     | RD47416      | 24     |
| 3/8        | .3750         | 4   | 1/2           | 3/8   | RD21924  | 18     | RD47424      | 25     |
| 1/2        | .5000         | 4   | 3/4           | 1/2   | RD21932  | 19     | RD47432      | 26     |
| 5/8        | .6250         | 4   | 1             | 5/8   | RD21940  | 20     | RD47440      | 27     |
| 3/4        | .7500         | 4   | 1             | 3/4   | RD21948  | 21     | RD47448      | 28     |

Tolerances  
+.0000, -.0005



Technical data found on page 263.





140° Point Uncoated



140° Point AlTiN Coated

## Carbide N/C Spotting, 140° Point

| Drill Size | Decimal Equiv | OAL | Length of Cut | Shk ø | Uncoated |        | AlTiN Coated |        |
|------------|---------------|-----|---------------|-------|----------|--------|--------------|--------|
|            |               |     |               |       | Part #   | Item # | Part #       | Item # |
| 1/8        | .1250         | 2   | 1/4           | 1/8   | RD22008  | 1      | RD47508      | 8      |
| 3/16       | .1875         | 2   | 3/8           | 3/16  | RD22012  | 2      | RD47512      | 9      |
| 1/4        | .2500         | 3   | 3/8           | 1/4   | RD22016  | 3      | RD47516      | 10     |
| 3/8        | .3750         | 4   | 1/2           | 3/8   | RD22024  | 4      | RD47524      | 11     |
| 1/2        | .5000         | 4   | 3/4           | 1/2   | RD22032  | 5      | RD47532      | 12     |
| 5/8        | .6250         | 4   | 1             | 5/8   | RD22040  | 6      | RD47540      | 13     |
| 3/4        | .7500         | 4   | 1             | 3/4   | RD22048  | 7      | RD47548      | 14     |



145° Point Uncoated

## N/C Spotting for High Performance Drills, 145° Point

| Drill Size | Decimal Equiv | OAL | Length of Cut | Shk ø | Uncoated |        |
|------------|---------------|-----|---------------|-------|----------|--------|
|            |               |     |               |       | Part #   | Item # |
| 6MM        | .2362         | 51  | 19            | 6.0   | RDH5000  | 15     |
| 8MM        | .3150         | 64  | 19            | 8.0   | RDH5001  | 16     |
| 10MM       | .3937         | 70  | 25            | 10.0  | RDH5002  | 17     |
| 12MM       | .4724         | 76  | 25            | 12.0  | RDH5003  | 18     |
| 16MM       | .6299         | 89  | 32            | 16.0  | RDH5004  | 19     |



Technical data found on page 263.

Tolerances

+0.000, -.0005







Single Flute Uncoated



Three Flute Uncoated



Six Flute Uncoated

## Carbide Countersinks, Single Flute

| Drill Size | Decimal Equiv | OAL   | Shk ø | 60°     |        | 82°     |        | 90°     |        | 100°    |        |
|------------|---------------|-------|-------|---------|--------|---------|--------|---------|--------|---------|--------|
|            |               |       |       | Part #  | Item # | Part #  | Item # | Part #  | Item # | Part #  | Item # |
| 1/8        | .1250         | 1-1/2 | 1/8   | RC26008 | 1      | RC26308 | 9      | RC26608 | 17     | RC36908 | 25     |
| 3/16       | .1875         | 2     | 3/16  | RC26012 | 2      | RC26312 | 10     | RC26612 | 18     | RC36912 | 26     |
| 1/4        | .2500         | 2     | 1/4   | RC26016 | 3      | RC26316 | 11     | RC26616 | 19     | RC36916 | 27     |
| 3/8        | .3750         | 2-5/8 | 1/4   | RC26024 | 4      | RC26324 | 12     | RC26624 | 20     | RC36924 | 28     |
| 1/2        | .5000         | 2-5/8 | 1/4   | RC26032 | 5      | RC26332 | 13     | RC26632 | 21     | RC36932 | 29     |
| 5/8        | .6250         | 2-3/4 | 3/8   | RC26040 | 6      | RC26340 | 14     | RC26640 | 22     | RC36940 | 30     |
| 3/4        | .7500         | 2-3/4 | 3/8   | RC26048 | 7      | RC26348 | 15     | RC26648 | 23     | RC36948 | 31     |
| 1          | 1.0000        | 3     | 1/2   | RC26064 | 8      | RC26364 | 16     | RC26664 | 24     | RC36964 | 32     |

## Carbide Countersinks, Three Flute

| Drill Size | Decimal Equiv | OAL   | Shk ø | 60°     |        | 82°     |        | 90°     |        | 100°    |        |
|------------|---------------|-------|-------|---------|--------|---------|--------|---------|--------|---------|--------|
|            |               |       |       | Part #  | Item # | Part #  | Item # | Part #  | Item # | Part #  | Item # |
| 1/8        | .1250         | 1-1/2 | 1/8   | RC26108 | 33     | RC26408 | 41     | RC26708 | 49     | RC37008 | 57     |
| 3/16       | .1875         | 2     | 3/16  | RC26112 | 34     | RC26412 | 42     | RC26712 | 50     | RC37012 | 58     |
| 1/4        | .2500         | 2     | 1/4   | RC26116 | 35     | RC26416 | 43     | RC26716 | 51     | RC37016 | 59     |
| 3/8        | .3750         | 2-5/8 | 1/4   | RC26124 | 36     | RC26424 | 44     | RC26724 | 52     | RC37024 | 60     |
| 1/2        | .5000         | 2-5/8 | 1/4   | RC26132 | 37     | RC26432 | 45     | RC26732 | 53     | RC37032 | 61     |
| 5/8        | .6250         | 2-3/4 | 3/8   | RC26140 | 38     | RC26440 | 46     | RC26740 | 54     | RC37040 | 62     |
| 3/4        | .7500         | 2-3/4 | 3/8   | RC26148 | 39     | RC26448 | 47     | RC26748 | 55     | RC37048 | 63     |
| 1          | 1.0000        | 3     | 1/2   | RC26164 | 40     | RC26464 | 48     | RC26764 | 56     | RC37064 | 64     |

## Carbide Countersinks, Six Flute

| Drill Size | Decimal Equiv | OAL   | Shk ø | 60°     |        | 82°     |        | 90°     |        | 100°    |        |
|------------|---------------|-------|-------|---------|--------|---------|--------|---------|--------|---------|--------|
|            |               |       |       | Part #  | Item # | Part #  | Item # | Part #  | Item # | Part #  | Item # |
| 1/8        | .1250         | 1-1/2 | 1/8   | RC26208 | 65     | RC26508 | 73     | RC26808 | 81     | RC37108 | 89     |
| 3/16       | .1875         | 2     | 3/16  | RC26212 | 66     | RC26512 | 74     | RC26812 | 82     | RC37112 | 90     |
| 1/4        | .2500         | 2     | 1/4   | RC26216 | 67     | RC26516 | 75     | RC26816 | 83     | RC37116 | 91     |
| 3/8        | .3750         | 2-5/8 | 1/4   | RC26224 | 68     | RC26524 | 76     | RC26824 | 84     | RC37124 | 92     |
| 1/2        | .5000         | 2-5/8 | 1/4   | RC26232 | 69     | RC26532 | 77     | RC26832 | 85     | RC37132 | 93     |
| 5/8        | .6250         | 2-3/4 | 3/8   | RC26240 | 70     | RC26540 | 78     | RC26840 | 86     | RC37140 | 94     |
| 3/4        | .7500         | 2-3/4 | 3/8   | RC26248 | 71     | RC26548 | 79     | RC26848 | 87     | RC37148 | 95     |
| 1          | 1.0000        | 3     | 1/2   | RC26264 | 72     | RC26564 | 80     | RC26864 | 88     | RC37164 | 96     |



Technical data found on page 266.





Single Flute Uncoated

## HSS, Countersinks, Single Flute

| Drill Size | Decimal Equiv | OAL     | Shk ø | 60°     |        | 82°     |        | 90°     |        |
|------------|---------------|---------|-------|---------|--------|---------|--------|---------|--------|
|            |               |         |       | Part #  | Item # | Part #  | Item # | Part #  | Item # |
| 1/4        | .2500         | 1-7/16  | 3/16  | RC27601 | 1      | RC27714 | 6      | RC27823 | 11     |
| 3/8        | .3750         | 1-21/32 | 1/4   | RC27602 | 2      | RC27715 | 7      | RC27824 | 12     |
| 1/2        | .5000         | 1-13/32 | 1/4   | RC27603 | 3      | RC27716 | 8      | RC27825 | 13     |
| 3/4        | .7500         | 1-27/32 | 1/2   | RC27604 | 4      | RC27717 | 9      | RC27826 | 14     |
| 1          | 1.0000        | 2-13/16 | 1/2   | RC27605 | 5      | RC27718 | 10     | RC27827 | 15     |



Four Flute Uncoated

## HSS, Countersinks, Four Flute

| Drill Size | Decimal Equiv | OAL   | Shk ø | 60°     |        | 82°     |        |
|------------|---------------|-------|-------|---------|--------|---------|--------|
|            |               |       |       | Part #  | Item # | Part #  | Item # |
| 1/2        | .5000         | 3-7/8 | 1/2   | RC27932 | 16     | RC28032 | 21     |
| 5/8        | .6250         | 4     | 1/2   | RC27940 | 17     | RC28040 | 22     |
| 3/4        | .7500         | 4-1/8 | 1/2   | RC27948 | 18     | RC28048 | 23     |
| 7/8        | .8750         | 4-1/4 | 1/2   | RC27956 | 19     | RC28056 | 24     |
| 1          | 1.0000        | 4-3/8 | 1/2   | RC27964 | 20     | RC28064 | 25     |

Countersinks



Technical data found on page 266.





Uncoated



AlTiN Coated

## Carbide Combined Drill & Countersinks, 60°

| Drill Size | OAL   | Drill ø | Body ø | Pkg Qty | Uncoated |        | AlTiN Coated |        |
|------------|-------|---------|--------|---------|----------|--------|--------------|--------|
|            |       |         |        |         | Part #   | Item # | Part #       | Item # |
| 00         | 1-1/2 | .025    | 1/8    | 1       | RC27320  | 1      | RC37220      | 9      |
| 0          | 1-1/2 | 1/32    | 1/8    | 1       | RC27300  | 2      | RC37210      | 10     |
| 1          | 1-1/2 | 3/64    | 18     | 1       | RC27301  | 3      | RC37201      | 11     |
| 2          | 2     | 5/64    | 3/16   | 1       | RC27302  | 4      | RC37202      | 12     |
| 3          | 2     | 7/64    | 1/4    | 1       | RC27303  | 5      | RC37203      | 13     |
| 4          | 2-1/8 | 1/8     | 5/16   | 1       | RC27304  | 6      | RC37204      | 14     |
| 5          | 2-3/4 | 3/16    | 7/16   | 1       | RC27305  | 7      | RC37205      | 15     |
| 6          | 3     | 7/32    | 1/2    | 1       | RC27306  | 8      | RC37206      | 16     |



Uncoated



TiN Coated

## HSS, Combined Drill & Countersink, Regular Length, 60°

| Drill Size | OAL   | Drill ø | Body ø | Pkg Qty | Uncoated |        | TiN Coated |        | Cobalt  |        |
|------------|-------|---------|--------|---------|----------|--------|------------|--------|---------|--------|
|            |       |         |        |         | Part #   | Item # | Part #     | Item # | Part #  | Item # |
| 00000      | 1-1/4 | .010    | 1/8    | 12      | RC27150  | 17     | —          | —      | —       | —      |
| 0000       | 1-1/4 | .015    | 1/8    | 12      | RC27140  | 18     | —          | —      | —       | —      |
| 000        | 1-1/4 | .020    | 1/8    | 12      | RC27130  | 19     | —          | —      | —       | —      |
| 00         | 1-1/4 | .025    | 1/8    | 12      | RC27120  | 20     | RC27020    | 30     | —       | —      |
| 0          | 1-1/4 | 1/32    | 1/8    | 12      | RC26910  | 21     | RC27010    | 31     | —       | —      |
| 1          | 1-1/4 | 3/64    | 1/8    | 12      | RC26901  | 22     | RC27001    | 32     | RC27201 | 40     |
| 2          | 1-7/8 | 5/64    | 3/16   | 12      | RC26902  | 23     | RC27002    | 33     | RC27202 | 41     |
| 3          | 2     | 7/64    | 1/4    | 12      | RC26903  | 24     | RC27003    | 34     | RC27203 | 42     |
| 4          | 2-1/8 | 1/8     | 5/16   | 12      | RC26904  | 25     | RC27004    | 35     | RC27204 | 43     |
| 5          | 2-3/4 | 3/16    | 7/16   | 12      | RC26905  | 26     | RC27005    | 36     | —       | —      |
| 6          | 3     | 7/32    | 1/2    | 12      | RC26906  | 27     | RC27006    | 37     | —       | —      |
| 7          | 3-1/4 | 1/4     | 5/8    | 6       | RC26907  | 28     | RC27007    | 38     | —       | —      |
| 8          | 3-1/2 | 5/16    | 3/4    | 3       | RC26908  | 29     | RC27008    | 39     | —       | —      |



Technical data found on page 266.





Uncoated

| HSS, Combined Drill & Countersink, Long Length, 60° |     |              |             |         |          |        |
|---|-----|--------------|-------------|---------|----------|--------|
| Drill Size  | OAL | Drill $\phi$ | Body $\phi$ | Pkg Qty | Uncoated |        |
|   |     |              |             |         | Part #   | Item # |
| #1X3  | 3   | 3/64         | 1/8         | 1       | RC27513  | 1      |
| #1X4  | 4   | 3/64         | 1/8         | 1       | RC27514  | 2      |
| #1X5  | 5   | 3/64         | 1/8         | 1       | RC27515  | 3      |
| #1X6  | 6   | 3/64         | 1/8         | 1       | RC27516  | 4      |
| #2X3  | 3   | 5/64         | 3/16        | 1       | RC27523  | 5      |
| #2X4  | 4   | 5/64         | 3/16        | 1       | RC27524  | 6      |
| #2X5  | 5   | 5/64         | 3/16        | 1       | RC27525  | 7      |
| #2X6  | 6   | 5/64         | 3/16        | 1       | RC27526  | 8      |
| #3X3  | 3   | 7/64         | 1/4         | 1       | RC27533  | 9      |
| #3X4  | 4   | 7/64         | 1/4         | 1       | RC27534  | 10     |
| #3X5  | 5   | 7/64         | 1/4         | 1       | RC27535  | 11     |
| #3X6  | 6   | 7/64         | 1/4         | 1       | RC27536  | 12     |
| #4X4  | 4   | 1/8          | 5/16        | 1       | RC27544  | 13     |
| #4X5  | 5   | 1/8          | 5/16        | 1       | RC27545  | 14     |
| #4X6  | 6   | 1/8          | 5/16        | 1       | RC27546  | 15     |
| #4-1/2X4  | 4   | 9/64         | 3/8         | 1       | RC27540  | 16     |
| #4-1/2X5  | 5   | 9/64         | 3/8         | 1       | RC27550  | 17     |
| #4-1/2X6  | 6   | 9/64         | 3/8         | 1       | RC27560  | 18     |
| #5X4  | 4   | 3/16         | 7/16        | 1       | RC27554  | 19     |
| #5X5  | 5   | 3/16         | 7/16        | 1       | RC27555  | 20     |
| #5X6  | 6   | 3/16         | 7/16        | 1       | RC27556  | 21     |
| #6X5  | 5   | 7/32         | 1/2         | 1       | RC27565  | 22     |
| #6X6  | 6   | 7/32         | 1/2         | 1       | RC27566  | 23     |
| #7X6  | 6   | 1/4          | 5/8         | 1       | RC27576  | 24     |
| #8X6  | 6   | 5/16         | 3/4         | 1       | RC27586  | 25     |

Combined Drill & Countersink



Technical data found on page 266.





Uncoated

| HSS, Combined Drill & Countersinks, 90° |       |         |        |         |          |        |
|---|-------|---------|--------|---------|----------|--------|
| Drill Size                              | OAL   | Drill ø | Body ø | Pkg Qty | Uncoated |        |
|   |       |         |        |         | Part #   | Item # |
| 1                                       | 1-1/4 | 3/64    | 1/8    | 12      | RC28101  | 1      |
| 2                                       | 1-7/8 | 5/64    | 3/16   | 12      | RC28102  | 2      |
| 3                                       | 2     | 7/64    | 1/4    | 12      | RC28103  | 3      |
| 4                                       | 2-1/8 | 1/8     | 5/16   | 12      | RC28104  | 4      |



Uncoated

| HSS, Combined Drill & Countersinks, Bell Type, 60° |       |         |        |         |          |        |
|--|-------|---------|--------|---------|----------|--------|
| Drill Size   | OAL   | Drill ø | Body ø | Pkg Qty | Uncoated |        |
|  |       |         |        |         | Part #   | Item # |
| 11   | 1-1/4 | 3/64    | 1/8    | 12      | RC27411  | 5      |
| 12   | 1-7/8 | 1/16    | 3/16   | 12      | RC27412  | 6      |
| 13   | 2     | 3/32    | 1/4    | 12      | RC27413  | 7      |
| 14   | 2-1/8 | 7/64    | 5/16   | 12      | RC27414  | 8      |
| 15   | 2-3/4 | 5/32    | 7/16   | 12      | RC27415  | 9      |
| 16   | 3     | 3/16    | 1/2    | 12      | RC27416  | 10     |
| 17   | 3-1/4 | 7/32    | 5/8    | 6       | RC27417  | 11     |
| 18   | 3-1/2 | 1/4     | 3/4    | 6       | RC27418  | 12     |

Combined Drill & Countersink



Technical data found on page 266.





## Micro-Drills Technical Information



- RedLine Hole Shot High Performance Drills are designed to give optimal performance in a wide range of materials. Our 135° point is designed to reduce thrust and our flute design stabilizes our drills for better positioning and for a more accurate hole.
- High Performance Micro-Drills found on pages 166-168.

### Micro-Drills, Solid Carbide Speeds & Feeds

| Workpiece Material  | Speed (SFM) |              | IPR by Drill Diameter (Inches) |       |       |       |       | Speed (M/Min) |              | (MM/Rev) by Drill Diameters (MM) |      |      |      |      |
|---|-------------|--------------|--------------------------------|-------|-------|-------|-------|---------------|--------------|----------------------------------|------|------|------|------|
|   | Uncoated    | AlTiN Coated | 1/64                           | 1/32  | 1/16  | 3/32  | 1/8   | Uncoated      | AlTiN Coated | 0.5                              | 1.0  | 1.5  | 2.0  | 3.0  |
| <b>Steels</b>   |             |              |                                |       |       |       |       |               |              |                                  |      |      |      |      |
| Low Carbon Steels 1018                                    | 110         | 150          | .0004                          | .0008 | .0015 | .0023 | .0030 | 35            | 45           | .010                             | .020 | .040 | .060 | .075 |
| Alloy Steels ≤ 35Rc 4140                                  | 90          | 130          | .0004                          | .0008 | .0015 | .0023 | .0030 | 25            | 40           | .010                             | .020 | .040 | .060 | .075 |
| Alloy Steels 36-45 Rc 4140                                | 85          | 120          | .0004                          | .0008 | .0015 | .0023 | .0030 | 25            | 40           | .010                             | .020 | .040 | .060 | .075 |
| Hardened Steels 55 Rc                                     | 35          | 50           | .0002                          | .0004 | .0007 | .0011 | .0014 | 10            | 15           | .005                             | .010 | .020 | .025 | .035 |
| <b>Cast Iron</b>  |             |              |                                |       |       |       |       |               |              |                                  |      |      |      |      |
| Gray Cast Iron A48, Class 20, G4000                       | 110         | 150          | .0004                          | .0008 | .0015 | .0023 | .0030 | 35            | 45           | .010                             | .020 | .040 | .060 | .075 |
| Ductile Cast Iron 60-40-18                                | 110         | 150          | .0004                          | .0008 | .0015 | .0023 | .0030 | 35            | 45           | .010                             | .020 | .040 | .060 | .075 |
| <b>Stainless Steels</b>                                   |             |              |                                |       |       |       |       |               |              |                                  |      |      |      |      |
| Austenitic 304, 316                                       | 90          | 125          | .0004                          | .0008 | .0015 | .0023 | .0030 | 25            | 40           | .010                             | .020 | .040 | .060 | .075 |
| Free Machining 303  | 110         | 140          | .0004                          | .0008 | .0015 | .0023 | .0030 | 35            | 45           | .010                             | .020 | .040 | .060 | .075 |
| Ferritic/Martensitic 440C                                 | 80          | 110          | .0004                          | .0008 | .0015 | .0023 | .0030 | 25            | 35           | .010                             | .020 | .040 | .060 | .075 |
| Precipitation Hardened 17-4PH                             | 45          | 60           | .0002                          | .0004 | .0007 | .0011 | .0014 | 15            | 20           | .005                             | .010 | .020 | .030 | .035 |
| <b>High Temperature Alloys</b>                            |             |              |                                |       |       |       |       |               |              |                                  |      |      |      |      |
| Titanium 6AL-4V   | 50          | 70           | .0004                          | .0008 | .0015 | .0023 | .0030 | 15            | 20           | .010                             | .020 | .040 | .060 | .075 |
| Inconel, Hastelloy, Waspelloy, Nickel Based Alloys, Monel | 45          | 60           | .0002                          | .0004 | .0007 | .0011 | .0014 | 15            | 20           | .005                             | .010 | .020 | .025 | .035 |
| <b>Non-Ferrous Materials</b>                              |             |              |                                |       |       |       |       |               |              |                                  |      |      |      |      |
| Aluminum < 10% Si   | 175         | —            | .0005                          | .0010 | .0020 | .0030 | .0040 | 55            | —            | .015                             | .025 | .050 | .075 | .100 |
| Plastic   | 175         | —            | .0005                          | .0010 | .0020 | .0030 | .0040 | 55            | —            | .015                             | .025 | .050 | .075 | .100 |

| Recommended Peck Depths by Diameter* (Inch) |                |
|---|----------------|
| Diameter                                    | Peck Depth     |
| 1/32  | 1 x Diameter   |
| 1/16  | 1.5 x Diameter |
| 3/32  | 2 x Diameter   |
| 1/8   | 3 x Diameter   |

| Recommended Peck Depths by Diameter* (mm) |                |
|---|----------------|
| Diameter                                  | Peck Depth     |
| 1.0 mm                                    | 1 x Diameter   |
| 1.5 mm                                    | 1.5 x Diameter |
| 2.0 mm                                    | 2 x Diameter   |
| 3.0 mm                                    | 3 x Diameter   |

| High Performance Drills Tolerances |              |              |             |              |              |
|------------------------------------|--------------|--------------|-------------|--------------|--------------|
| Inches                             |              |              | Millimeters |              |              |
| Size                               | Drill ø (h7) | Shank ø (h6) | Size        | Drill ø (h7) | Shank ø (h6) |
| .0000-.1250                        | +0/-.0003    | +0/-0.0002   | 0-3.00      | +0/-0.008    | +0/-0.005    |

\* Peck depths can vary by material type.





## Multi-Material (Non-Coolant Fed) Stub & Regular Length Drills Technical Information

- RedLine Hole Shot High Performance Drills are designed to give optimal performance in a wide range of materials. Our 142° point is designed to reduce thrust and our flute design stabilizes our drills for better positioning and for a more accurate hole.
- All shanks are manufactured to h6 tolerance, suitable for use in shrink-fit holders.
- Multi-Material, Non-Coolant Fed, High Performance Drills found on pages 169-178.

### Multi-Material, Solid Carbide (Non-Coolant) Speeds & Feeds

| Workpiece Material                          | Speed (SFM) | IPR by Drill Diameter (Inches) |            |           |           |           |           | Speed (M/Min) | (MM/Rev) by Drill Diameters (Millimeters) |           |           |           |           |           |
|---|-------------|--------------------------------|------------|-----------|-----------|-----------|-----------|---------------|---|-----------|-----------|-----------|-----------|-----------|
|   |             | 1/8                            | 1/4        | 3/8       | 1/2       | 5/8       | 3/4       |               | 3.0                                       | 6.0       | 10.0      | 12.0      | 16.0      | 19.0      |
| <b>Steels</b>                               |             |                                |            |           |           |           |           |               |   |           |           |           |           |           |
| Low Carbon Steels 1018, 12L14               | 340-400     | .0035-.0065                    | .0065-.009 | .009-.011 | .010-.013 | .011-.015 | .013-.017 | 105-125       | .100-.150                                 | .150-.230 | .230-.280 | .255-.330 | .280-.380 | .305-.430 |
| Alloy Steels < 35Rc 4140, A2, D2            | 275-350     | .0035-.0065                    | .0065-.009 | .009-.011 | .010-.013 | .011-.015 | .013-.017 | 85-105        | .100-.150                                 | .150-.230 | .230-.280 | .255-.330 | .280-.380 | .305-.430 |
| Alloy Steels >35 Rc 4140, A2, D2            | 175-210     | .002-.003                      | .004-.006  | .005-.009 | .006-.010 | .009-.012 | .010-.014 | 50-65         | .050-.075                                 | .100-.150 | .125-.230 | .150-.255 | .230-.305 | .255-.355 |
| <b>Cast Iron</b>                            |             |                                |            |           |           |           |           |               |   |           |           |           |           |           |
| Gray Cast Iron A48, Class 20, G4000         | 400-500     | .004-.0065                     | .006-.009  | .009-.011 | .010-.013 | .011-.015 | .012-.017 | 125-150       | .100-.150                                 | .150-.230 | .230-.280 | .255-.330 | .280-.380 | .305-.430 |
| Ductile Iron 60-40-18                       | 300-375     | .004-.0065                     | .006-.009  | .009-.011 | .010-.013 | .011-.015 | .012-.017 | 95-115        | .100-.150                                 | .150-.230 | .230-.280 | .255-.330 | .280-.380 | .305-.430 |
| <b>Stainless Steels</b>                     |             |                                |            |           |           |           |           |               |   |           |           |           |           |           |
| Austenitic 304, 316                         | 125-200     | .004-.0065                     | .0065-.009 | .009-.011 | .010-.013 | .011-.015 | .012-.017 | 40-60         | .100-.150                                 | .150-.230 | .230-.280 | .255-.330 | .280-.380 | .305-.430 |
| Precipitation Hardened 17-4PH, 13-8PH       | 100-155     | .002-.003                      | .004-.006  | .005-.009 | .006-.010 | .009-.012 | .010-.014 | 30-50         | .050-.075                                 | .100-.150 | .125-.230 | .150-.255 | .230-.305 | .255-.355 |
| <b>High Temperature Alloys</b>              |             |                                |            |           |           |           |           |               |   |           |           |           |           |           |
| Titanium 6AL-4V                             | 150         | .001                           | .003       | .004      | .005      | .006      | .008      | 45            | .025                                      | .065      | .103      | .125      | .153      | .192      |
| Cobalt Based Alloys Stellite, Haynes 25,188 | 40          | .001                           | .003       | .004      | .005      | .006      | .008      | 15            | .025                                      | .065      | .103      | .125      | .153      | .192      |
| Nickel Based Alloys Inconel 625, 718        | 80          | .001                           | .003       | .004      | .005      | .006      | .008      | 25            | .025                                      | .065      | .103      | .125      | .153      | .192      |
| Iron Based Alloys Incoloy 800-802, Multimet | 80          | .001                           | .003       | .004      | .005      | .006      | .008      | 25            | .025                                      | .065      | .103      | .125      | .153      | .192      |
| High Nickel Alloys Monel                    | 100         | .001                           | .003       | .004      | .005      | .006      | .008      | 30            | .025                                      | .065      | .103      | .125      | .153      | .192      |

#### High Performance Drills Tolerances (Inch)

| Size        | Drill ø (h7) | Shank ø (h6) |
|-------------|--------------|--------------|
| .0000-.1181 | +0/-.00039   | +0/-.00024   |
| .1182-.2362 | +0/-.00047   | +0/-.00031   |
| .2363-.3937 | +0/-.00059   | +0/-.00035   |
| .3938-.7087 | +0/-.00071   | +0/-.00043   |
| .7088-.7500 | +0/-.00083   | +0/-.00051   |

#### High Performance Drills Tolerances (mm)

| Size        | Drill ø (h7) | Shank ø (h6) |
|-------------|--------------|--------------|
| 0-3.00      | +0/-.010     | +0/-.006     |
| 3.01-6.00   | +0/-.012     | +0/-.008     |
| 6.01-10.00  | +0/-.015     | +0/-.009     |
| 10.01-18.00 | +0/-.018     | +0/-.011     |
| 18.01-20.00 | +0/-.021     | +0/-.013     |





## Multi-Material, Coolant Fed, Stub & Regular Length Drills Technical Information

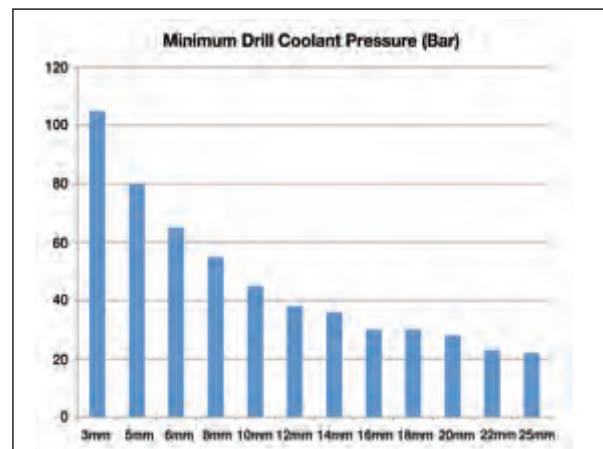
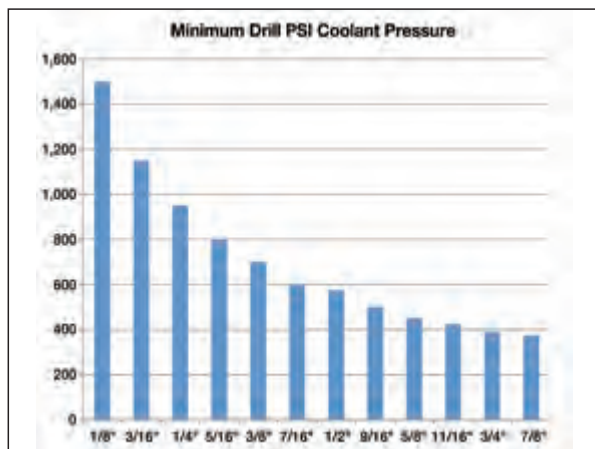


- RedLine Hole Shot High Performance Drills are designed to give optimal performance in a wide range of materials. Our 142° point is designed to reduce thrust and our flute design stabilizes our drills for better positioning and for a more accurate hole.
- All shanks are manufactured to h6 tolerance, suitable for use in shrink-fit holders.
- Multi-Material, Coolant-Fed, High Performance Drills found on pages 179-187.

### Multi-Material, Coolant Fed, Regular Length Speeds & Feeds

| Workpiece Material                          | Speed (SFM) | IPR by Drill Diameter (Inches) |            |           |           |           |           | Speed (M/Min) | (MM/Rev) by Drill Diameters (Millimeters) |           |           |           |           |           |
|---|-------------|--------------------------------|------------|-----------|-----------|-----------|-----------|---------------|---|-----------|-----------|-----------|-----------|-----------|
|   |             | 1/8                            | 1/4        | 3/8       | 1/2       | 5/8       | 3/4       |               | 3.0                                       | 6.0       | 10.0      | 12.0      | 16.0      | 19.0      |
| <b>Steels</b>                               |             |                                |            |           |           |           |           |               |   |           |           |           |           |           |
| Low Carbon Steels 1018, 12L14               | 500-625     | .0035-.0065                    | .0065-.009 | .009-.011 | .010-.013 | .011-.015 | .013-.017 | 150-190       | .100-.150                                 | .150-.230 | .230-.280 | .255-.330 | .280-.380 | .305-.430 |
| Alloy Steels < 35Rc 4140, A2, D2            | 315-435     | .0035-.0065                    | .0065-.009 | .009-.011 | .010-.013 | .011-.015 | .013-.017 | 95-130        | .100-.150                                 | .150-.230 | .230-.280 | .255-.330 | .280-.380 | .305-.430 |
| Alloy Steels >35 Rc 4140, A2, D2            | 190-250     | .002-.003                      | .004-.006  | .005-.009 | .006-.010 | .009-.012 | .010-.014 | 60-75         | .050-.075                                 | .100-.150 | .125-.230 | .150-.255 | .230-.305 | .255-.355 |
| <b>Cast Iron</b>                            |             |                                |            |           |           |           |           |               |   |           |           |           |           |           |
| Gray Cast Iron A48, Class 20, G4000         | 500-625     | .004-.0065                     | .006-.009  | .009-.011 | .010-.013 | .011-.015 | .012-.017 | 150-190       | .100-.150                                 | .150-.230 | .230-.280 | .255-.330 | .280-.380 | .305-.430 |
| Ductile Iron 60-40-18                       | 560-625     | .004-.0065                     | .006-.009  | .009-.011 | .010-.013 | .011-.015 | .012-.017 | 170-190       | .100-.150                                 | .150-.230 | .230-.280 | .255-.330 | .280-.380 | .305-.430 |
| <b>Stainless Steels</b>                     |             |                                |            |           |           |           |           |               |   |           |           |           |           |           |
| Austenitic 304, 316                         | 220-315     | .004-.0065                     | .0065-.009 | .009-.011 | .010-.013 | .011-.015 | .012-.017 | 220-315       | .100-.150                                 | .150-.230 | .230-.280 | .255-.330 | .280-.380 | .305-.430 |
| Precipitation Hardened 17-4PH, 13-8PH       | 150-220     | .002-.003                      | .004-.006  | .005-.009 | .006-.010 | .009-.012 | .010-.014 | 150-220       | .050-.075                                 | .100-.150 | .125-.230 | .150-.255 | .230-.305 | .255-.355 |
| <b>High Temperature Alloys</b>              |             |                                |            |           |           |           |           |               |   |           |           |           |           |           |
| Titanium 6AL-4V                             | 180         | .001                           | .003       | .004      | .005      | .006      | .008      | 55            | .025                                      | .065      | .103      | .125      | .153      | .192      |
| Cobalt Based Alloys Stellite, Haynes 25,188 | 50          | .001                           | .003       | .004      | .005      | .006      | .008      | 15            | .025                                      | .065      | .103      | .125      | .153      | .192      |
| Nickel Based Alloys Inconel 625, 718        | 95          | .001                           | .003       | .004      | .005      | .006      | .008      | 30            | .025                                      | .065      | .103      | .125      | .153      | .192      |
| Iron Based Alloys Incoloy 800-802, Multimet | 95          | .001                           | .003       | .004      | .005      | .006      | .008      | 30            | .025                                      | .065      | .103      | .125      | .153      | .192      |
| High Nickel Alloys Monel                    | 120         | .001                           | .003       | .004      | .005      | .006      | .008      | 35            | .025                                      | .065      | .103      | .125      | .153      | .192      |

### Coolant Pressure Requirements







## Multi-Material, Coolant Fed, Long Length Drills Technical Information

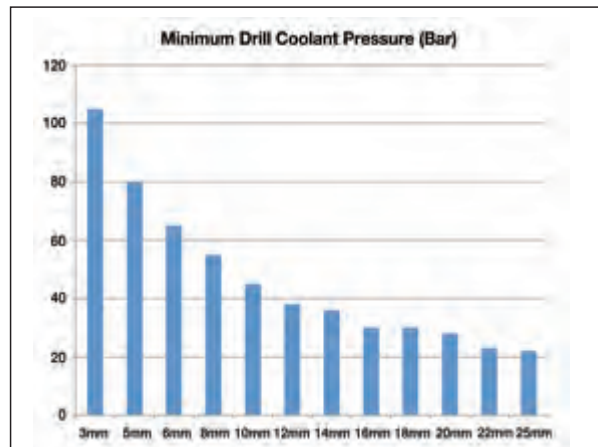
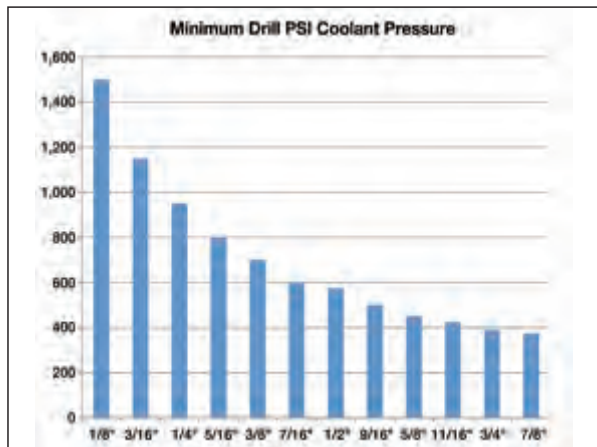


- RedLine Hole Shot High Performance Drills are designed to give optimal performance in a wide range of materials. Our 142° point is designed to reduce thrust and our flute design stabilizes our drills for better positioning and for a more accurate hole.
- All shanks are manufactured to h6 tolerance, suitable for use in shrink-fit holders.
- Multi-Material, Coolant-Fed, High Performance Drills found on pages 188-191.

### Multi-Material, Coolant Fed, Long Length Speeds & Feeds

| Workpiece Material                          | Speed (SFM) | IPR by Drill Diameter (Inches) |            |           |           |           |           | Speed (M/Min) | (MM/Rev) by Drill Diameters (Millimeters) |           |           |           |           |           |
|---|-------------|--------------------------------|------------|-----------|-----------|-----------|-----------|---------------|---|-----------|-----------|-----------|-----------|-----------|
|   |             | 1/8                            | 1/4        | 3/8       | 1/2       | 5/8       | 3/4       |               | 3.0                                       | 6.0       | 10.0      | 12.0      | 16.0      | 19.0      |
| <b>Steels</b>                               |             |                                |            |           |           |           |           |               |   |           |           |           |           |           |
| Low Carbon Steels 1018, 12L14               | 530-605     | .0035-.0065                    | .0065-.009 | .009-.011 | .010-.013 | .011-.015 | .013-.017 | 160-180       | .100-.150                                 | .150-.230 | .230-.280 | .255-.330 | .280-.380 | .305-.430 |
| Alloy Steels < 35Rc 4140, A2, D2            | 280-375     | .0035-.0065                    | .0065-.009 | .009-.011 | .010-.013 | .011-.015 | .013-.017 | 85-120        | .100-.150                                 | .150-.230 | .230-.280 | .255-.330 | .280-.380 | .305-.430 |
| Alloy Steels >35 Rc 4140, A2, D2            | 170-225     | .002-.003                      | .004-.006  | .005-.009 | .006-.010 | .009-.012 | .010-.014 | 50-70         | .050-.075                                 | .100-.150 | .125-.230 | .150-.255 | .230-.305 | .255-.355 |
| <b>Cast Iron</b>                            |             |                                |            |           |           |           |           |               |   |           |           |           |           |           |
| Ductile Iron 60-40-18                       | 475-590     | .004-.0065                     | .006-.009  | .009-.011 | .010-.013 | .011-.015 | .012-.017 | 140-180       | .100-.150                                 | .150-.230 | .230-.280 | .255-.330 | .280-.380 | .305-.430 |
| Gray Cast Iron A48, Class 20, G4000         | 530-590     | .004-.0065                     | .006-.009  | .009-.011 | .010-.013 | .011-.015 | .012-.017 | 160-180       | .100-.150                                 | .150-.230 | .230-.280 | .255-.330 | .280-.380 | .305-.430 |
| <b>Stainless Steels</b>                     |             |                                |            |           |           |           |           |               |   |           |           |           |           |           |
| Austenitic 304, 316                         | 185-280     | .004-.0065                     | .0065-.009 | .009-.011 | .010-.013 | .011-.015 | .012-.017 | 50-85         | .100-.150                                 | .150-.230 | .230-.280 | .255-.330 | .280-.380 | .305-.430 |
| Precipitation Hardened 17-4PH, 13-8PH       | 125-190     | .002-.003                      | .004-.006  | .005-.009 | .006-.010 | .009-.012 | .010-.014 | 40-60         | .050-.075                                 | .100-.150 | .125-.230 | .150-.255 | .230-.305 | .255-.355 |
| <b>High Temperature Alloys</b>              |             |                                |            |           |           |           |           |               |   |           |           |           |           |           |
| Titanium 6AL-4V                             | 180         | .001                           | .003       | .004      | .005      | .006      | .008      | 55            | .025                                      | .065      | .103      | .125      | .153      | .192      |
| Cobalt Based Alloys Stellite, Haynes 25,188 | 50          | .001                           | .003       | .004      | .005      | .006      | .008      | 15            | .025                                      | .065      | .103      | .125      | .153      | .192      |
| Nickel Based Alloys Inconel 625, 718        | 95          | .001                           | .003       | .004      | .005      | .006      | .008      | 30            | .025                                      | .065      | .103      | .125      | .153      | .192      |
| Iron Based Alloys Incoloy 800-802, Multimet | 95          | .001                           | .003       | .004      | .005      | .006      | .008      | 30            | .025                                      | .065      | .103      | .125      | .153      | .192      |
| High Nickel Alloys Monel                    | 120         | .001                           | .003       | .004      | .005      | .006      | .008      | 35            | .025                                      | .065      | .103      | .125      | .153      | .192      |

### Coolant Pressure Requirements





## Multi-Material, Coolant Fed, X-Long Length Drills Technical Information



- RedLine Hole Shot High Performance Drills are designed to give optimal performance in a wide range of materials. Our 142° point is designed to reduce thrust and our flute design stabilizes our drills for better positioning and for a more accurate hole.
- All shanks are manufactured to h6 tolerance, suitable for use in shrink-fit holders.
- For information on deep hole drilling techniques, see the next page.
- Multi-Material, Coolant-Fed, High Performance Drills found on pages 192-193.

### Multi-Material, Coolant Fed, X-Long Length Speeds & Feeds

| Workpiece Material                          | Speed (SFM) | IPR by Drill Diameter (Inches) |       |       |       |       |       |       |       |       | Speed (M/Min) | (MM/Rev) by Drill Diameters (Millimeters) |      |      |      |      |      |      |      |      |  |
|---|-------------|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|---|------|------|------|------|------|------|------|------|--|
|   |             | .1181                          | .1575 | .1968 | .2362 | .2756 | .3150 | .3543 | .3937 | .4724 |               | 3   | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 12   |  |
| <b>Steels</b>                               |             |                                |       |       |       |       |       |       |       |       |               |   |      |      |      |      |      |      |      |      |  |
| Low Carbon Steels 1018, 12L14               | 350         | .0020                          | .0028 | .0035 | .0042 | .0050 | .0076 | .0085 | .0094 | .0100 | 105           | .050                                      | .071 | .088 | .106 | .127 | .193 | .215 | .238 | .254 |  |
| Medium Carbon Steels 4140                   | 260         | .0020                          | .0028 | .0035 | .0042 | .0050 | .0076 | .0085 | .0094 | .0100 | 80            | .050                                      | .071 | .088 | .106 | .127 | .193 | .215 | .238 | .254 |  |
| Tool & Die Steels A2, D2, P20, H13          | 260         | .0020                          | .0028 | .0035 | .0042 | .0050 | .0076 | .0085 | .0094 | .0100 | 80            | .050                                      | .071 | .088 | .106 | .127 | .193 | .215 | .238 | .254 |  |
| Alloy Steels 4140, 8620                     | 260         | .0020                          | .0028 | .0035 | .0042 | .0050 | .0076 | .0085 | .0094 | .0100 | 80            | .050                                      | .071 | .088 | .106 | .127 | .193 | .215 | .238 | .254 |  |
| Alloy Steels 36-45 5Rc A2, D2, P20, H13     | 260         | .0005                          | .0006 | .0008 | .0009 | .0011 | .0019 | .0021 | .0024 | .0026 | 35            | .012                                      | .015 | .020 | .022 | .027 | .048 | .053 | .060 | .066 |  |
| Alloy Steels 46-50 Rc A2, D2, P20, H13      | 120         | .0005                          | .0006 | .0008 | .0009 | .0011 | .0019 | .0021 | .0024 | .0026 | 25            | .012                                      | .015 | .020 | .022 | .027 | .048 | .053 | .060 | .066 |  |
| Structural Steels                           | 400         | .0020                          | .0028 | .0035 | .0042 | .0050 | .0076 | .0085 | .0094 | .0100 | 120           | .050                                      | .071 | .088 | .106 | .127 | .193 | .215 | .238 | .254 |  |
| Steel Forgings                              | 175         | .0024                          | .0031 | .0039 | .0047 | .0055 | .0076 | .0085 | .0094 | .0100 | 55            | .060                                      | .078 | .099 | .119 | .139 | .193 | .215 | .238 | .254 |  |
| <b>Cast Iron</b>                            |             |                                |       |       |       |       |       |       |       |       |               |   |      |      |      |      |      |      |      |      |  |
| Gray Cast Iron Class 20                     | 400         | .0024                          | .0031 | .0039 | .0047 | .0055 | .0076 | .0085 | .0094 | .0100 | 120           | .060                                      | .078 | .099 | .119 | .139 | .193 | .215 | .238 | .254 |  |
| Ductile Cast Iron 60-40-18                  | 260         | .0024                          | .0031 | .0039 | .0047 | .0055 | .0076 | .0085 | .0094 | .0100 | 80            | .060                                      | .078 | .099 | .119 | .139 | .193 | .215 | .238 | .254 |  |
| Malleable Iron Ferritic                     | 260         | .0024                          | .0031 | .0039 | .0047 | .0055 | .0076 | .0085 | .0094 | .0100 | 80            | .060                                      | .078 | .099 | .119 | .139 | .193 | .215 | .238 | .254 |  |
| <b>Stainless Steels</b>                     |             |                                |       |       |       |       |       |       |       |       |               |   |      |      |      |      |      |      |      |      |  |
| Austenitic 304, 316                         | 180         | .0020                          | .0028 | .0035 | .0042 | .0050 | .0076 | .0085 | .0094 | .010  | 55            | .050                                      | .071 | .088 | .106 | .127 | .193 | .215 | .238 | .254 |  |
| Precipitation Hardened 17-4PH, 13-8PH       | 125         | .0020                          | .0028 | .0035 | .0042 | .0050 | .0076 | .0085 | .0094 | .010  | 40            | .050                                      | .071 | .088 | .106 | .127 | .193 | .215 | .238 | .254 |  |
| Martensitic 410, 440                        | 125         | .0020                          | .0028 | .0035 | .0042 | .0050 | .0076 | .0085 | .0094 | .010  | 40            | .050                                      | .071 | .088 | .106 | .127 | .193 | .215 | .238 | .254 |  |
| Ferritic                                    | 250         | .0020                          | .0028 | .0035 | .0042 | .0050 | .0076 | .0085 | .0094 | .010  | 75            | .050                                      | .071 | .088 | .106 | .127 | .193 | .215 | .238 | .254 |  |
| <b>High Temperature Alloys</b>              |             |                                |       |       |       |       |       |       |       |       |               |   |      |      |      |      |      |      |      |      |  |
| Titanium 6AL-4V                             | 160         | .0012                          | .0016 | .0020 | .0024 | .0028 | .0040 | .0050 | .0055 | .0060 | 45            | .030                                      | .040 | .050 | .060 | .071 | .120 | .127 | .139 | .152 |  |
| Cobalt Based Alloys Stellite, Haynes 25,188 | 80          | .0007                          | .0009 | .0012 | .0014 | .0019 | .0025 | .0028 | .0031 | .0034 | 25            | .017                                      | .022 | .030 | .035 | .048 | .063 | .071 | .078 | .085 |  |
| Nickel Based Alloys Inconel 625, 718        | 80          | .0007                          | .0009 | .0012 | .0014 | .0019 | .0025 | .0028 | .0031 | .0034 | 25            | .017                                      | .022 | .030 | .035 | .048 | .063 | .071 | .078 | .085 |  |
| Iron Based Alloys Incoloy 800-802, Multimet | 60          | .0007                          | .0009 | .0012 | .0014 | .0019 | .0025 | .0028 | .0031 | .0034 | 20            | .017                                      | .022 | .030 | .035 | .048 | .063 | .071 | .078 | .085 |  |
| High Nickel Alloys Monel                    | 80          | .0007                          | .0009 | .0012 | .0014 | .0019 | .0025 | .0028 | .0031 | .0034 | 25            | .017                                      | .022 | .030 | .035 | .048 | .063 | .071 | .078 | .085 |  |
| <b>Non-Ferrous</b>                          |             |                                |       |       |       |       |       |       |       |       |               |   |      |      |      |      |      |      |      |      |  |
| Aluminum <14% Si 6061-T6                    | 500         | .0033                          | .0044 | .0055 | .0066 | .0077 | .0110 | .0120 | .0130 | .0140 | 150           | .083                                      | .110 | .139 | .167 | .195 | .279 | .314 | .350 | .378 |  |
| Aluminum >14% Si                            | 350         | .0033                          | .0044 | .0055 | .0066 | .0077 | .0110 | .0120 | .0130 | .0140 | 105           | .083                                      | .110 | .139 | .167 | .195 | .279 | .314 | .350 | .378 |  |
| Brass                                       | 400         | .0021                          | .0028 | .0035 | .0042 | .0050 | .0110 | .0125 | .0135 | .0150 | 120           | .053                                      | .071 | .088 | .106 | .127 | .279 | .314 | .350 | .378 |  |
| Copper/Copper Alloys Magnesium              | 300         | .0021                          | .0028 | .0035 | .0042 | .0050 | .0110 | .0125 | .0135 | .0150 | 90            | .053                                      | .071 | .088 | .106 | .127 | .279 | .314 | .350 | .378 |  |

Drills - Technical Info





## Multi-Material, Coolant Fed, X-Long Length Drills Success Deep Hole Drilling Techniques



### Step 1

Using a coolant or non-coolant pilot drill, start by producing a hole 1.5 x to 3 x diameter deep. Make sure the pilot drill has a point angle the same as or greater than the deep hole drill. You should run this drill at 100% of the final drill speed and 1/2 the normal feed.

### Step 2

Retract, then tool change to the final deep hole drill.

### Step 3

Ensuring not to exceed 400 to 500 RPM, rapid to clearance plane and enter the pilot hole at 25% of the final speed and 1 to 2 IPM—this helps with true position by eliminating drill whip. Once into the hole, turn on the coolant and advance to the material start. It is here that you can add a dwell to clear any chips that have been left from the previous drill and let the spindle get to full speed. Increase the speed and feed to final drilling parameters.

### Step 4

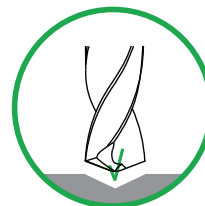
Drill one shot to the final hole depth or through.

### Step 5

If you experience any squeaking, this could mean that chip packing is occurring. As a result, you may need to retract the drill and increase your feed.

### Step 6

Once through the material, reducing the RPM may be required to eliminate breakage of the drill due to drill whip. Now retract to the clearance plane.



**CORRECT**  
Make contact here with drill



**INCORRECT**  
Do not make contact here with drill

#### Machine Requirements:

High Pressure Pump System (1,000 PSI)  
Tool runout of .0003" (.008 mm) Max.





## Aluminum & Non-Ferrous Drills Technical Information

- RedLine Aluminum & Non-Ferrous High Performance Drills have been specifically designed for high penetration rates, great chip evacuation, and improved hole quality, speed and performance for lower hole costs!
- All shanks are manufactured to h6 tolerance, suitable for use in shrink-fit holders.
- Aluminum & Non-Ferrous, High Performance Drills found on pages 194-197 .



### Aluminum & Non-Ferrous, Speeds & Feeds

| Workpiece Material       | Speed (SFM) | IPR by Drill Diameter (Inches) |      |      |      |      |      |      |      | Speed (M/Min) | (MM/Rev) by Drill Diameters (Millimeters) |      |      |      |      |      |      |  |
|--------------------------|-------------|--------------------------------|------|------|------|------|------|------|------|---------------|---|------|------|------|------|------|------|--|
|                          |             | 1/32                           | 1/16 | 1/8  | 1/4  | 3/8  | 1/2  | 5/8  | 3/4  |               | 1.0                                       | 1.5  | 3.0  | 6.0  | 10.0 | 12.0 | 16.0 |  |
| Aluminum & Non-Ferrous   |             |                                |      |      |      |      |      |      |      |               |   |      |      |      |      |      |      |  |
| Aluminum < 14% on 6061T6 | 750         | .002                           | .003 | .008 | .012 | .014 | .018 | .022 | .024 | 215           | .038                                      | .076 | .203 | .305 | .356 | .457 | .508 |  |
| Aluminum >14% Silicon    | 500         | .001                           | .002 | .003 | .006 | .008 | .010 | .011 | .012 | 150           | .025                                      | .051 | .076 | .152 | .203 | .254 | .279 |  |
| Brass/Copper             | 225         | .001                           | .002 | .003 | .006 | .008 | .010 | .011 | .012 | 70            | .025                                      | .051 | .076 | .152 | .203 | .254 | .279 |  |
| Plastics                 | 300         | .001                           | .002 | .003 | .006 | .008 | .010 | .011 | .012 | 90            | .025                                      | .051 | .076 | .152 | .203 | .254 | .279 |  |

#### Aluminum & Non-Ferrous Tolerances (Inch)

| Size        | Drill ø        |
|-------------|----------------|
| .0469-.1250 | +0.001/+0.0004 |
| .1251-.2500 | +0.002/+0.0006 |
| .2501-.3750 | +0.003/+0.0008 |
| .3751-.7500 | +0.003/+0.0010 |

#### Aluminum & Non-Ferrous Tolerances (Metric)

| Size        | Drill ø       |
|-------------|---------------|
| 2.00-3.00   | +0.002/+0.012 |
| 3.01-6.00   | +0.004/+0.016 |
| 6.01-10.00  | +0.006/+0.021 |
| 10.01-16.00 | +0.007/+0.025 |



| <b>General Purpose Carbide Drills Speeds &amp; Feeds</b>   |             |   |       |       |       |       |
|--|-------------|---|-------|-------|-------|-------|
| Workpiece Material   | Speed (SFM) | (Feed/Tooth) by Drill Diameter (Inches) |       |       |       |       |
|  |             | 1/8                                     | 1/4   | 1/2   | 3/4   | 1     |
| <b>Non-Ferrous Materials</b>                               |             |   |       |       |       |       |
| Aluminum   | 150-400     | .0015                                   | .003  | .005  | —     | —     |
| Brass/Bronze   | 100-300     | .001                                    | .002  | .003  | —     | —     |
| Copper/Copper Alloys                                       | 150-400     | .002                                    | .004  | .009  | —     | —     |
| Plastics   | 250-600     | .003                                    | .005  | .012  | —     | —     |
| <b>Cast Iron</b>   |             |   |       |       |       |       |
| Malleable  | 100-300     | .002                                    | .003  | .006  | .010  | .012  |
| Ductile  | 70-250      | .0015                                   | .003  | .005  | .008  | .014  |
| <b>Steels</b>  |             |   |       |       |       |       |
| Low Carbon Steels  | 85-150      | .001                                    | .002  | .004  | .008  | .010  |
| Medium Alloy Steels 200, 250, 300                          | 65-120      | .001                                    | .0015 | .003  | .007  | .009  |
| High Strength Steels                                       | 30-90       | .0005                                   | .0015 | .0025 | .004  | .006  |
| <b>Stainless Steels</b>                                    |             |   |       |       |       |       |
| PH Series  | 50-125      | .0005                                   | .0005 | .002  | .005  | .006  |
| Austenitic 200, 302, 303, 304(L), 316(L)                   | 30-90       | .0005                                   | .0005 | .002  | .005  | .006  |
| Martensitic 403, 410, 416, 420, 440                        | 50-125      | .0005                                   | .0005 | .002  | .005  | .006  |
| <b>High Temp Alloys</b>                                    |             |   |       |       |       |       |
| Nickel Based Inconel 601, 625, 718<br>Waspalloy, Hastelloy | 30-90       | .0005                                   | .0007 | .001  | .002  | .0025 |
| Cobalt Based Stellite, Haynes 25                           | 30-90       | .0005                                   | .0007 | .001  | .002  | .0025 |
| Iron Based Incoloy 800-802, Haynes 556                     | 40-100      | .0007                                   | .001  | .0015 | .0025 | .003  |
| Titanium   | 45-200      | .001                                    | .003  | .005  | .010  | .011  |

**NOTES:** (1) Speeds and Feeds listed are estimated and will vary by application.  
 (2) Reduce Speeds by 20-30% when exceeding 2x length to diameter.

| <b>N/C Spotting for Hole Shot High Performance Drills Speeds &amp; Feeds</b> |               |                                     |      |      |      |      |
|--|---------------|-------------------------------------|------|------|------|------|
| Workpiece Material   | Speed (M/Min) | (MM/Rev) by Drill Diameter (Metric) |      |      |      |      |
|  |               | 6                                   | 8    | 10   | 12   | 16   |
| <b>Cast Iron</b>   |               |                                     |      |      |      |      |
| Malleable  | 100-120       | .075                                | .100 | .125 | .153 | .155 |
| Ductile  | 75-90         | .075                                | .100 | .125 | .153 | .155 |
| <b>Steels</b>  |               |                                     |      |      |      |      |
| Low Carbon Steels  | 100-120       | .075                                | .100 | .125 | .153 | .155 |
| Medium Alloy Steels 200, 250, 300  | 75-90         | .075                                | .100 | .125 | .153 | .155 |
| High Strength Steels   | 40-50         | .075                                | .100 | .125 | .153 | .155 |
| <b>Stainless Steels</b>  |               |                                     |      |      |      |      |
| PH Series  | 25-35         | .075                                | .100 | .125 | .153 | .155 |
| Austenitic 200, 302, 303, 304(L), 316(L)                                     | 40-45         | .075                                | .100 | .125 | .153 | .155 |
| Martensitic 403, 410, 416, 420, 440  | 45-50         | .075                                | .100 | .125 | .153 | .155 |
| <b>High Temp Alloys</b>  |               |                                     |      |      |      |      |
| Nickel Based Inconel 601, 625, 718<br>Waspalloy, Hastelloy                   | 20-25         | .075                                | .100 | .125 | .153 | .155 |
| Cobalt Based Stellite, Haynes 25   | 20-25         | .075                                | .100 | .125 | .153 | .155 |
| Iron Based Incoloy 800-802,<br>Haynes 556                                    | 20-25         | .075                                | .100 | .125 | .153 | .155 |
| Titanium   | 50-55         | .075                                | .100 | .125 | .153 | .155 |

**NOTES:** Speeds and Feeds listed are estimated and will vary by application.



| High Speed Steel Drills<br>Speeds & Feeds                  |             |           |
|--|-------------|-----------|
| Workpiece Material   | Speed (SFM) | Feed Rate |
| <b>Non-Ferrous Materials</b>                               |             |           |
| Aluminum   | 200-300     | M-H       |
| Brass/Bronze   | 75-150      | M-H       |
| Copper/Copper Alloys                                       | 80-85       | L         |
| Plastics   | 100-200     | M-H       |
| <b>Cast Iron</b>   |             |           |
| Malleable  | 75-125      | M         |
| Ductile  | 50-100      | L-M       |
| <b>Steels</b>  |             |           |
| Low Carbon Steels  | 50-100      | M-H       |
| Medium Alloy Steels 200, 250, 300                          | 45-80       | M         |
| High Strength Steels                                       | 40-60       | M         |
| <b>Stainless Steels</b>                                    |             |           |
| PH Series  | 20-80       | M         |
| Austenitic 200, 302, 303, 304, 304(L), 316(L)              | 30-100      | M         |
| Martensitic 403, 410, 416, 420, 440                        | 10-30       | M         |
| <b>High Temp Alloys</b>                                    |             |           |
| Nickel Based Inconel 601, 625, 718<br>Waspalloy, Hastelloy | 5-15        | M         |
| Cobalt Based Stellite, Haynes 25                           | 7-20        | M         |
| Iron Based Incoloy 800-802,<br>Haynes 556                  | 7-20        | M         |
| <b>Titanium</b>  | 15-45       | M         |

NOTES: Speeds and Feeds listed are estimated and will vary by application.

| High Speed Steel Drills Feed Rate<br>Per Revolution Based on Cut |             |             |             |
|--|-------------|-------------|-------------|
| Drill Size   | Light       | Medium      | Heavy       |
| 1/16"-1/8"   | .0005-.0010 | .0010-.0020 | .0020-.0030 |
| 1/8"-1/4"  | .0010-.0030 | .0030-.0050 | .0050-.0070 |
| 1/4"-1/2"  | .0030-.0050 | .0050-.0070 | .0070-.0090 |
| 1/2"-3/4"  | .0050-.0080 | .0080-.0110 | .0110-.0140 |
| 3/4"-1"  | .0080-.0110 | .0110-.0140 | .0140-.0170 |
| >1"  | .0120-.0150 | .0150-.0200 | .0200-.0250 |



| <b>Cobalt Drills Speeds &amp; Feeds</b>               |         |                     |           |
|---|---------|---------------------|-----------|
| Workpiece Material                                    | Cobalt  | AlTiN Coated Cobalt | Feed Rate |
| <b>Non-Ferrous Materials</b>                          |         |                     |           |
| Aluminum  | 280-420 | 420-630             | M-H       |
| Brass/Bronze  | 105-120 | 155-180             | M-H       |
| Copper/Copper Alloys                                  | 115-120 | 175-180             | L         |
| Plastics  | 140-280 | 210-420             | M-H       |
| <b>Cast Iron</b>                                      |         |                     |           |
| Malleable   | 105-175 | 155-265             | M         |
| Ductile   | 70-140  | 105-210             | L-M       |
| <b>Steels</b>   |         |                     |           |
| Low Carbon Steels                                     | 70-140  | 105-210             | M-H       |
| Medium Alloy Steels 200, 250, 300                     | 65-115  | 100-175             | M         |
| High Strength Steels                                  | 55-85   | 85-130              | M         |
| <b>Stainless Steels</b>                               |         |                     |           |
| PH Series   | 28-115  | 42-175              | M         |
| Austenitic 200,302, 303,304,304(L), 316(L)            | 40-140  | 60-210              | M         |
| Martensitic 403,410,416,420,440                       | 15-42   | 23-65               | M         |
| <b>High Temp Alloys</b>                               |         |                     |           |
| Nickel Based Inconel 601,625,718 Waspalloy, Hastelloy | 7-20    | 11-30               | M         |
| Cobalt Based Stellite, Haynes 25                      | 10-28   | 15-42               | M         |
| Iron Based Incolloy 800-802 Haynes 556                | 10-28   | 15-42               | M         |
| <b>Titanium</b>                                       | 21-65   | 32-100              | M         |

NOTES: Speeds listed are estimated and will vary by application.

| <b>Cobalt Drills Feed Rate Per Revolution Based on Cut</b> |             |             |             |                     |             |             |
|--|-------------|-------------|-------------|---------------------|-------------|-------------|
| Drill/Reamer Size  | Cobalt      |             |             | AlTiN Coated Cobalt |             |             |
|  | Light       | Medium      | Heavy       | Light               | Medium      | Heavy       |
| 1/16"-1/8"   | .0006-.0011 | .0011-.0022 | .0022-.0033 | .0007-.0013         | .0013-.0026 | .0026-.0040 |
| 1/8"-1/4"  | .0011-.0033 | .0033-.0055 | .0055-.0077 | .0013-.0040         | .0040-.0066 | .0066-.0092 |
| 1/4"-1/2"  | .0033-.0055 | .0055-.0077 | .0077-.0099 | .0040-.0066         | .0066-.0092 | .0092-.0119 |
| 1/2"-3/4"  | .0055-.0088 | .0088-.0121 | .0121-.0154 | .0066-.0106         | .0106-.0145 | .0145-.0185 |
| 3/4"-1"  | .0088-.0121 | .0121-.0154 | .0154-.0187 | .0106-.0145         | .0145-.0185 | .0185-.0224 |
| >1"  | .0132-.0165 | .0165-.0220 | .0220-.0275 | .0158-.0198         | .0198-.0264 | .0264-.0330 |



| <b>Countersink Speeds</b>                                |            |               |                |
|--|------------|---------------|----------------|
| <b>Workpiece Material</b>                                | <b>HSS</b> | <b>Cobalt</b> | <b>Carbide</b> |
| <b>Non-Ferrous Materials</b>                             |            |               |                |
| Aluminum   | 150-200    | 175-250       | 350-500        |
| Brass/Bronze   | 100-125    | 100-150       | 150-250        |
| Copper/Copper Alloys                                     | 100-125    | 100-150       | 150-225        |
| Plastics   | 100-225    | 150-300       | 250-350        |
| <b>Cast Iron</b>   |            |               |                |
| Malleable  | 100-125    | 100-150       | 150-225        |
| Ductile  | 80-100     | 90-115        | 135-200        |
| <b>Steels</b>  |            |               |                |
| Low Carbon Steels  | 30-50      | 50-75         | 60-80          |
| Medium Alloy Steels<br>200, 250, 300                     | 25-50      | 40-60         | 40-70          |
| High Strength Steels                                     | 20-35      | 30-50         | 30-60          |
| <b>Stainless Steels</b>                                  |            |               |                |
| PH Series  | 15-50      | 25-70         | 85-130         |
| Austenitic 200,302,<br>303,304,304(L), 316(L)            | 35-75      | 50-80         | 50-100         |
| Martensitic 403,410,416,420,440                          | 10-50      | 25-70         | 40-85          |
| <b>High Temp Alloys</b>                                  |            |               |                |
| Nickel Based Inconel 601,625,718<br>Waspalloy, Hastelloy | 10-25      | 25-50         | 40-60          |
| Cobalt Based Stellite, Haynes 25                         | 15-30      | 20-40         | 30-50          |
| Iron Based Incolloy 800-802<br>Haynes 556                | 15-30      | 20-40         | 30-50          |
| <b>Titanium</b>  | 40-50      | 50-75         | 60-80          |

NOTES: Speeds listed are estimated and will vary by application.

