



# STANDARD CARBIDE DRILLS

## RECOMMENDED CUTTING CONDITIONS

### CARBIDE DRILLS

#### D5412, D5413, D5417 SERIES

| WORK MATERIAL<br>DIAMETER | NON-ALLOY STEELS |       | ALLOY STEELS |       | SOFT GREY CAST IRON |       | HARD GREY CAST IRON |       |
|---------------------------|------------------|-------|--------------|-------|---------------------|-------|---------------------|-------|
|                           | N                | S     | N            | S     | N                   | S     | N                   | S     |
| 3/64                      | 23000            | .0012 | 17200        | .0012 | 32000               | .0016 | 23000               | .0016 |
| 5/64                      | 11500            | .0016 | 8600         | .0016 | 16000               | .0020 | 11500               | .0020 |
| 1/8                       | 7800             | .0020 | 5750         | .0020 | 10500               | .0024 | 7600                | .0024 |
| 5/32                      | 5800             | .0024 | 4300         | .0024 | 7800                | .0028 | 5700                | .0028 |
| 13/64                     | 4700             | .0028 | 3450         | .0028 | 6200                | .0031 | 4550                | .0031 |
| 15/64                     | 3900             | .0031 | 2850         | .0031 | 5200                | .0035 | 3800                | .0035 |
| 9/32                      | 3350             | .0035 | 2450         | .0035 | 4500                | .0039 | 3250                | .0039 |
| 5/16                      | 2900             | .0039 | 2150         | .0039 | 3900                | .0047 | 2850                | .0047 |
| 23/64                     | 2600             | .0043 | 1900         | .0043 | 3450                | .0055 | 2550                | .0055 |
| 25/64                     | 2350             | .0047 | 1700         | .0047 | 3100                | .0063 | 2300                | .0063 |
| 7/16                      | 2150             | .0051 | 1600         | .0051 | 2850                | .0071 | 2100                | .0071 |
| 15/32                     | 1950             | .0055 | 1450         | .0055 | 2600                | .0079 | 1900                | .0079 |
| 33/64                     | 1800             | .0063 | 1350         | .0063 | 2400                | .0079 | 1750                | .0079 |

| WORK MATERIAL<br>DIAMETER | STAINLESS STEELS |       | Al-Si ALLOY,<br>Si<10% |       | Al-Si ALLOY,<br>Si>10% |       | Ti, Ni ALLOY STEELS |       |
|---------------------------|------------------|-------|------------------------|-------|------------------------|-------|---------------------|-------|
|                           | N                | S     | N                      | S     | N                      | S     | N                   | S     |
| 3/64                      | 12000            | .0016 | 54000                  | .0020 | 42000                  | .0020 | 11800               | .0008 |
| 5/64                      | 6000             | .0012 | 27000                  | .0024 | 21000                  | .0024 | 5900                | .0012 |
| 1/8                       | 4000             | .0016 | 18000                  | .0028 | 14000                  | .0028 | 3900                | .0016 |
| 5/32                      | 3000             | .0020 | 13000                  | .0031 | 10500                  | .0031 | 2950                | .0020 |
| 13/64                     | 2400             | .0024 | 10500                  | .0035 | 8500                   | .0035 | 2350                | .0024 |
| 15/64                     | 2000             | .0028 | 8800                   | .0043 | 7100                   | .0043 | 1950                | .0028 |
| 9/32                      | 1700             | .0031 | 7600                   | .0051 | 6100                   | .0051 | 1700                | .0031 |
| 5/16                      | 1500             | .0035 | 6600                   | .0059 | 5350                   | .0059 | 1450                | .0035 |
| 23/64                     | 1350             | .0039 | 5900                   | .0067 | 4750                   | .0067 | 1300                | .0039 |
| 25/64                     | 1200             | .0043 | 5300                   | .0075 | 4250                   | .0075 | 1200                | .0043 |
| 7/16                      | 1100             | .0047 | 4850                   | .0083 | 3900                   | .0083 | 1050                | .0047 |
| 15/32                     | 1000             | .0051 | 4450                   | .0091 | 3550                   | .0091 | 980                 | .0051 |
| 33/64                     | 950              | .0051 | 4100                   | .0098 | 3300                   | .0098 | 905                 | .0051 |

N = R.P.M

S = Inch per Revolution(inch/rev.)