

SPEEDS AND FEEDS FOR BORING TOOLS

| SPEEDS AND FEEDS FOR BORING TOOLS | | | | DEPTH OF CUT | | |
|-----------------------------------|----------------------|-------------------------------------|----------------------------------|--|---|--|
| | | | | INSERT BARS SERIES 16THRU 18 PAGE 45 THRU 48 | SOLID CARBIDE BARS OUR SERIES 10 PAGE 2 | TIN COATED SOLID CARBIDE BARS OUR SERIES 11 PAGE 3 |
| MATERIAL | TYPE | SPEED SURFACE FEET PER MINUTE | FEED INCHES PER REVOLUTION | | | |
| PLASTIC | TEFLON | 500-600 | .003 - .006 | .007 | .012 | .016 |
| | NYLON | 700-800 | .001 - .003 | .007 | .012 | .016 |
| | PHENOLIC | 700-800 | .001 - .003 | .007 | .012 | .016 |
| | GLASS FILLED | 700-800 | .001 - .003 | .005 | .012 | .016 |
| MAGNESIUM | AZ,AM,EZ,ZE,HK | 750-1500 | .005 - .012 | .008 | .012 | .016 |
| ALUMINUM | 2021 THRU 6061 | 700-1400 | .005 - .012 | .008 | .014 | .018 |
| COPPER | 101-707 | 600-800 | .003 - .005 | .008 | .014 | .016 |
| | 834-978 | 600-800 | .003 - .005 | .008 | .014 | .016 |
| BRASS | | 350-400 | .001 - .003 | .006 | .011 | .012 |
| BRONZE | | 300-400 | .001 - .002 | .006 | .011 | .012 |
| CAST IRON | GRAY | 250-350 | .004 - .010 | .007 | .007 | .009 |
| | DUCTILE | 250-350 | .004 - .010 | .007 | .007 | .009 |
| | MALLEABLE | 250-350 | .004 - .010 | .007 | .007 | .009 |
| STEEL | 1005-1029 | 100-300 | .003 - .007 | .007 | .014 | .016 |
| | 1030-1055 | 100-300 | .003 - .007 | .007 | .014 | .016 |
| | 1060-1095 | 150-400 | .003 - .005 | .007 | .014 | .016 |
| | 10L45-10L50 | 300-500 | .004 - .006 | .007 | .014 | .016 |
| | 12L13-12L15 | 300-500 | .003 - .005 | .007 | .014 | .016 |
| | 41L30-41L50 | 200-400 | .003 - .005 | .007 | .014 | .016 |
| | 4140-4150 | 150-400 | .003 - .005 | .007 | .014 | .016 |
| | 4140 (35 HRC) | 90-125 | .001 - .004 | .004 | .007 | .008 |
| | 8617-8622 | 100-300 | .002 - .004 | .007 | .006 | .007 |
| | M1-M6 | 150-250 | .003 - .008 | .006 | .005 | .006 |
| | H10-H19 | 150-250 | .003 - .007 | .006 | .005 | .006 |
| | D2-D7 | 150-250 | .004 - .010 | .006 | .005 | .006 |
| | A2-A9, 01-07 | 150-250 | .003 - .008 | .006 | .005 | .006 |
| | W1, W2 | 150-250 | .003 - .008 | .006 | .006 | .007 |
| M-50, 52100 | 300-400 | .004 - .010 | .007 | .006 | .007 | |
| TITANIUM | TI-9Al-6V | 90-250 | .001 - .003 | .005 | .008 | .011 |
| STAINLESS | 201-385 | 100-250 | .001 - .004 | .005 | .008 | .012 |
| | 405-446 | 100-250 | .001 - .004 | .005 | .008 | .012 |
| | 15-5PH,16-6PH,14-4PH | 300-400 | .002 - .004 | .005 | .008 | .012 |
| NICKEL | NICKEL 200-230 | 100-250 | .002 - .005 | .004 | .007 | .009 |
| MONEL | | 80-120 | .001 - .003 | .004 | .007 | .009 |
| INCONEL | | 80-120 | .001 - .003 | .004 | .007 | .009 |
| WASPALOY | | 80-120 | .001 - .003 | .004 | .007 | .009 |
| HASTELLOY | | 80-120 | .001 - .003 | .004 | .007 | .009 |

NOTE: ALL SPEEDS AND FEEDS LISTED HERE ARE PROVIDED FOR REFERENCE ONLY.

$$RPM = \frac{SFM \times 12}{(\pi) \times \text{DIAMETER}}$$