| Material | Speed SFM | Feed (IPR) |  |  | SMPM | Feed (MMPR) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | . 1250 | . 2500 | . 5000 |  | 3.00 mm | 6.00 mm | 12.00 mm |
| High Si Aluminum >10\% | 75-200 | . 0040 | . 0080 | . 0120 | 22-60 | . 1016 | . 2032 | . 3048 |
| Low Si Aluminum <10\% | 100-300 | . 0050 | . 0100 | . 0150 | 30-91 | . 1270 | . 2540 | . 3810 |
| Composites | - | - | - | - | - | - | - | - |
| Plastics | $\cdot$ | - | - | - | - | - | - | - |
| Brass \& Copper | 75-150 | . 0030 | . 0040 | . 0060 | 22-45 | . 0762 | . 1016 | . 1524 |
| Graphite | - | - | - | - | - | - | - | - |
| Cast Iron |  |  |  |  |  |  |  |  |
| Soft | 75-150 | . 0050 | . 0080 | . 0120 | 22-45 | . 1270 | . 2032 | . 3048 |
| Medium | 60-100 | . 0050 | . 0080 | . 0120 | 18-30 | . 1270 | . 2032 | . 3048 |
| Malleable | 40-100 | . 0030 | . 0060 | . 0100 | 12-30 | . 0762 | . 1524 | . 2540 |
| Bronze | 65-125 | . 0030 | . 0040 | . 0060 | 19-38 | . 0762 | . 1016 | . 1524 |
| Hardened Steels | 30-90 | . 0020 | . 0020 | . 0040 | 9-27 | . 0508 | . 0508 | . 1016 |
| Steels |  |  |  |  |  |  |  |  |
| Low Carbon | 60-125 | . 0030 | . 0060 | . 0100 | 18-28 | . 0762 | . 1524 | . 2540 |
| Medium Carbon | 100-150 | . 0030 | . 0050 | . 0080 | 30-45 | . 0762 | . 1270 | . 2032 |
| Stainless Steels |  |  |  |  |  |  |  |  |
| Free Machining | 50-90 | . 0050 | . 0080 | . 0120 | 15-27 | . 1270 | . 2032 | . 3048 |
| Work Machining | 30-75 | . 0030 | . 0060 | . 0100 | 9-22 | . 0762 | . 1524 | . 2540 |
| Super Alloys | 40-80 | . 0025 | . 0035 | . 0055 | 12-24 | . 0635 | . 0889 | . 1397 |
| Titanium |  |  |  |  |  |  |  |  |
| Soft | 50-125 | . 0030 | . 0060 | . 0100 | 15-38 | . 0762 | . 1524 | . 2540 |
| Hard | 20-60 | . 0020 | . 0040 | . 0080 | 6-18 | . 0508 | . 1016 | . 2032 |

## Stock Removal

Sufficient amount of stock should be left in the work area to permit the reamer to cut rather than to burnish or glaze. The amount of stock removal for machine reaming:
$\left.\left.\begin{array}{|c|c|}\hline \text { Reamer Diameter } & \begin{array}{c}\text { Suggested Stock } \\ \text { Removal }\end{array} \\ \hline .2500^{\prime \prime} & .008^{\prime \prime}-.010^{\prime \prime}\end{array} \right\rvert\, \begin{array}{c|c|}\hline .25011^{\prime \prime}-.5000^{\prime \prime}-.015^{\prime \prime}\end{array}\right]$

The use of coolants will help produce a superior finish when reaming.
Not Recommended for Composites, Plastics, or Graphite.
The parameters listed for tool series that are stocked uncoated are based on running an uncoated tool.
If a coating is applied to the tools, the SFM can be increased by approximately $25 \%$.
All speed and feed recommendations should be considered only as a starting point.
Start with conservative speeds and feeds while analyizing the rigidity of the process.
Then cautiously progress incrementally to achieve optimum performance.

