



## QM Mini

INCH

METRIC

### Recommended Cutting Data for QM Mini

| Material                       | Parameters | Finish    |             |
|--------------------------------|------------|-----------|-------------|
|                                |            | YOHW Side | YOHW Bottom |
| Gray Cast Iron                 | SFM        | 1,200     | 720         |
|                                | IPT        | .006"     | .007"       |
|                                | DOC        | .030"     | .005"       |
|                                | WOC        | .004"     | 60%         |
|                                | Grade      | DH102     | DH102       |
| Nodular Cast Iron              | SFM        | 1,100     | 660         |
|                                | IPT        | .006"     | .007"       |
|                                | DOC        | .030"     | .005"       |
|                                | WOC        | .004"     | 60%         |
|                                | Grade      | DH102     | DH102       |
| Carbon Steel                   | SFM        | 1,000     | 600         |
|                                | IPT        | .006"     | .007"       |
|                                | DOC        | .025"     | .005"       |
|                                | WOC        | .004"     | 60%         |
|                                | Grade      | DH102     | DH102       |
| Low Alloy Steel                | SFM        | 1,000     | 600         |
|                                | IPT        | .006"     | .007"       |
|                                | DOC        | .025"     | .005"       |
|                                | WOC        | .004"     | 60%         |
|                                | Grade      | DH102     | DH102       |
| Mold Steel                     | SFM        | 900       | 540         |
|                                | IPT        | .005"     | .006"       |
|                                | DOC        | .025"     | .005"       |
|                                | WOC        | .004"     | 60%         |
|                                | Grade      | DH102     | DH102       |
| Tool & Die Steel (40-50 HRC)   | SFM        | 750       | 450         |
|                                | IPT        | .005"     | .006"       |
|                                | DOC        | .020"     | .004"       |
|                                | WOC        | .004"     | 40%         |
|                                | Grade      | DH102     | DH102       |
| Hardened Die Steel (50-60 HRC) | SFM        | 600       | 360         |
|                                | IPT        | .004"     | .005"       |
|                                | DOC        | .020"     | .004"       |
|                                | WOC        | .003"     | 40%         |
|                                | Grade      | DH102     | DH102       |
| Stainless Steel                | SFM        | 250       | 150         |
|                                | IPT        | .005"     | .006"       |
|                                | DOC        | .025"     | .005"       |
|                                | WOC        | .004"     | 60%         |
|                                | Grade      | JC8015    | JC8015      |
| Titanium                       | SFM        | 300       | 180         |
|                                | IPT        | .003"     | .004"       |
|                                | DOC        | .020"     | .004"       |
|                                | WOC        | .003"     | 60%         |
|                                | Grade      | JC8015    | JC8015      |
| Inconel                        | SFM        | 200       | 120         |
|                                | IPT        | .003"     | .004"       |
|                                | DOC        | .015"     | .003"       |
|                                | WOC        | .003"     | 40%         |
|                                | Grade      | JC8015    | JC8015      |
| Graphite                       | SFM        | *         | *           |
|                                | IPT        | *         | *           |
|                                | DOC        | *         | *           |
|                                | WOC        | *         | *           |
|                                | Grade      | *         | *           |

**NOTE:** 1. These parameters are for stable machining with steel bodies at lengths 4XD. See table below for longer applications.

2.  $RPM = 3.82 \times SFM / Dia.$

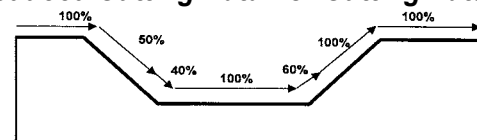
3.  $IPM = RPM \times IPT \times \# \text{ of flutes (or teeth)}$

### Additional Cutting Data For Longer Tools

| Reach/Dia. | ~4.0 | 4.0~4.5 | 4.5~5.3 | 5.3~5.7 | 5.7~6.2 | 6.3~ |
|------------|------|---------|---------|---------|---------|------|
| rpm %      | 100  | 90      | 80      | 80      | 75      | 70   |
| Feed %     | 100  | 90      | 90      | 80      | 75      | 70   |

**NOTE:** The above percentages should be applied, according to tool ratio.

### Reduced Cutting Data For Cutting Pattern



**NOTE:** Feed should be reduced when cutting the above pattern