## NTK Milling Cutter Selection
### Machining Gray / Ductile Cast Iron

### XFM series

- **Features**
  - 88° Lead angle
  - *A.R.-4° R.R.0°*

### HVM series

- **Features**
  - Extremely economical 8-corner inserts (SNG43...)
  - Covers various applications with 45, 75, and 88 degree angle milling cutters
  - Ceramic inserts with chipbreaker and wiper are available
  - *Up to .220” depth of cut*

### JQ series

- **Features**
  - Capable of 90-degree shoulder milling
  - A variety of cutter diameters as small as .787 (φ20mm)
  - APCW inserts standard edge prep also available with wiper
  - *Up to .320” depth of cut*

### TRI series

- **Features**
  - Stable gray cast iron milling with lower cutting forces
  - Maximizes ceramic insert potential and can mill faster than 3,200 SFM
  - WNX inserts with radius or chamfer
  - *Up to .220” depth of cut*

### COMING SOON:
- **New Cutter | Large DOC | 90 Degree Shoulder Milling**

---
### SX6 Ceramic

**Features**

- Excellent wear resistance in applications where notch wear appears
- Stable tool life in the applications where thermal shock resistance is required: such as WET machining or milling

<table>
<thead>
<tr>
<th>Work material</th>
<th>Application</th>
<th>Purpose</th>
<th>Cutting speed (SFM)</th>
<th>Feed (IPR / IPT)</th>
<th>Depth of cut (inch)</th>
<th>DRY</th>
<th>WET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cast iron</td>
<td>Milling</td>
<td>Rough</td>
<td>1500–4200</td>
<td>.003-.010</td>
<td>.020-.140</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

### SP9 Ceramic + Coating

**Features**

- Excellent wear resistance and chipping resistance with CVD coated high-strength silicon nitride-based ceramic
- Achieves lower tool pressure with minimal edge preparation
- Also usable for finishing

<table>
<thead>
<tr>
<th>Work material</th>
<th>Application</th>
<th>Purpose</th>
<th>Cutting speed (SFM)</th>
<th>Feed (IPR / IPT)</th>
<th>Depth of cut (inch)</th>
<th>DRY</th>
<th>WET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gray cast iron</td>
<td>Milling</td>
<td>Rough-Semi finish</td>
<td>1200–2500</td>
<td>.003-.010</td>
<td>-.240</td>
<td>●</td>
<td>○</td>
</tr>
<tr>
<td>Ductile cast iron</td>
<td>Milling</td>
<td>Rough-Semi finish</td>
<td>2100–3000</td>
<td>.003-.010</td>
<td>-.240</td>
<td>●</td>
<td>○</td>
</tr>
</tbody>
</table>

### B30 CBN

**Features**

- Excellent wear resistance thanks to high CBN content
- Designed for finishing cast iron

- CBN Wiper Insert: Can install 1 or 2 CBN Wiper Inserts with ceramic insert.
- Available for: JQ Series - APCW inserts
  - HVM Series - FDX inserts
  - HSM Series - SDW inserts

### B52 CBN

**Features**

- Excellent wear resistance due to optimum CBN content with special TiC binders
- Ideal for finishing ductile cast iron and continuous cuts for finishing hardened materials

---

**DISTRIBUTED BY**

NTK Cutting Tools USA

a division of NGK SPARK PLUGS (U.S.A), INC.

46909 Magellan Drive, Wixom, MI 48393, U.S.A.

www.ntkcuttingtools.com

youtube.com/NTKCUTTINGTOOLS