### Precision Matrix & Crown Design Chart

<table>
<thead>
<tr>
<th>SOFT ROCK</th>
<th>HARD ROCK DESCRIPTION</th>
<th>1X to 3X</th>
<th>4X to 5X</th>
<th>6X to 9X</th>
<th>10X to 15X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any Abrasion &lt; ABRASION &gt;</td>
<td>Extreme Abrasive Some Nil Nil</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any Fracturing &lt; FRACTURING &gt;</td>
<td>Extreme Fractured Minor Solid Solid Core</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Hardness &lt;MOHS 3 &lt; HARDNESS &gt;</td>
<td>Soft to Medium Medium Medium with hard bands Hard to Very Hard Extremely Hard</td>
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</tbody>
</table>

**Surface Set**
- **Or Polycrystalline Set**
- **VERY FAST CUTTING**

- Long-life and abrasion resistant crown design.
- Good results with any matrix.

- Best core recovery on "Triple- Tube" designs, abrasion resistant. Can be used with any matrix.

- Standard design. Works with any matrix, best results with #6X and higher numbers.

**Wireline bits**
- All popular core barrel designs and sizes: A, B, N, H, P

**Conventional bits**
- All CDA/DCDMA standard items
  - IEW/IEW-S, IAW/IAW-S, AW34, LTK 46, JKT 48, LTK 56, BW44, A,B,N,H

**International metric T-series:**
- T(2), T-36, .46, .56, .66, .76, .86, .96, 101

**International metric B-series:**
- B-36, 46,56,66,76,86,96,101

- Faster penetrating design in solid, hard rock. Works best with #8X and higher numbers

- For longest bit life, start with the lowest number in each application zone

Please ask about any size or style not listed.