## Precision Matrix & Crown Design Chart

### Soft Rock
- **Abrasion**
  - Any Abrasion: Extreme Abrasion, Some Nil, Nil Nil

- **Fracturing**
  - Any Fracturing: Extreme Fractured, Minor Solid, Solid Core

- **Hardness**
  - MOHS 3

### Hard Rock Description
- **Soft to Medium**
- **Medium**
- **Medium with hard bands**
- **Hard to Very Hard**
- **Extremely Hard**

### Surface Set
- Polycrystalline Set

### Cutting Ranges
- **1X to 3X**
- **4X to 5X**
- **6X to 9X**
- **10X to 15X**

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

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

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

### International Metric T-series:
- T(21), T-36, .46, .56, .66, .76, .86, .101

### International Metric B-series:
- B-36, 46, 56, 66, 76, 86, 101

### 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.

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

### Please ask about any size or style not listed.