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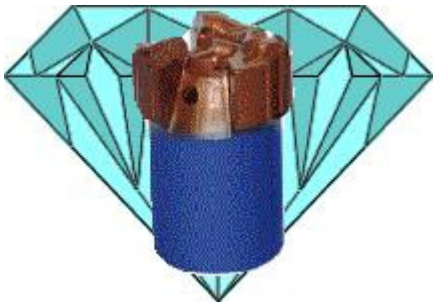

PDC drilling bit specifications

- **Operation**

PDC is a super hard material that was applied in the synthesis of pure carbon on tungsten carbide under high pressure and temperatures. It not only has the advantages of diamond as the particularly high hardness and wear resistance, but also the advantages of tungsten carbide, such as its impact resistance.
PCD drill bits are the best tool around in the medium to hard rock drilling and improve the efficiency of drilling.

- **Notes**

1. **Drill head mount and tighten. (Caution, not to full torque tightening)**
2. **Make sure that the hole is free of debris (gravel etc.)**
3. **At the start of the drilling first start with light pressure and drilling speed slowly to the downhole and drill about 0.2 to 1.3 m, then continue drilling with normal rate of penetration (see guide).**
4. **The PDC drill bit should always be provided with sufficient drilling fluid and checked in time if, for example unusual noises or a slow rate of penetration occur.**
5. **Always start first with a larger bore diameter of the hole and then if necessary little more boring, not vice versa.**

- **Reference Data**

PDC Bit Ø (mm)	Bit load (KN)	Speed (U/min)	Flush flow (l/min)
98	6,5 - 16	150 – 250	200 - 250
114	8,8 - 22	120 – 200	200 - 300
152	15 – 30	100 – 200	500 – 850
190	18 – 44	100 – 150	600 - 1200

Note important information!

We want to mention a few points to note, that your PDC drill bit reached their maximum lifetime!

• Use PDC only in wells without gravel or debris on the bottom of the hole
• In very fissured rock formations it is to slow the rate of penetration to prevent a resounding "dancing" movement of the drill bit.
• Maximum load values see table above (less is often sufficient for a good drilling progress)
• recommended minimum speed of drilling rod is 130 rpm

• The bit types "SC" , "SC5" ,"ST5", "STO" are for medium hard layers (marl with limestone sills, soft sandstone) used for.

- **Designed to exclusively hard formations (sandstone, clay, marl) the types of "S" or "SO" should be used for.**

• In very hard rock formations or rocks such as conglomerate like 'Greywacke', dolomite limestone, gneiss or granite is drilling with the PDC cutting tools are not recommended.