PDC Core Bits





Applications

- Geotechnical investigation
- Environmental investigation
- Mineral exploration

Features

- Fast penetration
- Good core recovery
- Suitable for water, polymer or air flush
- Mohs hardness scale 2 4

PDC (Polycrystalline Diamond Cutters) are set on the crown, giving a very long working life, very fast penetration and high percentage core recovery in soft to hard rock formations.

The surface of the disc-shaped cutting element consists of very fine synthetic diamond particles sintered together by high pressure and high temperature. On top of this diamond layer is a tungsten carbide stud which is brazed directly into the bit matrix. These cutters can take accommodate the very large compressive and shear loads generated during drilling.

PDC core bits are ideal for use with high powered drill rigs operating at relatively low rotation speeds. Bit life and penetration can be much better compared with surface set bits.

Two main types of PDC cutters are available such as the conventional flat design and dome.

Dimensions		
Size T2 Metric Gauge	Outside diameter (mm)	Inside diameter (mm)
T2-66	66.12/65.87	51.81/51.565
T2-76	76.12/75.87	61.82/61.57
T2-76 Coreliner	76.12/75.87	58.12/57.87
T2-86	86.13/85.58	71.83/71.58
T2-86 Coreliner	86.13/85.58	68.1/83.57
T2-101	101.12/100.8	83.82/83.57
T2-101 Coreliner	101.12/100.8	80.13/79.88

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Dimensions		
Size T6 Metric Gauge	Outside diameter (mm)	Inside diameter (mm)
T6-76	76.12/75.87	57.12/56.87
T6-86	86.13/85.58	67.13/66.88
T6-86 Coreliner	86.18/85.88	63.98/63.77
T6-101	101.12/100.8	79.12/78.87
T6-101 Coreliner	101.12/100.8	76.09/75.86
T6-116	116.20/115.8	93.14/92.89
T6-116 Coreliner	116.20/115.8	90.12/89.88
T6-131	131.19/130.8	108.13/107.87
T6-131 Coreliner	131.19/130.8	103.6/103.37
T6-146	146.18/145.8	123.11/122.86
T6-146 Coreliner	146.18/145.8	118.11/117.85
H Gauge		
HWF	98.98/98.6	76.33/76.08
HWF Coreliner	99.36/98.98	77.089/76.885
412F	107.19/106.88	75.38/74.98
412F Coreliner	107.19/106.88	72.99/72.69
P Gauge		
PWF	120.78/120.4	92.33/91.95
PWF Coreliner	120.78/120.4	87.12/86.86
PQ	122.30/121.8	85.09/84.84
S Gauge		
SWF	145.67/145.16	112.95/112.5
SWF Coreliner	146.18/145.8	107.18/106.78
Geobore S	146.27/145.99	102.18/101.98