Polycrystalline Diamond Compact (PDC Cutter)

PDC consists of two parts: polycrystalline diamond layer and tungsten carbide base. It is a super hard product made by sintering super hard composite material under special high temperature and high pressure. This product has the feature of good wear-resistance, impact resistance and good thermal stability. It is suitable for making petroleum drill bits, coal mine drill bits and cutters. Our corporation can provide PDC with various specifications. Our standard PDC product is of cylindrical form, other forms of these cutters can be made according to customers specific requests. The bonding interface of PDC can be divided into plain face and groove face. The groove interface PDC cutter is helpful to strengthen the bond strength of the PDC and enhance the impact resistance.



PDC-Flat shaped series



PDC cutters for oil well/petroleum exploration

Product types	Performance and application of this type PDC	Diamond layer thickness (mm)
3BZF series	3BZF series PDC products is with non-plain interface of the diamond layer and tungsten carbide layer. It is of stable manufacturing technique, good reparability, high impact resistance & strong bonding. It is one of the most popular and stable items we supplied for customers regularly.	0.8-1.2
3BHF series	3BHF series PDC products is the new generation PDC that cooperation designed to meet demands of higher durability, higher impact resistance and thermal stability. We utilized independently design of non-direction groove and advanced synthesis technology that makes this series PDC reach high level of comprehensive performances.	1.2-2.0
3BWF series	3BWF series PDC products is special designed for petroleum drilling bits that our company successfully developed in recently years. We utilized higher strength of tungsten carbide and diamond micron powder materials. It produced with the latest assembly and synthesis techniques. This type of PDC reached perfect level on boning strength, thermal stability, impact resistance and tool life. It is the first and best choice for petroleum exploration.	2.0-2.5



Specifications	Diameter(mm)	Height(mm)	Thickness of PDC layer(mm)
1925	19.05	25.00	2.0-2.5
1916	19.05	16.00	1.2-2.5
1913	19.05	13.20	1.2-2.5
1908	19.05	8.00	1.2-2.5
1616	16.00	16.00	1.2-2.5
1613	16.00	13.20	1.2-2.5
1313	13.44	13.20	0.5-2.5
1308	13.44	8.00	0.5-2.5
1008	10.00	8.00	0.5-1.2/2.0-2.5
0808	8.00	8.00	0.5-1.2/2.0-2.5

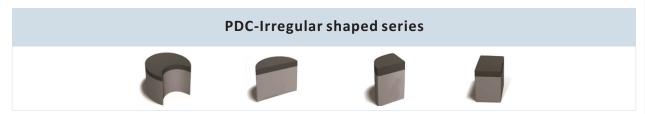
Polycrystalline Diamond Compact (PDC Cutter)

PDC cutters for coal mining and geological explorations

Product types	Performance and application of this type PDC	Diamond layer thickness (mm)
Normal type	Features good impact resistance and wearability, Used for soft and medium formation.	0.8-1.0
Standard type	Features good impact resistance and wearability. Used for soft and medium formation.	1.0-1.2
Reinforced type	Utilized advanced manufacturing technology, stable performance, features excellent impact resistance and durability, achieve extremely high performance for hard formation, different rock formation and gravel formation.	1.3-1.5



Specifications	Diameter(mm)	Height(mm)
1308	13.44	08.00
1305	13.30	05.00
1304	13.30	04.50
1204	12.00	04.50
1004	10.00	04.50
0804	08.00	04.50



PDC-Irregular shaped series is our irregular shaped PDC . We have the ability to provide all kinds of different shapes and sizes.



Diameter(mm)	Height(mm)	Thickness of PDC layer(mm)
9.4	9.4	8.0
12	12	8.0
12	12	4.5



Mainly for roller cone bits, as well as small and medium-sized button bit, DTH bit. With good wear ability and better impact toughness, it is well suited for percussion drilling.



Specifications	Series	Diameter(mm)	Height(mm)
Dome PDC-11mm	11	11.17	13.84/13.34/12.84/12.34/11.84
Dome PDC-14mm	14	13.81	12.70/12.20/11.70/11.20
Dome PDC-16mm	16	15.775	20.015/19.515/19.015/18.515
Dome PDC-19mm	19	19.05	14.1/13.6/13.1/12.6