



武汉玖石超硬材料有限公司
Wuhan Ninestones Superabrasives

www.cnpdcutter.com



钻探用聚晶金刚石复合片/复合齿
POLYCRYSTALLINE DIAMOND COMPACT
for Drilling & Mining Engineering



Polycrystalline diamond compact (PDC) cutter is sintered by diamond powder and tungsten carbide substrate at HP/HT with high abrasion resistance, impact resistance and good thermal stability. PDC widely used in oil&gas drilling, geological exploration, mining engineering and other industries.

Ninestones works closely with customers to find the most cost-effective product to meet their requirements. As well as manufacturing standard PDC, Ninestones offers customized designs based on specific drilling applications.

聚晶金刚石复合片 (PDC) 由金刚石粉末和硬质合金基体在高温高压下烧结而成, 具有极高的耐磨性和抗冲击性。产品广泛用于石油钻井、地质钻探、采矿工程、建筑施工等领域。

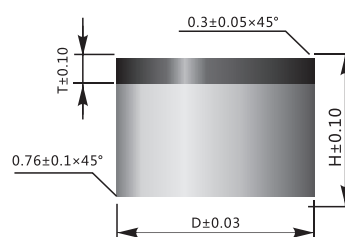
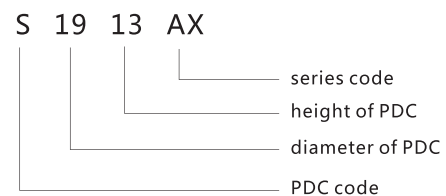
玖石公司贴近用户需求, 开发了一系列性能优异极具竞争力的产品。除了提供标准系列产品外, 我们更乐于与用户合作, 提供完善的PDC解决方案。



Standard Sizes of PDC mm

type	diameter	height
S0808	8.00	8.0
S1008	10.00	8.0
S1308	13.44	8.0
S1313	13.44	13.2
S1613	15.88	13.2
S1616	15.88	16.0
S1913	19.05	13.2
S1916	19.05	16.0
S2213	22.00	13.2
S2216	22.00	16.0
S2219	22.00	19.05

Type Example



Dimensions and Tolerance

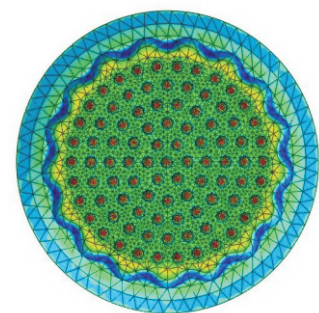
Ninestones adhere to developing excellent PDC products with strict quality management.

We have complete test system of PDC product, such as VTL heavy load wear test, drop hammer impact test, thermal stability test, and micro-structure analysis.

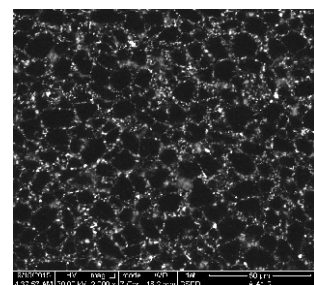
我公司建立了严格的质量技术平台，致力于开发卓越的金金刚石复合片产品。
公司具有重载荷耐磨性测试立式车床、抗冲击测试装置、热稳定测试设备等装置，以及各种微观分析手段。



VTL abrasion resistance test



Residual stress analysis by FEA



Metallographic analysis by SEM



Dome PDC inserts consist of multilayer structure of diamond and transition layer, improving impact resistance greatly, which makes dome PDC inserts the best alternative to be applied in roller cone bits, DTH bits, as well as gauge, anti-vibration in PDC bits.

Drilling tools with dome PDC inserts have increased durability and reduced drilling cost. Usually, the footage of drilling tools with dome PDC is 5 to 10 times greater than that with carbide inserts.

金刚石复合齿由多层结构的金刚石及其过渡层组成，具有更高的抗冲击性。金刚石复合齿尤其适用于研磨性地层使用，是常规硬质合金齿寿命的5-10倍，极大地降低了钻进成本。

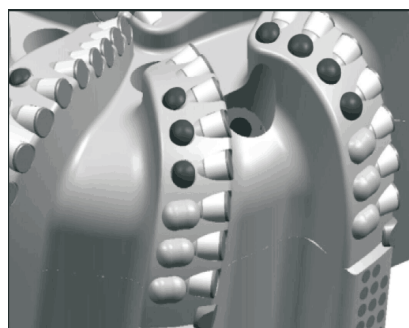
金刚石复合齿是未来牙轮钻头、潜孔钻头用齿以及PDC钻头的保径、减震的最佳选择。



MTS for Compression Fatigue Test



Cone Rock Bit



Anti-vibration Insert for PDC bit



Percussion Bit

Ninestones is available in diameter 6mm-30mm various shapes of Dome PDC Insert, such as spherical, conical, bullet-shaped, wedge, etc., as well as customized designs.

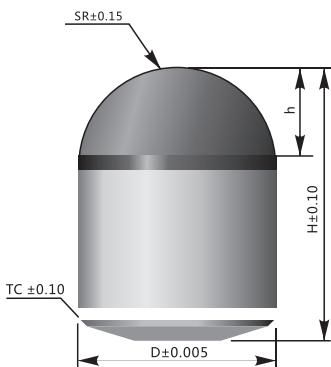
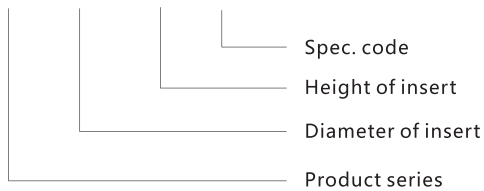
我公司可提供直径6mm-30mm的各种规格的金金刚石复合齿。也可根据用户的齿型进行专门设计。



Multi-layer transition structure

Type Example

DB 191 229 A



Dimensions and Tolerance

Specifications of DEC

A0230	DB1112R6.8	11.00	12.0	6.76	2.83
A0223	DB1114R5.5	11.18	13.8	5.47	4.76
A0046	DB1312R20	13.44	12.0	20	1.16
A0216	DB1313R12	13.44	12.7	12	2.06
A0217	DB1313R7.5	13.44	13.2	7.54	4.1
A0043	DB1417R7.8	14.36	17.1	7.78	4.78
A0238	DB1618R8.3	15.95	17.88	8.32	5.95
A0225	DB1620R8.2	15.88	20.0	8.18	6.06
A0231	DP1417P4.9	13.82	17.0	4.92	3.3

for Cone Rock Bit / Percussion Bit,
tolerance of diameter +/-0.005mm

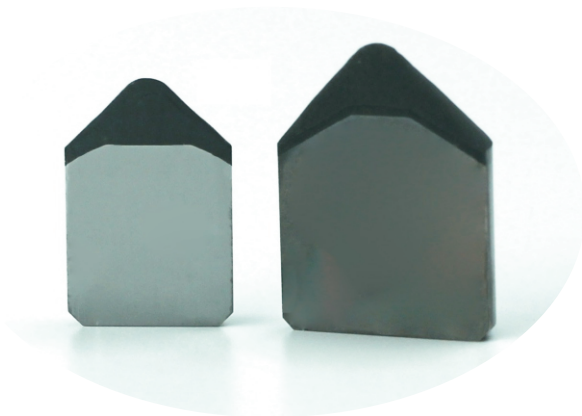
Dome 照失颈					
A0227	DB1117	11.00	17.0	5.59	4.6
A0047	DB1217	12.07	17.0	6.76	3.65
A0095	DB1317	13.07	17.0	7.54	3.78
A0049	DB1420	13.90	20.0	7.54	4.62
A0048	DB1624	15.90	24.0	8.26	5.94
A0005	DB1923	19.09	22.86	9.93	7.2
Conical 锥形齿					
A0202	DC0809A	8.01	9.25	3.5	3.33
A0200	DC1011A	9.60	11.1	4.2	4
A0209	DC1117A	11.58	17.0	3.5	8.4
A0211	DC1217A	12.07	17.0	4.75	7.5
Ovoid 卵形齿					
A0210	DE1116	11.02	16.1	3/11	6.1
A0241	DE1319	12.92	19.0	4.6/12	5.9
A0212	DE1928	19.13	28.8	5/20	9
A0391	DE2534	25.40	34.0	3/43	12.7
Chisel 楔形齿					
A0203	DW0809A	8.01	9.25	1.7	3.33
A0201	DW1011A	9.60	11.1	2	4
A0010	DW1317A	12.80	17.0	3	5.6



Conical PDC inserts combine an aggressive conical tip with superior impact and wear resistance. Comparing with conventional cylindrical PDC cutters which shear the rock, conical PDC inserts fracture hard and abrasive rock more efficiently with less torque and larger cuttings.

锥形金刚石复合齿具有攻击性极强的锥形或子弹形顶尖，产品具有极高的耐磨性和抗冲击性，和常规金刚石复合片以及硬质合金相比，锥形复合齿能吃入更坚硬的岩层，并且减少了切削振动。

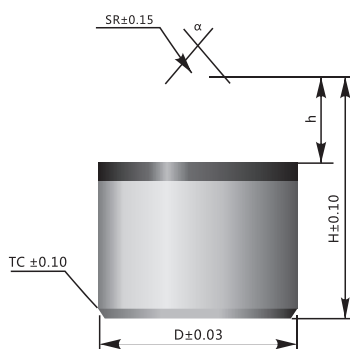
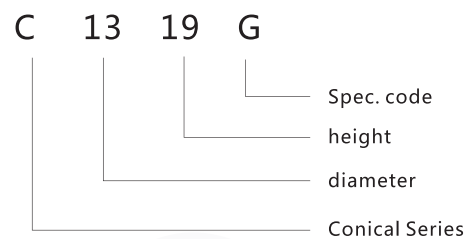
锥形复合齿是未来工程施工、路面开挖、岩石钻进工具不可替代的选择。



Specifications of Conical PDC

type	diameter	height
C1210	12	10
C1218	12	188.0
C1319	13.44	19.05
C1319BR	13.44	19.05
C1621	15.88	21
C1621BR	15.88	21
C3028	30	28
C3040	30	40

Type Example



Dimensions and Tolerance





Wuhan Ninestones Superabrasives Co., Ltd was founded in 2012 with an investment of 2 million US Dollars. Ninestones is dedicated to provide the best PDC solution. We design and manufacture all range of Polycrystalline Diamond Compact (PDC), Dome PDC and Conical PDC for oil/gas drilling, geological drilling, mining engineering and construction industries.

The core technology member of Ninestones developed the first Dome PDC in China. With excellent performance, consistent quality and superior service, especially in the field of dome PDC, Ninestones is regarded as one of the technology leaders.

We have passed the certifications: ISO9001 Quality Management System, ISO14001 Environmental Management System and OHSAS18001 Occupational Health and Safety Management System.

武汉玖石超硬材料有限公司2012年成立于武汉东湖新技术开发区，总投资人民币1200万元，主要从事金刚石复合片、复合球齿和复合锥齿的开发和制造，产品广泛应用于石油钻井、地质钻探、矿山开采、建筑工程等行业。公司致力于为全球客户提供最适宜的PDC解决方案。

在中国，武汉玖石核心团队最早从事金刚石复合齿的开发，金刚石复合齿技术长期保持国际领先水平。凭借优异的性能、稳定的质量、优质的市场服务以及持续的研发创新，武汉玖石复合片产品获得国内外用户的高度认可。

公司已通过ISO9001质量管理体系、ISO14001环境管理体系及OHSAS18001职业健康安全管理体系等多项认证。





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