



DTS GmbH - Deutschland Diamond Tooling Systems



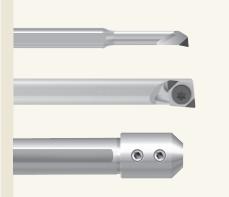
Lasered Inserts PCD / CVD-D / UltraDiamond

- Neutral and positiv inserts available
- Inserts with laserd 3D-micro chip breaker
- Special tools on request



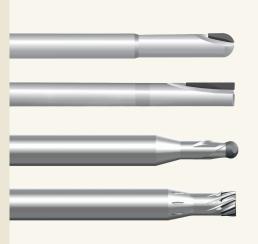
Inserts CBN

- 12 different CBN grades from stock
- For continious to heavy interrupted cut
- Lasered 3D-micro chip breaker on request
- Special tools on request



Boring Bars | MiniTools with Inserts PCD / CVD-D / UltraDiamond / CBN

- Brazed boring bars for bore machining from Dmin 1,00-9,00 mm
- MiniTools with indexable multiple egde tipped inserts for bore machining from Dmin 3,50-11,00 mm
- Standard tool holder and hydro chlamp chucks on stock
- Boring bars for turning and fine boring
- Special tools on request



End Mills PCD / CVD-D / UltraDiamond / CBN

- End mills from Ø 0,20-20,00 mm
- Corner, radius, multi-tooth and CBN Solid end mills in large selection available
- Optimized, stable version for machining carbide, ceramics and brittle hard materials
- Straight and twisted cutting edges
- Special tools on request

Milling Cutter Systems with Inserts PCD / CVD-D / CBN

- Face, corner and weldon end mills from Ø 10-25 mm
- Copy end mills from Ø 15-80 mm
- Face and 90° shoulder cutter from Ø 32-100 mm
- Flexible milling cutter systems with adjustable cartridges from Ø 50-400 mm, carbide base in aluminum and steel
- All milling inserts are multiple edge tipped
- For standard and hight speed machining



Grooving Tools PCD / CVD-D / UltraDiamond / CBN

- Stable grooving stystem starting form width 1,00-6,00 mm
- For grooving, profile turning and parting
- Multi-edged tipped diamond and CBN inserts
- Also form grooving tools possible
- Special tools and 3D-micro chip breaker on request



CBNCoat Drills Solid CBN Reamers

- Drills for hard drilling up to 68HRC, from Ø 2,00-12,00 mm, in increments of Ø 0,10 mm
- CBN Reamers for hard drilling up to 72HRC, from Ø 1,50-6,03 mm, in increments of Ø 0,01 mm and 0,10 mm



Special Tools PCD / CVD-D / UltraDiamond / CBN

- Intelligent combination tools
- For the application adjusted 3D-micro chip breaker
- Tipping the provided base bodies with diamond or CBN cutting materials possible
- Initial design of special tools and processes



Applications of our cutting materials



PCD - Diamond

is ideally suited for the machining of:

Aluminum <10% Si | Brass | Copper, Copper Alloys | Graphite | Magnesium | PEEK | Tungsten alloy



continuous cut



light interrupted cut



heavy interrupted cut



CVD-D - Diamond

is ideally suited for the machining of:

Acrylic (PMMA) | Aluminum >10% Si | Carbide | Ceramics | Composites (GFRP/CFRP) | Copper, Copper Alloys | Glass, Glass Ceramic | Magnesium | Plastic | Silver, Gold, Platinum | Titanium | Zirconium



continuous cut



light interrupted cut



heavy interrupted cut



UltraDiamond

is ideally suited for the machining of:

Acrylic (PMMA) | Carbide | Ceramic | Glass, Glass Ceramic | **Zirconium**



continuous cut



light interrupted cut



heavy interrupted cut



CBN-H

for the machining of:

Steel, hardened up to 72 HRC Sinter Steel, hardened



continuous cut



light interrupted cut



heavy interrupted cut



CBN-P

for the machining of: all Sintered Materials



continuous cut



light interrupted cut



heavy interrupted cut



CBN-K

for the highspeed-machining of:

Grey Cast Iron (GCI) **Ductile Cast Iron (DCI)**



continuous cut



light interrupted cut



heavy interrupted cut



CBN-S

for the machining of:

Inconel

Ni-, Co-, Fe- and Cr-Alloys



continuous cut



light interrupted cut



heavy interrupted cut



CBN-X

for the machining of:

Powder metallurgical Steel, hardened Special Alloys such as ASP, CPM, Hardox Tool Steel, hardened up to 72 HRC



continuous cut



light interrupted cut



heavy interrupted cut