



## Product Overview of lasered Diamond and CBN Tools

### PCD Diamond

Aluminum <10% Si | Brass | Ceramic green compact |  
Ceramic, sintered | Copper, copper alloy | Graphite |  
Magnesium | PEEK | Tungsten alloy



### CVD-D Diamond

Acrylic (PMMA) | Aluminum >10% Si | Carbide >10%Co | Ceramics |  
Copper, Copper alloys | Composite materials (CFRP, GFRP) |  
Glass, Glass ceramics | Magnesium | Magnesium | Plastics |  
Silver, gold, platinum | Titanium | Zirconium



### Ultra Diamond

Acrylic (PMMA) | Glass, Glass ceramic | Carbide <12%Co |  
Ceramic



### CBN-H

Steels, hardened up to 72 HRC  
Sintered Steels, hardened

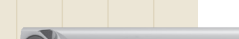
- continuous cut
- light interrupted cut
- heavy interrupted cut



### CBN-P

Sintered metal  
Shell chilled cast iron

- continuous cut
- light interrupted cut
- heavy interrupted cut



### CBN-S

Inconel 718  
Ni, Co, Fe & Cr alloys

- continuous cut
- light interrupted cut
- heavy interrupted cut



### CBN-K

Gray cast Iron (GG)  
Ductile Iron (GGG)

- continuous cut
- light interrupted cut
- heavy interrupted cut



### CBN-X

HSS, Tool Steel  
ASP, CPM and other PM Steels  
Cold and Hot Work Steels  
Solid Carbide-Steel Composites

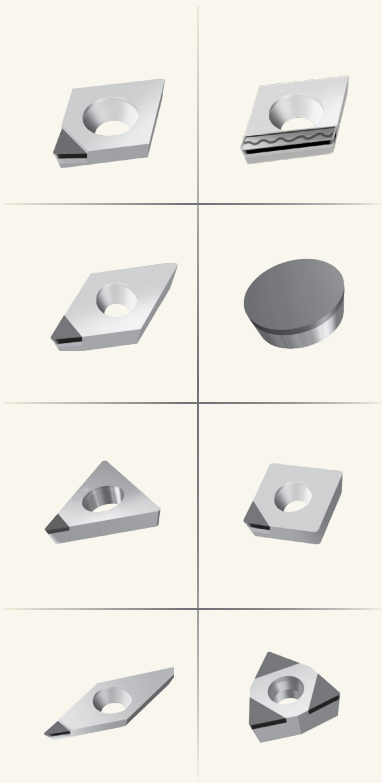
- continuous cut
- light interrupted cut
- heavy interrupted cut



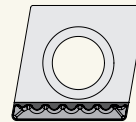
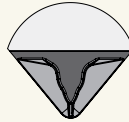
Explanation of cutting materials

## Catalog 01

## Lasered diamond indexable inserts



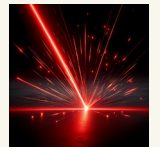
- Indexable inserts with lasered cutting edge
- neutral and positive version
- Indexable inserts with lasered 3D chip breaker



- Special tools on request

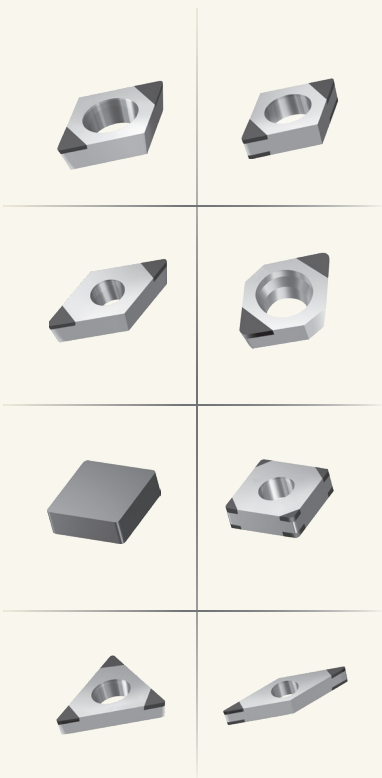


Laser Cut

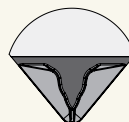


## Catalog 02

## CBN indexable inserts



- 12 different CBN grades available from stock
- For continuous to heavily interrupted cuts
- Sharp and wiper cutting edges available
- Lasered 3D chip breaker available on request



- Special tools on request



## Catalog 03

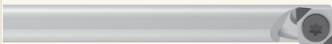
## Boring Bars MiniTools with indexable inserts

### Brazed boring bars



Ø 1.00-9.00 mm

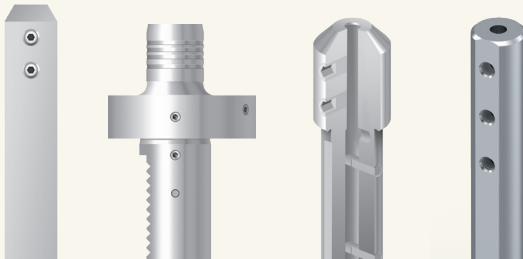
### MiniTools with insert holder



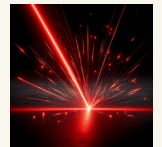
Ø 3.50-11.00 mm

- **Brazed boring bars** for internal machining
- For turning and spindle machining
- **MiniTools with laser-cut, exchangeable, multi-edged indexable inserts** for internal machining
- Standard adapters and hydraulic expansion holders available from stock
- Special tools on request

### Clamping adapters and hydraulic expansion holders



Laser Cut



## Catalog 04

## End Mills

### End mills with brazed cutting edge



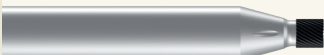
Ø 0.90-20.00 mm

### Multi-tooth cutter



Ø 1.00-10.00 mm

### Solid PKD Corner end mills



Ø 0.40-6.00 mm

### Mini End mills with CBN solid cutting edges



Ø 0.20-12.00 mm

### End mills with insert holder



Ø 10.00-25.00 mm

- **Lasered End Mills** from Ø 0.20-25.00 mm
- **Corner-, Ball Nose-, Multi-Tooth- and PCD/CBN Solid End Mill**
- Optimized, robust design for machining carbides, ceramics, and brittle hard materials
- Straight and twisted cutting edges
- Multi-tooth end mills from Z1 to Z55
- Special tools on request



Laser Cut



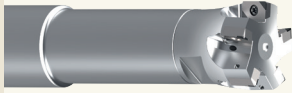
## Catalog 05

### End Mills



Ø 10.00-25.00 mm

Screw-in milling cutter with  
carbide extensions



Ø 10.00-42,00 mm

### Face, Shoulder and Copy Cutters



Ø 15.00-120.00 mm

Adjustable Cartridge  
Milling Cutter

Ø 50.00-400.00 mm

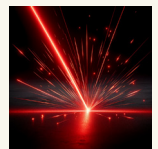


## Milling systems with milling inserts for roughing and finishing

- End Mills with lasered indexable inserts
- Face, shoulder and copy milling cutters
- Screw-in milling cutter with conical and cylindrical carbide extensions
- Flexible milling cutter systems with **adjustable cassettes** in steel and aluminum versions
- **Lasered multi-edged milling inserts** in diamond and CBN - AOEX, CPGW, RDHX, RPGW, SPGW, SNGN
- For standard and high-speed machining

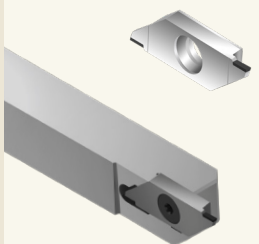


Laser Cut

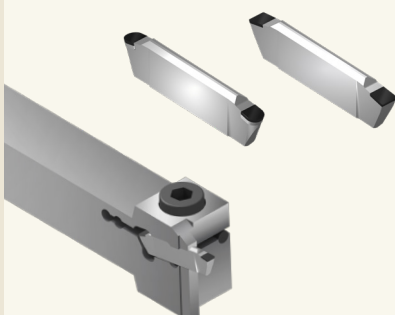


## Catalog 06

**MICRO - Line**  
Grooving width 1.00 - 2.00



**ECO - Line**  
Grooving width 2.00 - 6.00

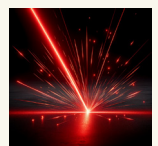


## Grooving systems

- Stable grooving system from width 1.00-6.00 mm
- Suitable for grooving, grooving turning, and parting-off
- **Multi-tooth lasered grooving inserts**
- Form grooving tools also available
- Special tools and lasered 3D chip breaker on request



Laser Cut



## Catalog 04

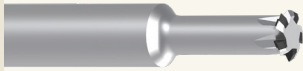
## Threading Tools

Solid PCD Thread milling cutter



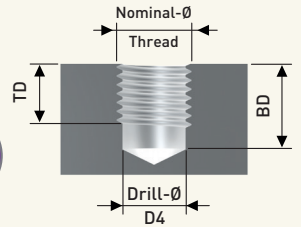
M3 - M6

PCD Thread milling cutter edge tipped



M8 - M12

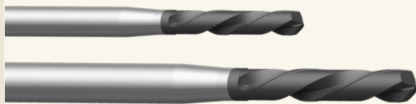
- Thread milling cutter with corner inserts or solid head
- from Z5 to Z10



## Catalog 07

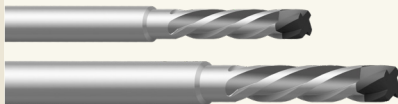
## CBNCoat Drills Solid CBN Reamers

CBN Coat Drills



Ø 2.00-12.00 mm

Solid CBN Reamers



Ø 1.50-6.03 mm

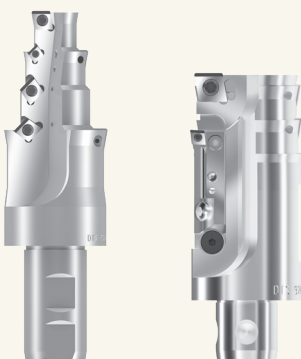
- **CBNCoat Drills** for hard drilling up to 68HRC, from Ø 2.00-12.00 mm, in increments of Ø 0.10 mm
- **CBN Reamers** for hard reaming up to 72HRC, from Ø 1.50-6.03 mm, in increments of Ø 0.01 mm and 0.10mm



Special solutions  
on request

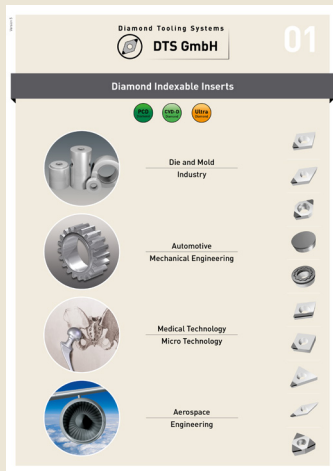
## Special tools

- Intelligent combination tools
- Tools with chip breakers adapted to the process possible
- Tipping of base bodies provided with diamond or CBN cutting materials
- First design of special tools and processes



# Product groups

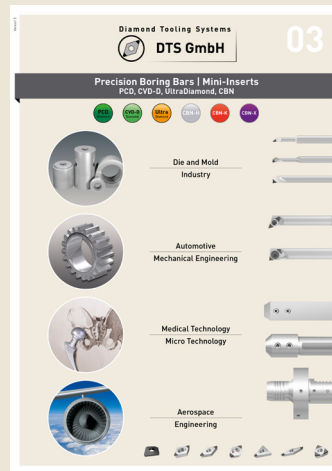
## 01 Diamond Inserts



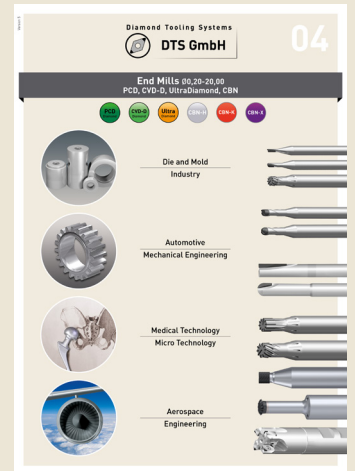
## 02 CBN Inserts



## 03 Precision Boring Bars



## 04 Diamond | CBN End Mills



to the catalogs



PASSION FOR DIAMOND

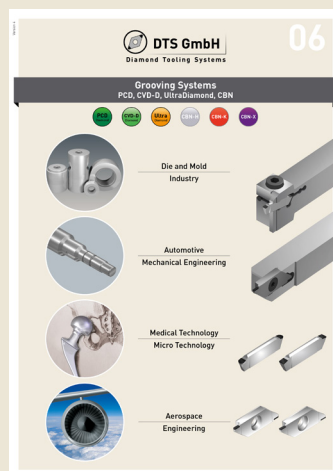


DTS Online Portals

## 05 Diamond | CBN Milling Systems



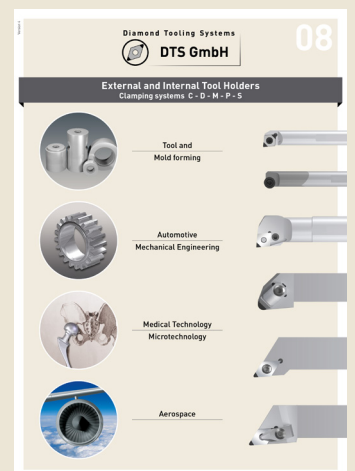
## 06 Diamond | CBN Grooving Systems



## 07 Drills Reamers



## 08 Tool Holders



Instagram



YouTube



LinkedIn



DTS Shop



DTS Website