

PCD cutting tools



Definition :

PCD inserts (polycrystalline diamond) are composed of two layers :

- One support layer in tungsten carbide
- A layer of PCD crystals bound with a metal agent

Advantages

- Productivity
- Extremely high cutting speed
- Heat resistant
- Mirror finishing close to what is obtained with natural diamond
- Excellent dimensional precision (no temperature induced variations)

Applications

- Watch industry
- Medtech
- Automotive
- Aviation

Machined Materials









Precious metals	Non-ferrous metals	Polymers and other materials
Silver	Aluminium	Rubber
Bronze	Copper	Ceramics
Gold	Tin	Polywood
Platinum	Brass	Carbon fibers
	Nickel	Glass fibers
	Lead	Peek
	Titanium	Plexiglas
	Zinc	Acrylic material

Machining with soft materials

Carbide tools are often subject to disproportionate degradation. The chipping procedure produces excessive heat, causing accelerated wear of the tool. PCD tools allow a better heat evacuation through the chips than hard metal tools. Chipping is easier to handle, and the tool suffers less wear.

► Our tools make all the difference thanks to the excellent acuity of the edges

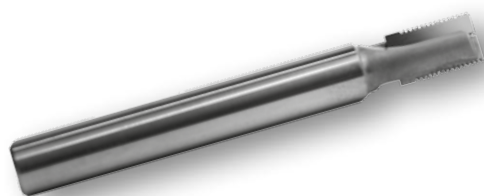
Standard PCD milling cutters

REF.		d ₁ min.		d ₁ max.	Flat or radius at tip
4010		Ø 0.5	-	Ø 20	
4015		Ø 1.0	-	Ø 12	
4020		Ø 2.0	-	Ø 8	
4100		Ø 3.0	-	Ø 16	
4200		Ø 1.0	-	Ø 12	
45200		Ø 1.4	-	Ø 5	
4119-3					from 0.03
4120					0.10

Standard PCD drill

4500		Ø 0.48	-	Ø 2.50
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Special tools



Profiled cutters



Slitting saws



Profiled inserts for turning tools

► Other dimensions and CBN tools available upon request