

FUNIK
PCD blank

Improve the comprehensive Competitiveness
advantages of cutting tool manufacturer



Advantages of Funik PCD blank

- Excellent wear-resistance
- Excellent impact-resistance
- Be with superior price-performance to drive customer profitability

PCD blank

PCD grades and characteristics

Grade	Grain size	Applications	Characteristics
PCD685	1μm	Well-suited for milling and rough cutting of aluminium alloys where extreme chip resistance is required, also for machining titanium and composites.	1 μm average grain size with extreme edge sharpness and retention, applications where mirror finishes are required.
PCD605	5μm	Ideal for cutting aluminum alloys that require high surface finish and higher wear resistance.	5 μm average grain size structure achieves the optimum balance between tool performance and resistance to wear and chips.
PCD512W	10μm	General grade, suitable for all types of woodworking applications.	10 μm average grain size with excellent EDM machining performance. Widely used in situations that require high EDM machining efficiency and good wear resistance.
PCD810	10μm	Ideal for a single tool which roughing and finishing are performed. Highly recommended for low to medium content aluminium alloys.	10 μm average grain size with extremely high wear resistance. Widely used in situations that require good toughness and high wear resistance.
PCD532	25μm	Well-suited for machining of high silicon aluminium alloys, metal matrix composites (MMC), tungsten carbides, ceramics and woods.	25 μm average grain size, making it particularly suitable for applications requiring high wear resistance.
PCD632	2-30μm	Application areas include MMC, high silicon aluminium alloys, high strength cast irons and bi-metal applications. Excellent wear resistance and good thermal stability.	A multi-size PCD with a combination of 2 μm to 30 μm grain sizes, giving it excellent wear resistance, edge strength and edge quality.

Application condition and machining performance

Grade	Impact resistance	Wear resistance	Electric spark
PCD685	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
PCD605	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
PCD512W	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
PCD810	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
PCD532	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
PCD632	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>

Parameters for product specifications

Grade	Outer diameter (mm)	PCD layer (mm)	Total thickness(+/-0.05mm)					PCD layer thickness (mm)
			1.0	1.2	1.6	2.0	3.2	
PCD685	63	0.3			✓			0.20-0.45
PCD810	63	0.5			✓	✓	✓	0.40-0.65
PCD605 PCD512W	63	0.3	✓	✓	✓			0.20-0.45
	63	0.5	✓	✓	✓	✓	✓	0.40-0.65
	63	1.0					✓	0.80-1.15
PCD532	63	0.5			✓	✓	✓	0.40-0.65
PCD632	63	1.0					✓	0.80-1.15