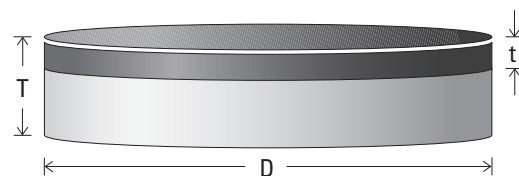


ADICO offers three industrial standard grade (fine, medium, coarse) PCDs for machining both non-ferrous and non-metallic materials. For optimum performance, ADICO engineers have developed two new innovative PCD properties in addition to standard-type ("S"-type) in each PCD grade as shown below. These two properties are tougher-type PCD ("X"-type) for higher chip resistance and ultrahard-type PCD ("U"-type) for higher wear resistance. The portfolio also includes the upgraded (improved abrasion resistance) submicron grade "UFSII".

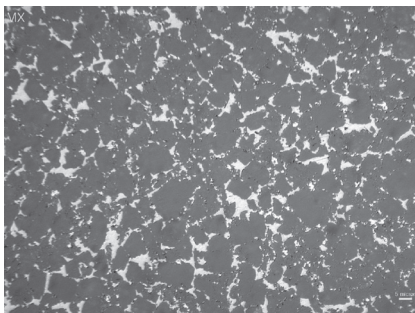
Types \ PCD Grades	FINE [2-4 μm]	MEDIUM [8-12 μm]	COARSE [25-35 μm]	Properties
Tougher („X“) type	FX	MX	CX	Higher chip resistance / interrupted cutting
Standard („S“) type	FS	MS	CS	Balanced grade
Ultrahard („U“) type	FU	MU	CU	Higher wear resistance / abrasive material
Submicron grade	UFSII (<1 μm)			Highest chip resistance / best workpiece surface



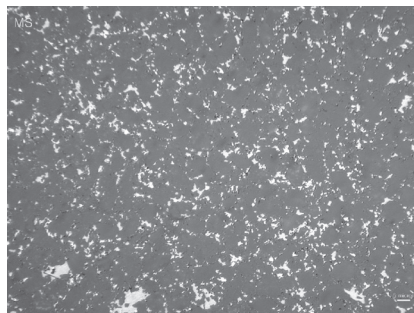
Blanks



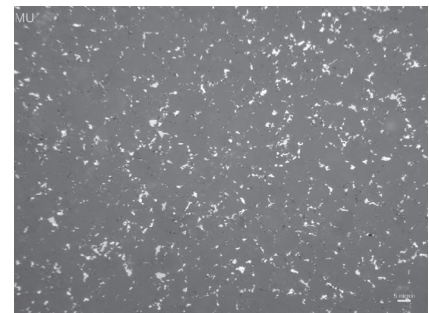
D (Blank Diameter):	62 mm
T (Blank Thickness):	1.60 mm, 2.00 mm, 3.20 mm, 4.80 mm
t (Diamond Thickness):	0.50 \pm 0.10 mm 0.35 + 0.10 / -0.15 mm 1.00 \pm 0.15 mm



MX



MS



MU

ADICO PCD Cutting Tool Blank Application Areas

ADICO PCD Workpiece Materials	Application Industries (Automotive, Hydraulic, Aircraft, Aerospace, Construction) Non-ferrous alloys, Plastics, Woods, MMC, Composites
Fine grain PCD („F-grade“) FX ————— FS ————— FU ————— UFSII ————— (submicron)	Aluminium alloys & Copper alloys Si-Al alloys Plastics, Fiberglass Si-Al alloys (for higher Si-content) Plastics, Fiberglass More wear-resistant material High impact resistance, Mirror finishing Al alloys, composite material, Titanium, etc
Medium grain PCD („M-grade“) MX ————— MS ————— MU —————	Woodworking & Metalworking Woodworking Particle board, MDF, Cement board Metal working (reaming, milling, machining) (automotive parts) Standard woodworking material (abrasive plastics, abrasive wood-based boards) Difficult-to-machine material (carbon-fibre composite, ceramic parts, plastic lens, Al ₂ O ₃ -coated laminated floor)
Coarse grain PCD („C-grade“) CX ————— CS ————— CU —————	Abrasive materials High Si-Al alloys (20% Si) Metal matrix composites (MMC) Plastic composites (glassfiber) Soft gray cast iron (crank-shaft bore machine) For special purpose with higher diamond content (MMC-milling, ceramics, WC-machining) For difficult-to-machine material (carbon-fibre composite body, PCB, SiC reinforced Al-alloys, Kevlar)