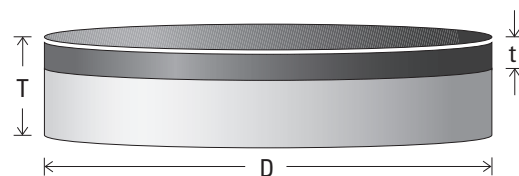


ADICO offers three(3) industrial standard grade (fine, medium, coarse) PCDs for machining both non-ferrous and non-metallic materials. For optimum performance, ADICO engineers have developed two(2) new innovative PCD properties in addition to standard-type ("S"-type) in each grade PCD as shown below. Two(2) new properties are tougher-type PCD ("X"-type) for higher chip resistance and ultrahard-type PCD ("U"-type) for higher wear resistance. In addition ADICO offers new grade for submicron PCD as "UFS".

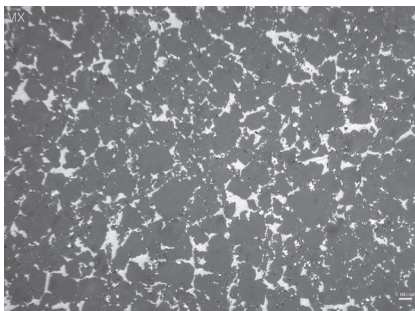
Types \ PCD Grades	FINE [2-4 $\mu\text{m}$ ]	MEDIUM [8-10 $\mu\text{m}$ ]	COARSE [25-35 $\mu\text{m}$ ]	Properties
Tougher („X“) type	FX	MX	CX	Higher chip resistance / interrupted cutting
Standard („S“) type	FS	MS	CS	Balanced grade
Ultrahard („U“) type	FU	MU	CU	Higher war resistance / abrasive material
Submicron grade	UFS (0.5-0.9 $\mu\text{m}$ )			Highest chip resistance / best workpiece surface



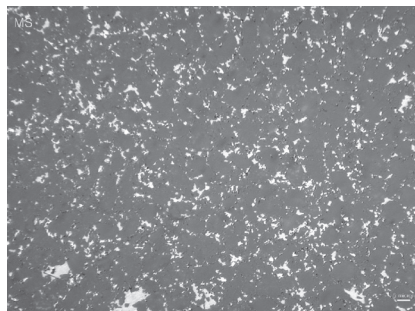
Blanks



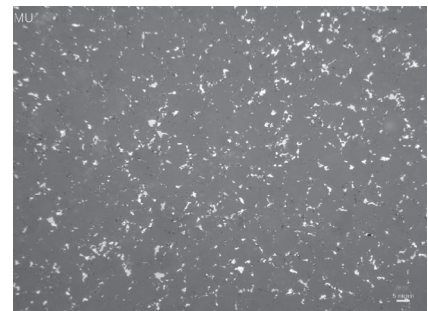
D (Blank Diameter):	62 mm
T (Blank Thickness):	1.60 mm, 2.00 mm, 3.20 mm, 4.80 mm
t (Diamond Thickness):	0.50 $\pm$ 0.10 mm 0.35 $\pm$ 0.10 / -0.15 mm 1.00 $\pm$ 0.15 mm



MX



MS



MU

## ADICO PCD Cutting Tool Blank Application Areas

<b>ADICO PCD</b>  Workpiece Materials	<b>Application Industries</b> (Automotive, Hydraulic, Aircraft, Aerospace, Construction)  Non-ferrous alloys, Plastics, Woods, MMC, Composites
<b>Fine grain PCD („F-grade“)</b>  FX —————  FS —————  FU —————  UFS ————— (submicron)	<b>Aluminium alloys &amp; Copper alloys</b>  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
<b>Medium grain PCD („M-grade“)</b>  MX —————  MS —————  MU —————	<b>Woodworking &amp; Metalworking</b>  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 <sub>2</sub> O <sub>3</sub> -coated laminated floor)
<b>Coarse grain PCD („C-grade“)</b>  CX —————  CS —————  CU —————	<b>Abrasive materials</b>  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)