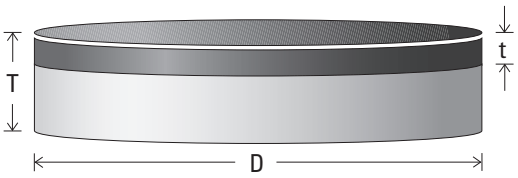
ADICO PCD

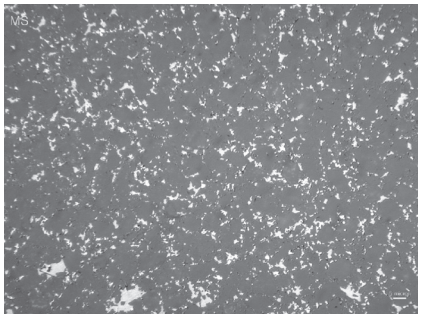
ADICO offers three(3) industrial standard grade (fine, medium, coarse) PCDs for machining both non-ferrous and non-metallic materials. For optimum performance, ADICO engineers have developed two(2) new innovative PCD properties in addition to standard-type ("S"-type) in each grade PCD as shown below.
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".

Typen \ PCD Grades	FINE 2–4㎛	MEDIUM 8–10㎛	COARSE 25–35㎛	Properties
Standard (**"S"**) type	**FS**	**MS**	**CS**	balanced grade
Tougher (**"X"**) type	**FX**	**MX**	**CX**	higher chip resistance / interrupted cutting
Ultrahard (**"U"**) type	**FU**	**MU**	**CU**	higher wear resistance / abrasive material
Submicron Grade	**UFS** (0.5–0.9㎛)			highest chip resistance / best workpiece surface

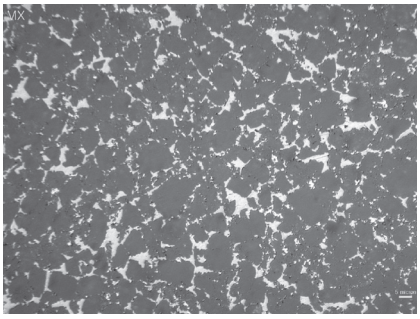
Blanks



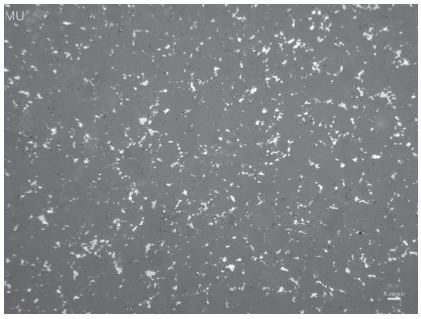
D (Blank Diameter): 62 mm
T (Blank Thickness): 1.60 mm, 2,00 mm, 3.20 mm, 4.80 mm
t (Diamond Thickness): 0.50 ± 0.10 mm
0.35 ± 0,10 / –0.15 mm
1.00 ± 0.15 mm



MS



MX



MU

ASIA POLYDIAMOND COMPANY Ltd.
561-4, Cheondeoksan-ro, Wongok-myeon, Anseong-si, Gyeonggi-do, South Korea • TEL: 82-31-656-6195~7 • E-MAIL: sales.europe@adico-polydiamond.com

ADICO PCD Cutting Tool Blank Application Areas

ADICO PCD	Application Industries (Automotive, Hydraulic, Aircraft, Aerospace, Construction)
Workpiece Materials	Non-ferrous alloys, Plastics, Woods, MMC, Composites
Fine grain PCD („F-grade")	**Aluminium alloys & Copper alloys**
FS	Si-Al alloys (for higher Si-content) Plastics, Fiberglass
FX	Si-Al alloys Plastics, Fiberglass
FU	More wear-resistant material
UFS (submicron)	High impact resistance, Mirror finishing Al alloys, composite material, Titanium, etc
Medium grain PCD („M-grade")	**Woodworking & Metalworking**
MS	Metal working (reaming, milling, machining) (automotive parts) Standard woodworking material (abrasive plastics, abrasive wood-based boards)
MX	Woodworking Particle board, MDF, Cement board
MU	Difficult-to-machine material (carbon-fibre composite, ceramic parts, plastic lens, Al_2O_3-coated laminated floor)
Coarse grain PCD („C-grade")	**Abrasive materials**
CS	For special purpose with higher diamond content (MMC-milling, ceramics, WC-machining)
CX	High Si-Al alloys (20% Si) Metal matrix composites (MMC) Plastic composites (glassfiber) Soft gray cast iron (crank-shaft bore machine)
CU	For difficult-to-machine material (carbon-fibre composite body, PCB, SiC reinforced Al-alloys, Kevlar)

ASIA POLYDIAMOND COMPANY Ltd.
561-4, Cheondeoksan-ro, Wongok-myeon, Anseong-si, Gyeonggi-do, South Korea • TEL: 82-31-656-6195~7 • E-MAIL: sales.europe@adico-polydiamond.com