

New Generation of Coated Carbide Grades for Milling

XCU2500 / XCK2000 / XCS2000

Revolutionary new coating
realises superb long tool life



ABSOTECH



XCU2500 P M K N S H

XCK2000 P M K N S H

New XCS2000 P M K N S H

Introducing a revolutionary coating with both wear and fracture resistance

ABSOTECH



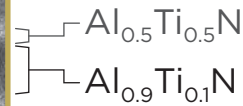
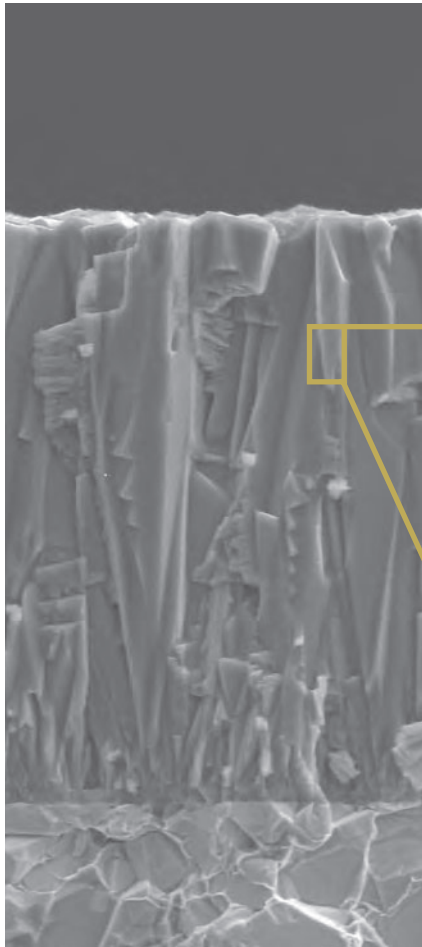
■ Coating Features

- Pure cubic crystal AlTiN with high Al content **World's first**

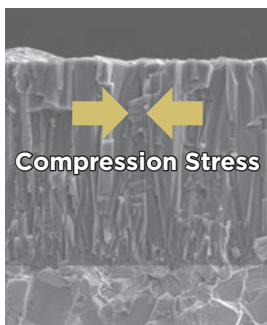
Amazing Wear Resistance

With proprietary structural control technology, differently composed layers of AlTiN are stacked at the nanometre level.

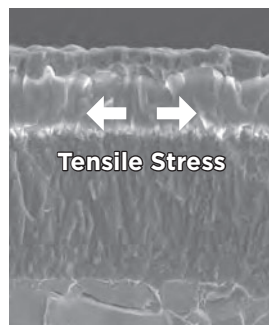
With a high-Al composition containing over 80% Al on average, it also maintains a cubic crystalline structure to achieve excellent thermal resistance and high hardness.



- Special Surface Treatment **Proprietary Technology**



Compression Stress



Tensile Stress

Conventional Tool

Excellent Thermal Crack and Fracture Resistance

Proprietary surface treatment introduces high compression stress to the coating, suppressing the development of cracks.

XCU2500/XCK2000/*New* XCS2000

■ Features of XCU2500/XCK2000/XCS2000

XCU2500 General-purpose Grade

The application of ABSOTECH™ X to a tough carbide substrate with well-balanced hardness and toughness enables superb performance in a wide range of cutting speeds on work materials such as steel, cast iron, and stainless steel.

XCK2000 Cast Iron Machining Grade

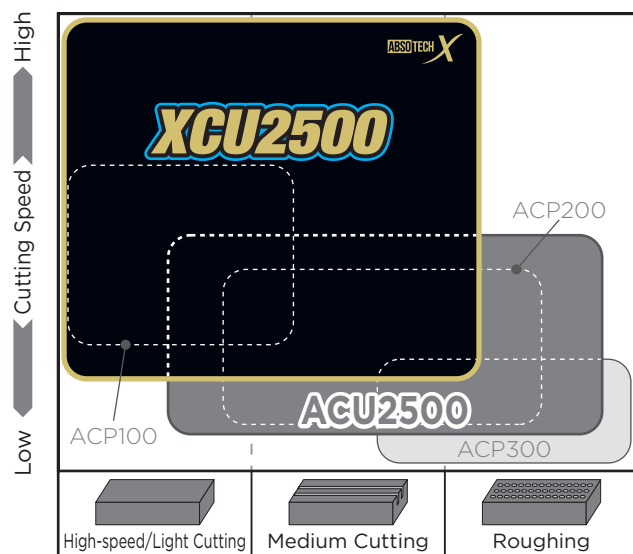
The application of ABSOTECH™ X to a high-hardness carbide substrate realises amazing long tool life in high-speed cast iron machining.

New **XCS2000** Exotic Alloy Machining Grade

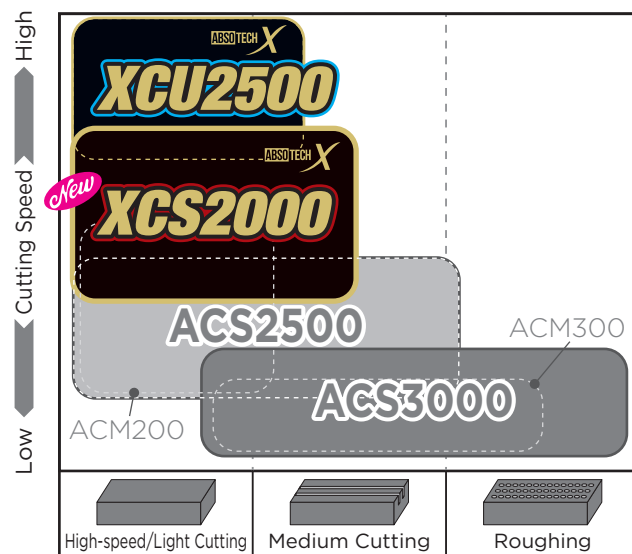
The application of ABSOTECH™ X to a tough carbide substrate realises superb long tool life in stainless steel and exotic alloy machining.

■ Application Range

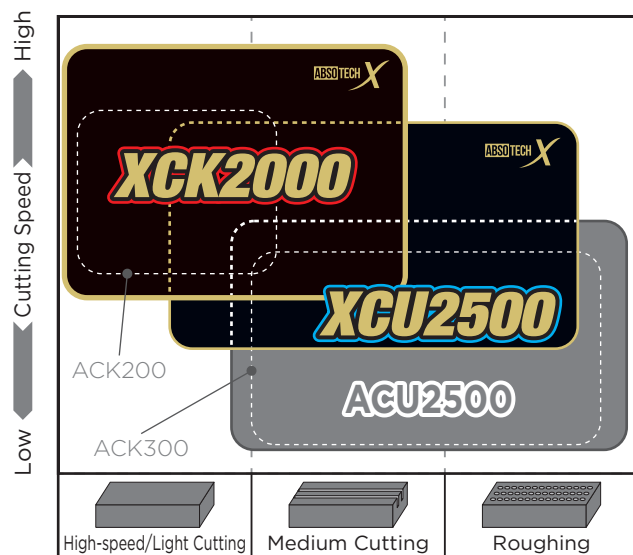
P Steel



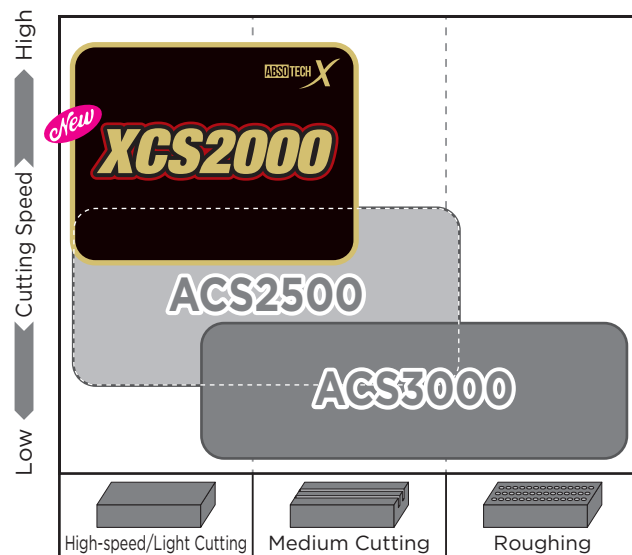
M Stainless Steel



K Cast Iron



S Heat-Resistant Alloy

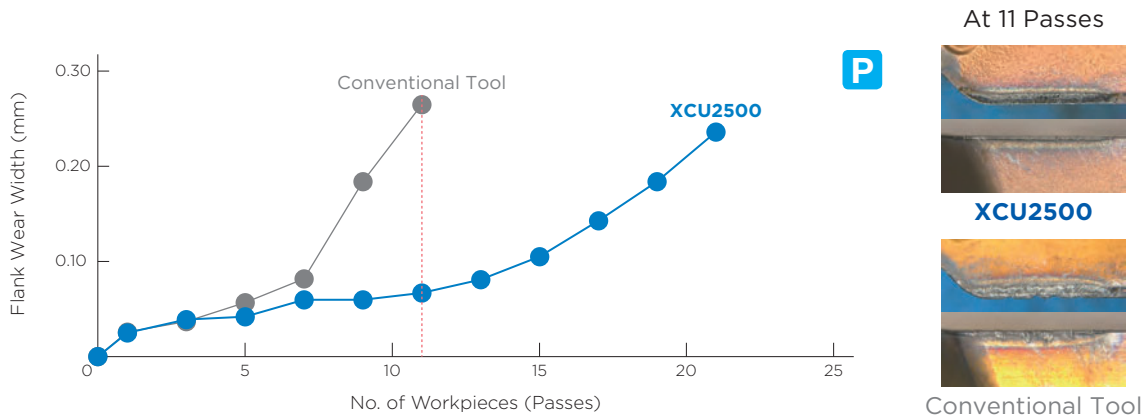


XCU2500/XCK2000/*New* XCS2000

■ Cutting Performance

● XCU2500 Wear Resistance (Steel; Dry Machining)

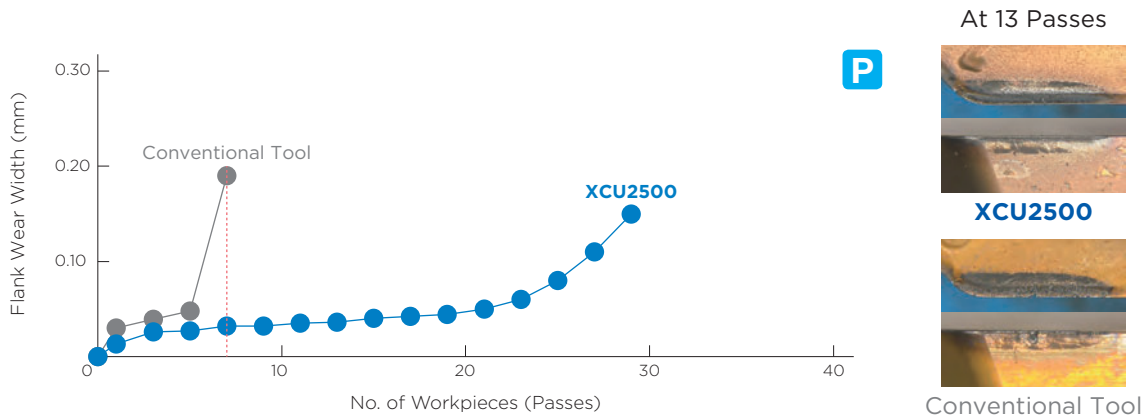
Superb thermal and wear resistance is achieved with a high-hardness, high-Al content AlTiN coating **for twice the conventional tool life with XCU2500 in high-speed dry machining of steel**



Work Material: Alloy Steel Machining (SCM435 Block Material) Tool: WGX13160R Insert: SEET13T3AGSR-G
 Cutting Conditions: $v_c = 350\text{m/min}$, $f_z = 0.2\text{mm/t}$, $a_p = 2.0\text{mm}$, $a_e = 80\text{mm}$, Dry

● XCU2500 Wear Resistance (Steel; Wet Machining)

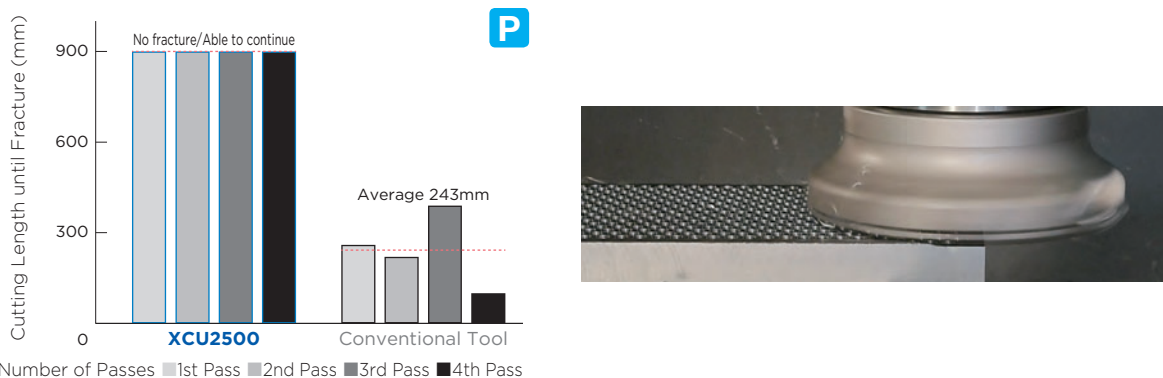
Superb thermal crack resistance is achieved by combining a high-compression stress coating and a tough substrate **for four times the conventional tool life with XCU2500 in wet machining of steel**



Work Material: Alloy Steel Machining (SCM435 Block Material) Tool: WGX 13160R Insert: SEET13T3AGSR-G
 Cutting Conditions: $v_c = 250\text{m/min}$, $f_z = 0.2\text{mm/t}$, $a_p = 2.0\text{mm}$, $a_e = 80\text{mm}$, Wet

● XCU2500 Fracture Resistance (Steel; Heavy Interrupted Dry Machining)

XCU2500 achieves three times or more the conventional fracture resistance in heavy interrupted cutting through the introduction of high compression stress to the coating layer



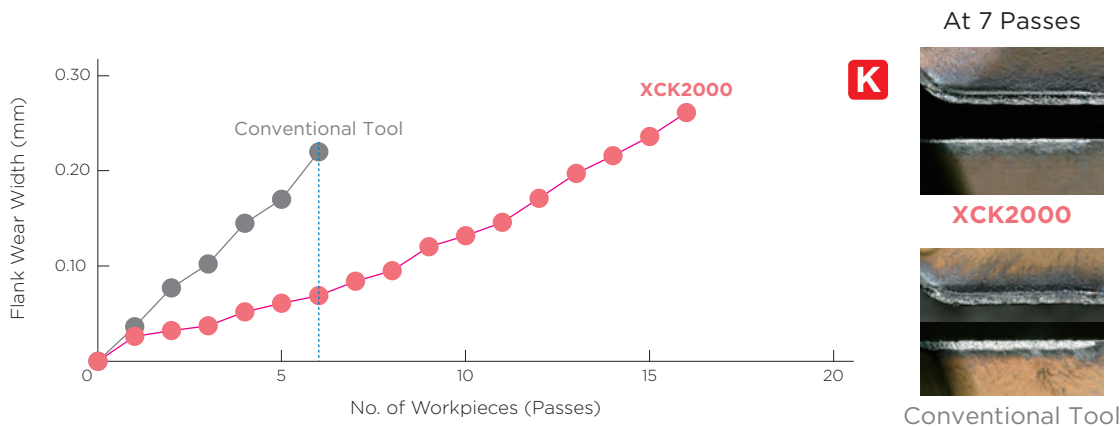
Work Material: Carbon Steel Heavy Interrupted Machining (S50C Block Material with Holes) Tool: WGX 13160R Insert: SEET13T3AGSR-G
 Cutting Conditions: $v_c = 200\text{m/min}$, $f_z = 0.4\text{mm/t}$, $a_p = 2.0\text{mm}$, $a_e = 150\text{mm}$, Dry

XCU2500/XCK2000/*New* XCS2000

● XCK2000 Wear Resistance (Ductile Cast Iron; Dry Machining)

Superb wear resistance is achieved with a high-hardness AlTiN coating

for three times the conventional tool life with XCK2000 in dry machining of cast iron

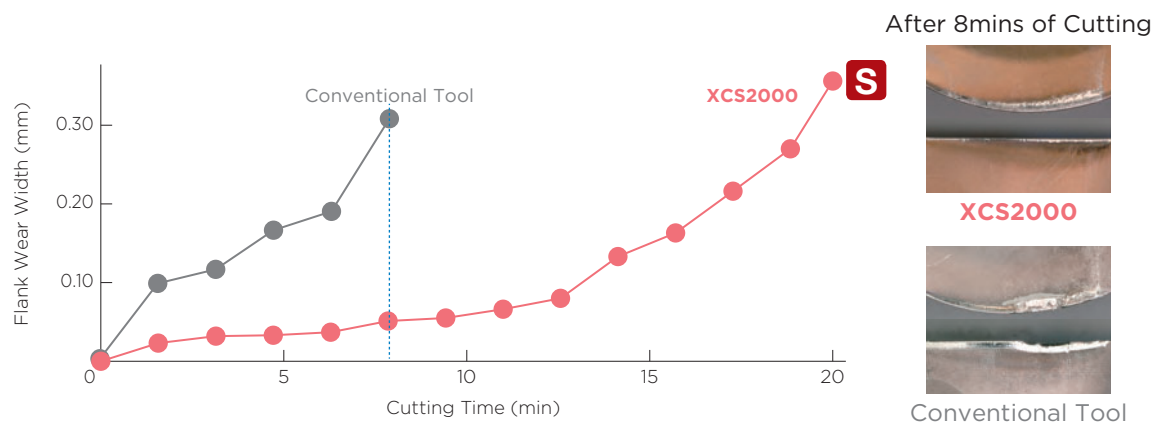


Work Material: Ductile Cast Iron Machining (FCD700 Block Material) Tool: WGX 13160R Insert: SEET13T3AGSR-G
 Cutting Conditions: $v_c = 200\text{m/min}$, $f_z = 0.2\text{mm/t}$, $a_p = 2.0\text{mm}$, $a_e = 80\text{mm}$, Dry

● XCS2000 Wear Resistance (Exotic Alloy; Wet Machining)

Superb wear resistance is achieved with a high-hardness AlTiN coating

for 2.5 times the conventional tool life with XCS2000 in wet machining of exotic alloy

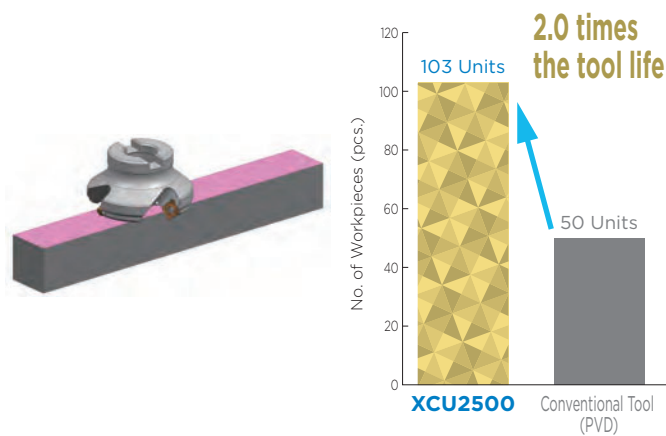


Work Material: Inconel 718 (44HRC) Tool: RSE 12050RS05 Insert: RPHT1204M0EN-G
 Cutting Conditions: $v_c = 40\text{m/min}$, $f_z = 0.3\text{mm/t}$, $a_p = 2\text{mm}$, $a_e = 30\text{mm}$, Wet

Application Examples of XCU2500

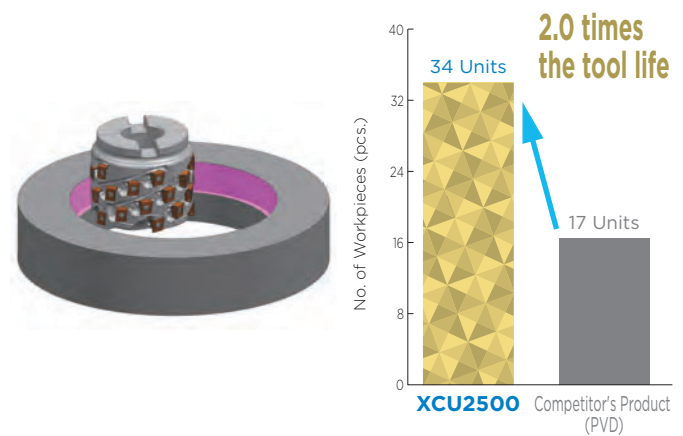
XCU2500 realises superb **long tool life** in machining of steel, cast iron, and stainless steel

P Suppresses wear for 2.0x longer tool life



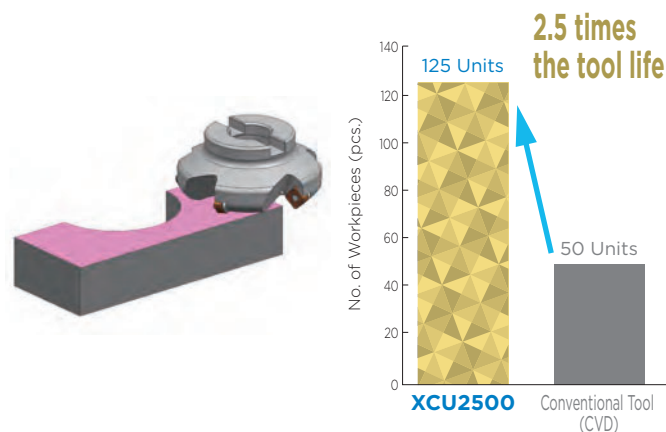
Work Material: Automotive Component (SWCHB, Boron Steel)
 Tool: WGX 13080RS Insert: SEMT 13T3AGSR-G
 Cutting Conditions: $vc = 332\text{m/min}$, $fz = 0.15\text{mm/t}$, $ap = 0.5\text{mm}$, $ae = 4.0\text{mm}$, Dry

P Suppresses wear and chipping for 2.0x longer tool life



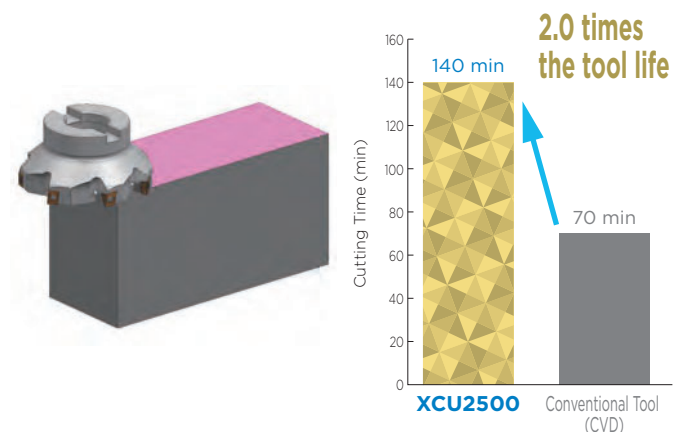
Work Material: Housing (SCMn2, Manganese Steel)
 Tool: TSXR 13100RS Insert: LNE X 130608PNER-H
 Cutting Conditions: $vc = 132\text{m/min}$, $fz = 0.1\text{mm/t}$, $ap = 30.0\text{mm}$, $ae = 5.0\text{mm}$, Dry

K Suppresses wear and chipping for 2.5x longer tool life



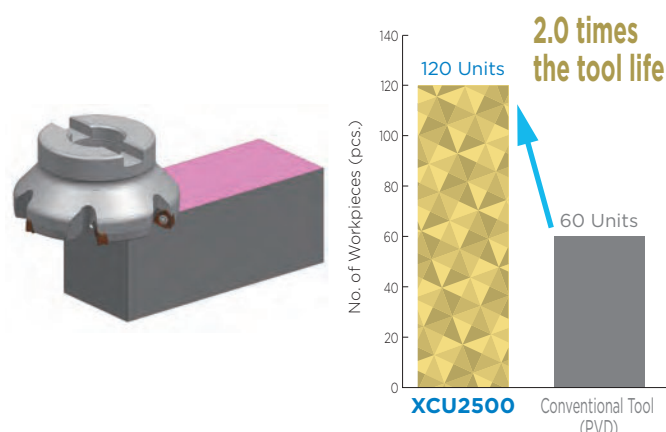
Work Material: Bearing Cap (FCD450)
 Tool: DGC 13100RS Insert: SNMT 13T6ANER-G
 Cutting Conditions: $vc = 240\text{m/min}$, $fz = 0.3\text{mm/t}$, $ap = 1.2\text{mm}$, Dry

K Suppresses chipping for 2.0x longer tool life



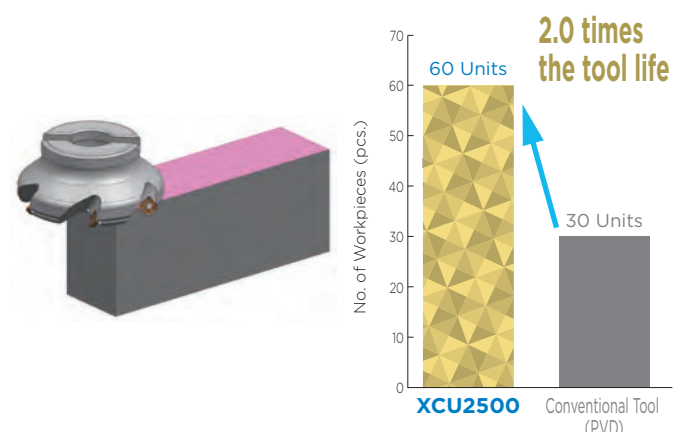
Work Material: Hydraulic Valve (FC250)
 Tool: TSX 13125RS Insert: LNE X 130608PNER-G
 Cutting Conditions: $vc = 350\text{m/min}$, $fz = 0.25\text{mm/t}$, $ap = 3.5\text{mm}$, Dry

P K Suppresses wear for 2.0x longer tool life



Work Material: Bearing Cover (FC250/FCD450/SC450, Mixed)
 Tool: DFC 09100RS Insert: XN MU 060604PNER-G
 Cutting Conditions: $vc = 236\text{m/min}$, $fz = 0.12\text{mm/t}$, $ap = 3.0\text{mm}$, Dry

M Suppresses adhesion for 2.0x longer tool life

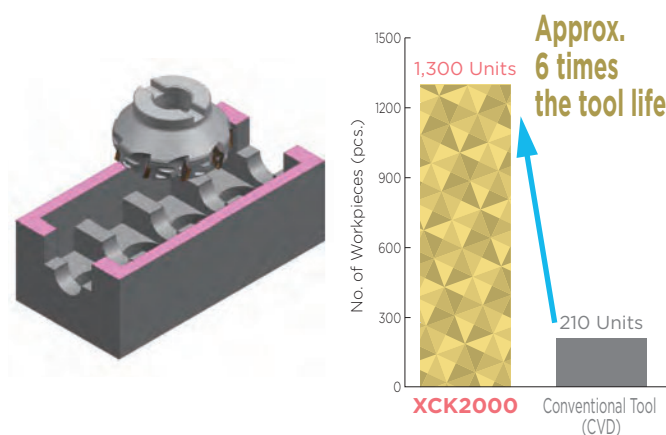


Work Material: Machine Component (SUS304)
 Tool: WGX 13125RS Insert: SEET 13T3AGSR-G
 Cutting Conditions: $vc = 250\text{m/min}$, $fz = 0.2\text{mm/t}$, $ap = 2.0$ to 3.0mm , Dry

Application Examples of XCK2000

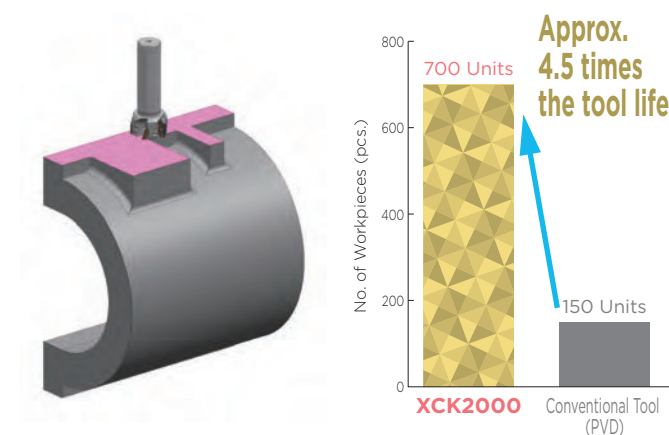
XCK2000 realises superb long tool life in machining of cast iron

K Suppresses chipping for approx. 6x longer tool life



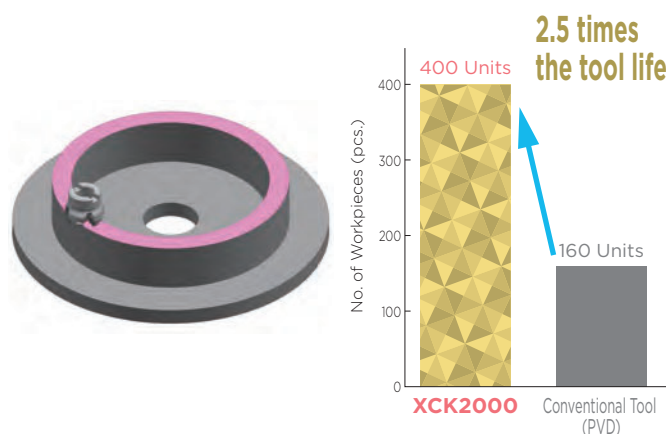
Work Material: Cylinder Block (FC250)
 Tool: WEZ 17125RS09 Insert: AOMT 170508PEER-G
 Cutting Conditions: $v_c = 300\text{m/min}$, $f_z = 0.26\text{mm/t}$, $a_p = 2.0\text{mm}$, Dry

K Suppresses wear for approx. 4.5x longer tool life



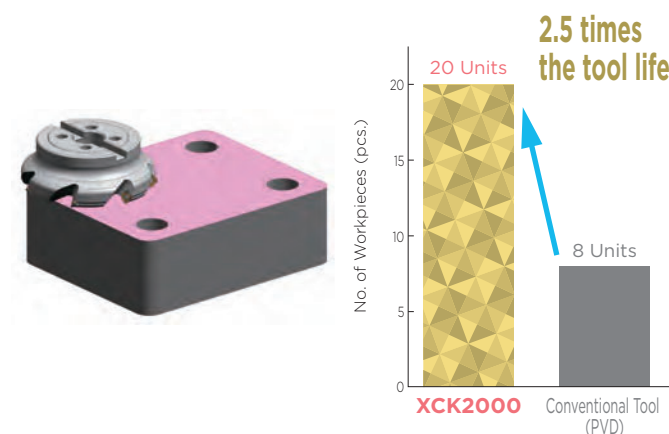
Work Material: Cylinder Block (FC250)
 Tool: WEZ 17050E05 Insert: AOMT 170508PEER-G
 Cutting Conditions: $v_c = 188\text{m/min}$, $f_z = 0.15\text{mm/t}$, $a_p = 1.0\text{mm}$, Wet

K Suppresses wear/chipping for 2.5x longer tool life



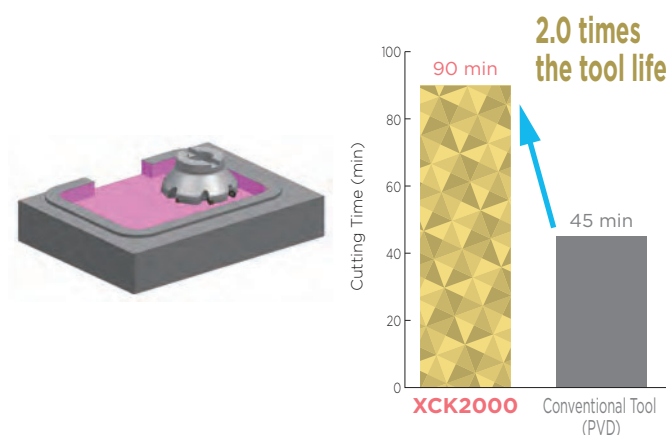
Work Material: Flywheel Housing (FC250)
 Tool: DFC 09050RS Insert: XNMU 060608PNER-G
 Cutting Conditions: $v_c = 250\text{m/min}$, $f_z = 0.2\text{mm/t}$, $a_p = 1.5\text{mm}$, Dry

K Suppresses wear for 2.5x longer tool life



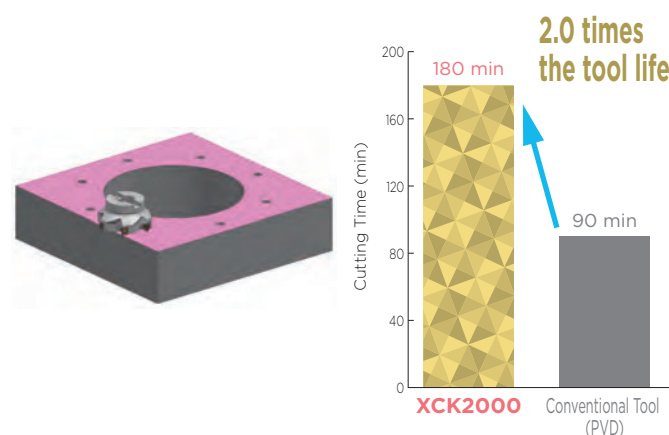
Work Material: Hydraulic Component (FCD450)
 Tool: WGX 13160RS Insert: SEET 13T3AGSR-G
 Cutting Conditions: $v_c = 250\text{m/min}$, $f_z = 0.2\text{mm/t}$, $a_p = 1.5\text{mm}$, Dry

K Suppresses wear for 2.0x longer tool life



Work Material: Housing Pilot (FCD450)
 Tool: DFC 09125RS Insert: XNMU 060608PNER-G
 Cutting Conditions: $v_c = 163\text{m/min}$, $f_z = 0.2\text{mm/t}$, $a_p = \text{Up to } 3.0\text{mm}$, Wet

K Suppresses wear for 2.0x longer tool life



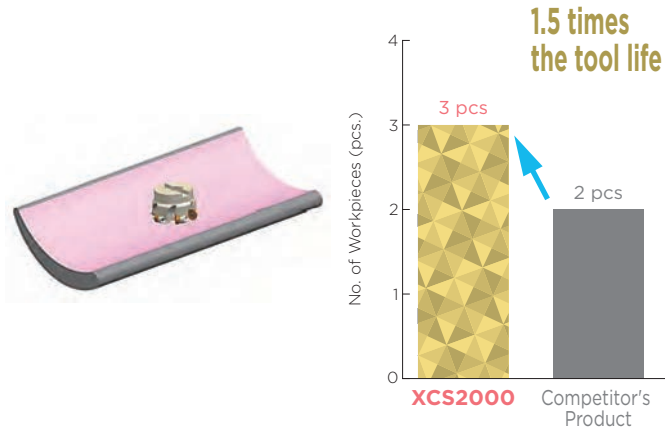
Work Material: Machine Component (FCD500)
 Tool: TSX 13100RS Insert: LNEK 130608PNER-G
 Cutting Conditions: $v_c = 170\text{m/min}$, $f_z = 0.23\text{mm/t}$, $a_p = \text{Up to } 2.0\text{mm}$, Wet

■ Application Examples of XCS2000

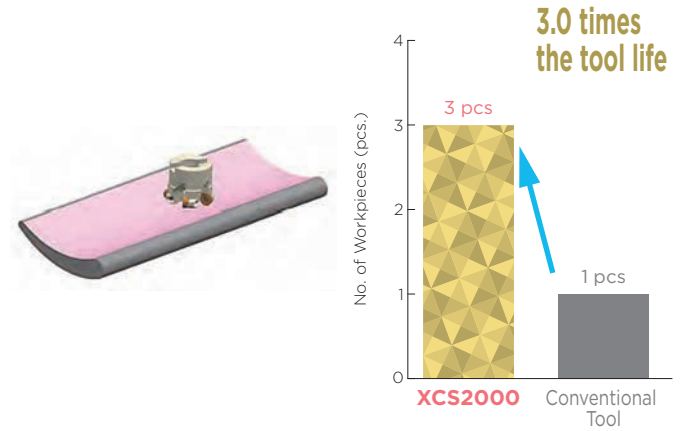
XCS2000 realises outstanding **long tool life** in machining of stainless steel and exotic alloy

M Suppresses wear for 1.5x longer tool life

S Suppresses chipping for 3.0x longer tool life

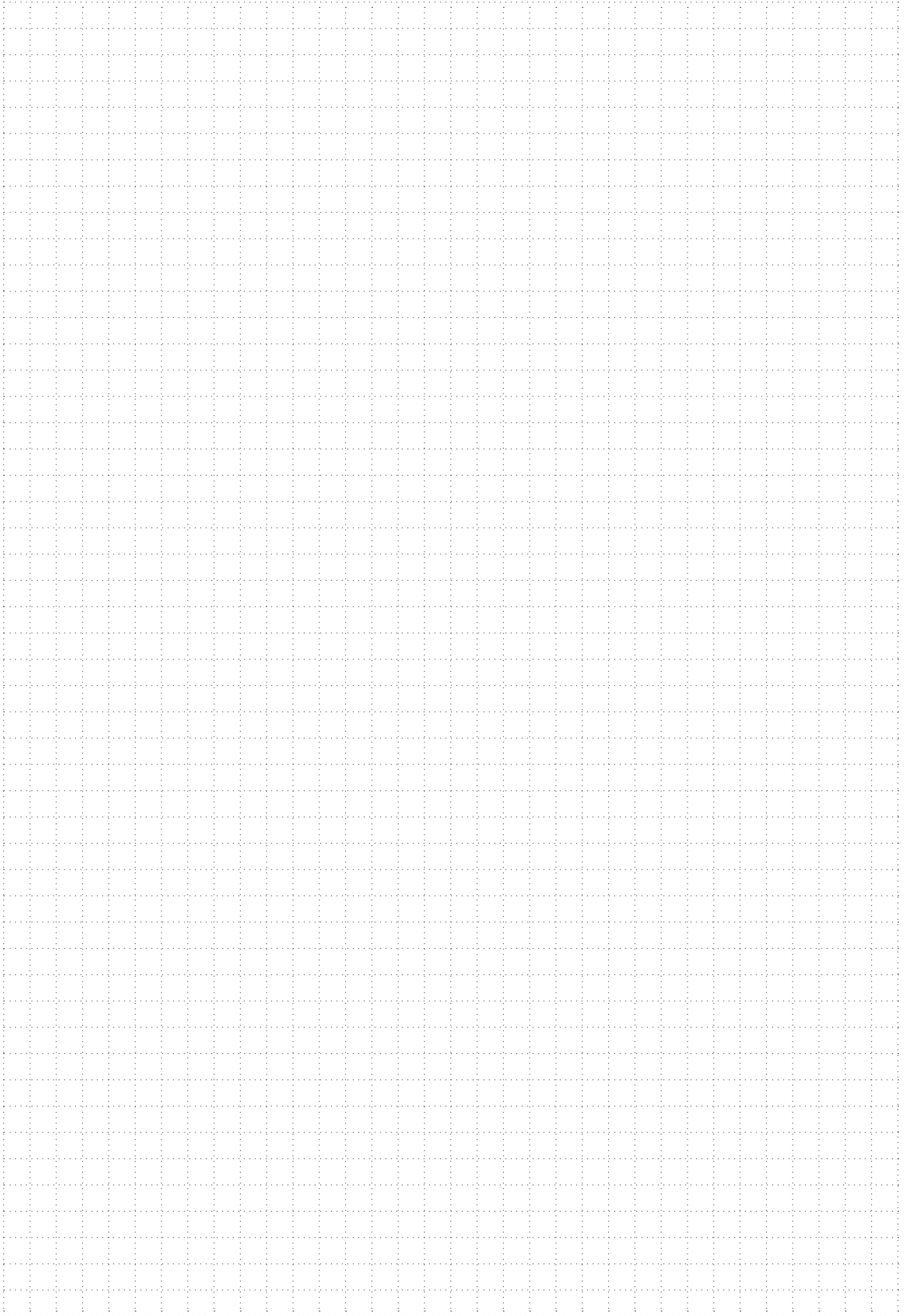


Work Material: Turbine Blade (Martensitic Stainless Steel)
 Tool: RSE 12063RS06 Insert: RPHT 1204M0EN-G
 Cutting Conditions: $v_c = 270\text{m/min}$, $f_z = 0.3\text{mm/t}$, $a_p = 2.5\text{mm}$, MQL



Work Material: Turbine Blade (Martensitic Heat-Resistant Steel)
 Tool: RSE 12050RS05 Insert: RPHT 1204M0EN-G
 Cutting Conditions: $v_c = 160\text{m/min}$, $f_z = 0.2\text{mm/t}$, $a_p = 1.5\text{mm}$, Wet

MEMO



New Generation of Coated Carbide Grades for Milling

XCU2500/XCK2000

SEC-WaveMill WGX series Dimensions (mm)

Process	High-speed/Light Cutting	K		Fig 1
	General-purpose	K	K	
	Roughing	K	K	
Cat. No.		XCU2500	XCK2000	Fig 2
SEET 13T3AGSR-L		●	●	1
SEET 13T3AGSR-G		●	●	1
SEMT 13T3AGSR-L		●	●	1
SEMT 13T3AGSR-G		●	●	1
SEMT 13T3AGSR-H		●	●	1
SEMT 13T3AGSR-FG		●	●	2
XEEW 13T3AGER-WR		●	●	3



SEC-Sumi Dual Mill DGC series Dimensions (mm)

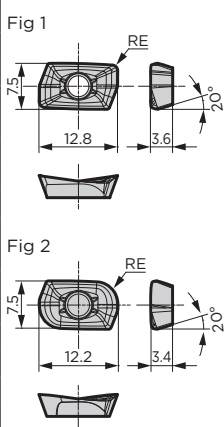
Process	High-speed/Light Cutting	K		Fig 1 8 corners
	General-purpose	K	K	
	Roughing	K	K	
Cat. No.		XCU2500	XCK2000	Fig 2 8 corners
SNMT 13T6ANER-L		●	●	1
SNMT 13T6ANER-G		●	●	1
SNMT 13T6ANER-H		●	●	1
SNMT 13T6ANER-FL		●	●	2
SNMT 13T6ANER-FG		●	●	2
SNET 13T6ANER-L				1
SNET 13T6ANER-G				1
SNET 13T6ANER-FL				2
SNET 13T6ANER-FG				2
XNEU 13T6ANEN-W		●	●	3
ONMT 05T6ANER-L		●	●	4
ONMT 05T6ANER-G		●	●	4
ONET 05T6ANER-L				4
ONET 05T6ANER-G				4



XCU2500/XCK2000

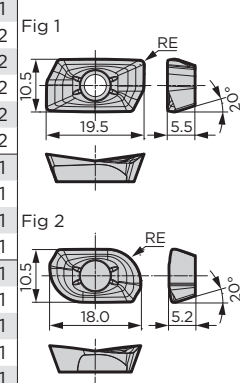
SEC-WaveMill WEZ series / WEZR series Dimensions (mm)

Process	High-speed/Light Cutting	K	RE	Corner Radius	Fig	
	General-purpose					K
	Roughing					K
Cat. No.	XCU2500	XCK2000				
AOMT 11T302PEER-G	●	●		0.2	1	
AOMT 11T304PEER-G	●	●		0.4	1	
AOMT 11T305PEER-G				0.5	1	
AOMT 11T308PEER-G	●	●		0.8	1	
AOMT 11T310PEER-G				1.0	1	
AOMT 11T312PEER-G	●	●		1.2	1	
AOMT 11T316PEER-G	●	●		1.6	1	
AOMT 11T320PEER-G	●	●		2.0	1	
AOMT 11T324PEER-G				2.4	1	
AOMT 11T330PEER-G	●	●		3.0	2	
AOMT 11T332PEER-G				3.2	2	
AOMT 11T304PEER-H	●	●		0.4	1	
AOMT 11T308PEER-H	●	●		0.8	1	
AOMT 11T312PEER-H				1.2	1	
AOMT 11T316PEER-H				1.6	1	
AOET 11T302PEER-F				0.2	1	
AOET 11T304PEER-F				0.4	1	
AOET 11T305PEER-F				0.5	1	
AOET 11T308PEER-F				0.8	1	
AOET 11T310PEER-F				1.0	1	
AOET 11T312PEER-F				1.2	1	
AOET 11T316PEER-F				1.6	1	
AOET 11T320PEER-F				2.0	1	
AOET 11T324PEER-F				2.4	1	
AOET 11T330PEER-F				3.0	2	
AOET 11T332PEER-F				3.2	2	
AOET 11T302PEER-P16				0.2	1	
AOET 11T304PEER-P16				0.4	1	
AOET 11T305PEER-P16				0.5	1	
AOET 11T308PEER-P16				0.8	1	
AOET 11T310PEER-P16				1.0	1	
AOET 11T312PEER-P16				1.2	1	
AOET 11T302PEER-P20				0.2	1	
AOET 11T304PEER-P20				0.4	1	
AOET 11T305PEER-P20				0.5	1	
AOET 11T308PEER-P20				0.8	1	
AOET 11T310PEER-P20				1.0	1	
AOET 11T312PEER-P20				1.2	1	
AOET 11T302PEER-P25				0.2	1	
AOET 11T304PEER-P25				0.4	1	
AOET 11T305PEER-P25				0.5	1	
AOET 11T308PEER-P25				0.8	1	
AOET 11T310PEER-P25				1.0	1	
AOET 11T312PEER-P25				1.2	1	



Dimensions (mm)

Process	High-speed/Light Cutting	K	RE	Corner Radius	Fig	
	General-purpose					K
	Roughing					K
Cat. No.	XCU2500	XCK2000				
AOMT 170502PEER-L				0.2	1	
AOMT 170504PEER-L	●	●		0.4	1	
AOMT 170508PEER-L	●	●		0.8	1	
AOMT 170512PEER-L				1.2	1	
AOMT 170516PEER-L				1.6	1	
AOMT 170502PEER-G	●	●		0.2	1	
AOMT 170504PEER-G	●	●		0.4	1	
AOMT 170505PEER-G				0.5	1	
AOMT 170508PEER-G	●	●		0.8	1	
AOMT 170510PEER-G				1.0	1	
AOMT 170512PEER-G	●	●		1.2	1	
AOMT 170516PEER-G	●	●		1.6	1	
AOMT 170520PEER-G	●	●		2.0	1	
AOMT 170524PEER-G				2.4	1	
AOMT 170530PEER-G	●	●		3.0	2	
AOMT 170532PEER-G	●	●		3.2	2	
AOMT 170540PEER-G	●	●		4.0	2	
AOMT 170550PEER-G	●	●		5.0	2	
AOMT 170564PEER-G				6.4	2	
AOMT 170504PEER-H	●	●		0.4	1	
AOMT 170508PEER-H	●	●		0.8	1	
AOMT 170512PEER-H				1.2	1	
AOMT 170516PEER-H				1.6	1	
AOET 170502PEER-F				0.2	1	
AOET 170504PEER-F				0.4	1	
AOET 170505PEER-F				0.5	1	
AOET 170508PEER-F				0.8	1	
AOET 170510PEER-F				1.0	1	
AOET 170512PEER-F				1.2	1	
AOET 170516PEER-F				1.6	1	
AOET 170520PEER-F				2.0	1	
AOET 170524PEER-F				2.4	1	
AOET 170530PEER-F				3.0	2	
AOET 170532PEER-F				3.2	2	
AOET 170540PEER-F				4.0	2	
AOET 170550PEER-F				5.0	2	
AOET 170564PEER-F				6.4	2	
AOET 170502PEER-P25				0.2	1	
AOET 170504PEER-P25				0.4	1	
AOET 170505PEER-P25				0.5	1	
AOET 170508PEER-P25				0.8	1	
AOET 170510PEER-P25				1.0	1	
AOET 170512PEER-P25				1.2	1	
AOET 170502PEER-P32				0.2	1	
AOET 170504PEER-P32				0.4	1	
AOET 170505PEER-P32				0.5	1	
AOET 170508PEER-P32				0.8	1	
AOET 170510PEER-P32				1.0	1	
AOET 170512PEER-P32				1.2	1	



XCU2500/XCK2000

SEC-WaveMill WFX series

Dimensions (mm)

Process	High-speed/Light Cutting	K		Corner Radius	RE	Fig
	General-purpose	K	K			
	Roughing	K	K			
Cat. No.		XCU2500	XCK2000			
		●	●	0.4		1
		●	●	0.8		1
		●	●	0.4		1
		●	●	0.8		1
		●	●	1.2		1
		●	●	0.8		1
		●	●	1.2		1
		●	●	0.4		1
		●	●	0.8		1
		●	●	1.2		1

SEC-Sumi Dual Mill DFC series

Dimensions (mm)

Process	High-speed/Light Cutting	K		Corner Radius	RE	Fig
	General-purpose	K	K			
	Roughing	K	K			
Cat. No.		XCU2500	XCK2000			
		●	●	0.4		1
		●	●	0.8		1
		●	●	0.4		1
		●	●	0.8		1
		●	●	1.2		1
		●	●	1.6		1
		●	●	0.4		1
		●	●	0.8		1
		●	●	1.2		1
		●	●	1.6		1
		●	●	0.8		1
		●	●	1.2		1
		●	●	1.6		1

Dimensions (mm)

Process	High-speed/Light Cutting	K		Corner Radius	RE	Fig
	General-purpose	K	K			
	Roughing	K	K			
Cat. No.		XCU2500	XCK2000			
		●	●	0.8		1
		●	●	0.4		1
		●	●	0.8		1
		●	●	1.2		1
		●	●	1.6		1
		●	●	0.8		1

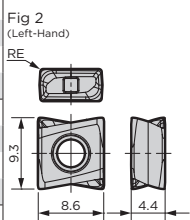
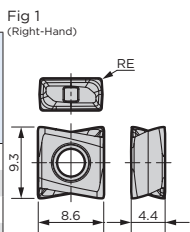


New Generation of Coated Carbide Grades for Milling

XCU2500/XCK2000

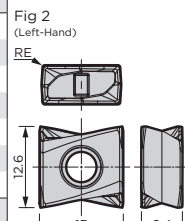
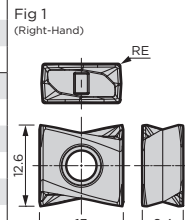
SEC-Sumi Dual Mill TSX series / TSXR series Dimensions (mm)

Process	High-speed/Light Cutting			Corner Radius RE	Fig
	General-purpose				
	Roughing				
		XCU2500	XCK2000		
Cat. No.					
LNEX 080404PNER-L	●	●		0.4	1
LNEX 080408PNER-L	●	●		0.8	1
LNEX 080412PNER-L	●	●		1.2	1
LNEX 080416PNER-L	●	●		1.6	1
LNEX 080404PNER-G	●	●		0.4	1
LNEX 080408PNER-G	●	●		0.8	1
LNEX 080412PNER-G	●	●		1.2	1
LNEX 080416PNER-G	●	●		1.6	1
LNEX 080404PNEL-L				0.4	2
LNEX 080408PNEL-L				0.8	2
LNEX 080412PNEL-L				1.2	2
LNEX 080416PNEL-L				1.6	2
LNEX 080404PNEL-G				0.4	2
LNEX 080408PNEL-G				0.8	2
LNEX 080412PNEL-G				1.2	2
LNEX 080416PNEL-G				1.6	2



Dimensions (mm)

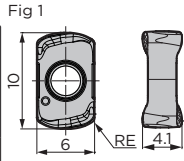
Process	High-speed/Light Cutting			Corner Radius RE	Fig
	General-purpose				
	Roughing				
		XCU2500	XCK2000		
Cat. No.					
LNEX 130604PNER-L	●	●		0.4	1
LNEX 130608PNER-L	●	●		0.8	1
LNEX 130612PNER-L	●	●		1.2	1
LNEX 130616PNER-L	●	●		1.6	1
LNEX 130620PNER-L	●	●		2.0	1
LNEX 130624PNER-L	●	●		2.4	1
LNEX 130632PNER-L	●	●		3.2	1
LNEX 130604PNER-G	●	●		0.4	1
LNEX 130608PNER-G	●	●		0.8	1
LNEX 130612PNER-G	●	●		1.2	1
LNEX 130616PNER-G	●	●		1.6	1
LNEX 130620PNER-G	●	●		2.0	1
LNEX 130624PNER-G	●	●		2.4	1
LNEX 130632PNER-G	●	●		3.2	1
LNEX 130604PNER-H	●	●		0.4	1
LNEX 130608PNER-H	●	●		0.8	1
LNEX 130612PNER-H	●	●		1.2	1
LNEX 130616PNER-H	●	●		1.6	1
LNEX 130620PNER-H	●	●		2.0	1
LNEX 130624PNER-H	●	●		2.4	1
LNEX 130632PNER-H	●	●		3.2	1
LNEX 130604PNEL-L				0.4	2
LNEX 130608PNEL-L				0.8	2
LNEX 130612PNEL-L				1.2	2
LNEX 130616PNEL-L				1.6	2
LNEX 130620PNEL-L				2.0	2
LNEX 130624PNEL-L				2.4	2
LNEX 130632PNEL-L				3.2	2
LNEX 130604PNEL-G				0.4	2
LNEX 130608PNEL-G				0.8	2
LNEX 130612PNEL-G				1.2	2
LNEX 130616PNEL-G				1.6	2
LNEX 130620PNEL-G				2.0	2
LNEX 130624PNEL-G				2.4	2
LNEX 130632PNEL-G				3.2	2



XCU2500/*New* XCS2000

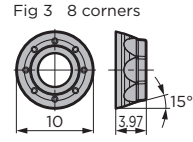
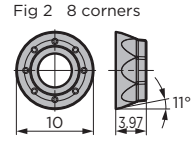
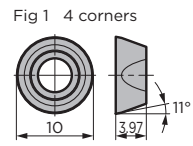
SEC-Sumi Dual Mill DMSL series Dimensions (mm)

Process	High-speed/Light Cutting			Corner Radius RE	Fig
	General-purpose				
	Roughing				
Cat. No.		XCU2500	XCS2000		
LNMU 06T3ZNER-L				1.0	1
LNMU 06T3ZNER-G				1.0	1
LNMU 06T3ZNER-H				1.0	1



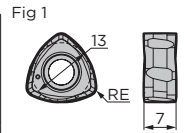
SEC-Wave Radius Mill RSE series Dimensions (mm)

Process	High-speed/Light Cutting			Corner Radius RE	Fig
	General-purpose				
	Roughing				
Cat. No.		XCU2500	XCS2000		
RPHT 10T3MOEN-G				1	1
RPMT 10T3MOEN-G				2	2
RDMT 10T3MOEN-G				3	3



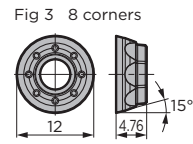
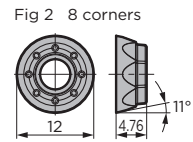
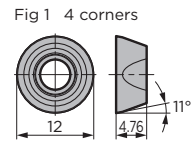
SEC-Sumi Dual Mill DMSW series Dimensions (mm)

Process	High-speed/Light Cutting			Corner Radius RE	Fig
	General-purpose				
	Roughing				
Cat. No.		XCU2500	XCS2000		
WNMU 0807ZNER-L				1.6	1
WNMU 0807ZNER-G				1.6	1
WNMU 0807ZNER-H				1.6	1



SEC-Wave Radius Mill RSE series Dimensions (mm)

Process	High-speed/Light Cutting			Corner Radius RE	Fig
	General-purpose				
	Roughing				
Cat. No.		XCU2500	XCS2000		
RPHT 1204MOEN-G				1	1
RPMT 1204MOEN-G				2	2
RDMT 1204MOEN-G				3	3



MEMO

A large grid of dotted lines for writing a memo. The grid consists of 20 columns and 30 rows of small squares, providing a structured space for text entry.



- Very hot or lengthy chips may be discharged while the machine is in operation. Therefore, machine guards, safety goggles or other protective covers must be used. Fire safety precautions must also be considered.

< SAFETY NOTES >

- Please handle with care as this product has sharp edges.
- Improper cutting conditions or mis-handling of the tool may result in breakages or projectiles. Therefore, please use the tool within its recommended conditions.

- When using non-water soluble cutting oil, precautions against fire must be taken and please ensure that a fire extinguisher is placed near the machine.

 Sumitomo Electric Industries, Ltd.

Hardmetal Division

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<https://www.sumitool.com/global>