



MILLING CONCEPTS FOR YOUR SUCCESS



TSX series
tangential shoulder milling cutters



DFC series
universal milling cutters



DMSW series
high-feed milling cutters

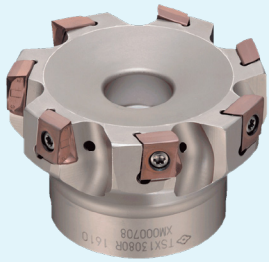


RSE series
radius milling cutters

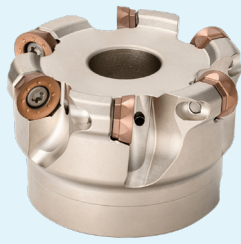
Milling concepts

In milling, the combination of strategy, milling tool and cutting material is the decisive factor in achieving optimum effectiveness and efficiency. SUMITOMO covers all important application areas with its wide range of milling cutters and cutting materials.

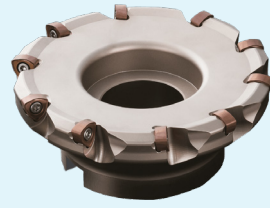




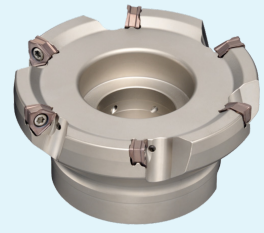
TSX
tangential shoulder milling cutters



RSE
radius milling cutters

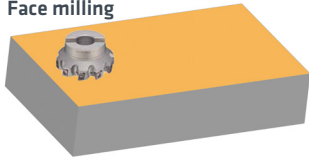


DMSW
high-feed milling cutters

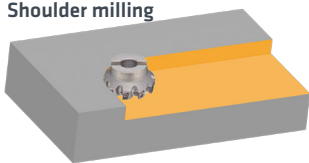


DFC
universal milling cutters

Face milling



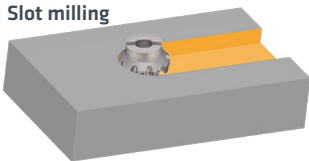
Shoulder milling



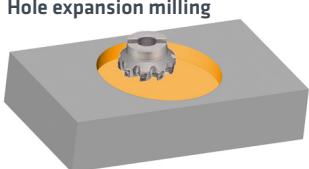
Side face milling



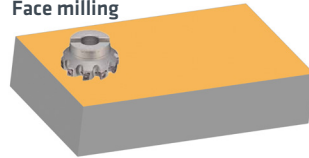
Slot milling



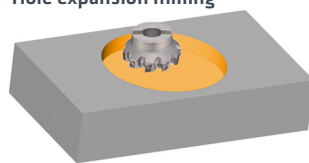
Hole expansion milling



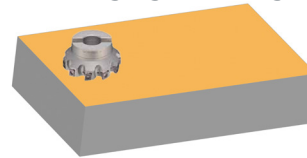
Face milling



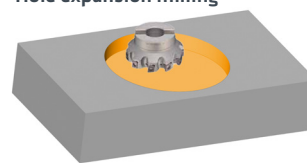
Hole expansion milling



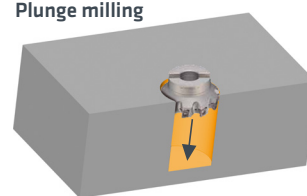
Face milling, High feed milling



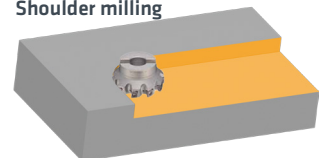
Hole expansion milling



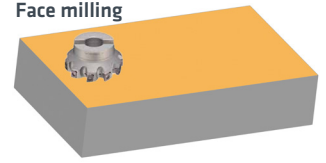
Plunge milling



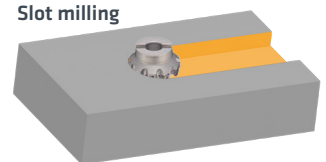
Shoulder milling



Face milling



Slot milling



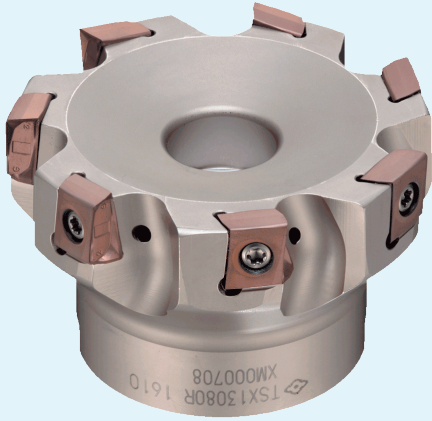
Side face milling



1981: The subsidiary SUMITOMO ELECTRIC Hartmetall GmbH is founded in Lauchheim/D. In 2012, the SUMITOMO European Design & Engineering Center was founded there as an innovative development and technology centre in order to make the use of the tools and systems tangible.

SUMITOMO products are used worldwide in all industries where quality and precision are key requirements. The most important products are carbide, cermet, silicon nitride as well as CBN and PCD cutting tools for turning, milling and drilling applications.

Wedco Tool Competence has been a trading partner for SUMITOMO products since its foundation in 1991 and is responsible for exclusive distribution in Austria. A successful partnership of more than 30 years that proves: You can rely on WEDCO and SUMITOMO!



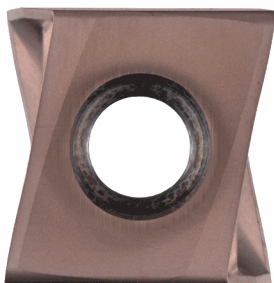
- Tough and sharp cutting edge
- Very accurate and excellent surface finish

TSX

High-efficient
shoulder milling
cutter

The SumiDual-Mill **TSX** series tools are highly efficient shoulder milling cutters with robust, tangential inserts.

- 2 different insert size series and 3 chip breaker
- Cutting materials for highest productivity in all ISO application areas



Optimized cutting edge geometry

The cutting edge geometries, optimised in terms of sharpness and cutting ability, significantly reduce the cutting forces. Thanks to a newly developed sintering technology and the peripheral grinding of the cutting inserts, very precise shoulders with excellent surface qualities can be produced.

Product video TSX shoulder milling cutter



Product range

Shoulder milling cutter

Type	Cat. No.	Series	∅ 16	∅ 20	∅ 25	∅ 32	∅ 40	∅ 50	∅ 63	∅ 80	∅ 100	∅ 125	∅ 160	∅ 200	∅ 250	∅ 315
Shell	TSX 08000RS	Standard Pitch	-	-	-	-	Z4	Z5	Z6	Z7	-	-	-	-	-	-
	TSXF 08000RS	Fine Pitch	-	-	-	-	Z6	Z8	Z10	Z11	-	-	-	-	-	-
	TSX 13000RS	Standard Pitch	-	-	-	-	Z3	Z4	Z5	Z5	Z6	Z7	Z8	Z12	Z14	Z16
	TSXM 13000RS	Medium Pitch	-	-	-	-	Z4	Z5	Z6	Z7	Z8	Z10	Z12	Z16	Z20	Z24
	TSXF 13000RS	Fine Pitch	-	-	-	-	Z5	Z6	Z7	Z8	Z10	Z14	Z16	-	-	-
Shank	TSX 08000E	Standard Pitch	Z2	Z2	Z3	Z3	Z4	Z5	Z6	Z7	-	-	-	-	-	-
	TSXF 08000E	Fine Pitch	-	Z3	Z4	Z5	Z6	Z8	Z10	Z11	-	-	-	-	-	-
	TSX 13000E	Standard Pitch	-	-	Z2	Z2	Z3	Z4	Z5	Z5	-	-	-	-	-	-
	TSXM 13000E	Medium Pitch	-	-	-	Z3	Z4	Z5	Z6	Z7	-	-	-	-	-	-
	TSXF 13000E	Fine Pitch	-	-	-	-	Z5	Z6	Z7	Z8	-	-	-	-	-	-

Repeater

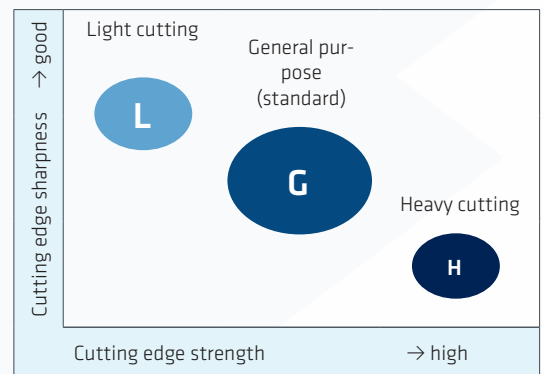
Type	Cat. No.	∅ 16	∅ 20	∅ 25	∅ 32	∅ 40	∅ 50	∅ 63	∅ 80	∅ 100	∅ 125
Shell	TSXR 08000RS	-	-	-	Z2	Z3	Z3/4	Z5	-	-	-
	TSXR 13000RS	-	-	-	-	Z2	Z3	Z3/4	Z4/5	Z5/6	Z7
Shank	TSXR 08000E	-	Z1	Z2	Z2	Z3	-	-	-	-	-
	TSXR 13000E	-	-	-	-	Z2	Z3	-	-	-	-

Insert grade selection

ISO	Finishing to light cutting	Medium cutting	Rough to heavy cutting
P	ABSOTECH XCU2500	ABSOTECH ACU2500	
	ABSOTECH ACP200		
		ABSOTECH ACP300	
S	ABSOTECH XCU2500	ABSOTECH ACU2500	
	ABSOTECH XCS2000		
		ABSOTECH ACS2500	
M			ABSOTECH ACS3000
K	ABSOTECH XCU2500	ABSOTECH ACU2500	
	ABSOTECH ACK200		
		ABSOTECH ACK300	

P PVD
C CVD

Chipbreaker selection

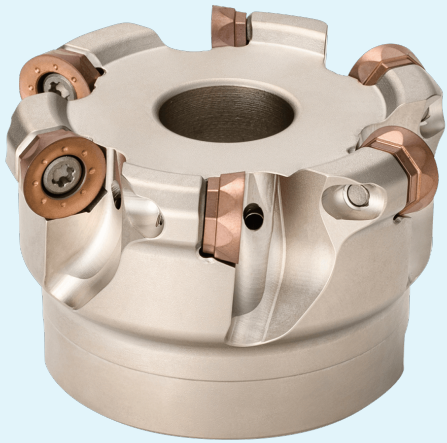


Inserts

Cat. No.	R0,4	R0,8	R1,2	R1,6	R2,0	R2,4	R3,2
LNEX0804_ _PNER-L	■	■	□	□	-	-	-
LNEX0804_ _PNER-G	■	■	■	■	-	-	-
LNEX1306_ _PNER-L	■	■	□	□	□	□	□
LNEX1306_ _PNER-G	□	■	□	■	■	■	■
LNEX1306_ _PNER-H	■	■	□	■	■	■	■

More info and data on the TSX series





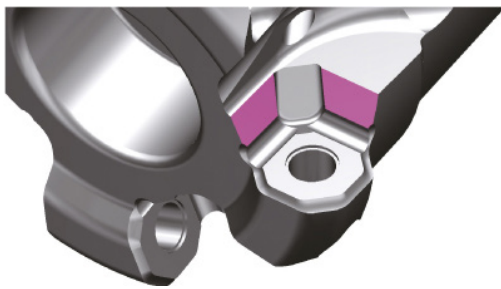
RSE

High-efficient,
tough radius
milling cutter

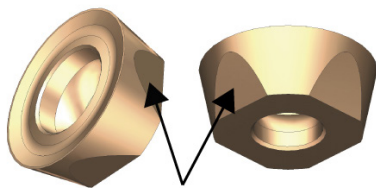
- High-efficiency, high-rigidity radius cutter
- Lineup of ground type and M class inserts

The tools of the SEC-wave radius mill-series **RSE** are tough cutters for high-efficiency machining of stainless steel and exotic alloy.

- Uses new grades for exotic alloy machining
- Cutter body can be shared by optimizing the locating surface design



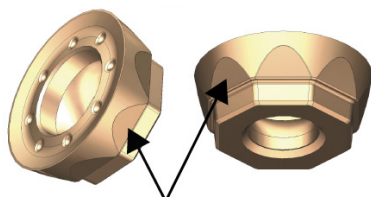
Stable, precise insert fit due to optimised insert design



- 4-sided RPHT mounted

Cutter body can be shared by optimizing the locating surface design

4-sided ground-type inserts and 8-sided M-class can be used on the same cutter body.



- 8-sided RPMT/RDMT mounted

Product video RSE radius milling cutter






Product range

Type	Cat. No.	Insert size	Ø 25	Ø 32	Ø 40	Ø 42	Ø 50	Ø 52	Ø 63	Ø 80
Shell	RSE 10000RS	10	-	-	Z5	-	Z6	-	-	-
	RSE 12000RS	12	-	-	Z4	Z4	Z5/6	Z5	Z6	Z8
Shank	RSE 10000E	10	Z2/3	Z3/4	-	-	-	-	-	-

Insert grade selection


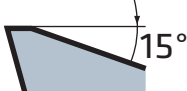
The newly developed **ACS2500/ACS3000** grades is ideal for machining titanium alloys, heat-resistant alloys and stainless steel.

ISO	Finishing to light cutting	Medium cutting	Rough to heavy cutting
S	 ACS2500		
	 ABSOTECH XCS2000		
M		 ABSOTECH ACS3000	

Inserts

Cat. No.	for body	Inner circle IC	Thickness S	Clamping surfaces	Clearance angle
RPHT10T3M0EN-G	10000RS/10000E	10	3,97	4	11°
RPMT10T3M0EN-G	10000RS/10000E	10	3,97	8	11°
RDMT10T3M0EN-G	10000RS/10000E	10	3,97	8	15°
RPHT1204M0EN-G	12000R	12	4,76	4	11°
RPMT1204M0EN-G	12000R	12	4,76	8	11°
RDMT1204M0EN-G	12000R	12	4,76	8	15°

Chipbreaker shape

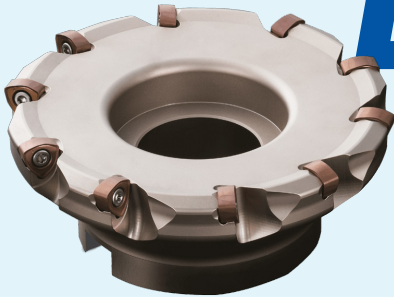
Applications	General-purpose to roughing
Features	Standard
Chipbreaker	<p>G-Type</p> 
Cutting Edge Cross Section	

More info and data on the RSE series



DMSW

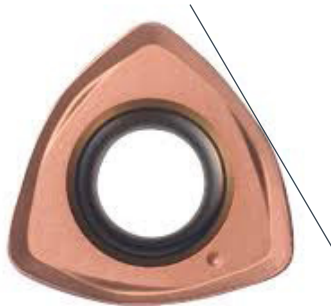
High-productivity
high-feed cutter
for rough milling



- The arc-shaped cutting edge reduces the cutting force to a minimum.
- Even at high feed rates of 2,0 mm/t or more, a reasonable surface finish can be attained.

High productivity thanks to an ultra-high metal removal rate as well as high economic efficiency, due to the stable double sided inserts with 6 cutting edges.

- High-efficiency machining at maximum feed rate per tooth of 3,5 mm/t is possible.
- The small approach angle (15°) directs most of cutting force in the axial direction and reduces the radial forces.
- High efficiency can be achieved by suppressing chatter in even long tool overhang machining.



Complex arc shape

A small chip cross-section due to a small approach angle enables high feed rates per tooth of up to 3,5mm/t.

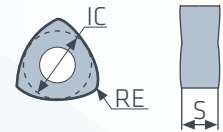


Product range

Type	Cat. No.	∅ 35	∅ 40	∅ 42	∅ 50	∅ 52	∅ 63	∅ 66	∅ 80	∅ 85	∅ 100	∅ 125	∅ 160
Shell	DMSW 08000RS	-	-	-	Z4/5	Z4/5	Z4/5/6	Z5/6	Z6/8	Z6/8	Z6	Z8	Z10
	DMSW 08000R	-	Z2	-	Z4/5	-	Z4/5/6	-	Z6/8	-	Z6	Z8	Z10
Shank	DMSW 08000E	Z2	Z3	-	Z3	-	Z4	-	-	-	-	-	-
	DMSW 08000EL	Z2	Z3	-	Z3	-	Z4	-	-	-	-	-	-
Modular	DMSW 08000M	Z2	Z3	Z3	-	-	-	-	-	-	-	-	-

Inserts

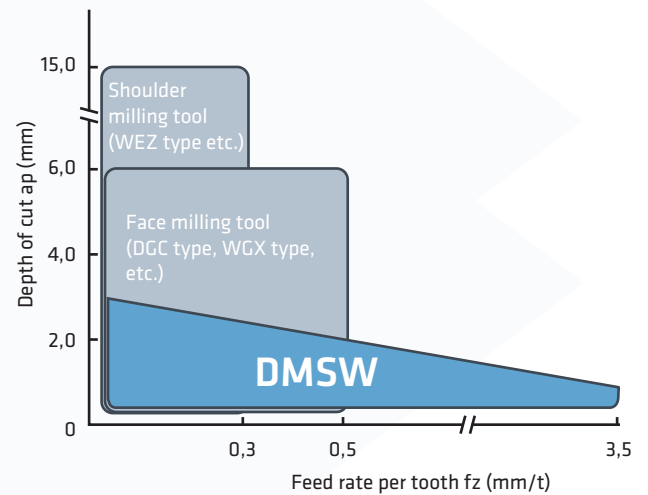
Cat. No.	ACU2500	ACP2000	ACP3000	ACK2000	ACK3000	XCU2500	XCS2000	ACS2500	ACS3000	Inner circle IC	Thick-ness S	RE
WNMU 0807ZNER-L	■	■	■				■	■	■	13	7	1,6
WNMU 0807ZNER-G	■	■	■	■	■	■	■	■	■	13	7	1,6
WNMU 0807ZNER-H	■	■	■				■	■	■	13	7	1,6



Insert grade selection

ISO	Finishing to light cutting	Medium cutting	Rough to heavy cutting
P	ABSOTECH ACU2500	ABSOTECH XCU2500	ABSOTECH ACP2500
		ABSOTECH ACP3000	
S	ABSOTECH ACU2500	ABSOTECH XCU2500	ABSOTECH XCS2000
		ABSOTECH ACS2500	ABSOTECH ACS3000
K	ABSOTECH ACU2500	ABSOTECH XCU2500	ABSOTECH ACK2000
			ABSOTECH ACK3000

Depth of cut

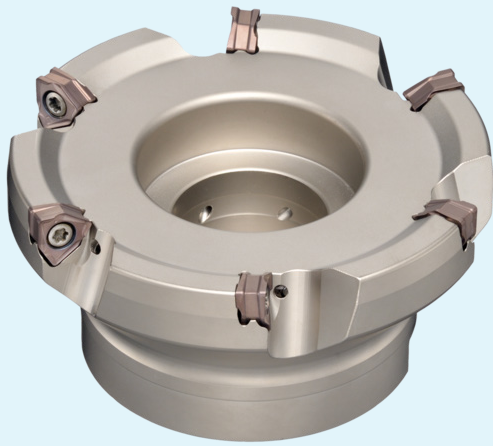


Chipbreaker

Work Material	P M K S	P M K S	P M K H
Applications	Light cutting	General purpose	Heavy cutting
Chip breaker	L	G	H
Cutting edge design			
Cutting edge cross section	0,15mm 	0,12mm 	0,22mm

More info and data on the DMSW series





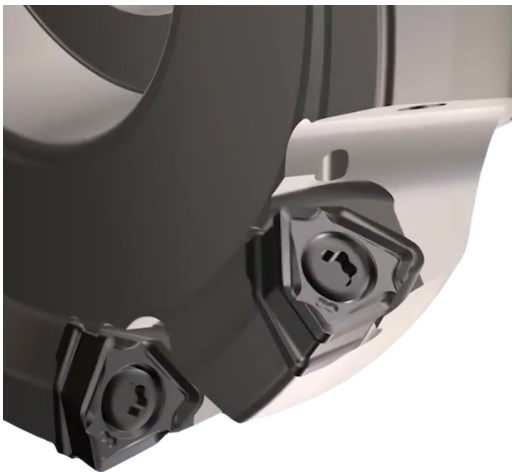
- Stable and reliable machining
- Cutter body as shank and shell type available

DFC

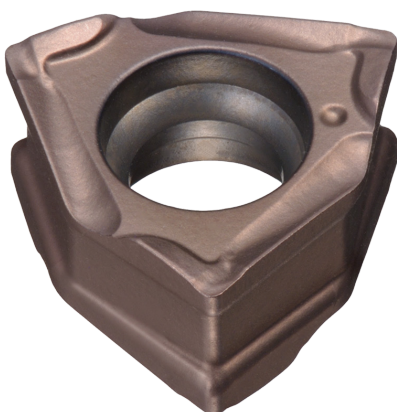
Highly efficient
economical universal
milling cutter

The SumiDual Mill DFC Type is a high-efficient shoulder milling cutter with double-sided 3-cornered inserts.

- Standard / Medium / Fine pitch
- Wide milling cutter range with diameter from \varnothing 25mm to 160mm



Inserts with table and High Cutting Performance Combined with High Toughness



New GS chipbreaker for shoulder milling

Facts:

- Controlled chip evacuation
- Avoids chip clamping
- Improved surface quality

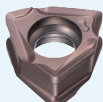
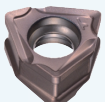
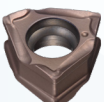
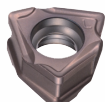




Product video DFC universal milling cutter



Product range

Type	Cat. No.	Series	Insert size	∅ 25	∅ 32	∅ 40	∅ 50	∅ 63	∅ 80	∅ 100	∅ 125	∅ 160
Shell	DFC09000RS	Standard pitch	9	-	-	-	Z4	Z4	Z5	Z6	Z7	Z8
	DFCM09000RS	Fine pitch	9	-	-	-	Z5	Z6	Z7	Z8	Z11	Z12
	DFCF09000RS	Extra-fine pitch	9	-	-	-	Z6	Z7	Z9	Z11	Z14	Z16
Shank	DFC09000E	Standard pitch	9	Z2	Z2	Z3	Z3	Z4	Z5	-	-	-
	DFCM09000E	Fine pitch	9	-	Z3	Z4	Z5	Z6	Z8	-	-	-

Chipbreaker

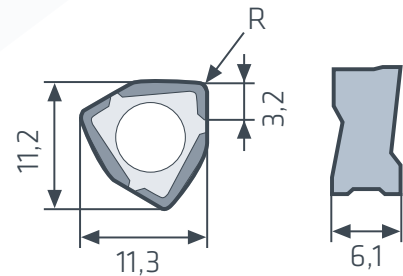
Work Material	Steel, Cast Iron			
Chipbreaker	L	G	GS	H
Feature	Low cutting force	General purpose	Shoulder milling	Strong edge
Cutting edge design				
Cutting edge cross section				
Application	Light cut, low rigidity milling and reduced burrs	Main breaker for general purpose applications	Shoulder milling for high shoulders, optimised chip removal	Roughing, heavy interrupted and hardness steel milling

Insert grade selection

ISO	Finishing to light cutting	Medium cutting	Rough to heavy cutting
P	ABSOTECH ACU2500		
	ABSOTECH XCU2500		
	ACP100		
	ACP200		
P	ABSOTECH ACU2500		
	ABSOTECH XCU2500		
	ACM200		
	ACM300		
	ACS2500		
	ABSOTECH ACS3000		
K	ABSOTECH ACU2500		
	ABSOTECH XCU2500		
	XCK2000		
	ACK200		
S	ACM200		
	ACM300		

Inserts

Cat. No.	R0,4	R0,8	R1,2	R1,6
XNMU0606_PNER-L	■	■		
XNMU0606_PNER-G	■	■	■	■
XNMU0606_PNER-GS	■	■	■	■
XNMU0606_PNER-H		■	■	■



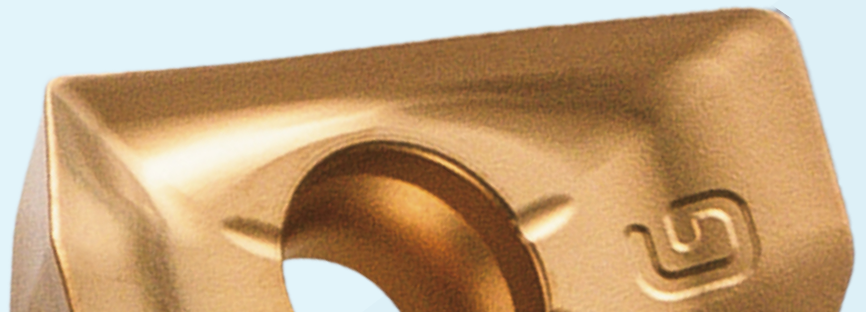
More info and data on the DFC series



New grades

for common ISO-applications

ACU2500
XCU2500



ACU2500 ABSOTECH stable under heavy use

The ACU2500 achieves a stable and long tool life in milling a wide range of materials, including steel and cast iron.

Facts:

- ABSOTECH®-coating for excellent wear resistance and resistance to chipping
- Carbide substrate with excellent fracture and wear resistance for long service life.
- Excellent cutting edge sharpness for low required cutting forces
- Reduces machining noise and suppresses burr formation



Further information on
the new grade ACU2500



XCU2500 ABSOTECH X revolutionary new coating

The revolutionary new ABSOTECH®X coating is particularly wear- and break-resistant and ensures extremely long service lives on steel, cast iron and stainless steel.

Facts:

- The revolutionary ABSOTECH X coating combines the wear resistance of conventional CVD coatings with the fracture resistance of PVD coatings
- Excellent thermal crack and fracture resistance
- Carbide substrate with balanced hardness and toughness for performance over a wide range of cutting speeds



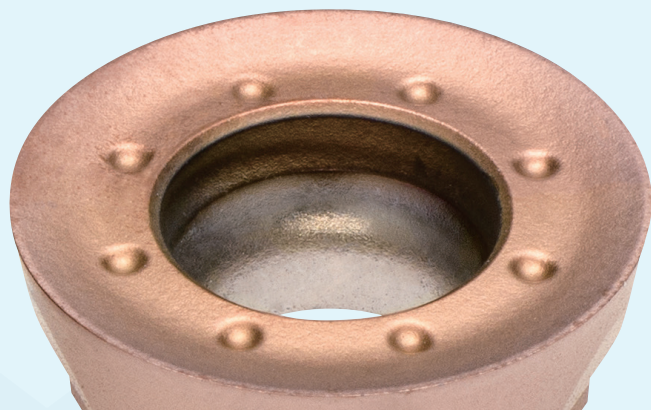
Further information on
the new grade XCU2500



for exotic materials

such as Ni-based alloys, cobalt (Co)-based alloys and Titanium (Ti) alloys

ACS2500
ACS3000

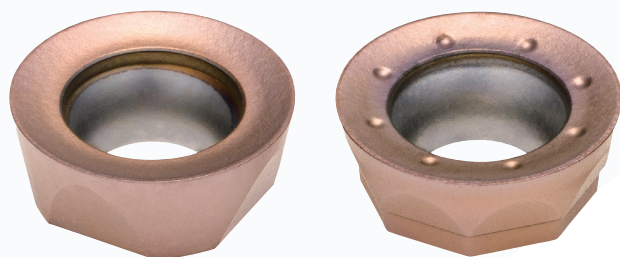


ACS2500 ideal for titanium alloys

The ACS2500 grade is a combination of an ultra-fine-grained AlTiBN layer and a carbide substrate of the S20 class.

Facts:

- New PVD coating with AlTiBN multi-layer structure for more strength, wear resistance and stability
- Improved stability due to better adhesion between coating and carbide substrate
- Excellent wear and adhesion resistance
- Convincing performance, especially with titanium alloys



M S

Further information on the new grade ACS2500

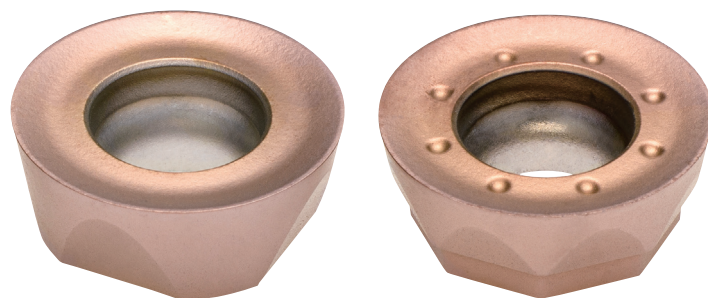


ACS3000 ideal for Inconel alloys

The grade ACS3000 is a combination of an ultra-fine-grained AlTiBN layer and a carbide substrate of the S30 class.

Facts:

- Highly ductile carbide substrate and coating with very good machining resistance provide excellent stability
- Excellent results when machining heat-resistant alloys in a wide range of applications.
- Very long service life due to the excellent wear-resistance



M S

Further information on the new grade ACS3000





SUCCESS IS A MATTER OF ATTITUDE

The WEDCO Plus for customer success:
Fast & innovative to the perfect process,
From SUMITOMO comes the tool,
from WEDCO the know-how.



RELIABLE, EXPERIENCED, PROFESSIONAL

WEDCO is your exclusive SUMITOMO partner in Austria, since 1991.

WEDCO Handelsgesellschaft m.b.H., Zerspanungs- und Präzisionswerkzeuge
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