



SUMITOMO

CARBIDE - CBN - DIAMOND

Global Support, Global Solutions.

Small Lathe Tools

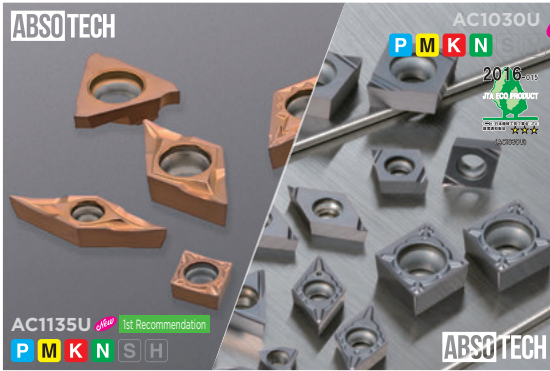
SumiSmall

Guidance 2026



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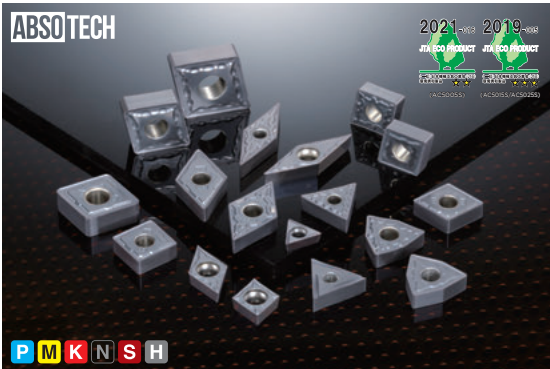
AC1135U/AC1030U

Coated Carbide Grades for Small Lathes/Autolathes

1st recommended material for small lathes/autolathes

Employs ABSOTECH™ PVD coating and a dedicated tough carbide substrate. High-quality cutting edge suppresses adhesion and micro-chipping, realising excellent machined surface quality.

New AC1135U grade is a versatile coated carbide grade specialized for small lathe/autolathe machining, supporting various work materials including stainless steel



AC5005S/AC5015S/AC5025S

Coated Carbide Grades for Exotic Alloy Turning

Highly heat-resistant super multi-layered thin-film AlTiSiN structure realises excellent crater wear and flank wear resistance.

PVD coated carbide grades for exotic alloy turning, realizing absolutely stable machining on various work materials such as Inconel



AC9115T/AC9125T

Coated Carbide Grades for Titanium Alloy Turning

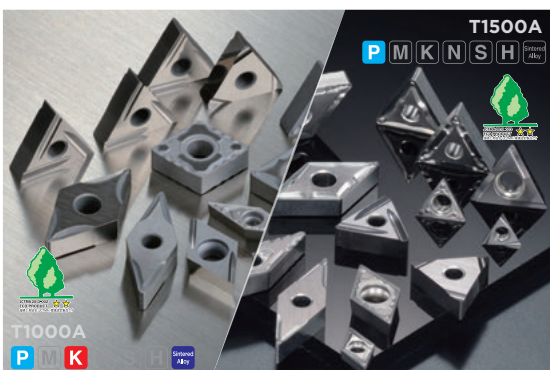
Coated carbide grade dedicated for titanium alloy, utilizing PVD coating Absotech™ technology, which adopts the industry's first WC-based composition, and a dedicated carbide substrate to suppress chemical reactions to titanium alloy and significantly improve wear resistance



T2100Z/T2500Z

Coated Cermet Grades for Steel Turning

Crack progression dramatically suppressed with new dedicated high-strength cermet alloy
Fracture and wear resistance also improved through a coating technology with excellent adhesion strength
Coated cermet grade with outstanding stability, realizing the machined surface finish unique to cermet



T1000A/T1500A

Uncoated Cermet Grades for Steel Turning

Lineup includes T1000A, a high-hardness grade with superior wear resistance, and T1500A, a general-purpose grade that provides both wear and fracture resistance with higher-quality surface finishes

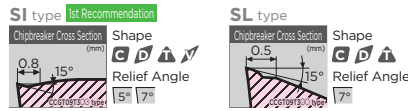




SI type/SL type Chipbreaker

General-purpose 3D Chipbreaker for G-class Positive Inserts

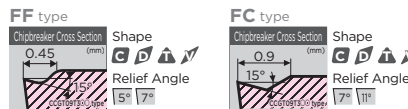
SI type is our 1st recommendation for small lathes and autolathes, realizing excellent chip control performance over a wide range of cutting conditions
SL type suppresses burrs, chatter, and machined surface defects with cutting edge sharpness, using a slanted cutting edge for excellent cutting performance even in vibration cutting



FF type/FC type Chipbreaker

Finishing 3D Chipbreaker for G-class Positive Inserts

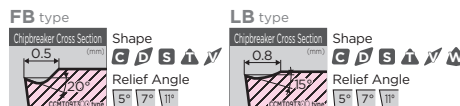
FF type realizes outstanding chip evacuation in fine cutting conditions
FC type offers excellent chip evacuation and cutting edge sharpness in finishing cutting applications



FB type/LB type Chipbreaker

3D Chipbreaker for M-class Positive Inserts

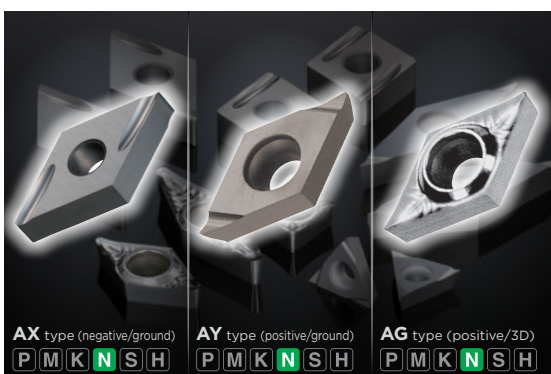
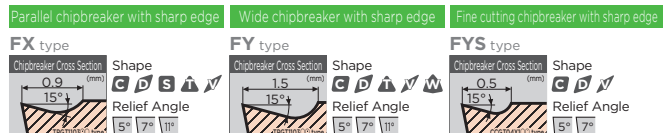
FB type reduces edge fracture with excellent chip control in finishing and ridged cutting edge
LB type chipbreaker for M-class positive inserts has excellent cutting edge sharpness and chip control



FX type/FY type/FYS type Chipbreaker

Ground Chipbreaker for G-class Positive Inserts

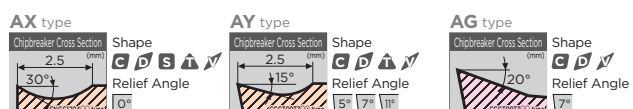
Ground chipbreaker for finishing to light cutting with excellent cutting edge sharpness

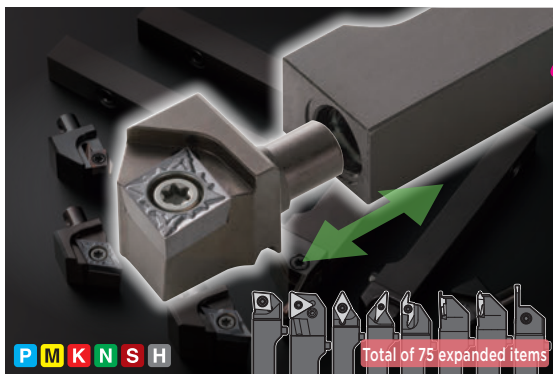


AX type/AY type/AG type Chipbreaker

Chipbreaker series for Aluminum Alloy and Non-Ferrous Metal Turning

This series provides a beautiful surface finish and excellent chip control thanks to its high rake design





Replaceable Head Type Quick Change Tool Holders

APM series

Small Lathe/Autolathe Tools

Mounting/removing the head alone improves workability and safety when changing the insert, reducing machine downtime at changeovers and thus increasing productivity. Polygon taper shape achieves head change repeatability within 5µm for all 3 axes

External		Internal Coolant Supply		Coolant Supply Without Hole		Replaceable Head type	
Turning	Back Turning	Grooving	Cut-off	Threading			



SEC-Mini Tool Holders

PC(-X) type/PD(-X) type

Back Clamp Holder

Supports gang type toolposts; exchanging positive type inserts on the machine is easy with lever locking holder. Lineup also includes zero-offset type

External	Back Clamp
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Applicable Inserts: C D



SEC-PB Tool Holders

SPB series

Special Tool Holders for Small Products Turning

Lineup includes uncoated binderless carbide grade BL130, with outstanding wear resistance and sharp-cornered cutting edges, usable on turret-type toolposts as well

External	Turning	Back Turning	Grooving	Cut-off	Threading
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SEC-Mini Tool Holders

SBT series/PBT series

Special Tool Holders for Small Products Turning

Realises smooth chip evacuation and superb surface finish in back turning

Also supports Replaceable Head Type Quick Change Holder APM series. Maximum depth of cut 8.0mm, width of cut 2.5mm

External	Back Clamp	Back Turning
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SEC-Wide-Cut Holders

SGW series

SUMIDIA Multi-purpose Tool

PCD chipbreaker SUMIDIA BREAK MASTER LD type realises outstanding chip control in grooving and traverse cutting of aluminum alloys

External	Grooving	Traverse Cutting
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SEC-Round Shank Tool Holders

RS series

Adapter Sleeve Holder Tool for External Turning

Lineup includes shank diameters of $\phi 14$ to 25mm, supporting various adapter sleeve toolposts

External Turning

Applicable Inserts:



SEC-MINI Boring Tool Holders/Twin Head Holder

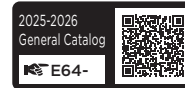
CKB series/CKBE type/CKBB type

Very Small Diameter Turning Tool/Multi-functional Small Lathe Tools

Turning, internal boring, and face grooving are supported through the combination of a unique design that ensures high indexing accuracy and easy insert replacement. The Twin Head Holder is an innovative small tool usable with two cutting edge types, supporting drill adapter sleeve toolposts as well.

External Internal Face Grooving

Min Bore Dia: $\phi 1.0\text{mm}$ -



Solid Carbide Bar

BXBR series

Very Small Diameter Turning Tool

Economical 2-cornered bars Usable at any desired overhang. Usable at any desired tool overhang length.

Internal

Min Bore Dia: $\phi 2.0\text{mm}$ -



Small Diameter Boring Bar

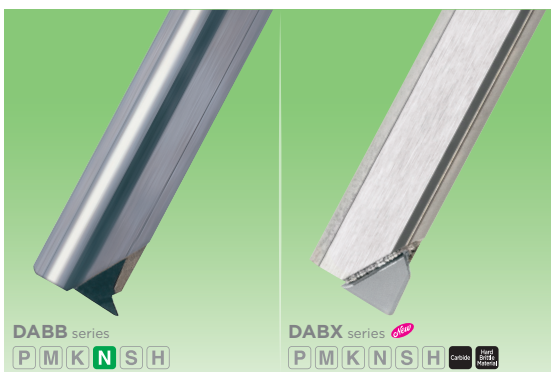
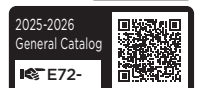
SEXC series/BSME series

Small Diameter Turning Tool

Clamp mechanism achieves high-precision cutting edge position. Realises high-efficiency machining by switching from grinding to cutting in the small diameter range. SEXC series is an indexable insert type with 2-corner specifications; BSME series is a brazed type.

Internal Coolant Supply Internal

Min Bore Dia: BSME series $\phi 2.5\text{mm}$ - SEXC series $\phi 4.0\text{mm}$ -



SUMIDIA/SUMIDIA BINDERLESS Boring Bars

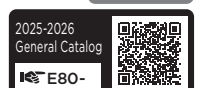
DABB series/^{New} DABX series

Tool for small hole boring of aluminum alloy and carbide

Boring Bars for Small-Diameter Internal Boring ($\phi 3.0\text{mm}$ up). DABB series, using PCD, is for non-ferrous metal machining; DABX series, using nano-polycrystalline diamond (SUMIDIA BINDERLESS), realizes high-precision carbide machining.

Internal

Min Bore Dia: DABB series $\phi 3.0\text{mm}$ - DABX series $\phi 3.0\text{mm}$ -





SEC-Grooving Tools

GND series

Grooving/Cut-off Tools

High-rigidity integrated body that uses die steel and diverse inserts that achieve outstanding chip control
Lineup includes GNDXL type for deep grooving (up to 32mm) and GNDIS type for internal grooving (ø14mm up)

Internal Coolant Supply Coolant Supply Without Hole External Internal Face Grooving Traverse Cutting Cut-off Necking Width of Cut: 1.25-8.00mm



SEC-Grooving Tools

GWC series

Shallow Grooving/Threading Tools

Grooving tools using the 3-cornered specification TGA type insert, boasting a wide lineup of grades.
Also supports Replaceable Head Type Quick Change Holder APM series, with TTE type threading insert available as a series as well

External Internal Grooving Threading Width of Cut: 0.33-4.80mm Applicable Thread Standard: M W UNC/UNF



SEC-Grooving Tools

SSH series

Internal Grooving Tools

Tough carbide body suppresses chatter
Supports internal grooving of ø8mm up
Supports bottom facing grooving with minimum bore diameter from ø14mm and groove depth up to 3.0mm

Internal Coolant Supply Internal Face Grooving Traverse Cutting Chamfering Width of Cut: 0.74-3.00mm



SEC-Small Diameter Cut-off Tool Holders

SCT series

Cut-off Tools

Uses tangential 2-cornered inserts (width of cut 0.5mm up, cut-off diameter ø5 to 16mm supported).
Just operate the clamp screw from the back to exchange inserts easily

External Cut-off Width of Cut: 0.5-2.0mm Max. Cut-off Dia.: ø16mm



SEC-Threading Tools

SSTE series / SSTI series

Threading Tools

Realises stable chip control thanks to a 3D chipbreaker, supporting various thread types

External Internal Threading Applicable Thread Standard: M W UNC/UNF G/Rp/W NPT R/Rc NPTF UNJ

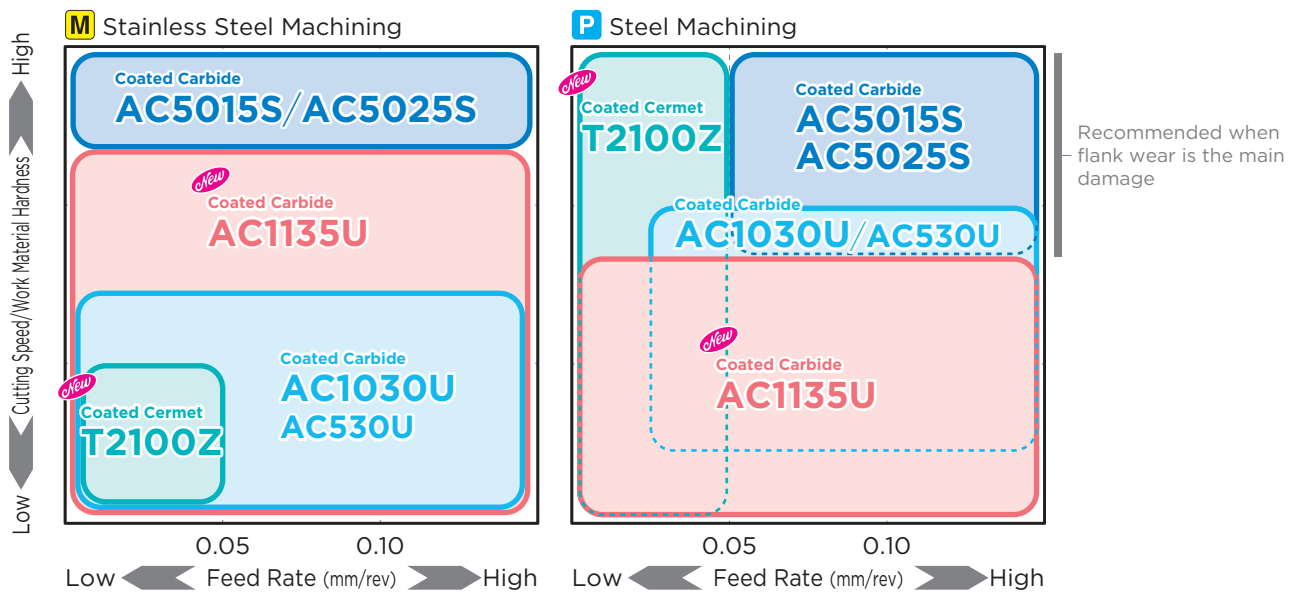


Insert Grade Application Range (General-purpose)

Insert Grades	Application Range			Work Material						
	High-precision	Finishing to Light Cutting	Medium Cutting	P Steel	M Stainless Steel	K Cast Iron	N Non-Ferrous Metals	S Exotic Alloy	S Titanium Alloy	H Hardened Steel
Coated Carbide (PVD)	AC1135U			⊙	⊙	○	○	○	○	
	AC1030U			⊙	⊙	○	○	○	○	
	AC5015S			⊙	⊙	○	○	○	○	
	AC5025S			⊙	⊙	○	○	○	○	
	AC530U			⊙	⊙	○	○	○	○	
	AC9115T			⊙	⊙	○	○	○	○	
Uncoated Cermet Coated Cermet	T1000A			⊙	○	⊙	○			
	T2100Z			⊙	○	○	○			
	T1500A/T1500Z			⊙	○	○	○			
Cemented Carbide	BL130			○	○	○	○		○	
		H1		○	○	○	○		○	
		EH510		○	○	○	○		○	
CBN (SUMIBORON)		BN1000/BN2000								⊙
		BN7125								⊙
PCD (SUMIDIA)		DA1000					⊙			

⊙ : 1st Recommendation ○ : 2nd Recommendation

Optimal Insert Grade Application Range for Autolathes



G-Class 3D Chipbreaker Selection Guide

SI type 3D G Class

1st recommendation for small lathe/autolathe machining

Excellent chip control performance over a wide range of cutting conditions

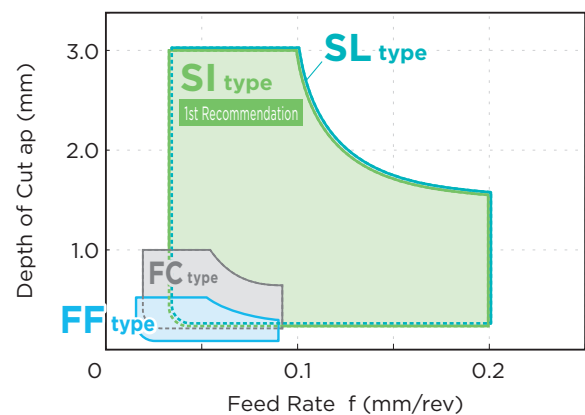
FF type 3D G Class

Outstanding chip control in fine finishing

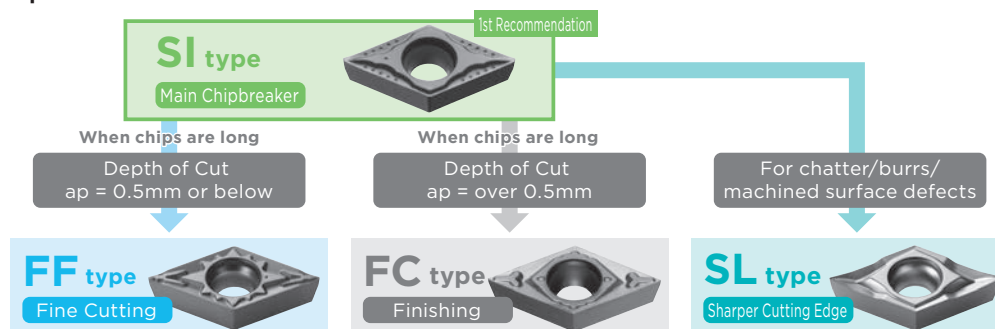
SL type 3D G Class

Excellent cutting edge sharpness over a wide range of cutting conditions
Emphasis on high machined surface quality

Chipbreaker Application Range



Selecting Chipbreakers





NeXEOMDE series

Coated Carbide Drill

General-purpose drill suitable for a wide range of work materials and cutting conditions

External Coolant Supply Internal Coolant Supply
 Diameter: ϕ 1.0-20.0mm 2D 3D 4D 5D 8D



Flat MULTIDRILL

MDF series / *New* MDF-A type

Coated Carbide Drill

Effective for drilling on tilted and cylindrical surfaces, ideal for burr control at through hole exits. Also supports aluminum alloy drilling

External Coolant Supply Internal Coolant Supply
 MDF series Diameter: ϕ 0.3-20.0mm 2D 3D 5D
 MDF-A type Diameter: ϕ 2.0-10.0mm 2D 3D



SumiDrill

WDX series

Indexable Insert type Drill

Excellent cutting balance that provides stable drilling on a wide range of work materials from general steel to stainless steel and aluminum alloy. Also ideal for turning

Internal Coolant Supply Indexable Insert type External Turning
 Diameter: ϕ 13.0-68.0mm 2D 5D 4D
 Diameter: ϕ 13.0-55.0mm 5D



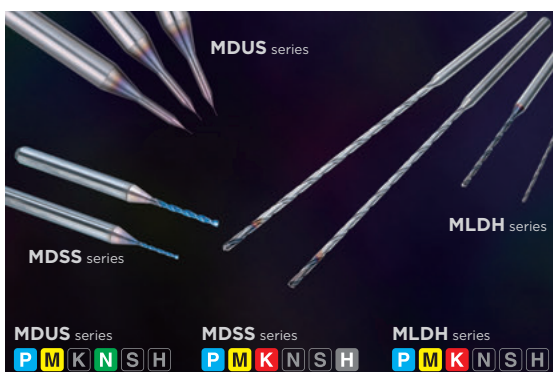
MULTIDRILL

MDA series

DLC Coat Drill for Non-Ferrous Metal Drilling

Covers a wide application range from high-precision to high-efficiency drilling. New DLC Coat and AURORA Coat X now available

Internal Coolant Supply
 Diameter: ϕ 1.0-3.0mm 3D 5D 10D 15D 20D
 Diameter: ϕ 3.1-12.0mm 3D 5D 10D



MULTIDRILL series for Very Small and Small Diameter Drilling

Micro MULTIDRILL MINI-MULTIDRILL Micro Long Drill MDUS series / MDSS series / MLDH series

Solid Carbide Drill

Wide-ranging lineup supports very small diameter drilling of ϕ 0.03mm up. Drills for ϕ 0.02mm and up can also be made to order

External Coolant Supply Internal Coolant Supply MDP
 MDUS series Diameter: ϕ 0.03-0.19mm P100 10D
 MDSS series Diameter: ϕ 0.20-1.00mm 10D
 MLDH series Diameter: ϕ 0.80-2.00mm P100 5D 12D 20D 50D





MULTIDRILL
MDC series

Coated Carbide Leading Drill

Leading drill for center hole drilling with 90° tip angle improves main drill hole position precision Also ideal for chamfering, grooving, and contouring in small lathe/autolathe machining, with high centering accuracy and low resistance

External Coating Supply Chamfering
Diameter: ø3.0-12.0mm 2D



GSX MILL series

Global Standard Solid Endmills

GSX Coat has increased wear resistance and thermal resistance for improved reliability and longer tool life. Large rake angle and unique groove design realize excellent cutting edge sharpness and chip evacuation

Coated Carbide Square Anti-vibration Square Radius Anti-vibration Radius Multi-purpose Ballnose
Diameter: ø0.3 to 25.0mm (Square) ø0.3 to 12.0mm (Radius) ø1.0 to 12.0mm (Multi-purpose) ø0.4 to 20.0mm (Ballnose)



AURORA Coat Endmill series

DLC Coat Endmills for Non-Ferrous Metal Machining

Low adhesion, good surface finish and low cutting force with DLC ultra-smooth Aurora Coat, enabling high-feed cutting and machining of low-rigidity workpieces

Lineup also includes Long Neck Ballnose Endmill SNB2 type, ideal for copper electrode machining as well

DLC Square Ballnose
Diameter: ø2.0 to 16.0mm (Square/Ballnose) ø0.1mm to 4.0mm (Long Neck Ballnose)



Solid Chamfering Endmills

AVIC type

Endmills for Aerospace Component Machining

High-raked cutting edge design significantly reduces cutting force

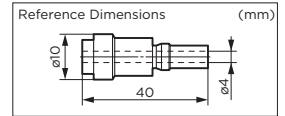
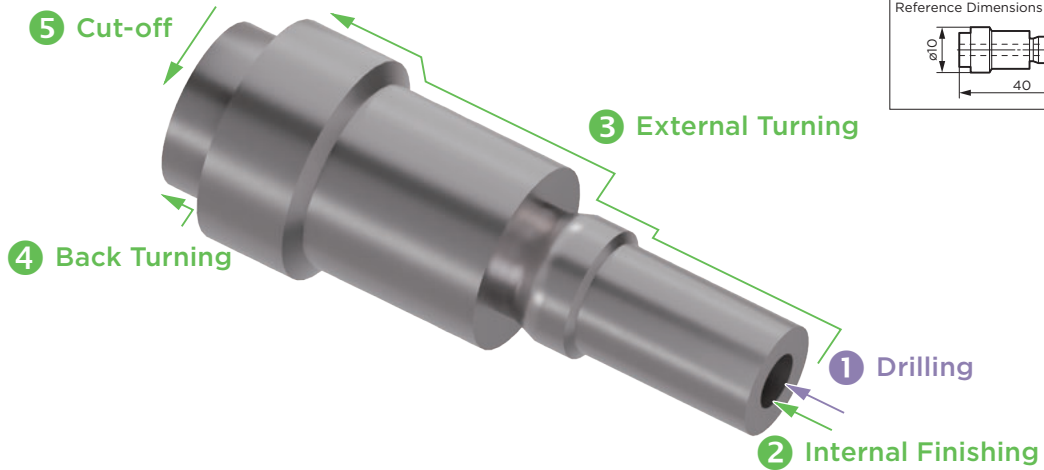
Realizes burr-free machining and suppresses damage to laminated workpieces during machining

Front and back chamfering is possible with a single tool

Uncoated Carbide Coated Carbide Chamfering
Diameter: ø2.0 to 12.0mm (Metric) ø2.383 to 12.7mm (Inch)



Steel
Stainless Steel



1 NeXEO MDE series

Coated Carbide Drill

General-purpose drill suitable for a wide range of work materials and cutting conditions
Stable drilling on small machining centers and small lathes as well



Diameter: $\phi 1.0$ - 20.0 mm **2D 3D 4D 5D 8D**

Drilling
External Coolant Supply Internal Coolant Supply

P M K N S H

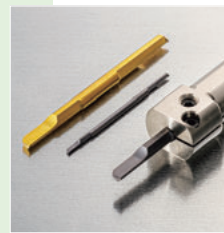
Product introduction in this leaflet

P8

2 BXBR series

Very Small Diameter Turning Tool

Economical 2-cornered specification, usable at any desired overhang
Shank size = min. bore diameter for easy selection



Min Bore Dia: $\phi 2.0$ mm-

Internal

P M K N S H

Product introduction in this leaflet

P5

3 Replaceable Head Type Quick Change Tool Holders

4 APM series *Expansion*

Small Lathe/Autolathe Tools

Mounting/removing the head alone improves workability and safety when changing the insert, reducing machine downtime at changeovers and thus increasing productivity
Realizes head change repeatability within 5 μ m



Shank Size: 10/**12**/16mm square
Replaceable Heads: 9 types

External Replaceable head type
Back Turning Grooving Cut-off Threading
Internal Coolant Supply Coolant Supply Without Head

P M K N S H

Product introduction in this leaflet

P4

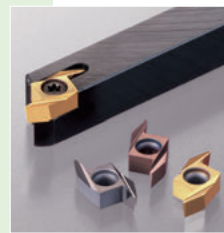
4 SEC-Mini Tool Holders

5 SBT series/PBT series

Special Tool Holders for Small Products Turning

Realises smooth chip evacuation and superb surface finish in back turning

- SBT series: Screw-on, PBT series: Back Clamp



Holder Size: 10/**12**/16/20mm square
Maximum Depth of Cut: Up to 3.5mm (SBT series) /
Up to 8.0mm (PBT series)

Width of Cut: 2.5mm (SBT series) / 2.5 to 5.2mm (PBT series)

External
Back Turning

P M K N S H

Product introduction in this leaflet

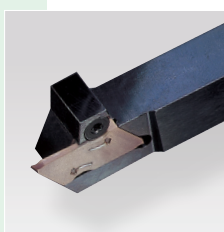
P4

5 SEC-Small Diameter Cut-off Tool Holders

6 SCT series

Cut-off Tools

Cut-off tool using tangential 2-cornered inserts, exchangeable just by loosening the screws



Holder Size: 10/**12**/16mm square
Max. Cut-off Dia.: Up to $\phi 16$ mm
Width of Cut: 0.5 to 2.0mm

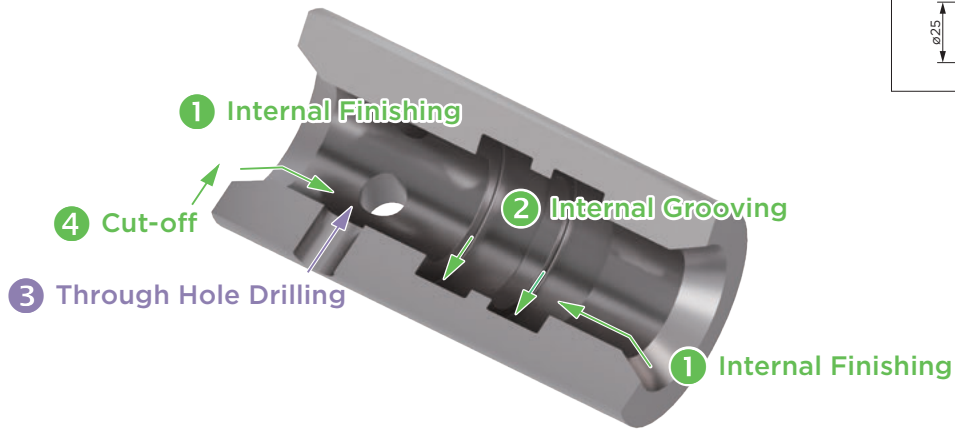
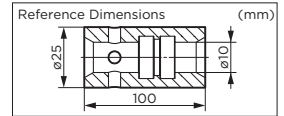
External
Cut-off

P M K N S H

Product introduction in this leaflet

P6


- Steel
- Stainless Steel



Small Diameter Boring Bar

1 SEXC series
Small Diameter Turning Tool

Clamp mechanism achieves high-precision cutting edge position
Realises high-efficiency machining by switching from grinding to cutting in the small diameter range
Economical Indexable Insert type



Min Bore Dia: $\varnothing 4.0\text{mm}$ -

Internal
Internal Coolant Supply

P M K N S H

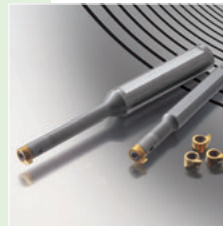
Product introduction in this leaflet

P6

SEC-Grooving Tools

2 SSH series
Internal Grooving Tools

Tough carbide body suppresses chatter
Supports internal grooving of $\varnothing 8\text{mm}$ up



Min Bore Dia: $\varnothing 8.0\text{mm}$ up
Max. Groove Depth: Up to 4.0mm
Width of Cut: 0.74 to 3.00mm

Internal	Face	
Grooving	Transverse Cutting	Chamfering
Internal Coolant Supply		

P M K N S H


Product introduction in this leaflet

P6

Flat MULTIDRILL

3 MDF series *Expansion*
Coated Carbide Drill

Effective for drilling on tilted and cylindrical surfaces,
ideal for burr control at through hole exits



Diameter: $\varnothing 0.3$ -20.0mm 2D 3D 5D

Drilling	
External Coolant Supply	Internal Coolant Supply

P M K N S H

Product introduction in this leaflet

P8

SEC-Grooving Tools

4 GND series (Small Lathe series)
Grooving/Cut-off Tools

High rigidity integrated body that uses die steel and a diverse lineup of inserts that achieve outstanding chip control



Holder Size: 10/12/16/20/25mm square
Max. Cut-off Dia.: Up to $\varnothing 32\text{mm}$ (Small Lathes)
Width of Cut: 1.25 to 8.00mm

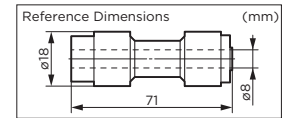
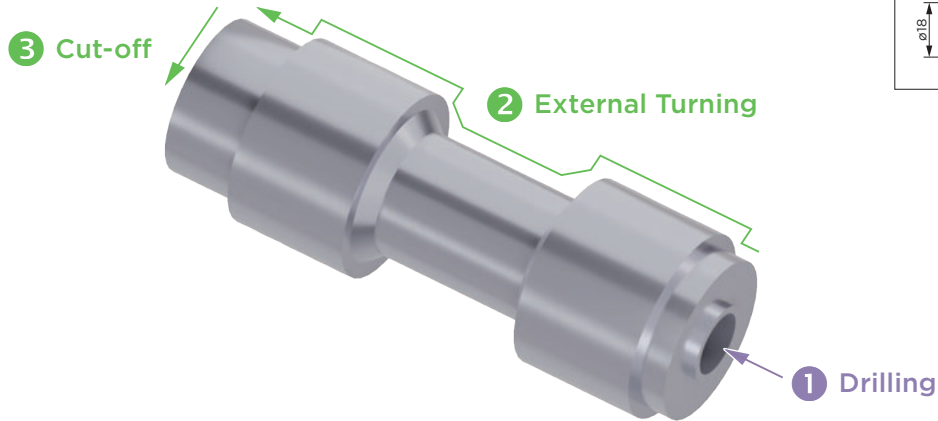
External	Internal	Face	
Grooving	Transverse Cutting	Cut-off	Necking
External Coolant Supply	Internal Coolant Supply	Coolant Supply Without Hops	

P M K N S H

Product introduction in this leaflet

P6

Aluminum Alloy



MULTIDRILL

1 MDA series
DLC Coat Drill for Non-Ferrous Metal Drilling

Covers a wide application range from high-precision to high-efficiency drilling
 New DLC Coat and AURORA Coat X now available

Diameter: $\phi 1.0$ - 3.0 mm
 $\phi 3.1$ - 12.0 mm

Drilling
 Internal Coolant Supply

P M K N S H

Product introduction in this leaflet

2 AX type / AY type / AG type Chipbreaker

Chipbreaker series for Aluminum Alloy and Non-Ferrous Metal Turning

This series provides a beautiful surface finish and excellent chip control thanks to its high rake design

Negative/Ground **AX type** 2.5 (mm) 30° 0°

Positive/Ground **AY type** 2.5 (mm) 15° 5° 7° 11°

Positive/3D **AG type** 2.5 (mm) 20° 7°

P M K N S H

Product introduction in this leaflet

Replaceable Head Type Quick Change Tool Holders

2 APM series *Expansion*

3 Small Lathe/Autolathe Tools

Mounting/removing the head alone improves workability and safety when changing the insert, reducing machine downtime at changeovers and thus increasing productivity
 Realizes head change repeatability within $5\mu\text{m}$

Shank Size: $10/12/16$ mm square
 Replaceable Heads: 10 types

External Replaceable head type
 Back Turning Grooving Cut-off Threading
 Internal Coolant Supply Coolant Supply Without Hose

P M K N S H

Product introduction in this leaflet

SEC-Wide-Cut Holders PCD

2 SGW series

SUMIDIA Multi-purpose Tool

PCD chipbreaker SUMIDIA BREAK MASTER LD type realises outstanding chip control in grooving and traverse cutting of aluminum alloys

Holder Size: $12/16$ mm square
 Width of Cut: 2.0 to 2.5 mm (PCD)
 Max. Groove Depth: Up to $\phi 6.5$ mm (PCD)

External Grooving Traverse Cutting

P M K N S H

Product introduction in this leaflet

SEC-Grooving Tools

3 GND series (Small Lathe series)

Grooving/Cut-off Tools

High rigidity integrated body that uses die steel and a diverse lineup of inserts that achieve outstanding chip control

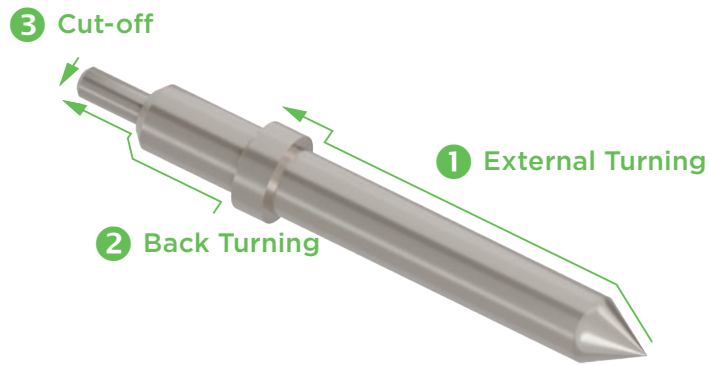
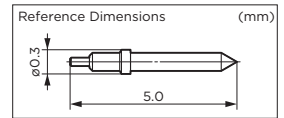
Holder Size: $10/12/16/20/25$ mm square
 Max. Cut-off Dia.: Up to $\phi 32$ mm (Small Lathes)
 Width of Cut: 1.25 to 8.00 mm

External Internal Face
 Grooving Traverse Cutting Cut-off Necking
 External Coolant Supply Internal Coolant Supply Coolant Supply Without Hose

P M K N S H

Product introduction in this leaflet

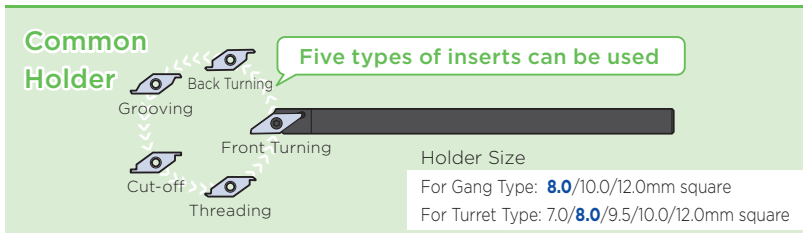
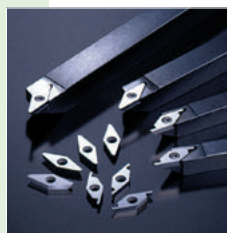
Copper Alloy



SEC-PB Tool Holders

- 1 **SPB series**
- 2 **Very Small Diameter Turning Tool**
- 3 High-rigidity holder adopted to support both gang-type and turret-type toolposts

Five types of inserts can be used with a single holder to suit the application, contributing to reduced tool costs
 Stock now includes uncoated binderless carbide grade BL130, with outstanding wear resistance and sharp-cornered cutting edges, while ultra-fine grained carbide grade F1 can be made to order

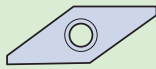


External	Turning	Back Turning
Grooving	Cut-off	Threading
External Coolant Supply	P M K N S H	

Product introduction in this leaflet

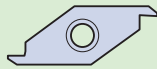
Applicable Inserts for Probe Pin Machining

1 Front Turning PBVF type



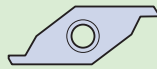
Effective Length: 1.0mm | Wiper Edge: Y/N

2 Back Turning PBVB type



Effective Length: 1.0mm | Wiper Edge: Y/N

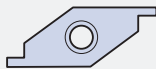
3 Cut-off PBVC type



Max. Cut-off Dia.: 5.0mm | Width of Cut: 1.0mm


Other Inserts

Grooving PBVG type




Max. Groove Depth: 0.5/1.0/2.0mm
 Width of Cut: 0.3/0.5/1.0mm

Threading PBVT type



Machining Pitch: 0.2 to 0.5mm

Insert Blanks PBVX type



Edge grinding is easy with uncoated grades
 For Wide Range / Sharp Edge / Grooving/Cut-off/Threading, etc.

External Turning (1)

Application / Model / Page	Cut-off	Back Turning	Profiling	General External Turning	Grooving	Grooving / Cut-off
	SCT series	SBT series PBT series <i>Expansion</i>	SV series	PD/SD series	GWC series TGA type Insert <i>Expansion</i>	GND series <i>Expansion</i>
	➡ F88 ~	➡ D44	➡ D36 ~	➡ D32, D33	➡ F4	➡ F12 ~
Cutting Edge Shape						
	0.5 to 2.0mm 20° Max. Bore Dia. 8 to 16mm	2.5 to 5.2mm RE 0.05, RE 0.15mm 3.5 to 8.0mm	SV□ type SVPD type 95° 117.5° 7° Positive 11° Positive	PDJC type SDJC type 93° 93° Back Ramp Clamp Screw-on	0.33 to 2.8mm 0.8 to 2.5mm	1.25 to 3.00mm 8 to 16mm
	➡ D20 ~	➡ D17 ~	➡ D15 ~	➡ D14 ~	➡ D18 ~	➡ D20 ~

External Turning (2)

Application / Model / Page	Turning	Turning	Grooving Traverse Cutting	Threading	Threading	Threading	Threading
	SFT series	PTXN-X type	SGE series	STH series	GWC series TTE type Insert <i>NEW</i>	SSTE series	THE series
	➡ D46	➡ D29	➡ F56	➡ F120	➡ F4	➡ F112 ~	➡ F124
Cutting Edge Shape							
	0.5 RE0 to 0.2mm 32°	100° Negative	3.0 to 6.0mm RE 0.2, RE 0.4mm	0.4 to 1.25mm Pitch 0.2 to 1.58mm RE 0.05 0.10mm	0.05 to 1.70mm Pitch 0.2 to 3.0mm	0.6 to 1.3mm Pitch 0.5 to 3.0mm	1.4mm Pitch 0.8 to 3.0mm
				➡ D18 ~			

Replaceable Head Type Quick Change Tool Holders APM series Shank ➡ D12

Application / Model / Size	Grooving / Cut-off	General External Turning (Negative)	General External Turning (Positive)	General External Turning (Positive)	General External Turning (Positive)	Back Turning	Grooving	Threading
	GNDM type GNDL type	PTGN type <i>Expansion</i>	SCLC type SDJC type	SDNC type <i>NEW</i>	SV type <i>Expansion</i>	SBT type	GWC type TGA type Insert	GWC type TTE type Insert <i>NEW</i>
	Applicable Size 10mm 12mm 16mm ➡ D20 ~	Applicable Size 10mm 12mm 16mm ➡ D16	Applicable Size 10mm 12mm 16mm ➡ D14	Applicable Size 10mm 12mm 16mm Tooling News No.551	Applicable Size 10mm 12mm 16mm ➡ D15	Applicable Size 10mm 12mm 16mm ➡ D17	Applicable Size 10mm 12mm 16mm ➡ D18 ~	Applicable Size 10mm 12mm 16mm ➡ D18 ~
Insert Shape								
	1.25 to 3.00mm RE= 0.05 to 0.4mm up to 16mm Full RE= 1.0 to 1.5mm Max. Cut-off Dia. up to ø32mm	PTGN type 90° PTGN type: Negative	SCLC type SDJC type 95° 93° SCLC type: Positive 7° SDJC type: Positive 7°	SDNC type 62.5° SDNC type: Positive 7°	SV□ type 93° SVJB type: Positive 5° Right/Left-handed SVJC type: Positive 7° Right/Left-handed SVJP type: Positive 11° Right-handed	2.5 to 5.2mm RE= 0.05 to 0.15mm 3.5 to 8.0mm	0.33 to 3.00mm RE= 0.05 to 0.10mm (0.20mm) up to 2.5mm	0.05 to 1.70mm Pitch 0.2 to 3.0mm Applicable Thread Symbol M W G/Rp/W

Internal Boring (1) Machining of very small diameters $\phi 1\text{mm}$ and above

Application / Model / Page	Very Small Dia. Boring Square Shank CKB series	Very Small Dia. Boring Round Shank S-CKB type/S-CKB-S type	Very Small Dia. Boring Square Shank L type Gang type Toolpost CKBS type	Solid Carbide Bar BXBR series	Small Hole Boring Bars SEXC series <i>Expansion</i>	
	E64	E66	E65	E70 -	E74	
Cutting Edge Shape	General $\phi 0.1\text{mm}$ 10° 20° KBMX type	Back Turning 5° KBMZ type	Grooving 10, 2.0mm KBMG type	Face Grooving 1.5, 2.0, 3.0mm KBMFR type	General $\phi 0.1\text{mm}$ 10° 20° BXBR type	$\phi 0.1\text{mm}$ 10° SEXC series

Internal Boring (2) Machining of small diameters $\phi 5\text{mm}$ and above

Internal Grooving and Threading

Application / Model / Page	Boring SW type/ST type/SC type/SD type/SV type/SS type			Internal Grooving SGIT series	Internal Grooving Internal Threading SSH series <i>Expansion</i>	Internal Grooving GNDIS series <i>Expansion</i>	Internal Threading STHI series	Internal Threading SSTI series
	E18 to E61			F59	F60 -	F48 -	F126	F112 -
Cutting Edge Shape	Stop Boring $\phi 5.5 - \text{SVUB series}$ $\phi 6.0 - \text{STUB series}$ E40 -	Bottom Facing $\phi 5.0 - \text{SCLC series}$ $\phi 7.0 - \text{SCLP series}$ E18 -	Profiling $\phi 5.0 - \text{SD series}$ E26 -	$\phi 10.0 -$ Max. Groove Depth 0.8 to 2.8mm 0.5 to 2.0mm	$\phi 8.0 -$ Max. Groove Depth 1.0 to 4.0mm 0.74 to 3.0mm	$\phi 14.0 -$ Max. Groove Depth 2.5 to 16mm 1.5 to 3.0mm	$\phi 8.0 -$ Pitch 0.4 to 1.0mm	$\phi 18.0 -$ Pitch 0.5 to 3.0mm
	Concave Facing and Bottom Facing $\phi 5.0 - \text{SVUB series}$ E48			Through Boring $\phi 6.0 - \text{ESSP series}$ $\phi 7.0 - \text{SSC series}$ E34 -	<i>New</i> Bottom Facing $\phi 14.0 -$ Max. Groove Depth 1.5 to 3.0mm E66 -	<i>New</i> Internal Threading $\phi 8.0 -$ Pitch 0.5 to 2.5mm E62 -		

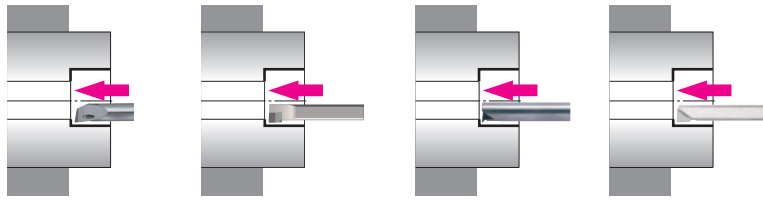
Unit (mm)

Drilling

Application / Model / Page	General-purpose MULTIDRILL NeXEO MDE series	Spot Facing Flat MULTIDRILL MDF series/MDF-A type	For Aluminum Alloy MULTIDRILL MDA series	Chamfering MULTIDRILL MDC series <i>New</i>	For Small Diameter Holes Micro Long Drill MLDH series	For Very Small Diameter Holes MINI-MULTIDRILL MDSS series	For Very Small Diameter Holes Micro MULTIDRILL MDUS series	Indexable Insert type SumiDrill WDX series
	J8 -	J26 -	J90 -	New Product Report No.76	J105 -	J108 -	J108 -	J158 -
Cutting Edge Shape	$\phi 1.0$ to 2.0mm	MDF series $\phi 3.0$ to 2.0mm MDF-A type $\phi 3.0$ to 1.0mm General-purpose For Aluminum Alloy	$\phi 1.0$ to 12.0mm	$\phi 3.0$ to 12.0mm	$\phi 0.8$ to 2.0mm	$\phi 0.2$ to 1.0mm	$\phi 0.05$ to 0.19mm	$\phi 1.0$ to 68.0mm

Small Hole Boring Bars (CBN)

Small Hole Boring Bars (PCD/Binderless PCD)



Application / Model / Page

Small Hole Boring Bars
SUMIBORON
BSME series

Small Hole Boring Bars
SUMIBORON
BNBX series

Small Hole Boring Bars
SUMIDIA
DABB series

Small Hole Boring Bars
SUMIDIA BINDERLESS
DABX series

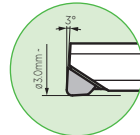
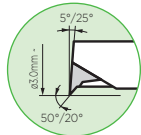
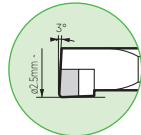
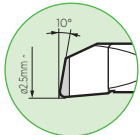
E73

E76

E80

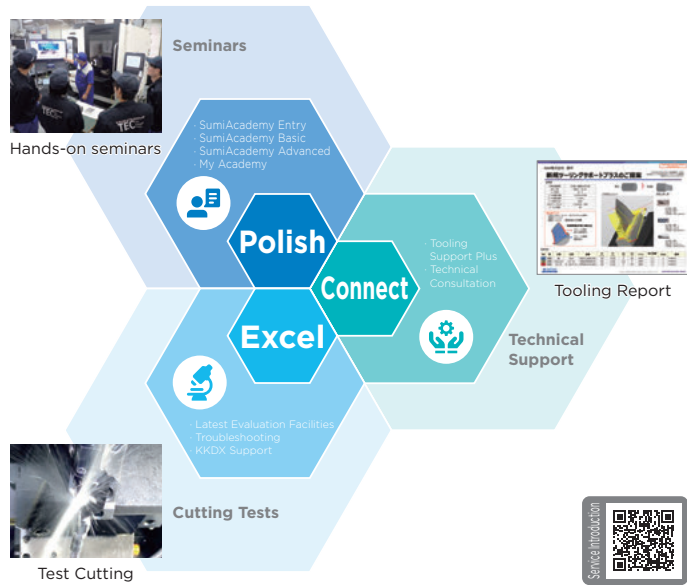
E81

Cutting Edge Shape



mark: 2025-2026 Cutting Tools General Catalog listed page

Tool Engineering Center



Tooling Support Plus

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SumiForce

Made-to-order tools

KKDX Machining Support Sensing Tools SumiForce

Product introduction QR code

< SAFETY NOTES >



- 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.
- 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

Global Marketing Department : 1-1-1, Koyakita, Itami, Hyogo 664-0016, Japan

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