

## 2018 > 2019 NEW PRODUCTS GUIDANCE

 $\bigcirc$ 

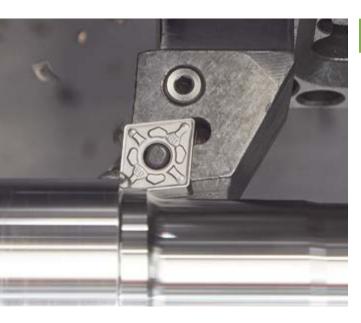
 $\bigcirc$ 

 $\bigcirc$ 



SUMITOMO ELECTRIC GROUP

## **Turning tools**



## AC8015P / AC8025P / AC8035P Coated Carbide Grades for Steel Turning



## AC4010K/AC4015K

Coated Carbide Grades for Cast Iron Turning

The new frontier of cast iron turning

Gray Cast Iron Ductile Cast Iron

Newly developed coating layer with high coating adhesion and strength along with residual stress control technoilogy to achieve a long and stable tool life.

AC4010K ► High speed turning of gray cast iron up to v<sub>c</sub>=700m/min AC4015K ► From continuous to interrupted turning of ductile cast iron





## AC6020M / AC6030M / AC6040M

#### Coated Carbide Grades for Stainless Steel Turning

For all stainless steel turning applications

Newly developed carbide substrate for stainless steel with Absotech<sup>™</sup> coating technology. Achieving stable and long tool life in a wide range of applications from roughing to finishing and at low to high cutting speeds.

AC6020M ► High Speed, High Efficiency Turning AC6030M ► General Purpose AC6040M ► Interrupted Turning





## AC5015S/AC5025S

**Coated Carbide Grades for** Exotic Alloy Turning

Extreme levels of exotic alloy machining Newly developed carbide substrate and PVD coating to overcome the difficulties of turning exotic alloys. Suppressing breakges caused by thermal wear and notch wear, which are typical to exotic alloy machining, with low thermal conductivity and high strength.











## FE type / FB type Chipbreakers Finishing Chipbreakers for M-Class

Negative Type Inserts

Excellent chip control in finishing operations 2 types of chipbreakers to cover a wide range of cutting conditions.

FE type Good chip control in general to high feedrate conditions.

FB type ► Excellent chip breaking capabilities. Significant improvements in breaking chips under very small depth-of-cut conditions, where it was conventionally considered difficult to control.



FE type Chipbreaker



FB type Chipbreaker



### Polygon Taper Shank **SUMIPOLYGON Tool Holder System**

Huge series expansion

Achieving high rigidity and high indexing accuracy with polygon shaped key-less coupling feature. Lineup of GND type grooving holders and other special made-to-order holders with short delivery lead time.



# **Turning tools**



## **SEC-Grooving Holders GND** type (Series Expansion) External Grooving / Cut-off Holders

Series expansion of GNDM-J and GNDL-J types with thru-tool coolant system

External Grooving New thru-tool coolant holders achieves both high efficiency and longer insert tool life, through more efficient supply of coolant to the cutting edge. Cut-off ► In addition to the CG type chipbreaker with a front cutting edge of 5°, series expansion of CF type chipbreaker to 10° and 15°.







SEC-Grooving Holders Release date: Mar 2019

## SSH type Internal Grooving Holders

Introducing a new series for small diameter internal grooving

Minimum bore diameter from ø8mm onwards. Solid carbide holder body eliminates chattering during small diameter grooving process, and high indexing accuracy with an unique insert mounting structure.



## Sumi Småll



Drills

Endmills

# Milling tools

## SEC-Wave Mill Release date: Apr 2019

### General Purpose, High Efficiency Shoulder Milling Series

Introducing the new ultra-refined General Purpose milling cutter and milling grades

High precision cutter balanced in cutting edge strength, cutter body durability, cutting edge sharpness, machined wall squareness and surface roughness. Also featuring the debut of a new milling grade ACU2500, for rough to finish milling of steel, stainless steel and cast iron.



ALNEX



## ALNEX Rele

High Speed, High Efficiency Milling Series for Aluminum Alloy

Achieving high speed and high efficiency aluminum alloy machining

Launching a lineup of  $\varnothing$ 32mm to  $\varnothing$ 160mm sized cutters, along with 6 different types of insert cutting edge treatments. Utilizing thru-blade coolant design for more effective supply of coolant to the cutting edges for excellent chip breaking effect.

## SEC-DUAL MILL **TSX** type (Series Expansion)

High Precision, High Efficiency Shoulder Milling Series with Tangentially Mounted Inserts

Launching the deep-stepped repeater type cutter Shoulder milling cutter with ground type, tangentially mounted inserts. Tangential inserts > Stable and high efficiency milling. Ground inserts > Excellent edge sharpness and machined surface accuracy.

Flexibility to design repeaters, side-cutter and other special-purpose cutters using the same insert.



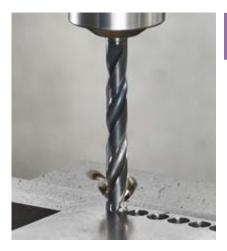


Blade (DA1000)

Milling tools

Drills

## **Drills**



## MultiDrill NeXEO Release date of expanded Item MDE type (Series Expansion) Coated Solid Carbide Drills

#### Series expansion of small diameter, general purpose drills

Covering a wide range of applications with just one drill. Achieving long and stable tool life under various cutting conditions and work materials from high carbon steel, die steel to stainless steel. Series expansion of Ø1.0mm to Ø2.9mm sized drills.







## **Bean Jet Cooling**

## MultiDrill **MDM** type

#### **Coated Solid Carbide Drills** for Stainless Steel

Long tool life with excellent cooling effect

Designed specially for stainless steel and other hard-to-cut materials. Improved tool life with "Bean Jet Cooling" technology that promotes excellent cooling effect and minimal work adhesion, with a newly developed bean-shaped coolant hole design.

## Flat MultiDrill

### MDF type (Series Expansion) Flat Ended Drills for **Counterbore Drilling**

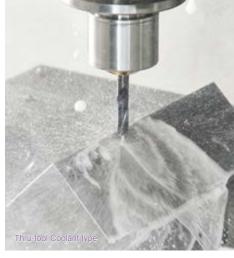


CC.

Expanded utilization of the flat drill

Reliable drill for counterbore, spherical face and other non-flat surface drilling, also integrated drilling processes. In addition to the standard, long shanked and indexable drill head types, series expansion to pre-tap hole and standard type drills from  $\varnothing$ 12.1mm to  $\varnothing$ 15.9mm.







## Endmills



## **Mold Finish Master SDCB** type

SUMIDIA Coat Ballnose Endmills

Extremely hard tool, applicable to high precision machining of hard and brittle work materials Stable performance in direct rough machining of cemented carbide Utilizing a newly developed diamond coating, along with a specialized cutting edge geometry.

## Turning tools (CBN/PCD)

## **Coated SUMIBORON** BNC2010/BNC2020

**Coated SUMIBORON Grades for** Hardened Steel Machining

Level up in hardened steel machining accuracy and efficiency

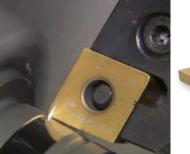
Select from a wide variety of grades and edge treatments

combinations to suit the specific machining application. ▶5 types of high precision, high efficiency edge specifications

▶ 2 types of wiper edges

▶ 3 types of chipbreakers









## **SUMIBORON Binderless NCB100**

### Nano-polycrystalline CBN Grade

Introducing the next generation in exotic alloy machining

Nano-polycrystalline CBN has hardness and thermal conductivity that far exceed those of conventional CBN.

Achieving high efficiency with extra long tool life in the machining of hard-to-cut materials such as titanium alloy and Co-Cr alloy.





#### SUMIDIA Binderless **SUMIDIA** NPD10 **DA90** 1

PCD Grades for Carbide and Hard Brittle Material

For roughing to finishing of cemented carbide and hard brittle material

Series expansion of new inserts for the machining of cemented carbide and brittle material. DA90 ► Excellent for roughing applications NPD10 ► Excellent for finishing applications







 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.

Global Marketing Department : 1-1 Koyakita 1-Chome, Itami, Hyogo 644-0016 Japan Tel : (+81) 72-772-4535 Fax : (+81) 72-771-0088