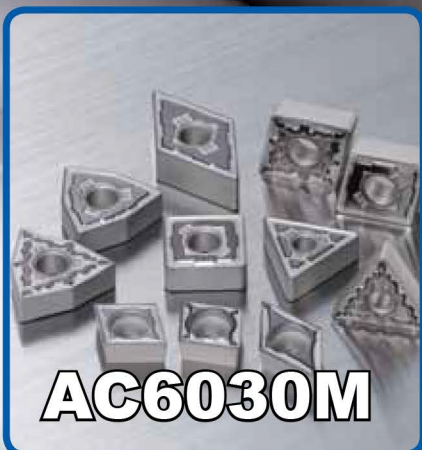


Carbide Grades for Turning

# AC6030M / AC6040M



AC6030M & AC6040M Grades for machining  
stainless steels

**M**

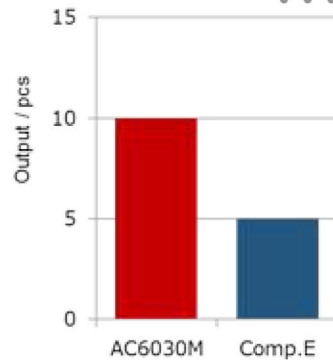
## AC6030M Features & Benefits

- Sumitomo's new "Absotech platinum" PVD grade coating, with fine grains and high hardness, achieved 1.5 times higher wear resistance and twice the tool life than conventional grade
- New  $TiB_2$  surface layer creates excellent adhesion and chipping resistance
- Expanded chipbreaker lineup with newly developed "EEM" type gives excellent chip control when roughing

## Application Examples



Twice longer tool life with improved fracture resistance!



AC6030M

Competitor E

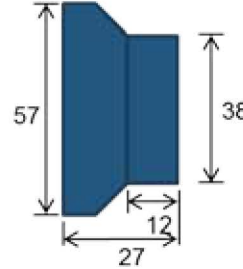


### Application Example Cutting Conditions (Impeller):

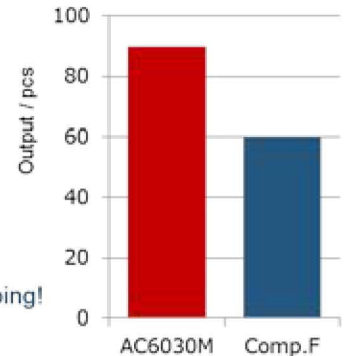
**Work Material:** G-X6CrNi189 / Cast Stainless

**Insert:** CNMG432EEG

**Cutting Condition:**  $V_c$ : 530 sfm  $f$ : 0.008 ipr  
 $a_p$ : 0.078", Wet



1.5times longer tool life without chipping!



AC6030M

Competitor F



### Application Example Cutting Conditions (probe):

**Work Material:** X5CrNiMo1810 / 316 Stainless

**Insert:** WNMG432EMU

**Cutting Condition:**  $V_c$ : 600 sfm  $f$ : 0.011 ipr  
 $a_p$ : 0.118", Wet

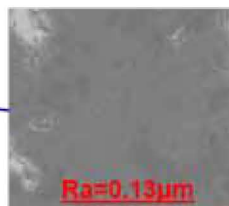
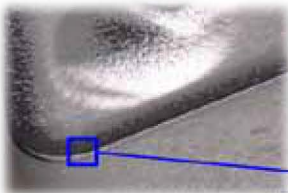
## AC6030M Surface Layer

### ■ New surface layer

" $TiB_2$ " surface layer has an extremely smooth surface.

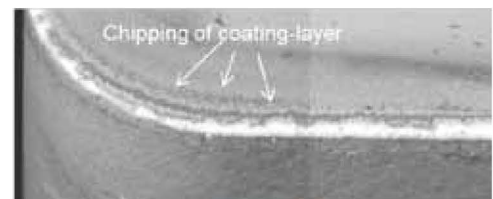
- Excellent adhesion and chipping resistance
- Easily distinguishable used cutting edge

Patent Pending

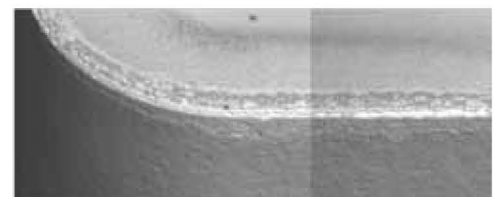


Patented Process

### Competitor



### AC6030M



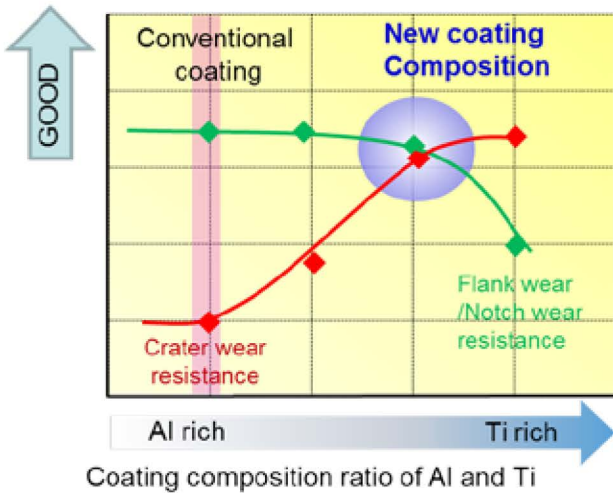




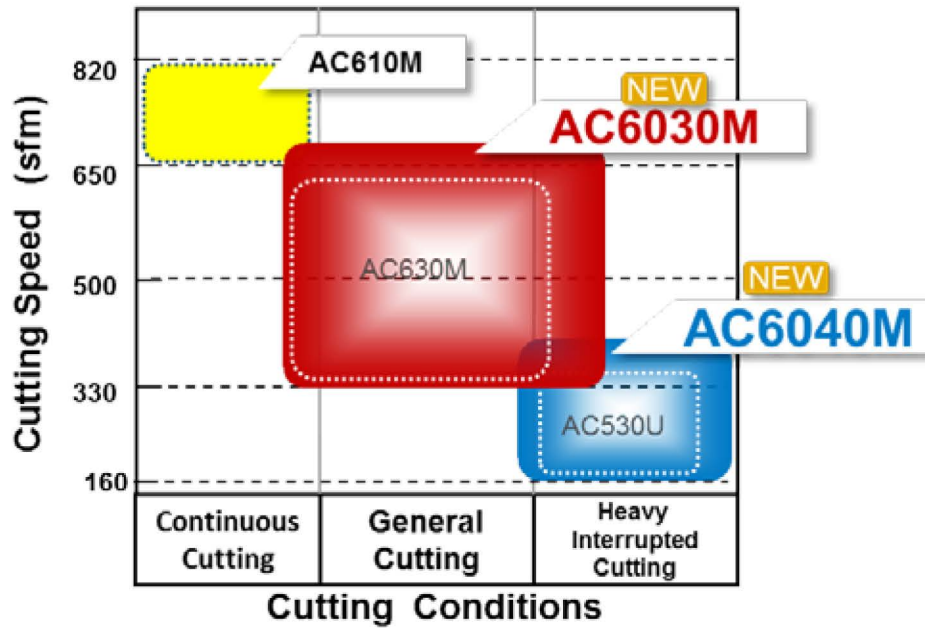
## AC6040M Features & Benefits

- Sumitomo's new "Absotech Bronze" PVD grade coating improves wear resistance, adhesion resistance, and fracture resistance which extends tool life - reducing your cost per part
- Expanded chipbreaker lineup with newly developed "EEM" type gives excellent chip control when roughing

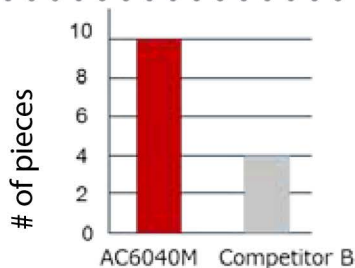
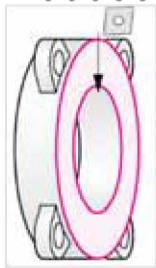
## Wear Resistance Chart



## Cutting Conditions



## Application Examples



2.6 times longer tool life without breakage!

AC6040M



Competitor B

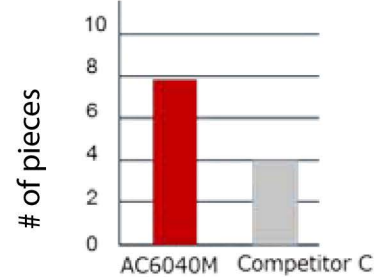
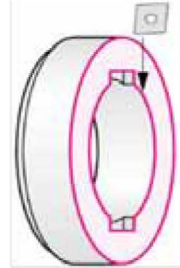


**Application Example Cutting Conditions (flange):**

**Work Material:** X5CrNiMo1810 / 316 Stainless

**Insert:** CNMG432EGU

**Cutting Condition:**  $V_c$ : 650 - 1,175 sfm  $f$ : 0.005 ipr  
 $a_p$ : 0.016", Wet



2.0 times longer tool life!

AC6040M



Competitor C



**Application Example Cutting Conditions (coupling):**

**Work Material:** G-X6CrNi189 / Cast Stainless

**Insert:** WNMG432EEG

**Cutting Condition:**  $V_c$ : 230 - 600 sfm  $f$ : 0.006 ipr  
 $a_p$ : 0.098", Wet