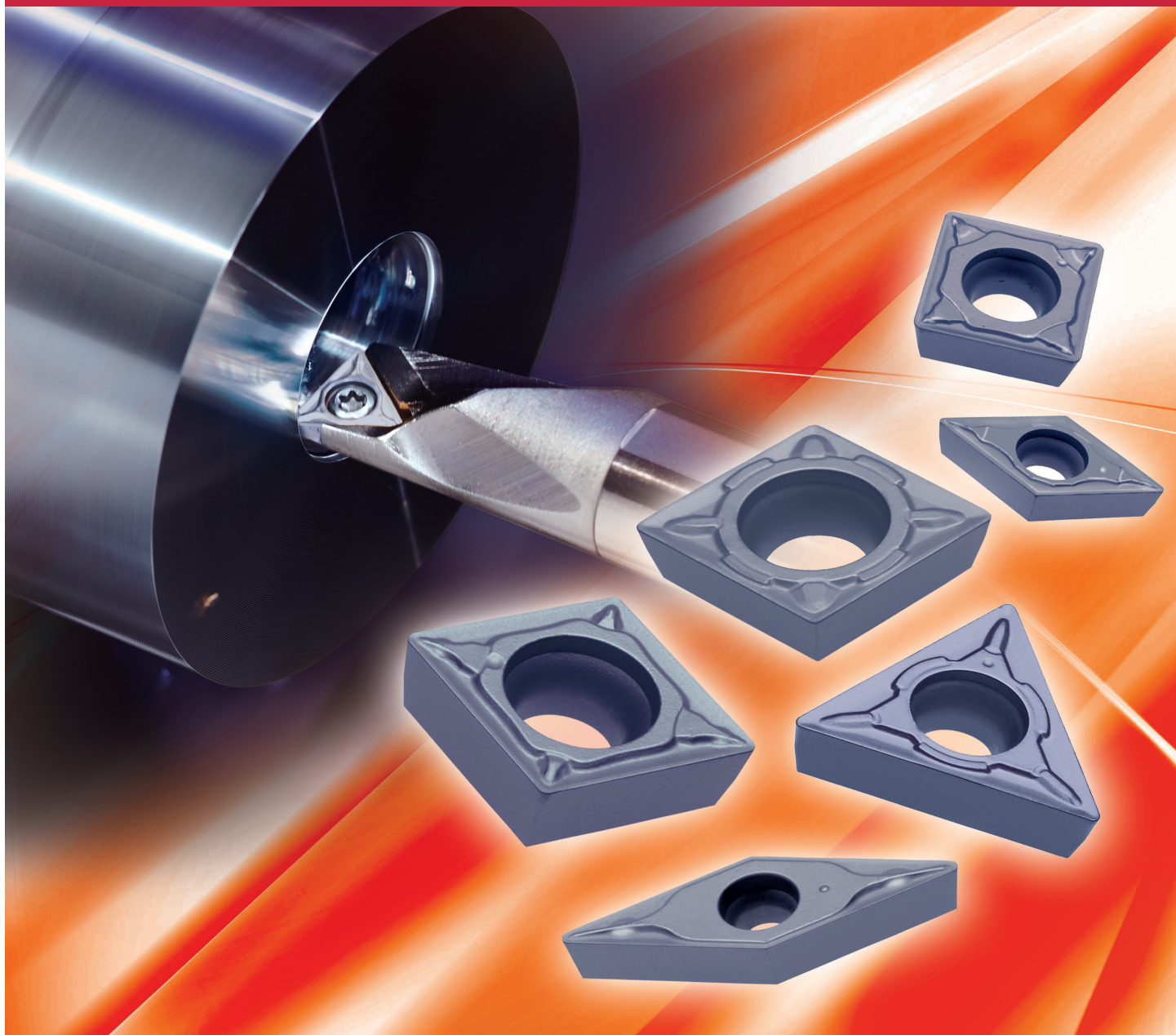


**PVD coated grade for steels and stainless steels**

# AH725

**Super Flash Coating provides High Productivity machining**



*“Triple Force” provides long tool life and stable operation.*

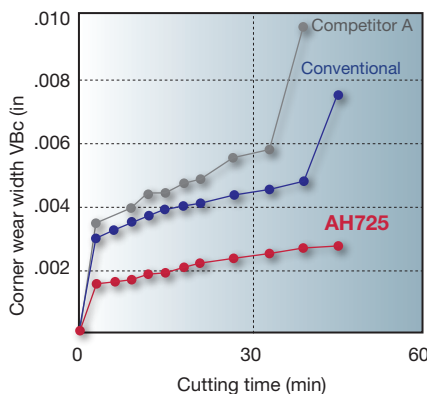


## New grade for internal turning of steels & stainless steels

AH725 features a super tough substrate along with a (Ti,Al)N coated layer providing "Triple Force".

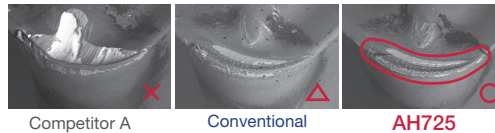
New coating layer features great adhesion strength between coating and substrate

### 1st Force: Excellent wear resistance

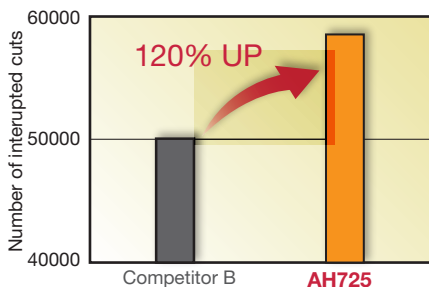


AH725 is more wear resistant than conventional and competitor's coated grades.

Work material : 1045 SAE Steel  
Cutting speed :  $v_c = 650$  SFM  
Depth of cut :  $a_p = .040$  in  
Feed :  $f = .006$  ipr  
Cutting fluid : Water soluble type (Internal supply)

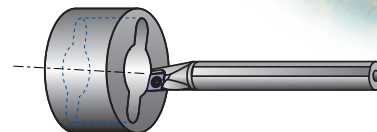


### 2nd Force: Well-balanced fracture resistance



AH725 features extraordinary resistance to fracturing in interrupted cutting.

Work material : 1045 SAE Steel  
Cutting speed :  $v_c = 500$  SFM  
Depth of cut :  $a_p = .040$  in  
Feed :  $f = .010$  ipr  
Cutting fluid : Water soluble type (Internal supply)



#### ■ Standard cutting conditions

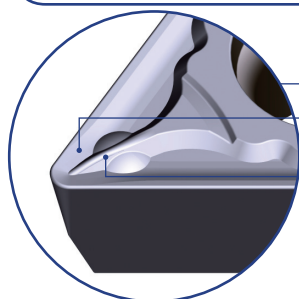
| Grade | Cutting Speed $v_c$ (SFM) |                  |
|-------|---------------------------|------------------|
|       | Steels                    | Stainless steels |
| AH725 | 400 - 600                 | 300 - 500        |





## Stainless steels in a wide variety of applications.

### 3rd Force: Excellent Chip Control

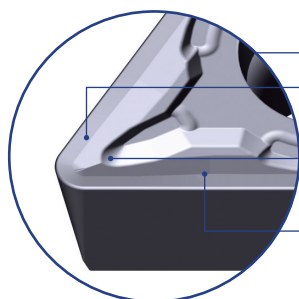


**PS** *chipbreaker*

for Finishing to Medium cutting

- Low cutting force due to high-rake angle.
- Applicable in a wide range of cutting conditions due to a unique chipbreaker protrusion.

Versatile chip breaker (1st choice)



**PM** *chipbreaker*

for Medium cutting

- Positive land creates low cutting force.
- Excellent chip control due to wide & positive chip flow.
- Strong cutting edge controls edge notching and chipping.

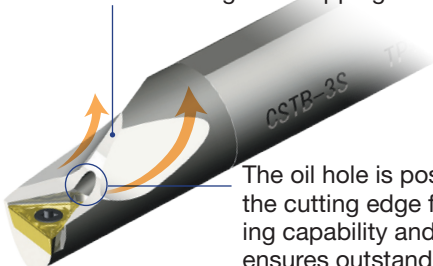
Functional chip breaker provides low cutting force.



Well-balanced micro alloy substrate is effective for plastic deformation resistance and toughness

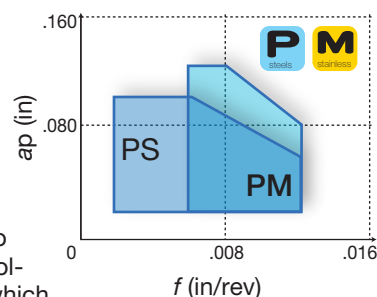
- High rigidity provides less tool deflection.

The head design provides both rigidity and good chip evacuation which prevents chip entanglement that can cause fracturing and chipping.

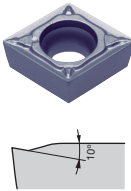
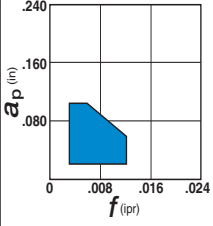
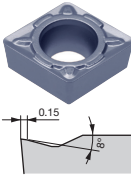
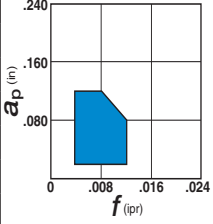


The oil hole is positioned close to the cutting edge for excellent cooling capability and chip control, which ensures outstanding tool life.

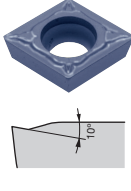
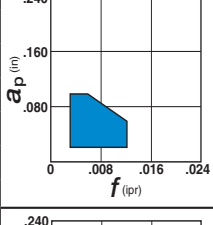
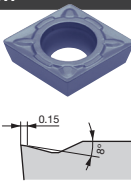
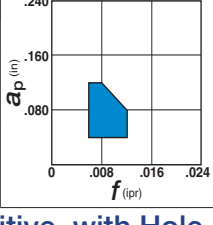
- Application for steels and stainless steels



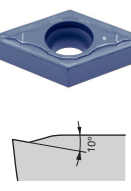
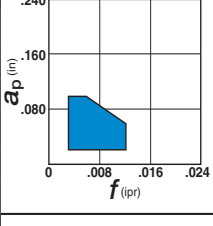
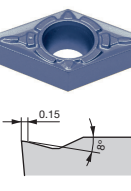
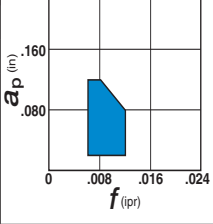
## 80° Rhombic, 7° Positive, with Hole

| Application                          | Chipbreaker<br>Apperance<br>(Cross section)                                                    | $f - ap$                                                                          | Insert Cat. No.<br>(Metric) | Insert Cat. No.<br>(Inch) | Dimensions (in) |           |              |               | Grade<br>Coating<br>AH725 |
|--------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------|---------------------------|-----------------|-----------|--------------|---------------|---------------------------|
|                                      |                                                                                                |                                                                                   |                             |                           | I.C. dia        | Thickness | Hole dia.(Ø) | Corner radius |                           |
| Finishing<br>to<br>medium<br>cutting | <b>PS</b><br> |  | CCMT060202-PS               | CCMT 21.50.5-PS           | 0.25            | 0.093     | 0.113        | .008          | ●                         |
|                                      |                                                                                                |                                                                                   | CCMT060204-PS               | CCMT 21.51-PS             |                 |           |              | .016          | ●                         |
|                                      |                                                                                                |                                                                                   | CCMT060208-PS               | CCMT 21.52-PS             |                 |           |              | .032          | ●                         |
|                                      |                                                                                                |                                                                                   | CCMT09T302-PS               | CCMT 32.50.5-PS           | 0.375           | 0.156     | 0.173        | .008          | ●                         |
|                                      |                                                                                                |                                                                                   | CCMT09T304-PS               | CCMT 32.51-PS             |                 |           |              | .016          | ●                         |
|                                      |                                                                                                |                                                                                   | CCMT09T308-PS               | CCMT 32.52-PS             |                 |           |              | .032          | ●                         |
|                                      |                                                                                                |                                                                                   | ▲ CCMT120404-PS             | CCMT 431-PS               | 0.50            | 0.187     | 0.217        | .016          | ●                         |
|                                      |                                                                                                |                                                                                   | CCMT120408-PS               | CCMT 432-PS               |                 |           |              | .032          | ●                         |
|                                      |                                                                                                |                                                                                   | CCMT120412-PS               | CCMT 433-PS               |                 |           |              | .047          | ●                         |
| Medium<br>cutting                    | <b>PM</b><br> |  | CCMT060204-PM               | CCMT 21.51-PM             | 0.25            | 0.093     | 0.113        | .016          | ●                         |
|                                      |                                                                                                |                                                                                   | CCMT060208-PM               | CCMT 21.52-PM             |                 |           |              | .032          | ●                         |
|                                      |                                                                                                |                                                                                   | CCMT09T304-PM               | CCMT 32.51-PM             |                 |           |              | .016          | ●                         |
|                                      |                                                                                                |                                                                                   | ▲ CCMT09T308-PM             | CCMT 32.52-PM             | 0.375           | 0.156     | 0.173        | .032          | ●                         |
|                                      |                                                                                                |                                                                                   | CCMT09T312-PM               | CCMT 32.53-PM             |                 |           |              | .047          | ●                         |
|                                      |                                                                                                |                                                                                   | CCMT120408-PM               | CCMT 432 PM               |                 |           |              | .032          | ●                         |
|                                      |                                                                                                |                                                                                   | CCMT120412-PM               | CCMT 433 PM               | 0.50            | 0.187     | 0.217        | .047          | ●                         |
|                                      |                                                                                                |                                                                                   |                             |                           |                 |           |              |               |                           |
|                                      |                                                                                                |                                                                                   |                             |                           |                 |           |              |               |                           |

## 80° Rhombic, 11° Positive, with Hole

| Application                          | Chipbreaker<br>Apperance<br>(Cross section)                                                      | $f - ap$                                                                            | Insert Cat. No.<br>(Metric) | Insert Cat. No.<br>(Inch) | Dimensions (in) |           |              |               | Grade<br>Coating<br>AH725 |
|--------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------|---------------------------|-----------------|-----------|--------------|---------------|---------------------------|
|                                      |                                                                                                  |                                                                                     |                             |                           | I.C. dia        | Thickness | Hole dia.(Ø) | Corner radius |                           |
| Finishing<br>to<br>medium<br>cutting | <b>PS</b><br>  |   | CPMT060202-PS               | CPMT 21.50.5-PS           | 0.25            | .093      | 0.113        | .008          | ●                         |
|                                      |                                                                                                  |                                                                                     | CPMT060204-PS               | CPMT 21.51-PS             |                 |           |              | .016          | ●                         |
|                                      |                                                                                                  |                                                                                     | CPMT080202-PS               | CPMT 2.51.50.5-PS         |                 |           |              | .008          | ○                         |
|                                      |                                                                                                  |                                                                                     | CPMT080204-PS               | CPMT 2.51.51-PS           | 0.313           | .093      | 0.173        | .016          | ○                         |
|                                      |                                                                                                  |                                                                                     | CPMT080208-PS               | CPMT 2.51.52-PS           |                 |           |              | .032          | ○                         |
|                                      |                                                                                                  |                                                                                     | ▲ CPMT090304-PS             | CPMT 321 PS               | 0.375           | 0.125     | 0.173        | .016          | ●                         |
|                                      |                                                                                                  |                                                                                     | CPMT090308-PS               | CPMT 322 PS               |                 |           |              | .032          | ●                         |
| Medium<br>cutting                    | <b>PM</b><br> |  | CPMT060204-PM               | CPMT 21.51-PM             | 0.25            | .093      | 0.113        | .016          | ●                         |
|                                      |                                                                                                  |                                                                                     | CPMT060208-PM               | CPMT 21.52-PM             |                 |           |              | .032          | ●                         |
|                                      |                                                                                                  |                                                                                     | ▲ CPMT090304-PM             | CPMT 321 PM               | 0.375           | 0.125     | 0.173        | .016          | ●                         |
|                                      |                                                                                                  |                                                                                     | CPMT090308-PM               | CPMT 322 PM               |                 |           |              | .032          | ●                         |
|                                      |                                                                                                  |                                                                                     |                             |                           |                 |           |              |               |                           |
|                                      |                                                                                                  |                                                                                     |                             |                           |                 |           |              |               |                           |

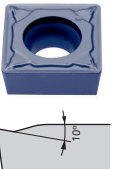
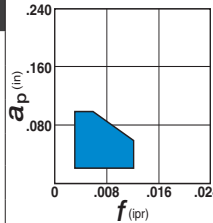
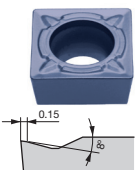
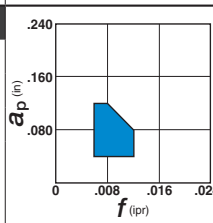
## 55° Rhombic, 7° Positive, with Hole

| Application                          | Chipbreaker<br>Apperance<br>(Cross section)                                                      | $f - ap$                                                                            | Insert Cat. No.<br>(Metric) | Insert Cat. No.<br>(Inch) | Dimensions (in) |           |              |               | Grade<br>Coating<br>AH725 |
|--------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------|---------------------------|-----------------|-----------|--------------|---------------|---------------------------|
|                                      |                                                                                                  |                                                                                     |                             |                           | I.C. dia        | Thickness | Hole dia.(Ø) | Corner radius |                           |
| Finishing<br>to<br>medium<br>cutting | <b>PS</b><br> |  | DCMT070202-PS               | DCMT 21.50.5-PS           | 0.025           | 0.093     | 0.113        | .008          | ●                         |
|                                      |                                                                                                  |                                                                                     | DCMT070204-PS               | DCMT 21.51-PS             |                 |           |              | .016          | ●                         |
|                                      |                                                                                                  |                                                                                     | DCMT070208-PS               | DCMT 21.52-PS             |                 |           |              | .032          | ●                         |
|                                      |                                                                                                  |                                                                                     | DCMT11T302-PS               | DCMT 32.50.5-PS           | 0.375           | 0.156     | 0.173        | .008          | ●                         |
|                                      |                                                                                                  |                                                                                     | ▲ DCMT11T304-PS             | DCMT 32.51-PS             |                 |           |              | .016          | ●                         |
|                                      |                                                                                                  |                                                                                     | DCMT11T308-PS               | DCMT 32.52-PS             |                 |           |              | .032          | ●                         |
|                                      |                                                                                                  |                                                                                     | DCMT11T312-PS               | DCMT 32.53-PS             |                 |           |              | .047          | ●                         |
| Medium<br>cutting                    | <b>PM</b><br> |  | DCMT070204-PM               | DCMT 21.51-PM             | 0.25            | 0.093     | 0.113        | .016          | ●                         |
|                                      |                                                                                                  |                                                                                     | DCMT070208-PM               | DCMT 21.52-PM             |                 |           |              | .032          | ●                         |
|                                      |                                                                                                  |                                                                                     | DCMT11T304-PM               | DCMT 32.51-PM             |                 |           |              | .016          | ●                         |
|                                      |                                                                                                  |                                                                                     | ▲ DCMT11T308-PM             | DCMT 32.52-PM             | 0.375           | 0.156     | 0.173        | .032          | ●                         |
|                                      |                                                                                                  |                                                                                     | DCMT11T312-PM               | DCMT 32.53-PM             |                 |           |              | .047          | ●                         |
|                                      |                                                                                                  |                                                                                     |                             |                           |                 |           |              |               |                           |

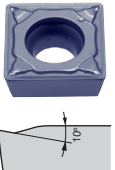
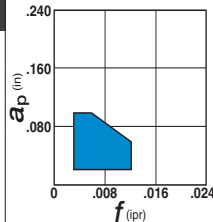
Note: Cross section of chipbreaker is of ▲ marked Cat.No.

● : Stock Standard  
○ : Non Stock Standard

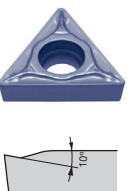
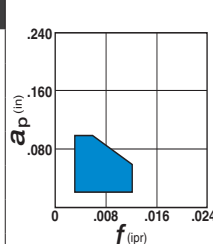
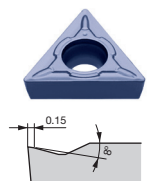
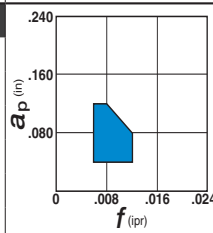
## 90° Square, 7° Positive, with Hole

| Application                          | Chipbreaker                                                                                    | $f - ap$                                                                          | Insert Cat. No.<br>(Metric) | Insert Cat. No.<br>(Inch) | Dimensions (in) |           |              |               | Grade            |
|--------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------|---------------------------|-----------------|-----------|--------------|---------------|------------------|
|                                      | Apperance<br>(Cross section)                                                                   |                                                                                   |                             |                           | I.C. dia        | Thickness | Hole dia.(Ø) | Corner radius | Coating<br>AH725 |
| Finishing<br>to<br>medium<br>cutting | <b>PS</b><br> |  | ▲ SCMT09T304-PS             | SCMT 32.51-PS             | 0.375           | 0.156     | 0.173        | .016          | ●                |
|                                      |                                                                                                |                                                                                   | SCMT09T308-PS               | SCMT32.52-PS              |                 |           |              | .032          | ●                |
|                                      |                                                                                                |                                                                                   | SCMT120404-PS               | SCMT 431 PS               | 0.500           | 0.187     | 0.217        | .016          | ●                |
|                                      |                                                                                                |                                                                                   | SCMT120408-PS               | SCMT 432 PS               |                 |           |              | .032          | ●                |
| Medium<br>cutting                    | <b>PM</b><br> |  | ▲ SCMT09T304-PM             | SCMT 32.51-PM             | 0.375           | 0.156     | 0.173        | .016          | ●                |
|                                      |                                                                                                |                                                                                   | SCMT09T308-PM               | SCMT32.52-PM              |                 |           |              | .032          | ●                |
|                                      |                                                                                                |                                                                                   | SCMT120408-PM               | SCMT 432 PM               | 0.500           | 0.187     | 0.217        | .032          | ●                |
|                                      |                                                                                                |                                                                                   | SCMT120412-PM               | SCMT 433 PM               |                 |           |              | .047          | ●                |

## 90° Square, 11° Positive, with Hole

| Application                          | Chipbreaker                                                                                     | $f - ap$                                                                           | Insert Cat. No.<br>(Metric) | Insert Cat. No.<br>(Inch) | Dimensions (in) |           |              |               | Grade            |
|--------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------|---------------------------|-----------------|-----------|--------------|---------------|------------------|
|                                      | Apperance<br>(Cross section)                                                                    |                                                                                    |                             |                           | I.C. dia        | Thickness | Hole dia.(Ø) | Corner radius | Coating<br>AH725 |
| Finishing<br>to<br>medium<br>cutting | <b>PS</b><br> |  | SPMT090304-PS               | SPMT 321 PM               | 0.375           | 0.156     | 0.173        | .016          | ●                |
|                                      |                                                                                                 |                                                                                    | SPMT090308-PS               | SPMT 322 PM               |                 |           |              | .032          | ●                |
|                                      |                                                                                                 |                                                                                    | SPMT120404-PS               | SPMT 431 PM               | 0.500           | 0.187     | 0.217        | .016          | ●                |
|                                      |                                                                                                 |                                                                                    | ● SPMT120408-PS             | SPMT 432 PM               |                 |           |              | .032          | ●                |

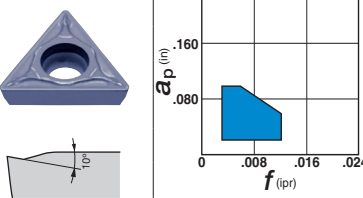
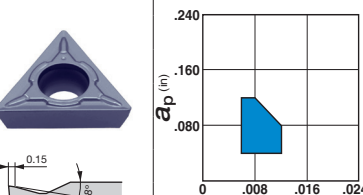
## 60° Triangular, 7° Positive, with Hole

| Application                          | Chipbreaker                                                                                      | $f - ap$                                                                            | Insert Cat. No.<br>(Metric) | Insert Cat. No.<br>(Inch) | Dimensions (in) |           |              |               | Grade            |
|--------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------|---------------------------|-----------------|-----------|--------------|---------------|------------------|
|                                      | Apperance<br>(Cross section)                                                                     |                                                                                     |                             |                           | I.C. dia        | Thickness | Hole dia.(Ø) | Corner radius | Coating<br>AH725 |
| Finishing<br>to<br>medium<br>cutting | <b>PS</b><br> |  | TCMT090204-PS               | TCMT 731 PS               | 0.219           | 0.093     | 0.094        | .016          | ●                |
|                                      |                                                                                                  |                                                                                     | TCMT090208-PS               | TCMT 732 PS               |                 |           |              | .032          | ●                |
|                                      |                                                                                                  |                                                                                     | TCMT110202-PS               | TCMT 21.50.5-PS           | 0.25            | .093      | 0.113        | .008          | ●                |
|                                      |                                                                                                  |                                                                                     | ▲ TCMT110204-PS             | TCMT 21.51-PS             |                 |           |              | .016          | ●                |
|                                      |                                                                                                  |                                                                                     | TCMT110208-PS               | TCMT 21.52-PS             |                 |           |              | .032          | ●                |
|                                      |                                                                                                  |                                                                                     | TCMT16T302-PS               | TCMT 32.50.5-PS           | 0.375           | 0.156     | 0.173        | .008          | ●                |
|                                      |                                                                                                  |                                                                                     | TCMT16T304-PS               | TCMT 32.51-PS             |                 |           |              | .016          | ●                |
|                                      |                                                                                                  |                                                                                     | TCMT16T308-PS               | TCMT 32.52-PS             |                 |           |              | .032          | ●                |
| Medium<br>cutting                    | <b>PM</b><br> |  | TCMT110202-PM               | TCMT 21.50.5-PM           | 0.25            | 0.093     | 0.113        | .008          | ●                |
|                                      |                                                                                                  |                                                                                     | TCMT110204-PM               | TCMT 21.51-PM             |                 |           |              | .016          | ●                |
|                                      |                                                                                                  |                                                                                     | TCMT110208-PM               | TCMT 21.52-PM             |                 |           |              | .032          | ●                |
|                                      |                                                                                                  |                                                                                     | ▲ TCMT16T304-PM             | TCMT 32.51-PM             | 0.375           | 0.156     | 0.173        | .016          | ●                |
|                                      |                                                                                                  |                                                                                     | TCMT16T308-PM               | TCMT 32.52-PM             |                 |           |              | .032          | ●                |
|                                      |                                                                                                  |                                                                                     | TCMT16T312-PM               | TCMT 32.53-PM             |                 |           |              | .047          | ●                |

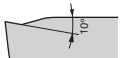
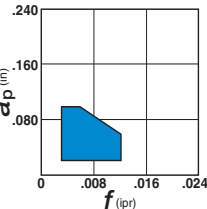
Note: Cross section of chipbreaker is of ▲ marked Cat.No.

● : Stock Standard  
○ : Non Stock Standard

## 60° Triangular, 11° Positive, with Hole

| Application                          | Chipbreaker                  | $f - ap$                                                                          | Insert Cat. No.<br>(Metric) | Insert Cat. No.<br>(Inch) | Dimensions (in) |           |              |               | Grade   |
|--------------------------------------|------------------------------|-----------------------------------------------------------------------------------|-----------------------------|---------------------------|-----------------|-----------|--------------|---------------|---------|
|                                      | Apperance<br>(Cross section) |                                                                                   |                             |                           | I.C. dia        | Thickness | Hole dia.(Ø) | Corner radius | Coating |
|                                      |                              |                                                                                   |                             |                           |                 |           |              |               | AH725   |
| Finishing<br>to<br>medium<br>cutting | PS                           |  | TPMT090202-PS               | TPMT 730.5 PS             | .219            | .093      | .094         | .008          | ●       |
|                                      | TPMT090204-PS                |                                                                                   | TPMT 731 PS                 | .016                      |                 |           |              | ●             |         |
|                                      | TPMT090208-PS                |                                                                                   | TPMT 732 PS                 | .032                      |                 |           |              | ●             |         |
|                                      | TPMT110202-PS                |                                                                                   | TPMT 21.50.5-PS             | .250                      | .093            | .113      | .008         | ●             |         |
|                                      | ▲ TPMT110204-PS              |                                                                                   | TPMT 21.51-PS               |                           |                 |           | .016         | ●             |         |
|                                      | TPMT110208-PS                |                                                                                   | TPMT 21.52-PS               |                           |                 |           | .032         | ●             |         |
|                                      | TPMT110304-PS                |                                                                                   | TPMT 221 PS                 | .250                      | .125            | .133      | .016         | ●             |         |
|                                      | TPMT110308-PS                |                                                                                   | TPMT 222 PS                 |                           |                 |           | .032         | ●             |         |
|                                      | TPMT130302-PS                |                                                                                   | TPMT 2.520.5-PS             | .313                      | .125            | .133      | .008         | ●             |         |
|                                      | TPMT130304-PS                |                                                                                   | TPMT 2.521-PS               |                           |                 |           | .016         | ●             |         |
|                                      | TPMT130308-PS                |                                                                                   | TPMT 2.522-PS               |                           |                 |           | .032         | ●             |         |
|                                      | TPMT16T304-PS                |                                                                                   | TPMT 32.51-PS               | .375                      | .156            | .173      | .016         | ●             |         |
|                                      | TPMT16T308-PS                |                                                                                   | TPMT 32.52-PS               |                           |                 |           | .032         | ●             |         |
| Medium<br>cutting                    | PM                           |  | TPMT090204-PM               | TPMT 731 PM               | .219            | .093      | .094         | .016          | ●       |
|                                      | TPMT090208-PM                |                                                                                   | TPMT 732 PM                 | .032                      |                 |           |              | ●             |         |
|                                      | TPMT110204-PM                |                                                                                   | TPMT 21.51-PM               | .250                      | .093            | .113      | .016         | ●             |         |
|                                      | TPMT110208-PM                |                                                                                   | TPMT 21.52-PM               |                           |                 |           | .032         | ●             |         |
|                                      | TPMT110304-PM                |                                                                                   | TPMT 221 PM                 | .250                      | .125            | .133      | .016         | ●             |         |
|                                      | TPMT110308-PM                |                                                                                   | TPMT 222 PM                 |                           |                 |           | .032         | ●             |         |
|                                      | TPMT130304-PM                |                                                                                   | TPMT 2.521-PM               | .313                      | .125            | .133      | .016         | ●             |         |
|                                      | TPMT130308-PM                |                                                                                   | TPMT 2.522-PM               |                           |                 |           | .032         | ●             |         |
|                                      | ▲ TPMT16T304-PM              |                                                                                   | TPMT 32.51-PM               | .325                      | .156            | .173      | .016         | ●             |         |
|                                      | TPMT16T308-PM                |                                                                                   | TPMT 32.52-PM               |                           |                 |           | .032         | ●             |         |
|                                      | TPMT16T312-PM                |                                                                                   | TPMT 32.53-PM               |                           |                 |           | .047         | ●             |         |

## 35° Rhombic, 5° Positive, with Hole

| Application                          | Chipbreaker                                                                                                                                                                             | $f - ap$                                                                            | Insert Cat. No.<br>(Metric) | Insert Cat. No.<br>(Inch) | Dimensions (in) |           |              |               | Grade   |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------|---------------------------|-----------------|-----------|--------------|---------------|---------|
|                                      | Apperance<br>(Cross section)                                                                                                                                                            |                                                                                     |                             |                           | I.C. dia        | Thickness | Hole dia.(Ø) | Corner radius | Coating |
|                                      |                                                                                                                                                                                         |                                                                                     |                             |                           |                 |           |              |               | AH725   |
| Finishing<br>to<br>medium<br>cutting | <b>PS</b><br><br> |  | ▲ VBMT110302-PS             | VBMT 220.5 PS             | .250            | .125      | .113         | .008          | ●       |
|                                      |                                                                                                                                                                                         |                                                                                     | VBMT110304-PS               | VBMT 221 PS               |                 |           |              | .016          | ●       |
|                                      |                                                                                                                                                                                         |                                                                                     | VBMT110308-PS               | VBMT 222 PS               |                 |           |              | .032          | ●       |
|                                      |                                                                                                                                                                                         |                                                                                     | VBMT160402-PS               | VBMT 330.5 PS             | .375            | .187      | .173         | .008          | ●       |
|                                      |                                                                                                                                                                                         |                                                                                     | VBMT160404-PS               | VBMT 331 PS               |                 |           |              | .016          | ●       |
|                                      |                                                                                                                                                                                         |                                                                                     | VBMT160408-PS               | VBMT 332 PS               |                 |           |              | .032          | ●       |
|                                      |                                                                                                                                                                                         |                                                                                     |                             |                           |                 |           |              |               |         |

## 35° Rhombic, 7° Positive, with Hole

| Application                          | Chipbreaker                  | $f - ap$ | Insert Cat. No.<br>(Metric) | Insert Cat. No.<br>(Inch) | Dimensions (in) |           |              |               | Grade   |
|--------------------------------------|------------------------------|----------|-----------------------------|---------------------------|-----------------|-----------|--------------|---------------|---------|
|                                      | Apperance<br>(Cross section) |          |                             |                           | I.C. dia        | Thickness | Hole dia.(Ø) | Corner radius | Coating |
|                                      |                              |          |                             |                           |                 |           |              |               | AH725   |
| Finishing<br>to<br>medium<br>cutting | PS                           |          | VCMT110302-PS               | VCMT 220.5 PS             | .250            | .125      | .113         | .008          | ●       |
|                                      | ▲ VCMT110304-PS              |          | VCMT 221 PS                 | .016                      |                 |           |              | ●             |         |
|                                      | VCMT110308-PS                |          | VCMT 222 PS                 | .032                      |                 |           |              | ●             |         |
|                                      | VCMT160404-PS                |          | VCMT 331 PS                 | .375                      | .187            | .173      | .016         | ●             |         |
|                                      | VCMT160408-PS                |          | VCMT 332 PS                 |                           |                 |           | .032         | ●             |         |
|                                      |                              |          |                             |                           |                 |           |              |               |         |

Note: Cross section of chipbreaker is of ▲ marked Cat.No.

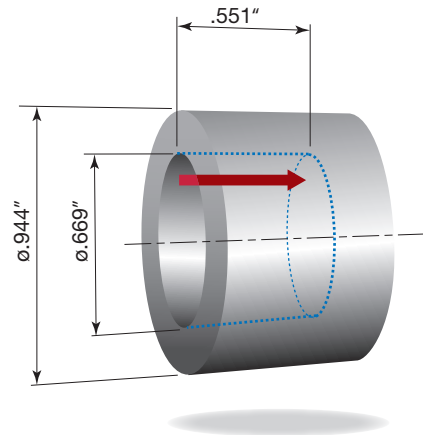
● : Stock Standard  
○ : Non Stock Standard

## Practical examples

### 20% longer tool life and excellent surface finish

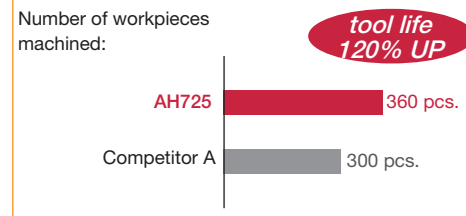
Insert : CCMT060208-PS  
Toolholder : A10K-SCLCR06-D120

Work material : Stainless  
Cutting speed :  $v_c = 400$  SFM  
Feed :  $f = .006$  ipr  
Depth of cut :  $a_p = .015$  in  
Tool life criteria : Surface roughness



Machine component

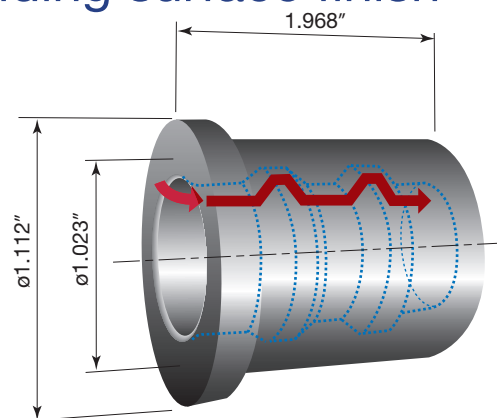
**Results** In operations with severe surface roughness, the tool life was increased by 20% compared with competitor's PVD grade



### 50% longer tool life with outstanding surface finish

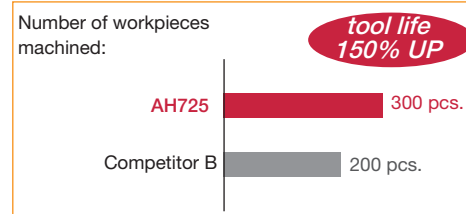
Insert : DCMT070204-PS  
Toolholder : A10K-SDUCR07-D130

Work material : 304 Stainless  
Cutting speed :  $v_c = 330$  SFM  
Feed :  $f = .004$  ipr  
Depth of cut :  $a_p = .023$  in  
Tool life criteria : number of workpieces and surface finish



Machine component

**Results** When competitor's PVD grade was used, the workpiece surface appeared dull and cutting was unstable. The productivity of AH725 was vastly improved from 200 pcs to 300 pcs. In addition, its surface finish was superior to those obtained with competitor's tool.



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