

Sumitomo Promotions

NEW

**Coated Grades
ACP/ACK**

Introducing New Coated Grades for Milling:

- **ACP100*/200/300**
for Steels & Stainless Steels
- **ACK200/300**
for Cast Iron

WEX Series



Metal Slash Mill



WGC Series



**Offer valid through
November 30, 2007**

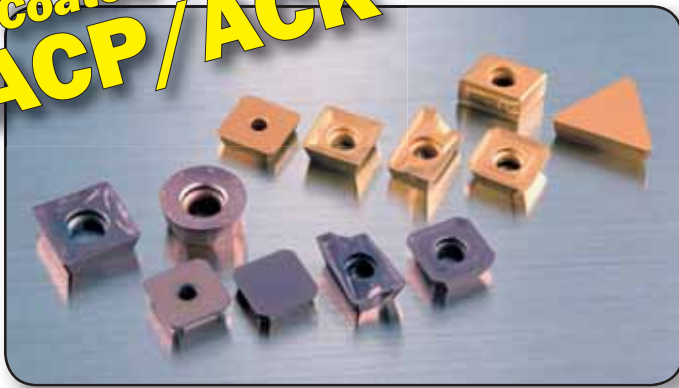


SUMITOMO

CARBIDE - CBN - DIAMOND

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Coated Grades ACP/ACK



NEW Coated Grades for Milling

Sumitomo continues to introduce new and improved grades for milling. The technology featured in our patented “SuperZX” and “Super FF” coatings provide the ACK and ACP series grades increased tool life and productivity.

Grade Applications

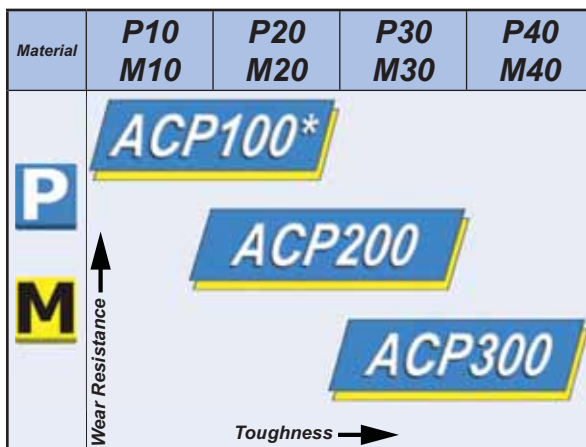
• for Steel & Stainless Steel

| Grade | Coating | Description |
|---------|---------|---|
| ACP100* | CVD | Al ₂ O ₃ based “Super FF” coating with an ultra fine TiCN layer for high speed and wet cutting of steels and stainless steels; super tough substrate for better wear and thermal cracking resistance. |
| ACP200 | PVD | Multi-layered “Super ZX” coating consisting of nanometer thick TiAlN and AlCrN layers, coupled with fine-grained tough substrate for excellent balance of fracture and wear resistance; for general purpose milling of steels and stainless steels. |
| ACP300 | PVD | Multi-layered “Super ZX” coating consisting of nanometer thick TiAlN and AlCrN layers, coupled with fine-grained super tough substrate for excellent fracture resistance; ideal for interrupted machining of steels and stainless steels. |

• for Cast Iron

| Grade | Coating | Description |
|--------|---------|--|
| ACK200 | CVD | Al ₂ O ₃ based “Super FF” coating with an ultra fine TiCN layer provides excellent anti-adhesion and wear resistance in general purpose milling of gray and ductile cast irons. |
| ACK300 | PVD | Multi-layered “Super ZX” coating consisting of nanometer thick TiAlN and AlCrN layers, coupled with fine-grained super tough substrate for excellent fracture resistance; for general to interrupted machining of gray and ductile cast irons. |

Application Ranges



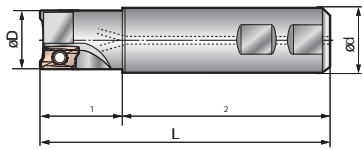
*ACP100 is a Worldwide Warehouse item

WEX Indexable Milling 90° End/Shell Mills



Features & Benefits

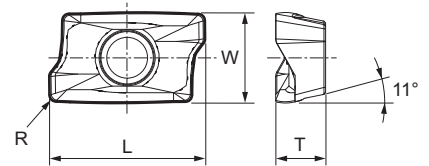
- The unique shape and strength of the cutting edge has been optimized resulting in reduced cutting forces
- Available in 3 different insert geometries (L, G, and H)
- A wide range of machining applications due to the new "Super ZX" and "Super FF" coatings for steels and irons
- Cutter body and insert strength provide for high feed rate capabilities
- Efficient chip removal due to air/coolant hole design



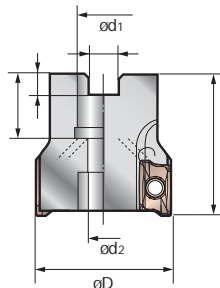
Plan A

**FREE WEX cutter with
the purchase of required
insert quantity**

| Catalog No. | Dimensions (Inches) | | | | | Ramp Angle | # of Teeth | Insert Purchase Required |
|----------------------|---------------------|-------|-------|----------------|----------------|------------|------------|--------------------------|
| | D | d | L | ℓ ₁ | ℓ ₂ | | | |
| AXMT12 WEX20500EW | 0.500 | 0.750 | 3.325 | 1.309 | 2.031 | 5° | 1 | 30 |
| WEX20625EW | 0.625 | 0.625 | 3.218 | 1.312 | 1.906 | 4° | 2 | 30 |
| WEX20625EMW | 0.625 | 0.625 | 3.591 | 1.685 | 1.906 | 4° | 2 | 30 |
| WEX20750EW | 0.750 | 0.750 | 3.561 | 1.530 | 2.031 | 4° | 3 | 30 |
| WEX20750EMW | 0.750 | 0.750 | 4.091 | 2.060 | 2.031 | 4° | 3 | 30 |
| WEX20750ELW | 0.750 | 0.750 | 5.091 | 3.060 | 2.031 | 4° | 3 | 40 |
| WEX21000EW | 1.000 | 1.000 | 3.811 | 1.530 | 2.281 | 2° | 4 | 40 |
| WEX21250EW | 1.250 | 1.250 | 4.531 | 2.250 | 2.281 | 1° 30' | 5 | 40 |
| AXMT17 WEX31000EW | 1.000 | 1.000 | 3.811 | 1.530 | 2.281 | 5° | 2 | 30 |
| WEX31000EMW | 1.000 | 1.000 | 4.841 | 2.560 | 2.281 | 5° | 2 | 30 |
| WEX31000ELW | 1.000 | 1.000 | 6.341 | 4.060 | 2.281 | 5° | 2 | 40 |
| WEX31250EW | 1.250 | 1.250 | 4.531 | 2.250 | 2.281 | 3° | 3 | 30 |
| WEX31250EMW | 1.250 | 1.250 | 6.381 | 4.100 | 2.281 | 3° | 3 | 30 |
| WEX31500EW | 1.500 | 1.250 | 4.531 | 2.250 | 2.281 | 2° | 4 | 40 |
| WEX32000EW | 2.000 | 1.250 | 4.531 | 2.250 | 2.281 | 2° | 5 | 50 |



| Catalog No. | Grades | | | | Dimensions (Inches) | | | | |
|-----------------|--------|--------|--------|--------|---------------------|------|------|------|-------------|
| | ACP200 | ACP300 | ACK200 | ACK300 | L | W | T | R | Facet Width |
| AXMT123504PEERG | ● | ● | ● | ● | .472 | .260 | .138 | .016 | .061 |
| AXMT123504PEERH | ● | ● | | | .472 | .260 | .138 | .016 | .061 |
| AXMT123508PEERG | ● | ● | ● | ● | .472 | .260 | .138 | .031 | .061 |
| AXMT123508PEERH | ● | ● | | | .472 | .260 | .138 | .031 | .061 |
| AXMT170508PEERG | ● | ● | ● | ● | .689 | .402 | .219 | .031 | .118 |
| AXMT170508PEERH | ● | ● | | | .689 | .402 | .219 | .031 | .118 |
| AXMT170516PEERG | ● | ● | | | .689 | .402 | .219 | .063 | .118 |



| Catalog No. | Dimensions (Inches) | | | | | | | Ramp Angle | # of Teeth | Insert Purchase Required |
|---------------------|---------------------|----------------|----------------|-------|-------|-------|-------|------------|------------|--------------------------|
| | D | d ₁ | d ₂ | a | t | H | h | | | |
| AXMT12 WEX21500R | 1.500 | 0.750 | 0.453 | 0.312 | 0.187 | 1.562 | 0.750 | 2° | 6 | 40 |
| WEX22000R | 2.000 | 0.750 | 0.406 | 0.312 | 0.187 | 1.562 | 0.750 | 1° | 7 | 50 |
| WEX22500R | 2.500 | 1.000 | 0.531 | 0.375 | 0.218 | 1.562 | 0.750 | 0° 30' | 8 | 60 |
| AXMT17 WEX32000R | 2.000 | 0.750 | 0.406 | 0.312 | 0.187 | 1.562 | 0.750 | 1° | 5 | 40 |
| WEX32500R | 2.500 | 1.000 | 0.531 | 0.375 | 0.218 | 1.562 | 0.750 | 0° 30' | 6 | 50 |
| WEXC33000R | 3.000 | 1.000 | 0.531 | 0.375 | 0.218 | 1.750 | 0.750 | 0° 30' | 5 | 50 |
| WEX33000R | 3.000 | 1.000 | 0.531 | 0.375 | 0.218 | 1.750 | 0.750 | 0° 30' | 7 | 70 |
| WEXC34000R | 4.000 | 1.250 | 0.656 | 0.500 | 0.281 | 2.000 | 0.750 | N/A | 6 | 60 |
| WEX34000R | 4.000 | 1.250 | 0.655 | 0.500 | 0.281 | 2.000 | 0.750 | N/A | 8 | 80 |

Plan B

**Already have a cutter?
Buy 40 inserts-
Get 10 FREE!**

Offer valid through November 30, 2007

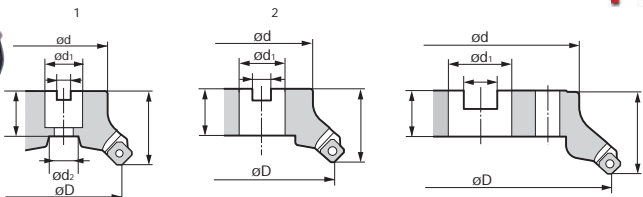
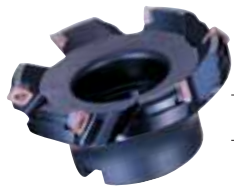
WGC Indexable Milling

45° End/Shell Mills



Features & Benefits

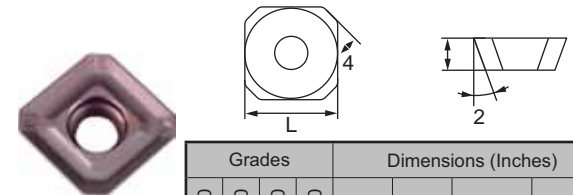
- Feed rate capabilities up to 30% higher than 90° tooling for high performance in face milling applications
- Cutter and insert design promote efficient cutting action with low horsepower consumption
- Light cutter assembly weight
- Minimal body overhang facilitates machining close to fixturing and/or part details
- Screw on insert design features carbide back up seats for durability and ease of repair while offering easy set-up and indexing
- Inserts available in "M" class, "E" class, and several chipbreakers/edge preps for almost any situation



Plan A

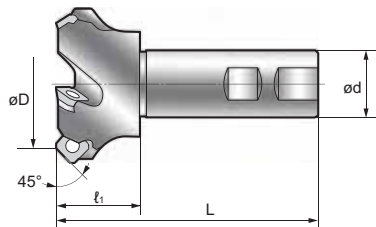
FREE WGC cutter with the purchase of required insert quantity

| Catalog No. | Dimensions (Inches) | | | | | | | # of Teeth | Fig. | Pitch | Insert Purchase Required |
|-------------|---------------------|----------------|----------------|-------|-------|-------|-------|------------|------|--------|--------------------------|
| | D | d ₁ | d ₂ | F | d | a | E | | | | |
| WGC4200SR | 2.000 | 0.750 | 0.406 | 1.750 | 1.500 | 0.312 | 1.020 | 3 | 1 | Coarse | 40 |
| WGCF4200SR | 2.000 | 0.750 | 0.406 | 1.750 | 1.500 | 0.312 | 1.020 | 4 | 1 | Fine | 50 |
| WGC4250SR | 2.500 | 1.000 | 0.531 | 1.750 | 1.750 | 0.375 | 1.020 | 4 | 1 | Coarse | 50 |
| WGCF4250SR | 2.500 | 1.000 | 0.531 | 1.750 | 1.750 | 0.375 | 1.020 | 5 | 1 | Fine | 60 |
| WGC4300SR | 3.000 | 1.000 | 0.531 | 1.750 | 2.250 | 0.375 | 1.020 | 4 | 1 | Coarse | 50 |
| WGCF4300SR | 3.000 | 1.000 | 0.531 | 1.750 | 2.250 | 0.375 | 1.020 | 6 | 1 | Fine | 70 |
| WGC4400SR | 4.000 | 1.250 | 0.656 | 2.000 | 2.870 | 0.500 | 1.020 | 5 | 1 | Coarse | 60 |
| WGCF4400SR | 4.000 | 1.250 | 0.656 | 2.000 | 2.870 | 0.500 | 1.020 | 7 | 1 | Fine | 80 |
| WGC4500SR | 5.000 | 1.500 | - | 2.500 | 3.750 | 0.625 | 1.060 | 6 | 2 | Coarse | 70 |
| WGCF4500SR | 5.000 | 1.500 | - | 2.500 | 3.750 | 0.625 | 1.060 | 8 | 2 | Fine | 90 |
| WGC4600SR | 6.000 | 1.500 | - | 2.500 | 4.380 | 0.625 | 1.060 | 7 | 2 | Coarse | 80 |
| WGCF4600SR | 6.000 | 1.500 | - | 2.500 | 4.380 | 0.625 | 1.060 | 10 | 2 | Fine | 110 |
| WGC4800SR | 8.000 | 2.500 | - | 2.500 | 5.120 | 1.000 | 1.595 | 8 | 3 | Coarse | 100 |
| WGCF4800SR | 8.000 | 2.500 | - | 2.500 | 5.120 | 1.000 | 1.595 | 12 | 3 | Fine | 130 |



| Catalog No. | Grades | | | | Dimensions (Inches) | | | |
|---------------|--------|--------|--------|--------|---------------------|-------|-------------|-------------|
| | ACP200 | ACP300 | ACK200 | ACK300 | L | T | Facet Width | Facet Radii |
| SEET13T3AGSNG | ● | ● | ● | ● | 0.528 | 0.156 | 0.0639 | 0.0394 |
| SEET13T3AGSNN | ● | ● | ● | ● | 0.528 | 0.156 | 0.0639 | 0.0394 |
| SEMT13T3AGSNG | ● | ● | ● | ● | 0.528 | 0.156 | 0.0639 | 0.0394 |
| SEMT13T3AGSNH | ● | ● | ● | ● | 0.528 | 0.156 | 0.0639 | 0.0394 |
| SEMT13T3AGSNL | ● | ● | ● | ● | 0.528 | 0.156 | 0.0639 | 0.0394 |

Note: SEET is a close tolerance, peripheral ground insert type which may provide better surface finish and repeatability



| Catalog No. | Dimensions (Inches) | | | | # of Teeth | Insert Purchase Required |
|-------------|---------------------|-------|-------|------------------|------------|--------------------------|
| | D | d | L | l ₁ * | | |
| WGC4200WR | 2.000 | 1.250 | 3.970 | 1.7094 | 3 | 40 |
| WGC4250WR | 2.500 | 1.250 | 3.970 | 1.7094 | 4 | 50 |

*Represents the actual extension from holder

Plan B

**Already have a cutter?
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Get 10 FREE!**

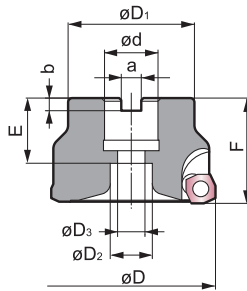
Offer valid through November 30, 2007

Metal Slash Mill
High Efficiency Shell Mills



Features & Benefits

- Screw on insert assembly
- U.S. stock standard bodies available in 2.000" - 4.000" diameters
- High feed rates (maximum feed rate = 0.078 IPT) result in high productivity milling
- Four corner insert design yields low tooling costs per part
- Unique design directs cutting forces into the machine spindle to facilitate high feed rates even in low rigidity conditions



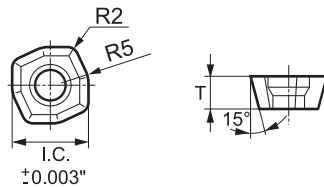
Plan A

FREE MS Mill with the purchase of required insert quantity

| Catalog No. | Dimensions (Inches) | | | | | | | | | | # of Teeth | Insert Purchase Required |
|-------------|---------------------|----------------|----------------|----------------|-------|-------|-------|-------|-------|---|------------|--------------------------|
| | D | D ₁ | D ₂ | D ₃ | F | d | a | b | E | | | |
| MS14020SR | 2.000 | 1.500 | 0.609 | 0.406 | 1.750 | 0.750 | 0.319 | 0.190 | 1.020 | 4 | 50 | |
| MS14025SR | 2.500 | 1.750 | 0.797 | 0.531 | 1.750 | 1.000 | 0.375 | 0.220 | 1.020 | 4 | 50 | |
| MS14030R | 3.000 | 2.250 | 0.797 | 0.531 | 1.750 | 1.000 | 0.375 | 0.220 | 1.020 | 5 | 60 | |
| MS14040R | 4.000 | 2.870 | 1.000 | 0.656 | 2.000 | 1.250 | 0.500 | 0.280 | 1.020 | 6 | 70 | |

Plan B

**Already have a mill?
Buy 40 inserts-
Get 10 FREE!**



| Catalog No. | Grades | | | | Dimensions (Inches) | | | |
|--------------|--------|--------|--------|--------|---------------------|-------|-------|-------|
| | ACP200 | ACP300 | ACK200 | ACK300 | I.C. | T | R2 | R5 |
| SDMW1406ZDTR | ● | ● | ● | ● | 0.551 | 0.236 | 0.079 | 0.197 |

Offer valid through November 30, 2007



SUMITOMO

CARBIDE - CBN - DIAMOND

'at the cutting edge'

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