

New Products 2018

Metric Version 3 - 2018

LOGIQ *Become a Master*
ISCAR CHESS LINES *Smarter Cutting Tools are Coming*



Member IMC Group
ISCAR
www.iscar.com

MACHINING **IN** DUSTRY 4.0 TELLIGENTLY

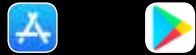
Mobile Apps



ISCAR Tool Advisor
Find the best tool
& conditions



ISCAR Cutting Info.
Machining
Parameters
Direct Access



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Upgrade Your
Current Tool



Become an **INDUSTRY 4.0**



ISCAR's Easy to Use Digital World of Applications

Web Apps

MASTER!



ITA
ISCAR Tools
Advisor



Industrealize
Metalworking
Applications



E-Cat
Electronic Catalog



MATRIX
Tool Management
System



IQ Cloud
Cloud Based
Tool Assemblies



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ADAPTATION SYSTEMS

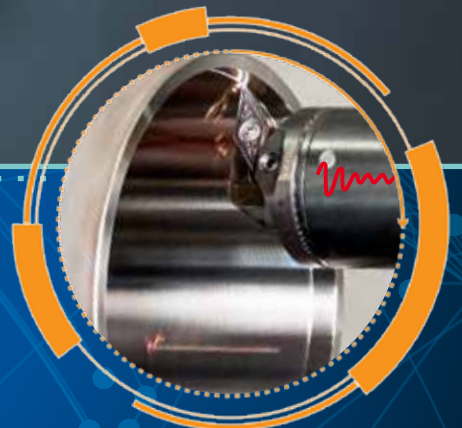
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|------------------|-----|
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|------------------|-----|

LOGIQTURN

ISCAR CHESS LINES



High Productivity



For All
Materials



New Generation



Cost Effective
Insert

MACHINING IN **DUSTRY 4.0**
TELLIGENTLY

WHISPERLINE

ANTI-VIBRATION

Anti-Vibration Turning Up to 10XD Boring Depth Whisper Master



Anti-Vibration Shank for Boring with
Exchangeable Boring Heads

Variety of **Exchangeable
Turning Heads** for Different
Geometries of Turning,
Threading and Grooving
Inserts



Boring Shaft
with Internal
Coolant



For All
Materials

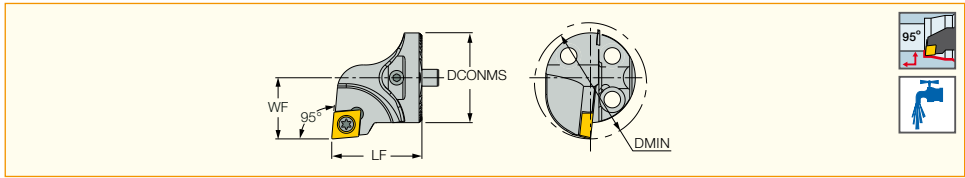


Up to 10xBD
Anti-Vibration
Shank

LOGIQTURN
ISCAR CHESS LINES

AVC-SCLCR/L

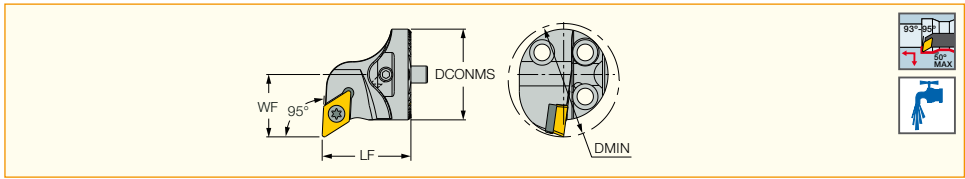
Interchangeable Boring Heads
Carrying 80° Rhombic Inserts with
7° Clearance



| Designation | WF | DCONMS | DMIN | LF |
|----------------------------|-------|--------|-------|-------|
| AVC-D16-SCLCR/L-06 | 11.00 | 16.00 | 20.00 | 20.00 |
| AVC-D20-SCLCR/L-09 | 13.00 | 20.00 | 25.00 | 20.00 |
| AVC-D25-SCLCR/L-09 | 17.00 | 25.00 | 32.00 | 22.00 |
| AVC-D32-SCLCR/L-09 | 22.00 | 32.00 | 40.00 | 32.00 |
| AVC-D40-SCLCR/L-12T | 27.00 | 40.00 | 50.00 | 38.00 |

AVC-SDUCR/L

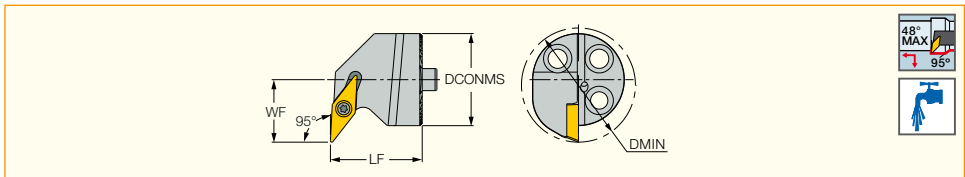
Interchangeable Boring Heads
Carrying 55° Rhombic Inserts with
7° Clearance



| Designation | WF | DCONMS | DMIN | LF |
|----------------------------|-------|--------|-------|-------|
| AVC-D16-SDUCR/L-07 | 11.00 | 16.00 | 20.00 | 20.00 |
| AVC-D20-SDUCR/L-11 | 13.00 | 20.00 | 25.00 | 20.00 |
| AVC-D25-SDUCR/L-11 | 17.00 | 25.00 | 32.00 | 20.00 |
| AVC-D32-SDUCR/L-11T | 22.00 | 32.00 | 40.00 | 32.00 |
| AVC-D40-SDUCR/L-11T | 27.00 | 40.00 | 50.00 | 38.00 |

AVC-SVUCR/L

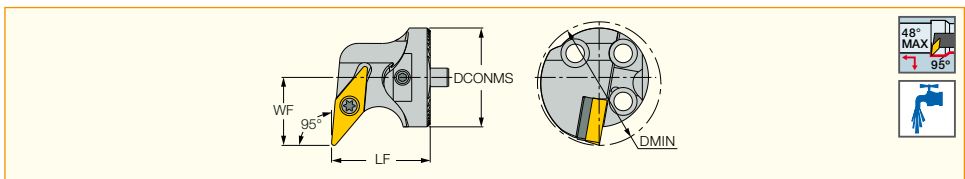
Interchangeable Boring Heads
for 35° Rhombic Inserts with
7° Clearance



| Designation | WF | DCONMS | DMIN | LF |
|---------------------------|-------|--------|-------|-------|
| AVC-D20-SVUCR/L-11 | 16.00 | 20.00 | 27.00 | 20.00 |
| AVC-D25-SVUCR/L-11 | 17.00 | 25.00 | 32.00 | 25.00 |

AVC-SVLCR/L

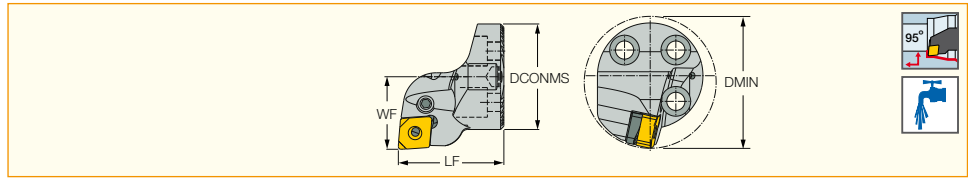
Interchangeable Boring Heads
Carrying 35° Rhombic Inserts with
7° Clearance



| Designation | WF | DCONMS | DMIN | LF |
|----------------------------|-------|--------|-------|-------|
| AVC-D32-SVLCR/L-16T | 22.00 | 32.00 | 40.00 | 32.00 |
| AVC-D40-SVLCR/L-16T | 27.00 | 40.00 | 50.00 | 32.00 |

AVC-PCLNR/L

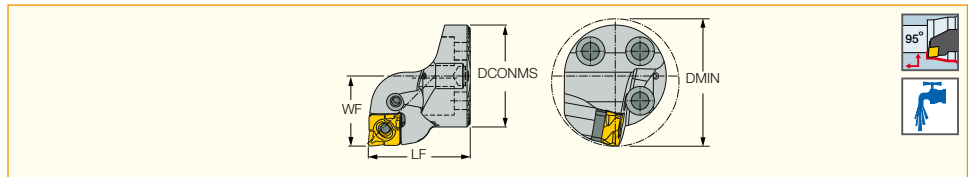
Interchangeable Boring Heads for 80°
Rhombic Inserts



| Designation | DCONMS | WF | LF | DMIN | | | | | | | |
|---------------------------|--------|-------|-------|-------|---------|-------|------|-------------|--------|------|--------|
| AVC-D20-PCLNR/L-09 | 20.00 | 13.00 | 20.00 | 25.00 | TCN 323 | TCX 3 | LR 3 | SR 117-2014 | HW 2.5 | SP 3 | PN 3-4 |
| AVC-D25-PCLNR/L-09 | 25.00 | 17.00 | 25.00 | 32.00 | TCN 323 | TCX 3 | LR 3 | SR 117-2014 | HW 2.5 | SP 3 | PN 3-4 |
| AVC-D32-PCLNR/L-09 | 32.00 | 22.00 | 32.00 | 40.00 | TCN 323 | TCX 3 | LR 3 | SR 117-2014 | HW 2.5 | SP 3 | PN 3-4 |

AVC-PCLXR/L

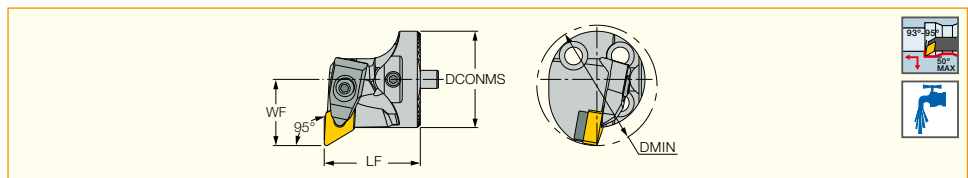
Interchangeable Boring Heads for 80°
Rhombic Inserts



| Designation | DCONMS | WF | LF | DMIN | | | | | | |
|----------------------------|--------|-------|-------|-------|---------|-------|-------------|--------|------|--------|
| AVC-D20-PCLXR/L-09X | 20.00 | 13.00 | 20.00 | 25.00 | TSN 323 | LR 3W | SR 117-2014 | HW 2.5 | SP 3 | PN 3-4 |
| AVC-D25-PCLXR/L-09X | 25.00 | 17.00 | 25.00 | 32.00 | TSN 323 | LR 3W | SR 117-2014 | HW 2.5 | SP 3 | PN 3-4 |
| AVC-D32-PCLXR/L-09X | 32.00 | 22.00 | 32.00 | 40.00 | TSN 323 | LR 3W | SR 117-2014 | HW 2.5 | SP 3 | PN 3-4 |
| AVC-D40-PCLXR/L-12X | 40.00 | 27.00 | 40.00 | 50.00 | TSN 323 | LR 3W | SR 117-2014 | HW 2.5 | SP 3 | PN 3-4 |

AVC-DDUNR/L

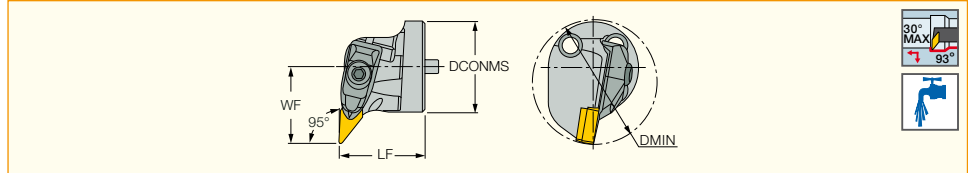
Interchangeable Boring Heads for 55°
Rhombic Inserts



| Designation | WF | DCONMS | DMIN | LF |
|----------------------------|-------|--------|-------|-------|
| AVC-D32-DDUNR/L-11T | 22.00 | 32.00 | 40.00 | 32.00 |
| AVC-D40-DDUNR/L-15T | 27.00 | 40.00 | 50.00 | 32.00 |

AVC-DVUNR/L

Interchangeable Boring Heads for 35°
Rhombic Inserts

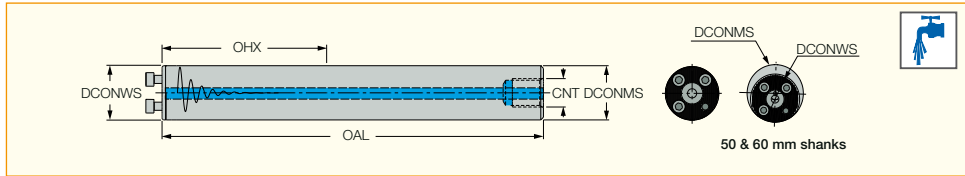


| Designation | WF | DCONMS | DMIN | LF |
|----------------------------|-------|--------|-------|-------|
| AVC-D40-DVUNR/L-16T | 30.00 | 40.00 | 52.00 | 36.00 |

Straight Shank

AV-D

Anti-Vibration Bars with Through Coolant for Interchangeable Turning Heads



| Designation | DCONMS | DCONWS | OAL | OHX ⁽¹⁾ | CNT |
|--------------|--------|--------|--------|--------------------|------|
| AV-D16-7D-C | 16.00 | 16.00 | 156.00 | 92.0 | - |
| AV-D16-10D-E | 16.00 | 16.00 | 204.00 | 140.0 | G1/8 |
| AV-D20-7D-C | 20.00 | 20.00 | 200.00 | 120.0 | - |
| AV-D20-10D-E | 20.00 | 20.00 | 260.30 | 180.0 | G1/4 |
| AV-D25-7D-C | 25.00 | 25.00 | 257.50 | 155.0 | G1/4 |
| AV-D25-10D-C | 25.00 | 25.00 | 330.00 | 230.0 | G1/4 |
| AV-D32-7D-C | 32.00 | 32.00 | 323.00 | 192.0 | G3/8 |
| AV-D32-10D-C | 32.00 | 32.00 | 416.00 | 288.0 | G3/8 |
| AV-D40-7D-C | 40.00 | 40.00 | 408.00 | 248.0 | G1/2 |
| AV-D40-10D-C | 40.00 | 40.00 | 528.00 | 368.0 | G1/2 |
| AV-D50-7D-C | 50.00 | 40.00 | 518.00 | 318.0 | G1/2 |
| AV-D50-10D-C | 50.00 | 40.00 | 668.00 | 468.0 | G1/2 |
| AV-D60-7D-C | 60.00 | 40.00 | 628.00 | 388.0 | G3/4 |
| AV-D60-10D-C | 60.00 | 40.00 | 813.00 | 568.0 | G3/4 |

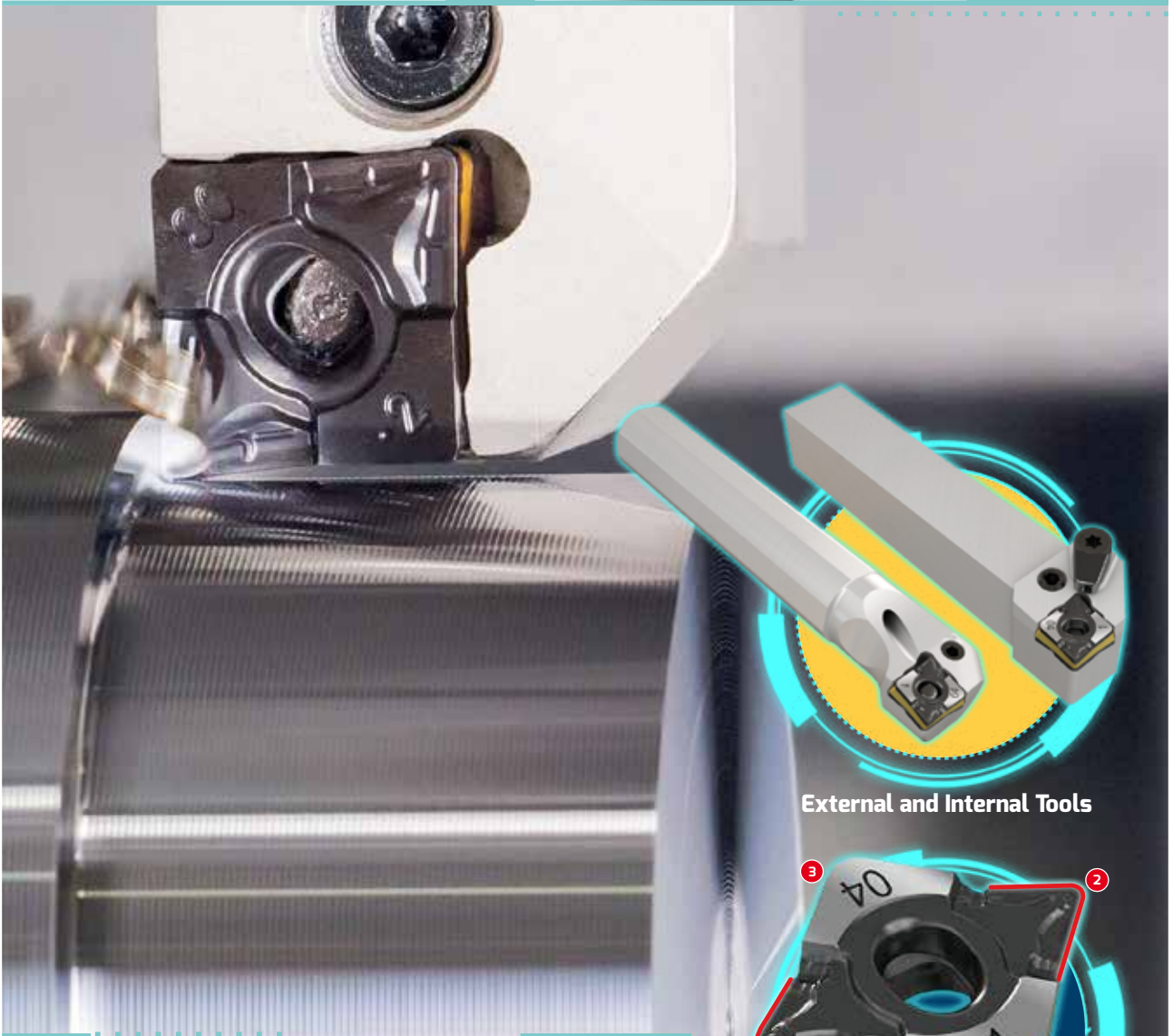
⁽¹⁾ Maximum overhang



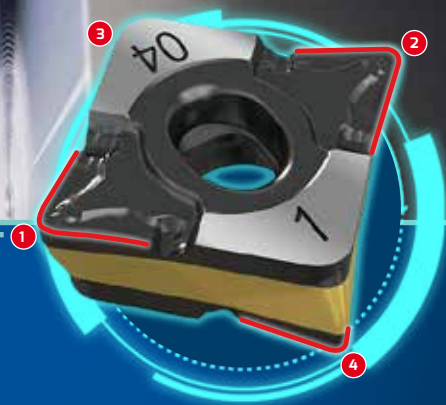
LOGIQ4TURN

POSITIVE DOUBLE SIDED

Economical Positive Insert Double Sided Master



External and Internal Tools



Double Sided Insert with 4 Positive Cutting Edges



Medium Finish



Double Sided
Insert



Dovetail



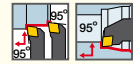
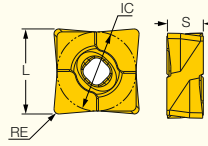
Positive Rake
Insert



LOGIQ4TURN
ISCAR CHESS LINES

CXMG-F3P

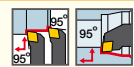
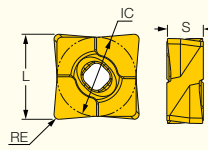
80° Double-Sided and Double-Positive Inserts with a Positive Rake for Finishing on Alloyed Steel



| Designation | Dimensions | | | | IC8150 | Recommended Machining Data | |
|------------------------|------------|-------|------|------|--------|----------------------------|------------|
| | L | IC | S | RE | | a_p (mm) | f (mm/rev) |
| CXMG 090404-F3P | 10.40 | 9.70 | 4.65 | 0.40 | ● | 0.40-2.00 | 0.05-0.25 |
| CXMG 12T504-F3P | 13.83 | 12.80 | 5.80 | 0.40 | ● | 0.40-2.00 | 0.05-0.25 |
| CXMG 12T508-F3P | 13.75 | 12.80 | 5.80 | 0.80 | ● | 0.40-2.00 | 0.05-0.25 |

CXMG-M3P

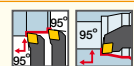
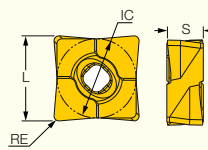
80° Double-Sided and Double-Positive Inserts with a Positive Rake for Medium Machining on Alloyed Steel



| Designation | Dimensions | | | | Tough ↔ Hard | | Recommended Machining Data | |
|------------------------|------------|-------|------|------|--------------|--------|----------------------------|------------|
| | L | IC | S | RE | IC8250 | IC8150 | a_p (mm) | f (mm/rev) |
| CXMG 090408-M3P | 10.32 | 9.70 | 4.65 | 0.80 | ● | | 0.80-3.00 | 0.10-0.50 |
| CXMG 12T508-M3P | 13.75 | 12.80 | 5.80 | 0.80 | ● | ● | 0.80-5.00 | 0.10-0.50 |
| CXMG 12T512-M3P | 13.68 | 12.80 | 5.80 | 1.20 | ● | ● | 1.20-5.00 | 0.10-0.50 |

CXMG-F3M

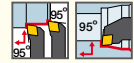
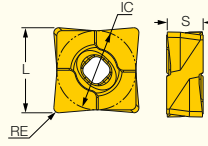
80° Double-Sided and Double-Positive Inserts with a Positive Rake for Finishing on Stainless Steel and H.T.A.



| Designation | Dimensions | | | | Tough ↔ Hard | | | Recommended Machining Data | |
|------------------------|------------|-------|------|------|--------------|-------|-------|----------------------------|------------|
| | L | IC | S | RE | IC6025 | IC806 | IC807 | a_p (mm) | f (mm/rev) |
| CXMG 090404-F3M | 10.40 | 9.70 | 4.65 | 0.40 | | | ● | 0.40-2.00 | 0.05-0.25 |
| CXMG 12T504-F3M | 13.83 | 12.80 | 5.80 | 0.40 | ● | ● | ● | 0.40-2.00 | 0.05-0.25 |
| CXMG 12T508-F3M | 13.75 | 12.80 | 5.80 | 0.80 | ● | ● | ● | 0.80-2.00 | 0.05-0.25 |

CXMG-M3M

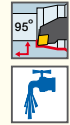
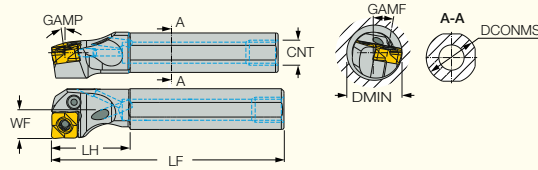
80° Double-Sided and Double-Positive Inserts with a Positive Rake for Medium Machining on Stainless Steel and H.T.A.



| Designation | Dimensions | | | | Tough ↔ Hard | | | Recommended Machining Data | |
|------------------------|------------|------|------|-------|--------------|-------|-------|----------------------------|------------|
| | L | RE | S | IC | IC6025 | IC806 | IC807 | a _D (mm) | f (mm/rev) |
| CXMG 090408-M3M | 10.32 | 0.80 | 4.65 | 9.70 | ● | ● | ● | 0.80-3.00 | 0.15-0.50 |
| CXMG 12T508-M3M | 13.75 | 0.80 | 5.80 | 12.80 | ● | ● | ● | 0.80-5.00 | 0.15-0.50 |
| CXMG 12T512-M3M | 13.68 | 1.20 | 5.80 | 12.80 | ● | ● | ● | 1.20-5.00 | 0.15-0.50 |

A-PCLXR/L

Lever Lock Boring Bars Carrying the Negative CXMG 80° Rhombic Inserts



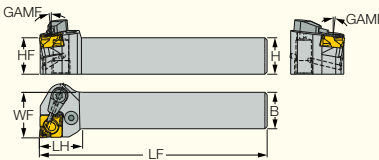
| Designation | DCONMS | LF | LDRED | WF | HF | GAMP | GAMF | DMIN | CNT | Insert |
|-------------------------|--------|--------|-------|-------|-------|------|------|-------|-------------|-----------|
| A16Q PCLXR/L-09X | 16.00 | 180.00 | 30.0 | 11.00 | 999.0 | 8.0 | 10.0 | 20.00 | UNC 3/8"-16 | CXMG 09.. |
| A20R PCLXR/L-09X | 20.00 | 200.00 | 30.0 | 13.00 | 999.0 | 6.0 | 10.0 | 25.00 | UNC 3/8"-24 | CXMG 09.. |
| A25S PCLXR/L-09X | 25.00 | 250.00 | 40.0 | 17.00 | 999.0 | 6.0 | 8.0 | 32.00 | UNC 1/2"-20 | CXMG 09.. |

Spare Parts

| Designation | | | |
|-------------------------|--------|-----------|-------|
| A16Q PCLXR/L-09X | HW 2.0 | LR 3X SET | PL 16 |
| A16Q PCLXR-09X | HW 2.0 | LR 3X SET | PL 16 |
| A20R PCLXR/L-09X | HW 2.0 | LR 3X SET | PL 20 |
| A25S PCLXR/L-09X | HW 2.0 | LR 3X SET | PL 25 |

PCLXR/L-JHP

Lever Lock Tools with Channels for High Pressure Coolant Carrying the CXMG 80° Rhombic Inserts



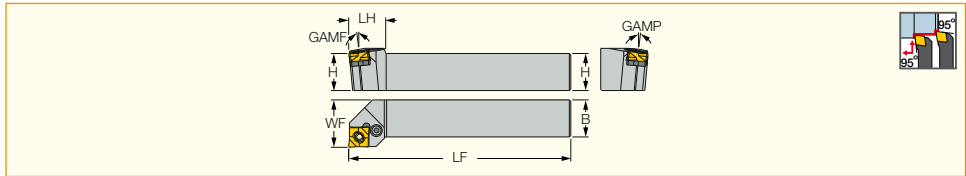
| Designation | B | H | HF | LF | LH | WF | GAMP | GAMF | Insert |
|------------------------------|------|------|------|--------|------|-------|------|------|------------|
| PCLXR/L 1212F-09X-JHP | 12.0 | 12.0 | 12.0 | 80.00 | 21.5 | 16.00 | 6.0 | 6.0 | CXMG 09... |
| PCLXR/L 1616H-09X-JHP | 16.0 | 16.0 | 16.0 | 100.00 | 20.0 | 20.00 | 6.0 | 6.0 | CXMG 09... |
| PCLXR/L 2020K-12X-JHP | 20.0 | 20.0 | 20.0 | 125.00 | 25.0 | 25.00 | 6.0 | 6.0 | CXMG 12... |
| PCLXR/L 2525M-12X-JHP | 25.0 | 25.0 | 25.0 | 150.00 | 25.0 | 32.00 | 6.0 | 6.0 | CXMG 12... |

Spare Parts

| Designation | | | | | | | | | |
|------------------------------|----------|-----------|----------|--------|--------|--|-------|------|-------------------|
| PCLXR/L 1212F-09X-JHP | | LR 3X SET | | | | | T-8/5 | | S-CU-JHP-A SET |
| PCLXR/L 1616H-09X-JHP | | LR 3X SET | | | | | T-8/5 | | S-CU-JHP-A SET |
| PCLXR/L 2020K-12X-JHP | TCNX 423 | LR-4X | SR LCS 5 | HW 3.0 | PN 3-4 | | | SP 4 | CH-1.9D-JHP-A SET |
| PCLXR/L 2525M-12X-JHP | TCNX 423 | LR-4X | SR LCS 5 | HW 3.0 | PN 3-4 | | | SP 4 | CH-1.9D-JHP-A SET |

PCLXR/L

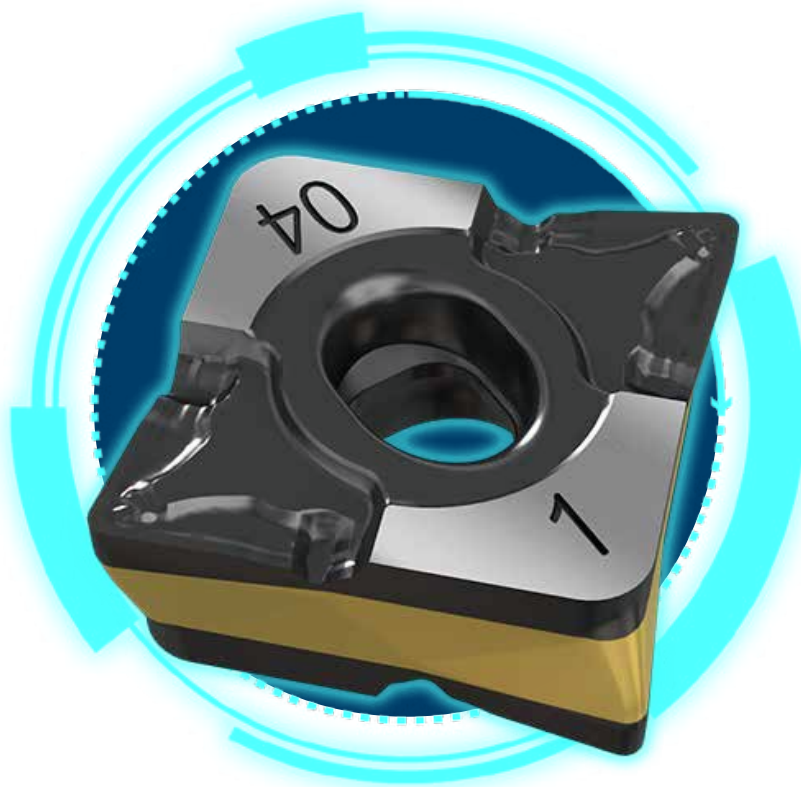
Lever Lock Tools Carrying the CXMG
80° Rhombic Inserts



| Designation | B | H | HF | LF | LH | WF | GAMP | GAMF | Insert |
|--------------------------|------|------|------|--------|------|-------|------|------|------------|
| PCLXR/L 1212F-09X | 12.0 | 12.0 | 12.0 | 80.00 | 21.5 | 16.00 | 6.0 | 6.0 | CXMG 09... |
| PCLXR/L 1616H-09X | 16.0 | 16.0 | 16.0 | 100.00 | 20.0 | 20.00 | 6.0 | 6.0 | CXMG 09... |
| PCLXR/L 2020K-12X | 20.0 | 20.0 | 20.0 | 125.00 | 25.0 | 25.00 | 6.0 | 6.0 | CXMG 12... |
| PCLXR/L 2525M-12X | 25.0 | 25.0 | 25.0 | 150.00 | 25.0 | 32.00 | 6.0 | 6.0 | CXMG 12... |

Spare Parts

| Designation | | | | | | |
|--------------------------|----------|-----------|-------------|--------|--------|------|
| PCLXR/L 1212F-09X | | LR 3X SET | | HW 2.0 | | |
| PCLXR/L 1616H-09X | | LR 3X SET | | HW 2.0 | | |
| PCLXR/L 2020K-12X | TCNX 423 | LR-4X | SR 117-2010 | HW 3.0 | PN 3-4 | SP 4 |
| PCLXR/L 2525M-12X | TCNX 423 | LR-4X | SR 117-2010 | HW 3.0 | PN 3-4 | SP 4 |



Pinpointed Coolant Jet Master



New Tool Holder with 3 Inlets for Coolant

Through-Coolant Clamp

Rigidly Clamped Holder
with Through-Coolant Clamp
Directed to the Cutting Edge



Rigid Clamping



Easy Chip Evacuation



Variety of Inserts for Coolant

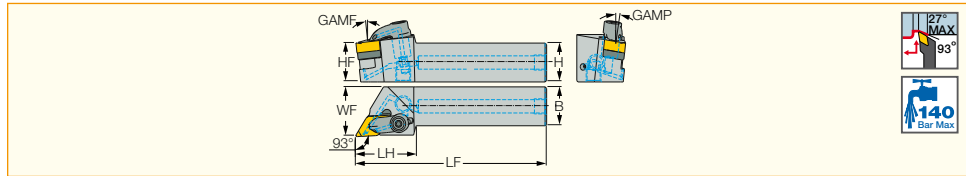


High Pressure Coolant



DDJNR/L-JHP-MC

Rigid Clamp Tools with Channels for High Pressure Coolant Carrying the 55° Rhombic Inserts



| Designation | B | H | HF | LF | LH | WF | GAMP | GAMF | Insert |
|--------------------------------|------|------|------|-------|-------|-------|------|------|-------------|
| DDJNR/L 2020X-15-JHP-MC | 20.0 | 20.0 | 20.0 | 40.00 | 125.0 | 25.00 | 6.0 | 6.0 | DNMG/X 1506 |
| DDJNR/L 2525X-15-JHP-MC | 25.0 | 25.0 | 25.0 | 40.00 | 150.0 | 32.00 | 6.0 | 6.0 | DNMG/X 1506 |

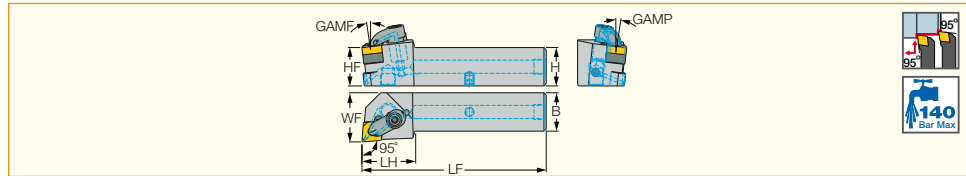
Spare Parts

| Designation | | | | | | |
|------------------------------|---------|--------------|--------|------------------|-----------|--------|
| DDJNL 2020X-15-JHP-MC | RDT 443 | LCGL-4JC SET | T-20/5 | PLG 1/8BSP TL360 | SR 14-506 | |
| DDJNR 2020X-15-JHP-MC | RDT 433 | LCGR-4JC SET | T-20/5 | PLG 1/8BSP TL360 | SR 14-506 | |
| DDJNL 2525X-15-JHP-MC | RDT 433 | LCGL-4JC SET | T-20/5 | PLG 1/8BSP TL360 | SR 14-506 | T-15/5 |
| DDJNR 2525X-15-JHP-MC | RDT 433 | LCGR-4JC SET | T-20/5 | PLG 1/8BSP TL360 | SR 14-506 | T-15/5 |



DCLNR/L-JHP-MC

Rigid Clamp Tools with Channels for High Pressure Coolant Carrying the 80° Rhombic Inserts



| Designation | B | H | HF | LF | LH | WF | GAMP | GAMF | Insert |
|--------------------------------|------|------|------|--------|------|-------|------|------|---------------------|
| DCLNR/L 2020X-12-JHP-MC | 20.0 | 20.0 | 20.0 | 125.00 | 35.0 | 25.00 | 6.0 | 6.0 | CNMG 1204 CNMX 1207 |
| DCLNR/L 2525X-12-JHP-MC | 25.0 | 25.0 | 25.0 | 150.00 | 35.0 | 32.00 | 6.0 | 6.0 | CNMG 1204 CNMX 1207 |

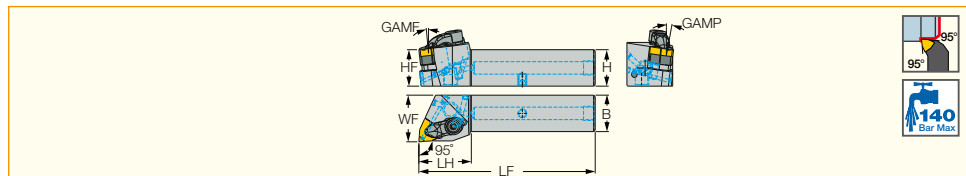
Spare Parts

| Designation | | | | | | |
|------------------------------|---------|--------------|------------------|--------|-----------|--------|
| DCLNL 2020X-12-JHP-MC | RCT 443 | LCGL-4JC SET | PLG 1/8BSP TL360 | | SR 14-506 | T-20/5 |
| DCLNR 2020X-12-JHP-MC | RCT 443 | LCGR-4JC SET | PLG 1/8BSP TL360 | | SR 14-506 | T-20/5 |
| DCLNL 2525X-12-JHP-MC | RCT 443 | LCGL-4JC SET | PLG 1/8BSP TL360 | T-15/5 | SR 14-506 | T-20/5 |
| DCLNR 2525X-12-JHP-MC | RCT 443 | LCGR-4JC SET | PLG 1/8BSP TL360 | T-15/5 | SR 14-506 | T-20/5 |



DWLNR/L-JHP-MC

Rigid Clamp Tools with Channels for High Pressure Coolant Carrying the 80° Trigon Inserts

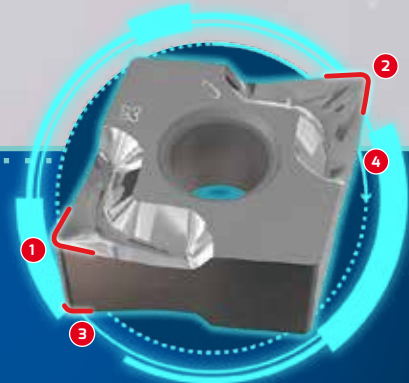
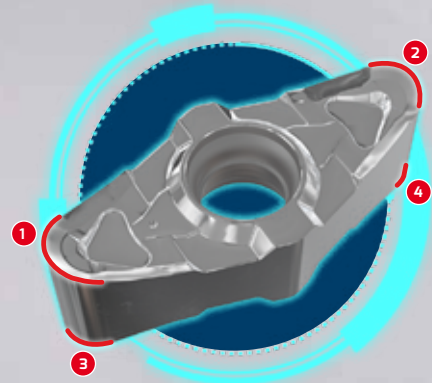
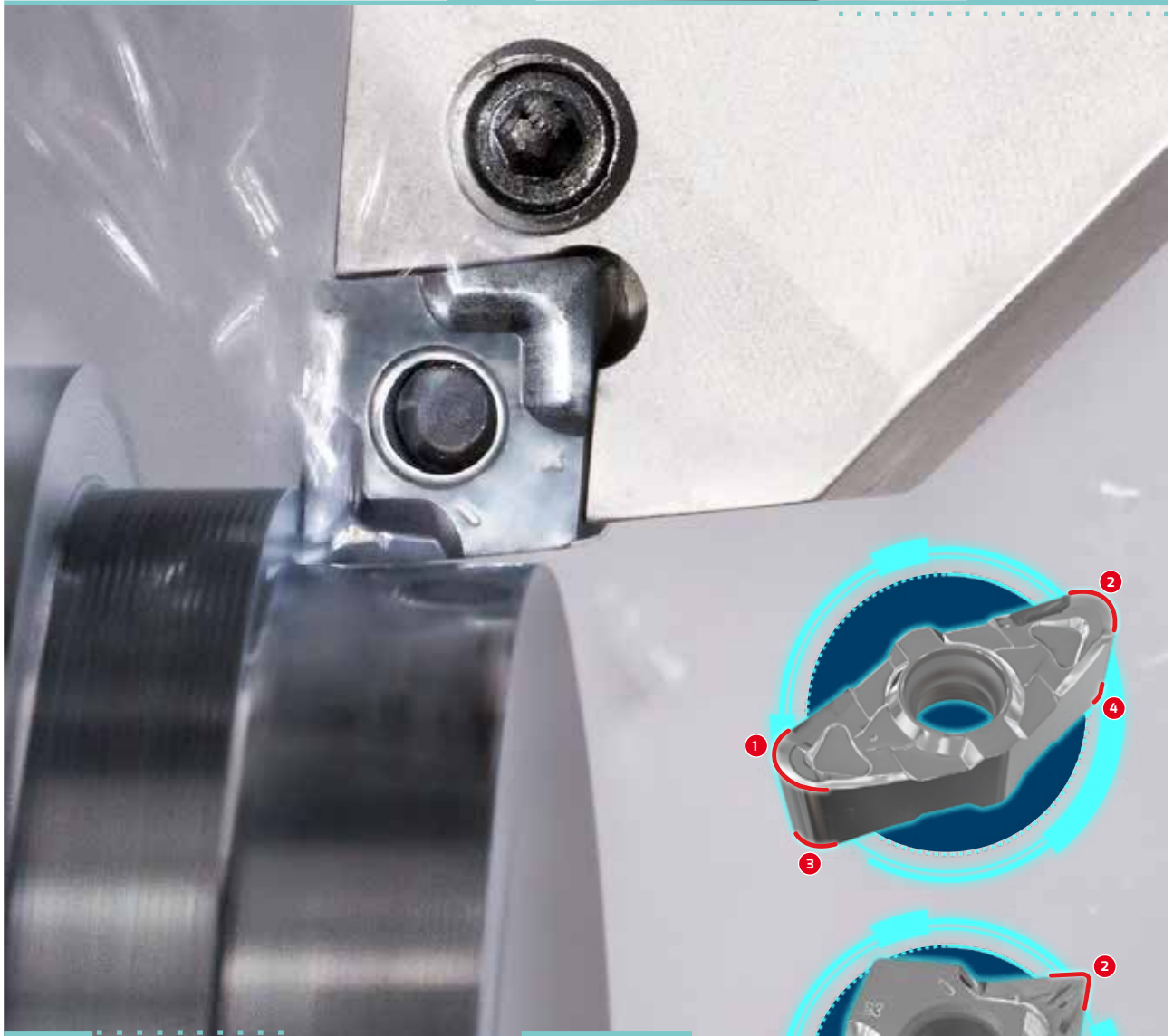


| Designation | B | H | HF | LF | LH | WF | GAMP | GAMF | Insert |
|--------------------------------|------|------|------|-------|------|-------|------|------|-----------|
| DWLNR/L 2020X-08-JHP-MC | 20.0 | 20.0 | 20.0 | 20.00 | 36.0 | 25.00 | 6.0 | 6.0 | WNMG 0804 |
| DWLNR/L 2525X-08-JHP-MC | 25.0 | 25.0 | 25.0 | 25.00 | 36.0 | 32.00 | 6.0 | 6.0 | WNMG 0804 |

Spare Parts

| Designation | | | | | | |
|------------------------------|---------|--------------|--------|-----------|------------------|--------|
| DWLNL 2020X-08-JHP-MC | RWT 443 | LCGR-4JC SET | | SR 14-506 | PLG 1/8BSP TL360 | T-20/5 |
| DWLNR 2020X-08-JHP-MC | RWT 443 | LCGR-4JC SET | | SR 14-506 | PLG 1/8BSP TL360 | T-20/5 |
| DWLNL 2525X-08-JHP-MC | RWT 443 | LCGL-4JC SET | T-15/5 | SR 14-506 | PLG 1/8BSP TL360 | T-20/5 |
| DWLNR 2525X-08-JHP-MC | RWT 443 | LCGR-4JC SET | T-15/5 | SR 14-506 | PLG 1/8BSP TL360 | T-20/5 |

Economical Turning Aluminum Master



Double Sided Positive Turning Inserts for Aluminum



Medium Finish



For Aluminum



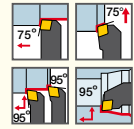
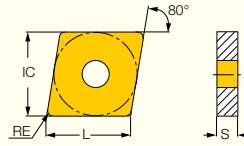
Double Sided
Insert



Positive Rake

CNGG-F3N

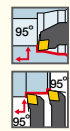
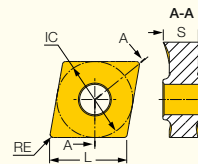
Double-Sided Sharp-Edged Positive and Polished Rake Inserts for Finishing on Aluminum and Other Non-Ferrous Materials



| Designation | Dimensions | | | | | IC20 | Recommended Machining Data | |
|--------------------------|------------|------|------|------|------------|-----------|----------------------------|--|
| | L | IC | S | RE | a_p (mm) | | f (mm/rev) | |
| CNGG 090402-F3N-P | 9.70 | 9.52 | 4.76 | 0.20 | ● | 0.30-3.00 | 0.10-0.30 | |
| CNGG 090404-F3N-P | 9.70 | 9.52 | 4.76 | 0.40 | ● | 0.30-3.00 | 0.10-0.30 | |
| CNGG 090408-F3N-P | 9.70 | 9.52 | 4.76 | 0.80 | ● | 0.30-3.00 | 0.10-0.30 | |

CNGX-M3N

Double-Sided Positive Rake Inserts with High Helical and Sharp Edge for Medium Machining on Non-Ferrous Materials

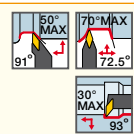
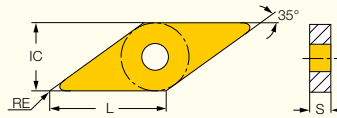


| Designation | Dimensions | | | | | IC20 | Recommended Machining Data | |
|--------------------------|------------|------|------|------|------------|-----------|----------------------------|--|
| | L | IC | S | RE | a_p (mm) | | f (mm/rev) | |
| CNGX 090604-M3N-P | 9.70 | 9.52 | 4.40 | 0.40 | ● | 0.30-3.00 | 0.10-0.30 | |
| CNGX 090608-M3N-P | 9.70 | 9.52 | 4.40 | 0.80 | ● | 0.30-3.00 | 0.10-0.30 | |

● PCLNR/L...X and A..-PCLNR/L-X are most recommended as they were designed especially for this insert

VNGU-R3N

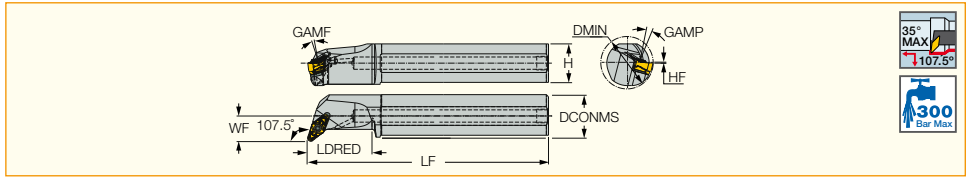
Double-Sided Sharp-Edged Positive Rake Inserts for Rough Machining on Aluminum and Other Non-Ferrous Materials



| Designation | Dimensions | | | | | IC20 | Recommended Machining Data | |
|------------------------|------------|-------|------|------|------------|-----------|----------------------------|--|
| | L | IC | S | RE | a_p (mm) | | f (mm/rev) | |
| VNGU 220616-R3N | 22.00 | 12.70 | 6.35 | 1.60 | ● | 0.50-3.00 | 0.10-0.25 | |
| VNGU 220630-R3N | 22.00 | 12.70 | 6.35 | 3.00 | ● | 1.50-4.50 | 0.15-0.30 | |

A-SVQNR/L-AL-JHP

Screw Lock Boring Bars Carrying the 35° Rhombic Inserts



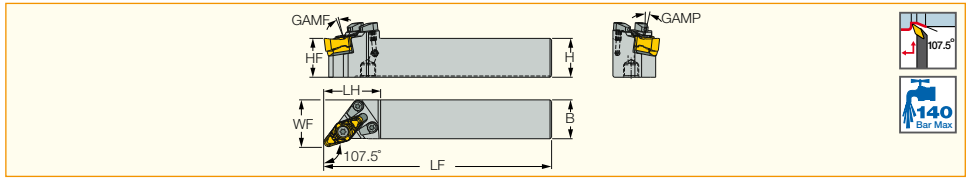
| Designation | DCONMS | LF | LDRED | H | HF | WF | DMIN | CSP | GAMP | GAMF | Insert |
|-------------------------------|--------|--------|-------|------|-----|-------|-------|-----|------|------|-----------|
| A40U SVQNR/L-22-AL-JHP | 40.00 | 348.10 | 60.0 | 36.0 | 0.1 | 23.40 | 49.00 | Y | 6.5 | 14.5 | VNGU 22.. |

Spare Parts

| Designation | | | | | | | |
|-------------------------|----------|----------------|--------|----------|------------|-------|---------|
| A-SVQNR/L-AL-JHP | TVX 2230 | SR 14-591/L-SN | HW 3.0 | SW6-T-SH | BLD T20/S7 | PL 40 | SR TC-4 |

SVHNR/L-JHP

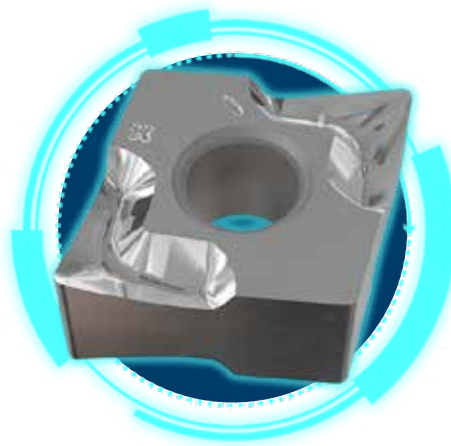
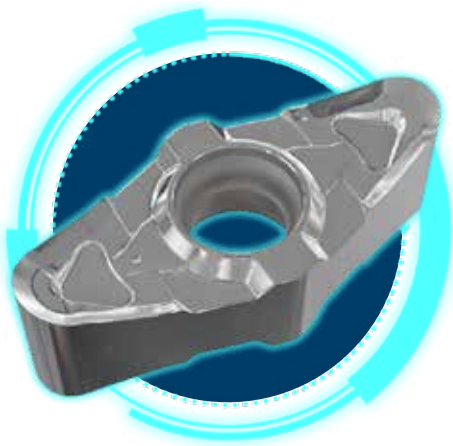
Screw Lock Tools with Channels for High Pressure Coolant Carrying 35° Rhombic Inserts



| Designation | H | B | HF | LF | LH | WF | GAMP | GAMF | Insert |
|--------------------------------|------|------|------|--------|------|-------|------|------|-----------|
| SVHNR/L 2525M-22-AL-JHP | 25.0 | 25.0 | 25.0 | 146.34 | 36.4 | 30.03 | 7.0 | 6.0 | VNGU 22.. |

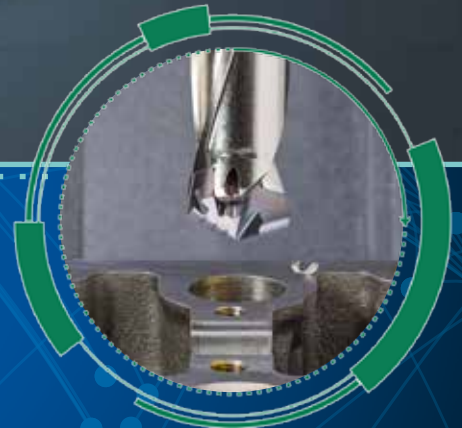
Spare Parts

| Designation | | | | | | | |
|--------------------|----------|----------------|----------|------------|--------|---------|-------------------|
| SVHNR/L-JHP | TVX 2230 | SR 14-591/L-SN | SW6-T-SH | BLD T20/S7 | HW 3.0 | SR TC-4 | CH-1.9D-JHP-A SET |



LOGIQ DRILL

ISCAR CHESS LINES



High Productivity



For All
Materials



New Generation



Cost Effective
Insert

MACHINING IN **INDUSTRY 4.0**
TELLIGENTLY

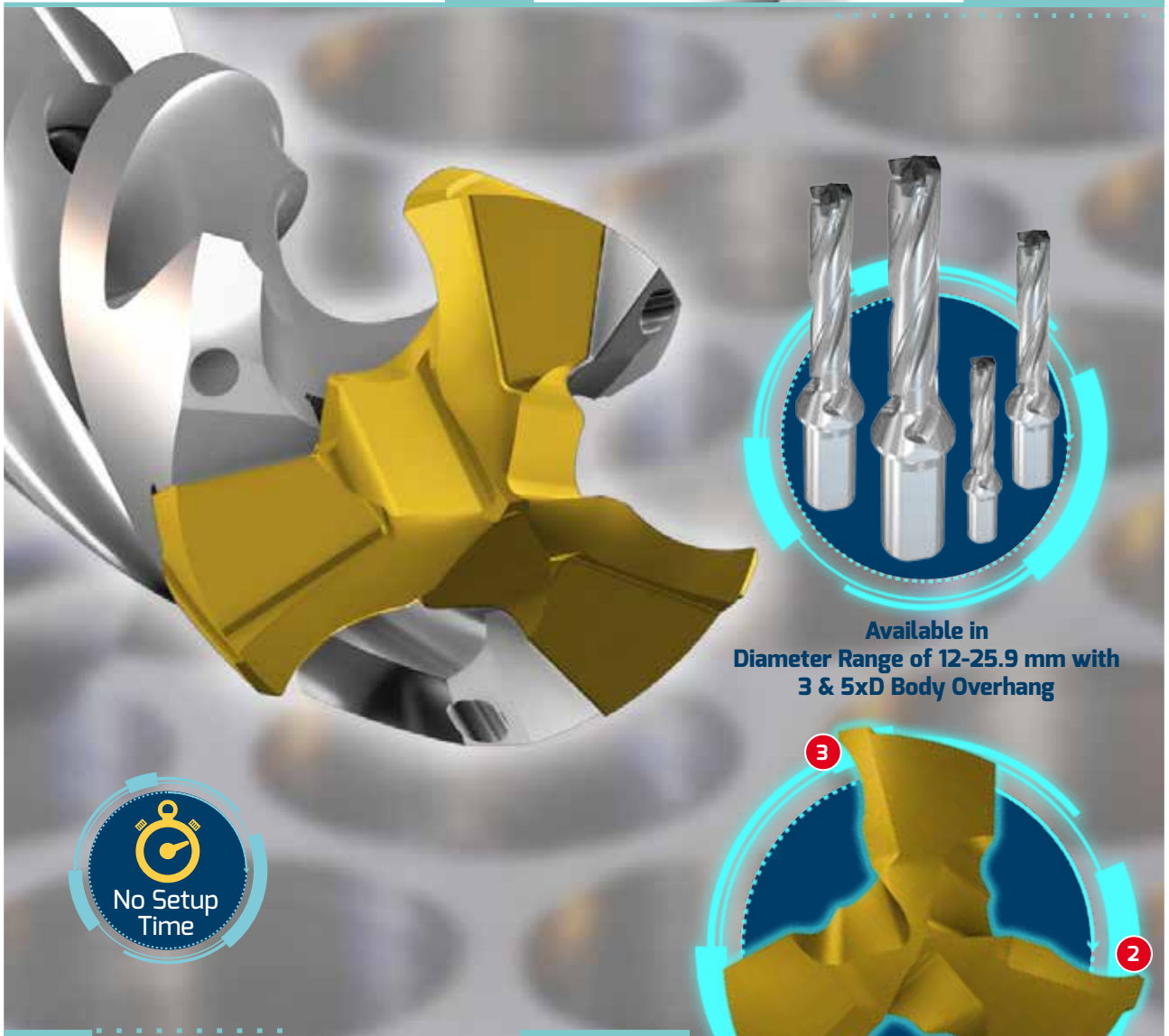
LOGIQ 3CHAM

THREE FLUTE CHAMDRILL

3 Effective Cutting Edges

Dia 12-25.9 mm

Drilling Master



Available in
Diameter Range of 12-25.9 mm with
3 & 5xD Body Overhang



3 Effective Cutting Edges for Higher Drilling Productivity



Self Centering
Insert



For Steel &
Cast Iron



High Productivity



Cost Effective
Insert

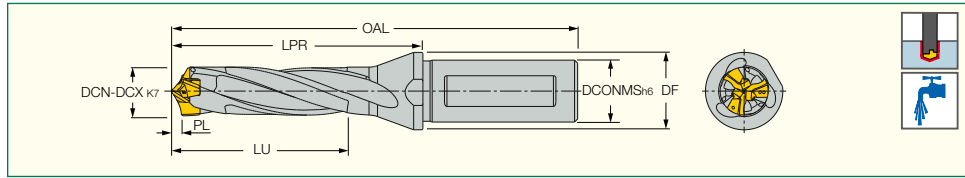


LOGIQ DRILL

ISCAR CHESS LINES

D3N A-3D

Exchangeable Head 3 Flute Drills with Coolant Holes and One Flat Shank, Drilling Depth 3xD



| Designation | DCN ⁽¹⁾ | DCX | LU | PL | DCONMS | DF | LPR | OAL | SSC ⁽²⁾ |
|--------------------|--------------------|-------|------|------|--------|-------|--------|--------|--------------------|
| D3N 120-036-16A-3D | 12.00 | 12.40 | 39.3 | 3.30 | 16.00 | 20.00 | 61.00 | 109.00 | 12 |
| D3N 125-037-16A-3D | 12.50 | 12.90 | 40.3 | 3.30 | 16.00 | 20.00 | 63.30 | 110.50 | 12 |
| D3N 130-039-16A-3D | 13.00 | 13.40 | 42.3 | 3.30 | 16.00 | 20.00 | 66.10 | 114.08 | 13 |
| D3N 135-041-16A-3D | 13.50 | 13.90 | 43.8 | 3.30 | 16.00 | 20.00 | 68.30 | 116.33 | 13 |
| D3N 140-042-16A-3D | 14.00 | 14.40 | 45.3 | 3.30 | 16.00 | 20.00 | 71.20 | 119.16 | 14 |
| D3N 145-044-16A-3D | 14.50 | 14.90 | 46.8 | 3.30 | 16.00 | 20.00 | 73.40 | 121.41 | 14 |
| D3N 150-045-20A-3D | 15.00 | 15.90 | 48.9 | 3.90 | 20.00 | 25.00 | 76.20 | 126.24 | 15 |
| D3N 160-048-20A-3D | 16.00 | 16.90 | 51.9 | 3.90 | 20.00 | 25.00 | 81.30 | 131.33 | 16 |
| D3N 170-051-20A-3D | 17.00 | 17.90 | 54.9 | 3.90 | 20.00 | 25.00 | 86.40 | 135.42 | 17 |
| D3N 180-054-25A-3D | 18.00 | 18.90 | 58.4 | 4.40 | 25.00 | 32.00 | 91.50 | 147.50 | 18 |
| D3N 190-057-25A-3D | 19.00 | 19.90 | 61.4 | 4.40 | 25.00 | 32.00 | 96.60 | 152.58 | 19 |
| D3N 200-060-25A-3D | 20.00 | 20.90 | 64.4 | 4.40 | 25.00 | 32.00 | 101.70 | 157.66 | 20 |
| D3N 210-063-25A-3D | 21.00 | 21.90 | 67.4 | 4.40 | 25.00 | 32.00 | 106.70 | 162.74 | 21 |
| D3N 220-066-25A-3D | 22.00 | 22.90 | 70.4 | 4.40 | 25.00 | 32.00 | 111.80 | 167.83 | 22 |
| D3N 230-069-32A-3D | 23.00 | 23.90 | 74.7 | 5.70 | 32.00 | 42.00 | 116.90 | 176.90 | 23 |
| D3N 240-072-32A-3D | 24.00 | 24.90 | 77.7 | 5.70 | 32.00 | 42.00 | 122.00 | 182.00 | 24 |
| D3N 250-075-32A-3D | 25.00 | 25.90 | 80.7 | 5.70 | 32.00 | 42.00 | 127.10 | 187.08 | 25 |

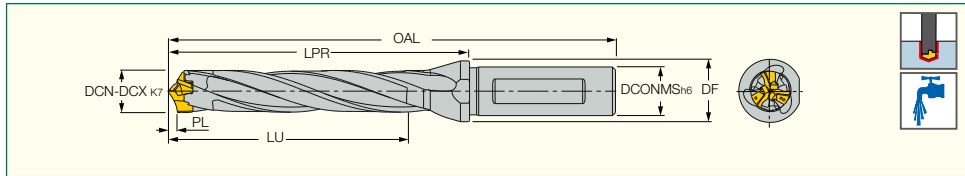
⁽¹⁾ Cutting diameter minimum

⁽²⁾ Seat size code



D3N A-5D

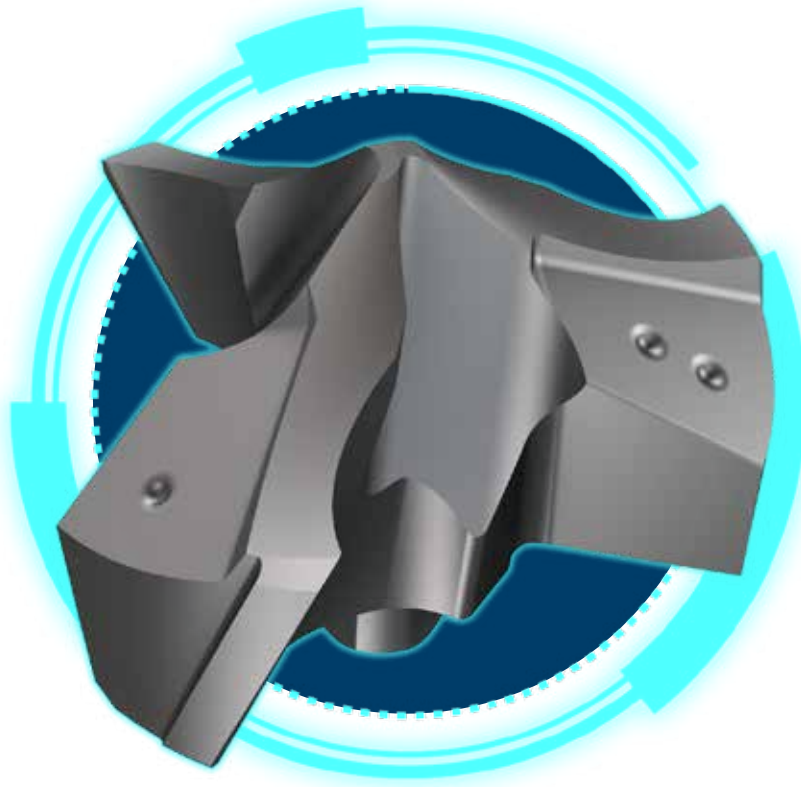
Exchangeable Head 3 Flute Drills with Coolant Holes and One Flat Shank, Drilling Depth 5xD



| Designation | DCN ⁽¹⁾ | DCX | LU | PL | DCONMS | DF | LPR | OAL | SSC ⁽²⁾ |
|---------------------------|--------------------|-------|-------|------|--------|-------|--------|--------|--------------------|
| D3N 120-060-16A-5D | 12.00 | 12.40 | 63.3 | 3.30 | 16.00 | 20.00 | 85.00 | 133.00 | 12 |
| D3N 125-062-16A-5D | 12.50 | 12.90 | 65.3 | 3.30 | 16.00 | 20.00 | 88.30 | 135.50 | 12 |
| D3N 130-065-16A-5D | 13.00 | 13.40 | 68.3 | 3.30 | 16.00 | 20.00 | 92.10 | 140.10 | 13 |
| D3N 135-068-16A-5D | 13.50 | 13.90 | 70.8 | 3.30 | 16.00 | 20.00 | 95.30 | 143.30 | 13 |
| D3N 140-070-16A-5D | 14.00 | 14.40 | 73.3 | 3.30 | 16.00 | 20.00 | 99.20 | 147.20 | 14 |
| D3N 145-073-16A-5D | 14.50 | 14.90 | 75.8 | 3.30 | 16.00 | 20.00 | 102.40 | 150.40 | 14 |
| D3N 150-075-20A-5D | 15.00 | 15.90 | 78.9 | 3.90 | 20.00 | 25.00 | 106.20 | 156.20 | 15 |
| D3N 160-080-20A-5D | 16.00 | 16.90 | 83.9 | 3.90 | 20.00 | 25.00 | 113.30 | 163.30 | 16 |
| D3N 170-085-20A-5D | 17.00 | 17.90 | 88.9 | 3.90 | 20.00 | 25.00 | 120.40 | 169.40 | 17 |
| D3N 180-090-25A-5D | 18.00 | 18.90 | 94.4 | 4.40 | 25.00 | 32.00 | 127.50 | 183.50 | 18 |
| D3N 190-095-25A-5D | 19.00 | 19.90 | 99.4 | 4.40 | 25.00 | 32.00 | 134.60 | 190.60 | 19 |
| D3N 200-100-25A-5D | 20.00 | 20.90 | 104.4 | 4.40 | 25.00 | 32.00 | 141.70 | 197.70 | 20 |
| D3N 210-105-25A-5D | 21.00 | 21.90 | 109.4 | 4.40 | 25.00 | 32.00 | 148.70 | 204.70 | 21 |
| D3N 220-110-25A-5D | 22.00 | 22.90 | 114.4 | 4.40 | 25.00 | 32.00 | 155.80 | 211.80 | 22 |
| D3N 230-115-32A-5D | 23.00 | 23.90 | 120.7 | 5.70 | 32.00 | 42.00 | 162.90 | 222.90 | 23 |
| D3N 240-120-32A-5D | 24.00 | 24.90 | 125.7 | 5.70 | 32.00 | 42.00 | 170.00 | 230.00 | 24 |
| D3N 250-125-32A-5D | 25.00 | 25.90 | 130.7 | 5.70 | 32.00 | 42.00 | 177.10 | 237.10 | 25 |

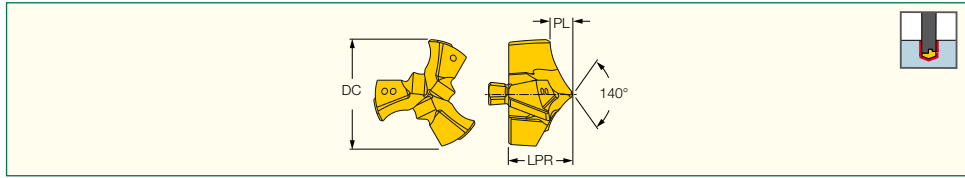
⁽¹⁾ Cutting diameter minimum

⁽²⁾ Seat size code



H3P

Exchangeable 3 Flute Drilling Heads for Carbon and Alloy Steel (ISO P) and Cast Iron (ISO K)



| Designation | Dimensions | | | | IC908 |
|-------------|------------|-------|--------------------|------|-------|
| | DC | LPR | SSC ⁽¹⁾ | PL | |
| H3P 120-IQ | 12.00 | 7.00 | 12 | 3.30 | ● |
| H3P 122-IQ | 12.20 | 7.00 | 12 | 3.30 | ● |
| H3P 123-IQ | 12.30 | 7.00 | 12 | 3.30 | ● |
| H3P 125-IQ | 12.50 | 7.00 | 12 | 3.30 | ● |
| H3P 126-IQ | 12.60 | 7.00 | 12 | 3.30 | ● |
| H3P 127-IQ | 12.70 | 7.00 | 12 | 3.30 | ● |
| H3P 128-IQ | 12.80 | 7.00 | 12 | 3.30 | ● |
| H3P 130-IQ | 13.00 | 7.00 | 13 | 3.30 | ● |
| H3P 131-IQ | 13.10 | 7.00 | 13 | 3.30 | ● |
| H3P 133-IQ | 13.30 | 7.00 | 13 | 3.30 | ● |
| H3P 135-IQ | 13.50 | 7.00 | 13 | 3.30 | ● |
| H3P 138-IQ | 13.80 | 7.00 | 13 | 3.30 | ● |
| H3P 140-IQ | 14.00 | 8.20 | 14 | 3.30 | ● |
| H3P 142-IQ | 14.20 | 8.20 | 14 | 3.30 | ● |
| H3P 143-IQ | 14.30 | 8.20 | 14 | 3.30 | ● |
| H3P 145-IQ | 14.50 | 8.20 | 14 | 3.30 | ● |
| H3P 146-IQ | 14.60 | 8.20 | 14 | 3.30 | ● |
| H3P 147-IQ | 14.70 | 8.20 | 14 | 3.30 | ● |
| H3P 150-IQ | 15.00 | 8.80 | 15 | 3.90 | ● |
| H3P 151-IQ | 15.10 | 8.80 | 15 | 3.90 | ● |
| H3P 153-IQ | 15.30 | 8.80 | 15 | 3.90 | ● |
| H3P 154-IQ | 15.40 | 8.80 | 15 | 3.90 | ● |
| H3P 155-IQ | 15.50 | 8.80 | 15 | 3.90 | ● |
| H3P 159-IQ | 15.90 | 8.80 | 15 | 3.90 | ● |
| H3P 160-IQ | 16.00 | 9.40 | 16 | 3.90 | ● |
| H3P 161-IQ | 16.10 | 9.40 | 16 | 3.90 | ● |
| H3P 165-IQ | 16.50 | 9.40 | 16 | 3.90 | ● |
| H3P 167-IQ | 16.70 | 9.40 | 16 | 3.90 | ● |
| H3P 170-IQ | 17.00 | 9.40 | 17 | 3.90 | ● |
| H3P 175-IQ | 17.50 | 9.40 | 17 | 3.90 | ● |
| H3P 176-IQ | 17.60 | 9.40 | 17 | 3.90 | ● |
| H3P 180-IQ | 18.00 | 11.10 | 18 | 4.40 | ● |
| H3P 185-IQ | 18.50 | 11.10 | 18 | 4.40 | ● |
| H3P 190-IQ | 19.00 | 11.10 | 19 | 4.40 | ● |
| H3P 1905-IQ | 19.05 | 11.10 | 19 | 4.40 | ● |
| H3P 195-IQ | 19.50 | 11.10 | 19 | 4.40 | ● |
| H3P 200-IQ | 20.00 | 12.30 | 20 | 4.40 | ● |
| H3P 205-IQ | 20.50 | 12.30 | 20 | 4.40 | ● |
| H3P 210-IQ | 21.00 | 12.30 | 21 | 4.40 | ● |
| H3P 215-IQ | 21.50 | 12.30 | 21 | 4.40 | ● |
| H3P 220-IQ | 22.00 | 12.30 | 22 | 4.40 | ● |
| H3P 222-IQ | 22.20 | 12.30 | 22 | 4.40 | ● |
| H3P 225-IQ | 22.50 | 12.30 | 22 | 4.40 | ● |
| H3P 230-IQ | 23.00 | 14.60 | 23 | 5.70 | ● |
| H3P 240-IQ | 24.00 | 14.60 | 24 | 5.70 | ● |
| H3P 245-IQ | 24.50 | 14.60 | 24 | 5.70 | ● |
| H3P 250-IQ | 25.00 | 14.60 | 25 | 5.70 | ● |
| H3P 254-IQ | 25.40 | 14.60 | 25 | 5.70 | ● |
| H3P 259-IQ | 25.90 | 14.60 | 25 | 5.70 | ● |

⁽¹⁾ Seat size code

SUMOCHAM


CHAMDRILL LINE

Smallest Indexable Dia 4.0-5.9 mm Drilling Master




No Setup
Time


Innovative Ergonomic Key


Available in
Diameter Range of 4.0-5.9 mm with
3 & 5xD Drilling Depths


10 X Magnified


Micro Size Inserts
for High Productivity


Twisted Coolant
Nozzles


For Every Type
of Material


Innovative
Ergonomic Key

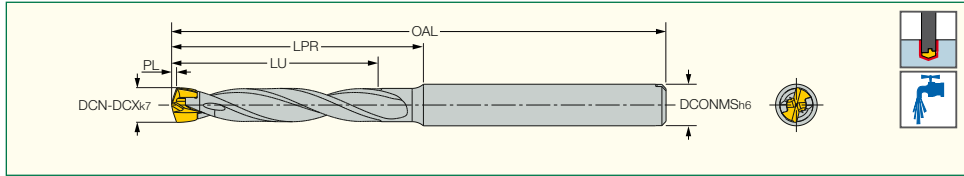

Cost Effective
Insert

World's Smallest Indexable Drill Head Decreased to 4 mm

LOGIQDRILL
ISCAR CHESS LINES

DCN R-3D

Indexable Head Drills with Coolant Holes and a Cylindrical Shank, Drilling Depth 3xD



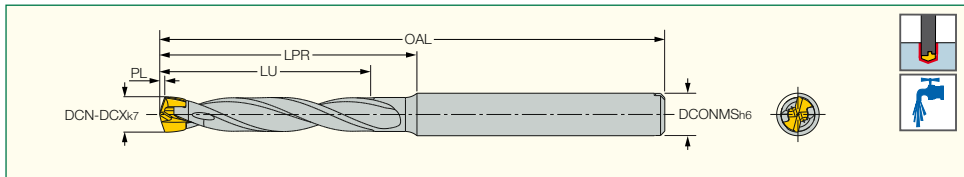
| Designation | DCN ⁽¹⁾ | DCX | LU | PL | DCONMS | LPR | SSC ⁽²⁾ | OAL |
|---------------------------|--------------------|------|------|------|--------|------|--------------------|-------|
| DCN 040-012-06R-3D | 4.00 | 4.40 | 12.6 | 0.59 | 6.00 | 23.0 | 4 | 58.00 |
| DCN 045-014-06R-3D | 4.50 | 4.90 | 14.8 | 0.75 | 6.00 | 24.6 | 4.5 | 59.65 |
| DCN 050-015-06R-3D | 5.00 | 5.40 | 15.7 | 0.73 | 6.00 | 26.3 | 5 | 61.33 |
| DCN 055-017-06R-3D | 5.50 | 5.90 | 17.9 | 0.90 | 6.00 | 28.1 | 5.5 | 63.13 |

⁽¹⁾ Do not mount smaller drilling heads other than the specified range of the drill body

⁽²⁾ Seat size code

DCN R-5D

Indexable Head Drills with Coolant Holes and Cylindrical Shanks, Drilling Depth 5xD



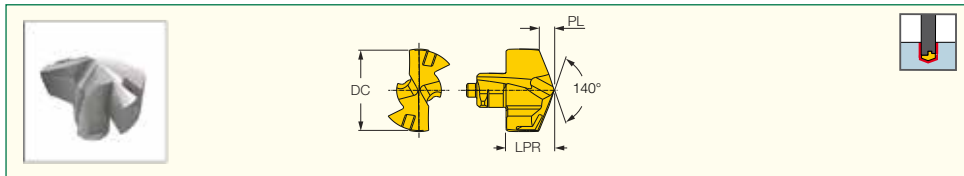
| Designation | DCN ⁽¹⁾ | DCX | LU | PL | DCONMS | LPR | SSC ⁽²⁾ | OAL |
|---------------------------|--------------------|------|------|------|--------|------|--------------------|-------|
| DCN 040-020-06R-5D | 4.00 | 4.40 | 20.6 | 0.59 | 6.00 | 31.0 | 4 | 66.00 |
| DCN 045-023-06R-5D | 4.50 | 4.90 | 22.8 | 0.75 | 6.00 | 33.6 | 4.5 | 68.65 |
| DCN 050-025-06R-5D | 5.00 | 5.40 | 25.7 | 0.73 | 6.00 | 36.3 | 5 | 71.30 |
| DCN 055-028-06R-5D | 5.50 | 5.90 | 27.9 | 0.90 | 6.00 | 39.2 | 5.5 | 74.15 |

⁽¹⁾ Do not mount smaller drilling heads other than the specified range of the drill body

⁽²⁾ Seat size code

ICP

Exchangeable DCN Drill Heads, for Carbon and Alloy Steel (ISO P Materials)



| Designation | Dimensions | | | | IC908 |
|--------------------|------------|------|--------------------|------|-------|
| | DC | LPR | SSC ⁽¹⁾ | PL | |
| ICP | 4.00-4.40 | 3.40 | 4 | 0.59 | ● |
| | 4.50-4.90 | 3.55 | 4.5 | 0.75 | ● |
| ICP/ICM/ICK | 5.00-5.40 | 3.70 | 5 | 0.73 | ● |
| | 5.50-5.90 | 3.85 | 5.5 | 0.90 | ● |

⁽¹⁾ Seat size code

MODUDRILL

MODULAR HEADS

Drilling System

Dia 33-40 mm

Modu Drill Master



COMBI-CHAM

DR-DH

CHAM-IQ



Multiple Drilling Head Options



Smart and Easy Connection

Innovative Modular System for Large Diameter and Deep Drilling



Internal Coolant



Easy Chip Evacuation



Innovative Modular System



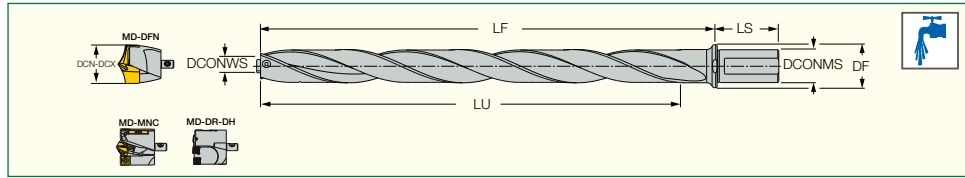
Cost Effective Insert

LOGIQDRILL
ISCAR CHESS LINES

MODUDRILL
MODULAR HEADS

MD-BODY

Modular Drill Holders, Each Holder Can Carry 4 Drill Pocket Head Sizes



| Designation | DCONMS | DF | LS | LF | LU | DCN ⁽¹⁾ | DCX | DCONWS ⁽²⁾ |
|------------------------------|--------|-------|------|--------|-------|--------------------|-------|-----------------------|
| MD-BODY-33-36-400-32A | 32.00 | 42.00 | 60.0 | 445.00 | 393.3 | 33.00 | 36.90 | 6.70 |
| MD-BODY-37-40-400-32A | 32.00 | 42.00 | 60.0 | 445.00 | 393.3 | 37.00 | 40.00 | 6.90 |

⁽¹⁾ Cutting diameter minimum ⁽²⁾ HEAD connection size

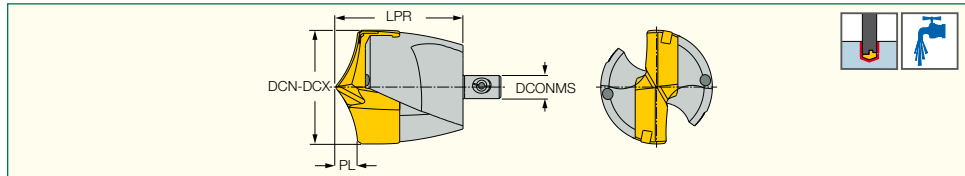
Spare Parts

| Designation | | | |
|------------------------------|--------------|----------------------|-----------|
| MD-BODY-33-36-400-32A | SET SCREW-M6 | BLD 4 T15-42.5LBF.IN | HSA 4 1-5 |
| MD-BODY-37-40-400-32A | SET SCREW-M6 | BLD 4 T15-42.5LBF.IN | HSA 4 1-5 |

MODUDRILL
MODULAR HEADS

MD-DFN

Indexable Pocket Heads with Coolant Holes for Drilling Holders



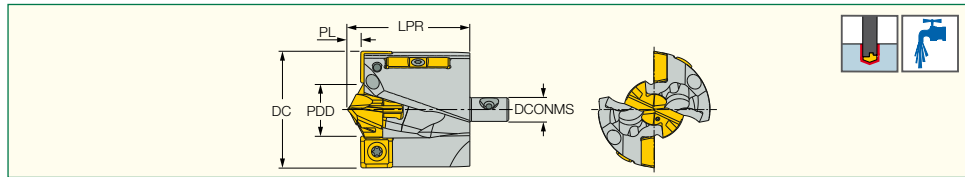
| Designation | DCN ⁽¹⁾ | DCX | LPR | DCONMS | SSC ⁽²⁾ | MIID ⁽³⁾ | PL | |
|------------------------|--------------------|-------|-------|--------|--------------------|---------------------|------|-------------|
| MD-DFN 330 HEAD | 33.00 | 33.90 | 36.90 | 6.70 | 33 | HFP 330-IQ | 7.33 | K DFN 30-40 |
| MD-DFN 340 HEAD | 34.00 | 34.90 | 37.20 | 6.70 | 34 | HFP 340-IQ | 7.62 | K DFN 30-40 |
| MD-DFN 350 HEAD | 35.00 | 35.90 | 37.20 | 6.70 | 35 | HFP 350-IQ | 7.65 | K DFN 30-40 |
| MD-DFN 360 HEAD | 36.00 | 36.90 | 37.60 | 6.70 | 36 | HFP 360-IQ | 8.15 | K DFN 30-40 |
| MD-DFN 370 HEAD | 37.00 | 37.90 | 37.60 | 6.90 | 37 | HFP 370-IQ | 8.04 | K DFN 30-40 |
| MD-DFN 380 HEAD | 38.00 | 38.90 | 38.00 | 6.90 | 38 | HFP 380-IQ | 8.20 | K DFN 30-40 |
| MD-DFN 390 HEAD | 39.00 | 40.00 | 38.00 | 6.90 | 39 | HFP 390-IQ | 8.43 | K DFN 30-40 |

1) Cutting diameter minimum ⁽²⁾ Seat size code ⁽³⁾ Master insert identification

MODUDRILL
MODULAR HEADS

MD-MNC

Indexable Pocket Heads with Coolant Holes for Drilling Holders



| Designation | DC | PDD | LPR | DCONMS | SSC ⁽¹⁾ | MIID ⁽²⁾ | MIID ₂ ⁽³⁾ | PL |
|--------------------------|-------|-------|-------|--------|--------------------|---------------------|----------------------------------|------|
| MD-MNC 330-175-09 | 33.00 | 17.00 | 30.90 | 6.70 | 17 | HCP 170 | SOGT 09T306-W | 3.65 |
| MD-MNC 340-180-09 | 34.00 | 18.00 | 30.90 | 6.70 | 18 | HCP 180 | SOGT 09T306-W | 3.70 |
| MD-MNC 350-189-09 | 35.00 | 18.90 | 30.90 | 6.70 | 18 | HCP 189 | SOGT 09T306-W | 3.85 |
| MD-MNC 360-190-10 | 36.00 | 19.00 | 30.90 | 6.70 | 19 | HCP 190 | SOGT 100408-W | 3.85 |
| MD-MNC 370-200-10 | 37.00 | 20.00 | 33.90 | 6.90 | 20 | HCP 200 | SOGT 100408-W | 4.00 |
| MD-MNC 380-209-10 | 38.00 | 20.90 | 33.90 | 6.90 | 20 | HCP 209 | SOGT 100408-W | 4.15 |
| MD-MNC 390-215-10 | 39.00 | 21.50 | 33.90 | 6.90 | 21 | HCP 215 | SOGT 100408-W | 4.25 |
| MD-MNC 400-225-10 | 40.00 | 22.50 | 33.90 | 6.90 | 22 | HCP 225 | SOGT 100408-W | 4.40 |

⁽¹⁾ Seat size code ⁽²⁾ Master insert identification ⁽³⁾ Master insert identification 2

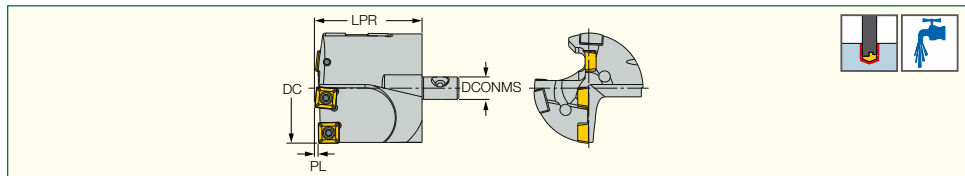
Spare Parts

| Designation | | | | | | |
|------------------------|-------------|----------------|--------|-----------|--------|-----------|
| MD-MNC 330 HEAD | K MNC MULTI | BLD T09/M7-SW4 | SW4-SD | SR 34-506 | T-7/51 | SR 34-508 |

MODUDRILL
MODULAR HEADS

MD-DR-DH-HEAD

Exchangeable Drilling Heads with Guide Pads, Carrying Square Inserts



| Designation | DC | LPR | DCONMS | MIID ⁽¹⁾ | PL |
|-------------------------------|-------|-------|--------|---------------------|------|
| MD-DR-DH 330 070606-06 | 33.00 | 33.00 | 6.70 | SOMX 06 | 1.00 |
| MD-DR-DH 340 070606-06 | 34.00 | 33.00 | 6.70 | SOMX 06 | 1.00 |
| MD-DR-DH 350 070606-06 | 35.00 | 33.00 | 6.70 | SOMX 07 | 1.00 |
| MD-DR-DH 360 070707-06 | 36.00 | 33.00 | 6.70 | SOMX 07 | 1.00 |
| MD-DR-DH 370 070707-06 | 37.00 | 39.00 | 6.90 | SOMX 07 | 1.00 |
| MD-DR-DH 380 070707-06 | 38.00 | 39.00 | 6.90 | SOMX 07 | 1.00 |
| MD-DR-DH 390 070707-06 | 39.00 | 39.00 | 6.90 | SOMX 07 | 1.00 |
| MD-DR-DH 400 070707-06 | 40.00 | 40.00 | 6.90 | SOMX 07 | 1.00 |

⁽¹⁾ Master insert identification

Spare Parts

| Designation | | | | | | |
|----------------------|--------------|--------|---------------|---------|---------------|-------|
| MD-DR-DH-HEAD | SR 14-560-HG | T-8/53 | SR 22052/HG-P | IP-7/51 | GPS-06-20-120 | IC908 |

TRIDEEP
DEEP DRILLING

Small Diameter Dia 12-14 mm Deep Drilling Master



Small Diameter Deep Drills with New Chip Splitting Insert Concept



Chip Splitting
Concept Insert



Deep Drilling



Super Surface
Finish



Innovative

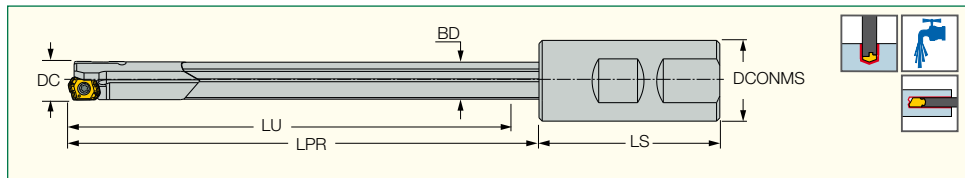
Serrated Cutting Edges
Small Diameter Range:
Ø12-14 mm

LOGIQDRILL
ISCAR CHESS LINES

TRIDEEP

GD-DHL

Gundrills Carrying Indexable Inserts with 2 Chip Splitting Cutting Edges and a Wiper for High Hole Surface Quality

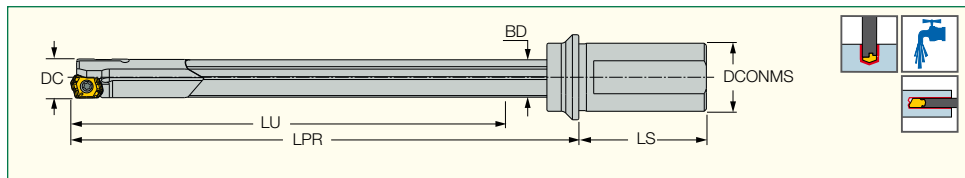


| Designation | DC | LPR | LU | DCONMS | LS | BD |
|-----------------------|----|------|------|--------|----|------|
| GD-DHL-12.00X800-U03 | 12 | 800 | 712 | 19.05 | 70 | 11.5 |
| GD-DHL-12.00X800-22 | 12 | 800 | 732 | 20.00 | 50 | 11.5 |
| GD-DHL-12.00X800-34 | 12 | 800 | 732 | 20.00 | 50 | 11.5 |
| GD-DHL-12.00X1000-U03 | 12 | 1000 | 912 | 19.05 | 70 | 11.5 |
| GD-DHL-12.00X1000-22 | 12 | 1000 | 932 | 20.00 | 50 | 11.5 |
| GD-DHL-12.00X1000-34 | 12 | 1000 | 932 | 20.00 | 50 | 11.5 |
| GD-DHL-12.00X1650-U03 | 12 | 1650 | 1562 | 19.05 | 70 | 11.5 |
| GD-DHL-12.00X1650-22 | 12 | 1650 | 1582 | 20.00 | 50 | 11.5 |
| GD-DHL-12.00X1650-34 | 12 | 1650 | 1582 | 20.00 | 50 | 11.5 |
| GD-DHL-13.00X800-U04 | 13 | 800 | 710 | 25.4 | 70 | 12.5 |
| GD-DHL-13.00X800-23 | 13 | 800 | 724 | 25.00 | 56 | 12.5 |
| GD-DHL-13.00X800-35 | 13 | 800 | 724 | 25.00 | 56 | 12.5 |
| GD-DHL-13.00X1000-U04 | 13 | 1000 | 910 | 25.4 | 70 | 12.5 |
| GD-DHL-13.00X1000-23 | 13 | 1000 | 924 | 25.00 | 56 | 12.5 |
| GD-DHL-13.00X1000-35 | 13 | 1000 | 924 | 25.00 | 56 | 12.5 |
| GD-DHL-13.00X1650-U04 | 13 | 1650 | 1560 | 25.4 | 70 | 12.5 |
| GD-DHL-13.00X1650-23 | 13 | 1650 | 1574 | 25.00 | 56 | 12.5 |
| GD-DHL-13.00X1650-35 | 13 | 1650 | 1574 | 25.00 | 56 | 12.5 |

TRIDEEP

GD-DH

Gundrills Carrying Indexable Inserts with 2 Chip Splitting Cutting Edges and a Wiper for High Hole Surface Quality, 15xD, 20xD, 25xD

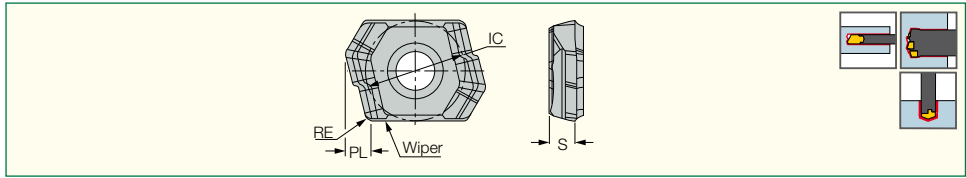


| Designation | DC | LPR | LU | DCONMS | LS | BD |
|------------------------|------|-----|-----|--------|----|------|
| GD-DH-12.00XM20-15D-04 | 12 | 225 | 195 | 20 | 50 | 11.5 |
| GD-DH-12.00XM20-20D-04 | 12 | 290 | 260 | 20 | 50 | 11.5 |
| GD-DH-12.00XM20-25D-04 | 12 | 355 | 325 | 20 | 50 | 11.5 |
| GD-DH-12.50XM20-15D-04 | 12.5 | 226 | 195 | 20 | 50 | 12 |
| GD-DH-12.50XM20-20D-04 | 12.5 | 291 | 260 | 20 | 50 | 12 |
| GD-DH-12.50XM20-25D-04 | 12.5 | 356 | 325 | 20 | 50 | 12 |
| GD-DH-13.00XM25-15D-04 | 13 | 245 | 210 | 25 | 56 | 12.5 |
| GD-DH-13.00XM25-20D-04 | 13 | 315 | 280 | 25 | 56 | 12.5 |
| GD-DH-13.00XM25-25D-04 | 13 | 385 | 350 | 25 | 56 | 12.5 |
| GD-DH-13.50XM25-15D-04 | 13.5 | 245 | 210 | 25 | 56 | 13 |
| GD-DH-13.50XM25-20D-04 | 13.5 | 315 | 280 | 25 | 56 | 13 |
| GD-DH-13.50XM25-25D-04 | 13.5 | 385 | 350 | 25 | 56 | 13 |

TRIDEEP

LOGT

Deep Drilling Inserts with 2 Chip Splitting Cutting Edges, Positive Rake Chipbreaker and a Wiper

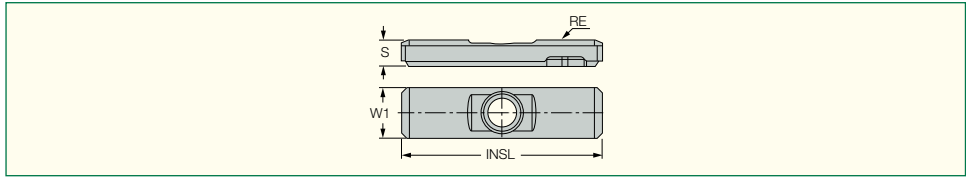


| Designation | Dimensions | | | | | IC908 |
|-----------------|------------|-----|-----|---|--|-------|
| | IC | RE | PL | S | | |
| LOGT 060204R-DT | 7 | 0.4 | 1.8 | 2 | | • |

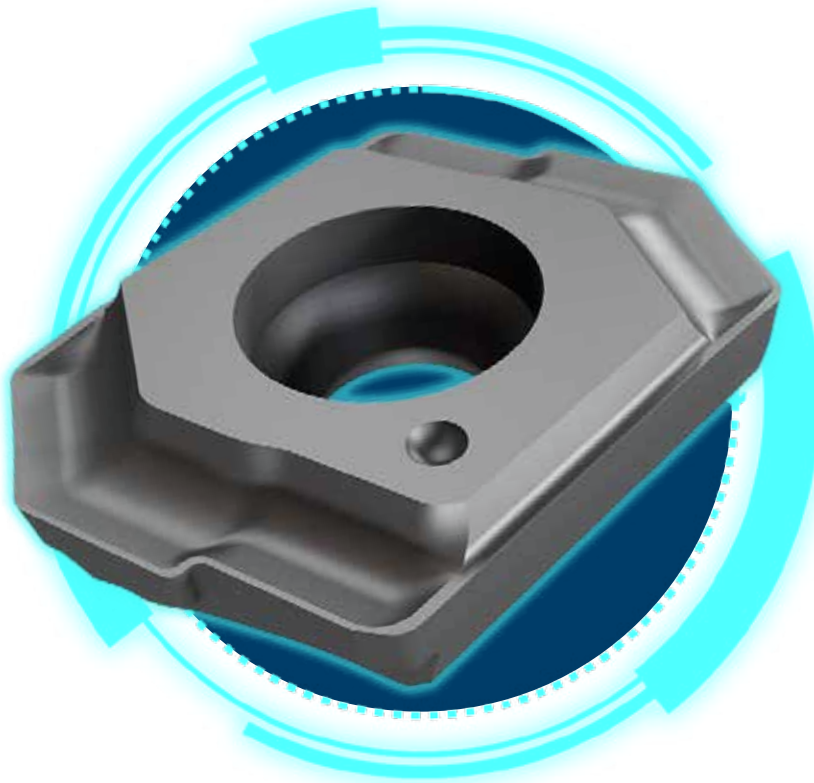
TRIDEEP

GPS

Solid Carbide Guide Pads



| Designation | Dimensions | | | | Tough ↔ Hard | |
|---------------|------------|------|-----|------|--------------|-------|
| | W1 | S | RE | INSL | IC950 | IC908 |
| GPS-04-16-055 | 4.0 | 2.00 | 5.5 | 16 | • | • |



LOGIQ GRIP

ISCAR CHESS LINES



High Productivity



For All Materials



New Generation



Cost Effective Insert

MACHINING IN **DUSTRY 4.0**
TELLIGENTLY

SWISSCUT

EXTRA LONG

Extra-Long Inserts Up to 10 mm D.O.C. Swiss Master



Long Reach Inserts and Tools for General Applications on Swiss Type Machines



Variety of Geometries



Rigid Clamping



Precision



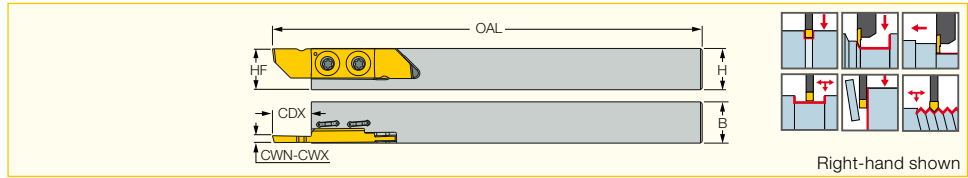
Deep Parting and Grooving



Long Insert with
Two Clamping Screws

SCHR/L-41BF

Grooving and Turning Tools with Back and Front Clamping for Swiss-Type and Automatic Machines



| Designation | CWX ⁽¹⁾ | CDX ⁽²⁾ | HF ⁽³⁾ | H | B | OAL | | | | | |
|-----------------------|--------------------|--------------------|-------------------|------|------|--------|-------------------|------------|----------------|------------|--------|
| SCHR/L 12-41BF | 3.00 | 11.00 | 12.0 | 12.0 | 12.0 | 125.00 | SR M4.5X0.75-L7.9 | BLD T15/S7 | SR M2X0.4-L3.5 | BLD T10/S7 | SW6-SD |
| SCHR/L 16-41BF | 3.00 | 11.00 | 16.0 | 16.0 | 16.0 | 125.00 | SR M4.5X0.75-L7.9 | BLD T15/S7 | SR M2X0.4-L3.5 | BLD T10/S7 | SW6-SD |

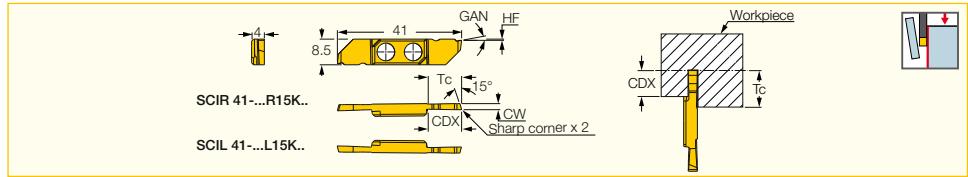
⁽¹⁾ Cutting width maximum

⁽²⁾ See insert data

⁽³⁾ HF=HF (tool)-HF (insert)

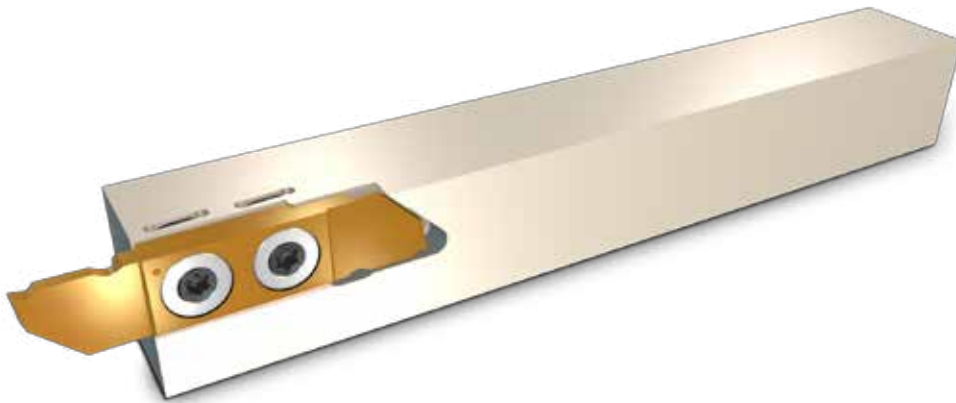
SCIR/L-41-R/L

Parting Inserts

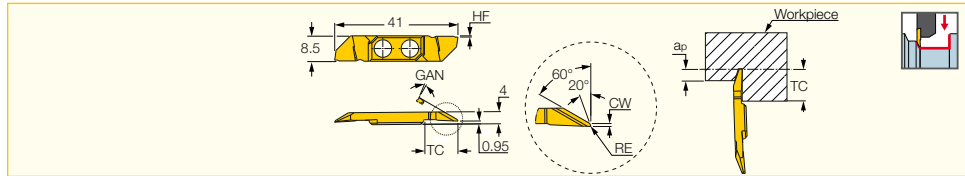


| Designation | Dimensions | | | | | | IC1008 | Recommended Machining Data |
|--------------------------|------------|-----|-------------------|-------|------|-------------------|-----------|----------------------------|
| | CW | GAN | HF ⁽¹⁾ | CDX | TC | f groove (mm/rev) | | |
| SCIL 41-100L15K00 | 1.00 | 0.0 | 0.2 | 6.00 | 11.0 | ● | 0.02-0.04 | |
| SCIR 41-100R15K00 | 1.00 | 0.0 | 0.2 | 6.00 | 11.0 | ● | 0.02-0.04 | |
| SCIL 41-150L15K00 | 1.50 | 0.0 | 0.2 | 8.00 | 11.0 | ● | 0.03-0.06 | |
| SCIR 41-150R15K00 | 1.50 | 0.0 | 0.2 | 8.00 | 11.0 | ● | 0.03-0.06 | |
| SCIL 41-150L15K7 | 1.50 | 7.0 | 0.5 | 8.00 | 11.0 | ● | 0.03-0.06 | |
| SCIR 41-150R15K7 | 1.50 | 7.0 | 0.5 | 8.00 | 11.0 | ● | 0.03-0.06 | |
| SCIL 41-200L15K00 | 2.00 | 0.0 | 0.2 | 10.00 | 11.0 | ● | 0.03-0.07 | |
| SCIR 41-200R15K00 | 2.00 | 0.0 | 0.2 | 10.00 | 11.0 | ● | 0.03-0.07 | |
| SCIL 41-200L15K7 | 2.00 | 7.0 | 0.5 | 10.00 | 11.0 | ● | 0.03-0.07 | |
| SCIR 41-200R15K7 | 2.00 | 7.0 | 0.5 | 10.00 | 11.0 | ● | 0.03-0.07 | |
| SCIL 41-250L15K00 | 2.50 | 0.0 | 0.2 | 10.00 | 11.0 | ● | 0.03-0.07 | |
| SCIR 41-250R15K00 | 2.50 | 0.0 | 0.2 | 10.00 | 11.0 | ● | 0.03-0.07 | |
| SCIL 41-250L15K7 | 2.50 | 7.0 | 0.5 | 10.00 | 11.0 | ● | 0.03-0.07 | |
| SCIR 41-250R15K7 | 2.50 | 7.0 | 0.5 | 10.00 | 11.0 | ● | 0.03-0.07 | |
| SCIL 41-300L15K00 | 3.00 | 0.0 | 0.2 | 10.00 | 11.0 | ● | 0.03-0.08 | |
| SCIR 41-300R15K00 | 3.00 | 0.0 | 0.2 | 10.00 | 11.0 | ● | 0.03-0.08 | |

⁽¹⁾ Cutting edge below center



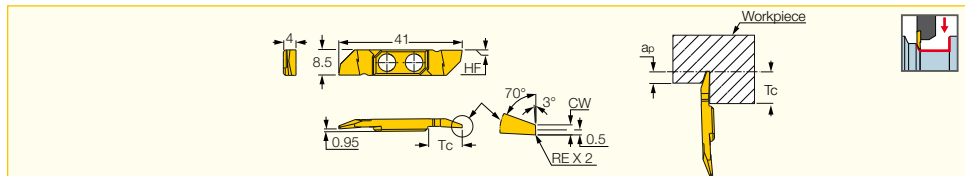
SWISSCUT
EXTRA LONG
SCIR/L-41-BRA/BLA
Back Turning Inserts



| Designation | Dimensions | | | | | IC1008 | Recommended Machining Data | |
|---------------------------|------------|------|-------------------|-------|-----|--------|----------------------------|-----------------|
| | CW | RE | HF ⁽¹⁾ | TC | GAN | | a _p (mm) | f turn (mm/rev) |
| SCIL 41-BLA08-05K8 | 0.50 | 0.08 | 0.5 | 11.00 | 8.0 | ● | 0.10-4.20 | 0.02-0.15 |
| SCIR 41-BRA08-05K8 | 0.50 | 0.08 | 0.5 | 11.00 | 8.0 | ● | 0.10-4.20 | 0.02-0.15 |
| SCIL 41-BLA08-10K8 | 1.00 | 0.08 | 0.5 | 11.00 | 8.0 | ● | 0.10-4.20 | 0.02-0.15 |
| SCIR 41-BRA08-10K8 | 1.00 | 0.08 | 0.5 | 11.00 | 8.0 | ● | 0.10-4.20 | 0.02-0.15 |

⁽¹⁾ Cutting edge below center

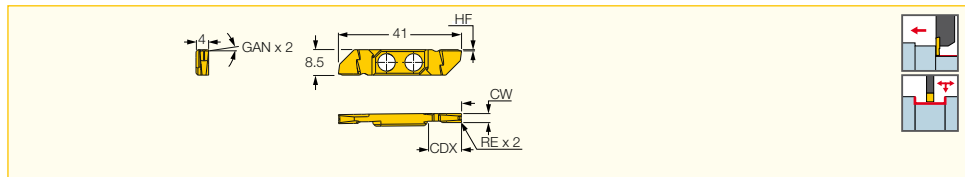
SWISSCUT
EXTRA LONG
SCIR/L-41-ERA/ELA
Back Turning Inserts for Short Chipping Materials



| Designation | Dimensions | | | | IC1008 | Recommended Machining Data | |
|---------------------------|------------|------|------|-------------------|--------|----------------------------|-----------------|
| | CW | RE | TC | HF ⁽¹⁾ | | a _p (mm) | f turn (mm/rev) |
| SCIL 41-ELA00-10K0 | 1.00 | 0.00 | 11.0 | 0.2 | ● | 0.05-5.00 | 0.02-0.15 |
| SCIR 41-ERA00-10K0 | 1.00 | 0.00 | 11.0 | 0.2 | ● | 0.05-5.00 | 0.02-0.15 |
| SCIL 41-ELA08-10K0 | 1.00 | 0.08 | 11.0 | 0.2 | ● | 0.10-5.00 | 0.02-0.15 |
| SCIR 41-ERA08-10K0 | 1.00 | 0.08 | 11.0 | 0.2 | ● | 0.10-5.00 | 0.02-0.15 |

⁽¹⁾ Cutting edge below center

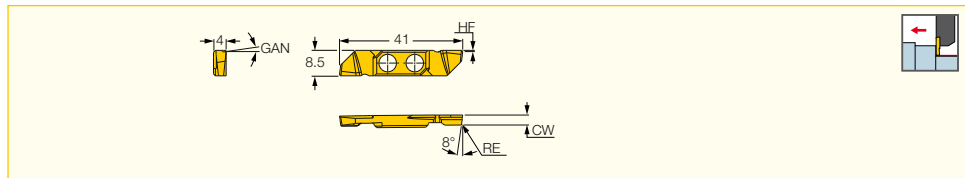
SWISSCUT
EXTRA LONG
SCIR/L-41-AD
Turning Inserts



| Designation | Dimensions | | | | | IC1008 | Recommended Machining Data | | |
|----------------------------|------------|------|-------|-------------------|-----|--------|----------------------------|-----------------|-------------------|
| | CW | RE | CDX | HF ⁽¹⁾ | GAN | | a _p (mm) | f turn (mm/rev) | f groove (mm/rev) |
| SCIR/L 41-AD08-30K8 | 3.00 | 0.08 | 11.00 | 0.5 | 8.0 | ● | 0.12-4.00 | 0.02-0.15 | 0.01-0.06 |

⁽¹⁾ Cutting edge below center

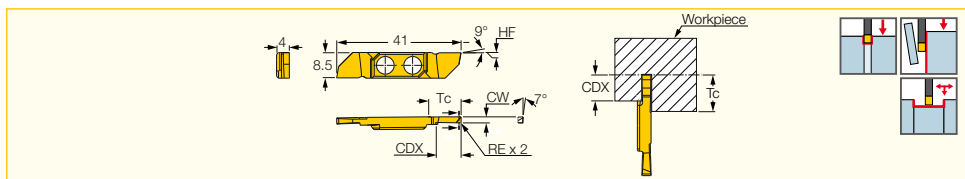
SWISSCUT
EXTRA LONG
SCIR/L-41-AR/AL
Turning Inserts with a
Frontal Relief Angle



| Designation | Dimensions | | | | | IC1008 | Recommended Machining Data | |
|---------------------------|------------|------|-------------------|------|---------------------|-----------|----------------------------|--|
| | CW | RE | HF ⁽¹⁾ | GAN | a _p (mm) | | f turn (mm/rev) | |
| SCIL 41-AL00-33K16 | 3.30 | 0.00 | 0.5 | 16.0 | ● | 0.05-4.00 | 0.02-0.15 | |
| SCIR 41-AR00-33K16 | 3.30 | 0.00 | 0.5 | 16.0 | ● | 0.05-4.00 | 0.02-0.15 | |

⁽¹⁾ Cutting edge under center distance

SWISSCUT
EXTRA LONG
SCIR/L-41-NP
Grooving, Turning and Parting Inserts

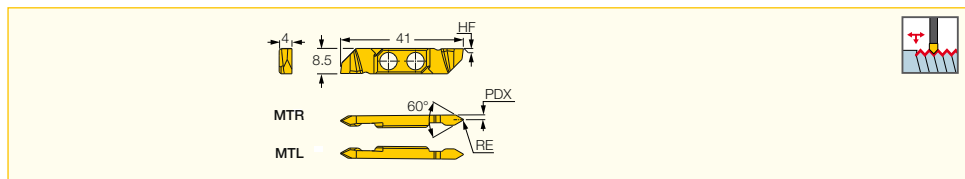


| Designation | Dimensions | | | | | IC1008 | Recommended Machining Data | | |
|--------------------------|------------|------|-------------------|-------|------|--------|----------------------------|-----------------|-------------------|
| | CW | RE | HF ⁽¹⁾ | CDX | TC | | a _p (mm) | f turn (mm/rev) | f groove (mm/rev) |
| SCIR/L 41-150NP08 | 1.50 | 0.08 | 0.2 | 8.00 | 10.0 | ● | 0.10-1.80 | 0.02-0.10 | 0.02-0.07 |
| SCIR/L 41-200NP08 | 2.00 | 0.08 | 0.2 | 8.00 | 10.0 | ● | 0.10-2.50 | 0.02-0.15 | 0.02-0.09 |
| SCIR/L 41-250NP08 | 2.50 | 0.08 | 0.2 | 10.00 | 10.0 | ● | 0.10-3.00 | 0.02-0.17 | 0.02-0.11 |
| SCIR/L 41-300NP08 | 3.00 | 0.08 | 0.2 | 10.00 | 10.0 | ● | 0.10-4.00 | 0.02-0.20 | 0.02-0.12 |

• When turning to the opposite side of chipformer, maximum D.O.C. is 0.5 mm

⁽¹⁾ Cutting edge below center

SWISSCUT
EXTRA LONG
SCIR/L-41-MTR/MTL
Threading Inserts with a
60° Partial Profile



| Designation | Dimensions | | | | | | | IC1008 |
|-----------------------|------------|-----|--------------------|--------------------|---------------------|---------------------|-------------------|--------|
| | RE | PDX | TPN ⁽¹⁾ | TPX ⁽²⁾ | TPIX ⁽³⁾ | TPIN ⁽⁴⁾ | HF ⁽⁵⁾ | |
| SCIL 41-MTL006 | 0.06 | 0.9 | 0.40 | 1.50 | 64.00 | 17.00 | 0.2 | ● |
| SCIR 41-MTR006 | 0.06 | 0.9 | 0.40 | 1.50 | 64.00 | 17.00 | 0.2 | ● |
| SCIL 41-MTL020 | 0.20 | 1.6 | 1.50 | 2.50 | 17.00 | 10.00 | 0.2 | ● |
| SCIR 41-MTR020 | 0.20 | 1.6 | 1.50 | 2.50 | 17.00 | 10.00 | 0.2 | ● |

⁽¹⁾ Thread pitch minimum (mm)

⁽²⁾ Thread pitch maximum (mm)

⁽³⁾ Threads per inch maximum

⁽⁴⁾ Threads per inch minimum

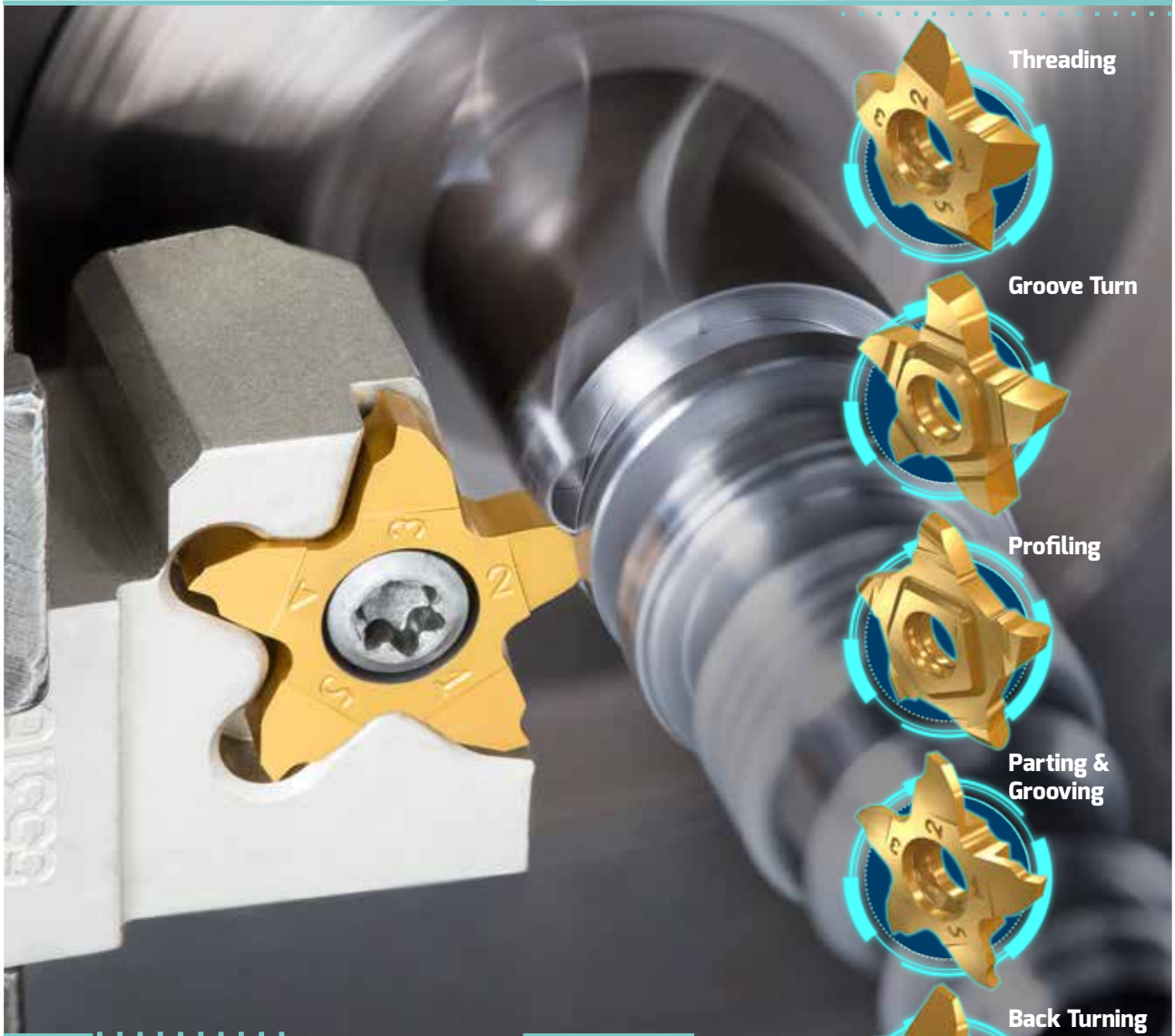
⁽⁵⁾ Cutting edge below center

PENTACUT

PARTING & GROOVING LINE

Mini Penta for Grooving & Parting Next to Shoulder 0.25-3.18 mm

Miniature Master



Pentagonal Insert with **5 Cutting Edges**
for Grooving & Parting Miniature Parts
Next to Shoulder



For Grooving,
Parting, Turning
& Threading
Application



For Every Type
of Material



Innovative



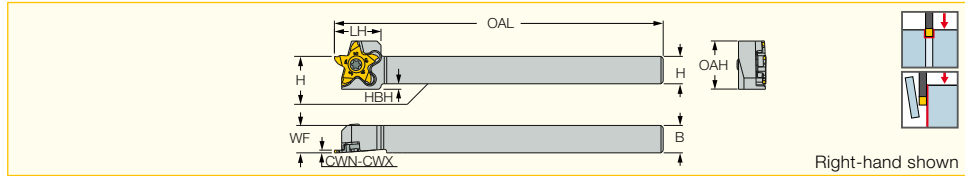
Cost Effective
Insert



Left & Right Insert Widths:
0.25 – 3.18 mm

PCHRS/LS-17



Tools Carrying Inserts with 5 Cutting Edges for Grooving, Parting and Recessing Next to High Shoulders



| Designation | H | B | CWN ⁽¹⁾ | CWX ⁽²⁾ | WF | OAL | LH | HBH | OAH |
|----------------------|------|------|--------------------|--------------------|-------|--------|------|-----|------|
| PCHR/LS 10-17 | 10.0 | 10.0 | 0.25 | 3.18 | 10.00 | 120.00 | 17.0 | 2.0 | 17.6 |
| PCHR/LS 12-17 | 12.0 | 12.0 | 0.25 | 3.18 | 12.00 | 120.00 | 17.0 | - | 17.6 |
| PCHR/LS 16-17 | 16.0 | 16.0 | 0.25 | 3.18 | 16.00 | 120.00 | 17.0 | - | 21.6 |
| PCHR/LS 20-17 | 20.0 | 20.0 | 0.25 | 3.18 | 20.00 | 120.00 | 17.0 | - | 25.6 |

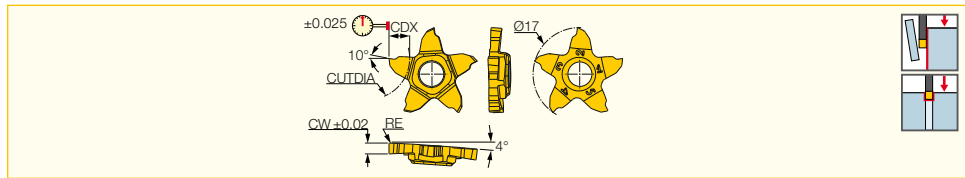
⁽¹⁾ Cutting width minimum
⁽²⁾ Cutting width maximum

Spare Parts

| Designation |  |  |
|--------------------|---|---|
| PCHLS 10-17 | SR M4-39432 | T-1508/5 |
| PCHRS 10-17 | SR M4-39432L | T-1508/5 |
| PCHLS 12-17 | SR M4-39432 | T-1508/5 |
| PCHRS 12-17 | SR M4-39432L | T-1508/5 |
| PCHLS 16-17 | SR M4-39432 | T-1508/5 |
| PCHRS 16-17 | SR M4-39432L | T-1508/5 |
| PCHLS 20-17 | SR M4-39432 | T-1508/5 |
| PCHRS 20-17 | SR M4-39432L | T-1508/5 |

PENTA 17-P-RS/LS

Pentagonal Inserts for Parting and Grooving Soft Materials, Thin and Miniature Parts

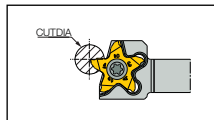
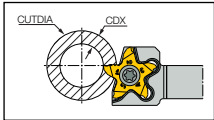


| Designation | Dimensions | | | | IC1008 | Recommended Machining Data |
|-----------------------------|------------|------|------|--------|--------|----------------------------|
| | CW | RE | CDX | CUTDIA | | f groove (mm/rev) |
| PENTA 17N025P000R/LS | 0.25 | 0.00 | 0.60 | 1.2 | ● | 0.02-0.03 |
| PENTA 17N030P000R/LS | 0.30 | 0.00 | 0.60 | 1.2 | ● | 0.02-0.03 |
| PENTA 17N033P000R/LS | 0.33 | 0.00 | 0.60 | 1.2 | ● | 0.02-0.03 |
| PENTA 17N043P000R/LS | 0.43 | 0.00 | 1.00 | 2.0 | ● | 0.02-0.04 |
| PENTA 17N050P000R/LS | 0.50 | 0.00 | 2.00 | 4.0 | ● | 0.02-0.04 |
| PENTA 17N075P000R/LS | 0.75 | 0.00 | 2.50 | 5.0 | ● | 0.02-0.04 |
| PENTA 17N080P000R/LS | 0.80 | 0.00 | 2.50 | 5.0 | ● | 0.02-0.04 |
| PENTA 17N095P000R/LS | 0.95 | 0.00 | 3.00 | 6.0 | ● | 0.02-0.05 |
| PENTA 17N100P010R/LS | 1.00 | 0.10 | 3.00 | 6.0 | ● | 0.02-0.05 |
| PENTA 17N100P050R/LS | 1.00 | 0.50 | 3.00 | 6.0 | ● | 0.02-0.05 |
| PENTA 17N120P010R/LS | 1.20 | 0.10 | 3.00 | 6.0 | ● | 0.02-0.05 |
| PENTA 17N140P010R/LS | 1.40 | 0.10 | 3.00 | 6.0 | ● | 0.02-0.05 |
| PENTA 17N150P010R/LS | 1.50 | 0.10 | 4.00 | 8.0 | ● | 0.02-0.07 |
| PENTA 17N157P010R/LS | 1.57 | 0.10 | 4.00 | 8.0 | ● | 0.02-0.07 |
| PENTA 17N157P079R/LS | 1.57 | 0.79 | 4.00 | 8.0 | ● | 0.02-0.07 |
| PENTA 17N170P010R/LS | 1.70 | 0.10 | 4.00 | 8.0 | ● | 0.02-0.07 |
| PENTA 17N178P010R/LS | 1.78 | 0.10 | 4.00 | 8.0 | ● | 0.02-0.07 |
| PENTA 17N196P010R/LS | 1.96 | 0.10 | 4.00 | 8.0 | ● | 0.02-0.08 |
| PENTA 17N200P010R/LS | 2.00 | 0.10 | 4.00 | 8.0 | ● | 0.02-0.08 |
| PENTA 17N200P100R/LS | 2.00 | 1.00 | 4.00 | 8.0 | ● | 0.02-0.08 |
| PENTA 17N222P010R/LS | 2.22 | 0.10 | 4.00 | 8.0 | ● | 0.02-0.08 |
| PENTA 17N230P010R/LS | 2.30 | 0.10 | 4.00 | 8.0 | ● | 0.02-0.08 |
| PENTA 17N239P010R/LS | 2.39 | 0.10 | 4.00 | 8.0 | ● | 0.02-0.08 |
| PENTA 17N239P120R/LS | 2.39 | 1.20 | 4.00 | 8.0 | ● | 0.02-0.08 |
| PENTA 17N247P010R/LS | 2.47 | 0.10 | 4.00 | 8.0 | ● | 0.02-0.08 |
| PENTA 17N250P010R/LS | 2.50 | 0.10 | 4.00 | 8.0 | ● | 0.02-0.08 |
| PENTA 17N270P010R/LS | 2.70 | 0.10 | 4.00 | 8.0 | ● | 0.02-0.09 |
| PENTA 17N287P010R/LS | 2.87 | 0.10 | 4.00 | 8.0 | ● | 0.02-0.10 |
| PENTA 17N300P010R/LS | 3.00 | 0.10 | 4.00 | 8.0 | ● | 0.02-0.10 |
| PENTA 17N318P010R/LS | 3.18 | 0.10 | 4.00 | 8.0 | ● | 0.02-0.10 |

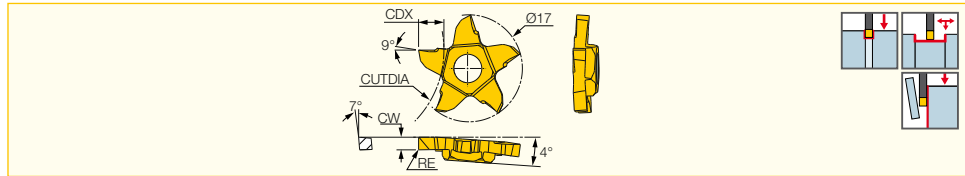
PENTA 17N...P...RS/LS - Precision Grooving & Parting Off Inserts

| Designation | CW±0.02 | RE | CDX | CUTDIA as a function of depth of cut (CDX) | | | | | | Parting to center CUTDIA | | | | | |
|-----------------------|---------|------|------|--|---------|---------|---------|---------|---------|--------------------------|--|--|--|--|--|
| | | | | CDX≤2.3 | CDX≤2.5 | CDX≤3.0 | CDX≤3.5 | CDX≤3.8 | CDX≤4.0 | | | | | | |
| PENTA 17N025P000RS/LS | 0.25 | 0.00 | 0.6* | - | - | - | - | - | - | | | | | | |
| PENTA 17N030P000RS/LS | 0.30 | 0.00 | 0.6* | - | - | - | - | - | - | | | | | | |
| PENTA 17N033P000RS/LS | 0.30 | 0.00 | 0.6* | - | - | - | - | - | - | | | | | | |
| PENTA 17N043P000RS/LS | 0.43 | 0.00 | 1.0* | - | - | - | - | - | - | | | | | | |
| PENTA 17N050P000RS/LS | 0.50 | 0.00 | 2.0* | - | - | - | - | - | - | 4 | | | | | |
| PENTA 17N075P000RS/LS | 0.75 | 0.00 | 2.5 | N.L. | 400 | - | - | - | - | 5 | | | | | |
| PENTA 17N080P000RS/LS | 0.80 | 0.00 | 2.5 | N.L. | | - | - | - | - | | | | | | |
| PENTA 17N095P000RS/LS | 0.95 | 0.00 | | N.L. | | - | - | - | - | | | | | | |
| PENTA 17N100P010RS/LS | 1.00 | 0.10 | 3.0 | N.L. | 400 | 100 | - | - | - | 6 | | | | | |
| PENTA 17N100P050RS/LS | 1.00 | 0.50 | | N.L. | | | - | - | - | | | | | | |
| PENTA 17N120P010RS/LS | 1.20 | 0.10 | | N.L. | | | - | - | - | | | | | | |
| PENTA 17N140P010RS/LS | 1.40 | 0.10 | | N.L. | | | - | - | - | | | | | | |
| PENTA 17N150P010RS/LS | 1.50 | 0.10 | | N.L. | | | | | | | | | | | |
| PENTA 17N157P010RS/LS | 1.57 | 0.10 | | N.L. | | | | | | | | | | | |
| PENTA 17N157P079RS/LS | 1.57 | 0.79 | | N.L. | | | | | | | | | | | |
| PENTA 17N170P010RS/LS | 1.70 | 0.10 | | N.L. | | | | | | | | | | | |
| PENTA 17N178P010RS/LS | 1.78 | 0.10 | | N.L. | | | | | | | | | | | |
| PENTA 17N196P010RS/LS | 1.96 | 0.10 | | N.L. | | | | | | | | | | | |
| PENTA 17N200P010RS/LS | 2.00 | 0.10 | 4.0 | N.L. | 400 | 100 | 55 | 32 | 20 | | | | | | |
| PENTA 17N200P100RS/LS | 2.00 | 1.00 | | N.L. | | | | | | | | | | | |
| PENTA 17N222P010RS/LS | 2.22 | 0.10 | | N.L. | | | | | | | | | | | |
| PENTA 17N230P010RS/LS | 2.30 | 0.10 | | N.L. | | | | | | | | | | | |
| PENTA 17N239P010RS/LS | 2.39 | 0.10 | | N.L. | | | | | | | | | | | |
| PENTA 17N239P120RS/LS | 2.39 | 1.20 | | N.L. | | | | | | | | | | | |
| PENTA 17N247P010RS/LS | 2.47 | 0.10 | | N.L. | | | | | | | | | | | |
| PENTA 17N250P010RS/LS | 2.50 | 0.10 | | N.L. | | | | | | | | | | | |
| PENTA 17N270P010RS/LS | 2.70 | 0.10 | | N.L. | | | | | | | | | | | |
| PENTA 17N287P010RS/LS | 2.87 | 0.10 | | N.L. | | | | | | | | | | | |
| PENTA 17N300P010RS/LS | 3.00 | 0.10 | | N.L. | | | | | | | | | | | |
| PENTA 17N318P010RS/LS | 3.18 | 0.10 | | N.L. | 400 | 100 | 55 | 32 | 25 | | | | | | |

* N.L. = NO LIMIT



PENTA 17-NP-RS/LS
Pentagonal Inserts for Precision Grooving and Turning Next to High Shoulder Applications



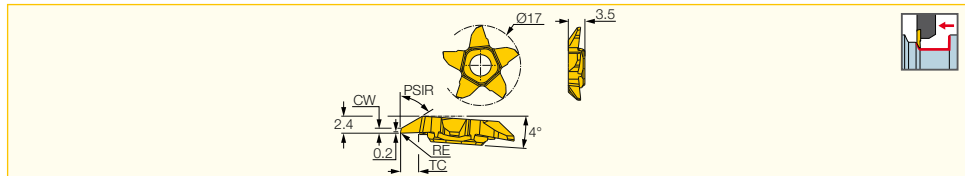
| Designation | Dimensions | | | | IC1008 | Recommended Machining Data | | |
|----------------------|------------|------|------|--------|--------|----------------------------|-----------------|-------------------|
| | CW | RE | CDX | CUTDIA | | a _p (mm) | f turn (mm/rev) | f groove (mm/rev) |
| PENTA 17-100NP08R/LS | 1.00 | 0.08 | 3.00 | 32.0 | ● | 0.05-0.70 | 0.02-0.06 | 0.03-0.06 |
| PENTA 17-200NP08R/LS | 2.00 | 0.08 | 4.00 | 32.0 | ● | 0.05-2.50 | 0.05-0.15 | 0.05-0.09 |
| PENTA 17-300NP08R/LS | 3.00 | 0.08 | 4.00 | 32.0 | ● | 0.05-3.10 | 0.05-0.19 | 0.05-0.11 |

• When turning to the opposite side of chipformer, maximum D.O.C. is 0.5 mm

| Designation | Dimensions | | | Dmax as a function of depth of cut (T) | | | | |
|-----------------------|------------|------|--------------------|--|---------|---------|---------|---------|
| | W | R | T _{max-r} | T ≤ 2.5 | T ≤ 3.0 | T ≤ 3.5 | T ≤ 3.8 | T ≤ 4.0 |
| PENTA 17-100NP08-L/RS | 1.00 | 0.08 | 3.00 | N.L. | 100 | - | - | - |
| PENTA 17-200NP08-L/RS | 2.00 | 0.08 | 4.00 | N.L. | 100 | 75 | 45 | 32 |
| PENTA 17-300NP08-L/RS | 3.00 | 0.08 | 4.00 | N.L. | 100 | 75 | 45 | 32 |

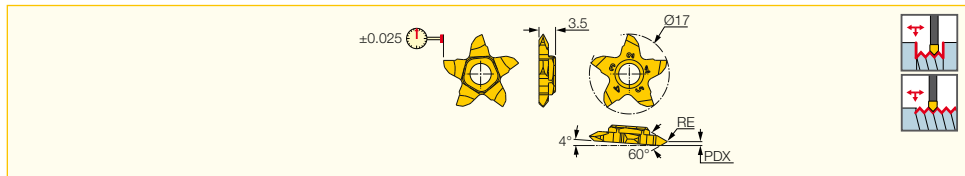
(1) N.L. - No Limit

PENTA 17-ER/EL
Back Turning Pentagonal Inserts for Short Chipping Materials



| Designation | Dimensions | | | | IC1008 | Recommended Machining Data | |
|---------------------|------------|------|------|----------------|--------|----------------------------|-----------------|
| | CW | RE | PSIR | T _c | | a _p (mm) | f turn (mm/rev) |
| PENTA 17EL00-07K0LS | 0.70 | 0.00 | 60.0 | 4.0 | ● | 0.05-2.50 | 0.01-0.15 |
| PENTA 17ER00-07K0RS | 0.70 | 0.00 | 60.0 | 4.0 | ● | 0.05-2.50 | 0.01-0.15 |
| PENTA 17EL08-07K0LS | 0.70 | 0.80 | 60.0 | 4.0 | ● | 0.05-2.50 | 0.01-0.15 |
| PENTA 17ER08-07K0RS | 0.70 | 0.80 | 60.0 | 4.0 | ● | 0.05-2.50 | 0.01-0.15 |

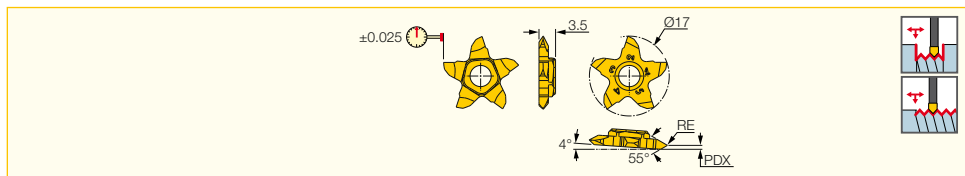
PENTA 17-MT-RS/LS
Precision Ground Pentagonal External Threading Inserts with a 60° Partial Profile



| Designation | Dimensions | | | | IC1008 |
|-------------------|--------------------|--------------------|------|-----|--------|
| | TPN ⁽¹⁾ | TPX ⁽²⁾ | RE | PDX | |
| PENTA 17-MTL003LS | 0.30 | 1.75 | 0.03 | 0.8 | ● |
| PENTA 17-MTR003RS | 0.30 | 1.75 | 0.03 | 0.8 | ● |
| PENTA 17-MTL008LS | 0.70 | 3.50 | 0.08 | 1.4 | ● |
| PENTA 17-MTR008RS | 0.70 | 3.50 | 0.08 | 1.4 | ● |

(1) Thread pitch minimum (mm) (2) Thread pitch maximum (mm)

PENTA 17-WT-RS/LS
Precision Ground Pentagonal External Threading Inserts with a 55° Partial Profile



| Designation | Dimensions | | | | IC1008 |
|-------------------|---------------------|---------------------|------|-----|--------|
| | TPIX ⁽¹⁾ | TPIN ⁽²⁾ | RE | PDX | |
| PENTA 17-WTL003LS | 72.00 | 17.00 | 0.03 | 0.8 | ● |
| PENTA 17-WTR003RS | 72.00 | 17.00 | 0.03 | 0.8 | ● |
| PENTA 17-WTL008LS | 31.00 | 7.00 | 0.08 | 1.4 | ● |
| PENTA 17-WTR008RS | 31.00 | 7.00 | 0.08 | 1.4 | ● |

(1) Threads per inch maximum (2) Threads per inch minimum

LOGIQ5GRIP

PARTING & GROOVING

Pentagonal Adapters 5 Pockets Blade Master



Up to 45 mm bar diameter
Tang-Grip 2-3 mm



Up to 22 mm bar diameter
GFT for Small Size 0.8-1.6 mm



Pentagonal Economical Adapters,
5 Pockets for Parting & Grooving



Ease of Use



High Pressure
Coolant



New Generation



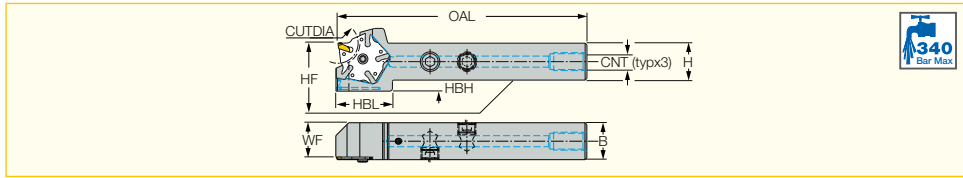
Cost Effective
Insert



**SCAN
NOW!**

LOGIQ5GRIP
ISCAR CHESS LINES

THMPR/L D22-JHP
Holders with High Pressure
Coolant Channels for Pentagonal
SELF-GRIP Adapters

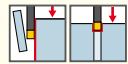
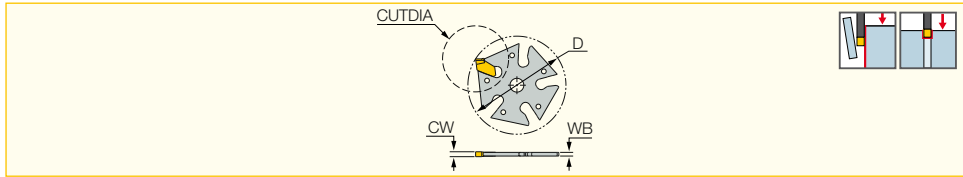


| Designation | H | HF | HBH | B | WF | CUTDIA | OAL | HBL | CNT |
|---------------------------|------|------|------|------|-------|--------|--------|------|-------------|
| THMPR/L 16-D22-JHP | 16.0 | 16.1 | 10.0 | 16.0 | 14.60 | 22.0 | 135.00 | 29.6 | UNF 5/16-24 |
| THMPR/L 20-D22-JHP | 20.0 | 20.1 | 6.0 | 20.0 | 18.60 | 22.0 | 135.00 | 29.6 | G1/8 |

Spare Parts

| Designation | | | | |
|-------------------------|------------------|----------|----------------|--------|
| THMPL 16-D22-JHP | SR 5/16UNF TL360 | HW 5/32" | SR M4X8 DIN912 | HW 3.0 |
| THMPR 16-D22-JHP | SR 5/16UNF TL360 | HW 5/32" | SR M4X8 DIN912 | HW 3.0 |
| THMPL 20-D22-JHP | PLG 1/8BSP TL360 | HW 5.0 | SR M4X8 DIN912 | HW 3.0 |
| THMPR 20-D22-JHP | PLG 1/8BSP TL360 | HW 5.0 | SR M4X8 DIN912 | HW 3.0 |

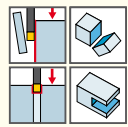
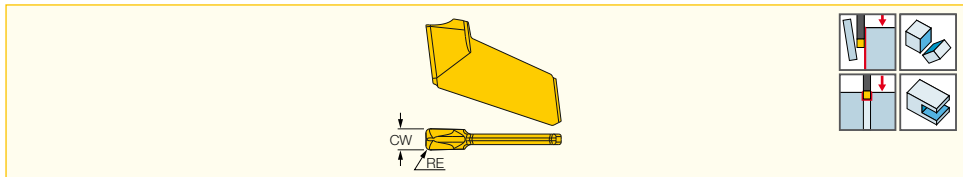
ADMP D22
Parting and Grooving Adapters With
5 Pockets for **SELF-GRIP** Inserts



| Designation | CW | WB | D | CUTDIA | Insert | |
|---------------------|------|------|----|--------|---------|----------|
| ADMP D22-0.8 | 0.80 | 0.70 | 32 | 22.0 | GFT 0.8 | ESG-SLM* |
| ADMP D22-1.0 | 1.00 | 0.90 | 32 | 22.0 | GFT 1.0 | ESG-SLM* |
| ADMP D22-1.2 | 1.20 | 1.06 | 32 | 22.0 | GFT 1.2 | ESG-SLM* |
| ADMP D22-1.6 | 1.60 | 1.20 | 32 | 22.0 | GFT 1.6 | ESG-SLM* |

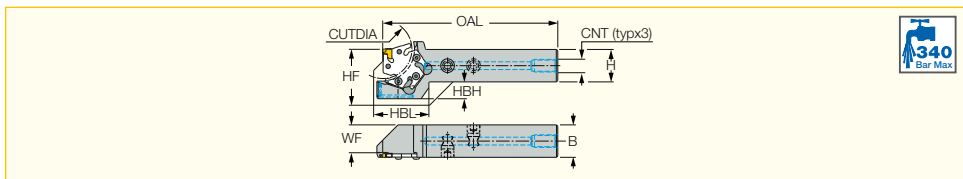
* Optional, should be ordered separately

GFT-J
Thin Parting, Grooving & Slitting
Single-Ended Inserts for Soft Materials



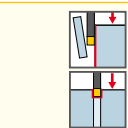
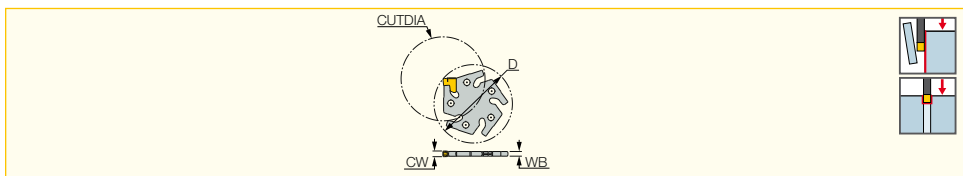
| Designation | Dimensions | | Tough ↔ Hard | | Recommended Machining Data |
|----------------------|------------|------|--------------|--------|-----------------------------------|
| | CW | RE | IC1028 | IC1008 | |
| GFT 0.8J-0.1 | 0.80 | 0.10 | ● | ● | f groove (mm/rev) 0.03-0.08 |
| GFT 1.0J-0.1 | 1.00 | 0.10 | ● | ● | 0.03-0.10 |
| GFT 1.2J-0.14 | 1.20 | 0.14 | ● | ● | 0.03-0.10 |
| GFT 1.6J-0.16 | 1.60 | 0.16 | ● | ● | 0.03-0.12 |

THMPR/L D45-JHP
Holders with High Pressure
Coolant Channels for Pentagonal
TANG-GRIP Adapters



| Designation | H | HF | HBH | B | WF | CUTDIA | OAL | HBL | CNT | | | | |
|---------------------------|------|------|------|------|-------|--------|--------|------|------|---------------|--------|------------------|--------|
| THMPR/L 20-D45-JHP | 20.0 | 20.1 | 18.0 | 20.0 | 17.35 | 45.0 | 135.00 | 35.6 | G1/8 | SR M3X8DIN912 | HW 2.5 | PLG 1/8BSP TL360 | HW 5.0 |
| THMPR/L 25-D45-JHP | 25.0 | 25.1 | 13.0 | 25.0 | 22.35 | 45.0 | 135.00 | 35.6 | G1/8 | SR M3X8DIN912 | HW 2.5 | PLG 1/8BSP TL360 | HW 5.0 |

ADMP D45
Parting and Grooving Adapters
With 5 Pockets for **TANG-GRIP**
Tangentially Clamped Inserts



| Designation | CWN ⁽¹⁾ | CWX ⁽²⁾ | WB | D | CUTDIA | Insert | |
|---------------------|--------------------|--------------------|------|----|--------|--------|-------------|
| ADMP D45-2.0 | 1.80 | 2.40 | 1.60 | 42 | 45.0 | TAG 2 | ETG 2* |
| ADMP D45-3.0 | 2.80 | 3.50 | 2.50 | 42 | 45.0 | TAG 3 | ETG 3-4-SH* |

* Optional, should be ordered separately (1) Cutting width minimum (2) Cutting width maximum

TANG-GRIP

HIGH FEED PARTING

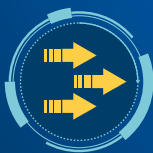
Ultra High Feed 3-5 mm Width Parting Master



High Feed TANG-GRIP Insert 3-5 mm Width



Rigid Clamping



Extra High Feed



High Pressure Coolant

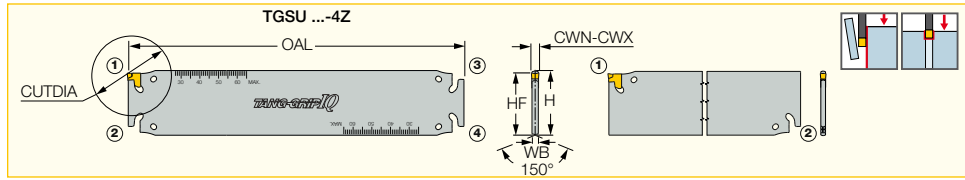


Cost Effective Insert

Ultra High Feed Parting
Insert and Tool Guarantees
Higher Productivity

TGSU

Parting and Grooving Flat Top Blades with Tangential Pockets Carrying TANG-GRIP Single-Ended Inserts



NEW

NEW

| Designation | H | CWN | CWX | CUTDIA | NOP ⁽²⁾ | WB | OAL | HF | | Insert | |
|-------------------------------------|------|------|-------|--------|--------------------|---------------------|--------|------|---|---------|---------------------|
| TGSU 35-1.4-IQ | 35.0 | 1.40 | 1.40 | 35.0 | 2 | 2.50 ⁽³⁾ | 180.00 | 33.2 | N | TAG 1.4 | ETG 1.4/1.6* |
| TGSU 35-2-IQ | 35.0 | 1.80 | 2.40 | 59.5 | 2 | 2.50 ⁽⁴⁾ | 160.00 | 33.2 | N | TAG 2 | ETG 2* |
| TGSU 35-3-IQ-4Z | 35.0 | 2.80 | 3.50 | 120.0 | 4 | 2.50 | 180.00 | 33.2 | N | TAG 3 | ETG 3-4-SH* |
| TGSU 35-3-4Z-JHP | 35.0 | 2.80 | 3.50 | 120.0 | 4 | 2.50 | 188.50 | 33.2 | Y | TAG 3 | ETG 3-4-SH* SGC 340 |
| TGSU 35-4-IQ-4Z | 35.0 | 3.70 | 4.50 | 120.0 | 4 | 3.40 | 180.00 | 33.2 | N | TAG 4 | ETG 3-4-SH* |
| TGSU 35-4-4Z-JHP | 35.0 | 3.70 | 4.50 | 120.0 | 4 | 3.40 | 188.50 | 33.2 | Y | TAG 4 | ETG 3-4-SH* SGC 340 |
| TGSU 35-5-IQ | 35.0 | 4.70 | 5.50 | 144.0 | 2 | 4.00 | 180.00 | 33.2 | N | TAG 5 | ETG 5-7* |
| TGSU 35-6-IQ | 35.0 | 5.70 | 6.50 | 144.0 | 2 | 5.20 | 180.00 | 33.2 | N | TAG 6 | ETG 5-7* |
| TGSU 35-7-IQ | 35.0 | 6.80 | 7.50 | 144.0 | 2 | 6.00 | 180.00 | 33.2 | N | TAG 7 | ETG 5-7* |
| TGSU 35C-8-IQ ⁽¹⁾ | 35.0 | 7.70 | 8.50 | 144.0 | 2 | 7.20 | 180.00 | 33.2 | Y | TAG 8 | ETG 8-12* |
| TGSU 35C-9-IQ ⁽¹⁾ | 35.0 | 8.70 | 10.00 | 144.0 | 2 | 8.20 | 180.00 | 33.2 | Y | TAG 9 | ETG 8-12* |
| TGSU 56C-7-IQ ⁽¹⁾ | 56.0 | 6.80 | 7.50 | 220.0 | 2 | 6.00 | 260.00 | 53.6 | Y | TAG 7 | ETG 5-7* |
| TGSU 56C-8-IQ ⁽¹⁾ | 56.0 | 7.70 | 8.50 | 220.0 | 2 | 7.20 | 260.00 | 53.6 | Y | TAG 8 | |
| TGSU 56C-9-IQ ⁽¹⁾ | 56.0 | 8.70 | 10.00 | 220.0 | 2 | 8.20 | 260.00 | 53.6 | Y | TAG 9 | |

⁽¹⁾ C - Internal coolant, use with TGTBU HD blocks only; cooling tube SGCU 341 should be ordered separately

⁽²⁾ Number of pockets ⁽³⁾ Thickness at the D.O.C. area is 1.05 mm ⁽⁴⁾ Thickness at the D.O.C. area is 1.65 mm

* Optional, should be ordered separately

For inserts: TAG N-A • TAG N-C/W/M • TAG N-J/JS/JT • TAG N-LF • TAG N-MF • TAG N-UT • TAG R/L-C • TAG R/L-J/JS • TAGB/TAGBA

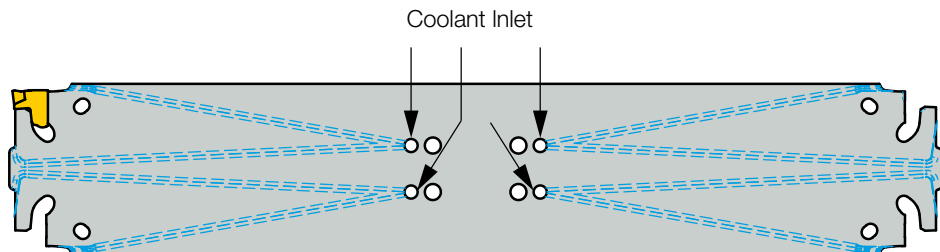
For holders: TGTBU

TGSU 35-3-IQ-4
TGSU 35-4-IQ-4



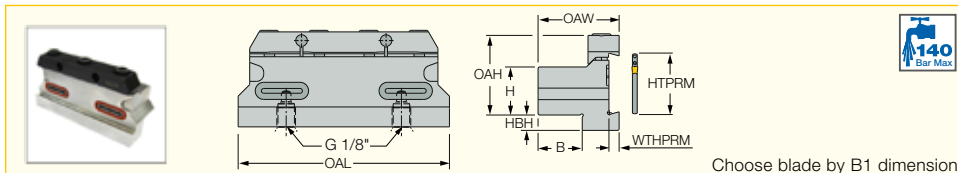
TGSU 35-3/4-4Z-JHP

NEW



TGTBU-JHP

Tool Blocks for Parting and Grooving
Blades for High Pressure Coolant

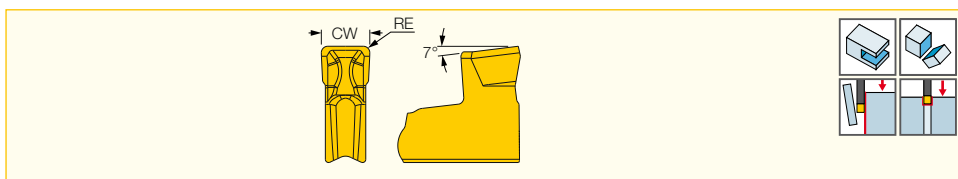


Choose blade by B1 dimension

| Designation | H | B | HTPRM | OAW | OAH | HBH | WTHPRM | OAL | | | | |
|----------------------------|------|------|-------|-------|------|------|--------|--------|---------|-----------------|--------|--------------|
| TGTBU 16-5G-JHP | 16.0 | 16.9 | 26.0 | 35.60 | 29.9 | 13.1 | 4.10 | 86.00 | BKU 86 | SR M6X16 DIN912 | HW 5.0 | OR 14X2.5N N |
| TGTBU 20-5G-JHP | 20.0 | 20.9 | 26.0 | 39.60 | 33.9 | 9.1 | 4.10 | 86.00 | BKU 86 | SR M6X16 DIN912 | HW 5.0 | OR 14X2.5N N |
| NEW TGTBU 20-35-JHP | 20.0 | 19.0 | 35.0 | 38.00 | 32.3 | 23.7 | 6.00 | 110.00 | | | | |
| TGTBU 20-6G-JHP | 20.0 | 19.0 | 32.0 | 39.20 | 36.4 | 15.0 | 5.30 | 100.00 | BKU 100 | SR M6X16 DIN912 | HW 5.0 | OR 14X2.5N N |
| TGTBU 25-5G-JHP | 25.0 | 26.1 | 26.0 | 44.10 | 39.0 | 5.5 | 4.10 | 110.00 | BKU 105 | SR M6X16 DIN912 | HW 5.0 | OR 14X2.5N N |
| NEW TGTBU 25-6G-JHP | 25.0 | 23.0 | 32.0 | 43.20 | 41.4 | 8.0 | 5.30 | 110.00 | BKU 110 | SR M6X16 DIN912 | HW 5.0 | OR 14X2.5N N |
| NEW TGTBU 25-35-JHP | 25.0 | 23.0 | 35.0 | 42.00 | 37.3 | 18.7 | 6.00 | 110.00 | | | | |
| TGTBU 32-6G-JHP | 32.0 | 29.0 | 32.0 | 49.20 | 48.4 | 5.0 | 5.30 | 110.00 | BKU 110 | SR M6X16 DIN912 | HW 5.0 | OR 14X2.5N N |
| NEW TGTBU 32-35-JHP | 32.0 | 29.0 | 35.0 | 48.00 | 44.3 | 11.7 | 6.00 | 110.00 | | | | |

TANGFGRIP

HIGH FEED PARTING
TAG N-HF
Single-Ended Inserts for High Feed
Parting, Grooving and Slitting Bars,
Hard Materials and Tough Applications



| Designation | Dimensions | | | Tough ↔ Hard | | Recommended Machining Data |
|-----------------|------------|----------------------|------|--------------|-------|-----------------------------------|
| | CW | CWTOL ⁽¹⁾ | RE | IC830 | IC808 | |
| TAG N3HF | 3.00 | 0.040 | 0.40 | ● | ● | f groove (mm/rev) 0.25-0.35 |
| TAG N4HF | 4.00 | 0.040 | 0.50 | ● | ● | 0.30-0.40 |
| TAG N5HF | 5.00 | 0.040 | 0.50 | ● | ● | 0.30-0.45 |

• Feed values for grade IC20 should be decreased by 50%

⁽¹⁾ Cutting width tolerance (+/-)



MODUGRIP

MODULAR GRIP CARTRIDGES

Compact Modular Adapters for Parting & Grooving Grip Master



Extra Compact **Flat Bottom**
Modular Holder Carries Cartridges
for **Parting and Grooving**



Ease of Use



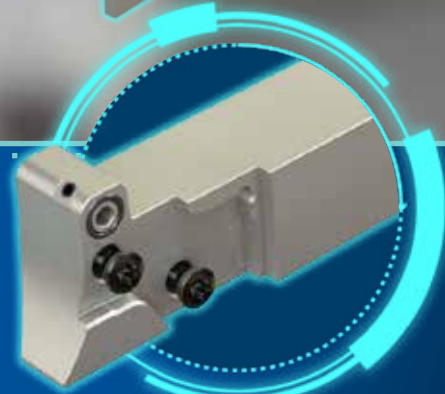
Variety of
Cartridges on Shank



High Pressure
Coolant



Cost Effective
Insert

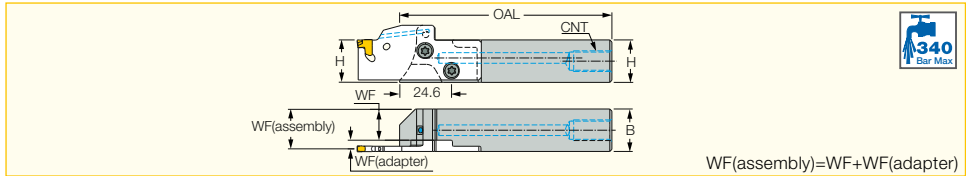


Left & Right Capability to
Machine Next to Shoulder

LOGIQGRIP
ISCAR CHESS LINES

NMAHR/L-JHP

Holders with High Pressure Coolant Channels for MODU-GRIP Adapters



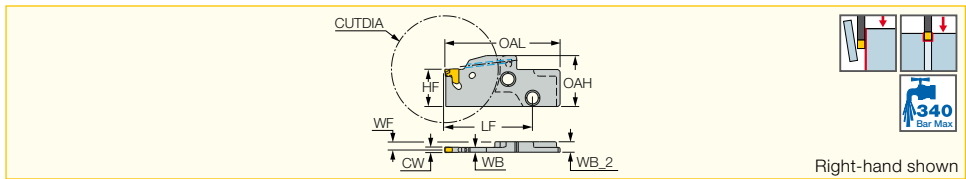
| Designation | H | B | OAL | WF | CNT |
|-------------------|------|------|--------|-------|------|
| NMAHR/L 20-MG-JHP | 20.0 | 20.0 | 100.00 | 14.70 | G1/8 |
| NMAHR/L 25-MG-JHP | 25.0 | 25.0 | 100.00 | 19.70 | G1/8 |

Spare Parts

| Designation | | | | |
|-----------------|-------------|----------|------------|---------|
| NMAHL 20-MG-JHP | SR M5-04451 | SW6-T-SH | BLD T20/S7 | OR 5X1N |
| NMAHR 20-MG-JHP | SR M5-04451 | SW6-T-SH | BLD T20/S7 | OR 5X1N |
| NMAHL 25-MG-JHP | SR M5-04451 | SW6-T-SH | BLD T20/S7 | OR 5X1N |
| NMAHR 25-MG-JHP | SR M5-04451 | SW6-T-SH | BLD T20/S7 | OR 5X1N |

TGAD RE/LE-JHP

Parting and Grooving Adapters with Channels for High Pressure Coolant Carrying TANG-GRIP Inserts



| Designation | CWN ⁽¹⁾ | CWX ⁽²⁾ | WF | WB | WB ₂ | LF | OAL | OAH | HF | CUTDIA | Insert |
|--------------------|--------------------|--------------------|------|------|-----------------|-------|-------|------|------|--------|--------|
| TGAD 2R/LE-D54-JHP | 1.80 | 2.40 | 4.48 | 1.65 | 5.3 | 44.40 | 58.30 | 25.8 | 18.9 | 54.0 | TAG 2 |
| TGAD 3R/LE-D54-JHP | 2.80 | 3.50 | 4.08 | 2.45 | 5.3 | 44.40 | 58.30 | 25.8 | 18.9 | 54.0 | TAG 3 |

⁽¹⁾ Cutting width minimum ⁽²⁾ Cutting width maximum

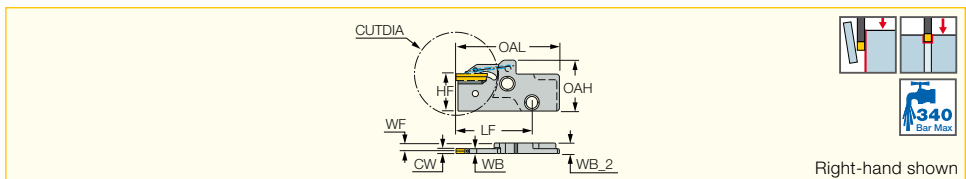
Spare Parts

| Designation | |
|----------------|-------------|
| TGAD RE/LE-JHP | ETG 3-4-SH* |

* Optional, should be ordered separately

D/HGAD RE/LE-JHP

Parting and Grooving Adapters with Channels for High Pressure Coolant Carrying DO-GRIP Inserts



| Designation | CWN ⁽¹⁾ | CWX ⁽²⁾ | WF | WB | WB ₂ | LF | OAL | OAH | HF | CUTDIA | Insert |
|--------------------|--------------------|--------------------|------|------|-----------------|-------|-------|------|------|--------|--------|
| DGAD 2R/LE-D38-JHP | 1.90 | 2.50 | 4.50 | 1.60 | 5.3 | 40.40 | 54.35 | 25.8 | 18.9 | 38.0 | DGN 2 |
| DGAD 3R/LE-D38-JHP | 3.00 | 3.18 | 4.08 | 2.45 | 5.3 | 40.40 | 54.35 | 25.8 | 18.9 | 38.0 | DGN 3 |
| HGAD 3R/LE-D42-JHP | 3.00 | 3.00 | 4.08 | 2.45 | 5.3 | 38.40 | 52.35 | 25.8 | 18.9 | 42.0 | HGN 3 |

⁽¹⁾ Cutting width minimum ⁽²⁾ Cutting width maximum

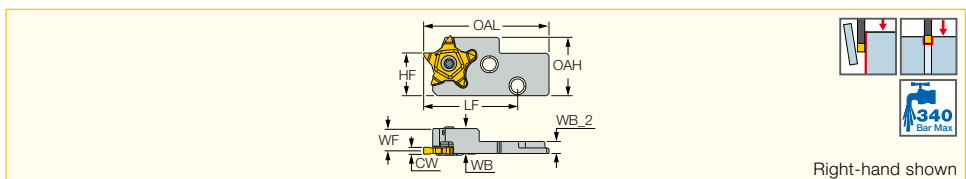
Spare Parts

| Designation | |
|------------------|----------|
| DGAD 2LE-D38-JHP | EDG 33A* |
| DGAD 2RE-D38-JHP | EDG 33A* |
| DGAD 3LE-D38-JHP | EDG 33A* |
| DGAD 3RE-D38-JHP | EDG 33A* |
| HGAD 3LE-D42-JHP | EDG 23B* |
| HGAD 3RE-D42-JHP | EDG 23B* |

* Optional, should be ordered separately

PCAD RE/LE-JHP

Parting and Grooving Adapters with Channels for High Pressure Coolant Carrying PENTA 24 Inserts



| Designation | CWN ⁽¹⁾ | CWX ⁽²⁾ | WF | WB | WB ₂ | LF | OAL | OAH | HF | Insert |
|-----------------|--------------------|--------------------|------|-------|-----------------|-------|-------|------|------|----------|
| PCAD 24R/LE-JHP | 0.50 | 3.18 | 5.20 | 11.00 | 5.3 | 41.40 | 55.30 | 25.8 | 18.9 | PENTA 24 |

⁽¹⁾ Cutting width minimum ⁽²⁾ Cutting width maximum

Spare Parts

| Designation | | |
|----------------|-----------------|----------|
| PCAD RE/LE-JHP | SR 16-212-01397 | T-2010/5 |

Anti-Vibration Grip Whisper Master



Unique Anti-Vibration
Blades

Unique **Anti-Vibration** Blades for Deep Parting & Deep Grooving Applications



Internal
Coolant



High Productivity



Deep Parting
and Grooving

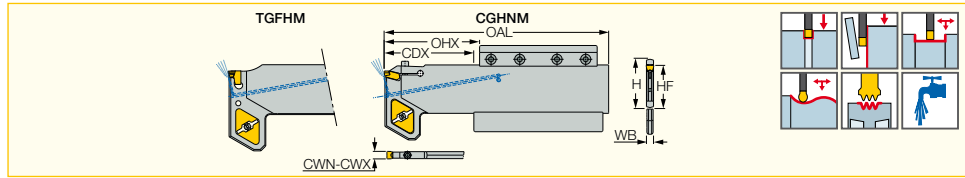


High Efficiency
in Large Overhangs

Innovative Counterweight Design
to Compensate Oscillation

Anti-Vibration Blades

Anti-Vibration Blades for Deep Grooving and Turning



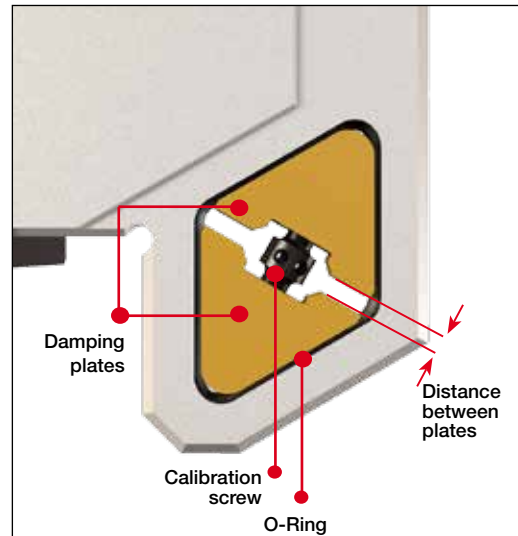
| Designation | CWN | CWX | OHX | CDX | WB | HF | H | OAL | Insert | ↙ | ↘ |
|------------------------|------|------|-------|----------------------|------|------|------|--------|-------------|---|-----------|
| CGHNM 53-6DG-AV | 5.50 | 6.40 | 100.0 | 93.00 | 5.20 | 45.0 | 52.6 | 235.00 | GIMF/N 6 | | EDG 44A* |
| TGFHM 53K-8-AV | 7.70 | 9.00 | 100.0 | 93.00 | 7.40 | 45.0 | 52.6 | 235.00 | TAG/TAGB 8 | | ETG 8-12* |
| CGHNM 53-P8-AV | 8.00 | 8.00 | 100.0 | 93.00 ⁽¹⁾ | 7.40 | 45.0 | 52.6 | 235.00 | GIMY/F/MM 8 | | HW 4.0 |

⁽¹⁾ For D<200 Tmax-r=98

*Optional, should be ordered separately

User Guide

- RPM is one of the most important factors that affect vibrations. In order to maintain a stable and controlled machining process in deep grooving applications, the WHISPERLINE blade should be applied at a constant RPM instead of constant cutting speed. In case of vibrations, the first step an operator should do is to reduce the RPM.
- Each blade is pre-calibrated by ISCAR for optimal performance at an overhang of 100mm. Even though this calibration is suitable for a wide range of overhangs, end-users can perform fine tuning calibration themselves if necessary.



Fine Tuning Calibration

Before starting calibration, measure the gap between the plates. This will enable restoration of the initial setup in case the calibration did not improve the situation.

1. If the blade's overhang is smaller than 100mm, it is recommended to increase the compression of the O-ring by rotating the calibration screw clockwise (make sure the distance between the damping plates increases).
2. If the blade's overhang is bigger than 100mm, it is recommended to decrease the compression of the O-ring by rotating the calibration screw counter clockwise (make sure the distance between the damping plates decreases).
3. The fine tuning resolution should be about a half-turn for each 30mm difference in the overhang. For example, for an overhang of 70mm the calibration screw should be half-turned clockwise.



LOGIQMILL

ISCAR CHESS LINES



High Productivity



For All
Materials



New Generation



Cost Effective
Insert

MACHINING IN DUSTRY 4.0
TELLIGENTLY

**Miniature Sized 8-10 mm
90° Endmill Line
Nano Master**

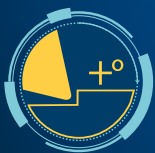


Significantly Large
Body Core Diameter



10 X Magnified

**Smallest Indexable Insert Combined
with Small Diameter Multi-Toothed
Endmill for 90° Shoulder Milling**



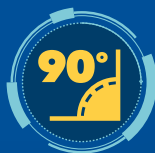
Extra Positive
Cutting Edge



Very Strong and
Durable Insert



New Generation
Insert



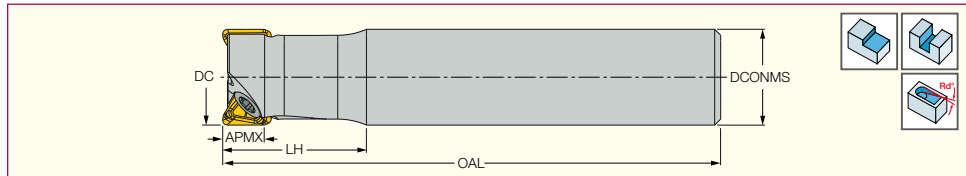
Performs
90° Shoulder



Triangular Insert
with No Hole

HM390 ETP-04

90° Small Diameter Endmills Carrying HM390 TPKR 0401 Triangular Inserts with 3 Helical Cutting Edges



| Designation | DC | APMX | CICT ⁽¹⁾ | OAL | LH | DCONMS | Shank ⁽²⁾ | RMPX ⁽³⁾ | |
|-------------------------------|-------|------|---------------------|-------|------|--------|----------------------|---------------------|------|
| HM390 ETP D08-2-C08-04 | 8.00 | 3.00 | 2 | 60.00 | 12.0 | 8.00 | C | 3.0 | 0.02 |
| HM390 ETP D10-3-C10-04 | 10.00 | 3.00 | 3 | 80.00 | 15.0 | 10.00 | C | 2.5 | 0.05 |

• Tightening torque 0.45 Nxm

⁽¹⁾ Number of inserts

⁽²⁾ C-Cylindrical, W-Weldon

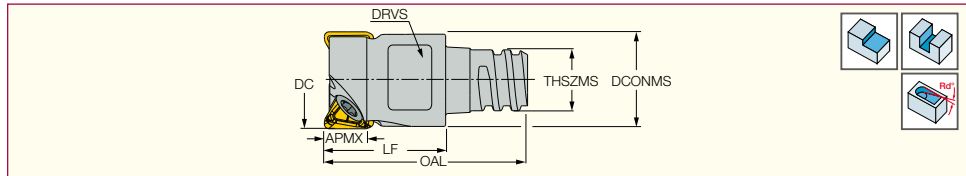
⁽³⁾ Ramping angle maximum

Spare Parts

| Designation | | |
|---------------------|----------------|------------------|
| HM390 ETP-04 | SR M2X0.4-3 T6 | T-6/5 MAGNET 3X3 |

HM390 ETP-MM-04

90° Endmills with a MULTI-MASTER Threaded Adaptation Carrying HM390 TPKR 0401... Triangular Inserts



| Designation | DC | APMX | CICT ⁽¹⁾ | LF | DCONMS | THSZMS | OAL | DRVS ⁽²⁾ | RMPX ⁽³⁾ |
|---------------------------------|-------|------|---------------------|-------|--------|--------|-------|---------------------|---------------------|
| HM390 ETP D08-2-MMT05-04 | 8.00 | 3.00 | 2 | 10.00 | 7.60 | T05 | 16.75 | 6.0 | 3.0 |
| HM390 ETP D10-3-MMT06-04 | 10.00 | 3.00 | 3 | 12.00 | 9.60 | T06 | 18.30 | 8.0 | 2.5 |

• Insert tightening torque 0.45 N*m

⁽¹⁾ Number of inserts

⁽²⁾ Key flat size

⁽³⁾ Ramping angle maximum

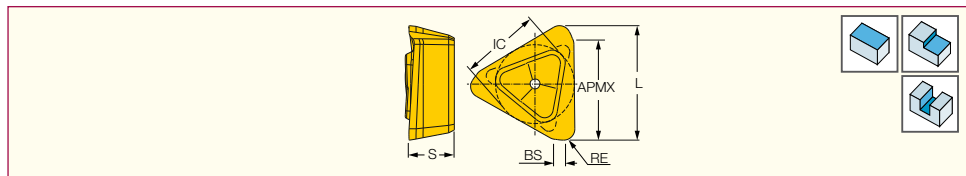
⁽⁴⁾ Item weight

Spare Parts

| Designation | | |
|------------------------|----------------|------------------|
| HM390 ETP-MM-04 | SR M2X0.4-3 T6 | T-6/5 MAGNET 3X3 |

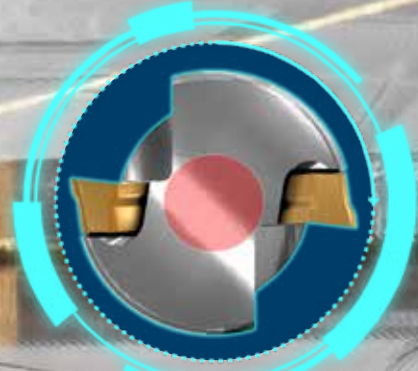
HM390 TPKR 0401

Triangular Miniature Inserts with 3 Helical Cutting Edges for 90° Shoulders

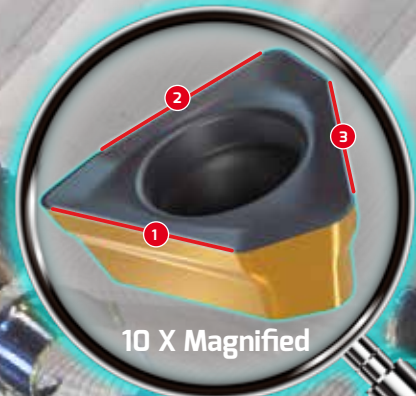


| Designation | Dimensions | | | | | | IC830 | Recommended Machining Data | |
|-----------------------------|------------|------|------|------|------|------|-------|----------------------------|-----------------------|
| | L | IC | S | APMX | RE | BS | | a _p (mm) | f _z (mm/t) |
| HM390 TPKR 0401-PCTR | 4.00 | 2.80 | 1.60 | 3.00 | 0.40 | 0.40 | • | 0.50-3.00 | 0.04-0.10 |

Miniature 10-16 mm Endmill Line Heli Master



Large Diameter Core



10 X Magnified

HM390 TPKT 05
Helical Cutting Edges



Miniature Insert for Small
Diameter Endmills
Depth of Cut up to 3.5 mm

The **Smallest Helical Indexable**
Multi-Toothed Endmill for
90° Shoulder Milling



High Positive
Rake



Large
Diameter Core

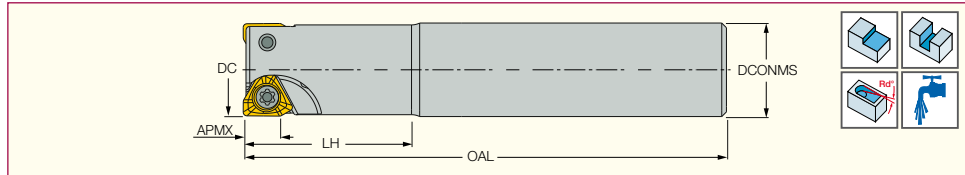


Performs
90° Shoulder



Cost Effective
Insert

HM390 ETP-05
90° Endmills Carrying HM390
TPKT 0502 Triangular Inserts
with 3 Helical Cutting Edges



| Designation | DC | APMX | CICT ⁽¹⁾ | OAL | LH | DCONMS | Shank ⁽²⁾ | RMPX ⁽³⁾ | kg |
|----------------------------------|-------|------|---------------------|-------|------|--------|----------------------|---------------------|------|
| HM390 ETP D10-02-C10-05-C | 10.00 | 3.50 | 2 | 70.00 | 18.0 | 10.00 | C | 2.0 | 0.03 |
| HM390 ETP D12-03-C12-05-C | 12.00 | 3.50 | 3 | 70.00 | 18.0 | 12.00 | C | 1.5 | 0.06 |
| HM390 ETP D14-03-C14-05-C | 14.00 | 3.50 | 3 | 80.00 | 20.0 | 14.00 | C | 1.5 | 0.08 |
| HM390 ETP D16-04-C16-05-C | 16.00 | 3.50 | 4 | 90.00 | 20.0 | 16.00 | C | 1.5 | 0.12 |

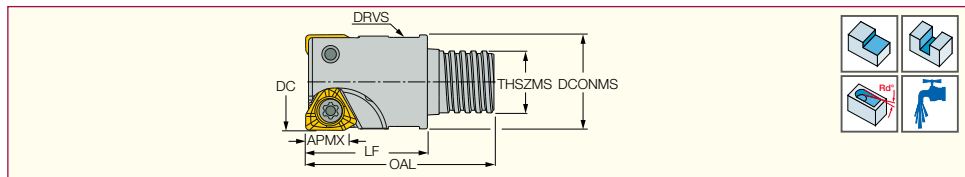
• Tightening torque 0.5 N*m

⁽¹⁾ Number of inserts

⁽²⁾ C-Cylindrical, W-Weldon

⁽³⁾ Ramping angle maximum

HM390 ETP-MM-05
90° Endmills with a MULTI-MASTER
Threaded Adaptation Carrying HM390
TPKT 0502... Triangular Inserts



| Designation | DC | APMX | CICT ⁽¹⁾ | LF | DCONMS | THSZMS | OAL | DRVS ⁽²⁾ | RMPX ⁽³⁾ |
|----------------------------------|-------|------|---------------------|-------|--------|--------|-------|---------------------|---------------------|
| HM390 ETP D10-02-MMT06-05 | 10.00 | 3.50 | 2 | 15.00 | 9.60 | T06 | 21.60 | 8.0 | 2.0 |
| HM390 ETP D12-03-MMT08-05 | 12.00 | 3.50 | 3 | 16.00 | 11.60 | T08 | 24.20 | 10.0 | 1.5 |
| HM390 ETP D14-03-MMT08-05 | 14.00 | 3.50 | 3 | 16.00 | 13.60 | T08 | 22.90 | 10.0 | 1.5 |
| HM390 ETP D16-04-MMT10-05 | 16.00 | 3.50 | 4 | 18.00 | 15.60 | T10 | 29.80 | 13.0 | 1.5 |

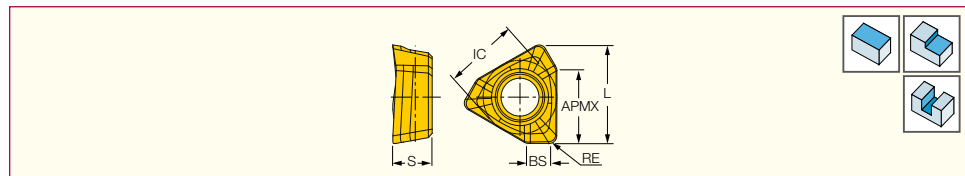
• Insert tightening torque 0.5 N*m

⁽¹⁾ Number of inserts

⁽²⁾ Key flat size

⁽³⁾ Ramping angle maximum

HM390 TPKT 0502
Triangular Inserts with 3 Helical Cutting
Edges for 90° Shoulder Accuracy

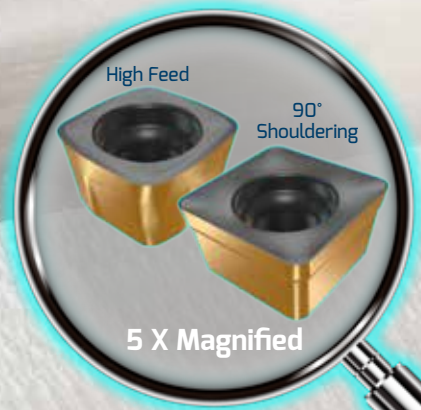


| Designation | Dimensions | | | | | | Tough ↔ Hard | | | Recommended Machining Data | |
|---------------------------|------------|------|------|------|------|------|--------------|-------|-------|----------------------------|--------------------------|
| | L | IC | S | APMX | RE | BS | IC830 | IC808 | IC810 | a _p (mm) | f _z (mm/t) |
| HM390 TPKT 0502PDR | 5.26 | 3.94 | 2.10 | 3.50 | 0.40 | 1.00 | • | • | • | 0.50-3.50 | 0.05-0.10 |
| HM390 TPKT 0502PDR | 5.26 | 3.94 | 2.10 | 3.50 | 0.40 | 1.00 | • | • | • | 0.50-3.50 | 0.05-0.10 |

Extra Small 10-20 mm SQ Master



Endmills and Multi-Master Range
10 -20mm



Small Quad Insert with
4 Cutting Edges

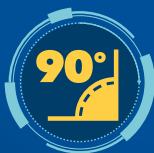
**Two Small Quad Inserts for
90° Shouldering and High Feed
Fit the Same Endmill**



Positive Rake
Angle



High Pressure
Coolant



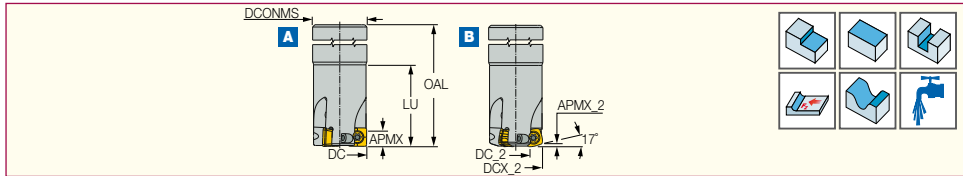
Performs
90° Shoulder



Cost Effective
Insert

E90SO-04

Endmills Carrying Inserts
for Shouldering and Fast
Feed Applications



| Designation | DC | APMX | DC_2 | DCX_2 | APMX_2 | LU | OAL | DCONMS | Shank ⁽¹⁾ | CICT ⁽²⁾ | WT ⁽³⁾ |
|-----------------------------|-------|------|-------|-------|--------|------|--------|--------|----------------------|---------------------|-------------------|
| E90SO D10-2-C10-04-C | 10.00 | 3.50 | 4.40 | 10.00 | 0.50 | 18.0 | 70.00 | 10.00 | C | 2 | 0.04 |
| E90SO D12-2-C12-04-C | 12.00 | 3.50 | 6.40 | 12.00 | 0.50 | 18.0 | 70.00 | 12.00 | C | 2 | 0.05 |
| E90SO D12-3-C12-04-C | 12.00 | 3.50 | 6.40 | 12.00 | 0.50 | 18.0 | 70.00 | 12.00 | C | 3 | 0.05 |
| E90SO D14-4-C14-04-C | 14.00 | 3.50 | 8.40 | 14.00 | 0.50 | 20.0 | 80.00 | 14.00 | C | 4 | 0.08 |
| E90SO D16-4-C16-04-C | 16.00 | 3.50 | 10.40 | 16.00 | 0.50 | 20.0 | 90.00 | 16.00 | C | 4 | 0.12 |
| E90SO D16-5-C16-04-C | 16.00 | 3.50 | 10.40 | 16.00 | 0.50 | 20.0 | 90.00 | 16.00 | C | 5 | 0.12 |
| E90SO D20-6-C20-04-C | 20.00 | 3.50 | 14.40 | 20.00 | 0.50 | 25.0 | 110.00 | 20.00 | C | 6 | 0.23 |

• A - with SOMT/CT 0402 insert • B - with SOMT 0402-FF insert • Tightening torque 0.5 Nxm

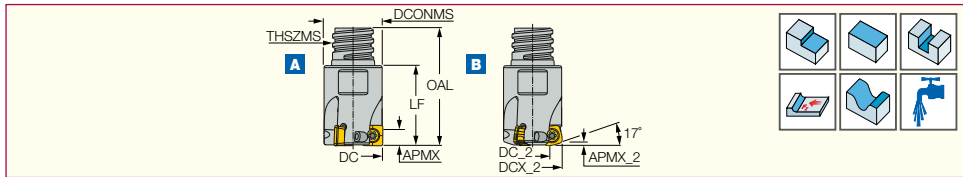
⁽¹⁾ C-Cylindrical

⁽²⁾ Number of inserts

⁽³⁾ Item weight

E90SO-MM-04

Endmills with a MULTI-MASTER
Connection Carrying Inserts
for Shouldering and Fast
Feed Applications



| Designation | DC | APMX | DC_2 | DCX_2 | APMX_2 | LF | OAL | CICT ⁽¹⁾ | DCONMS | THSZMS | DRVS ⁽²⁾ | WT ⁽³⁾ |
|-----------------------------|-------|------|-------|-------|--------|-------|-------|---------------------|--------|--------|---------------------|-------------------|
| E90SO D10-2-MMT06-04 | 10.00 | 3.50 | 4.40 | 10.00 | 0.50 | 15.00 | 21.30 | 2 | 9.70 | T06 | 8.0 | 0.07 |
| E90SO D12-3-MMT08-04 | 12.00 | 3.50 | 6.40 | 12.00 | 0.50 | 16.00 | 23.50 | 3 | 11.60 | T08 | 10.0 | 0.15 |
| E90SO D14-4-MMT08-04 | 14.00 | 3.50 | 8.40 | 14.00 | 0.50 | 16.00 | 23.50 | 4 | 13.60 | T08 | 10.0 | 0.16 |
| E90SO D16-5-MMT10-04 | 16.00 | 3.50 | 10.40 | 16.00 | 0.50 | 18.00 | 29.30 | 5 | 15.60 | T10 | 13.0 | 0.26 |

• A - with SOMT/CT 0402 insert • B - with SOMT 0402-FF insert

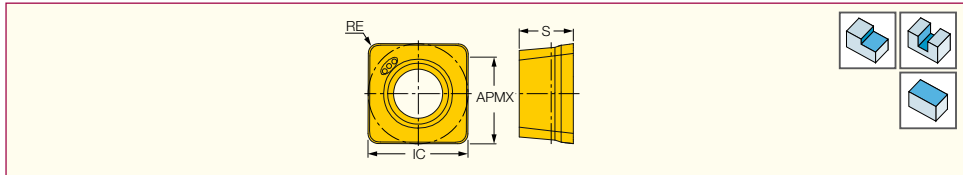
⁽¹⁾ Number of inserts

⁽²⁾ Key flat size

⁽³⁾ Item weight

SOMT/CT 0402

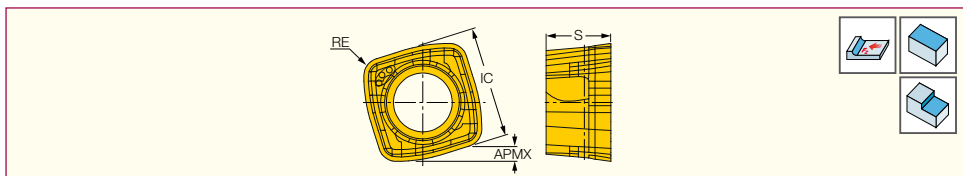
Square Milling Inserts for General Use



| Designation | Dimensions | | | | Tough ↔ Hard | | | Recommended Machining Data | |
|-------------------------|------------|------|------|------|--------------|-------|-------|----------------------------|--------------------------|
| | APMX | RE | IC | S | IC830 | IC808 | IC810 | a _p (mm) | f _z (mm/t) |
| SOCT 040204 PNR | 3.50 | 0.40 | 4.07 | 2.20 | • | • | • | 0.50-3.50 | 0.05-0.10 |
| SOMT 040204 PNTR | 3.50 | 0.40 | 4.07 | 2.20 | • | • | • | 0.50-3.50 | 0.05-0.10 |

SOMT 0402-FF

Square Milling Inserts for
Fast Feed Milling



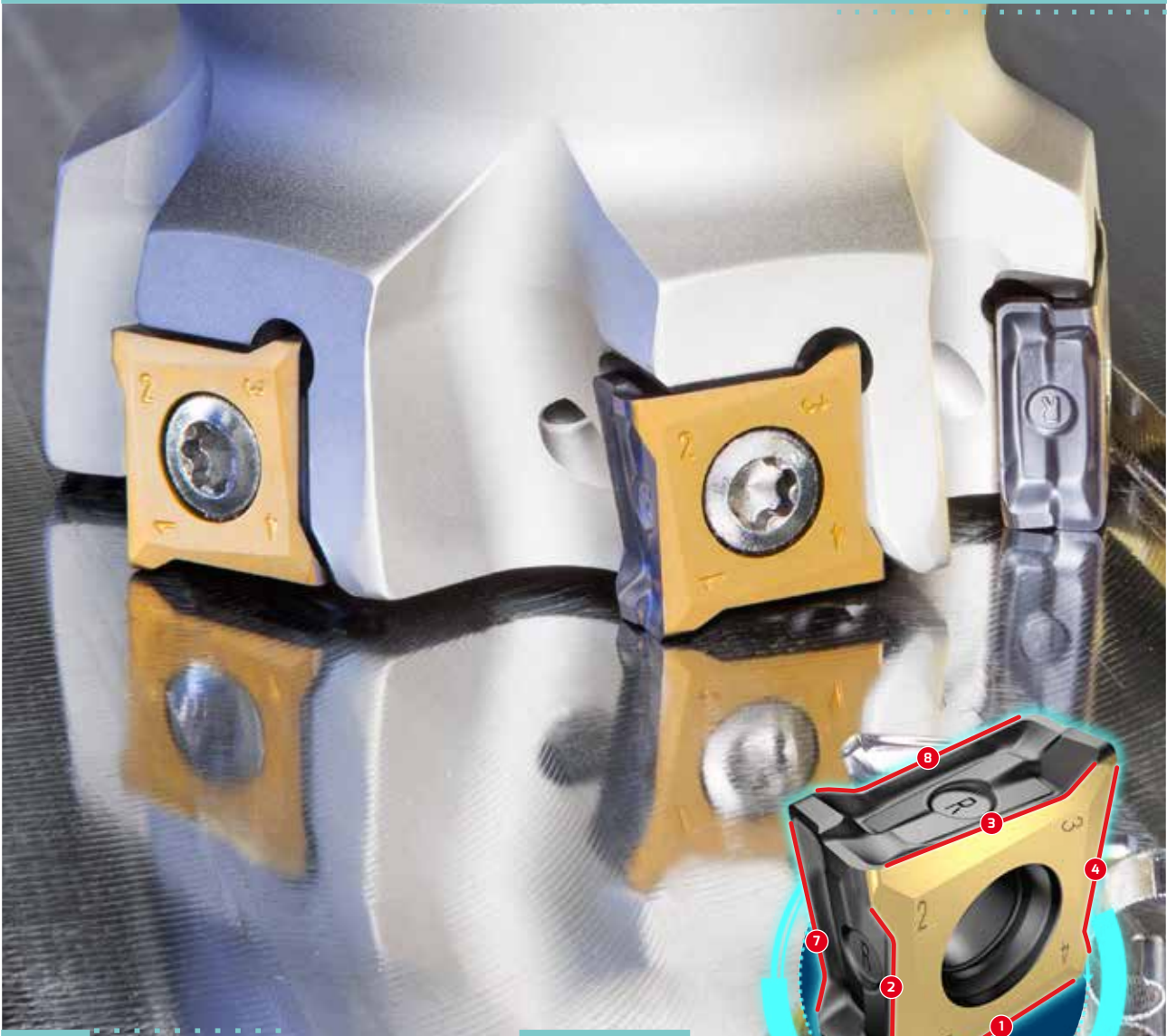
| Designation | Dimensions | | | | | IC830 | Recommended Machining Data | |
|---------------------------|------------|------|------|-------------------------------|------|-------|----------------------------|--------------------------|
| | IC | APMX | RE | R _g ⁽¹⁾ | S | | a _p (mm) | f _z (mm/t) |
| SOMT 040206 PNR-FF | 3.80 | 0.50 | 0.60 | 1.00 | 2.20 | • | 0.20-0.50 | 0.30-0.50 |

⁽¹⁾ Radius for programming

LOGIQ 8TANG

T890 MILLING LINE

90° 8 Cutting Edged Insert 32-160 mm Dia. Range Tangential Master



Tangential Cost Effective Insert
with **8 Cutting Edges** for
90° Shoulder Milling

8 Cutting Edges



Tangential
Advantage



Large Body
Core



90°
Performs
90° Shoulder



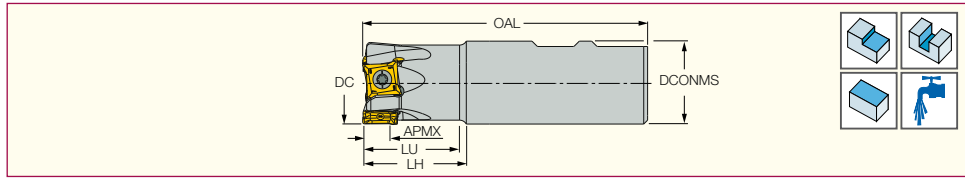
Dovetail



**SCAN
NOW!**

LOGIQMILL
ISCAR CHESS LINES




T890HT ELN-R13
90° Endmills Carrying T890 LN.T
1306... Tangentially Clamped
Inserts with 8 Cutting Edges



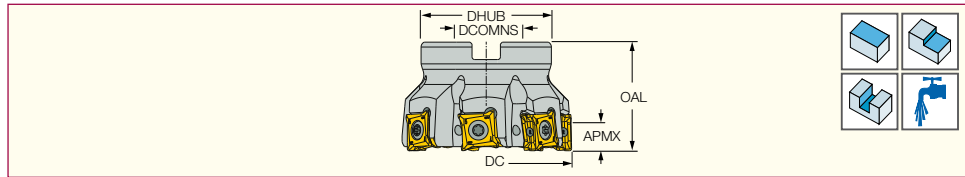
| Designation | DC | APMX | CICT ⁽¹⁾ | DCONMS | Shank ⁽²⁾ | LU | LH | OAL | WT ⁽³⁾ |
|--------------------------|-------|------|---------------------|--------|----------------------|------|------|--------|-------------------|
| T890HT ELN D32-3-C32-13 | 32.00 | 9.50 | 3 | 32.00 | C | 37.4 | 40.0 | 130.00 | 0.68 |
| T890HT ELN D32-3-C32-13B | 32.00 | 9.50 | 3 | 32.00 | C | 47.4 | 50.0 | 250.00 | 1.43 |
| T890HT ELN D32-3-W32-13 | 32.00 | 9.50 | 3 | 32.00 | W | 37.4 | 40.0 | 110.00 | 0.56 |
| T890HT ELN D40-4-C32-13 | 40.00 | 9.50 | 4 | 32.00 | C | - | 44.0 | 130.00 | 0.12 |
| T890HT ELN D40-4-W32-13 | 40.00 | 9.50 | 4 | 32.00 | W | - | 40.0 | 115.00 | 0.69 |


⁽¹⁾ Number of inserts ⁽²⁾ C-Cylindrical, W-Weldon ⁽³⁾ Item weight

Spare Parts

| Designation |  |  |  |
|--------------------------|---|---|---|
| T890HT ELN D32-3-C32-13 | SR 10513105 | BLD IP20/M7 | SW6-T-SH |
| T890HT ELN D32-3-C32-13B | SR 10513105 | BLD IP20/M7 | SW6-T-SH |
| T890HT ELN D32-3-W32-13 | SR 10513105 | BLD IP20/M7 | SW6-T-SH |
| T890HT ELN D40-4-C32-13 | SR 10513105 | BLD IP20/M7 | SW6-T-SH |
| T890HT ELN D40-4-W32-13 | SR 10513105 | BLD IP20/M7 | SW6-T-SH |





T890HT FLN-R13
90° Face Mills Carrying
T890 LN.T 1306...
Tangentially Clamped Inserts
with 8 Cutting Edges

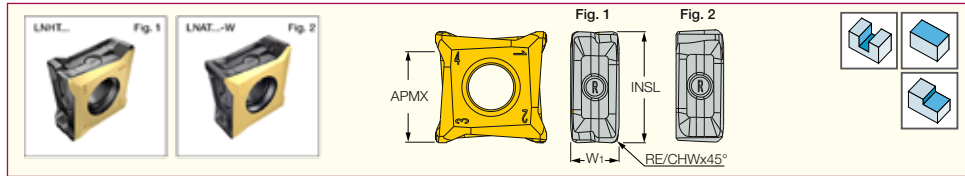


| Designation | DC | APMX | CICT ⁽¹⁾ | DCONMS | DHUB | OAL | Arbor |  |
|---------------------------|--------|------|---------------------|--------|-------|-------|-------|---|
| T890HT FLN D040-03-16-R13 | 40.00 | 9.50 | 3 | 16.00 | 38.00 | 40.00 | A | 0.22 |
| T890HT FLN D040-04-16-R13 | 40.00 | 9.50 | 4 | 16.00 | 38.00 | 40.00 | A | 0.21 |
| T890HT FLN D040-05-16-R13 | 40.00 | 9.50 | 5 | 16.00 | 38.00 | 40.00 | A | 0.21 |
| T890HT FLN D050-04-22-R13 | 50.00 | 9.50 | 4 | 22.00 | 48.00 | 40.00 | A | 0.33 |
| T890HT FLN D050-05-22-R13 | 50.00 | 9.50 | 5 | 22.00 | 48.00 | 40.00 | A | 0.33 |
| T890HT FLN D050-06-22-R13 | 50.00 | 9.50 | 6 | 22.00 | 48.00 | 40.00 | A | 0.35 |
| T890HT FLN D063-06-22-R13 | 63.00 | 9.50 | 6 | 22.00 | 48.00 | 40.00 | A | 0.48 |
| T890HT FLN D063-07-22-R13 | 63.00 | 9.50 | 7 | 22.00 | 48.00 | 40.00 | A | 0.48 |
| T890HT FLN D063-08-22-R13 | 63.00 | 9.50 | 8 | 22.00 | 48.00 | 40.00 | A | 0.50 |
| T890HT FLN D080-06-27-R13 | 80.00 | 9.50 | 6 | 27.00 | 60.00 | 50.00 | B | 0.88 |
| T890HT FLN D080-07-27-R13 | 80.00 | 9.50 | 7 | 27.00 | 60.00 | 50.00 | B | 0.89 |
| T890HT FLN D080-09-27-R13 | 80.00 | 9.50 | 9 | 27.00 | 60.00 | 50.00 | B | 0.91 |
| T890HT FLN D100-08-32-R13 | 100.00 | 9.50 | 8 | 32.00 | 78.00 | 50.00 | B | 1.49 |
| T890HT FLN D100-12-32-R13 | 100.00 | 9.50 | 12 | 32.00 | 78.00 | 50.00 | B | 1.62 |
| T890HT FLN D125-09-40-R13 | 125.00 | 9.50 | 9 | 40.00 | 92.00 | 63.00 | B | 2.83 |
| T890HT FLN D125-15-40-R13 | 125.00 | 9.50 | 15 | 40.00 | 92.00 | 63.00 | B | 2.93 |

⁽¹⁾ Number of inserts

Spare Parts

| Designation |  |  |  |  |
|---------------------------|---|---|---|---|
| T890HT FLN D040-03-16-R13 | SR 10513105-L10.5 | BLD IP20/M7 | SW6-T-SH | SR M8X30DIN912 |
| T890HT FLN D040-04-16-R13 | SR 10513105-L10.5 | BLD IP20/M7 | SW6-T-SH | SR M8X30DIN912 |
| T890HT FLN D040-05-16-R13 | SR 10513105-L10.5 | BLD IP20/M7 | SW6-T-SH | SR M8X30DIN912 |
| T890HT FLN D050-04-22-R13 | SR 10513105 | BLD IP20/M7 | SW6-T-SH | SR M10X25 DIN912 |
| T890HT FLN D050-05-22-R13 | SR 10513105 | BLD IP20/M7 | SW6-T-SH | SR M10X25 DIN912 |
| T890HT FLN D050-06-22-R13 | SR 10513105 | BLD IP20/M7 | SW6-T-SH | SR M10X25 DIN912 |
| T890HT FLN D063-06-22-R13 | SR 10513105 | BLD IP20/M7 | SW6-T-SH | SR M10X25 DIN912 |
| T890HT FLN D063-07-22-R13 | SR 10513105 | BLD IP20/M7 | SW6-T-SH | SR M10X25 DIN912 |
| T890HT FLN D063-08-22-R13 | SR 10513105 | BLD IP20/M7 | SW6-T-SH | SR M10X25 DIN912 |
| T890HT FLN D080-06-27-R13 | SR 10513105 | BLD IP20/M7 | SW6-T-SH | SR M10X25 DIN912 |
| T890HT FLN D080-07-27-R13 | SR 10513105 | BLD IP20/M7 | SW6-T-SH | SR M10X25 DIN912 |
| T890HT FLN D080-09-27-R13 | SR 10513105 | BLD IP20/M7 | SW6-T-SH | SR M10X25 DIN912 |
| T890HT FLN D100-08-32-R13 | SR 10513105 | BLD IP20/M7 | SW6-T-SH | SR M10X25 DIN912 |
| T890HT FLN D100-12-32-R13 | SR 10513105 | BLD IP20/M7 | SW6-T-SH | SR M10X25 DIN912 |
| T890HT FLN D125-09-40-R13 | SR 10513105 | BLD IP20/M7 | SW6-T-SH | SR M10X25 DIN912 |
| T890HT FLN D125-15-40-R13 | SR 10513105 | BLD IP20/M7 | SW6-T-SH | SR M10X25 DIN912 |



| Designation | Dimensions | | | | | | Tough ↔ Hard | | | | | | Recommended Machining Data | |
|--|------------|-------|----------------|------|------|------|--------------|-------|--------|--------|-------|-------|----------------------------|--------------------------|
| | APMX | INSL | W ₁ | RE | CHW | Fig. | IC845 | IC830 | IC5400 | IC5500 | IC808 | IC810 | a _p (mm) | f _z (mm/t) |
| T890 LNHT 1306PNTR | 9.50 | 13.78 | 6.00 | 0.80 | - | 1 | ● | ● | ● | ● | ● | ● | 1.00-9.50 | 0.10-0.20 |
| T890 LNAT 1306PN-W ⁽¹⁾ | 9.50 | 13.92 | 5.90 | - | 0.60 | 2 | | | | | | ● | 0.50-1.00 | 0.10-0.20 |

⁽¹⁾ A wiper insert (5.9 mm long), 4 cutting edges, for finishing only



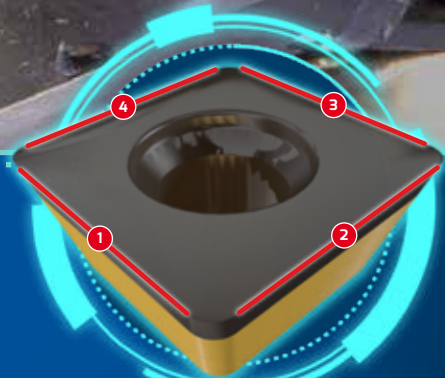
XQUAD

EXTENDED FLUTE

Extended Flute Milling Dia 50-100 mm Aerospace Master



Special Positioning of Inserts for Quiet and Chatter Free Operation



4 Cutting Edged Square Insert

Extended Flute for Aerospace Parts Machining High Productivity Metal Removal



Easy Chip Evacuation



For Exotic Materials

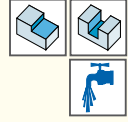
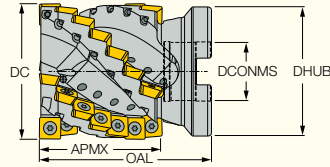


High Pressure Coolant



Cost Effective Insert

LOGIQMILL
ISCAR CHESS LINES



| Designation | DC | APMX | NOF ⁽²⁾ | CICT ⁽³⁾ | OAL | DCONMS | DHUB | Arbor | |
|---|-------|-------|--------------------|---------------------|-------|--------|-------|-------|------|
| SDK D050-48-03-22-10-C | 50.00 | 48.00 | 3 | 18 | 75.00 | 22.00 | 48.00 | A | 0.54 |
| SDK D050-48-03-27-10-C | 50.00 | 48.00 | 3 | 18 | 80.00 | 27.00 | 49.00 | A | 0.57 |
| SDK D050-48-04-27-10-C | 50.00 | 48.00 | 4 | 24 | 80.00 | 27.00 | 49.00 | A | 0.56 |
| SDK D050-48-04-27-10-HP ⁽¹⁾ | 50.00 | 48.00 | 4 | 24 | 80.00 | 27.00 | 49.00 | A | 0.57 |
| SDK D063-56-04-27-10-C | 63.00 | 56.00 | 4 | 28 | 80.00 | 27.00 | 60.00 | A | 0.90 |
| SDK D080-64-05-32-10-C | 80.00 | 64.00 | 5 | 40 | 85.00 | 32.00 | 78.00 | A | 1.61 |

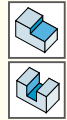
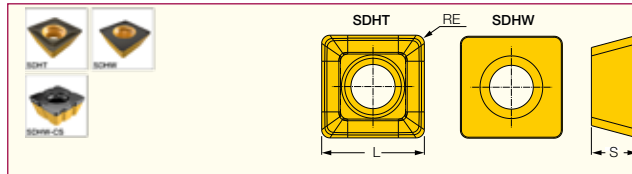
⁽¹⁾ Designed with coolant nozzles for high pressure coolant

⁽²⁾ Number of flutes

⁽³⁾ Number of inserts

Spare Parts

| Designation | | | | | |
|--------------------------------|-----------------------|-------------|--------|-----------------|--------------------------|
| SDK D050-48-03-22-10-C | SR M3.5X0.6-L8.5 IP10 | BLD IP10/S7 | SW6-SD | SR M10X60DIN912 | |
| SDK D050-48-03-27-10-C | SR M3.5X0.6-L8.5 IP10 | BLD IP10/S7 | SW6-SD | | |
| SDK D050-48-04-27-10-C | SR M3.5X0.6-L8.5 IP10 | BLD IP10/S7 | SW6-SD | | |
| SDK D050-48-04-27-10-HP | SR M3.5X0.6-L8.5 IP10 | BLD IP10/S7 | SW6-SD | | NOZZLE 1.2mm 5691 026-04 |
| SDK D063-56-04-27-10-C | SR M3.5X0.6-L8.5 IP10 | BLD IP10/S7 | SW6-SD | | |
| SDK D080-64-05-32-10-C | SR M3.5X0.6-L8.5 IP10 | BLD IP10/S7 | SW6-SD | | |

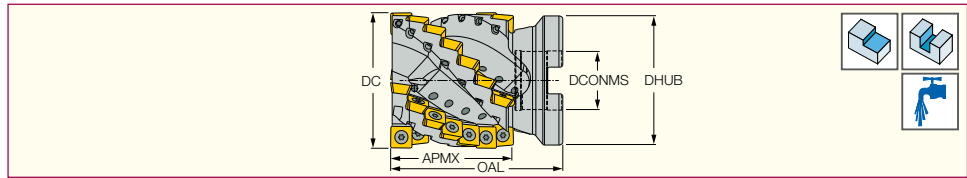



| Designation | Dimensions | | | Tough ↔ Hard | | | Recommended Machining Data f _z (mm/t) |
|---|------------|------|------|--------------|--------|-------|---|
| | L | S | RE | IC882 | IC5820 | IC380 | |
| SDHT 100408-PDEN ⁽¹⁾ | 10.00 | 4.50 | 0.80 | ● | ● | | 0.05-0.10 |
| SDHW 100408-TN ⁽²⁾ | 10.00 | 4.50 | 0.80 | ● | ● | ● | 0.05-0.12 |
| SDHW 100408-TN-CS ⁽³⁾ | 10.00 | 4.50 | 0.80 | | ● | | 0.05-0.12 |

⁽¹⁾ First choice for machining stainless steel

⁽²⁾ First choice for machining titanium

⁽³⁾ Chip splitting cutting edge







| Designation | DC | APMX | NOF ⁽²⁾ | CICT ⁽³⁾ | OAL | DCONMS | DHUB | Arbor |  |
|--|--------|--------|--------------------|---------------------|--------|--------|-------|-------|---|
| SDK D63-55-05-27-12-C | 63.00 | 55.00 | 5 | 25 | 80.00 | 27.00 | 60.00 | A | 0.94 |
| SDK D63-55-05-27-12-HP ⁽¹⁾ | 63.00 | 55.00 | 5 | 25 | 80.00 | 27.00 | 60.00 | A | 0.94 |
| SDK D63-66-04-27-12-C | 63.00 | 66.00 | 4 | 24 | 93.00 | 27.00 | 60.00 | A | 1.07 |
| SDK D63-98-04-27-12-C | 63.00 | 98.00 | 4 | 36 | 125.00 | 27.00 | 60.00 | A | 1.38 |
| SDK D80-66-05-32-12-C | 80.00 | 66.00 | 5 | 30 | 95.00 | 32.00 | 77.60 | A | 2.06 |
| SDK D80-109-05-32-12-C | 80.00 | 109.00 | 5 | 50 | 143.00 | 32.00 | 77.60 | A | 3.06 |
| SDK D100-76-06-40-12-C | 100.00 | 76.00 | 6 | 42 | 110.00 | 40.00 | 92.00 | A | 3.97 |
| SDK D100-130-06-40-12-C | 100.00 | 130.00 | 6 | 72 | 165.00 | 40.00 | 92.00 | A | 5.87 |

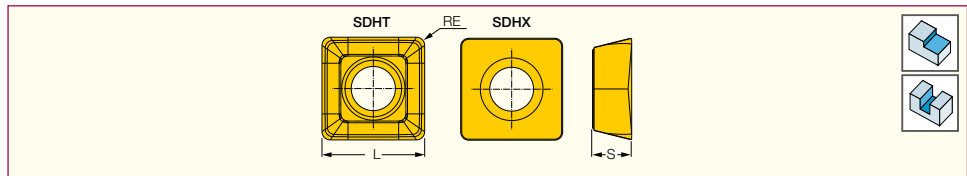
⁽¹⁾ With coolant nozzles for high pressure coolant

⁽²⁾ Number of flutes

⁽³⁾ Number of inserts

Spare Parts

| Designation |  |  |  |  |
|--------------------------------|---|---|---|---|
| SDK D63-55-05-27-12-C | SR M4X0.7-L9.5 IP15-4623 | BLD IP15/M7 | SW6-T | |
| SDK D63-55-05-27-12-HP | SR M4X0.7-L9.5 IP15-4623 | BLD IP15/M7 | SW6-T | |
| SDK D63-66-04-27-12-C | SR M4X0.7-L9.5 IP15-4623 | BLD IP15/M7 | SW6-T | SR M12X80DIN912 |
| SDK D63-98-04-27-12-C | SR M4X0.7-L9.5 IP15-4623 | BLD IP15/M7 | SW6-T | SR M12X110DIN912 |
| SDK D80-66-05-32-12-C | SR M4X0.7-L9.5 IP15-4623 | BLD IP15/M7 | SW6-T | SR M16X70DIN912 |
| SDK D80-109-05-32-12-C | SR M4X0.7-L9.5 IP15-4623 | BLD IP15/M7 | SW6-T | SR M16X120 DIN912 |
| SDK D100-76-06-40-12-C | SR M4X0.7-L9.5 IP15-4623 | BLD IP15/M7 | SW6-T | |
| SDK D100-130-06-40-12-C | SR M4X0.7-L9.5 IP15-4623 | BLD IP15/M7 | SW6-T | |



| Designation | Dimensions | | | Tough ↔ Hard | | Recommended Machining Data f _z (mm/t) |
|--|------------|------|------|--------------|--------|--|
| | L | S | RE | IC882 | IC5820 | |
| SDHT 120508-PDEN ⁽¹⁾ | 12.70 | 4.90 | 0.80 | • | • | 0.05-0.15 |
| SDHX 120508-PD-N ⁽²⁾ | 12.70 | 4.94 | 0.80 | • | • | 0.05-0.15 |

⁽¹⁾ First choice for machining stainless steel

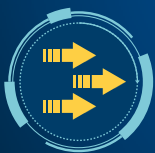
⁽²⁾ First choice for machining titanium

Miniature 8-10 mm High Feed Endmill Line Nano Master



**Smallest Indexable Insert Combined
with Small Diameter Multi-Toothed
Endmill** for High Feed and Productivity

Triangular Insert
with No Hole



High Feed
Milling



Very Strong and
Durable Insert



High Ramp Down
Angle



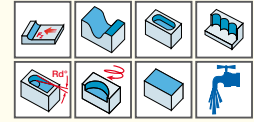
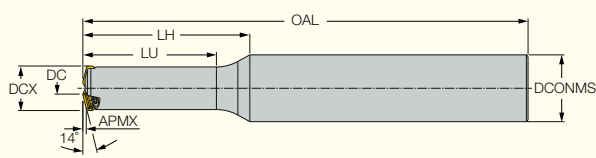
Easy Chip
Evacuation



High Pressure
Coolant

FFT3 EFM-02

Small Diameter Endmills Carrying Single-Sided Triangular Inserts for Fast Feed Milling



| Designation | DCX | DC | APMX | CICT ⁽¹⁾ | LU | LH | OAL | DCONMS | Shank ⁽²⁾ | RMPX ⁽³⁾ | |
|----------------------------------|-------|------|------|---------------------|------|------|-------|--------|----------------------|---------------------|------|
| FFT3 EFM D08-2-060-C10-02 | 8.00 | 2.20 | 0.60 | 2 | 17.0 | 20.0 | 60.00 | 10.00 | C | 10.8 | 0.03 |
| FFT3 EFM D08-2-080-C12-02 | 8.00 | 2.20 | 0.60 | 2 | 26.0 | 30.0 | 80.00 | 12.00 | C | 10.8 | 0.10 |
| FFT3 EFM D10-3-090-C10-02 | 10.00 | 4.20 | 0.60 | 3 | 40.0 | 40.0 | 90.00 | 10.00 | C | 4.7 | 0.12 |

• Radius for programming 1.1 mm

⁽¹⁾ Number of inserts

⁽²⁾ C-Cylindrical, W-Weldon

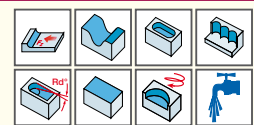
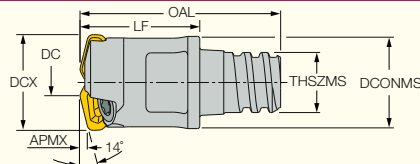
⁽³⁾ Ramping angle maximum

Spare Parts

| Designation | | |
|--------------------|---------------------|------------------|
| FFT3 EFM-02 | SR M2X0.4-2.9 T6-HG | T-6/5 MAGNET 3X3 |

FFT3 EFM-MM 02

Small Diameter Endmills with a MULTI-MASTER Threaded Adaptation Carrying Triangular Inserts for Fast Feed Milling



| Designation | DCX | DC | APMX | CICT ⁽¹⁾ | LF | DCONMS | THSZMS | OAL | DRVS ⁽²⁾ | RMPX ⁽³⁾ | |
|----------------------------------|-------|------|------|---------------------|-------|--------|--------|-------|---------------------|---------------------|------|
| FFT3 EFMD08/.31-2MMT05-02 | 8.00 | 2.20 | 0.60 | 2 | 10.00 | 7.60 | T05 | 16.75 | 5.5 | 10.8 | 0.01 |
| FFT3 EFMD10/.39-3MMT06-02 | 10.00 | 4.20 | 0.60 | 3 | 10.00 | 9.70 | T06 | 16.30 | 8.0 | 4.7 | 0.01 |

• Radius for programming 1.1 mm

⁽¹⁾ Number of inserts

⁽²⁾ Key flat size

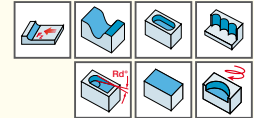
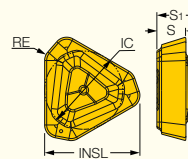
⁽³⁾ Maximum ramping angle

Spare Parts

| Designation | | |
|-----------------------|---------------------|------------------|
| FFT3 EFM-MM 02 | SR M2X0.4-2.9 T6-HG | T-6/5 MAGNET 3X3 |

FFT3 TXMT 02

Triangular Miniature Inserts for Fast Feed Machining at Small Depth of Cut



| Designation | Dimensions | | | | | | IC830 | Recommended Machining Data | |
|--------------------------|------------|------|------|------|----------------|---------------------|-----------|----------------------------|--|
| | INSL | IC | RE | S | S ₁ | a _p (mm) | | f _z (mm/t) | |
| FFT3 TXMT 020105T | 3.66 | 2.00 | 0.50 | 1.10 | 1.56 | • | 0.20-0.60 | 0.20-0.70 | |

MICRO³FEED

MF 300 ENDMILL

Miniature High Feed 10-16 mm Micro Master

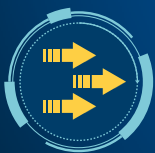


Multi-Toothed Small Diameter Tool with Coolant Pinpointed to the Cutting Edge

10 X Magnified

Unique Trigon Insert with 3 Cutting Edges

Small Diameter Multi-Toothed Endmill for High Feed and Productivity



High Feed Milling



High Positive Rake Angle



High Productivity



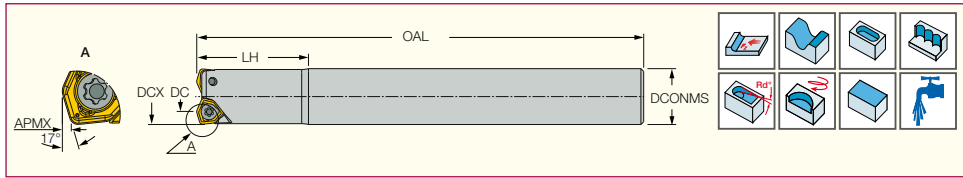
Through-Tool Coolant

Micro Sized Insert for Depth of Cut up to 0.6mm Feed up to 0.8mm per tooth

LOGIQMILL
ISCAR CHESS LINES

FFT3 EFM-03

Endmills Carrying Single-Sided Small Trigon Inserts for Fast Feed Milling



| Designation | DCX | DC | APMX | CICT ⁽¹⁾ | LH | OAL | DCONMS | Shank ⁽²⁾ | RMPX ⁽³⁾ | kg |
|----------------------------------|-------|-------|------|---------------------|------|--------|--------|----------------------|---------------------|------|
| FFT3 EFM D10-2-080-C10-03 | 10.00 | 5.60 | 0.60 | 2 | 20.0 | 80.00 | 10.00 | C | 6.9 | 0.11 |
| FFT3 EFM D12-3-120-C12-03 | 12.00 | 7.60 | 0.60 | 3 | 25.0 | 120.00 | 12.00 | C | 4.7 | 0.14 |
| FFT3 EFM D16-4-140-C16-03 | 16.00 | 11.60 | 0.60 | 4 | 35.0 | 140.00 | 16.00 | C | 2.9 | 0.18 |



• Radius for programming 1.1 mm

⁽¹⁾ Number of inserts

⁽²⁾ C-Cylindrical, W-Weldon

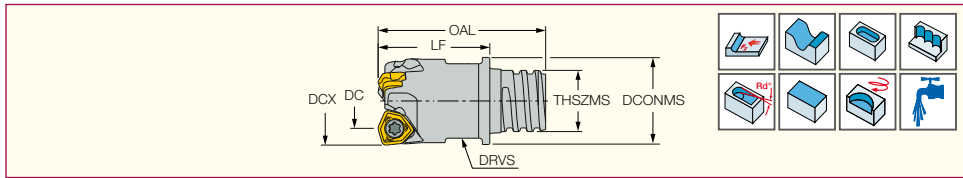
⁽³⁾ Maximum ramping angle

Spare Parts

| Designation |  |  |
|--------------------|---|---|
| FFT3 EFM-03 | TS 18041/HG | T-6IP/51 |

FFT3 EFM-MM 03

Endmills with a MULTI-MASTER Threaded Adaptation Carrying Single-Sided Small Trigon Inserts for Fast Feed Milling



| Designation | DCX | DC | APMX | CICT ⁽¹⁾ | LF | DCONMS | THSZMS | OAL | DRVS ⁽²⁾ | RMPX ⁽³⁾ | kg |
|----------------------------------|-------|-------|------|---------------------|-------|--------|--------|-------|---------------------|---------------------|------|
| FFT3 EFMD10/.39-2MMT06-03 | 10.00 | 5.60 | 0.60 | 2 | 10.00 | 9.70 | T06 | 16.30 | 8.0 | 6.9 | 0.02 |
| FFT3 EFMD12/.47-3MMT08-03 | 12.00 | 7.60 | 0.60 | 3 | 15.00 | 11.70 | T08 | 22.50 | 10.0 | 4.7 | 0.03 |
| FFT3 EFMD16/.63-4MMT10-03 | 16.00 | 11.60 | 0.60 | 4 | 20.00 | 15.30 | T10 | 31.30 | 13.0 | 2.9 | 0.05 |



• Radius for programming 1.1 mm

⁽¹⁾ Number of inserts

⁽²⁾ Key flat size

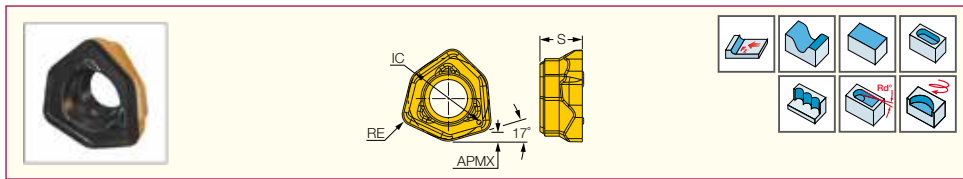
⁽³⁾ Maximum ramping angle

Spare Parts

| Designation |  |  |
|-----------------------|---|---|
| FFT3 EFM-MM 03 | TS 18041/HG | T-6IP/51 |

FFT3 WXMT 03

Single-Sided Small Trigon Inserts for Fast Feed Milling



| Designation | Dimensions | | | | Tough ↔ Hard | | Recommended Machining Data | |
|--------------------------|------------|------|------|------|--------------|-------|----------------------------|-----------------------|
| | IC | S | RE | APMX | IC830 | IC808 | a _p (mm) | f _z (mm/t) |
| FFT3 WXMT 030206T | 4.20 | 2.20 | 0.60 | 0.60 | • | • | 0.20-0.60 | 0.20-0.80 |

LOGIQ4FEED

HIGH FEED MILLING

High Feed Milling 12-40 mm Twist Master

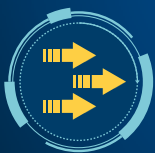


Twisted Shape
High Rake Angle



Unique Insert Shape

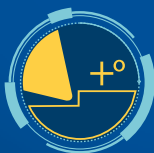
Twisted Shape Insert for High Feed Milling Guarantees Higher Productivity



High Feed
Milling



Large Body Core
Ensures Stability
and Rigidity



High Positive
Rake Angle



Double Sided
Insert

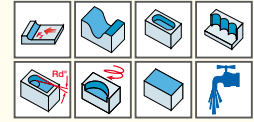
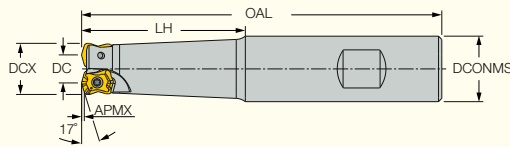


**SCAN
NOW!**

LOGIQMILL
ISCAR CHESS LINES

FFX4 ED

Endmills Carrying Small Double-Sided "Bone Shape" Inserts with 4 Cutting Edges for Fast Feed Milling



| Designation | DCX | DC | APMX | CICT ⁽¹⁾ | LH | OAL | DCONMS | RMPX ⁽²⁾ | Shank ⁽³⁾ | WT ⁽⁴⁾ |
|-------------------------------|-------|-------|------|---------------------|-------|--------|--------|---------------------|----------------------|-------------------|
| FFX4 ED12-1-030-C12-04 | 12.00 | 4.60 | 0.80 | 1 | 30.0 | 90.00 | 12.00 | 3.6 | C | 0.07 |
| FFX4 ED16-2-030-C16-04 | 16.00 | 8.60 | 0.80 | 2 | 30.0 | 120.00 | 16.00 | 4.3 | C | 0.16 |
| FFX4 ED16-2-050-W20-04 | 16.00 | 8.60 | 0.80 | 2 | 50.0 | 110.00 | 20.00 | 4.3 | W | 0.20 |
| FFX4 ED20-3-050-C20-04 | 20.00 | 12.60 | 0.80 | 3 | 50.0 | 140.00 | 20.00 | 2.7 | C | 0.29 |
| FFX4 ED20-3-060-W20-04 | 20.00 | 12.60 | 0.80 | 3 | 60.0 | 120.00 | 20.00 | 2.7 | W | 0.24 |
| FFX4 ED25-4-060-C25-04 | 25.00 | 17.60 | 0.80 | 4 | 60.0 | 150.00 | 25.00 | 1.8 | C | 0.50 |
| FFX4 ED25-4-080-W25-04 | 25.00 | 17.60 | 0.80 | 4 | 80.0 | 140.00 | 25.00 | 1.8 | W | 0.45 |
| FFX4 ED32-5-080-W32-04 | 32.00 | 24.60 | 0.80 | 5 | 80.0 | 150.00 | 32.00 | 1.2 | W | 0.80 |
| FFX4 ED32-5-120-C32-04 | 32.00 | 24.60 | 0.80 | 5 | 120.0 | 205.00 | 32.00 | 1.2 | C | 1.02 |

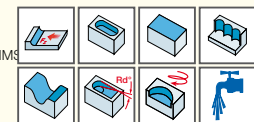
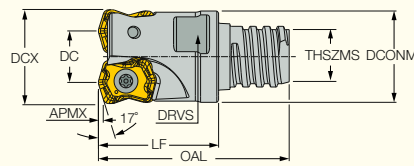
• Radius for programming 1.8 mm (1) Number of inserts (2) Ramping angle maximum (3) C-Cylindrical, W-Weldon (4) Item weight

Spare Parts

| Designation | | |
|-------------------------------|---------------------|---------|
| FFX4 ED12-1-030-C12-04 | SR M2.5X6-T7-60 | T-7/51 |
| FFX4 ED16-2-030-C16-04 | SR M2.5X6-T7-60 | T-7/51 |
| FFX4 ED16-2-050-W20-04 | SR M2.5X6-T7-60 | T-7/51 |
| FFX4 ED20-3-050-C20-04 | SR M2.5X0.45-L6 IP7 | IP-7/51 |
| FFX4 ED20-3-060-W20-04 | SR M2.5X6-T7-60 | T-7/51 |
| FFX4 ED25-4-060-C25-04 | SR M2.5X6-T7-60 | T-7/51 |
| FFX4 ED25-4-080-W25-04 | SR M2.5X6-T7-60 | T-7/51 |
| FFX4 ED32-5-080-W32-04 | SR M2.5X6-T7-60 | T-7/51 |
| FFX4 ED32-5-120-C32-04 | SR M2.5X6-T7-60 | T-7/51 |

FFX4 ED-MM

Endmills with MULTI-MASTER Adaptation Carrying Small "Bone Shape" Inserts with 4 Cutting Edges for Fast Feed Milling



| Designation | DCX | DC | CICT ⁽¹⁾ | APMX | THSZMS | LF | OAL | RMPX ⁽²⁾ | DCONMS | DRVS ⁽³⁾ | |
|---------------------------------|-------|------|---------------------|------|--------|-------|-------|---------------------|--------|---------------------|------|
| FFX4 ED16/.63-2-MMT10-04 | 16.00 | 8.60 | 2 | 0.80 | T10 | 20.00 | 31.75 | 4.3 | 15.20 | 13.0 | 0.02 |

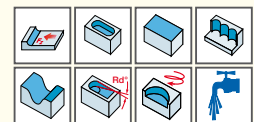
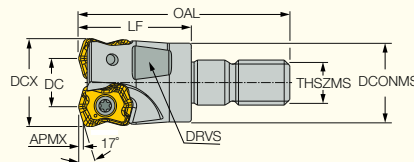
• Radius for programming 1.8 mm (1) Number of inserts (2) Ramping angle maximum (3) Key flat size

Spare Parts

| Designation | | |
|-------------------|-----------------|--------|
| FFX4 ED-MM | SR M2.5X6-T7-60 | T-7/51 |

FFX4 ED-M

Endmills with FLEXFIT Adaptation Carrying Small "Bone Shape" Inserts with 4 Cutting Edges for Fast Feed Milling



| Designation | DCX | DC | CICT ⁽¹⁾ | APMX | THSZMS | LF | OAL | RMPX ⁽²⁾ | DCONMS | DRVS ⁽³⁾ | WT ⁽⁴⁾ |
|--------------------------------|-------|-------|---------------------|------|--------|-------|-------|---------------------|--------|---------------------|-------------------|
| FFX4 ED16/.63-2-M08-04 | 16.00 | 8.60 | 2 | 0.80 | M08 | 20.00 | 37.50 | 4.3 | 13.00 | 13.0 | 0.02 |
| FFX4 ED20/.78-3-M10-04 | 20.00 | 12.60 | 3 | 0.80 | M10 | 25.00 | 45.00 | 2.7 | 18.00 | 17.0 | 0.04 |
| FFX4 ED25/.98-4-M12-04 | 25.00 | 17.60 | 4 | 0.80 | M12 | 30.00 | 52.00 | 1.8 | 21.00 | 19.0 | 0.08 |
| FFX4 ED32/1.26-5-M16-04 | 32.00 | 24.60 | 5 | 0.80 | M16 | 35.00 | 60.00 | 1.2 | 29.00 | 27.0 | 0.18 |
| FFX4 ED35/1.38-5-M16-04 | 35.00 | 27.60 | 5 | 0.80 | M16 | 35.00 | 60.00 | 1.1 | 29.00 | 27.0 | 0.20 |

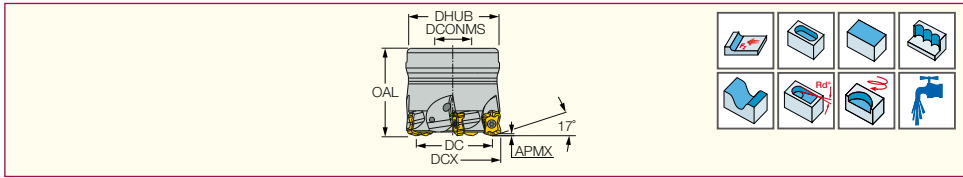
• Radius for programming 1.8 mm (1) Number of inserts (2) Ramping angle maximum (3) Key flat size (4) Item weight

Spare Parts

| Designation | | |
|------------------|-----------------|--------|
| FFX4 ED-M | SR M2.5X6-T7-60 | T-7/51 |

FFX4 FD




Face Mills Carrying Small "Bone Shape" Inserts with 4 Cutting Edges for Fast Feed Milling



| Designation | DCX | DC | CICT ⁽¹⁾ | APMX | OAL | DCONMS | DHUB | R _d [°] | WT ⁽²⁾ |
|---------------------------|-------|-------|---------------------|------|-------|--------|-------|-----------------------------|-------------------|
| FFX4 FD032-5-16-04 | 32.00 | 24.60 | 5 | 0.80 | 40.00 | 16.00 | 38.00 | 1.2 | 0.17 |
| FFX4 FD040-6-16-04 | 40.00 | 32.60 | 6 | 0.80 | 40.00 | 16.00 | 38.00 | 0.9 | 0.23 |

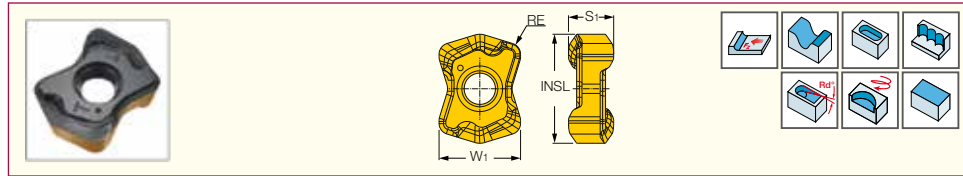
- Radius for programming 1.8 mm
- ⁽¹⁾ Number of inserts
- ⁽²⁾ Item weight

Spare Parts

| Designation |  |  |  |
|---------------------------|---|--|---|
| FFX4 FD032-5-16-04 | SR M2.5X6-T7-60 | T-7/51 | SR M8X25-D11.5 |
| FFX4 FD040-6-16-04 | SR M2.5X6-T7-60 | T-7/51 | SR M8X25DIN912 |

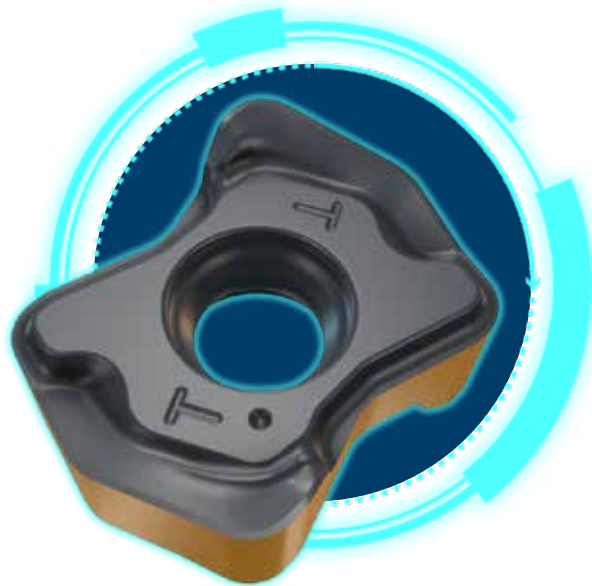
FFX4 XNMU

Small "Bone Shape" Inserts with 4 Cutting Edges for Fast Feed Milling



| Designation | Dimensions | | | | Tough ↔ Hard | | | | | | Recommended Machining Data | |
|---------------------------|------------|----------------|------|----------------|--------------|-------|-------|--------|-------|-------|----------------------------|-----------------------|
| | INSL | S ₁ | RE | W ₁ | IC882 | IC840 | IC830 | IC5820 | IC808 | IC810 | a _p (mm) | f _z (mm/t) |
| FFX4 XNMU 040310HP | 9.29 | 3.97 | 1.00 | 7.16 | • | • | • | • | • | • | 0.20-0.80 | 0.20-0.90 |
| FFX4 XNMU 040310T | 9.29 | 3.97 | 1.00 | 7.16 | • | • | • | • | • | • | 0.20-0.80 | 0.20-1.20 |

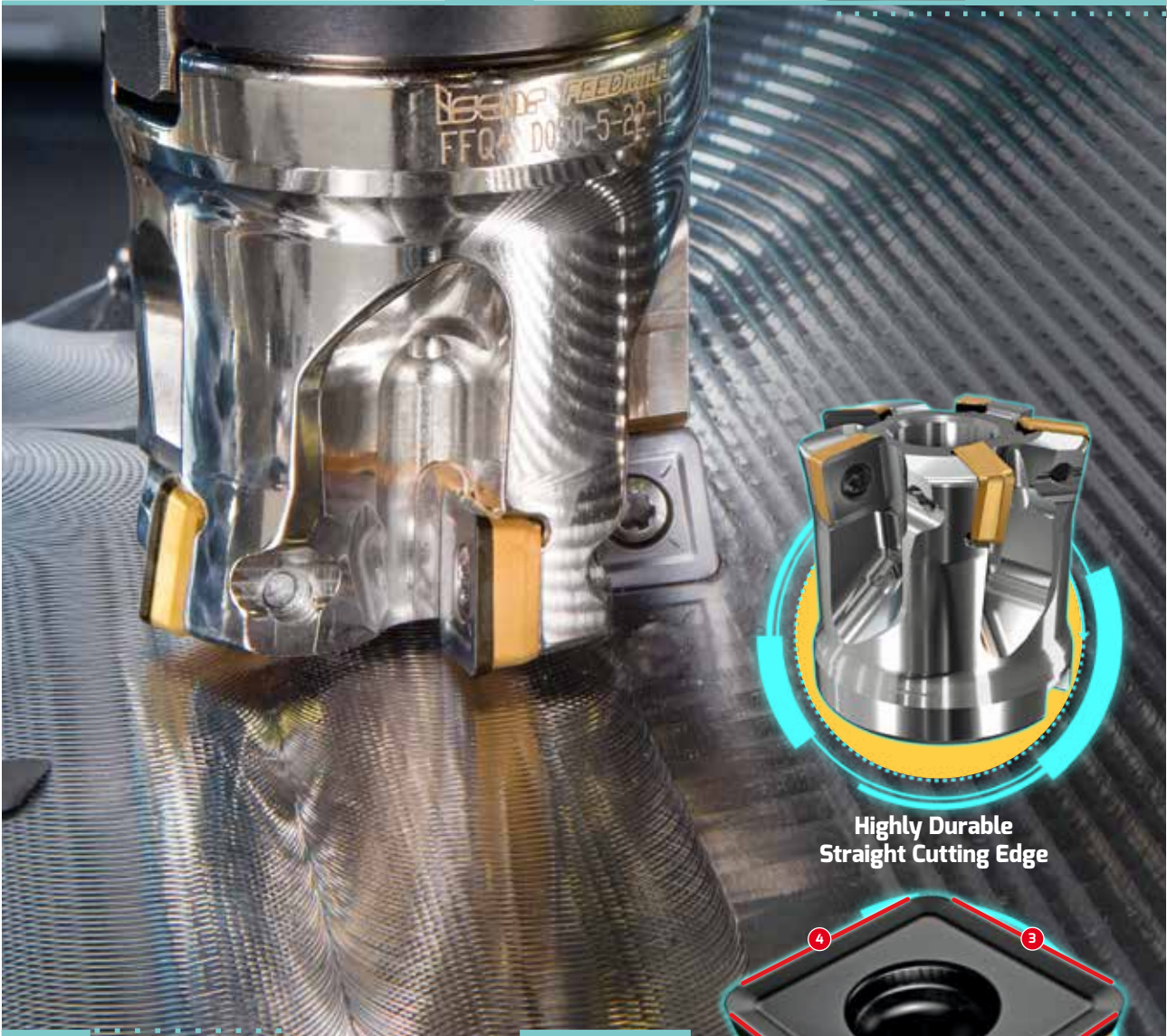
- HP- for austenitic stainless steel and high temperature alloys
- T- for steel, ferritic and martensitic stainless steel, cast iron and hardened steel



MILL4FEED

HIGH FEED

High Feed Face Milling 22-160 mm Diameter Feed Master



Highly Durable
Straight Cutting Edge

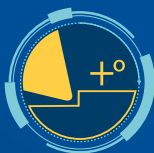
Square Insert for High Feed Face Milling with Higher Productivity



Reinforced
Insert Radius



For Stainless Steel,
Cast Iron
& Exotic Materials



Positive Insert
Positioning



Interrupted Cut



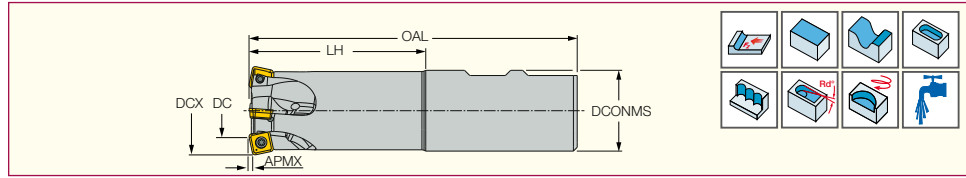
4 Cutting Edged
Square Insert

LOGIQMILL
ISCAR CHESS LINES

MILL4FEED

FFQ4 D-W-09

Fast Feed Endmills Carrying Single-Sided Inserts with 4 Cutting Edges



| Designation | DC | DCX | APMX | AE ⁽¹⁾ | CICT ⁽²⁾ | LH | OAL | DCONMS | RMPX ⁽³⁾ | WT ⁽⁴⁾ |
|------------------------|-------|-------|------|-------------------|---------------------|------|--------|--------|---------------------|-------------------|
| FFQ4 D022-2-044-W20-09 | 7.70 | 22.00 | 1.20 | 6.0 | 2 | 44.0 | 94.00 | 20.00 | 8.2 | 0.19 |
| FFQ4 D025-3-050-W25-09 | 10.70 | 25.00 | 1.20 | 6.0 | 3 | 50.0 | 106.00 | 25.00 | 5.5 | 0.25 |
| FFQ4 D032-4-064-W25-09 | 17.70 | 32.00 | 1.20 | 6.0 | 4 | 64.0 | 120.00 | 25.00 | 3.2 | 0.50 |
| FFQ4 D035-5-070-W32-09 | 20.70 | 35.00 | 1.20 | 6.0 | 5 | 70.0 | 130.00 | 32.00 | 2.7 | 0.70 |

• Radius for programming 2.5 mm (1) Plunging width (2) Number of inserts (3) Ramping angle maximum (4) Item weight

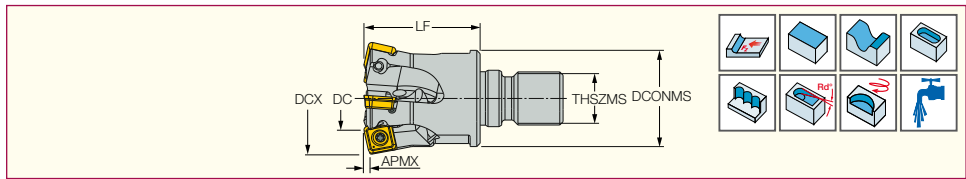
Spare Parts

| Designation |  |  |
|-------------|---|---|
| FFQ4 D-W-09 | SR M3X0.5-L7.4 IP9 | IP-9/151 |

MILL4FEED

FFQ4 D-M-09

Fast Feed Endmills with FLEXFIT Threaded Adaptation Carrying Single-Sided Inserts with 4 Cutting Edges



| Designation | DC | DCX | APMX | AE ⁽¹⁾ | CICT ⁽²⁾ | LF | OAL | DCONMS | THSZMS | RMPX ⁽³⁾ | WT ⁽⁴⁾ |
|---------------------|-------|-------|------|-------------------|---------------------|-------|-------|--------|--------|---------------------|-------------------|
| FFQ4 D022-02-M10-09 | 7.70 | 22.00 | 1.20 | 6.0 | 2 | 25.00 | 45.00 | 18.00 | M10 | 8.2 | 0.04 |
| FFQ4 D025-02-M12-09 | 10.70 | 25.00 | 1.20 | 6.0 | 2 | 30.00 | 52.00 | 21.00 | M12 | 5.5 | 0.05 |
| FFQ4 D025-03-M12-09 | 10.70 | 25.00 | 1.20 | 6.0 | 3 | 30.00 | 52.00 | 21.00 | M12 | 5.5 | 0.07 |
| FFQ4 D032-03-M16-09 | 17.70 | 32.00 | 1.20 | 6.0 | 3 | 35.00 | 60.00 | 29.00 | M16 | 3.2 | 0.14 |
| FFQ4 D032-04-M16-09 | 17.70 | 32.00 | 1.20 | 6.0 | 4 | 35.00 | 60.00 | 29.00 | M16 | 3.2 | 0.14 |
| FFQ4 D035-05-M16-09 | 20.70 | 35.00 | 1.20 | 6.0 | 5 | 35.00 | 60.00 | 29.00 | M16 | 2.7 | 0.16 |
| FFQ4 D040-05-M16-09 | 25.70 | 40.00 | 1.20 | 6.0 | 5 | 35.00 | 60.00 | 29.00 | M16 | 2.0 | 0.18 |

• Radius for programming 2.5 mm (1) Plunging width (2) Number of inserts (3) Ramping angle maximum (4) Item weight

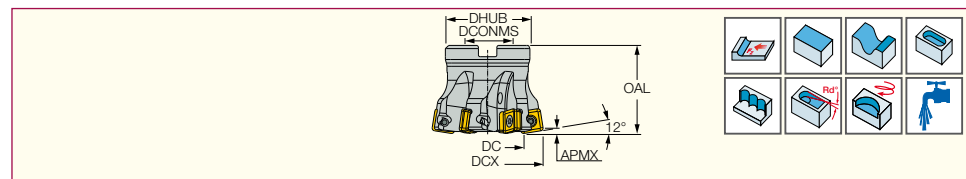
Spare Parts

| Designation |  |  |
|-------------|---|---|
| FFQ4 D-M-09 | SR M3X0.5-L7.4 IP9 | IP-9/151 |

MILL4FEED

FFQ4 D-09




Fast Feed Face Mills Carrying Single-Sided Inserts with 4 Cutting Edges



| Designation | DC | DCX | APMX | AE ⁽¹⁾ | CICT ⁽²⁾ | OAL | DCONMS | DHUB | RMPX ⁽³⁾ | WT ⁽⁴⁾ |
|-------------------|-------|-------|------|-------------------|---------------------|-------|--------|-------|---------------------|-------------------|
| FFQ4 D40-05-16-09 | 25.70 | 40.00 | 1.20 | 6.0 | 5 | 35.00 | 16.00 | 38.00 | 2.0 | 0.17 |
| FFQ4 D50-07-22-09 | 35.70 | 50.00 | 1.20 | 6.0 | 7 | 40.00 | 22.00 | 48.00 | 1.5 | 0.32 |
| FFQ4 D52-07-22-09 | 37.70 | 52.00 | 1.20 | 6.0 | 7 | 40.00 | 22.00 | 48.00 | 1.4 | 0.34 |
| FFQ4 D63-08-22-09 | 48.70 | 63.00 | 1.20 | 6.0 | 8 | 45.00 | 22.00 | 48.00 | 1.1 | 0.49 |

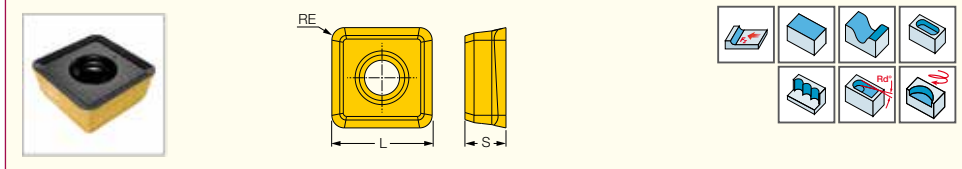
• Radius for programming 2.5 mm (1) Plunging width (2) Number of inserts (3) Ramping angle maximum (4) Item weight

Spare Parts

| Designation |  |  |  |
|-------------------|---|---|---|
| FFQ4 D40-05-16-09 | SR M3X0.5-L7.4 IP9 | IP-9/151 | SR M8X25DIN912 |
| FFQ4 D50-07-22-09 | SR M3X0.5-L7.4 IP9 | IP-9/151 | SR M10X25 DIN912 |
| FFQ4 D52-07-22-09 | SR M3X0.5-L7.4 IP9 | IP-9/151 | SR M10X25 DIN912 |
| FFQ4 D63-08-22-09 | SR M3X0.5-L7.4 IP9 | IP-9/151 | SR M10X30 DIN912 |

MILL4FEED

FFQ4 SOMT 0904
Square Single-Sided Inserts with 4
Cutting Edges for Fast Feed Milling

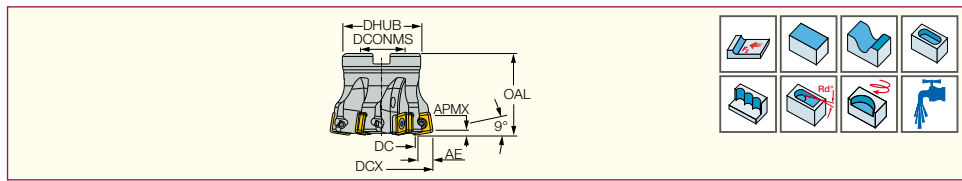


| Designation | Dimensions | | | Tough ↔ Hard | | | | | Recommended Machining Data | |
|---------------------------|------------|------|------|--------------|-------|--------|-------|-------|----------------------------|--------------------------|
| | L | S | RE | IC882 | IC830 | IC5820 | IC808 | IC810 | a _p (mm) | f _z (mm/t) |
| FFQ4 SOMT 090412T | 8.50 | 3.90 | 1.20 | | • | | • | • | 0.50-1.20 | 0.40-1.50 |
| FFQ4 SOMT 0904RM-T | 8.50 | 3.80 | 1.20 | | | | • | | 0.50-1.20 | 0.40-1.50 |
| FFQ4 SOMT 090412HP | 8.50 | 3.80 | 1.20 | • | • | • | • | | 0.50-1.20 | 0.40-1.40 |

• T - type for steel, ferritic and martensitic stainless steel, cast iron and hardened steel • RM-T type for interrupted cut and machining near straight shoulders on steel, ferritic and martensitic stainless steel, cast iron and hardened steel • HP- type for austenitic stainless steel and high temperature alloys

MILL4FEED

FFQ4 D-12
Fast Feed Face Mills
Carrying Single-Sided Inserts
with 4 Cutting Edges



| Designation | DC | DCX | APMX | AE | CICT | OAL | DHUB | DCONMS | Arbor | RMPX | kg |
|--------------------------|-------|--------|------|------|------|-------|-------|--------|-------|------|------|
| FFQ4 D040-3-16-12 | 18.00 | 40.00 | 1.50 | 10.0 | 3 | 45.00 | 38.00 | 16.00 | A | 4.3 | 0.23 |
| FFQ4 D040-4-16-12 | 18.00 | 40.00 | 1.50 | 10.0 | 4 | 45.00 | 38.00 | 16.00 | A | 4.3 | 0.22 |
| FFQ4 D050-4-22-12 | 28.00 | 50.00 | 1.50 | 10.0 | 4 | 50.00 | 48.00 | 22.00 | A | 2.7 | 0.38 |
| FFQ4 D050-5-22-12 | 28.00 | 50.00 | 1.50 | 10.0 | 5 | 50.00 | 48.00 | 22.00 | A | 2.7 | 0.37 |
| FFQ4 D052-5-22-12 | 29.00 | 52.00 | 1.50 | 10.0 | 5 | 50.00 | 48.00 | 22.00 | A | 2.5 | 0.39 |
| FFQ4 D063-6-22-12 | 41.00 | 63.00 | 1.50 | 10.0 | 6 | 50.00 | 48.00 | 22.00 | A | 1.8 | 0.50 |
| FFQ4 D066-6-27-12 | 43.00 | 66.00 | 1.50 | 10.0 | 6 | 50.00 | 60.00 | 27.00 | A | 1.6 | 0.65 |
| FFQ4 D080-7-27-12 | 58.00 | 80.00 | 1.50 | 10.0 | 7 | 50.00 | 60.00 | 27.00 | A | 1.2 | 0.84 |
| FFQ4 D100-8-32-12 | 78.00 | 100.00 | 1.50 | 10.0 | 8 | 50.00 | 78.00 | 32.00 | B | 0.9 | 1.30 |

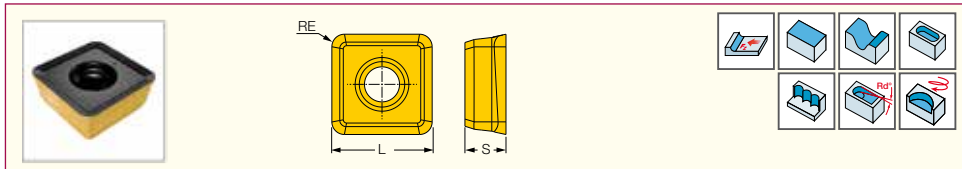
• Radius for programming 3.1 mm (1) Plunging width

Spare Parts

| Designation | | | | | |
|--------------------------|---------------------|-------|-------------|------------------|----------------|
| FFQ4 D040-3-16-12 | SR M4X0.7-L9.6 IP15 | SW6-T | BLD IP15/S7 | | SR PS 118-0416 |
| FFQ4 D040-4-16-12 | SR M4X0.7-L9.6 IP15 | SW6-T | BLD IP15/S7 | | SR PS 118-0416 |
| FFQ4 D050-4-22-12 | SR M4X0.7-L9.6 IP15 | SW6-T | BLD IP15/S7 | SR M10X35 DIN912 | |
| FFQ4 D050-5-22-12 | SR M4X0.7-L9.6 IP15 | SW6-T | BLD IP15/S7 | SR M10X35 DIN912 | |
| FFQ4 D052-5-22-12 | SR M4X0.7-L9.6 IP15 | SW6-T | BLD IP15/S7 | SR M10X35 DIN912 | |
| FFQ4 D063-6-22-12 | SR M4X0.7-L9.6 IP15 | SW6-T | BLD IP15/S7 | SR M10X35 DIN912 | |
| FFQ4 D066-6-27-12 | SR M4X0.7-L9.6 IP15 | SW6-T | BLD IP15/S7 | SR M12X30DIN912 | |
| FFQ4 D080-7-27-12 | SR M4X0.7-L9.6 IP15 | SW6-T | BLD IP15/S7 | SR M12X30DIN912 | |
| FFQ4 D100-8-32-12 | SR M4X0.7-L9.6 IP15 | SW6-T | BLD IP15/S7 | | |

MILL4FEED

FFQ4 SOMT 1205
Square Single-Sided Inserts with 4
Cutting Edges for Fast Feed Milling

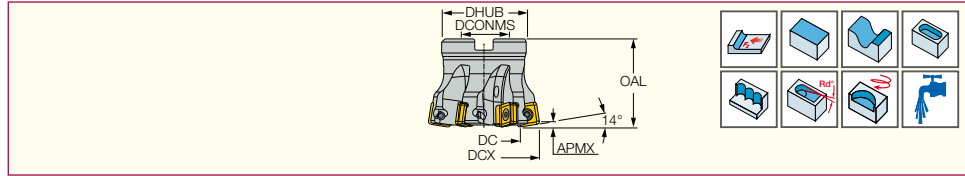


| Designation | Dimensions | | | Tough ↔ Hard | | | | | Recommended Machining Data | |
|----------------------------|------------|------|------|--------------|-------|--------|-------|-------|----------------------------|--------------------------|
| | L | S | RE | IC882 | IC830 | IC5820 | IC808 | IC810 | a _p (mm) | f _z (mm/t) |
| FFQ4 SOMT 1205RM-HP | 12.70 | 5.20 | 1.60 | | • | | | | 0.50-1.50 | 0.40-1.80 |
| FFQ4 SOMT 1205RM-T | 12.70 | 5.20 | 1.60 | | | | • | | 0.50-1.50 | 0.40-2.00 |
| FFQ4 SOMT 120516HP | 12.70 | 5.20 | 1.60 | • | • | • | • | | 0.50-1.50 | 0.40-1.80 |
| FFQ4 SOMT 120516T | 12.70 | 5.20 | 1.60 | | • | | • | | 0.50-1.50 | 0.40-2.00 |
| FFQ4 SOMT 120516T20 | 12.70 | 5.20 | 1.60 | | | | | • | 0.50-1.50 | 0.40-2.00 |

• RM-HP- for interrupted cut and machining next to shoulders of austenitic stainless steel and high temperature alloys • RM-T- for interrupted cut and machining next to shoulders of steel, ferritic and martensitic stainless steel, cast iron and hardened steel • HP- for austenitic stainless steel and high temperature alloys
• T- for steel, ferritic and martensitic stainless steel, cast iron and hardened steel • T20- for grey and nodular cast iron

FFQ4 D-17

Fast Feed Face Mills Carrying Single-Sided Inserts with 4 Cutting Edges



| Designation | DCX | DC | APMX | AE | CICT ⁽¹⁾ | OAL | DCONMS | DHUB | RMPX ⁽²⁾ | WT ⁽³⁾ |
|--------------------|--------|--------|------|------|---------------------|-------|--------|-------|---------------------|-------------------|
| FFQ4 D080-06-27-17 | 80.00 | 50.80 | 3.00 | 13.0 | 6 | 50.00 | 27.00 | 60.00 | 1.2 | 0.78 |
| FFQ4 D100-07-32-17 | 100.00 | 70.80 | 3.00 | 13.0 | 7 | 50.00 | 32.00 | 78.00 | 0.8 | 1.18 |
| FFQ4 D125-08-40-17 | 125.00 | 95.80 | 3.00 | 13.0 | 8 | 63.00 | 40.00 | 92.00 | 0.6 | 2.48 |
| FFQ4 D160-10-40-17 | 160.00 | 130.80 | 3.00 | 13.0 | 10 | 63.00 | 40.00 | 95.00 | 0.2 | 2.90 |

• Radius for programming 5.5 mm

⁽¹⁾ Number of inserts

⁽²⁾ Ramping angle maximum

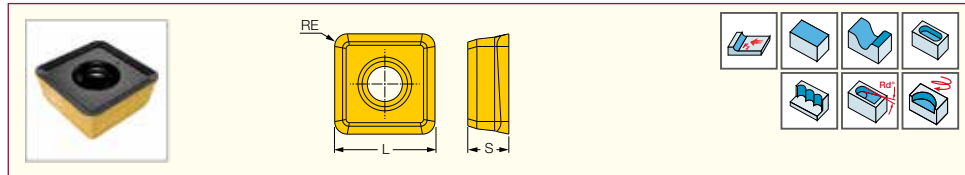
⁽³⁾ Item weight

Spare Parts

| Designation | | | | |
|--------------------|---------------|-------|-------------|-----------------|
| FFQ4 D080-06-27-17 | SR M5-14 IP20 | SW6-T | BLD IP20/S7 | SR M12X30DIN912 |
| FFQ4 D100-07-32-17 | SR M5-14 IP20 | SW6-T | BLD IP20/S7 | |
| FFQ4 D125-08-40-17 | SR M5-14 IP20 | SW6-T | BLD IP20/S7 | |
| FFQ4 D160-10-40-17 | SR M5-14 IP20 | SW6-T | BLD IP20/S7 | |

FFQ4 SOMT 1706

Square Single-Sided Inserts with 4 Cutting Edges for Fast Feed Milling

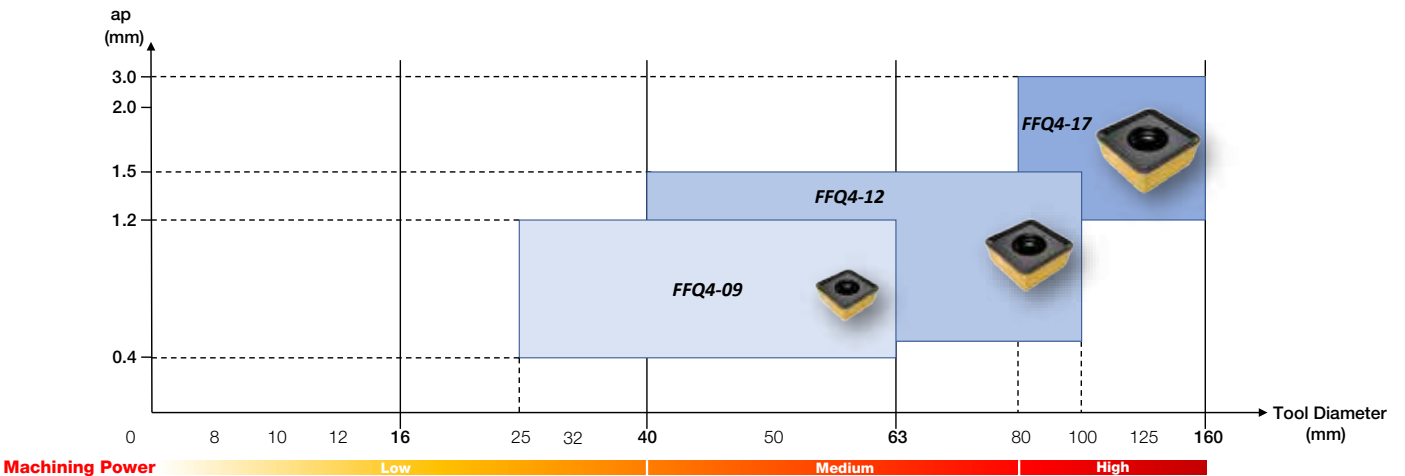


| Designation | Dimensions | | | Tough ↔ Hard | | | | Recommended Machining Data | |
|-----------------------------------|------------|------|------|--------------|-------|-------|-------|----------------------------|-----------------------|
| | L | S | RE | IC882 | IC830 | IC808 | IC810 | a _p (mm) | f _z (mm/t) |
| FFQ4 SOMT 1706RM-T ⁽¹⁾ | 17.50 | 6.00 | 2.50 | | | • | | 1.20-3.00 | 0.40-2.00 |
| FFQ4 SOMT 170625HP ⁽²⁾ | 17.50 | 6.00 | 2.50 | • | • | • | | 1.20-3.00 | 0.40-1.50 |
| FFQ4 SOMT 170625T ⁽³⁾ | 17.50 | 6.00 | 2.50 | | • | • | • | 1.20-3.00 | 0.40-2.00 |

⁽¹⁾ For interrupted cut and machining next to shoulders on steel, stainless steel, cast iron and hardened steel

⁽²⁾ For austenitic stainless steel and high temperature alloys

⁽³⁾ For steel, ferritic and martensitic stainless steel, cast iron and hardened steel



TANG4FEED

HI-FEED MILLING

Tangential High Feed 40-100 mm Speed Master



Unique Tangential Insert for High Feed Face Milling



Tangential
Insert



For Steel, Cast Iron
and Exotic Materials



Strong Cutting
Edge

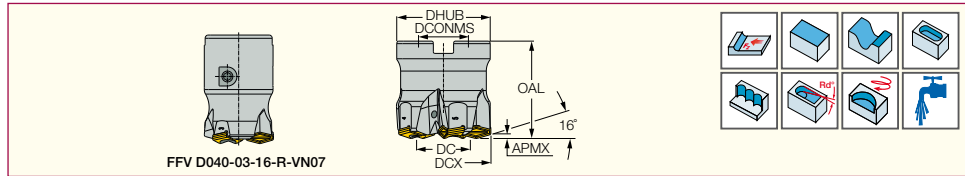


Up to 3.1°
Ramp Down Angle



LOGIQMILL
ISCAR CHESS LINES

FFV-D-R-VN07
Fast Feed Shell Mill Carrying
Tangentially Clamped Inserts
with 4 Cutting Edges









FFV D040-03-16-R-VN07

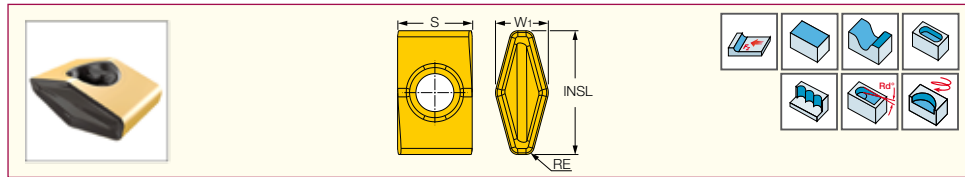
| Designation | DCX | DC | APMX | CICT ⁽²⁾ | OAL | DCONMS | DHUB | RMPX ⁽³⁾ | Arbor | WT ⁽⁴⁾ |
|---|--------|-------|------|---------------------|-------|--------|-------|---------------------|---------|-------------------|
| FFV D040-03-16-R-VN07 ⁽¹⁾ | 40.00 | 25.00 | 1.50 | 3 | 60.00 | 16.00 | 25.00 | 3.0 | Special | 0.36 |
| FFV D050-05-22-R-VN07 | 50.00 | 35.00 | 1.50 | 5 | 50.00 | 22.00 | 48.00 | 3.2 | A | 0.47 |
| FFV D063-06-22-R-VN07 | 63.00 | 48.00 | 1.50 | 6 | 40.00 | 22.00 | 48.00 | 2.2 | A | 1.17 |
| FFV D080-07-27-R-VN07 | 80.00 | 65.00 | 1.50 | 7 | 50.00 | 27.00 | 60.00 | 1.5 | A | 0.81 |
| FFV D100-08-32-R-VN07 | 100.00 | 85.00 | 1.50 | 8 | 50.00 | 32.00 | 78.00 | 1.2 | B | 1.61 |

- Radius for programming R=2.8 mm
- ⁽¹⁾ Use on face mill adapters with the supplied retention screw
- ⁽²⁾ Number of inserts
- ⁽³⁾ Ramping angle maximum
- ⁽⁴⁾ Item weight

Spare Parts

| Designation |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|
| FFV D040-03-16-R-VN07 | SR M4X0.7-L11.5 IP15 | BLD IP15/S7 | SW6-T-SH | SR M8X17-13685 | | HW 4.0 |
| FFV D050-05-22-R-VN07 | SR M4X0.7-L11.5 IP15 | BLD IP15/S7 | SW6-T-SH | | SR PS 118-0271C | |
| FFV D063-06-22-R-VN07 | SR M4X0.7-L11.5 IP15 | BLD IP15/S7 | SW6-T-SH | SR M10X25 DIN912 | | |
| FFV D080-07-27-R-VN07 | SR M4X0.7-L11.5 IP15 | BLD IP15/S7 | SW6-T-SH | | | |
| FFV D100-08-32-R-VN07 | SR M4X0.7-L11.5 IP15 | BLD IP15/S7 | SW6-T-SH | | | |

FF VNMT 0706
Tangentially Clamped Inserts with 4
Cutting Edges for Fast Feed Milling



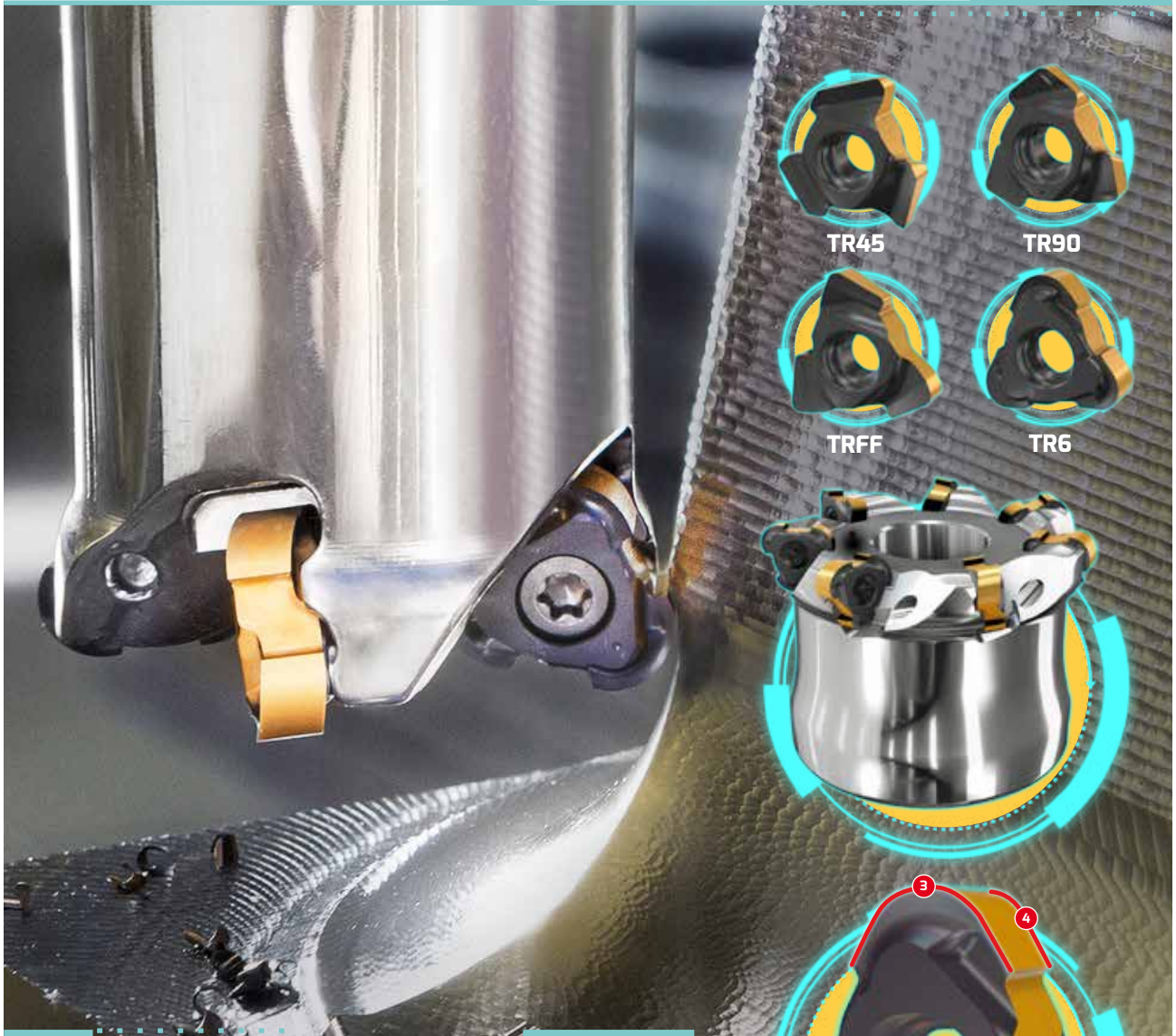
| Designation | Dimensions | | | | Tough ↔ Hard | | | | | | | | Recommended Machining Data | | |
|--|----------------|-------|------|------|--------------|-------|-------|-------|--------|--------|--------|-------|----------------------------|------------------------|--------------------------|
| | W ₁ | INSL | RE | S | IC882 | IC845 | IC840 | IC830 | IC5820 | IC5400 | IC5500 | IC808 | IC810 | a _p (mm) | f _z (mm/t) |
| FF VNMT 0706ZN-ER ⁽¹⁾ | 6.40 | 15.00 | 1.00 | 9.05 | ● | ● | ● | ● | ● | ● | ● | ● | ● | 0.50-1.50 | 0.40-1.80 |
| FF VNMT 0706ZN-ETR ⁽²⁾ | 6.40 | 15.00 | 1.00 | 9.05 | | | | ● | | | ● | ● | ● | 0.50-1.50 | 0.40-1.80 |

- ⁽¹⁾ For general applications
- ⁽²⁾ Reinforced cutting edges for interrupted cut and unfavorable conditions

TOR6MILL

PROFILING

Profile Milling 16-80 mm Diameters Radius Master



Radial Profile Insert for Die & Mold and General Applications



High Positive
Rake Angle



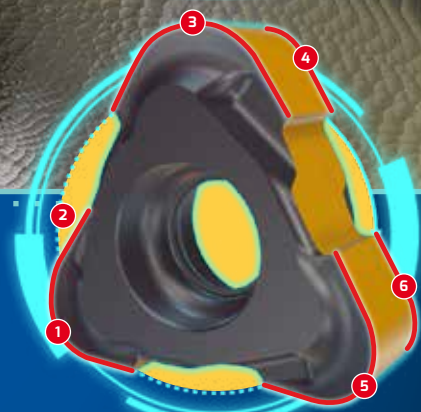
Innovative Insert
Design



Variety of
Cutting Geometries



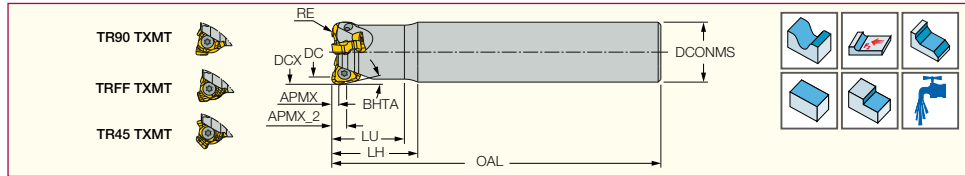
Cost Effective
Insert



Double Sided Inserts with
6 Round Cutting Edges

TR6 ER

Multifunction Endmills that can Carry Four Different Insert Geometries



| Designation | DCX | DC | APMX | APMX ₂ ⁽¹⁾ | RE | CICT ⁽²⁾ | LU | LH | DCONMS | BHTA | OAL | WT ⁽³⁾ | Insert |
|-------------------------------|-------|-------|------|----------------------------------|------|---------------------|------|------|--------|------|--------|-------------------|-----------------|
| TR6 ER D16-50-2-C16-07 | 16.00 | 14.00 | 1.00 | 2.00 | 1.00 | 2 | 46.5 | 50.0 | 16.00 | 21.0 | 100.00 | 0.12 | TR6 TNCU 070210 |
| TR6 ER D20-60-4-C20-07 | 20.00 | 18.00 | 1.00 | 2.00 | 1.00 | 4 | 56.5 | 60.0 | 20.00 | 21.0 | 120.00 | 0.22 | TR6 TNCU 070210 |
| TR6 ER D25-70-5-C25-07 | 25.00 | 23.00 | 1.00 | 2.00 | 1.00 | 5 | 65.5 | 70.0 | 25.00 | 21.0 | 140.00 | 0.42 | TR6 TNCU 070210 |
| TR6 ER D32-80-6-C32-07 | 32.00 | 30.00 | 1.00 | 2.00 | 1.00 | 6 | 75.5 | 80.0 | 32.00 | 21.0 | 160.00 | 0.82 | TR6 TNCU 070210 |
| TR6 ER D25-70-3-C25-10 | 25.00 | 20.00 | 2.50 | 4.20 | 2.50 | 3 | 65.0 | 70.0 | 25.00 | 20.5 | 140.00 | 0.41 | TR6 TNCU 100425 |
| TR6 ER D32-80-4-C32-10 | 32.00 | 27.00 | 2.50 | 4.20 | 2.50 | 4 | 75.0 | 80.0 | 32.00 | 20.5 | 160.00 | 0.81 | TR6 TNCU 100425 |

• Note: The data refers to TR6 TNCU 070210 and TR6 TNCU 100425 master inserts, for other insert radii and geometries refer to the table below

(1) For undercutting (2) Number of inserts (3) Item weight

Spare Parts

| Designation | Screw | Key |
|-------------------------------|---------------------|---------|
| TR6 ER D16-50-2-C16-07 | SR M2.5X0.45-L6 IP7 | IP-7/51 |
| TR6 ER D20-60-4-C20-07 | SR M2.5X0.45-L6 IP7 | IP-7/51 |
| TR6 ER D25-70-5-C25-07 | SR M2.5X0.45-L6 IP7 | IP-7/51 |
| TR6 ER D32-80-6-C32-07 | SR M2.5X0.45-L6 IP7 | IP-7/51 |
| TR6 ER D25-70-3-C25-10 | SR 10508600 | T-9/51 |
| TR6 ER D32-80-4-C32-10 | SR 10508600 | T-9/51 |

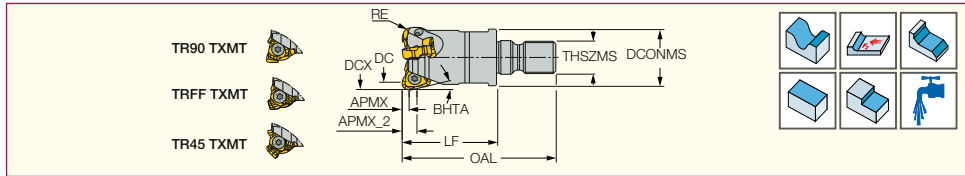
| Tool | Insert | DCX | DC | APMX | LU | LH | OAL | RMPX ⁽¹⁾ | For undercutting | |
|-------------------------------|--------------------|------|-------|-------|--------|--------|--------|---------------------|-------------------|------|
| | | | | | | | | | APMX ₂ | BHTA |
| TR6 ER D16-50-2-C16-07 | TR6 TNCU 070205 | 16.0 | 15.0 | 0.5 | 46.4 | 49.9 | 99.9 | - | 1.6 | 17.0 |
| | TR6 TNMU 070215 | | 13.0 | 1.5 | 45.6 | 50.1 | 100.1 | - | 2.4 | 21.0 |
| | TRFF TXMT 0702 | | 12.1 | 0.6 | 46.7 | 50.2 | 100.2 | 1.1 | - | - |
| | TR90 TXMT 070204 | | - | 2.5 | 46.8 | 50.3 | 100.3 | 1.6 | - | - |
| TR6 ER D20-60-4-C20-07 | TR6 TNCU 070205 | 20.0 | 19.0 | 0.5 | 56.4 | 59.9 | 119.9 | - | 1.6 | 17.0 |
| | TR6 TNMU 070215 | | 17.0 | 1.5 | 56.6 | 60.1 | 120.1 | - | 2.4 | 21.0 |
| | TRFF TXMT 0702 | | 16.1 | 0.6 | 56.7 | 60.2 | 120.2 | 0.8 | - | - |
| | TR90 TXMT 070204 | | - | 2.5 | 56.8 | 60.3 | 120.3 | 1.2 | - | - |
| TR6 ER D25-70-5-C25-07 | TR6 TNCU 070205 | 25.0 | 24.0 | 1.0 | 65.4 | 69.9 | 139.9 | - | 1.6 | 17.0 |
| | TR6 TNMU 070215 | | 22.0 | 1.5 | 65.6 | 70.1 | 140.1 | - | 2.4 | 21.0 |
| | TRFF TXMT 0702 | | 21.1 | 0.6 | 65.7 | 70.2 | 140.2 | 0.6 | - | - |
| | TR90 TXMT 070204 | | - | 2.5 | 65.8 | 70.3 | 140.3 | 0.9 | - | - |
| TR6 ER D32-80-6-C32-07 | TR6 TNCU 070205 | 32.0 | 31.0 | 0.5 | 75.4 | 79.9 | 159.9 | - | 1.6 | 17.0 |
| | TR6 TNMU 070215 | | 29.0 | 1.5 | 75.6 | 80.1 | 160.1 | - | 2.4 | 21.0 |
| | TRFF TXMT 0702 | | 28.1 | 0.6 | 75.7 | 80.2 | 160.2 | 0.4 | - | - |
| | TR90 TXMT 070204 | | - | 2.5 | 75.8 | 80.3 | 160.3 | 0.7 | - | - |
| TR6 ER D25-70-3-C25-10 | TR6 TNCU 100405 | 25.0 | 24.0 | 0.5 | 64.52 | 69.52 | 139.52 | - | 1.8 | 17.5 |
| | TR6 TNCU 100410 | | 23.0 | 1.0 | 64.64 | 69.64 | 139.65 | - | 2.3 | |
| | TR6 TNCU/MU 100415 | | 22.0 | 1.5 | 64.76 | 69.76 | 139.76 | - | 2.7 | |
| | TR6 TNCU 100420 | | 21.0 | 2.0 | 64.88 | 69.88 | 139.88 | - | 3.5 | |
| | TR6 TNCU 100430 | | 19.0 | 3.0 | 65.12 | 70.12 | 140.12 | - | 4.5 | 20.5 |
| | TRFF TXMT 1004 | | 19.0 | 0.8 | 65.15 | 70.15 | 140.15 | 1.7 | - | |
| | TR90 TXMT 100408 | | - | 4.0 | 64.91 | 69.91 | 139.91 | 1.6 | - | |
| TR6 ER D32-80-4-C32-10 | TR45 TXMT 1004 | 26.8 | 20.6 | 3.0 | 65.12 | 70.12 | 140.12 | 1.4 | - | |
| | TR6 TNCU 100405 | | 31.0 | 0.5 | 74.52 | 79.52 | 159.52 | - | 1.8 | 17.5 |
| | TR6 TNCU 100410 | | 30.0 | 1.0 | 74.64 | 79.65 | 159.64 | - | 2.3 | |
| | TR6 TNCU/MU 100415 | | 29.0 | 1.5 | 74.76 | 79.76 | 159.76 | - | 2.7 | |
| | TR6 TNCU 100420 | | 28.0 | 2.0 | 74.88 | 79.88 | 159.88 | - | 3.5 | |
| | TR6 TNCU 100430 | | 26.0 | 3.0 | 75.12 | 80.12 | 160.12 | - | 4.5 | 20.5 |
| | TRFF TXMT 1004 | | 26.0 | 0.8 | 75.15 | 80.15 | 160.15 | 1.2 | - | |
| TR90 TXMT 100408 | - | 4.0 | 74.91 | 79.91 | 159.91 | 1.2 | - | | | |
| TR45 TXMT 1004 | 33.8 | 27.6 | 3.0 | 75.12 | 80.12 | 160.12 | 1.0 | - | | |

(1) Maximum ramp down angle



TR6 ER-M

Multifunction Endmills with FLEXFIT
Threaded Adaptation that can Carry
Four Different Insert Geometries.



| Designation | DCX | DC | APMX | APMX ₂ ⁽¹⁾ | RE | CICT ⁽²⁾ | LF | DCONMS | THSZMS | BHTA | OAL | WT ⁽³⁾ | Insert |
|--------------------------|-------|-------|------|----------------------------------|------|---------------------|-------|--------|--------|------|-------|-------------------|-----------------|
| TR6 ER D16/0.63-2-M08-07 | 16.00 | 14.00 | 1.00 | 2.00 | 1.00 | 2 | 20.00 | 13.00 | M08 | 21.0 | 37.50 | 0.03 | TR6 TNCU 070210 |
| TR6 ER D25/0.98-5-M12-07 | 25.00 | 23.00 | 1.00 | 2.00 | 1.00 | 5 | 30.00 | 21.00 | M12 | 21.0 | 52.00 | 0.08 | TR6 TNCU 070210 |
| TR6 ER D32/1.26-6-M16-07 | 32.00 | 30.00 | 1.00 | 2.00 | 1.00 | 6 | 35.00 | 29.00 | M16 | 21.0 | 60.00 | 0.18 | TR6 TNCU 070210 |
| TR6 ER D35/1.38-6-M16-07 | 35.00 | 33.00 | 1.00 | 2.00 | 1.00 | 6 | 35.00 | 29.00 | M16 | 21.0 | 60.00 | 0.19 | TR6 TNCU 070210 |
| TR6 ER D25/0.98-3-M12-10 | 25.00 | 20.00 | 2.50 | 4.20 | 2.50 | 3 | 35.00 | 21.00 | M12 | 20.5 | 57.00 | 0.06 | TR6 TNCU 100425 |
| TR6 ER D35/1.38-5-M16-10 | 35.00 | 30.00 | 2.50 | 4.20 | 2.50 | 5 | 35.00 | 29.00 | M16 | 20.5 | 57.00 | 0.18 | TR6 TNCU 100425 |

• Note: The data refers to TR6 TNCU 070210 and TR6 TNCU 100425 master inserts, for other insert radii and geometries refer to the table below

⁽¹⁾ For undercutting ⁽²⁾ Number of inserts ⁽³⁾ Item weight

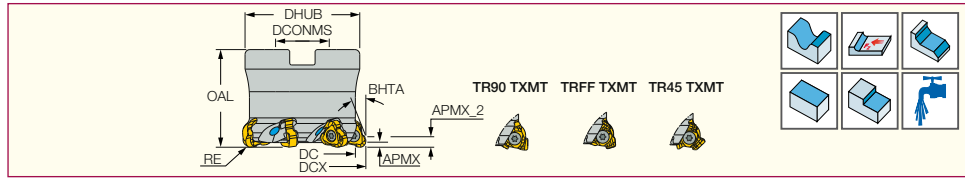
Spare Parts

| Designation | Screw | Key |
|--------------------------|---------------------|---------|
| TR6 ER D16/0.63-2-M08-07 | SR M2.5X0.45-L6 IP7 | IP-7/51 |
| TR6 ER D25/0.98-5-M12-07 | SR M2.5X0.45-L6 IP7 | IP-7/51 |
| TR6 ER D32/1.26-6-M16-07 | SR M2.5X0.45-L6 IP7 | IP-7/51 |
| TR6 ER D35/1.38-6-M16-07 | SR M2.5X0.45-L6 IP7 | IP-7/51 |
| TR6 ER D25/0.98-3-M12-10 | SR 10508600 | T-9/51 |
| TR6 ER D35/1.38-5-M16-10 | SR 10508600 | T-9/51 |

| Tool | Insert | DCX | DC | APMX | LF | OAL | RMPX | For undercutting | |
|--------------------------|--------------------|------|------|------|-------|-------|------|-------------------|------|
| | | | | | | | | APMX ₂ | BHTA |
| TR6 ER D16/0.63-2-M08-07 | TR6 TNCU 070205 | 16.0 | 15.0 | 0.5 | 24.9 | 42.4 | - | 1.6 | 17.0 |
| | TR6 TNMU 070215 | | 13.0 | 1.5 | 25.1 | 42.6 | - | 2.4 | 21.0 |
| | TRFF TXMT 0702 | | 12.1 | 0.6 | 25.2 | 47.2 | 1.1 | - | - |
| | TR90 TXMT 070204 | | - | 2.5 | 25.3 | 42.8 | 1.6 | - | - |
| TR6 ER D20/0.78-4-M10-07 | TR6 TNCU 070205 | 20.0 | 19.0 | 0.5 | 26.9 | 46.9 | - | 1.6 | 17.0 |
| | TR6 TNMU 070215 | | 17.0 | 1.5 | 27.1 | 47.1 | - | 2.4 | 21.0 |
| | TRFF TXMT 0702 | | 16.1 | 0.6 | 27.2 | 47.2 | 0.8 | - | - |
| | TR90 TXMT 070204 | | - | 2.5 | 27.3 | 47.3 | 1.2 | - | - |
| TR6 ER D25/0.98-5-M12-07 | TR6 TNCU 070205 | 25.0 | 24.0 | 0.5 | 29.9 | 51.9 | - | 1.6 | 17.0 |
| | TR6 TNMU 070215 | | 22.0 | 1.5 | 30.1 | 52.1 | - | 2.4 | 21.0 |
| | TRFF TXMT 0702 | | 21.1 | 0.6 | 30.2 | 52.2 | 0.6 | - | - |
| | TR90 TXMT 070204 | | - | 2.5 | 30.3 | 52.3 | 0.9 | - | - |
| TR6 ER D32/1.26-6-M16-07 | TR6 TNCU 070205 | 32.0 | 31.0 | 0.5 | 32.9 | 57.9 | - | 1.6 | 17.0 |
| | TR6 TNMU 070215 | | 29.0 | 1.5 | 33.1 | 58.1 | - | 2.4 | 21.0 |
| | TRFF TXMT 0702 | | 28.1 | 0.6 | 33.2 | 58.2 | 0.4 | - | - |
| | TR90 TXMT 070204 | | - | 2.5 | 33.3 | 58.3 | 0.7 | - | - |
| TR6 ER D35/1.38-6-M16-07 | TR6 TNCU 070205 | 35.0 | 34.0 | 0.5 | 32.9 | 57.9 | - | 1.6 | 17.0 |
| | TR6 TNMU 070215 | | 32.0 | 1.5 | 33.1 | 58.1 | - | 2.4 | 21.0 |
| | TRFF TXMT 0702 | | 31.1 | 0.6 | 33.2 | 58.2 | 0.4 | - | - |
| | TR90 TXMT 070204 | | - | 2.5 | 33.3 | 58.3 | 0.4 | - | - |
| TR6 ER D25/0.98-3-M12-10 | TR6 TNCU 100405 | 25.0 | 24.0 | 0.5 | 24.52 | 46.52 | - | 1.8 | 17.5 |
| | TR6 TNCU 100410 | | 23.0 | 1.0 | 24.64 | 46.64 | - | 2.3 | - |
| | TR6 TNCU/MU 100415 | | 22.0 | 1.5 | 24.76 | 46.76 | - | 2.7 | - |
| | TR6 TNCU 100420 | | 21.0 | 2.0 | 24.88 | 46.88 | - | 3.5 | - |
| | TR6 TNCU 100430 | | 19.0 | 3.0 | 25.12 | 47.12 | - | 4.5 | 20.5 |
| | TRFF TXMT 1004 | | 20.6 | 0.8 | 25.15 | 47.15 | 1.7 | - | - |
| | TR90 TXMT 100408 | | - | 4.0 | 24.91 | 46.91 | 1.6 | - | - |
| | TR45 TXMT 1004 | | 26.8 | 3.0 | 25.12 | 47.12 | 1.4 | - | - |
| TR6 ER D32/1.26-4-M16-10 | TR6 TNCU 100405 | 32.0 | 31.0 | 0.5 | 34.52 | 59.52 | - | 1.8 | 17.5 |
| | TR6 TNCU 100410 | | 30.0 | 1.0 | 34.64 | 59.64 | - | 2.3 | - |
| | TR6 TNCU/MU 100415 | | 29.0 | 1.5 | 34.76 | 59.76 | - | 2.7 | - |
| | TR6 TNCU 100420 | | 28.0 | 2.0 | 34.88 | 59.88 | - | 3.5 | - |
| | TR6 TNCU 100430 | | 26.0 | 3.0 | 35.12 | 60.12 | - | 4.5 | 20.5 |
| | TRFF TXMT 1004 | | 27.6 | 0.8 | 35.15 | 60.15 | 1.2 | - | - |
| | TR90 TXMT 100408 | | - | 4.0 | 34.91 | 59.91 | 1.1 | - | - |
| | TR45 TXMT 1004 | | 33.8 | 3.0 | 35.12 | 60.12 | 0.9 | - | - |
| TR6 ER D35/1.38-5-M16-10 | TR6 TNCU 100405 | 35.0 | 34.0 | 0.5 | 34.52 | 59.52 | - | 1.8 | 17.5 |
| | TR6 TNCU 100410 | | 33.0 | 1.0 | 34.64 | 59.64 | - | 2.3 | - |
| | TR6 TNCU/MU 100415 | | 32.0 | 1.5 | 34.76 | 59.76 | - | 2.7 | - |
| | TR6 TNCU 100420 | | 31.0 | 2.0 | 34.88 | 59.88 | - | 3.5 | - |
| | TR6 TNCU 100430 | | 29.0 | 3.0 | 35.12 | 60.12 | - | 4.5 | 20.5 |
| | TRFF TXMT 1004 | | 30.6 | 0.8 | 35.15 | 60.15 | 1.2 | - | - |
| | TR90 TXMT 100408 | | - | 4.0 | 34.91 | 59.91 | 1.1 | - | - |
| | TR45 TXMT 1004 | | 36.8 | 3.0 | 35.12 | 60.12 | 0.9 | - | - |

TR6 FR

Multifunction Face Mills that can Carry Four Different Insert Geometries

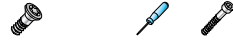


| Designation | DCX | DC | APMX | APMX ₂ (1) | RE | CICT(2) | DCONMS | Arbor | DHUB | BHTA | OAL | WT(3) | Insert |
|---------------------|-------|-------|------|-----------------------|------|---------|--------|-------|-------|------|-------|-------|-----------------|
| TR6 FR D40-06-16-10 | 40.00 | 35.00 | 2.50 | 4.20 | 2.50 | 6 | 16.00 | A | 32.00 | 20.5 | 37.00 | 0.14 | TR6 TNCU 100425 |
| TR6 FR D42-06-16-10 | 42.00 | 37.00 | 2.50 | 4.20 | 2.50 | 6 | 16.00 | A | 32.00 | 20.5 | 37.00 | 0.15 | TR6 TNCU 100425 |
| TR6 FR D50-07-22-10 | 50.00 | 45.00 | 2.50 | 4.20 | 2.50 | 7 | 22.00 | A | 47.00 | 20.5 | 40.00 | 0.29 | TR6 TNCU 100425 |
| TR6 FR D52-07-22-10 | 52.00 | 47.00 | 2.50 | 4.20 | 2.50 | 7 | 22.00 | A | 47.00 | 20.5 | 40.00 | 0.33 | TR6 TNCU 100425 |
| TR6 FR D63-08-22-10 | 63.00 | 58.00 | 2.50 | 4.20 | 2.50 | 8 | 22.00 | A | 48.00 | 20.5 | 40.00 | 0.42 | TR6 TNCU 100425 |
| TR6 FR D66-08-22-10 | 66.00 | 61.00 | 2.50 | 4.20 | 2.50 | 8 | 22.00 | A | 48.00 | 20.5 | 40.00 | 0.46 | TR6 TNCU 100425 |
| TR6 FR D80-10-27-10 | 80.00 | 75.00 | 2.50 | 4.20 | 2.50 | 10 | 27.00 | A | 60.00 | 20.5 | 50.00 | 0.91 | TR6 TNCU 100425 |

• Note: The data refers to TR6 TNCU 100425 master insert, for other insert radii and geometries refer to the table below

(1) For undercutting (2) Number of inserts (3) Item weight

Spare Parts



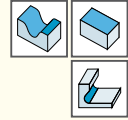
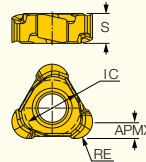
| Designation | Screw | Key | Screw 1 |
|---------------------|-------------|--------|------------------|
| TR6 FR D40-06-16-10 | SR 10508600 | T-9/51 | SR M8X25DIN912* |
| TR6 FR D42-06-16-10 | SR 10508600 | T-9/51 | SR M8X25DIN912 |
| TR6 FR D50-07-22-10 | SR 10508600 | T-9/51 | SR M10X25 DIN912 |
| TR6 FR D52-07-22-10 | SR 10508600 | T-9/51 | SR M10X25 DIN912 |
| TR6 FR D63-08-22-10 | SR 10508600 | T-9/51 | SR M10X25 DIN912 |
| TR6 FR D66-08-22-10 | SR 10508600 | T-9/51 | SR M10X25 DIN912 |
| TR6 FR D80-10-27-10 | SR 10508600 | T-9/51 | SR M12X30DIN912 |

* Optional, should be ordered separately

| Tool | Insert | DCX | DC | APMX | OAL | RMPX | For undercutting | |
|---------------------|--------------------|------|------|------|-------|-------|------------------|------|
| | | | | | | | APMX 2 | BHTA |
| TR6 FR D40-06-16-10 | TR6 TNCU 100405 | 40.0 | 39.0 | 0.5 | 36.52 | - | 1.8 | 17.5 |
| | TR6 TNCU 100410 | | 38.0 | 1.0 | 36.64 | - | 2.3 | |
| | TR6 TNCU/MU 100415 | | 37.0 | 1.5 | 36.76 | - | 2.7 | |
| | TR6 TNCU 100420 | | 36.0 | 2.0 | 36.88 | - | 3.5 | |
| | TR6 TNCU 100430 | | 34.0 | 3.0 | 37.12 | - | 4.5 | 20.5 |
| | TRFF TXMT 1004 | | 34.0 | 0.8 | 37.15 | 0.9 | - | |
| | TR90 TXMT 100408 | | - | 4.0 | 36.91 | 0.9 | - | |
| | TR45 TXMT 1004 | | 41.8 | 35.6 | 3.0 | 37.12 | 0.7 | - |
| TR6 FR D42-06-16-10 | TR6 TNCU 100405 | 42.0 | 41.0 | 0.5 | 36.52 | - | 1.8 | 17.5 |
| | TR6 TNCU 100410 | | 40.0 | 1.0 | 36.64 | - | 2.3 | |
| | TR6 TNCU/MU 100415 | | 39.0 | 1.5 | 36.76 | - | 2.7 | |
| | TR6 TNCU 100420 | | 38.0 | 2.0 | 36.88 | - | 3.5 | |
| | TR6 TNCU 100430 | | 36.0 | 3.0 | 37.12 | - | 4.5 | 20.5 |
| | TRFF TXMT 1004 | | 36.0 | 0.8 | 37.15 | 0.9 | - | |
| | TR90 TXMT 100408 | | - | 4.0 | 36.91 | 0.9 | - | |
| | TR45 TXMT 1004 | | 43.8 | 37.6 | 3.0 | 37.12 | 0.7 | - |
| TR6 FR D50-07-22-10 | TR6 TNCU 100405 | 50.0 | 49.0 | 0.5 | 39.52 | - | 1.8 | 17.5 |
| | TR6 TNCU 100410 | | 48.0 | 1.0 | 39.64 | - | 2.3 | |
| | TR6 TNCU/MU 100415 | | 47.0 | 1.5 | 39.76 | - | 2.7 | |
| | TR6 TNCU 100420 | | 46.0 | 2.0 | 39.88 | - | 3.5 | |
| | TR6 TNCU 100430 | | 44.0 | 3.0 | 40.12 | - | 4.5 | 20.5 |
| | TRFF TXMT 1004 | | 44.0 | 0.8 | 40.15 | 0.7 | - | |
| | TR90 TXMT 100408 | | - | 4.0 | 39.91 | 0.7 | - | |
| | TR45 TXMT 1004 | | 51.8 | 45.6 | 3.0 | 40.12 | 0.6 | - |
| TR6 FR D52-07-22-10 | TR6 TNCU 100405 | 52.0 | 51.0 | 0.5 | 39.52 | - | 1.8 | 17.5 |
| | TR6 TNCU 100410 | | 50.0 | 1.0 | 39.64 | - | 2.3 | |
| | TR6 TNCU/MU 100415 | | 49.0 | 1.5 | 39.76 | - | 2.7 | |
| | TR6 TNCU 100420 | | 48.0 | 2.0 | 39.88 | - | 3.5 | |
| | TR6 TNCU 100430 | | 46.0 | 3.0 | 40.12 | - | 4.5 | 20.5 |
| | TRFF TXMT 1004 | | 46.0 | 0.8 | 40.15 | 0.7 | - | |
| | TR90 TXMT 100408 | | - | 4.0 | 39.91 | 0.7 | - | |
| | TR45 TXMT 1004 | | 53.8 | 53.8 | 3.0 | 40.12 | 0.6 | - |
| TR6 FR D63-08-22-10 | TR6 TNCU 100405 | 63.0 | 62.0 | 0.5 | 39.52 | - | 1.8 | 17.5 |
| | TR6 TNCU 100410 | | 61.0 | 1.0 | 39.64 | - | 2.3 | |
| | TR6 TNCU/MU 100415 | | 60.0 | 1.5 | 39.76 | - | 2.7 | |
| | TR6 TNCU 100420 | | 59.0 | 2.0 | 39.88 | - | 3.5 | |
| | TR6 TNCU 100430 | | 57.0 | 3.0 | 40.12 | - | 4.5 | 20.5 |
| | TRFF TXMT 1004 | | 57.0 | 0.8 | 40.15 | 0.5 | - | |
| | TR90 TXMT 100408 | | - | 4.0 | 39.91 | 0.5 | - | |
| | TR45 TXMT 1004 | | 64.8 | 58.6 | 3.0 | 40.12 | 0.4 | - |
| TR6 FR D66-08-22-10 | TR6 TNCU 100405 | 66.0 | 65.0 | 0.5 | 39.52 | - | 1.8 | 17.5 |
| | TR6 TNCU 100410 | | 64.0 | 1.0 | 39.64 | - | 2.3 | |
| | TR6 TNCU/MU 100415 | | 63.0 | 1.5 | 39.76 | - | 2.7 | |
| | TR6 TNCU 100420 | | 62.0 | 2.0 | 39.88 | - | 3.5 | |
| | TR6 TNCU 100430 | | 60.0 | 3.0 | 40.12 | - | 4.5 | 20.5 |
| | TRFF TXMT 1004 | | 60.0 | 0.8 | 40.15 | 0.5 | - | |
| | TR90 TXMT 100408 | | - | 4.0 | 39.91 | 0.5 | - | |
| | TR45 TXMT 1004 | | 67.8 | 61.6 | 3.0 | 40.12 | 0.4 | - |
| TR6 FR D80-10-27-10 | TR6 TNCU 100405 | 80.0 | 79.0 | 0.5 | 49.52 | - | 1.8 | 17.5 |
| | TR6 TNCU 100410 | | 78.0 | 1.0 | 49.64 | - | 2.3 | |
| | TR6 TNCU/MU 100415 | | 77.0 | 1.5 | 49.76 | - | 2.7 | |
| | TR6 TNCU 100420 | | 76.0 | 2.0 | 49.88 | - | 3.5 | |
| | TR6 TNCU 100430 | | 74.0 | 3.0 | 50.12 | - | 4.5 | 20.5 |
| | TRFF TXMT 1004 | | 74.0 | 0.8 | 50.15 | 0.4 | - | |
| | TR90 TXMT 100408 | | - | 4.0 | 49.91 | 0.4 | - | |
| | TR45 TXMT 1004 | | 81.8 | 75.6 | 3.0 | 50.12 | 0.3 | - |

TR6 TNCU/MU

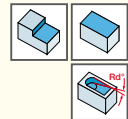
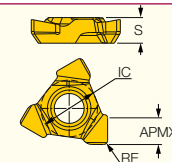
Double Sided Inserts with Six Round Cutting Edges, Available in 0.5 Up to 3.0 mm Corner Radii



| Designation | Dimensions | | | | Tough ↔ Hard | | | | Recommended Machining Data | |
|-----------------|------------|------|------|------|--------------|-------|-------|-------|----------------------------|-----------------------|
| | RE | APMX | IC | S | IC882 | IC830 | IC808 | IC908 | a _p (mm) | f _z (mm/t) |
| TR6 TNCU 070205 | 0.50 | 0.50 | 5.30 | 2.80 | | • | • | | 0.20-0.50 | 0.10-0.30 |
| TR6 TNCU 070210 | 1.00 | 1.00 | 5.30 | 2.80 | | • | • | | 0.20-1.00 | 0.10-0.30 |
| TR6 TNMU 070215 | 1.50 | 1.50 | 5.30 | 2.80 | | • | • | | 0.20-1.50 | 0.10-0.30 |
| TR6 TNCU 100405 | 0.50 | 0.50 | 7.30 | 4.20 | • | • | • | | 0.20-0.50 | 0.10-0.30 |
| TR6 TNCU 100410 | 1.00 | 1.00 | 7.30 | 4.20 | • | • | • | | 0.20-1.00 | 0.10-0.30 |
| TR6 TNCU 100415 | 1.50 | 1.50 | 7.30 | 4.20 | • | • | • | | 0.20-1.50 | 0.10-0.30 |
| TR6 TNMU 100415 | 1.50 | 1.50 | 7.30 | 4.20 | • | • | • | | 0.20-1.50 | 0.10-0.30 |
| TR6 TNCU 100420 | 2.00 | 2.00 | 7.30 | 4.20 | • | • | • | | 0.20-2.00 | 0.10-0.30 |
| TR6 TNCU 100425 | 2.50 | 2.50 | 7.30 | 4.20 | • | • | • | • | 0.20-2.50 | 0.10-0.30 |
| TR6 TNCU 100430 | 3.00 | 3.00 | 7.30 | 4.20 | • | • | • | | 0.20-3.00 | 0.10-0.30 |

TR90 TXMT

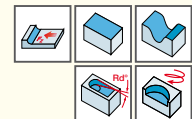
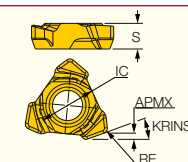
Single Sided Insert with Three Cutting Edges for 90° Shoulder and Face Milling



| Designation | Dimensions | | | | Tough ↔ Hard | | Recommended Machining Data | |
|------------------|------------|------|------|------|--------------|-------|----------------------------|-----------------------|
| | APMX | RE | IC | S | IC830 | IC808 | a _p (mm) | f _z (mm/t) |
| TR90 TXMT 070204 | 2.50 | 0.40 | 5.30 | 2.40 | • | • | 0.50-2.50 | 0.10-0.20 |
| TR90 TXMT 100408 | 4.00 | 0.80 | 7.30 | 3.90 | • | • | 0.90-4.00 | 0.10-0.20 |

TRFF TXMT

Single Sided Insert with Three Cutting Edges for High Feed Machining

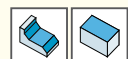
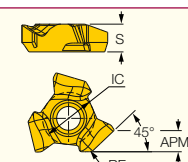


| Designation | Dimensions | | | | | | Tough ↔ Hard | | Recommended Machining Data | |
|----------------|------------|------|-------------------------------|------|------|----------------------|--------------|-------|----------------------------|-----------------------|
| | APMX | RE | R ₀ ⁽¹⁾ | IC | S | KRINS ⁽²⁾ | IC830 | IC808 | a _p (mm) | f _z (mm/t) |
| TRFF TXMT 0702 | 0.60 | 0.50 | 1.00 | 5.30 | 2.40 | 18.0 | • | • | 0.20-0.60 | 0.50-0.80 |
| TRFF TXMT 1004 | 0.80 | 0.70 | 1.40 | 7.30 | 3.90 | 17.0 | • | • | 0.20-0.80 | 0.70-1.20 |

⁽¹⁾ Radius for programming ⁽²⁾ Edge angle related to the wiper

TR45 TXMT

Single Sided Inserts with Three Cutting Edges for 45° Chamfering and Face Milling



| Designation | Dimensions | | | | Tough ↔ Hard | | Recommended Machining Data | |
|----------------|------------|------|------|------|--------------|-------|----------------------------|-----------------------|
| | APMX | RE | IC | S | IC830 | IC808 | a _p (mm) | f _z (mm/t) |
| TR45 TXMT 1004 | 3.00 | 0.40 | 7.30 | 3.90 | • | • | 1.00-3.00 | 0.20-0.40 |

MILLCHAM

BALLNOSE LINE

Indexable Profile Milling 30-32 mm Large Diameters Ball Master



No Setup Time



Ideal for Finishing Applications



Ideal for Semi Finishing and Roughing Applications



Innovative Clamping System

Indexable Ball Nose with No Setup Time for **High Accuracy, Finishing and Semi Finishing** Applications



Ease of Use



Profiling, Roughing, Semi Finishing & Finishing applications



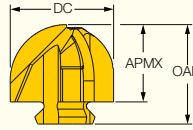
Cost Effective Insert

LOGIQMILL
ISCAR CHESS LINES

MILLCHAM

BCTR-QT

Interchangeable Solid Carbide
Ball Nose Milling Heads for High
Productivity on Hard Materials



| Designation | Dimensions | | | | | Tough ↔ Hard | |
|---------------------------|------------|--------------------|-------|--------------------|-------|--------------|-------|
| | DC | NOF ⁽¹⁾ | APMX | SSC ⁽²⁾ | OAL | IC928 | IC908 |
| BCTR D30-E20-QT-T3 | 30.00 | 3 | 22.00 | C30 | 28.30 | • | |
| BCTR D30-E20-QT-T6 | 30.00 | 6 | 28.00 | C30 | 34.30 | | • |
| BCTR D32-E20-QT-T3 | 32.00 | 3 | 22.00 | C30 | 28.30 | • | |
| BCTR D32-E20-QT-T6 | 32.00 | 6 | 28.00 | C30 | 34.30 | | • |

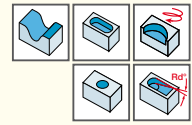
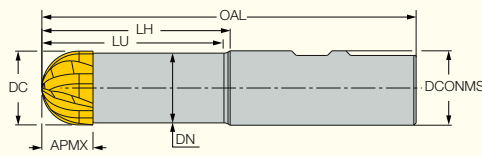
⁽¹⁾ Number of flutes

⁽²⁾ Seat size code

MILLCHAM

BCTM D-W

Weldon Shanks for Ball Nose
Solid Carbide Milling Heads



| Designation | DC | APMX | DN | LU | LH | OAL | DCONMS | Shank ⁽¹⁾ | SSC ⁽²⁾ | WT ⁽³⁾ |
|-------------------------------|-------|-------|-------|-------|-------|--------|--------|----------------------|--------------------|-------------------|
| BCTM D30/32-A-L120-W32 | 30.00 | 22.00 | 29.00 | 37.00 | 40.00 | 120.00 | 32.00 | W | C30 | 0.70 |
| BCTM D30/32-A-L160-W32 | 30.00 | 22.00 | 29.00 | 77.00 | 80.00 | 160.00 | 32.00 | W | C30 | 0.80 |

⁽¹⁾ W-Weldon

⁽²⁾ Seat size code

⁽³⁾ Item weight

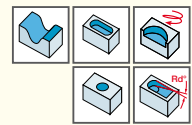
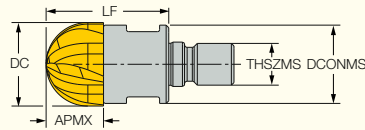
The above table dimensions are valid for BCTR D30-E20-QT-T3 insert only; for other inserts the following data modifications should be calculated:

| Designation | DC | APMX | LU | LH | OAL |
|---------------------------|----|------|----|----|-----|
| BCTR D30-E20-QT-T6 | +0 | +6 | +6 | +6 | +6 |
| BCTR D32-E20-QT-T3 | +2 | +0 | +0 | +0 | +0 |
| BCTR D32-E20-QT-T6 | +2 | +6 | +6 | +6 | +6 |

MILLCHAM

BCTM D-M

Shanks with FLEXFIT Connection for
Ball Nose Solid Carbide Milling Heads



| Designation | DC | APMX | LF | SSC ⁽¹⁾ | DCONMS | THSZMS | WT ⁽²⁾ |
|--------------------------|-------|-------|-------|--------------------|--------|--------|-------------------|
| BCTM D32/1.25-M16 | 30.00 | 22.00 | 47.00 | C30 | 29.00 | M16 | 0.15 |

⁽¹⁾ Seat size code

⁽²⁾ Item weight

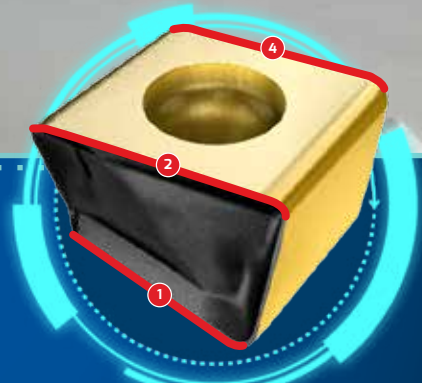
The above table dimensions are valid for BCTR D30-E20-QT-T3 insert only; for other inserts the following data modifications should be calculated:

| Designation | DC | APMX | LF |
|---------------------------|----|------|----|
| BCTR D30-E20-QT-T6 | +0 | +6 | +6 |
| BCTR D32-E20-QT-T3 | +2 | +0 | +0 |
| BCTR D32-E20-QT-T6 | +2 | +6 | +6 |

Mirror Face Milling 50-160 mm Diameters Finish Master



Superior Finish Achieved with Tangential Step Mounted Inserts



Tangential Inserts with
4 Cutting Edges



Super Surface
Finish



Tangential
Clamping



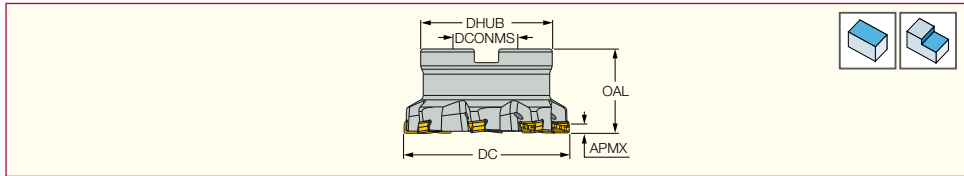
Double Sided
Insert



Strong Body
Insert

HTF-R-LN10

Face Mills Carrying Tangentially Clamped Inserts with 4 Cutting Edges for Extra Fine Milling Applications



| Designation | DC | APMX | CICT ⁽¹⁾ | OAL | DHUB | DCONMS | Arbor | | WT ⁽²⁾ |
|------------------------------|--------|------|---------------------|-------|-------|--------|-------|---|-------------------|
| HTF D050-05-22-R-LN10 | 50.00 | 0.25 | 5 | 40.00 | 48.00 | 22.00 | A | Y | 0.31 |
| HTF D063-06-22-R-LN10 | 63.00 | 0.30 | 6 | 40.00 | 48.00 | 22.00 | A | Y | 0.43 |
| HTF D080-07-27-R-LN10 | 80.00 | 0.35 | 7 | 50.00 | 60.00 | 27.00 | B | Y | 0.81 |
| HTF D100-08-32-R-LN10 | 100.00 | 0.40 | 8 | 50.00 | 78.00 | 32.00 | B | Y | 1.44 |
| HTF D125-09-40-R-LN10 | 125.00 | 0.45 | 9 | 63.00 | 92.00 | 40.00 | B | Y | 2.55 |
| HTF D160-10-40-R-LN10 | 160.00 | 0.50 | 10 | 63.00 | 95.00 | 40.00 | C | N | 3.75 |

⁽¹⁾ Number of inserts

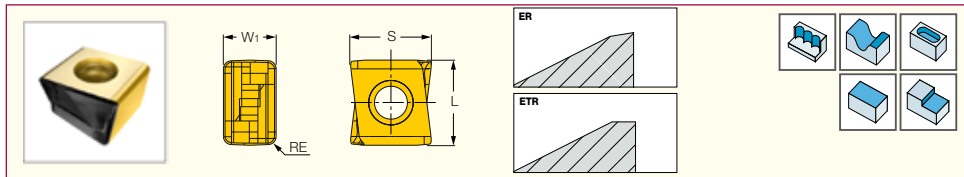
⁽²⁾ Item weight

Spare Parts

| Designation | | | | |
|------------------------------|-----------|------------|--------|------------------|
| HTF D050-05-22-R-LN10 | SR 34-550 | BLD T10/S7 | SW6-SD | SR M10X25 DIN912 |
| HTF D063-06-22-R-LN10 | SR 34-550 | BLD T10/S7 | SW6-SD | |
| HTF D080-07-27-R-LN10 | SR 34-550 | BLD T10/S7 | SW6-SD | |
| HTF D100-08-32-R-LN10 | SR 34-550 | BLD T10/S7 | SW6-SD | |
| HTF D125-09-40-R-LN10 | SR 34-550 | BLD T10/S7 | SW6-SD | |
| HTF D160-10-40-R-LN10 | SR 34-550 | BLD T10/S7 | SW6-SD | |

HTP LN.. 1006

Tangentially Clamped Inserts with 4 Cutting Edges for Plungers

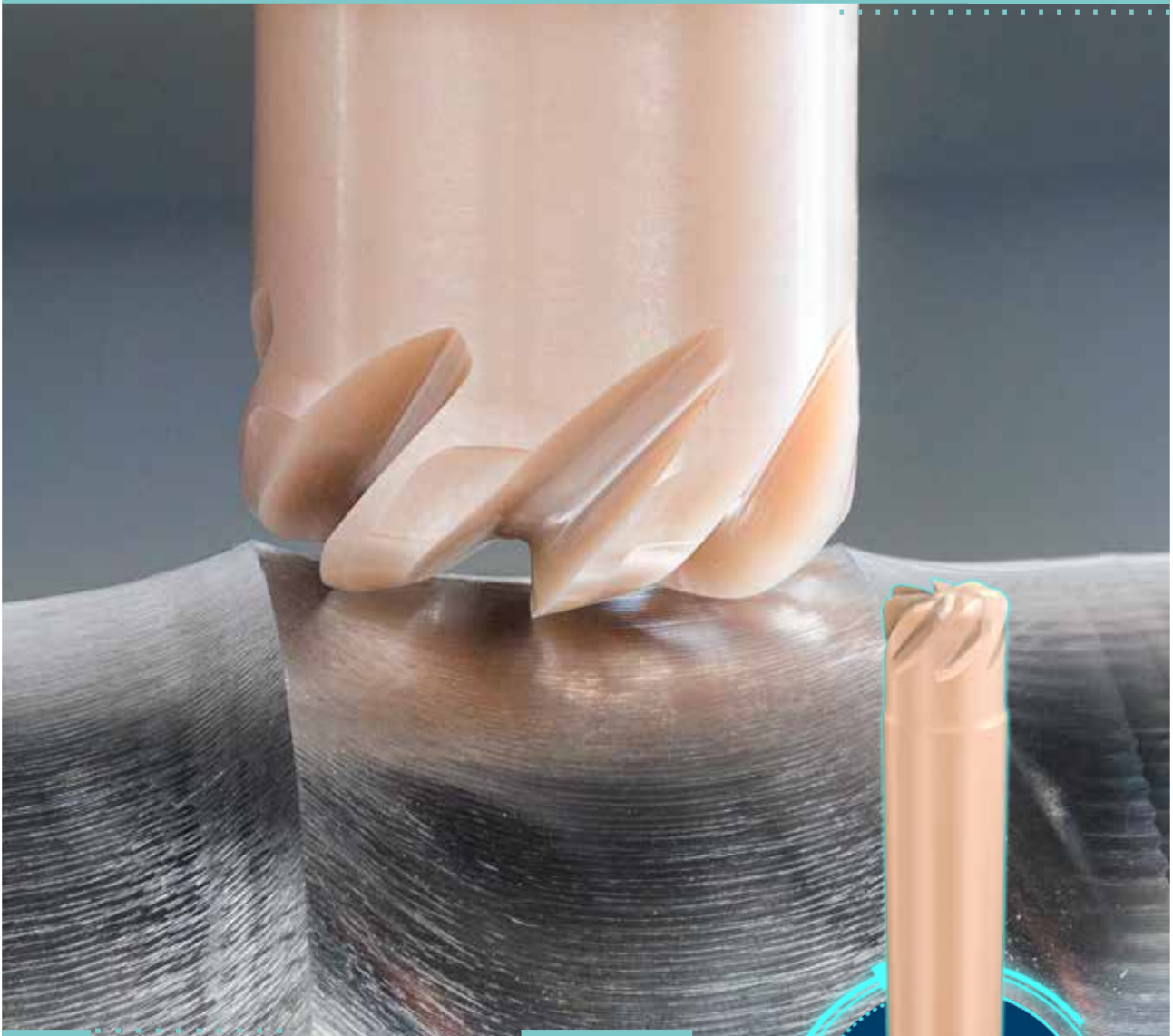


| Designation | Dimensions | | | | Tough ↔ Hard | | | | |
|--|------------|-------|-------|------|--------------|-------|-------|-------|------|
| | W1 | L | S | RE | IC330 | IC830 | IC808 | IC810 | IC07 |
| HTP LNAR 1006 FR-P | 6.50 | 10.50 | 10.13 | 1.00 | | | | | ● |
| HTP LNHT 1006 ER | 6.50 | 10.50 | 9.93 | 1.00 | ● | ● | ● | ● | |
| HTP LNHT 1006 ETR | 6.50 | 10.50 | 9.93 | 1.00 | ● | ● | ● | | |
| HTP LNMT 1006 ER ⁽¹⁾ | 6.50 | 10.50 | 9.96 | 1.00 | ● | ● | ● | | |

⁽¹⁾ Mounting this insert increases tool diameter by 0.1 mm

SOLIDMILL
CERAMIC ENDMILL

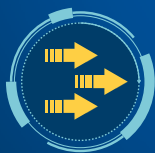
High Feed
Dia 6-20 mm
Ceramic Master



High Feed Ceramic Endmill
for Cost Effectiveness and
High Productivity



Rough
Application



High Feed
Milling Geometry



High Productivity



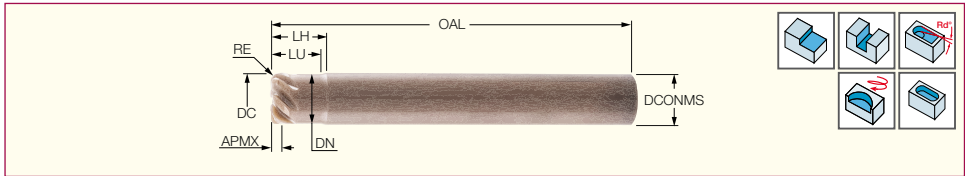
Cost Effective
Insert



Solid Ceramic
Endmill Cutter

LOGIQMILL
ISCAR CHESS LINES

EC-E3/E7-CE (ceramic)
3 and 7 Flute Solid Ceramic Endmills
with Relieved Necks for Machining
Superalloys, Cast Iron and Graphite



| Designation | Dimensions | | | | | | | | | Tough ↔ Hard | | Recommended Machining Data f _z (mm/t) |
|----------------------------------|------------|-------|-------|--------|-------------------|------|--------------------|------|-------|--------------|-----|---|
| | DC | APMX | DN | DCONMS | RE ⁽¹⁾ | LU | NOF ⁽²⁾ | LH | OAL | IS35 | IS6 | |
| EC-E3 06-06/15C06R.4N50CE | 6.00 | 6.00 | 5.50 | 6.00 | 0.42 | 14.5 | 3 | 15.0 | 50.00 | ● | | 0.03-0.10 |
| EC-E3 08-08/20C08R.5N57CE | 8.00 | 8.00 | 7.50 | 8.00 | 0.56 | 19.5 | 3 | 20.0 | 57.00 | ● | | 0.03-0.14 |
| EC-E3 10-10/25C10R.7N65CE | 10.00 | 10.00 | 9.50 | 10.00 | 0.70 | 24.5 | 3 | 25.0 | 65.00 | ● | | 0.03-0.16 |
| EC-E3 12-12/30C12R1.N72CE | 12.00 | 12.00 | 11.50 | 12.00 | 1.10 | 29.5 | 3 | 30.0 | 72.00 | ● | | 0.03-0.18 |
| EC-E3 16-16/35C16R2.N83CE | 16.00 | 16.00 | 15.50 | 16.00 | 1.90 | 34.5 | 3 | 35.0 | 83.00 | ● | | 0.03-0.22 |
| EC-E3 20-20/40C20R2.N93CE | 20.00 | 20.00 | 19.50 | 20.00 | 2.50 | 39.5 | 3 | 40.0 | 93.00 | ● | | 0.03-0.24 |
| EC-E7 08-02C08R1.0N63CE | 8.00 | 0.40 | 7.50 | 8.00 | 1.00 | 8.0 | 7 | 9.5 | 63.00 | | ● | 0.03-0.10 |
| EC-E7 10-02C10R1.5N72CE | 10.00 | 0.70 | 9.50 | 10.00 | 1.50 | 10.0 | 7 | 11.5 | 72.00 | | ● | 0.03-0.12 |
| EC-E7 12-02C12R1.5N83CE | 12.00 | 1.30 | 11.50 | 12.00 | 1.50 | 10.0 | 7 | 12.0 | 83.00 | | ● | 0.03-0.15 |

• Recommended cutting speed on high temperature nickel-based superalloys: 250-700 m/min • Maximum width of cut for the 3 flute cutters is 0.1xD

⁽¹⁾ Programming radius

⁽²⁾ Number of flutes

| P | M | K | N(K) | S(M) | H(P/K) |
|---|---|---|------|------|--------|
| | | + | + | + | |

+ recommended



SURELOCK

RIGID CLAMPING

Round Tools with Secure Clamping Lock Master



Tool Shank is
Screwed into the Holder to
Prevent Tool Pull-Out

SURELOCK Solid Carbide Tools

Securely Clamped Round Tools Designed to Prevent Tool Pull-Out



Ease of Use



Variety



New Generation
Insert



Rigid Clamping

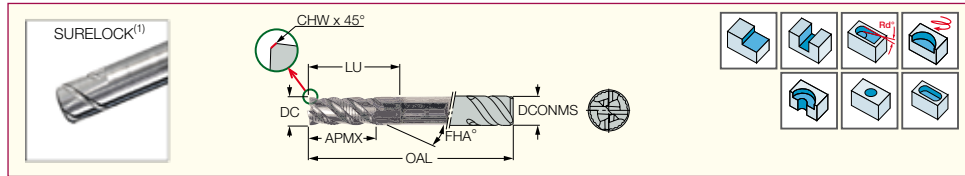
SURELOCK Solid Carbide and Steel
Multi-Master Shanks

SAFE-LOCK®
by HAIMER.

LOGIQMILL
ISCAR CHESS LINES

EFS-B44

Combination of Roughing and Finishing Solid Carbide Endmills in a Single Tool



| Designation | Dimensions | | | | | | | | | | | IC900 | Recommended Machining Data | |
|---------------------------------|------------|--------|-------|------|--------|--------------------|--------------------|------|------|---------|-----------------------|-----------|----------------------------|--|
| | DC | DCONMS | APMX | LU | OAL | NOF ⁽²⁾ | FHA ⁽³⁾ | RMPX | CHW | Coolant | f _z (mm/t) | | | |
| EFS-B44 10-22/32SL10-72 | 10.00 | 10.00 | 22.00 | 32.0 | 72.00 | 4 | 45.0 | 5.0 | 0.30 | N | ● | 0.03-0.09 | | |
| EFS-B44 10-22SL10-72 | 10.00 | 10.00 | 22.00 | - | 72.00 | 4 | 45.0 | 5.0 | 0.30 | N | ● | 0.03-0.09 | | |
| EFS-B44 10-22SL10-72C | 10.00 | 10.00 | 22.00 | - | 72.00 | 4 | 45.0 | 5.0 | 0.30 | Y | ● | 0.04-0.07 | | |
| EFS-B44 12-26/38SL12-83 | 12.00 | 12.00 | 26.00 | 38.0 | 83.00 | 4 | 45.0 | 5.0 | 0.40 | N | ● | 0.04-0.10 | | |
| EFS-B44 12-26SL12-83 | 12.00 | 12.00 | 26.00 | - | 83.00 | 4 | 45.0 | 5.0 | 0.40 | N | ● | 0.04-0.10 | | |
| EFS-B44 12-26SL12-83C | 12.00 | 12.00 | 26.00 | - | 83.00 | 4 | 45.0 | 5.0 | 0.40 | Y | ● | 0.04-0.08 | | |
| EFS-B44 16-34/50SL16-100 | 16.00 | 16.00 | 34.00 | 50.0 | 100.00 | 4 | 45.0 | 5.0 | 0.60 | N | ● | 0.05-0.11 | | |
| EFS-B44 16-34SL16-92 | 16.00 | 16.00 | 34.00 | - | 92.00 | 4 | 45.0 | 5.0 | 0.60 | N | ● | 0.05-0.11 | | |
| EFS-B44 16-34SL16-92C | 16.00 | 16.00 | 34.00 | - | 92.00 | 4 | 45.0 | 5.0 | 0.60 | Y | ● | 0.05-0.08 | | |
| EFS-B44 20-42/62SL20-125 | 20.00 | 20.00 | 42.00 | 62.0 | 125.00 | 4 | 45.0 | 5.0 | 0.60 | N | ● | 0.05-0.11 | | |
| EFS-B44 20-42SL20-104 | 20.00 | 20.00 | 42.00 | - | 104.00 | 4 | 45.0 | 5.0 | 0.60 | N | ● | 0.05-0.11 | | |
| EFS-B44 25-52SL25-121 | 25.00 | 25.00 | 52.00 | - | 121.00 | 4 | 45.0 | 5.0 | 0.60 | N | ● | 0.06-0.11 | | |

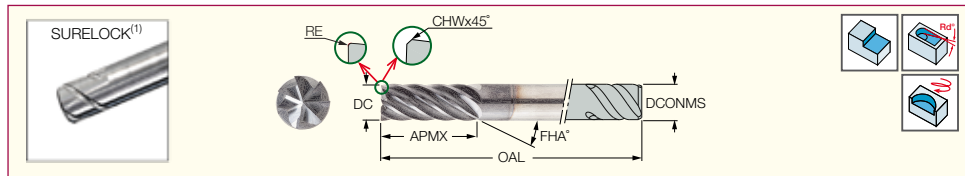
⁽¹⁾ With Safe-Lock® (by Haimer) pull-out prevention helical grooves

⁽²⁾ Number of flutes

⁽³⁾ Helix angle

EC-E7/H7-CF

7 Flute Endmills with Different Helix and Variable Pitch for Chatter Free High Speed Finish Milling



| Designation | Dimensions | | | | | | | | | | IC902 | Recommended Machining Data | |
|--------------------------------|------------|--------|-------|--------|--------------------|--------------------|------|-----|-----|-----------------------|-----------|----------------------------|--|
| | DC | DCONMS | APMX | OAL | NOF ⁽²⁾ | FHA ⁽³⁾ | RMPX | CHW | RE | f _z (mm/t) | | | |
| EC-H7 12-24SL12CF-M83 | 12.00 | 12.00 | 24.00 | 83.00 | 7 | 37.0 | 3.0 | - | - | ● | 0.04-0.12 | | |
| EC-H7 12-24SL12CFR.6M83 | 12.00 | 12.00 | 24.00 | 83.00 | 7 | 37.0 | 3.0 | - | 0.6 | ● | 0.04-0.12 | | |
| EC-H7 12-36SL12CF-M110 | 12.00 | 12.00 | 36.00 | 110.00 | 7 | 37.0 | 3.0 | 0.3 | - | ● | 0.04-0.12 | | |
| EC-H7 12-48SL12CF-110 | 12.00 | 12.00 | 48.00 | 110.00 | 7 | 37.0 | 3.0 | 0.3 | - | ● | 0.04-0.12 | | |
| EC-H7 12-72SL12CF-140 | 12.00 | 12.00 | 72.00 | 140.00 | 7 | 37.0 | 3.0 | 0.3 | - | ● | 0.04-0.12 | | |
| EC-H7 16-32SL16CF-M92 | 16.00 | 16.00 | 32.00 | 92.00 | 7 | 37.0 | 3.0 | - | - | ● | 0.04-0.12 | | |
| EC-H7 16-32SL16CFR.8M92 | 16.00 | 16.00 | 32.00 | 92.00 | 7 | 37.0 | 3.0 | - | 0.8 | ● | 0.04-0.12 | | |
| EC-H7 16-48SL16CF-M131 | 16.00 | 16.00 | 48.00 | 131.00 | 7 | 37.0 | 3.0 | 0.3 | - | ● | 0.04-0.12 | | |
| EC-H7 16-64SL16CF-131 | 16.00 | 16.00 | 64.00 | 131.00 | 7 | 37.0 | 3.0 | 0.3 | - | ● | 0.04-0.12 | | |
| EC-H7 16-96SL16CF-175 | 16.00 | 16.00 | 96.00 | 175.00 | 7 | 37.0 | 3.0 | 0.3 | - | ● | 0.04-0.12 | | |
| EC-H7 20-40SL20CF-M104 | 20.00 | 20.00 | 40.00 | 104.00 | 7 | 37.0 | 3.0 | - | - | ● | 0.04-0.12 | | |
| EC-H7 20-40SL20CFR1M104 | 20.00 | 20.00 | 40.00 | 104.00 | 7 | 37.0 | 3.0 | - | - | ● | 0.05-0.15 | | |
| EC-H7 20-60SL20CF-M140 | 20.00 | 20.00 | 60.00 | 140.00 | 7 | 37.0 | 3.0 | 0.4 | - | ● | 0.05-0.15 | | |
| EC-H7 20-80SL20CF-140 | 20.00 | 20.00 | 80.00 | 140.00 | 7 | 37.0 | 3.0 | 0.4 | - | ● | 0.05-0.15 | | |

• Can machine at radial width of cut (ae) of up to 0.10xD

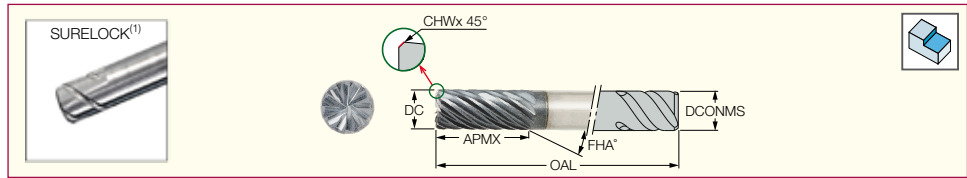
⁽¹⁾ With Safe-Lock® (by Haimer) pull-out prevention helical grooves

⁽²⁾ Number of flutes

⁽³⁾ Helix angle

EC-H-CF

6-20 Flute Endmills with Different Helix and Variable Pitch for **CHATTERFREE** High Speed Finish Milling



| Designation | Dimensions | | | | | | | | IC902 | Recommended Machining Data |
|----------------------------------|------------|--------|-------|-------|--------------------|--------------------|-----|-----------------------|-----------|----------------------------|
| | DC | DCONMS | APMX | OAL | NOF ⁽²⁾ | FHA ⁽³⁾ | CHW | f _z (mm/t) | | |
| EC-H10 10-20SL10CF-H72 92 | 10.00 | 10.00 | 20.00 | 72.00 | 10 | 35.0 | 3.0 | ● | 0.03-0.10 | |
| EC-H12 12-24SL12CF-H83 92 | 12.00 | 12.00 | 20.00 | 72.00 | 12 | 35.0 | 3.0 | ● | 0.04-0.11 | |
| EC-H16 16-32SL16CF-H92 92 | 16.00 | 16.00 | 20.00 | 72.00 | 16 | 35.0 | 3.0 | ● | 0.05-0.13 | |
| EC-H20 20-40SL20CFH104 92 | 20.00 | 20.00 | 20.00 | 72.00 | 20 | 35.0 | 3.0 | ● | 0.05-0.13 | |

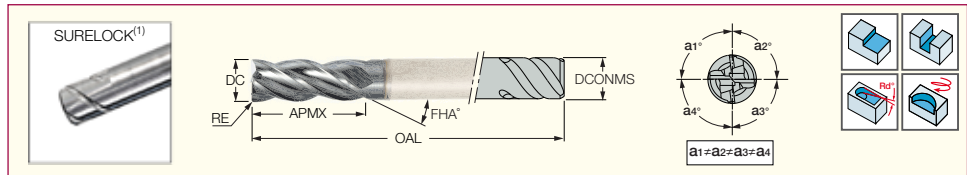
⁽¹⁾ With Safe-Lock® (by Haimer) pull-out prevention helical grooves

⁽²⁾ Number of flutes

⁽³⁾ Helix angle

ECK-H4M-CFR

Endmills with Different Helix, Chamfered Edges and Variable Pitch for Chatter Dampening on Titanium



| Designation | Dimensions | | | | | | | | | | IC900 | Recommended Machining Data |
|----------------------------------|------------|--------|-------|--------|--------------------|------|--------------------|------|---|-----------------------|-----------|----------------------------|
| | DC | DCONMS | APMX | OAL | NOF ⁽²⁾ | RE | FHA ⁽³⁾ | RPMX | Y | f _z (mm/t) | | |
| ECK-H4 10-20SL10CFR.5-72C | 10.00 | 10.00 | 20.00 | 72.00 | 4 | 0.50 | 36.0 | 5.0 | Y | ● | 0.03-0.07 | |
| ECK-H4 10-20SL10CFR0.5-72 | 10.00 | 10.00 | 20.00 | 72.00 | 4 | 0.50 | 36.0 | 5.0 | N | ● | 0.03-0.07 | |
| ECK-H4 12-24SL12CFR0.6-83 | 12.00 | 12.00 | 24.00 | 83.00 | 4 | 0.60 | 36.0 | 5.0 | N | ● | 0.04-0.08 | |
| ECK-H4 16-32SL16CFR.8-92C | 16.00 | 16.00 | 32.00 | 92.00 | 4 | 0.80 | 36.0 | 5.0 | Y | ● | 0.05-0.08 | |
| ECK-H4 16-32SL16CFR0.8-92 | 16.00 | 16.00 | 32.00 | 92.00 | 4 | 0.80 | 36.0 | 5.0 | N | ● | 0.05-0.08 | |
| ECK-H4 20-40SL20CFR1.-104 | 20.00 | 20.00 | 40.00 | 104.00 | 4 | 1.00 | 36.0 | 5.0 | N | ● | 0.05-0.08 | |

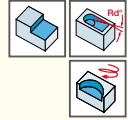
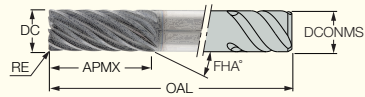
⁽¹⁾ With Safe-Lock® (by Haimer) pull-out prevention helical grooves

⁽²⁾ Number of flutes

⁽³⁾ Helix angle

ECK-H7/9-CFR

7 and 9 Flute Endmills with Different Helix and Variable Pitch for Chatter Dampening on Titanium

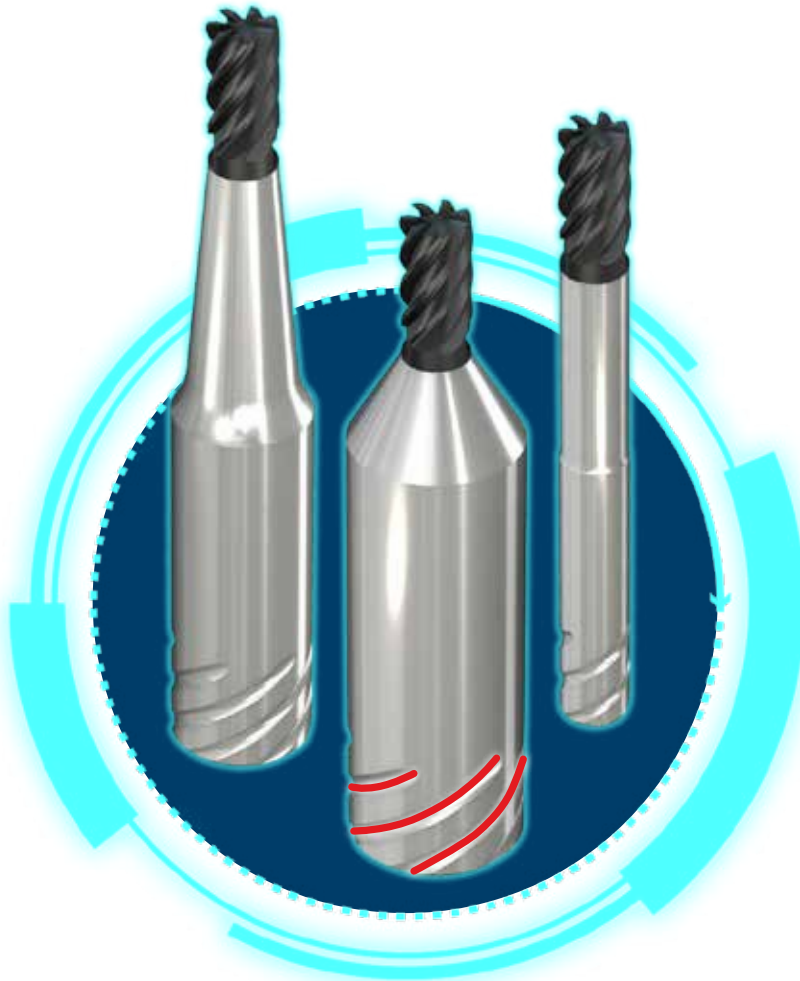


| Designation | Dimensions | | | | | | | | | IC900 |
|----------------------------------|------------|--------|------|--------|--------------------|------|--------------------|------|---|-------|
| | DC | DCONMS | APMX | OAL | NOF ⁽²⁾ | RE | FHA ⁽³⁾ | RMPX | | |
| ECK-H7 10-22SL10CFR0.5T72 | 10.00 | 10.00 | 22 | 72.00 | 7 | 0.50 | 35.0 | 5.0 | • | |
| ECK-H7 12-26SL12CFR0.6T83 | 12.00 | 12.00 | 26 | 83.00 | 7 | 0.60 | 35.0 | 5.0 | • | |
| ECK-H9 16-32SL16CFR0.8T92 | 16.00 | 16.00 | 32 | 92.00 | 9 | 0.80 | 35.0 | 5.0 | • | |
| ECK-H9 20-38SL20CFR1T104 | 20.00 | 20.00 | 38 | 104.00 | 9 | 1.00 | 35.0 | 5.0 | • | |

⁽¹⁾ With Safe-Lock® (by Haimer) pull-out prevention helical grooves

⁽²⁾ Number of flutes

⁽³⁾ Helix angle

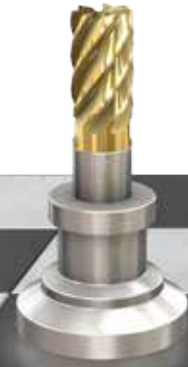


SAFE-LOCK®
by HAIMER.

MULTI-MASTER

INDEXABLE HEADS

Indexable Solid Carbide Endmill Long Cutting Edge 1.5XD Flute Master



Multi-Master Heads
1.5xD Length
8-25 mm Diameters



12-25 mm Diameters

New Long Flute Multi-Master Heads Length Ratio 1.5xD



Ease of Use



Different Types
of Materials



Roughing
Semi-Finishing &
Finishing

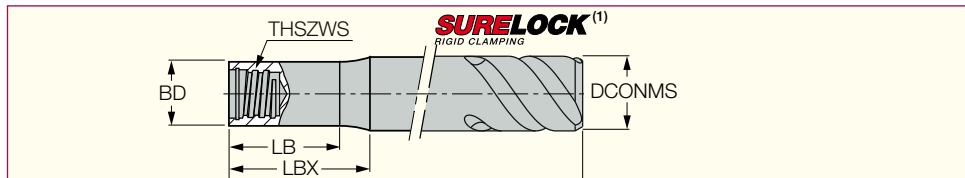


Cost Effective
Insert

LOGIQMILL
ISCAR CHESS LINES

MM S-A (stepped shanks)

Stepped Cylindrical Shanks for Interchangeable Milling Heads



| Designation | THSZWS | DCONMS | BD | LB | LBX | OAL | Shank m. ⁽²⁾ | Coolant | RPM max ⁽³⁾ |
|--|--------|--------|-------|-------|------|--------|-------------------------|---------|------------------------|
| MM S-A-L065/24-SL08T05C ⁽¹⁾ | T05 | 8.00 | 7.60 | 24.00 | 25.6 | 65.00 | C | N | 60000 |
| MM S-A-L075/30-SL10T06C ⁽¹⁾ | T06 | 10.00 | 9.60 | 30.00 | 31.7 | 75.00 | C | N | 53940 |
| MM S-A-L085/36-SL12T08C ⁽¹⁾ | T08 | 12.00 | 11.60 | 36.00 | 37.7 | 85.00 | C | N | 60000 |
| MM S-A-L100/48-SL16T10C ⁽¹⁾ | T10 | 16.00 | 15.30 | 48.00 | 50.3 | 100.00 | C | N | 38040 |
| MM S-A-L110/50-SL20T12C ⁽¹⁾ | T12 | 20.00 | 18.30 | 50.00 | 53.3 | 110.00 | C | N | 60000 |
| MM S-A-L125/63-SL25T15C ⁽¹⁾ | T15 | 25.00 | 24.00 | 63.00 | 65.8 | 125.00 | C | N | 41700 |
| MM S-A-L135/64-SL32T21C ⁽¹⁾ | T21 | 32.00 | 30.00 | 64.00 | 67.5 | 135.00 | C | N | 12690 |

• Do not apply lubricant to the threaded connection.

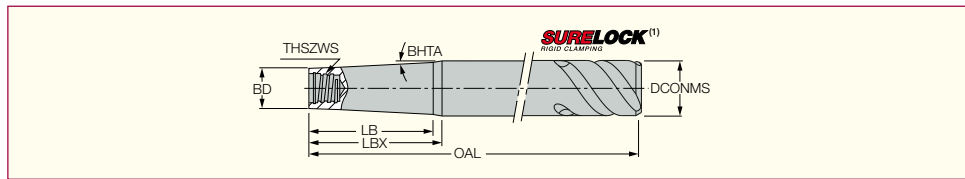
⁽¹⁾ With Safe-Lock® (by Haimer) pull-out prevention helical grooves

⁽²⁾ S-steel, C-carbide, W-tungsten

⁽³⁾ The maximum RPM must be calculated. Divide the listed max. RPM by the number of flutes (on the milling head) being used.

MM S-B (85° conical shanks)

85° Conical Shanks for Interchangeable Milling Heads



| Designation | THSZWS | DCONMS | BD | BHTA | Shank ⁽²⁾ | LB | OAL | Shank m. | LBX | RPM max ⁽³⁾ |
|---------------------------------------|--------|--------|-------|------|----------------------|------|--------|----------|-------|------------------------|
| MM S-B-L085/32-SL16T05 ⁽¹⁾ | T05 | 16.00 | 7.60 | 5.0 | C | 27.0 | 85.00 | S | 32.00 | 41280 |
| MM S-B-L095/40-SL20T06 ⁽¹⁾ | T06 | 20.00 | 9.60 | 5.0 | C | 34.0 | 95.00 | S | 40.00 | 41280 |
| MM S-B-L100/48-SL20T08 ⁽¹⁾ | T08 | 20.00 | 11.60 | 5.0 | C | 48.0 | 100.00 | S | - | 25590 |
| MM S-B-L120/55-SL25T10 ⁽¹⁾ | T10 | 25.00 | 15.30 | 5.0 | C | 55.4 | 120.00 | S | - | 29490 |
| MM S-B-L150/78-SL32T12 ⁽¹⁾ | T12 | 32.00 | 18.30 | 5.0 | C | 78.3 | 150.00 | S | - | 34890 |
| MM S-B-L180/92-SL40T15 ⁽¹⁾ | T15 | 40.00 | 23.90 | 5.0 | C | 92.0 | 180.00 | S | - | 14160 |
| MM S-B-L150/57-SL40T21 ⁽¹⁾ | T21 | 40.00 | 30.00 | 5.0 | C | 57.0 | 150.00 | S | - | 21840 |

• Shank material (Shank m.): S-steel, W-tungsten.

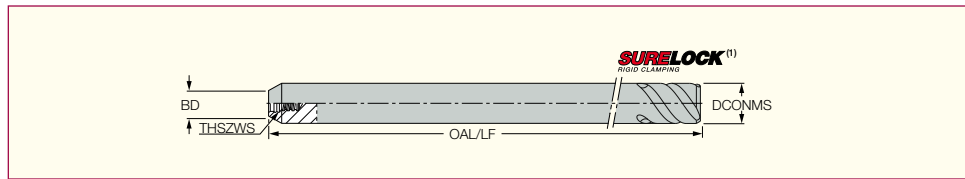
• Do not apply lubricant to the threaded connection.

⁽¹⁾ With Safe-Lock® (by Haimer) pull-out prevention helical grooves

⁽³⁾ The maximum RPM must be calculated. Divide the listed max. RPM by the number of flutes (on the milling head) being used.

MM S-A (straight shanks)

Shanks for Interchangeable Milling Heads



| Designation | THSZWS | DCONMS | BD | OAL | Shank m. ⁽⁴⁾ | RPM max ⁽⁵⁾ |
|------------------------------------|--------|--------|-------|--------|-------------------------|------------------------|
| MM S-A-L070-SL20T05 ⁽¹⁾ | T05 | 20.00 | 7.60 | 70.00 | S | 999 |
| MM S-A-L080-SL25T06 ⁽¹⁾ | T06 | 25.00 | 9.60 | 80.00 | S | 999 |
| MM S-A-L080-SL25T08 ⁽¹⁾ | T08 | 25.00 | 11.60 | 80.00 | S | 999 |
| MM S-A-L080-SL32T10 ⁽¹⁾ | T10 | 32.00 | 15.30 | 80.00 | S | 999 |
| MM S-A-L080-SL32T12 ⁽¹⁾ | T12 | 32.00 | 18.30 | 80.00 | S | 999 |
| MM S-A-L100-SL40T15 ⁽¹⁾ | T15 | 40.00 | 23.90 | 100.00 | S | 999 |
| MM S-A-L100-SL40T21 ⁽¹⁾ | T21 | 40.00 | 30.00 | 100.00 | S | 999 |

• Do not apply lubricant to the threaded connection.

⁽¹⁾ With Safe-Lock® (by Haimer) pull-out prevention helical grooves

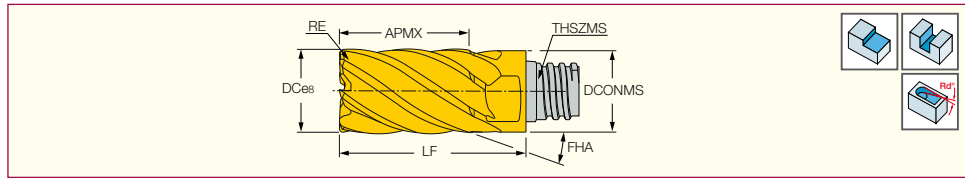
⁽²⁾ "B" suffix - cylindrical shank which may be shortened.

⁽⁴⁾ S-steel

⁽⁵⁾ The maximum RPM must be calculated. Divide the listed max. RPM by the number of flutes (on the milling head) being used.

MM EC-CF-Z7/9-1.5xD

Interchangeable 7, 9 Flute Solid Carbide Endmill Heads 30° and 45° Helix with 1.5xD Flute Lengths

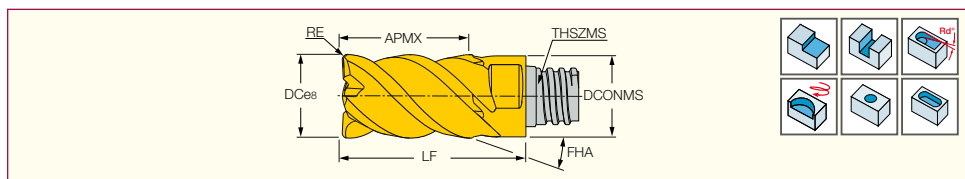


| Designation | Dimensions | | | | | | | | | IC908 | Recommended Machining Data |
|-----------------------|------------|--------------------|-------|------|--------|--------|-------|------|---------------------|-------|----------------------------|
| | DC | NOF ⁽¹⁾ | APMX | RE | THSZMS | DCONMS | LF | FHA | RMPX ⁽²⁾ | | f _z (mm/t) |
| MM EC080H12R05CF-7T05 | 8.00 | 7 | 12.00 | 0.50 | T05 | 7.70 | 18.00 | 36.0 | 3.0 | ● | 0.03-0.10 |
| MM EC100H15R05CF-7T06 | 10.00 | 7 | 15.00 | 0.50 | T06 | 9.60 | 22.00 | 36.0 | 3.0 | ● | 0.04-0.10 |
| MM EC120H18R05CF-7T08 | 12.00 | 7 | 18.00 | 0.50 | T08 | 11.70 | 27.00 | 36.0 | 3.0 | ● | 0.04-0.10 |
| MM EC160H24R08CF-9T10 | 16.00 | 9 | 24.00 | 0.80 | T10 | 15.30 | 33.50 | 36.0 | 1.0 | ● | 0.05-0.10 |
| MM EC200H30R10CF-9T12 | 20.00 | 9 | 30.00 | 1.00 | T12 | 18.45 | 41.00 | 36.0 | 1.0 | ● | 0.05-0.10 |
| MM EC250H37R10CF-9T15 | 25.00 | 9 | 37.00 | 1.00 | T15 | 23.90 | 52.50 | 36.0 | 1.0 | ● | 0.05-0.10 |

• Do not apply lubricant to the threaded connection. ⁽¹⁾ Number of flutes ⁽²⁾ Ramping angle maximum

MM EC-CF-Z4-1.5xD

Interchangeable Solid Carbide Endmill Heads with 1.5xD Flute Lengths for Chatter Free Roughing and Finishing

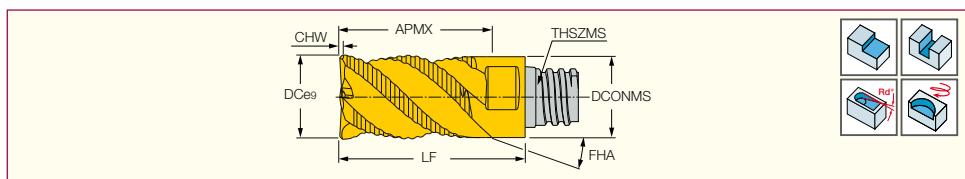


| Designation | Dimensions | | | | | | | | | IC908 | Recommended Machining Data |
|-----------------------|------------|--------------------|-------|------|--------|--------|-------|------|---------------------|-----------|----------------------------|
| | DC | NOF ⁽¹⁾ | APMX | RE | THSZMS | DCONMS | LF | FHA | RMPX ⁽²⁾ | | f _z (mm/t) |
| MM EC080H12R05CF-4T05 | 8.00 | 4 | 12.00 | 0.50 | T05 | 7.70 | 18.00 | 46.5 | ● | 0.03-0.09 | |
| MM EC100H15R05CF-4T06 | 10.00 | 4 | 15.00 | 0.50 | T06 | 9.60 | 22.00 | 46.5 | ● | 0.03-0.10 | |
| MM EC120H18R05CF-4T08 | 12.00 | 4 | 18.00 | 0.50 | T08 | 11.70 | 27.00 | 46.5 | ● | 0.04-0.11 | |
| MM EC160H24R05CF-4T10 | 16.00 | 4 | 24.00 | 0.50 | T10 | 15.30 | 33.50 | 46.5 | ● | 0.05-0.13 | |
| MM EC200H30R05CF-4T12 | 20.00 | 4 | 30.00 | 0.50 | T12 | 18.45 | 41.00 | 46.5 | ● | 0.05-0.17 | |
| MM EC250H37R05CF-4T15 | 25.00 | 4 | 37.00 | 0.50 | T15 | 23.90 | 52.50 | 46.5 | ● | 0.06-0.17 | |

• Do not apply lubricant to the threaded connection. ⁽¹⁾ Number of flutes

MM ERS-1.5xD

Interchangeable Solid Carbide Rough Milling Heads with 1.5xD Flute Lengths for High Metal Removal Rates



| Designation | Dimensions | | | | | | | | | IC908 | Recommended Machining Data |
|-------------------|------------|--------------------|-------|------|--------|--------|-------|------|---------------------|-------|----------------------------|
| | DC | NOF ⁽¹⁾ | APMX | CHW | THSZMS | DCONMS | LF | FHA | RMPX ⁽²⁾ | | f _z (mm/t) |
| MM ERS080B12-4T05 | 8.00 | 4 | 12.00 | 0.25 | T05 | 7.70 | 18.00 | 46.0 | 90.0 | ● | 0.03-0.08 |
| MM ERS100B15-4T06 | 10.00 | 4 | 15.00 | 0.30 | T06 | 9.60 | 22.00 | 46.0 | 90.0 | ● | 0.03-0.09 |
| MM ERS120B18-4T08 | 12.00 | 4 | 18.00 | 0.35 | T08 | 11.70 | 27.00 | 46.0 | 90.0 | ● | 0.04-0.10 |
| MM ERS160B24-5T10 | 16.00 | 5 | 24.00 | 0.40 | T10 | 15.30 | 33.50 | 40.0 | 7.0 | ● | 0.04-0.10 |
| MM ERS200B30-6T12 | 20.00 | 6 | 30.00 | 0.40 | T12 | 18.45 | 41.00 | 47.0 | 3.0 | ● | 0.05-0.11 |
| MM ERS250B37-6T15 | 25.00 | 6 | 37.00 | 0.50 | T15 | 23.90 | 52.50 | 47.0 | 3.0 | ● | 0.05-0.11 |

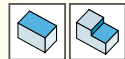
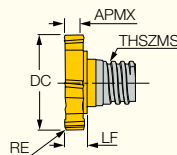
• Do not apply lubricant to the threaded connection. ⁽¹⁾ Number of flutes ⁽²⁾ Ramping angle maximum

Interchangeable Solid Carbide Face Milling Heads



MULTI-MASTER
INDEXABLE SOLID CARBIDE LINE

MM FM
Interchangeable Solid Carbide Face Milling Heads with MULTI-MASTER Threaded Connections



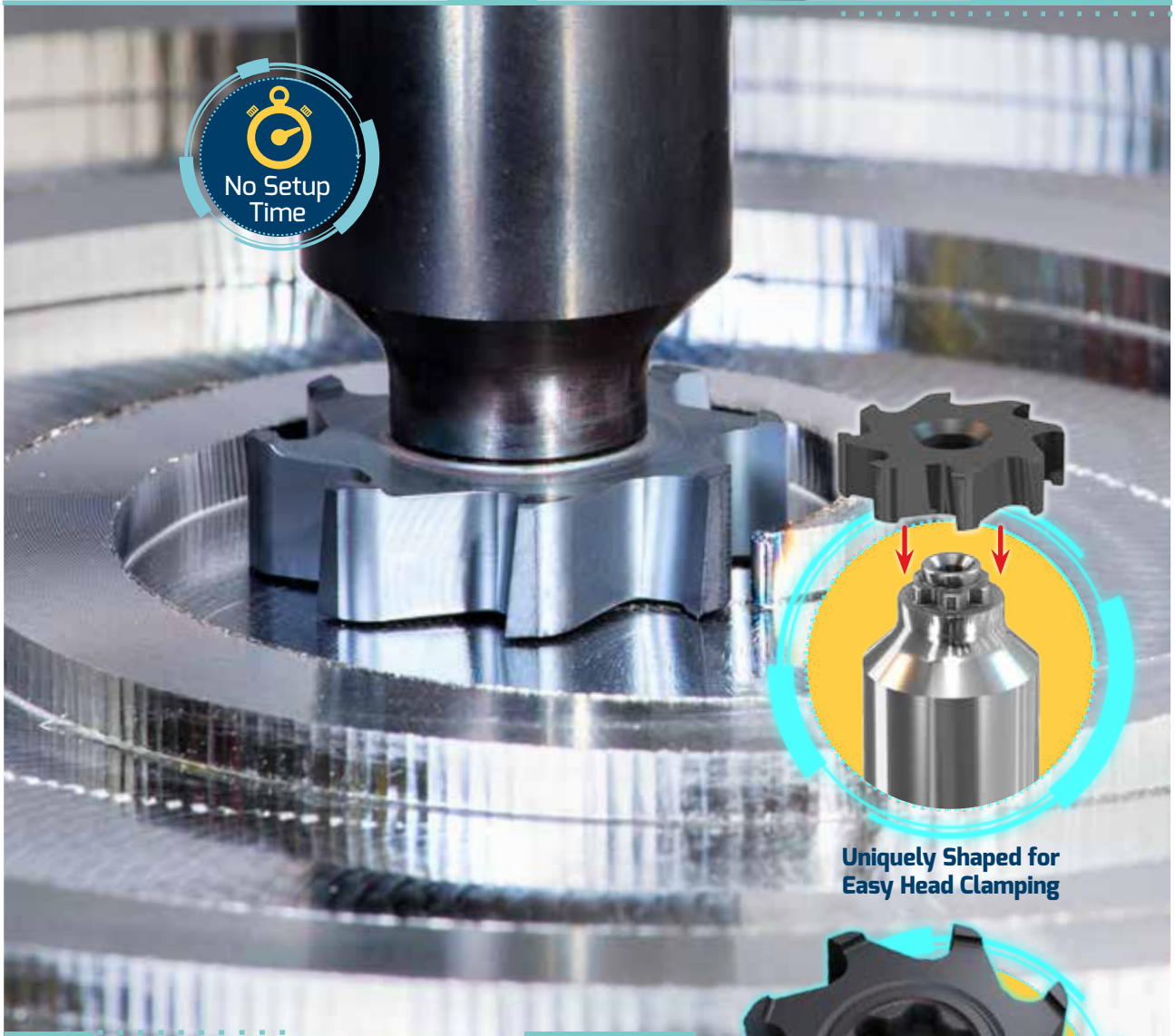
| Designation | Dimensions | | | | | | | 908 | Recommended Machining Data |
|-----------------------|------------|------|------|--------------------|------|--------|-----------|-----|----------------------------|
| | DC | LF | APMX | NOF ⁽¹⁾ | RE | THSZMS | ∠ | | f _z (mm/t) |
| MM FM120-36R0.2-06T05 | 12.00 | 4.40 | 3.60 | 6 | 0.20 | T05 | T-20/3* | ● | 0.04-0.10 |
| MM FM160-48R0.4-06T06 | 16.00 | 5.60 | 4.80 | 6 | 0.40 | T06 | T-20/3* | ● | 0.05-0.10 |
| MM FM200-60R0.4-06T08 | 20.00 | 6.80 | 6.00 | 6 | 0.40 | T08 | T-40/3 L* | ● | 0.05-0.10 |
| MM FM250-75R0.4-06T10 | 25.00 | 8.40 | 7.50 | 6 | 0.40 | T10 | T-40/3 L* | ● | 0.05-0.10 |

⁽¹⁾ Number of flutes * Optional, should be ordered separately

T-FACE

FACE MILL

Indexable Solid Carbide Dia 32-50 mm Face Milling Master



Uniquely Shaped for
Easy Head Clamping

Small Diameter Exchangeable Solid Carbide Heads for Face Milling



High
Productivity



Shorter Overhang
Provides Stability



Precision

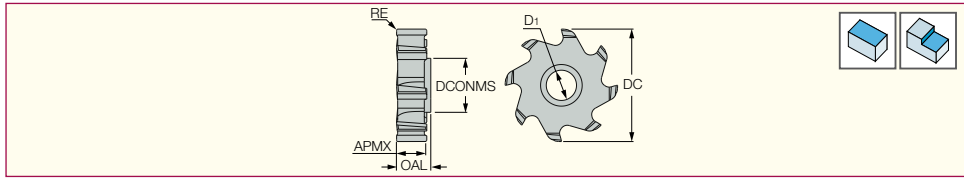


Cost Effective
Insert



Multiple Cutting Edges
Face Milling Heads

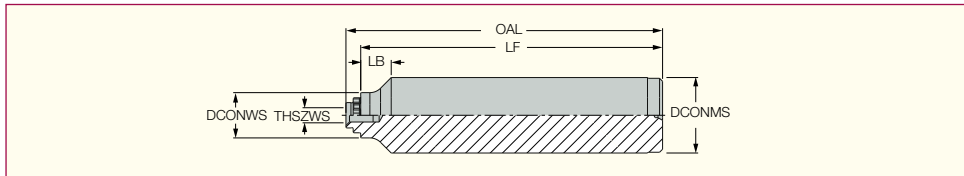
SD FM
Interchangeable Solid Carbide
Face Milling Heads



| Designation | Dimensions | | | | | | | IC908 | Recommended Machining Data |
|------------------------------|------------|-------|--------------------|------|------|--------|-------|-------|----------------------------|
| | DC | APMX | NOF ⁽¹⁾ | RE | D1 | DCONMS | OAL | | f _z (mm/t) |
| SD FM D32-8-R0.4-SP15 | 31.25 | 8.00 | 8 | 0.40 | 8.40 | 15.00 | 8.00 | ● | 0.04-0.15 |
| SD FM D40-10-R0.4SP17 | 39.25 | 10.00 | 10 | 0.40 | 9.80 | 17.00 | 10.00 | ● | 0.04-0.15 |
| SD FM D50-12-R0.4SP19 | 49.25 | 12.00 | 12 | 0.40 | 9.80 | 19.00 | 14.00 | ● | 0.04-0.15 |

⁽¹⁾ Number of flutes

SD FM-S-A-SP
Stepped Cylindrical Shanks
for Interchangeable Solid
Carbide Face Milling Heads






| Designation | DCONMS | DCONWS | THSZWS | LB | LF | OAL | Shank ⁽¹⁾ | WT ⁽²⁾ |
|--------------------------------|--------|--------|--------|-------|--------|--------|----------------------|-------------------|
| SD FM-S-A-L100-C25-SP15 | 25.00 | 15.00 | M5x0.5 | 10.10 | 100.00 | 104.90 | C | 0.37 |
| SD FM-S-A-L120-W25-SP15 | 25.00 | 15.00 | M5x0.5 | 10.10 | 120.00 | 124.90 | W | 0.44 |
| SD FM-S-A-L125-W32-SP17 | 32.00 | 17.00 | M6x0.5 | 12.50 | 125.00 | 131.00 | W | 0.75 |
| SD FM-S-A-L140-C32-SP17 | 32.00 | 17.00 | M6x0.5 | 12.50 | 140.00 | 146.00 | C | 0.85 |
| SD FM-S-A-L140-C32-SP19 | 32.00 | 19.00 | M6x0.5 | 10.00 | 140.00 | 148.50 | C | 1.41 |
| SD FM-S-A-L130-W40-SP19 | 40.00 | 19.00 | M6x0.5 | 14.00 | 130.00 | 138.50 | W | 1.21 |

• Apply lubricant to the clamping screw

⁽¹⁾ C-Cylindrical, W-Weldon

⁽²⁾ Item weight

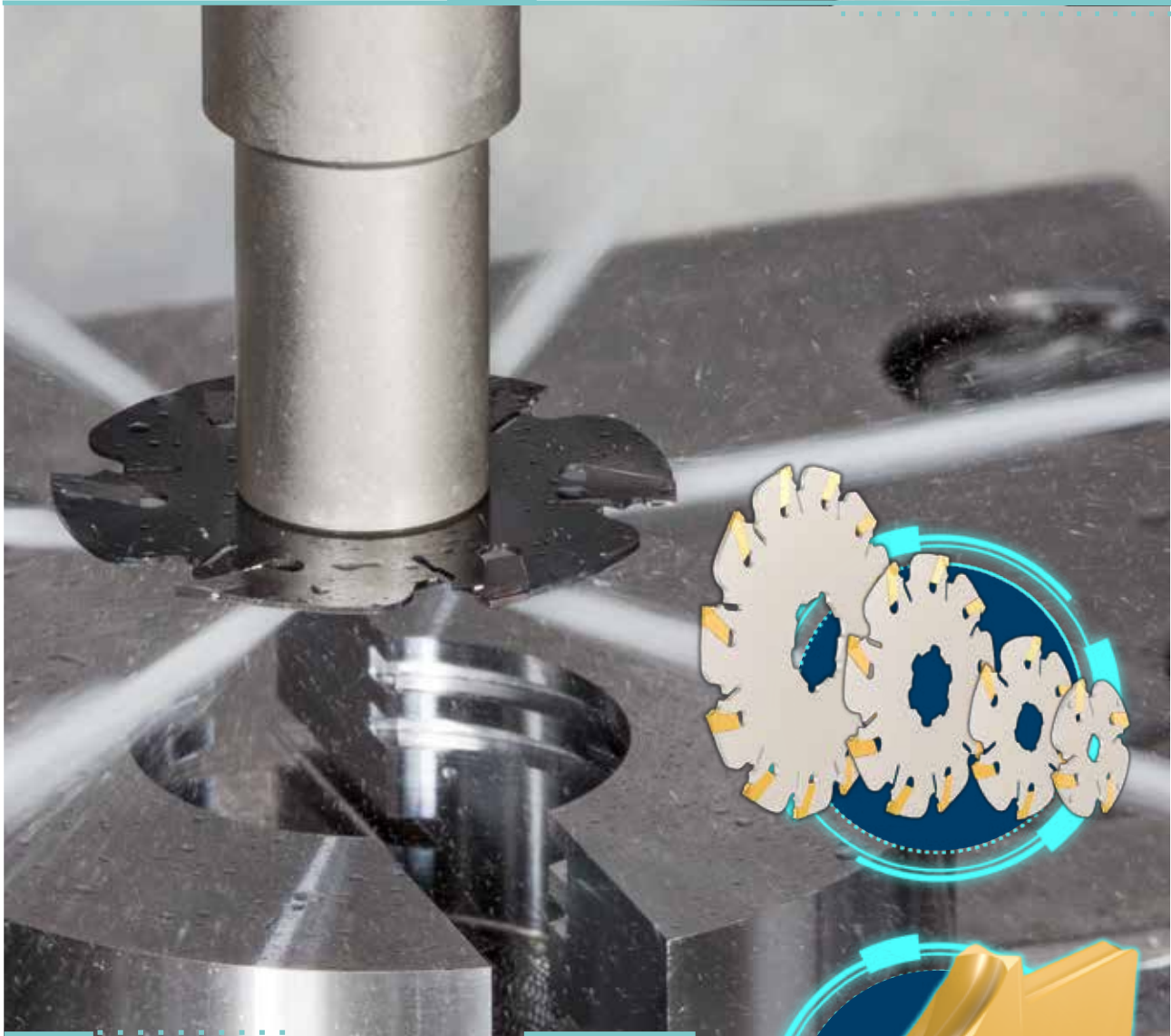
Spare Parts

| Designation |  |  |  |
|--------------------------------|---|---|---|
| SD FM-S-A-L100-C25-SP15 | SR M5X0.5-SP15-IP20-HG | BLD IP20/S7 | SW6-T-SH |
| SD FM-S-A-L120-W25-SP15 | SR M5X0.5-SP15-IP20-HG | BLD IP20/S7 | SW6-T-SH |
| SD FM-S-A-L125-W32-SP17 | SR M6X0.5-SP17-IP20-HG | BLD IP20/S7 | SW6-T-SH |
| SD FM-S-A-L140-C32-SP17 | SR M6X0.5-SP17-IP20-HG | BLD IP20/S7 | SW6-T-SH |
| SD FM-S-A-L140-C32-SP19 | SR M6X0.5-SP17-IP20-HG | BLD IP20/S7 | SW6-T-SH |
| SD FM-S-A-L130-W40-SP19 | SR M6X0.5-SP17-IP20-HG | BLD IP20/S7 | SW6-T-SH |

SLIMSLIT

NARROW SLITTING

Narrowest Indexable Cutter 0.8-1.2 mm Inserts Width Slitting Master



**Narrowest Indexable
Slitting Cutter
in the Market**



Narrow Insert



High Pressure
Coolant



New Generation



Cost Effective
Insert

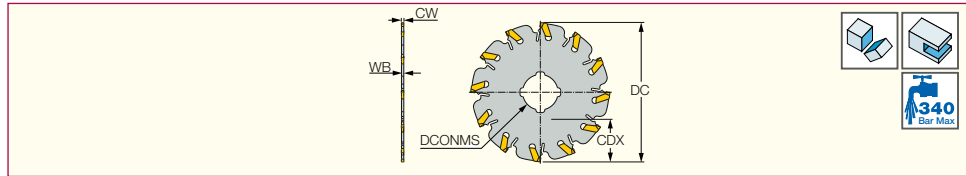


Narrowest Insert Width of
0.8 - 1.2mm

SLIMSLIT
NARROW SLITTING

SGST

Thin Slitting Cutters Carrying
SELF-GRIP Inserts



| Designation | DC | CW | CICT ⁽¹⁾ | WB | DCONMS | CDX | RPMX ⁽²⁾ | Insert | |
|---------------------------|-------|------|---------------------|------|--------|-------|---------------------|---------|----------|
| SGST 32-8-0.8-4Z | 32.00 | 0.80 | 4 | 0.69 | 8.00 | 8.00 | 2490 | GFT 0.8 | ESG-SLM* |
| SGST 32-8-1.0-4Z | 32.00 | 1.00 | 4 | 0.90 | 8.00 | 8.00 | 2490 | GFT 1.0 | ESG-SLM* |
| SGST 32-8-1.2-4Z | 32.00 | 1.20 | 4 | 1.06 | 8.00 | 8.00 | 2490 | GFT 1.2 | ESG-SLM* |
| SGST 40-10-0.8-6Z | 40.00 | 0.80 | 6 | 0.69 | 10.00 | 12.00 | 1990 | GFT 0.8 | ESG-SLM* |
| SGST 40-10-1.0-6Z | 40.00 | 1.00 | 6 | 0.90 | 10.00 | 12.00 | 1990 | GFT 1.0 | ESG-SLM* |
| SGST 40-10-1.2-6Z | 40.00 | 1.20 | 6 | 1.06 | 10.00 | 12.00 | 1990 | GFT 1.2 | ESG-SLM* |
| SGST 50-13-0.8-9Z | 50.00 | 0.80 | 9 | 0.69 | 13.00 | 12.50 | 1590 | GFT 0.8 | ESG-SLM* |
| SGST 50-13-1.0-9Z | 50.00 | 1.00 | 9 | 0.90 | 13.00 | 12.50 | 1590 | GFT 1.0 | ESG-SLM* |
| SGST 50-13-1.2-9Z | 50.00 | 1.20 | 9 | 1.06 | 13.00 | 12.50 | 1590 | GFT 1.2 | ESG-SLM* |
| SGST 63-16-1.0-12Z | 63.00 | 1.00 | 12 | 0.90 | 16.00 | 19.00 | 1260 | GFT 1.0 | ESG-SLM* |
| SGST 63-16-1.2-12Z | 63.00 | 1.20 | 12 | 1.06 | 16.00 | 19.00 | 1260 | GFT 1.2 | ESG-SLM* |

⁽¹⁾ Number of inserts

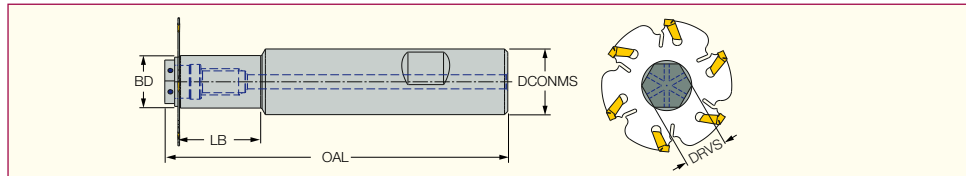
⁽²⁾ Maximum RPM

* Optional, should be ordered separately

SLIMSLIT
NARROW SLITTING

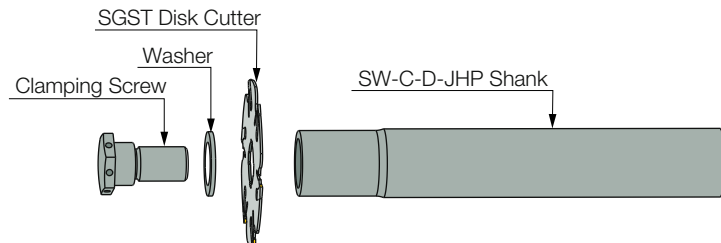
SW-C-D-JHP

Shanks for SGST Slim Slot
Milling Disk Cutters



| Designation | DCONMS | BD | LB | OAL | DRVS ⁽¹⁾ | | |
|-----------------------|--------|-------|-------|--------|---------------------|---------------------|-------------|
| SW 16C-D32-JHP | 16.00 | 15.00 | 25.00 | 104.00 | 13.0 | SCREW CLAMP-D32-JHP | MM KEY 13X8 |
| SW 20C-D40-JHP | 20.00 | 16.00 | 25.00 | 104.00 | 13.0 | SCREW CLAMP-D40-JHP | MM KEY 13X8 |
| SW 25C-D50-JHP | 25.00 | - | - | 115.00 | 20.0 | SCREW CLAMP-D50-JHP | MM KEY 20 |
| SW 25C-D63-JHP | 25.00 | - | - | 115.00 | 20.0 | SCREW CLAMP-D63-JHP | MM KEY 20 |

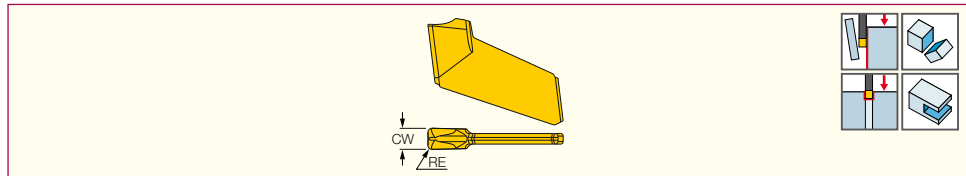
⁽¹⁾ Key flat size



SLIMGRIP
NARROW INSERTS

GFT-J

Thin Parting, Grooving & Slitting
Single-Ended Inserts for Soft Materials



| Designation | Dimensions | | Tough ↔ Hard | | Recommended Machining Data |
|----------------------|------------|------|--------------|--------|-----------------------------------|
| | CW | RE | IC1028 | IC1008 | |
| GFT 0.8J-0.1 | 0.80 | 0.10 | • | • | f groove (mm/rev) 0.03-0.08 |
| GFT 1.0J-0.1 | 1.00 | 0.10 | • | • | 0.03-0.10 |
| GFT 1.2J-0.14 | 1.20 | 0.14 | • | • | 0.03-0.10 |
| GFT 1.6J-0.16 | 1.60 | 0.16 | • | • | 0.03-0.12 |

Indexable Solid Carbide Gear Master



Uniquely Shaped for
Easy Head Clamping

Indexable Solid Carbide Heads for Machining Involute Gear Profiles



Precise
Indexable
Head



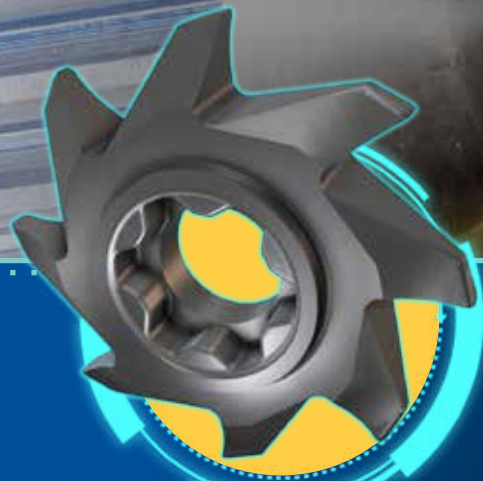
Strong Mechanism
of Torque Transfer to
the Head



High
Productivity



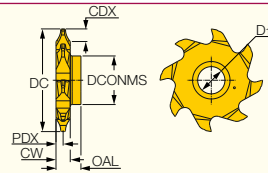
Cost Effective
Insert



Solid Head with 8 Teeth

SD-M-N-SP

Interchangeable Solid Carbide Heads
for Involute Gear Profile Milling
According to DIN 3972 Basic Profile ||



| Designation | Dimensions | | | | | | | | | | IC908 |
|------------------------------|------------|------------------------|-------|-----|------|------|---------------------|--------|------|------|-------|
| | Module | T range ⁽¹⁾ | DC | PDX | CW | CDX | CEDC ⁽²⁾ | DCONMS | D1 | OAL | |
| SD D32-M1.00-NO1-SP15 | 1.00 | 12-13 | 32.00 | 2.2 | 4.40 | 2.50 | 8 | 15.00 | 8.40 | 7.70 | ● |
| SD D32-M1.00-NO2-SP15 | 1.00 | 14-16 | 32.00 | 2.2 | 4.40 | 2.50 | 8 | 15.00 | 8.40 | 7.70 | ● |
| SD D32-M1.25-NO3-SP15 | 1.25 | 17-20 | 32.00 | 2.2 | 4.40 | 3.00 | 8 | 15.00 | 8.40 | 7.70 | ● |
| SD D32-M1.25-NO4-SP15 | 1.25 | 21-25 | 32.00 | 2.2 | 4.40 | 3.00 | 8 | 15.00 | 8.40 | 7.70 | ● |
| SD D32-M1.50-NO5-SP15 | 1.50 | 26-34 | 32.00 | 2.2 | 4.40 | 3.50 | 8 | 15.00 | 8.40 | 7.70 | ● |
| SD D32-M1.50-NO6-SP15 | 1.50 | 35-54 | 32.00 | 2.2 | 4.40 | 3.50 | 8 | 15.00 | 8.40 | 7.70 | ● |
| SD D32-M1.75-NO7-SP15 | 1.75 | 55-134 | 32.00 | 2.7 | 5.40 | 4.25 | 8 | 15.00 | 8.40 | 7.70 | ● |
| SD D32-M1.75-NO8-SP15 | 1.75 | >134 | 32.00 | 2.7 | 5.40 | 4.25 | 8 | 15.00 | 8.40 | 7.70 | ● |
| SD D32-M2.00-NO4-SP15 | 2.00 | 21-25 | 32.00 | 3.2 | 6.40 | 4.50 | 8 | 15.00 | 8.40 | 7.70 | ● |
| SD D32-M2.00-NO5-SP15 | 2.00 | 26-34 | 32.00 | 3.2 | 6.40 | 4.50 | 8 | 15.00 | 8.40 | 7.70 | ● |

• Tightening torque 4 Nxm

⁽¹⁾ Gear teeth range

⁽²⁾ Number of cutting edges

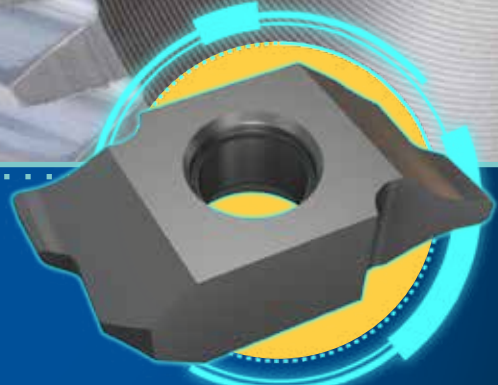


Indexable Gear Milling Profiling Master



Tool Diameter 63 mm
Shank 25 mm

Precise **Involute** Profile Insert for **Gear Machining**



Insert with 2 Cutting Edges



Tangential
Insert



High Pressure
Coolant



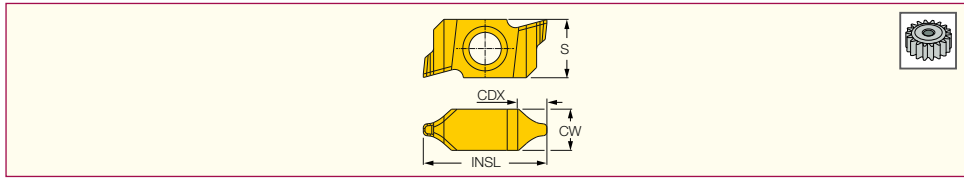
High
Productivity



Cost Effective
Insert

LNET 18-M

Indexable Inserts for Involute
Gear Profile Milling According
to DIN 3972 Basic Profile ||



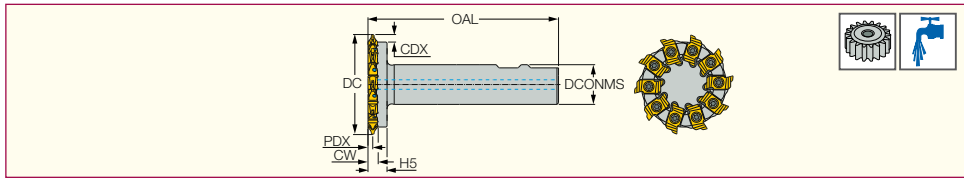
| Designation | Dimensions | | | | | | IC908 |
|---------------------------------|------------|------------------------|------|------|-------|------|-------|
| | Module | T range ⁽¹⁾ | CW | CDX | INSL | S | |
| LNET 18-M1.50-NO3-C-CL10 | 1.50 | 17-20 | 6.00 | 4.50 | 18.00 | 8.50 | ● |

• Other gear profiles within module 1.0-1.75 mm range can be provided on request

⁽¹⁾ Gear teeth range

ETS Gear Mill

Tools for Milling Gear Profile Carrying
Tangentially Clamped Inserts



| Designation | DC | PDX | CDX | CW | CICT ⁽¹⁾ | H5 | DCONMS | OAL |
|------------------------------|-------|-----|------|------|---------------------|-------|--------|--------|
| ETS D63-M1-1.75-W25-C | 63.00 | 3.0 | 4.50 | 6.00 | 10 | 12.00 | 25.00 | 120.00 |

• Other cutter diameters with alternative connection options (shank or arbor-type) can be provided on request

⁽¹⁾ Number of inserts

Spare Parts

| Designation |  |  |
|----------------------|---|---|
| ETS Gear Mill | SR 14-500-L11.5 | T-15/51-BE |



MINSLIT
SMALL DIA SLIT

Mini Slitting with Threaded Connection 16-22 mm Dia

Mini Master



Two Types of Head Connections
Multi-Master and FLEXFIT



10 X Magnified



Small Insert with
2 Cutting Edges

Small Diameter Slitting Cutter
with Unique Small
2 Cutting Edged Insert



Ease of Use



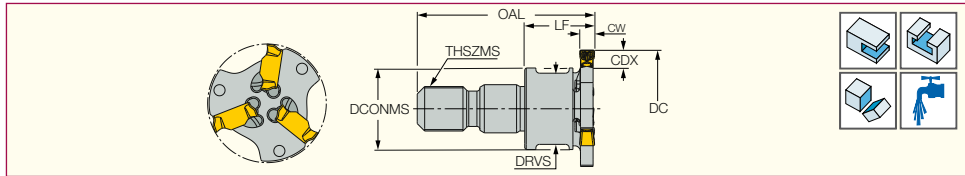
High Pressure
Coolant



Cost
Effective

LOGIQMILL
ISCAR CHESS LINES

DGSM-M-JHP
Grooving and Slitting Small
Diameter Cutters with FLEXFIT
Threaded Adaptation

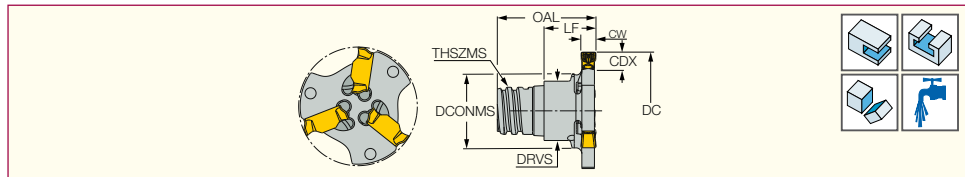


| Designation | DC | CW | CDX | DCONMS | THSZMS | LF | OAL | DRVS ⁽¹⁾ |
|----------------------|-------|------|------|--------|--------|-------|-------|---------------------|
| DGSM 16-2-M06-3Z-JHP | 16.00 | 2.00 | 2.20 | 9.80 | M06 | 12.00 | 29.50 | 8.0 |
| DGSM 16-3-M06-3Z-JHP | 16.00 | 3.00 | 2.20 | 9.80 | M06 | 12.00 | 29.50 | 8.0 |
| DGSM 18-2-M06-3Z-JHP | 18.00 | 2.00 | 3.20 | 9.80 | M06 | 12.00 | 29.50 | 8.0 |
| DGSM 18-3-M06-3Z-JHP | 18.00 | 3.00 | 3.20 | 9.80 | M06 | 12.00 | 29.50 | 8.0 |
| DGSM 22-2-M08-3Z-JHP | 22.00 | 2.00 | 4.80 | 13.00 | M08 | 12.00 | 29.50 | 9.6 |
| DGSM 22-3-M08-3Z-JHP | 22.00 | 3.00 | 4.80 | 13.00 | M08 | 12.00 | 29.50 | 9.6 |

• For inserts: DGM-V

⁽¹⁾ Key flat size

DGSM-MM-JHP
Grooving and Slitting Small
Diameter Cutters with MULTI-
MASTER Threaded Adaptation

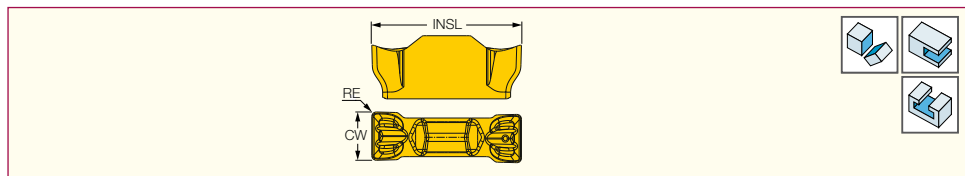


| Designation | DC | CW | CDX | DCONMS | THSZMS | LF | OAL | DRVS ⁽¹⁾ |
|------------------------|-------|------|------|--------|--------|------|-------|---------------------|
| DGSM 16-2-M06-3Z-JHP | 16.00 | 2.00 | 2.20 | 9.60 | T06 | 9.15 | 15.80 | 8.0 |
| DGSM 16-3-MMT06-3Z-JHP | 16.00 | 3.00 | 2.20 | 9.60 | T06 | 9.15 | 15.80 | 8.0 |
| DGSM 18-2-MMT06-3Z-JHP | 18.00 | 2.00 | 3.20 | 9.60 | T06 | 9.15 | 15.80 | 8.0 |
| DGSM 18-3-MMT06-3Z-JHP | 18.00 | 3.00 | 3.20 | 9.60 | T06 | 9.15 | 15.80 | 8.0 |
| DGSM 22-2-MMT08-4Z-JHP | 22.00 | 2.00 | 4.80 | 11.50 | T08 | 9.15 | 21.80 | 10.0 |
| DGSM 22-3-MMT08-4Z-JHP | 22.00 | 3.00 | 4.80 | 11.50 | T08 | 9.15 | 21.80 | 10.0 |

• For inserts: DGM-V

⁽¹⁾ Key flat size

DGM-V
Small Double-Sided Inserts with
Ridged Positive Chipformer
for Slitting and Grooving of
Wide Range of Materials

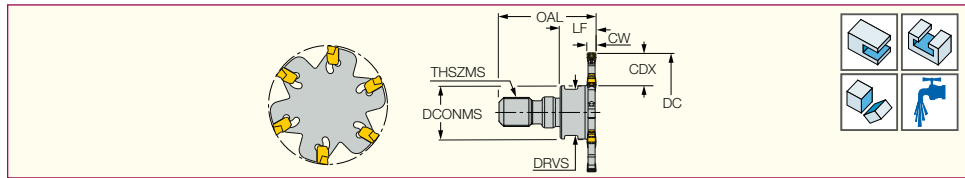


| Designation | Dimensions | | | IC1008 | Recommended Machining Data |
|-------------|------------|------|------|--------|----------------------------|
| | CW | RE | INSL | | f groove (mm/t) |
| DGM 2002V | 2.00 | 0.20 | 6.20 | • | 0.03-0.10 |
| DGM 3002V | 3.00 | 0.20 | 6.20 | • | 0.04-0.15 |

SELFGRIP

SGSF/A-M-JHP

Grooving and Slitting Small Diameter Cutters with FLEXFIT Threaded Adaptation



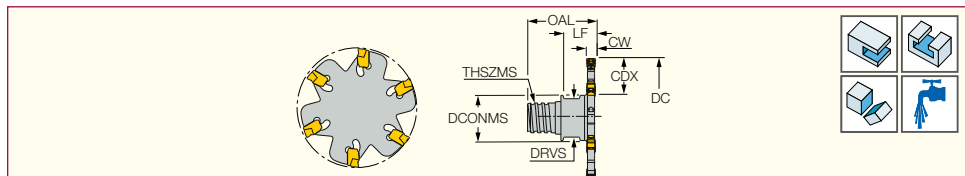
| Designation | DC | CW | CDX | DCONMS | THSZMS | LF | OAL | DRVS ⁽¹⁾ | Insert |
|-----------------------------|-------|------|-------|--------|--------|-------|-------|---------------------|-----------|
| SGSF 32-2-M08-3Z-JHP | 32.00 | 2.00 | 7.80 | 13.00 | M08 | 12.00 | 29.50 | 9.6 | GSFN 2... |
| SGSA 32-3-M08-4Z-JHP | 32.00 | 3.00 | 7.80 | 13.00 | M08 | 12.00 | 29.50 | 9.6 | GSAN 3... |
| SGSF 40-2-M10-4Z-JHP | 40.00 | 2.00 | 11.80 | 18.00 | M10 | 12.00 | 29.50 | 15.0 | GSFN 2... |
| SGSA 40-3-M10-6Z-JHP | 40.00 | 3.00 | 11.80 | 18.00 | M10 | 12.00 | 29.50 | 15.0 | GSAN 3... |

⁽¹⁾ Key flat size

SELFGRIP

SGSF/A-MM-JHP

Grooving and Slitting Small Diameter Cutters with MULTI-MASTER Threaded Adaptation



| Designation | DC | CW | CDX | DCONMS | THSZMS | LF | OAL | DRVS ⁽¹⁾ | Insert |
|-------------------------------|-------|------|-------|--------|--------|-------|-------|---------------------|-----------|
| SGSF 32-2-MMT08-3Z-JHP | 32.00 | 2.00 | 9.00 | 11.70 | T08 | 10.60 | 18.10 | 10.0 | GSFN 2... |
| SGSA 32-3-MMT08-4Z-JHP | 32.00 | 3.00 | 9.00 | 11.70 | T08 | 11.40 | 18.90 | 10.0 | GSAN 3... |
| SGSF 40-2-MMT10-4Z-JHP | 40.00 | 2.00 | 11.30 | 15.30 | T10 | 10.60 | 21.90 | 13.0 | GSFN 2... |
| SGSA 40-3-MMT10-6Z-JHP | 40.00 | 3.00 | 11.30 | 15.30 | T10 | 11.40 | 22.70 | 13.0 | GSAN 3... |

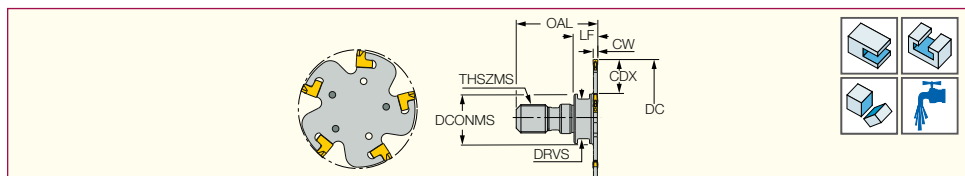
⁽¹⁾ Key flat size

For inserts: GSFN

TANGSLIT

TGSF-M-JHP

Grooving and Slitting Small Diameter Cutters with FLEXFIT Threaded Adaptation



| Designation | DC | CW | CDX | DCONMS | THSZMS | LF | OAL | DRVS ⁽¹⁾ |
|-----------------------------|-------|------|-------|--------|--------|-------|-------|---------------------|
| TGSF 50-2-M12 5Z-JHP | 50.00 | 2.00 | 14.30 | 21.00 | M12 | 12.00 | 34.00 | 17.0 |
| TGSF 50-3-M12 4Z-JHP | 50.00 | 3.00 | 14.30 | 21.00 | M12 | 12.00 | 34.00 | 17.0 |

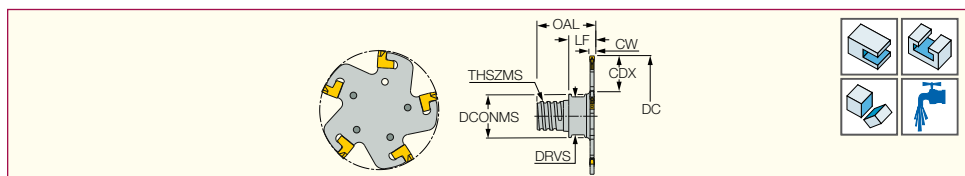
⁽¹⁾ Key flat size

For inserts: TAG N-A • TAG N-C/W/M • TAG N-J/JT • TAG N-MF

TANGSLIT

TGSF-MM-JHP

Grooving and Slitting Small Diameter Cutters with MULTI-MASTER Threaded Adaptation



| Designation | DC | CW | CDX | DCONMS | THSZMS | LF | OAL | DRVS ⁽¹⁾ |
|----------------------------|-------|------|-------|--------|--------|-------|-------|---------------------|
| TGSF 50-2-MM 5Z JHP | 50.00 | 2.00 | 15.30 | 19.00 | T12 | 11.50 | 24.00 | 16.0 |
| TGSF 50-3-MM 5Z JHP | 50.00 | 3.00 | 15.30 | 19.00 | T12 | 11.50 | 24.00 | 16.0 |

⁽¹⁾ Key flat size

For inserts: TAG N-A • TAG N-C/W/M • TAG N-J/JT • TAG N-MF

LOGIQ HOLD

ISCAR CHESS LINES



High Productivity



For All
Materials



New Generation



Cost Effective

MACHINING INTELLENTLY DUSTRY 4.0

Jet Coolant Chuck Master



Thermal Shrink Chucks
with **Coolant Jet Channels**
along the Shank

Shrink Chuck **Through-Tool Coolant** Solution for Solid Carbide and HSS Tools



High Pressure
Coolant



Innovative



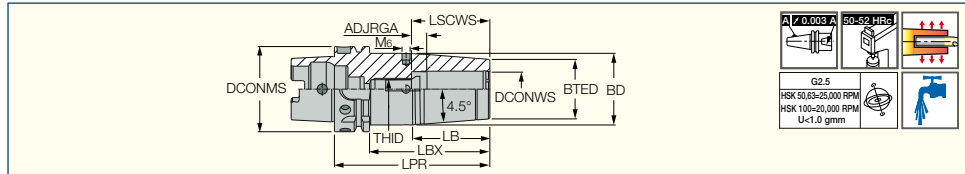
Effective Chip
Evacuation



Cost Effective
Prolonged Tool Life

HSK A-SRKIN-CX

Thermal Shrink Chucks with HSK
DIN69893 Form A Tapered Shank
and Coolant Jet Channels along
the Shank Bore



| Designation | DCONMS | DCONWS | BTED | BD | LPR | LBX | LB | ADJRGA | LSCWS | THID | Key ⁽¹⁾ | WT ⁽²⁾ |
|-------------------------|--------|--------|-------|-------|--------|-------|-------|--------|-------|------|--------------------|-------------------|
| HSK A63 SRKIN6X80 CX | 63.00 | 6.00 | 21.00 | 27.00 | 80.00 | 54.00 | 38.10 | 9.50 | 34.0 | M5 | 2.50 | 0.83 |
| HSK A63 SRKIN6X120 CX | 63.00 | 6.00 | 21.00 | 27.00 | 120.00 | 94.00 | 38.10 | 9.50 | 34.0 | M5 | 2.50 | 1.00 |
| HSK A63 SRKIN8X80 CX | 63.00 | 8.00 | 21.00 | 27.00 | 80.00 | 54.00 | 38.10 | 9.50 | 34.0 | M6 | 3.00 | 0.85 |
| HSK A63 SRKIN8X120 CX | 63.00 | 8.00 | 21.00 | 27.00 | 120.00 | 94.00 | 38.10 | 9.50 | 34.0 | M6 | 3.00 | 1.05 |
| HSK A63 SRKIN10X85 CX | 63.00 | 10.00 | 24.00 | 32.00 | 85.00 | 59.00 | 50.80 | 9.30 | 39.8 | M8 | 4.00 | 0.87 |
| HSK A63 SRKIN10X120 CX | 63.00 | 10.00 | 24.00 | 32.00 | 120.00 | 94.00 | 50.80 | 9.30 | 39.8 | M8 | 4.00 | 1.07 |
| HSK A63 SRKIN12X90 CX | 63.00 | 12.00 | 24.00 | 32.00 | 90.00 | 64.00 | 50.80 | 9.30 | 44.8 | M10 | 5.00 | 0.90 |
| HSK A63 SRKIN12X120 CX | 63.00 | 12.00 | 24.00 | 32.00 | 120.00 | 94.00 | 50.80 | 9.30 | 44.8 | M10 | 5.00 | 1.15 |
| HSK A63 SRKIN14X90 CX | 63.00 | 14.00 | 27.00 | 34.00 | 90.00 | 64.00 | 44.50 | 9.30 | 44.8 | M10 | 5.00 | 1.02 |
| HSK A63 SRKIN16X75 CX | 63.00 | 16.00 | 27.00 | 34.00 | 75.00 | 49.00 | 44.50 | 7.50 | 46.0 | M5 | 2.50 | 0.82 |
| HSK A63 SRKIN16X95 CX | 63.00 | 16.00 | 27.00 | 34.00 | 95.00 | 69.00 | 44.50 | 9.30 | 47.8 | M12 | 6.00 | 1.00 |
| HSK A63 SRKIN16X120 CX | 63.00 | 16.00 | 27.00 | 34.00 | 120.00 | 94.00 | 44.50 | 9.30 | 47.8 | M12 | 6.00 | 1.20 |
| HSK A63 SRKIN18X95 CX | 63.00 | 18.00 | 33.00 | 42.00 | 95.00 | 69.00 | 57.20 | 9.30 | 47.8 | M12 | 6.00 | 1.20 |
| HSK A63 SRKIN20X75 CX | 63.00 | 20.00 | 33.00 | 41.00 | 75.00 | 49.00 | - | 5.50 | 46.0 | M5 | 2.50 | 0.92 |
| HSK A63 SRKIN20X100 CX | 63.00 | 20.00 | 33.00 | 42.00 | 100.00 | 74.00 | 57.20 | 8.50 | 49.0 | M16 | 8.00 | 1.18 |
| HSK A63 SRKIN20X120 CX | 63.00 | 20.00 | 33.00 | 42.00 | 120.00 | 94.00 | 57.20 | 8.50 | 49.0 | M16 | 8.00 | 1.38 |
| HSK A63 SRKIN25X85 CX | 63.00 | 25.00 | 44.00 | 52.20 | 85.00 | 59.00 | 52.10 | 9.50 | 56.0 | M5 | 2.50 | 1.26 |
| HSK A63 SRKIN32X85 CX | 63.00 | 32.00 | 44.00 | 52.20 | 85.00 | 59.00 | 52.10 | 9.50 | 56.0 | M5 | 2.50 | 1.11 |
| HSK A100 SRKIN6X85 CX | 100.00 | 6.00 | 21.00 | 27.00 | 85.00 | 56.00 | 38.10 | 9.50 | 34.0 | M5 | 2.50 | 2.21 |
| HSK A100 SRKIN8X85 CX | 100.00 | 8.00 | 21.00 | 27.00 | 85.00 | 56.00 | 38.10 | 9.50 | 34.0 | M6 | 3.00 | 2.21 |
| HSK A100 SRKIN10X90 CX | 100.00 | 10.00 | 24.00 | 32.00 | 90.00 | 61.00 | 50.80 | 9.30 | 39.8 | M8 | 4.00 | 2.29 |
| HSK A100 SRKIN12X95 CX | 100.00 | 12.00 | 24.00 | 32.00 | 95.00 | 66.00 | 50.80 | 9.30 | 44.8 | M10 | 5.00 | 2.30 |
| HSK A100 SRKIN14X95 CX | 100.00 | 14.00 | 27.00 | 34.00 | 95.00 | 66.00 | 44.50 | 9.30 | 44.8 | M10 | 5.00 | 2.36 |
| HSK A100 SRKIN16X100 CX | 100.00 | 16.00 | 27.00 | 34.00 | 100.00 | 71.00 | 44.50 | 9.30 | 47.8 | M12 | 6.00 | 2.37 |
| HSK A100 SRKIN18X100 CX | 100.00 | 18.00 | 33.00 | 42.00 | 100.00 | 71.00 | 57.20 | 9.30 | 47.8 | M12 | 6.00 | 2.53 |
| HSK A100 SRKIN20X105 CX | 100.00 | 20.00 | 33.00 | 42.00 | 105.00 | 76.00 | 57.20 | 8.50 | 49.0 | M16 | 8.00 | 2.57 |
| HSK A100 SRKIN25X115 CX | 100.00 | 25.00 | 44.00 | 53.00 | 115.00 | 86.00 | 57.20 | 9.50 | 56.0 | M16 | 8.00 | 3.07 |
| HSK A100 SRKIN32X120 CX | 100.00 | 32.00 | 44.00 | 53.00 | 120.00 | 91.00 | 57.20 | 8.50 | 59.0 | M16 | 8.00 | 2.98 |

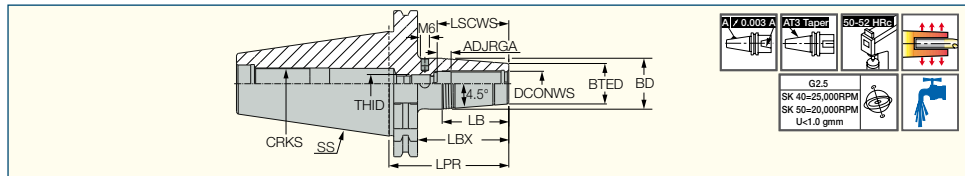
- A cooling tube must be used with all coolant through HSK spindles (should be ordered separately)
- Use only inductive heating device for SRKIN holders

⁽¹⁾ Adjustment screw hexagon key size

⁽²⁾ Item weight

DIN69871-SRKIN-CX

Thermal Shrink Chucks with DIN69871
Form AD Tapered Shank and Coolant
Jet Channels along the Shank Bore



| Designation | SS | DCONWS | BTED | BD | LPR | LBX | LB | LSCWS | ADJRGA | THID | Key ⁽¹⁾ | CRKS | WT ⁽²⁾ |
|---------------------------|----|--------|-------|-------|--------|-------|-------|-------|--------|------|--------------------|------|-------------------|
| DIN69871 40 SRKIN 6X80 CX | 40 | 6.00 | 21.00 | 27.00 | 80.00 | 60.90 | 38.00 | 34.0 | 9.50 | M5 | 2.50 | M16 | 0.99 |
| DIN69871 40 SRKIN 8X80 CX | 40 | 8.00 | 21.00 | 27.00 | 80.00 | 60.90 | 38.00 | 34.0 | 9.50 | M6 | 3.00 | M16 | 1.00 |
| DIN69871 40 SRKIN 10X80CX | 40 | 10.00 | 24.00 | 32.00 | 80.00 | 60.90 | 51.00 | 39.8 | 9.30 | M8 | 4.00 | M16 | 1.05 |
| DIN69871 40 SRKIN 12X80CX | 40 | 12.00 | 24.00 | 32.00 | 80.00 | 60.90 | 51.00 | 44.8 | 9.30 | M10 | 5.00 | M16 | 1.05 |
| DIN69871 40 SRKIN 14X80CX | 40 | 14.00 | 27.00 | 34.00 | 80.00 | 60.90 | 45.00 | 44.8 | 9.30 | M10 | 5.00 | M16 | 1.15 |
| DIN69871 40 SRKIN 16X80CX | 40 | 16.00 | 27.00 | 34.00 | 80.00 | 60.90 | 45.00 | 47.8 | 9.30 | M12 | 6.00 | M16 | 1.07 |
| DIN69871 40 SRKIN 18X80CX | 40 | 18.00 | 33.00 | 42.00 | 80.00 | 60.90 | 57.00 | 47.8 | 9.30 | M12 | 6.00 | M16 | 1.21 |
| DIN69871 40 SRKIN 20X80CX | 40 | 20.00 | 33.00 | 42.00 | 80.00 | 60.90 | 57.00 | 49.0 | 8.50 | M16 | 8.00 | M16 | 1.16 |
| DIN69871 40 SRKIN25X100CX | 40 | 25.00 | 44.00 | 53.00 | 100.00 | 80.90 | 57.00 | 55.0 | 8.50 | M16 | 8.00 | M16 | 1.71 |
| DIN69871 40 SRKIN32X100CX | 40 | 32.00 | 44.00 | 53.00 | 100.00 | 80.90 | 57.00 | 59.0 | 8.50 | M16 | 8.00 | M16 | 1.60 |
| DIN69871 50 SRKIN 6X80 CX | 50 | 6.00 | 21.00 | 27.00 | 80.00 | 61.00 | 38.00 | 34.0 | 9.50 | M5 | 2.50 | M24 | 2.72 |
| DIN69871 50 SRKIN 8X80 CX | 50 | 8.00 | 21.00 | 27.00 | 80.00 | 60.90 | 38.00 | 34.0 | 9.50 | M6 | 3.00 | M24 | 2.71 |
| DIN69871 50 SRKIN 10X80CX | 50 | 10.00 | 24.00 | 32.00 | 80.00 | 60.90 | 51.00 | 39.8 | 9.30 | M8 | 4.00 | M24 | 2.81 |
| DIN69871 50 SRKIN 12X80CX | 50 | 12.00 | 24.00 | 32.00 | 80.00 | 60.90 | 51.00 | 44.8 | 9.30 | M10 | 5.00 | M24 | 2.79 |
| DIN69871 50 SRKIN 14X80CX | 50 | 14.00 | 27.00 | 34.00 | 80.00 | 60.90 | 45.00 | 44.8 | 9.30 | M10 | 5.00 | M24 | 2.84 |
| DIN69871 50 SRKIN 16X80CX | 50 | 16.00 | 27.00 | 34.00 | 80.00 | 60.90 | 45.00 | 47.8 | 9.30 | M12 | 6.00 | M24 | 2.76 |
| DIN69871 50 SRKIN 18X80CX | 50 | 18.00 | 33.00 | 42.00 | 80.00 | 60.90 | 57.00 | 47.8 | 9.30 | M12 | 6.00 | M24 | 2.90 |
| DIN69871 50 SRKIN 20X80CX | 50 | 20.00 | 33.00 | 42.00 | 80.00 | 60.90 | 57.00 | 49.0 | 8.50 | M16 | 8.00 | M24 | 2.92 |
| DIN69871 50 SRKIN25X100CX | 50 | 25.00 | 44.00 | 53.00 | 100.00 | 80.90 | 57.00 | 55.0 | 8.50 | M16 | 8.00 | M24 | 3.51 |
| DIN69871 50 SRKIN32X100CX | 50 | 32.00 | 44.00 | 53.00 | 100.00 | 80.90 | 57.00 | 59.0 | 8.50 | M16 | 8.00 | M24 | 3.36 |

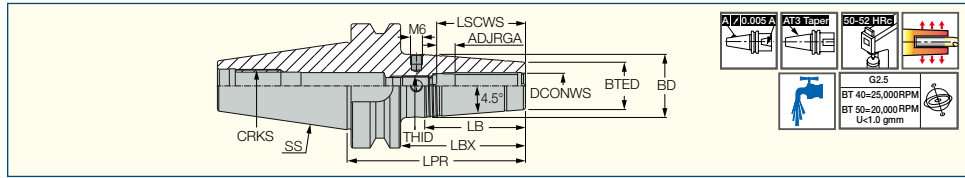
- Use only inductive heating device for SRKIN holders

⁽¹⁾ Hex key size for the rear stopper screw

⁽²⁾ Item weight

BT-SRKIN-CX

Thermal Shrink Chucks with BT MAS-403
Form AD Tapered Shank and Coolant Jet
Channels along the Shank Bore



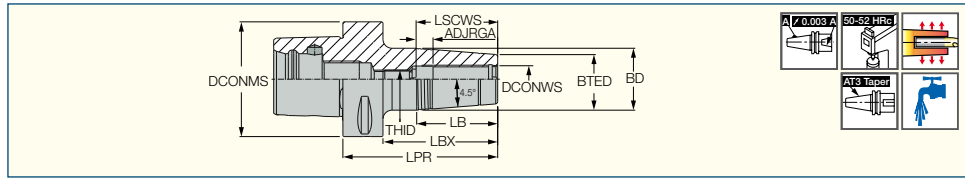
| Designation | SS | DCONWS | BTED | BD | LPR | LBX | LB | LSCWS | ADJRGA | THID | Key | CRKS | WT ⁽¹⁾ |
|-----------------------------|----|--------|-------|-------|--------|-------|-------|-------|--------|------|------|------|-------------------|
| BT40 SRKIN 6X90 CX | 40 | 6.00 | 21.00 | 27.00 | 90.00 | 63.00 | 38.00 | 34.0 | 9.50 | M5 | 2.50 | M16 | 1.13 |
| BT40 SRKIN 8X90 CX | 40 | 8.00 | 21.00 | 27.00 | 90.00 | 63.00 | 38.00 | 34.0 | 9.50 | M6 | 3.00 | M16 | 1.07 |
| BT40 SRKIN 10X90 CX | 40 | 10.00 | 24.00 | 32.00 | 90.00 | 63.00 | 50.80 | 39.8 | 9.30 | M8 | 4.00 | M16 | 1.23 |
| BT40 SRKIN 12X90 CX | 40 | 12.00 | 24.00 | 32.00 | 90.00 | 63.00 | 50.80 | 44.8 | 9.30 | M10 | 5.00 | M16 | 1.13 |
| BT40 SRKIN 14X90 CX | 40 | 14.00 | 27.00 | 34.00 | 90.00 | 63.00 | 44.50 | 44.8 | 9.30 | M10 | 5.00 | M16 | 1.26 |
| BT40 SRKIN 16X90 CX | 40 | 16.00 | 27.00 | 34.00 | 90.00 | 63.00 | 44.50 | 47.8 | 9.30 | M12 | 6.00 | M16 | 1.23 |
| BT40 SRKIN 18X90 CX | 40 | 18.00 | 33.00 | 42.00 | 90.00 | 63.00 | 57.00 | 47.8 | 9.30 | M12 | 6.00 | M16 | 1.40 |
| BT40 SRKIN 20X90 CX | 40 | 20.00 | 33.00 | 42.00 | 90.00 | 63.00 | 57.00 | 49.0 | 8.50 | M16 | 8.00 | M16 | 1.30 |
| BT40 SRKIN 25X110 CX | 40 | 25.00 | 44.00 | 53.00 | 110.00 | 83.00 | 57.00 | 55.0 | 8.50 | M16 | 8.00 | M16 | 1.84 |
| BT50 SRKIN 6X100 CX | 50 | 6.00 | 21.00 | 26.00 | 100.00 | 62.00 | 32.00 | 34.0 | 9.50 | M5 | 2.50 | M24 | 3.67 |
| BT50 SRKIN 8X100 CX | 50 | 8.00 | 21.00 | 27.00 | 100.00 | 62.00 | 38.00 | 34.0 | 9.50 | M6 | 3.00 | M24 | 3.78 |
| BT50 SRKIN 10X100 CX | 50 | 10.00 | 24.00 | 32.00 | 100.00 | 62.00 | 50.80 | 39.8 | 9.30 | M8 | 4.00 | M24 | 3.78 |
| BT50 SRKIN 12X100 CX | 50 | 12.00 | 24.00 | 32.00 | 100.00 | 62.00 | 50.80 | 44.8 | 9.30 | M10 | 5.00 | M24 | 3.74 |
| BT50 SRKIN 14X100 CX | 50 | 14.00 | 27.00 | 34.00 | 100.00 | 62.00 | 44.50 | 44.8 | 9.30 | M10 | 5.00 | M24 | 3.80 |
| BT50 SRKIN 16X100 CX | 50 | 16.00 | 27.00 | 34.00 | 100.00 | 62.00 | 44.50 | 47.8 | 9.30 | M12 | 6.00 | M24 | 3.70 |
| BT50 SRKIN 18X100 CX | 50 | 18.00 | 33.00 | 42.00 | 100.00 | 62.00 | 57.00 | 47.8 | 9.30 | M12 | 6.00 | M24 | 3.92 |
| BT50 SRKIN 20X100 CX | 50 | 20.00 | 33.00 | 42.00 | 100.00 | 62.00 | 57.00 | 49.0 | 8.50 | M16 | 8.00 | M24 | 3.77 |
| BT50 SRKIN 25X120 CX | 50 | 25.00 | 44.00 | 53.00 | 120.00 | 82.00 | 57.00 | 55.0 | 8.50 | M16 | 8.00 | M24 | 4.50 |
| BT50 SRKIN 32X120 CX | 50 | 32.00 | 44.00 | 53.00 | 120.00 | 82.00 | 57.00 | 59.0 | 8.50 | M16 | 8.00 | M24 | 4.35 |

• Use only inductive heating device for SRKIN holders

⁽¹⁾ Item weight

C#-SRKIN-CX

Thermal Shrink Chucks with CAMFIX
(ISO 26623-1) Tapered Shank and
Coolant Jet Channels along
the Shank Bore



| Designation | SS | DCONWS | BTED | BD | LPR | LBX | LB | LSCWS | ADJRGA | THID | Key | WT ⁽¹⁾ |
|--------------------------|----|--------|-------|-------|-------|-------|-------|-------|--------|------|------|-------------------|
| C6 SRKIN 6X80 CX | 63 | 6.00 | 21.00 | 27.00 | 80.00 | 58.00 | 38.10 | 34.0 | 9.50 | M5 | 2.50 | 0.95 |
| C6 SRKIN 8X80 CX | 63 | 8.00 | 21.00 | 27.00 | 80.00 | 58.00 | 38.10 | 34.0 | 9.50 | M6 | 3.00 | 0.94 |
| C6 SRKIN 10X80 CX | 63 | 10.00 | 24.00 | 32.00 | 80.00 | 58.00 | 50.80 | 39.8 | 9.30 | M8 | 4.00 | 1.07 |
| C6 SRKIN 12X80 CX | 63 | 12.00 | 24.00 | 32.00 | 80.00 | 58.00 | 50.80 | 44.8 | 9.30 | M10 | 5.00 | 1.01 |
| C6 SRKIN 14X85 CX | 63 | 14.00 | 27.00 | 34.00 | 85.00 | 63.00 | 44.50 | 44.8 | 9.30 | M10 | 5.00 | 1.08 |
| C6 SRKIN 16X85 CX | 63 | 16.00 | 27.00 | 34.00 | 85.00 | 63.00 | 44.50 | 47.8 | 9.30 | M12 | 6.00 | 1.06 |
| C6 SRKIN 18X85 CX | 63 | 18.00 | 33.00 | 42.00 | 85.00 | 63.00 | 57.20 | 47.8 | 9.30 | M12 | 6.00 | 1.21 |
| C6 SRKIN 20X85 CX | 63 | 20.00 | 33.00 | 42.00 | 85.00 | 63.00 | 57.20 | 49.0 | 8.50 | M16 | 8.00 | 1.16 |
| C6 SRKIN 25X90 CX | 63 | 25.00 | 44.00 | 53.00 | 90.00 | 68.00 | 57.20 | 55.0 | 8.50 | M16 | 8.00 | 1.50 |
| C6 SRKIN 32X95 CX | 63 | 32.00 | 44.00 | 53.00 | 95.00 | 73.00 | 57.20 | 59.0 | 8.50 | M16 | 8.00 | 1.46 |

• Use only inductive heating device for SRKIN holders

⁽¹⁾ Item weight

LOGIQ GRADES

ISCAR CHESS LINES



High Productivity



All
Materials



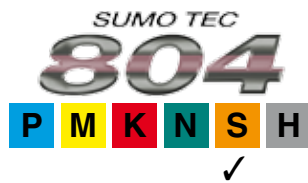
New Generation



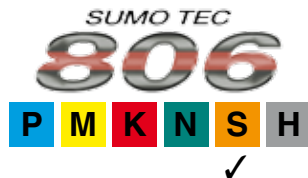
Cost Effective

MACHINING IN **DUSTRY 4.0**
TELLIGENTLY

Turning Grades



A hard submicron substrate. TiAlN PVD coated grade followed by a special "SUMO TEC" surface treatment. Suitable for turning hard nickel base alloys / Inconel (40-50 HRC) at low to medium cutting speeds.



A tough submicron substrate, TiAlN PVD coated grade followed by a special "SUMO TEC" surface treatment. Suitable for turning nickel-based high temperature alloys at low to medium cutting speeds.



A tough submicron substrate, improved TiAlN PVD coated grade for better chip flow. Suitable for turning heat resistant alloys, austenitic stainless steel and hard steel at low to medium cutting speeds.



A very hard substrate with a cobalt enriched outer layer and alpha Al₂O₃ coating. Used for finishing and medium turning of stainless steel at high cutting speeds. Features long tool life and excellent repeatability.

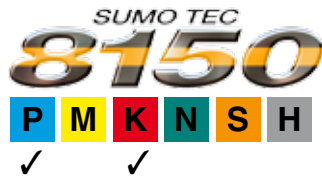


A tough substrate with MTCVD Al₂O₃ and TiCN coating. Recommended for machining stainless steel at high feeds and unfavorable conditions at medium cutting speed.

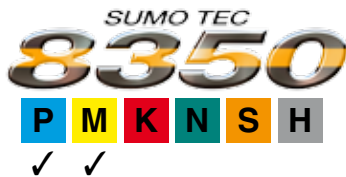


A tough substrate with a cobalt enriched layer combined with improved MTCVD TiCN and a thick alpha Al₂O₃ CVD coating. Recommended for general use machining of steel in a wide range of conditions, featuring high toughness and resistance to chipping and plastic deformation.

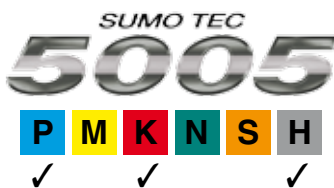
Turning Grades



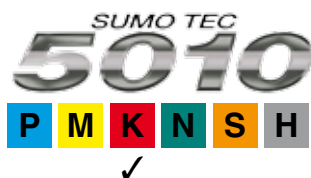
A very hard substrate with a cobalt enriched layer, improved MTCVD TiCN and a thick alpha Al₂O₃ CVD coating. Features excellent thermal stability, resistance to chipping and plastic deformation. Recommended for high speed machining of steel at stable or slightly unstable conditions.



A very tough substrate with a cobalt enriched layer combined with an improved MTCVD TiCN and alpha Al₂O₃ CVD coating. Provides excellent toughness and chipping resistance on steel for interrupted and unstable cutting conditions.



A hard substrate, MTCVD TiCN and thick Al₂O₃ coated grade with post coating surface treatment. Mainly used for turning nodular cast iron (may be used for other cast iron as well) at medium to high cutting speeds at stable or slightly unstable conditions. Can be used when higher wear resistance than that provided by IC5010 or other grades is required.



A hard substrate, improved MTCVD TiCN and a thick alpha Al₂O₃ CVD coating. Features excellent thermal stability and improved toughness. Recommended mainly for grey cast iron at stable or slightly unstable conditions. Can also be used successfully on nodular cast iron.

Drilling Grades



Diamond coated grade for drilling CFRP (Carbon Fiber Reinforced Plastic) and titanium CFRP laminates.

Milling Grades

SUMO TEC
810

P M K N S H
✓ ✓

A TiAlN PVD coated grade. First choice for milling nodular cast iron at medium to high cutting speeds.

SUMO TEC
5100

P M K N S H
✓

A tough substrate with a MTCVD and TiCN/Al₂O₃ coating. Recommended for milling grey cast iron at high cutting speeds, providing extended tool life.

SUMO TEC
380

P M K N S H
✓ ✓

A tough submicron substrate, TiCN PVD coated and with a special surface treatment. Designed for machining heat resistant alloys, hardened steels and cast iron at medium to high cutting speeds, interrupted cut and unfavorable conditions. Excellent notch wear and built-up edge resistance. High resistance to mechanical and thermal shock – therefore milling with coolant may be applied.

SUMO TEC
5400

P M K N S H
✓

A tough substrate with a MTCVD and alpha Al₂O₃ coating. Recommended for milling steel at high cutting speed, providing excellent tool life.

840

P M K N S H
✓ ✓

A PVD TiSiN coated tough grade followed by a special surface treatment. Suitable for milling austenitic stainless steel and high temperature alloys. Recommended for interrupted cuts and heavy operations.

SUMO TEC
845

P M K N S H
✓

A PVD AlTiN coated tough grade followed by a special “SUMO TEC” surface treatment. Suitable for milling alloyed steel. Recommended for interrupted cut and heavy operations.

882

P M K N S H
✓ ✓

A tough substrate, TiAlN PVD coated and a special surface treatment. Designed for machining austenitic stainless steel, titanium and high temperature alloys.

NEW!

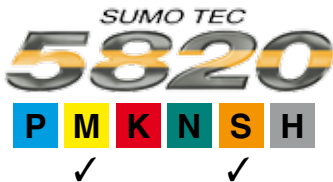
NEW!

NEW!

Milling Grades



A tough TiCN+TiN thin PVD coated grade with a special “SUMO TEC” surface treatment. Used for milling a wide range of workpiece materials, at low to medium cutting speeds and for unstable machining conditions.



A tough substrate, with a MTCVD and alpha Al₂O₃ coating and a special surface treatment. Designed for machining austenitic stainless steel, titanium and high temperature alloys.

NEW!

Turning, Milling and Drilling Grades



A tough submicron substrate, improved TiAlN PVD coated grade for better chip flow. Designed for machining heat resistant alloys, austenitic stainless steel, hard alloys and carbon steel at medium to high cutting speeds, interrupted cut and unfavorable conditions.

Excellent notch wear and built-up edge resistance.



An improved TiAlN PVD coated tough grade for better chip flow. Suitable for machining stainless steel, high temperature alloys and other alloy steels. Recommended for interrupted cut and heavy operations.

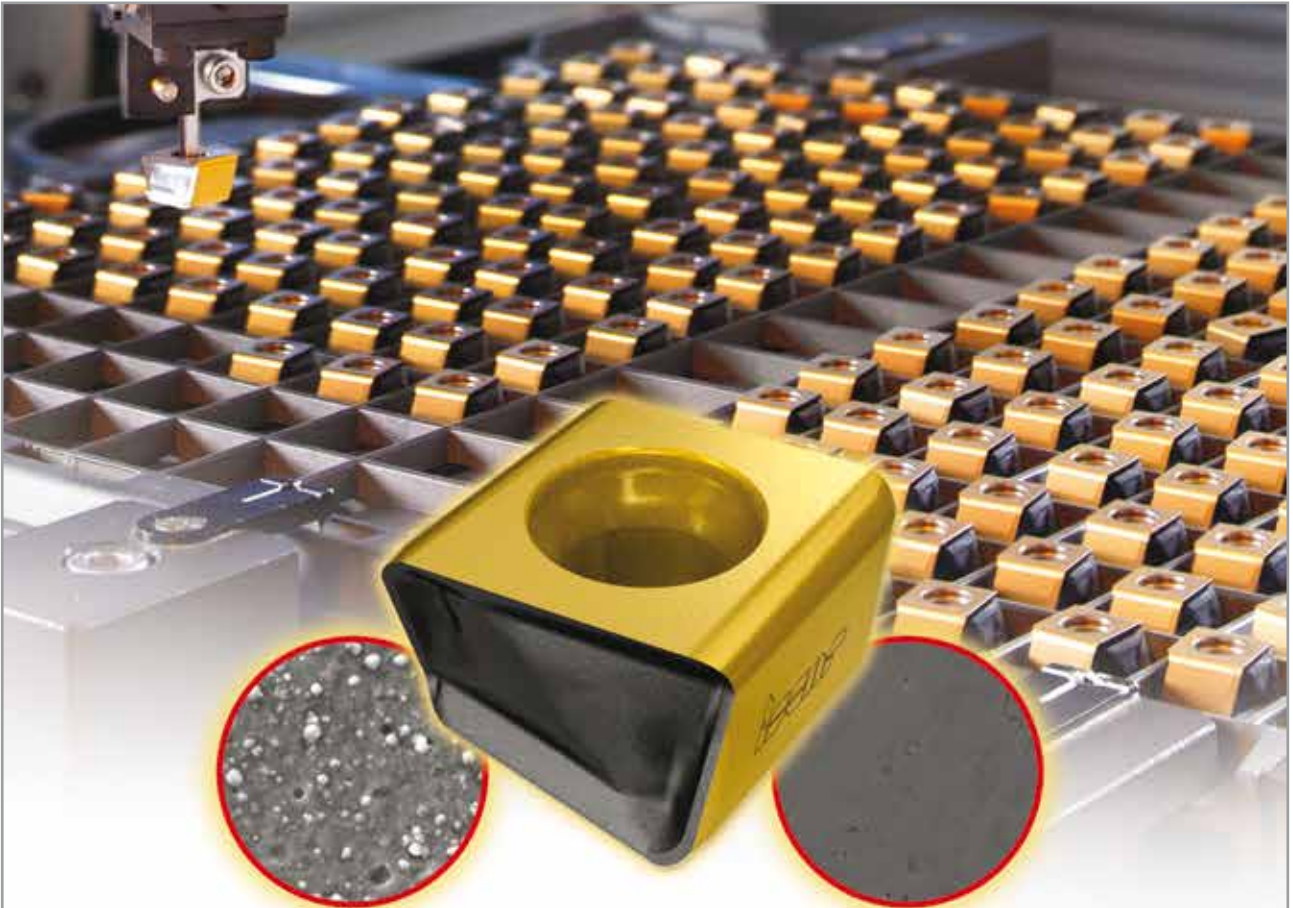


A tough submicron substrate, TiAlN PVD coated grade. Designed for machining heat resistant alloys, austenitic stainless steel, hard alloys and carbon steel at medium to high cutting speeds, interrupted cut and unfavorable conditions. Excellent notch wear and built-up edge resistance.



A tough substrate with a MTCVD and alpha Al₂O₃ coating. Recommended for machining martensitic stainless steel at high cutting speed providing excellent tool life.

NEW!



Standard Grade

SUMO TEC Grade

The SUMO TEC grades feature a special post-coating treatment which improves toughness and chipping resistance while reducing friction and built-up edge. The new process provides higher reliability and improves tool life substantially.



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