

New Products 2019

Metric Version 5

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

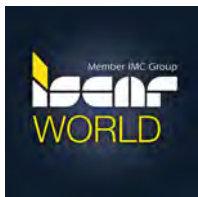
Mobile Apps



**ISCAR Tool
Advisor**
Find the best tool & con-
ditions



**ISCAR
Cutting Info.**
Machining Parameters Direct
Access



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Devices



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Upgrade Your
Current Tool



Become an **INDUSTRY 4.0**



ISCAR's Easy to Use Digital World of Applications

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MASTER!



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Industrealize
Metalworking
Applications



E-Cat
Electronic Catalog



MATRIX
Tool Management
System



IQ Cloud
Cloud Based
Tool Assemblies



ISO TURNING SYSTEMS

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LOGIQTURN

ISCAR CHESS LINES



High Productivity



For All
Materials



New Generation

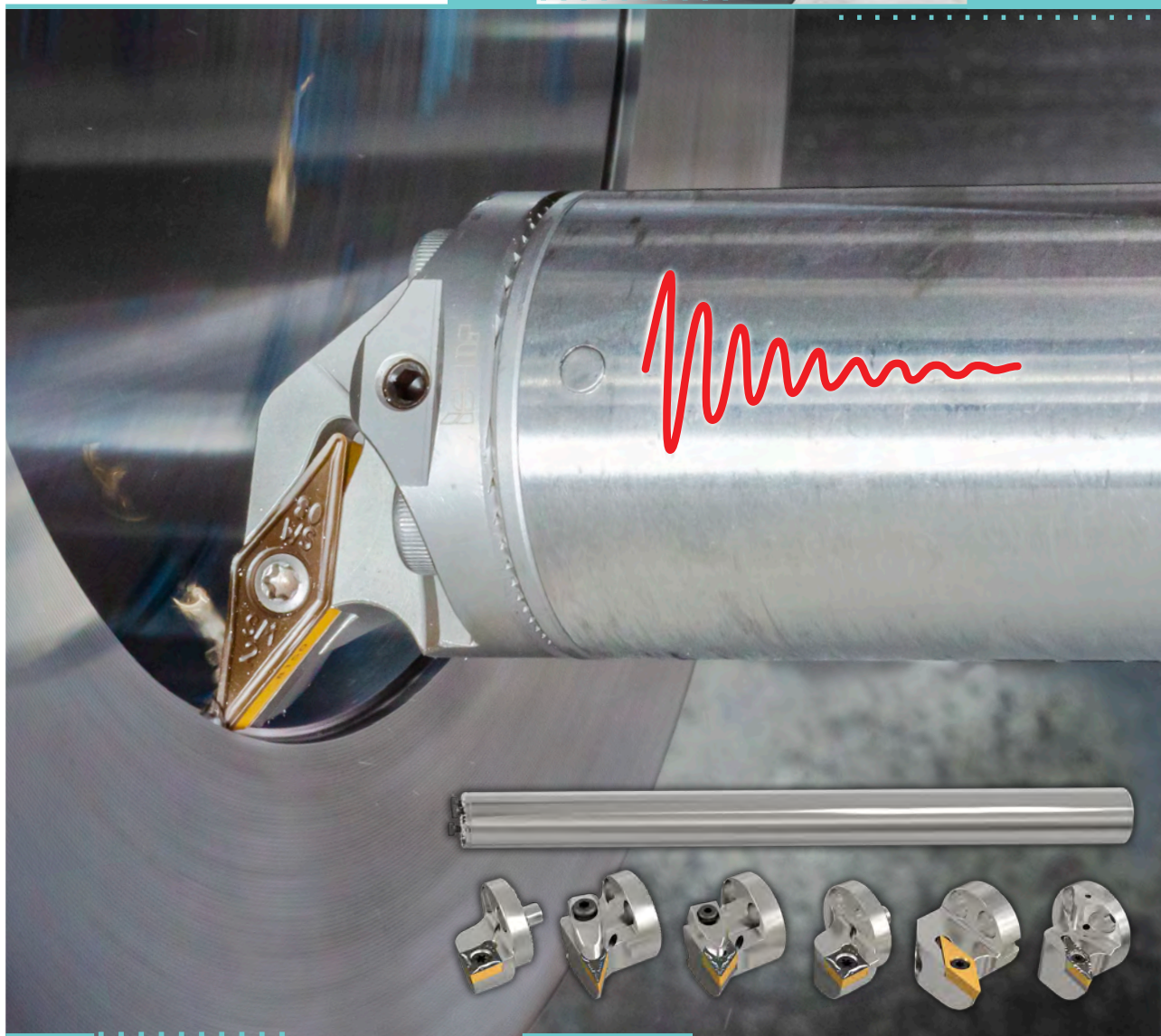


Cost Effective
Insert

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

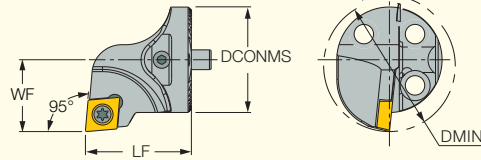


For All
Materials



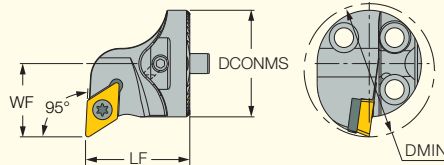
Up to 10xBD
Anti-Vibration
Shank

LOGIQTURN
ISCAR CHESS LINES

ISOTURN**WHISPERLINE**
ANTI-VIBRATION**AVC-SCLCR/L**Interchangeable Boring
Heads Carrying 80° Rhombic
Inserts with 7° Clearance

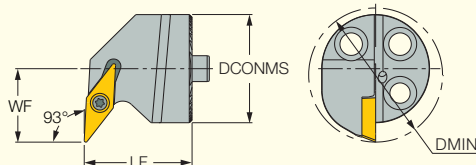
Designation	WF	DCONMS	DMIN	LF				
AVC-D16-SCLCR/L-06	11.00	16.00	20.00	20.00	SR 14-548*	T-7/5*		
AVC-D20-SCLCR/L-09	13.00	20.00	25.00	20.00	SR 16-236*	T-15/5*		
AVC-D25-SCLCR/L-09	17.00	25.00	32.00	20.00	SR 16-236*	T-15/5*		
AVC-D32-SCLCR/L-09	22.00	32.00	40.00	32.00	SR 16-236*	T-15/5*		
AVC-D40-SCLCR/L-12T	27.00	40.00	50.00	38.00	SR 16-212*	T-20/5*	SR TC-4*	TCC 4-2*

* Optional, should be ordered separately

ISOTURN**WHISPERLINE**
ANTI-VIBRATION**AVC-SDUCR/L**Interchangeable Boring
Heads Carrying 55° Rhombic
Inserts with 7° Clearance

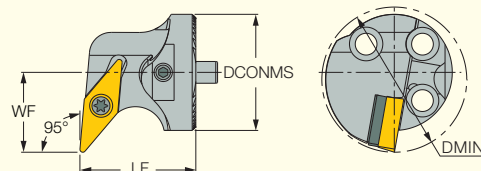
Designation	WF	DCONMS	DMIN	LF				
AVC-D16-SDUCR/L-07	11.00	16.00	20.00	20.00	SR 14-548*	T-7/5*		
AVC-D20-SDUCR/L-11	13.00	20.00	25.00	20.00	SR 16-236 P*	T-15/5*		
AVC-D25-SDUCR/L-11	17.00	25.00	32.00	20.00	SR 16-236 P*	T-15/5*		
AVC-D32-SDUCR/L-11T	22.00	32.00	40.00	32.00	SR 16-236 P*	T-15/5*	SR TC-3P*	TDC 3-1P*
AVC-D40-SDUCR/L-11T	27.00	40.00	50.00	32.00	SR 16-236 P	T-15/5*	SR TC-3P*	TDC 3-1P*

* Optional, should be ordered separately

ISOTURN**WHISPERLINE**
ANTI-VIBRATION**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	SR 14-560*	T-8/5*
AVC-D25-SVUCR/L-11	17.00	25.00	32.00	25.00	SR 14-560*	T-8/5*

* Optional, should be ordered separately

ISOTURN**WHISPERLINE**
ANTI-VIBRATION**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	SR 16-236 P*	T-15/5*	SR TC-3P*	TVC 3-1P*
AVC-D40-SVLCR/L-16T	27.00	40.00	50.00	32.00	SR 16-236 P*	T-15/5*	SR TC-3P*	TVC 3-1P*

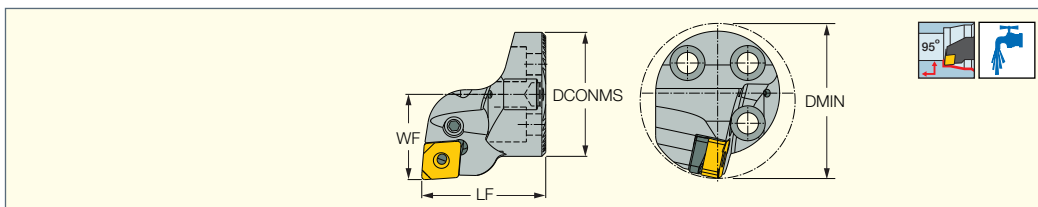
* Optional, should be ordered separately

FLASHTURN
ECO LINE

WHISPERLINE
ANTI-VIBRATION

AVC-PCLNR/L

Interchangeable Boring Heads
for 80° Rhombic Inserts



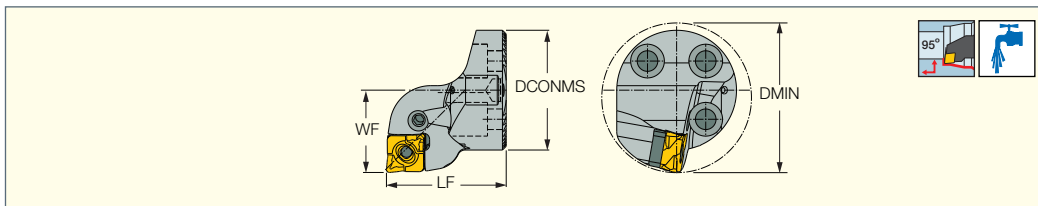
Designation	WF	DCONMS	DMIN	LF							
AVC-D20-PCLNR/L-09	13.00	20.00	25.00	26.00			LR 3S	SR 117-2009	HW 2.0		
AVC-D25-PCLNR/L-09	17.00	25.00	32.00	28.00	TCN 323	TCX 3	LR 3	SR 117-2014	HW 2.5	SP 3	PN 3-4
AVC-D32-PCLNR/L-09	22.00	32.00	40.00	32.00	TCN 323	TCX 3	LR 3	SR 117-2014	HW 2.5	SP 3	PN 3-4

LOGIC4TURN
POSITIVE DOUBLE SIDED

WHISPERLINE
ANTI-VIBRATION

AVC-PCLXR/L

Interchangeable Boring Heads
for 80° Rhombic Inserts



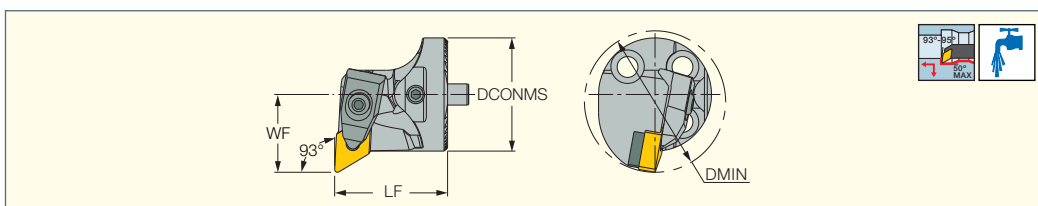
Designation	WF	DCONMS	DMIN	LF							
AVC-D20-PCLXR-09X	13.00	20.00	25.00	26.00	TSN 323	LR 3W	SR 117-2014	HW 2.5	SP 3	PN 3-4	
AVC-D25-PCLXR/L-09X	17.00	25.00	32.00	28.00	TSN 323	LR 3W	SR 117-2014	HW 2.5	SP 3	PN 3-4	
AVC-D32-PCLXR/L-09X	22.00	32.00	40.00	32.00	TSN 323	LR 3W	SR 117-2014	HW 2.5	SP 3	PN 3-4	
AVC-D40-PCLXR/L-12X	27.00	40.00	50.00	35.00	TCNX 423	LR 4X	SR LCS 5	HW 3.0	SP 4	PN 3-4	

ISOTURN

WHISPERLINE
ANTI-VIBRATION

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	RDT 3-2*	SR RC3*	SR 40085I*	HW 2.5*	T-15/5*	LCGR-3*	KSP 3*
AVC-D40-DDUNR/L-15T	27.00	40.00	50.00	38.00	RDT 433*	DLS 4*	SR 14-506*	HW 3.0*	T-15/5*	DLM 4*	DSP 4*

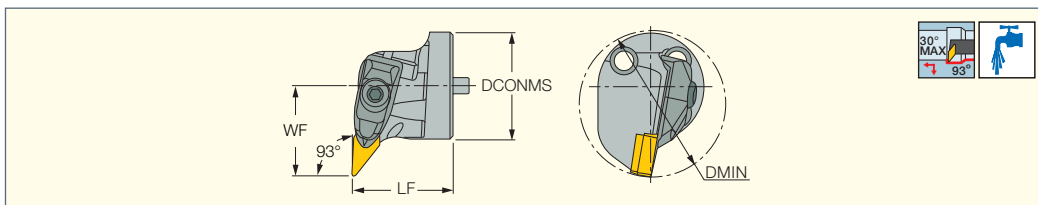
* Optional, should be ordered separately

ISOTURN

WHISPERLINE
ANTI-VIBRATION

AVC-DVUNR/L

Interchangeable Boring Heads
for 35° Rhombic Inserts

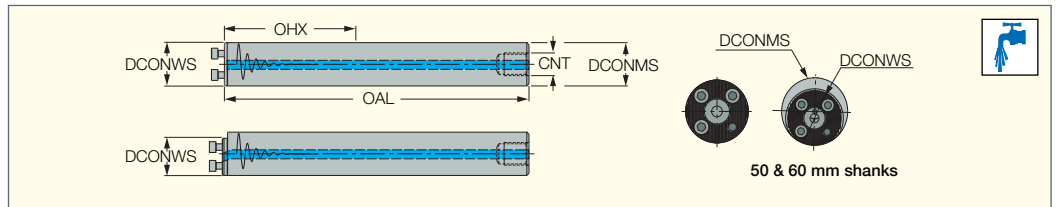


Designation	WF	DCONMS	DMIN	LF							
AVC-D40-DVUNR/L-16T	34.00	40.00	56.00	38.00	DLM 3V*	SR 10402267*	HW 4.0*	KSP 5*	ASV322 D30*	T-15/5*	SR 35080*1

* Optional, should be ordered separately

AV-D

Anti-Vibration Bars with Through
Coolant for Interchangeable
Turning Heads



Designation	DCONWS	DCONMS	OAL	OHX ⁽¹⁾	CNT	BMC ⁽²⁾
AV-D16-7D-C	16.00	16.00	156.30	92.0	G1/8	S
AV-D16-10D-E	16.00	16.00	204.30	140.0	-	H
AV-D20-7D-C	20.00	20.00	200.30	120.0	G1/4	S
AV-D20-10D-E	20.00	20.00	260.30	180.0	-	H
AV-D25-7D-C	25.00	25.00	257.50	155.0	G1/4	S
AV-D25-10D-C	25.00	25.00	332.50	230.0	G1/4	S
AV-D32-7D-C	32.00	32.00	323.00	192.0	G3/8	S
AV-D32-10D-C	32.00	32.00	419.00	288.0	G3/8	S
AV-D40-7D-C	40.00	40.00	411.00	251.0	G1/2	S
AV-D40-10D-C	40.00	40.00	531.00	368.0	G1/2	S
AV-D50-7D-C	40.00	50.00	523.00	318.0	G1/2	S
AV-D50-10D-C	40.00	50.00	673.00	468.0	G1/2	S
AV-D60-7D-C	40.00	60.00	633.00	388.0	G3/4	S
AV-D60-10D-C	40.00	60.00	813.00	568.0	G3/4	S

• The bars can be shortened. For details, table below

⁽¹⁾ Maximum overhang

⁽²⁾ S-steel body, H-solid carbide body

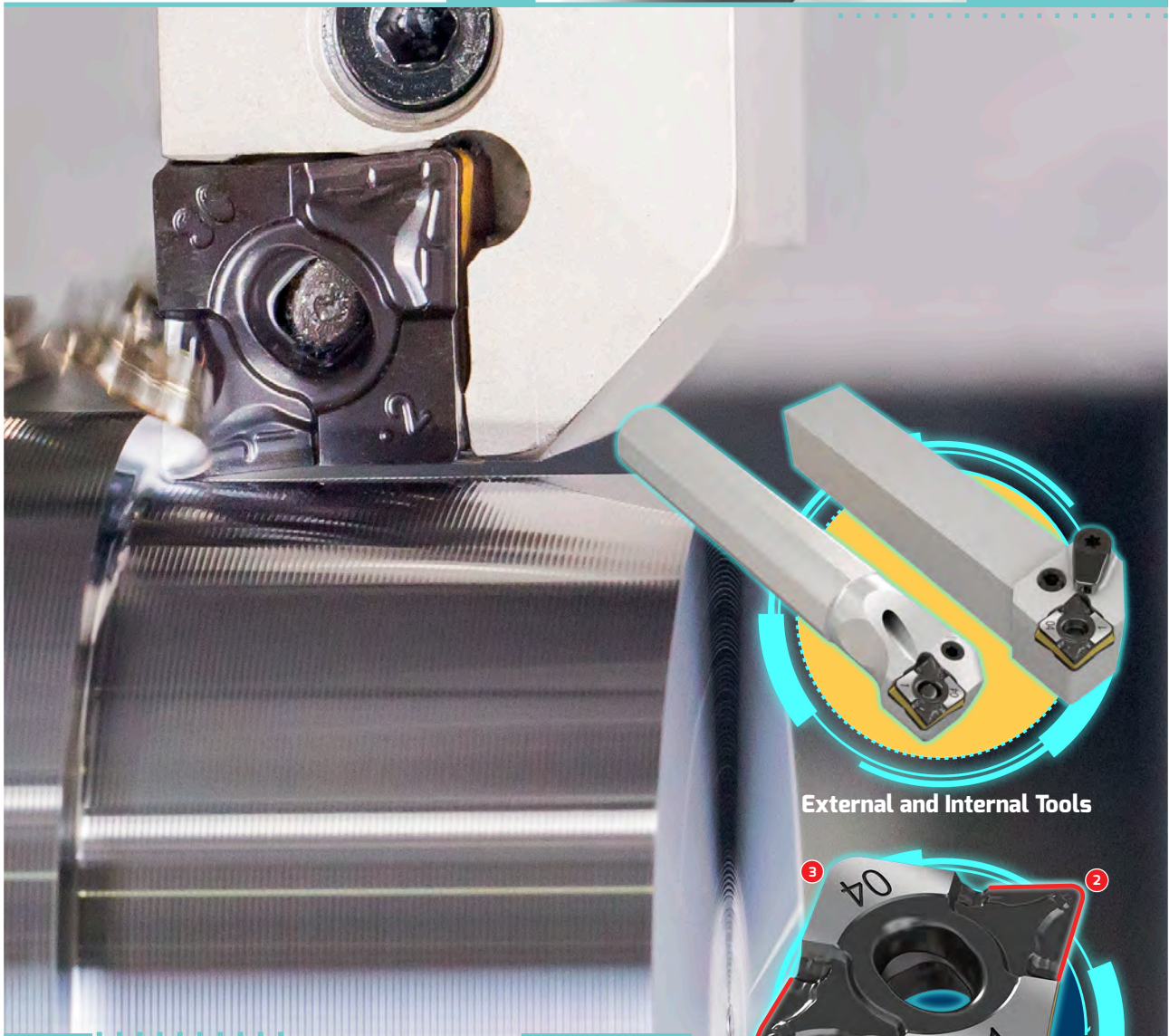
Bar Diameter	Minimum Length After Shortening	
DCONMS (mm)	OAL 7D (mm)	OAL 10D (mm)
16	100	- ⁽¹⁾
20	125	- ⁽¹⁾
25	155	255
32	190	320
40	240	410
50	305	520
60	380	630

⁽¹⁾ Cannot be shortened



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

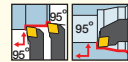
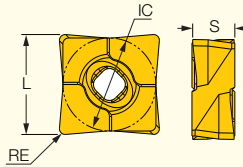


**SCAN
NOW!**

LOGIQTURN
ISCAR CHESS LINES

CXMG-F3P

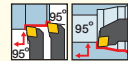
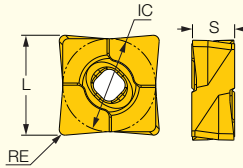
80° Double-Sided and Double-Positive Inserts with a Positive Rake for Finishing on Alloyed Steel



Designation	Dimensions				Tough ↔ Hard		Recommended Machining Data	
	L	IC	S	RE	IC8150	IC807	a_p (mm)	f (mm/rev)
CXMG 090402-F3P	10.40	9.70	4.66	0.20	•	•	0.30-2.00	0.03-0.15
CXMG 090404-F3P	10.40	9.70	4.65	0.40	•	•	0.40-2.00	0.05-0.25
CXMG 12T504-F3P	13.83	12.50	5.80	0.40	•	•	0.40-2.00	0.05-0.25
CXMG 12T508-F3P	13.75	12.50	5.80	0.80	•	•	0.80-2.00	0.05-0.25

CXMG-M3P

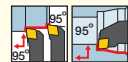
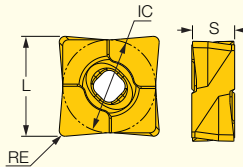
80° Double-Sided and Double-Positive Inserts with a Positive Rake for Medium Machining on Alloyed Steel



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	12.50	5.80	0.80	•	•	0.80-5.00	0.10-0.50
CXMG 12T512-M3P	13.68	12.50	5.80	1.20	•	•	1.20-5.00	0.10-0.50

CXMG-F3M

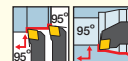
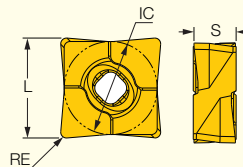
80° Double-Sided and Double-Positive Inserts with a Positive Rake for Finishing on Stainless Steel and H.T.A.



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	12.50	5.80	0.40	•	•	•	0.40-2.00	0.05-0.25
CXMG 12T508-F3M	13.75	12.50	5.80	0.80	•	•	•	0.80-2.00	0.05-0.25

CXMG-M3M

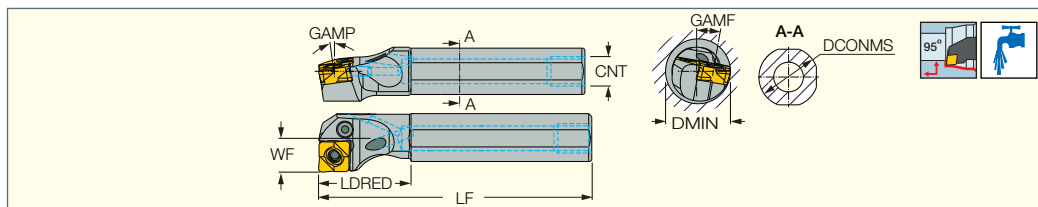
80° Double-Sided and Double-Positive Inserts with a Positive Rake for Medium Machining on Stainless Steel and H.T.A.



Designation	Dimensions				Tough ↔ Hard			Recommended Machining Data	
	L	IC	S	RE	IC6025	IC806	IC807	a_p (mm)	f (mm/rev)
CXMG 090408-M3M	10.32	9.70	4.65	0.80	•	•	•	0.80-3.00	0.15-0.50
CXMG 12T508-M3M	13.75	12.50	5.80	0.80	•	•	•	0.80-5.00	0.15-0.50
CXMG 12T512-M3M	13.68	12.50	5.80	1.20	•	•	•	1.20-5.00	0.15-0.50

A-PCLXR/L

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



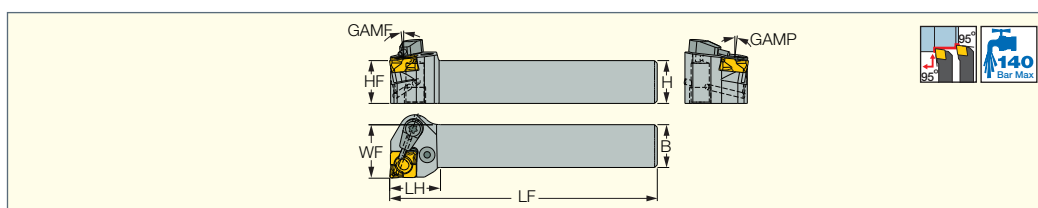
Designation	DCONMS	LF	LDRED	WF	GAMP	GAMF	DMIN	CNT	Insert
A16Q PCLXR/L-09X	16.00	180.00	30.0	11.00	8.0	10.0	20.00	UNC 3/8"-16	CXMG 09..
A20R PCLXR/L-09X	20.00	200.00	30.0	13.00	5.0	10.0	25.00	UNC 3/8"-24	CXMG 09..
A25S PCLXR/L-09X	25.00	250.00	40.0	17.00	5.0	10.0	32.00	UNC 1/2"-20	CXMG 09..

Spare Parts

Designation				
A16Q PCLXR/L-09X	LR 3X SET	PL 16	SR M6XL11.5V	T-8/5
A20R PCLXR/L-09X	LR 3X SET	PL 20	SR M6XL11.5V	T-8/5
A25S PCLXR/L-09X	LR 3X SET	PL 25	SR M6XL11.5V	T-8/5

JETCUT
PCLXR/L-JHP

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



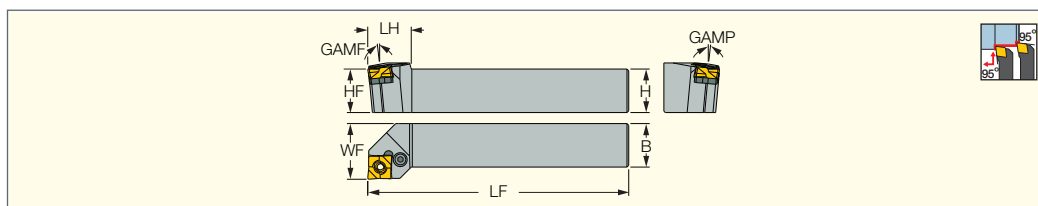
Designation	B	H	HF	LF	LH	WF	GAMP	GAMF	Insert
PCLXR/L 1212F-09X-JHP	12.0	12.0	12.0	80.00	20.0	16.00	6.0	6.0	CXMG 09...
PCLXR/L 1616H-09X-JHP	16.0	16.0	16.0	100.00	20.0	20.00	6.0	6.0	CXMG 09...
PCLXR/L 2020K-12X-JHP	20.0	20.0	20.0	125.00	25.0	25.00	6.0	6.0	CXMG 12...
PCLXR/L 2525M-12X-JHP	25.0	25.0	25.0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

Spare Parts

Designation								
PCLXR/L 1212F-09X-JHP		LR 3X SET	SR M6XL11.5V			T-8/5		S-CU-JHP-A SET
PCLXR/L 1616H-09X-JHP		LR 3X SET	SR M6XL11.5V			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	19.0	16.00	6.0	6.0	CXMG 09...
PCLXR/L 1616H-09X	16.0	16.0	16.0	100.00	19.0	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	SR M6XL11.5V			T-8/5	
PCLXR/L 1616H-09X		LR 3X SET	SR M6XL11.5V			T-8/5	
PCLXR/L 2020K-12X	TCNX 423	LR 4X	SR LCS 5	HW 3.0	PN 3-4	SP 4	
PCLXR/L 2525M-12X	TCNX 423	LR 4X	SR LCS 5	HW 3.0	PN 3-4	SP 4	

Pinpointed Coolant Jet Master



New Tool Holder with
3 Inlets for Coolant

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



Rigid Clamping



Easy Chip
Evacuation



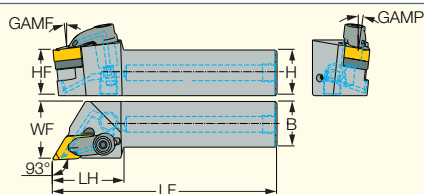
Variety of Inserts
for Coolant



High Pressure
Coolant



Through-Coolant Clamp

ISOTURN**JET RETURN**
RIGID CLAMP**DDJNR/L-JHP-MC**Rigid Clamp Tools with Channels
for High Pressure Coolant Carrying
the 55° Rhombic Inserts

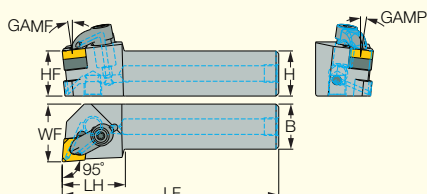
Designation	B	H	HF	LF	LH	WF	GAMP	GAMF	Insert
DDJNR/L 2020X-15-JHP-MC	20.0	20.0	20.0	110.00	40.0	25.00	6.0	6.0	DNMG/X 1506
DDJNR/L 2525X-15-JHP-MC	25.0	25.0	25.0	125.00	40.0	32.00	6.0	6.0	DNMG/X 1506

Spare Parts

Designation							
DDJNL 2020X-15-JHP-MC	RDT 433	RDT 443*	LCGL-4JC SET(a)	T-20/3	PLUG G1/8-6.5 TL360	SR 14-506	OR 4X3 NBR70
DDJNR 2020X-15-JHP-MC	RDT 433	RDT 443*	LCGR-4JC SET(a)	T-20/3	PLUG G1/8-6.5 TL360	SR 14-506	OR 4X3 NBR70
DDJNL 2525X-15-JHP-MC	RDT 433	RDT 443*	LCGL-4JC SET(a)	T-20/3	PLUG G1/8-6.5 TL360	SR 14-506	OR 4X3 NBR70
DDJNR 2525X-15-JHP-MC	RDT 433	RDT 443*	LCGR-4JC SET(a)	T-20/3	PLUG G1/8-6.5 TL360	SR 14-506	OR 4X3 NBR70

(a) Recommended tightening torque 4Nm for R-Clamp Screw

* Optional, should be ordered separately

ISOTURN**JET RETURN**
RIGID CLAMP**DCLNR/L-JHP-MC**Rigid Clamp Tools with Channels
for High Pressure Coolant Carrying
the 80° Rhombic Inserts

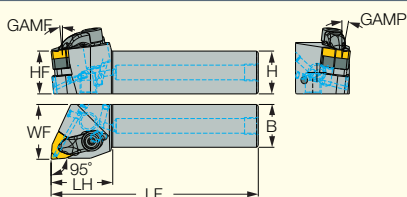
Designation	B	H	HF	LF	LH	WF	GAMP	GAMF	Insert
DCLNR/L 2020X-12-JHP-MC	20.0	20.0	20.0	105.00	35.0	25.00	6.0	6.0	CNMG 1204
DCLNR/L 2525X-12-JHP-MC	25.0	25.0	25.0	120.00	35.0	32.00	6.0	6.0	CNMG 1204

Spare Parts

Designation							
DCLNL 2020X-12-JHP-MC	RCT 443	TCH4*	LCGL-4JC SET(a)	T-20/3	PLUG G1/8-6.5 TL360	OR 4X3 NBR70	SR 14-506
DCLNR 2020X-12-JHP-MC	RCT 443	TCH4*	LCGR-4JC SET(a)	T-20/3	PLUG G1/8-6.5 TL360	OR 4X3 NBR70	SR 14-506
DCLNL 2525X-12-JHP-MC	RCT 443	TCH4*	LCGL-4JC SET(a)	T-20/3	PLUG G1/8-6.5 TL360	OR 4X3 NBR70	SR 14-506
DCLNR 2525X-12-JHP-MC	RCT 443	TCH4*	LCGR-4JC SET(a)	T-20/3	PLUG G1/8-6.5 TL360	OR 4X3 NBR70	SR 14-506

(a) Recommended tightening torque 4Nm for R-Clamp Screw

* Optional, should be ordered separately

ISOTURN**JET RETURN**
RIGID CLAMP**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	106.00	36.0	25.00	6.0	6.0	WNMG 0804
DWLNR/L 2525X-08-JHP-MC	25.0	25.0	25.0	121.00	36.0	32.00	6.0	6.0	WNMG 0804

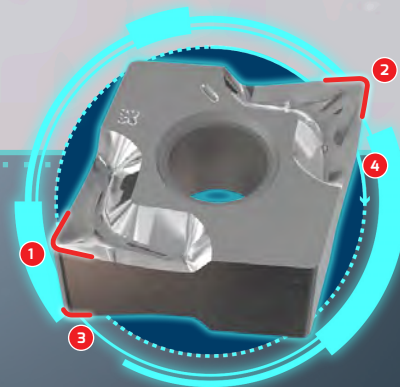
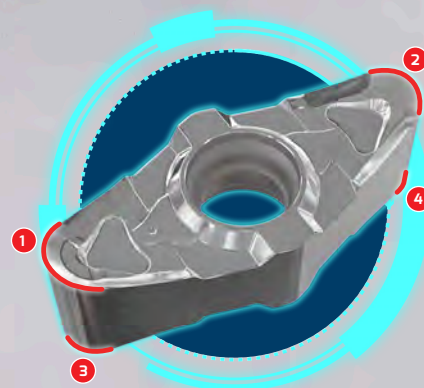
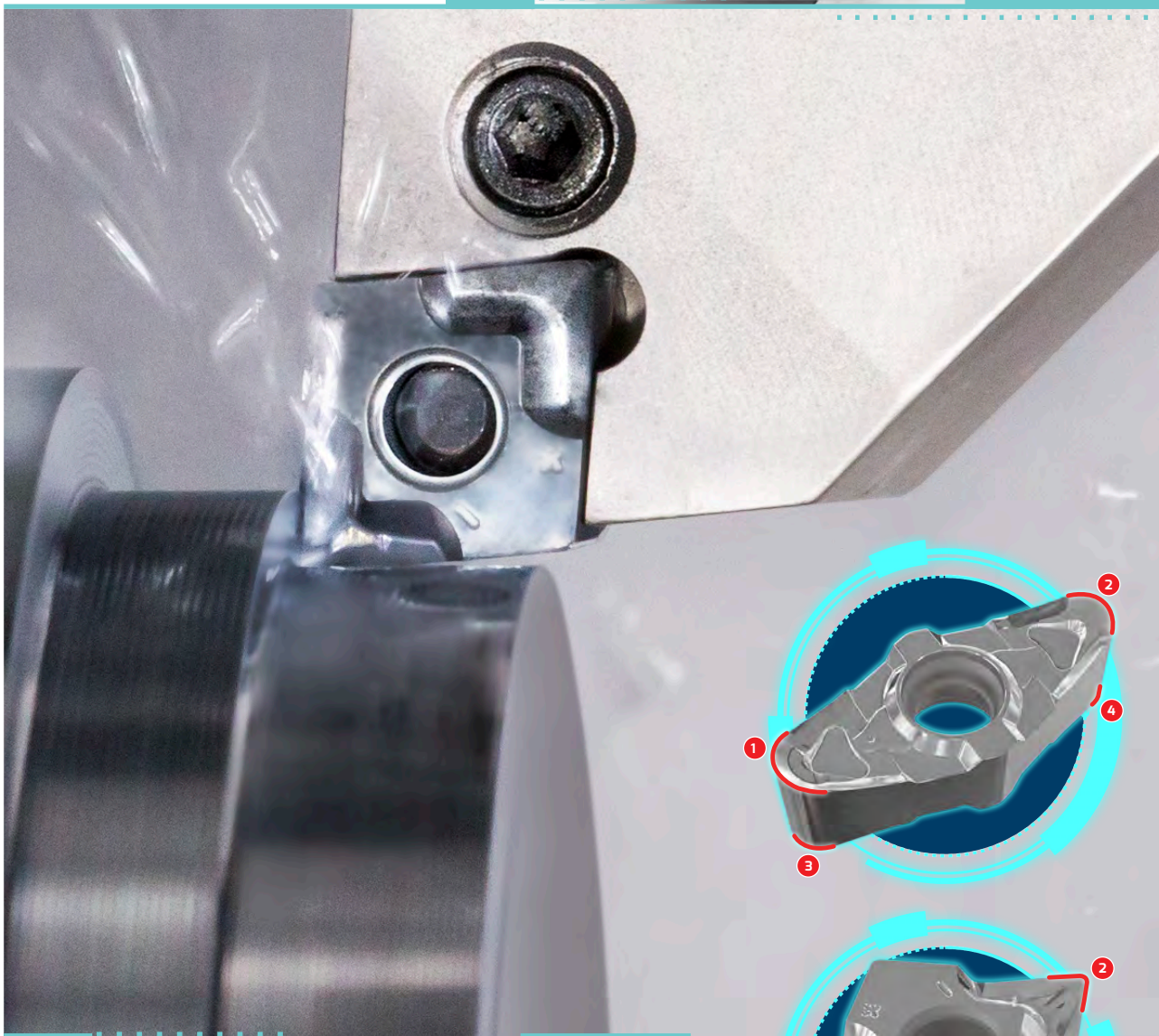
Spare Parts

Designation							
DWLNL 2020X-08-JHP-MC	RWT 443	TWH4*	LCGL-4JC SET(a)	T-20/3	SR 14-506	OR 4X3 NBR70	PLUG G1/8-6.5 TL360
DWLNR 2020X-08-JHP-MC	RWT 443	TWH4*	LCGR-4JC SET(a)	T-20/3	SR 14-506	OR 4X3 NBR70	PLUG G1/8-6.5 TL360
DWLNL 2525X-08-JHP-MC	RWT 443	TWH4*	LCGL-4JC SET(a)	T-20/3	SR 14-506	OR 4X3 NBR70	PLUG G1/8-6.5 TL360
DWLNR 2525X-08-JHP-MC	RWT 443	TWH4*	LCGR-4JC SET(a)	T-20/3	SR 14-506	OR 4X3 NBR70	PLUG G1/8-6.5 TL360

(a) Recommended tightening torque 4Nm for R-Clamp Screw

* Optional, should be ordered separately

Economical Turning Aluminum Master



Double Sided
Positive Turning Inserts
for **Aluminum**



Medium Finish



For Aluminum



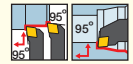
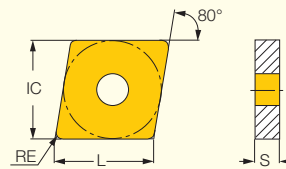
Double Sided
Insert



Positive Rake

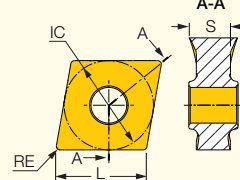
ISOTURN
ALUPTURN
 POSITIVE DOUBLE SIDED

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		●	0.40-3.00	0.10-0.30
CNGG 090408-F3N-P	9.70	9.52	4.76	0.80		●	0.80-3.00	0.10-0.30

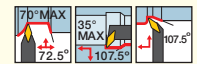
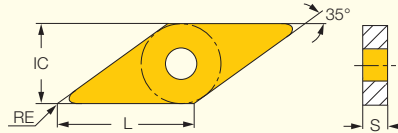
HELITURN LD
CNGX-M3N

 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		●	0.40-3.00	0.10-0.30
CNGX 090608-M3N-P	9.70	9.52	4.40	0.80		●	0.80-3.00	0.10-0.30

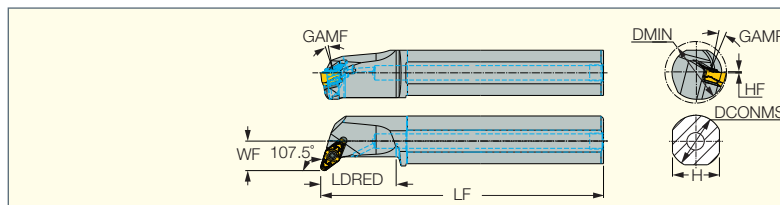
• PCLNR/L...X and A...PCLNR/L-X are most recommended as they were designed especially for this insert

ISOTURN
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

ISOTURN
A-SVQNR/L-AL-JHP

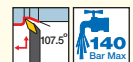
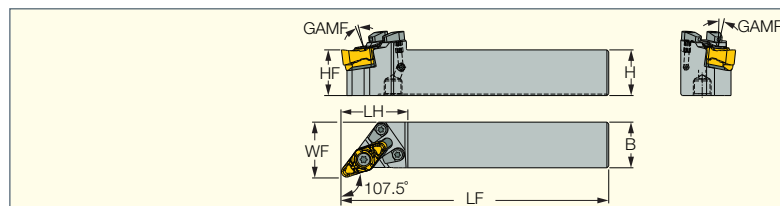
 Screw Lock Boring Bars Carrying
 the 35° Rhombic Inserts


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

Spare Parts

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

ISOTURN JETCUT
SVHNR/L-JHP

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


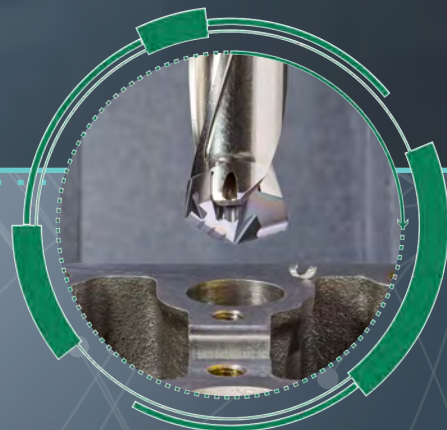
Designation	H	B	HF	LF	LH	WF	GAMP	GAMF	Insert
SVHNR/L 2525M-22-AL-JHP	25.0	25.0	25.0	146.34	36.3	30.03	7.0	6.0	VNGU 22..

Spare Parts

Designation							
SVHNR/L-JHP	TXV 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** DUSTRY 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



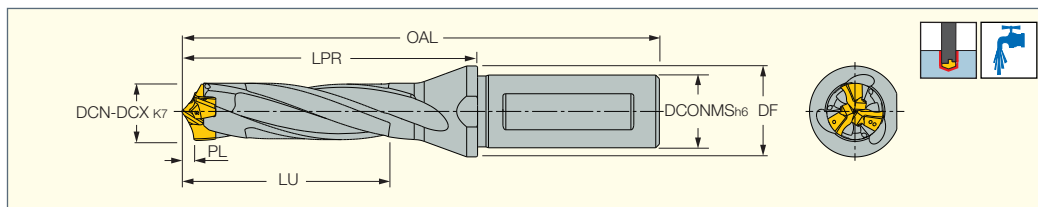
Cost Effective
Insert



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 ⁽²⁾	DCONMS	DF	LU	LPR	PL	OAL	SSC ⁽³⁾	
D3N 120-036-16A-3D	12.00	12.40	16.00	20.00	39.3	61.00	2.71	109.00	12	K D3N 12-13.99
D3N 125-037-16A-3D	12.50	12.90	16.00	20.00	40.3	63.30	2.71	110.50	12	K D3N 12-13.99
D3N 130-039-16A-3D	13.00	13.40	16.00	20.00	42.3	66.10	2.91	114.08	13	K D3N 12-13.99
D3N 135-041-16A-3D	13.50	13.90	16.00	20.00	43.8	68.30	2.91	116.33	13	K D3N 12-13.99
D3N 140-042-16A-3D	14.00	14.40	16.00	20.00	45.3	71.20	3.10	119.16	14	K D3N 14-15.99
D3N 145-044-16A-3D	14.50	14.90	16.00	20.00	46.8	73.40	3.10	121.41	14	K D3N 14-15.99
D3N 150-045-20A-3D	15.00	15.90	20.00	25.00	48.9	76.20	3.47	126.24	15	K D3N 14-15.99
D3N 160-048-20A-3D	16.00	16.90	20.00	25.00	51.9	81.30	3.44	131.33	16	K D3N 16-17.99
D3N 170-051-20A-3D	17.00	17.90	20.00	25.00	54.9	86.40	3.52	135.42	17	K D3N 16-17.99
D3N 180-054-25A-3D	18.00	18.90	25.00	32.00	58.4	91.50	3.90	147.50	18	K D3N 18-19.99
D3N 190-057-25A-3D	19.00	19.90	25.00	32.00	61.4	96.60	4.10	152.58	19	K D3N 18-19.99
D3N 200-060-25A-3D	20.00	20.90	25.00	32.00	64.4	101.70	4.32	157.66	20	K D3N 20-21.99
D3N 210-063-25A-3D	21.00	21.90	25.00	32.00	67.4	106.70	4.55	162.74	21	K D3N 20-21.99
D3N 220-066-25A-3D	22.00	22.90	25.00	32.00	70.4	111.80	4.69	167.83	22	K D3N 22-23.99
D3N 230-069-32A-3D	23.00	23.90	32.00	42.00	74.7	116.90	4.91	176.90	23	K D3N 22-23.99
D3N 240-072-32A-3D	24.00	24.90	32.00	42.00	77.7	122.00	5.21	182.00	24	K D3N 24-25.99
D3N 250-075-32A-3D	25.00	25.90	32.00	42.00	80.7	127.10	5.31	187.08	25	K D3N 24-25.99

• Do not mount smaller drilling heads other than the specified range of the drill body

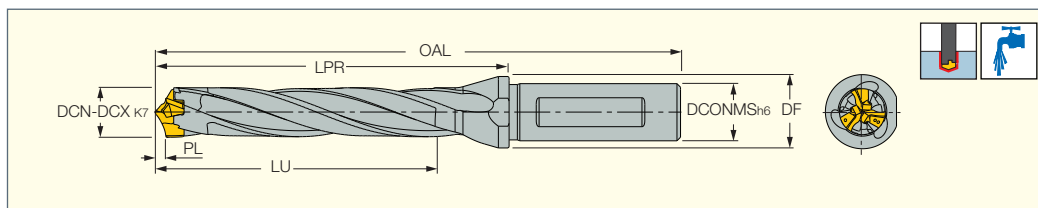
⁽¹⁾ Cutting diameter minimum

⁽²⁾ Cutting diameter maximum

⁽³⁾ 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 ⁽²⁾	DCONMS	DF	LU	LPR	PL	OAL	SSC ⁽³⁾	
D3N 120-060-16A-5D	12.00	12.40	16.00	20.00	63.3	85.00	2.71	133.00	12	K D3N 12-13.99
D3N 125-062-16A-5D	12.50	12.90	16.00	20.00	65.3	88.30	2.71	136.30	12	K D3N 12-13.99
D3N 130-065-16A-5D	13.00	13.40	16.00	20.00	68.3	92.10	2.91	140.10	13	K D3N 12-13.99
D3N 135-068-16A-5D	13.50	13.90	16.00	20.00	70.8	95.30	2.91	143.30	13	K D3N 12-13.99
D3N 140-070-16A-5D	14.00	14.40	16.00	20.00	73.3	99.20	3.10	147.20	14	K D3N 14-15.99
D3N 145-073-16A-5D	14.50	14.90	16.00	20.00	75.8	102.40	3.10	150.40	14	K D3N 14-15.99
D3N 150-075-20A-5D	15.00	15.90	20.00	25.00	78.9	106.20	3.47	156.20	15	K D3N 14-15.99
D3N 160-080-20A-5D	16.00	16.90	20.00	25.00	83.9	113.30	3.44	163.30	16	K D3N 16-17.99
D3N 170-085-20A-5D	17.00	17.90	20.00	25.00	88.9	120.40	3.52	170.40	17	K D3N 16-17.99
D3N 180-090-25A-5D	18.00	18.90	25.00	32.00	94.4	127.50	3.90	183.50	18	K D3N 18-19.99
D3N 190-095-25A-5D	19.00	19.90	25.00	32.00	99.4	134.60	4.10	190.60	19	K D3N 18-19.99
D3N 200-100-25A-5D	20.00	20.90	25.00	32.00	104.4	141.70	4.32	197.70	20	K D3N 20-21.99
D3N 210-105-25A-5D	21.00	21.90	25.00	32.00	109.4	148.70	4.55	204.70	21	K D3N 20-21.99
D3N 220-110-25A-5D	22.00	22.90	25.00	32.00	114.4	155.80	4.69	211.80	22	K D3N 22-23.99
D3N 230-115-32A-5D	23.00	23.90	32.00	42.00	120.7	162.90	4.91	222.90	23	K D3N 22-23.99
D3N 240-120-32A-5D	24.00	24.90	32.00	42.00	125.7	170.00	5.21	230.00	24	K D3N 24-25.99
D3N 250-125-32A-5D	25.00	25.90	32.00	42.00	130.7	177.10	5.31	237.10	25	K D3N 24-25.99

• Do not mount smaller drilling heads other than the specified range of the drill body

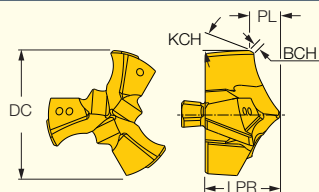
⁽¹⁾ Cutting diameter minimum

⁽²⁾ Cutting diameter maximum

⁽³⁾ Seat size code

H3P

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



Designation	Dimensions						ISO
	DC	LPR ⁽¹⁾	SSC ⁽²⁾	PL ⁽³⁾	KCH	BCH	
H3P 120-IQ	12.00	6.92	12	2.71	15.0	0.40	●
H3P 121-IQ	12.10	6.92	12	2.71	15.0	0.40	●
H3P 122-IQ	12.20	6.92	12	2.71	15.0	0.40	●
H3P 123-IQ	12.30	6.92	12	2.71	15.0	0.40	●
H3P 124-IQ	12.40	6.92	12	2.71	15.0	0.40	●
H3P 125-IQ	12.50	6.92	12	2.71	15.0	0.40	●
H3P 126-IQ	12.60	6.92	12	2.71	15.0	0.40	●
H3P 127-IQ	12.70	6.92	12	2.71	15.0	0.40	●
H3P 128-IQ	12.80	6.92	12	2.71	15.0	0.40	●
H3P 129-IQ	12.90	6.92	12	2.71	15.0	0.40	●
H3P 130-IQ	13.00	7.58	13	2.91	15.0	0.40	●
H3P 131-IQ	13.10	7.58	13	2.91	15.0	0.40	●
H3P 132-IQ	13.20	7.58	13	2.91	15.0	0.40	●
H3P 133-IQ	13.30	7.58	13	2.91	15.0	0.40	●
H3P 134-IQ	13.40	7.58	13	2.91	15.0	0.40	●
H3P 135-IQ	13.50	7.58	13	2.91	15.0	0.40	●
H3P 136-IQ	13.60	7.58	13	2.91	15.0	0.40	●
H3P 137-IQ	13.70	7.58	13	2.91	15.0	0.40	●
H3P 138-IQ	13.80	7.58	13	2.91	15.0	0.40	●
H3P 139-IQ	13.90	7.58	13	2.91	15.0	0.40	●
H3P 140-IQ	14.00	8.10	14	3.11	15.0	0.40	●
H3P 141-IQ	14.10	8.10	14	3.11	15.0	0.40	●
H3P 142-IQ	14.20	8.10	14	3.11	15.0	0.40	●
H3P 143-IQ	14.30	8.10	14	3.11	15.0	0.40	●
H3P 144-IQ	14.40	8.10	14	3.11	15.0	0.40	●
H3P 145-IQ	14.50	8.10	14	3.11	15.0	0.40	●
H3P 146-IQ	14.60	8.10	14	3.11	15.0	0.40	●
H3P 147-IQ	14.70	8.10	14	3.11	15.0	0.40	●
H3P 148-IQ	14.80	8.10	14	3.11	15.0	0.40	●
H3P 149-IQ	14.90	8.10	14	3.11	15.0	0.40	●
H3P 150-IQ	15.00	8.66	15	3.47	15.0	0.40	●
H3P 151-IQ	15.10	8.66	15	3.47	15.0	0.40	●
H3P 152-IQ	15.20	8.66	15	3.47	15.0	0.40	●
H3P 153-IQ	15.30	8.66	15	3.47	15.0	0.40	●
H3P 154-IQ	15.40	8.66	15	3.47	15.0	0.40	●
H3P 155-IQ	15.50	8.66	15	3.47	15.0	0.40	●
H3P 156-IQ	15.60	8.66	15	3.47	15.0	0.40	●
H3P 157-IQ	15.70	8.66	15	3.47	15.0	0.40	●
H3P 158-IQ	15.80	8.66	15	3.47	15.0	0.40	●
H3P 159-IQ	15.90	8.66	15	3.47	15.0	0.40	●
H3P 160-IQ	16.00	9.26	16	3.44	15.0	0.40	●
H3P 161-IQ	16.10	9.26	16	3.44	15.0	0.40	●
H3P 162-IQ	16.20	9.26	16	3.44	15.0	0.40	●
H3P 163-IQ	16.30	9.26	16	3.44	15.0	0.40	●
H3P 164-IQ	16.40	9.26	16	3.44	15.0	0.40	●
H3P 165-IQ	16.50	9.26	16	3.44	15.0	0.40	●
H3P 166-IQ	16.60	9.26	16	3.44	15.0	0.40	●
H3P 167-IQ	16.70	9.26	16	3.44	15.0	0.40	●
H3P 168-IQ	16.80	9.26	16	3.44	15.0	0.40	●
H3P 169-IQ	16.90	9.26	16	3.44	15.0	0.40	●
H3P 170-IQ	17.00	9.72	17	3.52	15.0	0.40	●
H3P 171-IQ	17.10	9.72	17	3.52	15.0	0.40	●
H3P 172-IQ	17.20	9.72	17	3.52	15.0	0.40	●
H3P 173-IQ	17.30	9.72	17	3.52	15.0	0.40	●
H3P 174-IQ	17.40	9.72	17	3.52	15.0	0.40	●
H3P 175-IQ	17.50	9.72	17	3.52	15.0	0.40	●
H3P 176-IQ	17.60	9.72	17	3.52	15.0	0.40	●
H3P 177-IQ	17.70	9.72	17	3.52	15.0	0.40	●
H3P 178-IQ	17.80	9.72	17	3.52	15.0	0.40	●
H3P 179-IQ	17.90	9.72	17	3.52	15.0	0.40	●
H3P 180-IQ	18.00	10.36	18	3.90	15.0	0.40	●
H3P 181-IQ	18.10	10.36	18	3.90	15.0	0.40	●
H3P 182-IQ	18.20	10.36	18	3.90	15.0	0.40	●
H3P 183-IQ	18.30	10.36	18	3.90	15.0	0.40	●
H3P 184-IQ	18.40	10.36	18	3.90	15.0	0.40	●
H3P 185-IQ	18.50	10.36	18	3.90	15.0	0.40	●
H3P 186-IQ	18.60	10.36	18	3.90	15.0	0.40	●
H3P 187-IQ	18.70	10.36	18	3.90	15.0	0.40	●
H3P 188-IQ	18.80	10.36	18	3.90	15.0	0.40	●
H3P 189-IQ	18.90	10.36	18	3.90	15.0	0.40	●
H3P 190-IQ	19.00	10.92	19	4.10	15.0	0.40	●

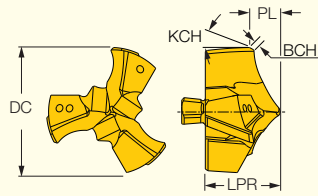
⁽¹⁾ LPR tolerance ± 0.05 mm

⁽²⁾ Seat size code

⁽³⁾ PL tolerance ± 0.1 mm

H3P (continued)

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



Designation	Dimensions						IC903
	DC	LPR ⁽¹⁾	SSC ⁽²⁾	PL ⁽³⁾	KCH	BCH	
H3P 1905-IQ	19.05	10.92	19	4.10	15.0	0.40	●
H3P 191-IQ	19.10	10.92	19	4.10	15.0	0.40	●
H3P 192-IQ	19.20	10.92	19	4.10	15.0	0.40	●
H3P 193-IQ	19.30	10.92	19	4.10	15.0	0.40	●
H3P 194-IQ	19.40	10.92	19	4.10	15.0	0.40	●
H3P 195-IQ	19.50	10.92	19	4.10	15.0	0.40	●
H3P 196-IQ	19.60	10.92	19	4.10	15.0	0.40	●
H3P 197-IQ	19.70	10.92	19	4.10	15.0	0.40	●
H3P 198-IQ	19.80	10.92	19	4.10	15.0	0.40	●
H3P 199-IQ	19.90	10.92	19	4.10	15.0	0.40	●
H3P 200-IQ	20.00	11.24	20	4.32	15.0	0.40	●
H3P 201-IQ	20.10	11.24	20	4.32	15.0	0.40	●
H3P 202-IQ	20.20	11.24	20	4.32	15.0	0.40	●
H3P 203-IQ	20.30	11.24	20	4.32	15.0	0.40	●
H3P 204-IQ	20.40	11.24	20	4.32	15.0	0.40	●
H3P 205-IQ	20.50	11.24	20	4.32	15.0	0.40	●
H3P 206-IQ	20.60	11.24	20	4.32	15.0	0.40	●
H3P 207-IQ	20.70	11.24	20	4.32	15.0	0.40	●
H3P 208-IQ	20.80	11.24	20	4.32	15.0	0.40	●
H3P 209-IQ	20.90	11.24	20	4.32	15.0	0.40	●
H3P 210-IQ	21.00	11.80	21	4.55	15.0	0.40	●
H3P 211-IQ	21.10	11.80	21	4.55	15.0	0.40	●
H3P 212-IQ	21.20	11.80	21	4.55	15.0	0.40	●
H3P 213-IQ	21.30	11.80	21	4.55	15.0	0.40	●
H3P 214-IQ	21.40	11.80	21	4.55	15.0	0.40	●
H3P 215-IQ	21.50	11.80	21	4.55	15.0	0.40	●
H3P 216-IQ	21.60	11.80	21	4.55	15.0	0.40	●
H3P 217-IQ	21.70	11.80	21	4.55	15.0	0.40	●
H3P 218-IQ	21.80	11.80	21	4.55	15.0	0.40	●
H3P 219-IQ	21.90	11.80	21	4.55	15.0	0.40	●
H3P 220-IQ	22.00	12.63	22	4.70	15.0	0.40	●
H3P 221-IQ	22.10	12.63	22	4.70	15.0	0.40	●
H3P 222-IQ	22.20	12.63	22	4.70	15.0	0.40	●
H3P 223-IQ	22.30	12.63	22	4.70	15.0	0.40	●
H3P 224-IQ	22.40	12.63	22	4.70	15.0	0.40	●
H3P 225-IQ	22.50	12.63	22	4.70	15.0	0.40	●
H3P 226-IQ	22.60	12.63	22	4.70	15.0	0.40	●
H3P 227-IQ	22.70	12.63	22	4.70	15.0	0.40	●
H3P 228-IQ	22.80	12.63	22	4.70	15.0	0.40	●
H3P 229-IQ	22.90	12.63	22	4.70	15.0	0.40	●
H3P 230-IQ	23.00	13.00	23	4.91	15.0	0.40	●
H3P 231-IQ	23.10	13.00	23	4.91	15.0	0.40	●
H3P 232-IQ	23.20	13.00	23	4.91	15.0	0.40	●
H3P 233-IQ	23.30	13.00	23	4.91	15.0	0.40	●
H3P 234-IQ	23.40	13.00	23	4.91	15.0	0.40	●
H3P 235-IQ	23.50	13.00	23	4.91	15.0	0.40	●
H3P 236-IQ	23.60	13.00	23	4.91	15.0	0.40	●
H3P 237-IQ	23.70	13.00	23	4.91	15.0	0.40	●
H3P 238-IQ	23.80	13.00	23	4.91	15.0	0.40	●
H3P 239-IQ	23.90	13.00	23	4.91	15.0	0.40	●
H3P 240-IQ	24.00	13.54	24	5.20	15.0	0.40	●
H3P 241-IQ	24.10	13.54	24	5.20	15.0	0.40	●
H3P 242-IQ	24.20	13.54	24	5.20	15.0	0.40	●
H3P 243-IQ	24.30	13.54	24	5.20	15.0	0.40	●
H3P 244-IQ	24.40	13.54	24	5.20	15.0	0.40	●
H3P 245-IQ	24.50	13.54	24	5.20	15.0	0.40	●
H3P 246-IQ	24.60	13.54	24	5.20	15.0	0.40	●
H3P 247-IQ	24.70	13.54	24	5.20	15.0	0.40	●
H3P 248-IQ	24.80	13.54	24	5.20	15.0	0.40	●
H3P 249-IQ	24.90	13.54	24	5.20	15.0	0.40	●
H3P 250-IQ	25.00	14.11	25	5.32	15.0	0.40	●
H3P 251-IQ	25.10	14.11	25	5.32	15.0	0.40	●
H3P 252-IQ	25.20	14.11	25	5.32	15.0	0.40	●
H3P 253-IQ	25.30	14.11	25	5.32	15.0	0.40	●
H3P 254-IQ	25.40	14.11	25	5.32	15.0	0.40	●
H3P 255-IQ	25.50	14.11	25	5.32	15.0	0.40	●
H3P 256-IQ	25.60	14.11	25	5.32	15.0	0.40	●
H3P 257-IQ	25.70	14.11	25	5.32	15.0	0.40	●
H3P 258-IQ	25.80	14.11	25	5.32	15.0	0.40	●
H3P 259-IQ	25.90	14.11	25	5.32	15.0	0.40	●

⁽¹⁾ LPR tolerance ± 0.05 mm

⁽²⁾ Seat size code

⁽³⁾ PL tolerance ± 0.1 mm

SUMOCHAM

CHAMDRILL LINE

Smallest Indexable Dia 4.0-5.9 mm Drilling Master



Innovative Ergonomic Key



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



**Micro Size Inserts
for High Productivity**



**Twisted Coolant
Nozzles**



**For Every Type
of Material**



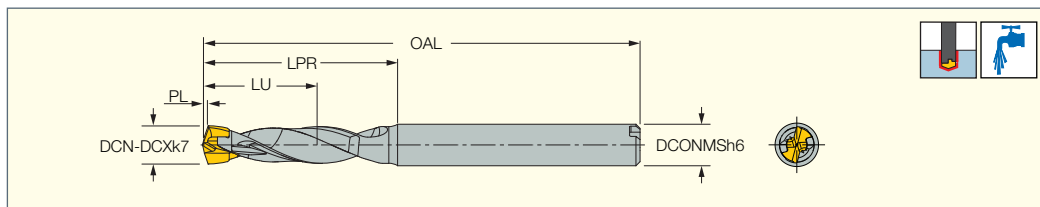
**Innovative
Ergonomic Key**



**Cost Effective
Insert**

LOGIQDRILL
ISCAR CHSS LINES

DCN C-3D

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


Designation	DCN ⁽²⁾	DCX ⁽³⁾	DCONMS	LU	LPR	PL	OAL	SSC ⁽⁴⁾	
DCN 040-012-06C-3D ⁽¹⁾	4.00	4.40	6.00	12.0	22.7	0.62	57.70	4	
DCN 045-014-06C-3D ⁽¹⁾	4.50	4.90	6.00	13.5	24.7	0.66	59.65	4.5	
DCN 050-015-06C-3D ⁽¹⁾	5.00	5.40	6.00	15.0	26.3	0.73	61.30	5	
DCN 055-017-06C-3D ⁽¹⁾	5.50	5.90	6.00	16.5	28.2	0.81	63.15	5.5	
DCN 060-018-08C-3D	6.00	6.40	8.00	18.0	28.0	0.96	64.00	6	K DCN 6-9.99-Y
DCN 065-020-08C-3D	6.50	6.90	8.00	19.5	29.8	1.18	65.80	6.5	K DCN 6-9.99-Y
DCN 070-021-08C-3D	7.00	7.40	8.00	21.0	31.6	1.01	67.60	7	K DCN 6-9.99
DCN 075-023-08C-3D	7.50	7.90	8.00	22.5	33.1	1.01	69.10	7	K DCN 6-9.99
DCN 080-024-10C-3D	8.00	8.40	10.00	24.0	35.4	1.20	75.40	8	K DCN 6-9.99
DCN 085-026-10C-3D	8.50	8.90	10.00	25.5	36.9	1.20	76.90	8	K DCN 6-9.99
DCN 090-027-10C-3D	9.00	9.40	10.00	27.0	38.8	1.25	78.80	9	K DCN 6-9.99
DCN 095-029-10C-3D	9.50	9.90	10.00	28.5	40.3	1.25	80.30	9	K DCN 6-9.99

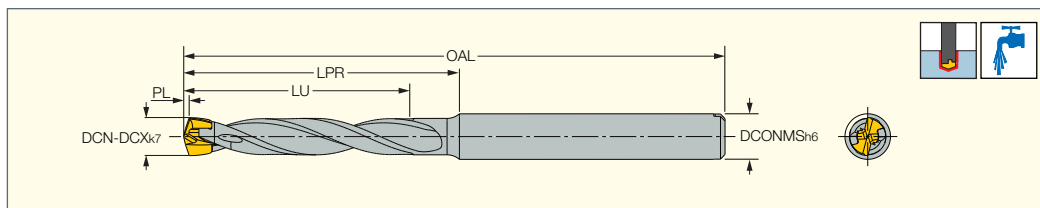
⁽¹⁾ The SK DCN key is supplied with the insert

⁽²⁾ Cutting diameter minimum • Do not mount smaller drilling heads other than the specified range of the drill body

⁽³⁾ Cutting diameter maximum

⁽⁴⁾ Seat size code

DCN C-5D

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


Designation	DCN ⁽²⁾	DCX ⁽³⁾	DCONMS	LU	LPR	PL	OAL	SSC ⁽⁴⁾	
DCN 040-020-06C-5D ⁽¹⁾	4.00	4.40	6.00	20.0	30.7	0.62	65.70	4	
DCN 045-023-06C-5D ⁽¹⁾	4.50	4.90	6.00	22.5	33.7	0.66	68.65	4.5	
DCN 050-025-06C-5D ⁽¹⁾	5.00	5.40	6.00	25.0	36.3	0.73	71.30	5	
DCN 055-028-06C-5D ⁽¹⁾	5.50	5.90	6.00	27.5	39.2	0.81	74.15	5.5	
DCN 060-030-08C-5D	6.00	6.40	8.00	30.0	40.0	0.96	76.00	6	K DCN 6-9.99-Y
DCN 065-033-08C-5D	6.50	6.90	8.00	32.5	42.8	1.18	78.80	6.5	K DCN 6-9.99-Y
DCN 070-035-08C-5D	7.00	7.40	8.00	35.0	45.6	1.01	81.60	7	K DCN 6-9.99
DCN 075-038-08C-5D	7.50	7.90	8.00	37.5	48.1	1.01	84.10	7	K DCN 6-9.99
DCN 080-040-10C-5D	8.00	8.40	10.00	40.0	51.4	1.20	91.40	8	K DCN 6-9.99
DCN 085-043-10C-5D	8.50	8.90	10.00	42.5	53.9	1.20	93.90	8	K DCN 6-9.99
DCN 090-045-10C-5D	9.00	9.40	10.00	45.0	56.8	1.25	96.80	9	K DCN 6-9.99
DCN 095-048-10C-5D	9.50	9.90	10.00	47.5	59.3	1.25	99.30	9	K DCN 6-9.99

⁽¹⁾ The SK DCN key is supplied with the insert

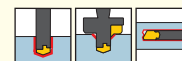
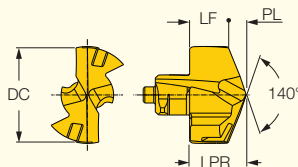
⁽²⁾ Cutting diameter minimum • Do not mount smaller drilling heads other than the specified range of the drill body

⁽³⁾ Cutting diameter maximum

⁽⁴⁾ Seat size code

ICP

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

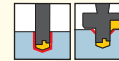
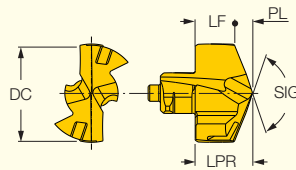


Designation	Dimensions							IC908
	DC	LPR	SSC ⁽¹⁾	PL	SIG	LF		
ICP 040	4.00	3.10	4	0.62	140	2.48	SK DCN 4-4.99	●
ICP 041	4.10	3.10	4	0.62	140	2.48	SK DCN 4-4.99	●
ICP 042	4.20	3.10	4	0.62	140	2.48	SK DCN 4-4.99	●
ICP 043	4.30	3.10	4	0.62	140	2.48	SK DCN 4-4.99	●
ICP 044	4.40	3.10	4	0.62	140	2.48	SK DCN 4-4.99	●
ICP 045	4.50	3.55	4.5	0.66	140	2.89	SK DCN 4-4.99	●
ICP 046	4.60	3.55	4.5	0.68	140	2.87	SK DCN 4-4.99	●
ICP 047	4.70	3.55	4.5	0.70	140	2.85	SK DCN 4-4.99	●
ICP 048	4.80	3.55	4.5	0.71	140	2.84	SK DCN 4-4.99	●
ICP 049	4.90	3.55	4.5	0.73	140	2.82	SK DCN 4-4.99	●
ICP 050	5.00	3.70	5	0.73	140	2.97	SK DCN 5-5.99	●
ICP 051	5.10	3.70	5	0.75	140	3.02	SK DCN 5-5.99	●
ICP 052	5.20	3.70	5	0.77	140	3.00	SK DCN 5-5.99	●
ICP 053	5.30	3.70	5	0.78	140	2.99	SK DCN 5-5.99	●
ICP 054	5.40	3.70	5	0.80	140	2.97	SK DCN 5-5.99	●
ICP 055	5.50	3.85	5.5	0.81	140	3.04	SK DCN 5-5.99	●
ICP 056	5.60	3.85	5.5	0.83	140	3.02	SK DCN 5-5.99	●
ICP 057	5.70	3.85	5.5	0.85	140	3.00	SK DCN 5-5.99	●
ICP 058	5.80	3.85	5.5	0.86	140	2.99	SK DCN 5-5.99	●
ICP 059	5.90	3.85	5.5	0.88	140	2.97	SK DCN 5-5.99	●

⁽¹⁾ Seat size code

ICM

Exchangeable DCN Drill Heads, for Stainless Steel and High Temperature Alloys (ISO M&S Materials)

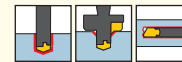
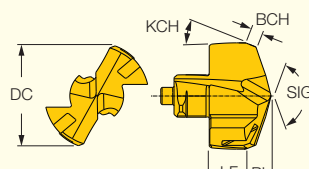


Designation	Dimensions							IC908
	DC	LPR	SSC ⁽¹⁾	PL	SIG	LF		
ICM 050	5.00	3.70	5.0	0.70	140	3.00	SK DCN 5-5.99	●
ICM 051	5.10	3.70	5.0	0.72	140	2.98	SK DCN 5-5.99	●
ICM 052	5.20	3.70	5.0	0.74	140	2.96	SK DCN 5-5.99	●
ICM 053	5.30	3.70	5.0	0.75	140	2.95	SK DCN 5-5.99	●
ICM 054	5.40	3.70	5.0	0.77	140	2.93	SK DCN 5-5.99	●
ICM 055	5.50	3.85	5.5	0.90	140	2.95	SK DCN 5-5.99	●
ICM 056	5.60	3.85	5.5	0.92	140	2.93	SK DCN 5-5.99	●
ICM 057	5.70	3.85	5.5	0.94	140	2.91	SK DCN 5-5.99	●
ICM 058	5.80	3.85	5.5	0.96	140	2.89	SK DCN 5-5.99	●
ICM 059	5.90	3.85	5.5	0.97	140	2.88	SK DCN 5-5.99	●

⁽¹⁾ Seat size code

ICK

Exchangeable DCN Drill Heads, for Cast Iron (ISO K Materials)



Designation	Dimensions								IC908
	DC	LPR	SSC ⁽¹⁾	PL	LF	SIG	KCH	BCH	
ICK 050	5.00	3.70	5.0	1.25	2.45	140	30.0	0.60	SK DCN 5-5.99
ICK 055	5.50	3.85	5.5	1.38	2.47	140	30.0	0.66	SK DCN 5-5.99
ICK 059	5.90	3.85	5.5	1.38	2.47	140	30.0	0.72	SK DCN 5-5.99

⁽¹⁾ Seat size code

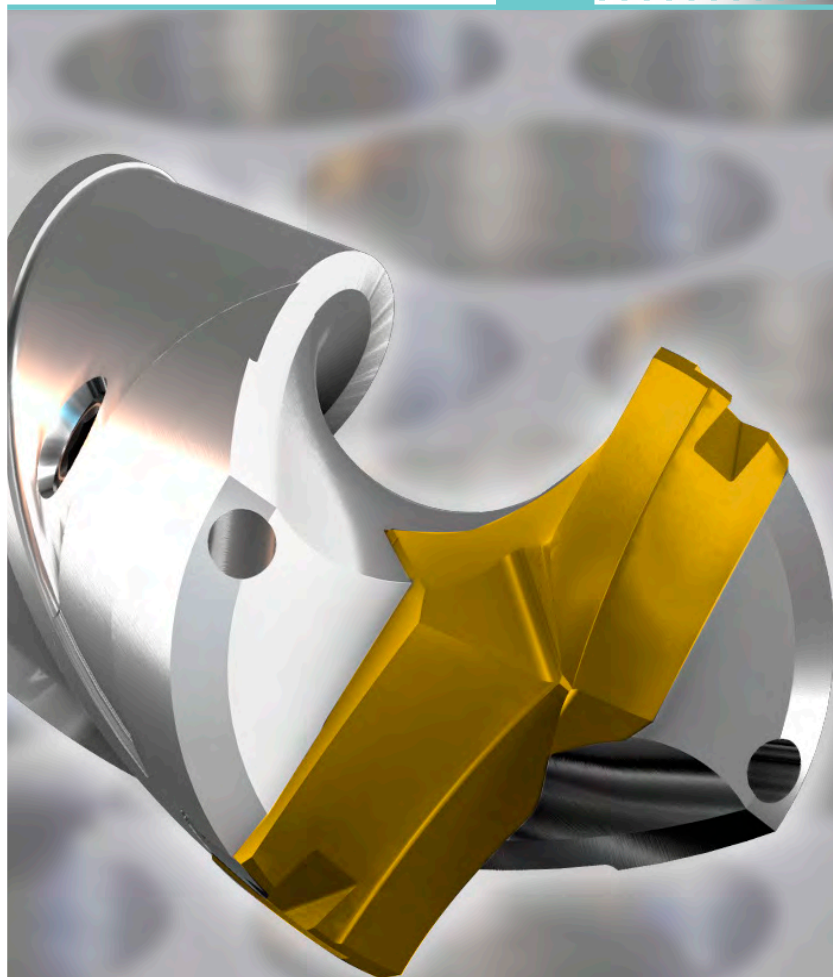
MODUDRILL

MODULAR HEADS

Drilling System

Dia 33-40 mm

Modu Drill Master

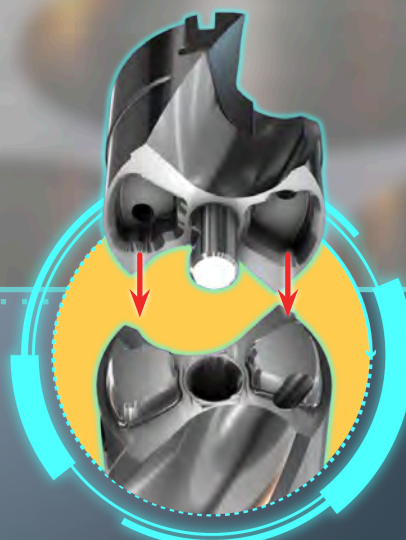


DR-DH

CHAM-IQ



Multiple Drilling Head Options



Smart and Easy
Connection



Internal Coolant



Easy Chip Evac-
uation



Innovative
Modular System

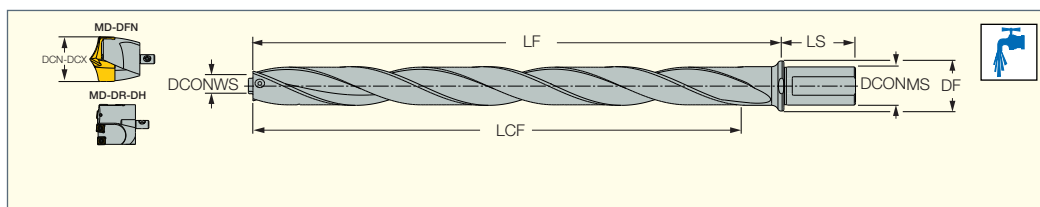


Cost Effective
Insert

LOGIQDRILL
ISCAR CHESS LINES

MD-BODY

Modular Drill Bodies, Each
Can Carry a Variety of
Exchangeable Drilling Heads
with Different Diameters



Designation	DCONMS	DF	LS	LF	LCF	DCN ⁽¹⁾	DCX ⁽²⁾	DCONWS ⁽³⁾			
MD-BODY-33-36-400-32A	32.00	42.00	60.0	445.00	393.3	33.00	36.90	6.70	SET SCREW M6-MODUDRILL	BLD T15/S7	SW6-T-SH
MD-BODY-37-40-400-32A	32.00	42.00	60.0	445.00	393.3	37.00	40.00	6.90	SET SCREW M6-MODUDRILL	BLD T15/S7	SW6-T-SH

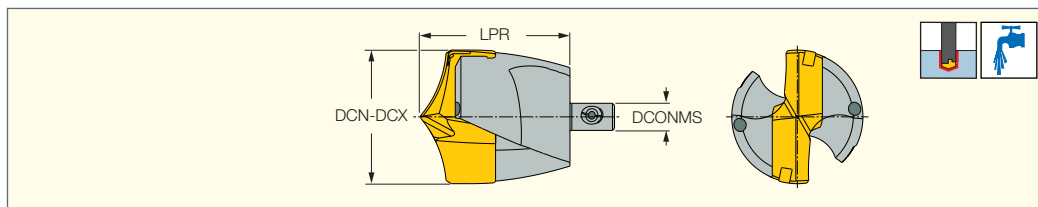
⁽¹⁾ Cutting diameter minimum

⁽²⁾ Cutting diameter maximum

⁽³⁾ HEAD connection size



MD-DFN-HEAD

 Exchangeable Drilling Heads
 Carrying CHAMIQDRILL
 Solid Carbide Inserts


Designation	DCN ⁽¹⁾	DCX ⁽²⁾	LPR	DCONMS	SSC ⁽³⁾	MIID ⁽⁴⁾	
MD-DFN 330 HEAD	33.00	33.90	36.90	6.70	33	HFP 330-IQ	K DFN 30-40
MD-DFN 340 HEAD	34.00	34.90	37.20	6.70	34	HFP 340-IQ	K DFN 30-40
MD-DFN 350 HEAD	35.00	35.90	37.20	6.70	35	HFP 350-IQ	K DFN 30-40
MD-DFN 360 HEAD	36.00	36.90	37.60	6.70	36	HFP 360-IQ	K DFN 30-40
MD-DFN 370 HEAD	37.00	37.90	37.60	6.90	37	HFP 370-IQ	K DFN 30-40
MD-DFN 380 HEAD	38.00	38.90	38.00	6.90	38	HFP 380-IQ	K DFN 30-40
MD-DFN 390 HEAD	39.00	40.00	38.00	6.90	39	HFP 390-IQ	K DFN 30-40

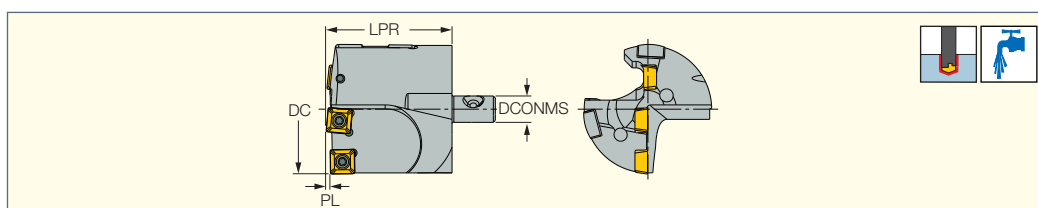
⁽¹⁾ Cutting diameter minimum • Do not mount smaller drilling heads other than the specified range of the drill body

⁽²⁾ Cutting diameter maximum

⁽³⁾ Seat size code

⁽⁴⁾ Master insert identification

MD-DR-DH-HEAD

 Exchangeable Drilling
 Heads with Guide Pads,
 Carrying Square Inserts


Designation	DC	LPR	DCONMS	MIID ⁽¹⁾	MIID_2 ⁽²⁾	PL
MD-DR-DH 330 070606-06	33.00	33.00	6.70	SOMX 06	SOMX 07 ⁽³⁾	1.00
MD-DR-DH 340 070606-06	34.00	33.00	6.70	SOMX 06	SOMX 07 ⁽³⁾	1.00
MD-DR-DH 350 070606-06	35.00	33.00	6.70	SOMX 06	SOMX 07 ⁽³⁾	1.00
MD-DR-DH 360 070707-06	36.00	33.00	6.70	SOMX 07	SOMX 07 ⁽³⁾	1.00
MD-DR-DH 370 070707-06	37.00	39.00	6.90	SOMX 07	SOMX 07 ⁽³⁾	1.00
MD-DR-DH 380 070707-06	38.00	39.00	6.90	SOMX 07	SOMX 07 ⁽³⁾	1.00
MD-DR-DH 390 070707-06	39.00	39.00	6.90	SOMX 07	SOMX 07 ⁽³⁾	1.00
MD-DR-DH 400 070707-06	40.00	40.00	6.90	SOMX 07	SOMX 07 ⁽³⁾	1.00

⁽¹⁾ Master insert identification

⁽²⁾ Master insert identification 2

⁽³⁾ Inner insert

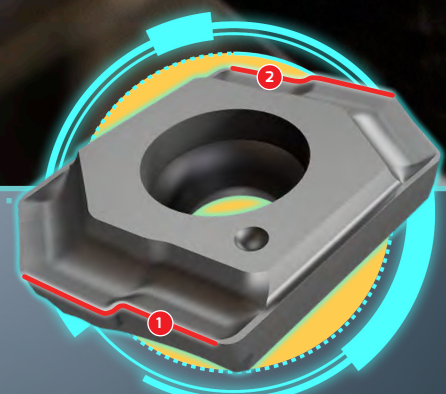
Spare Parts

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



TRIDEEP
DEEP DRILLING

Small Diameter Dia 12-13.99 mm Deep Drilling Master



Small Diameter Deep Drills with New Chip Splitting Insert Concept



Chip Splitting
Concept Insert



Deep Drilling



Super Surface
Finish



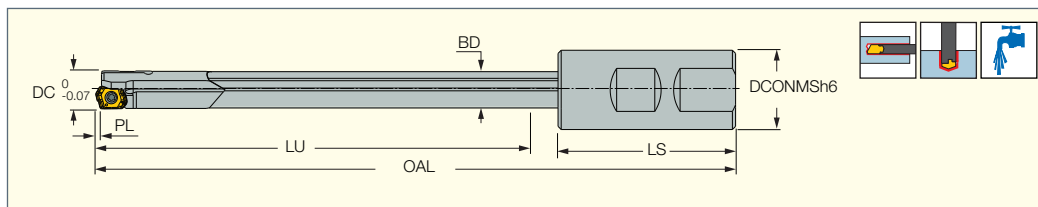
Innovative

Serrated Cutting Edges
Small Diameter Range:
Ø12-13.99 mm

LOGIQDRILL
ISCAR CHESS LINES

GD-DHL

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



Designation	DC	OAL	LU	DCONMS	BD	PL	LS	MIID ⁽¹⁾
GD-DHL 12.00X800-U03	12.00	801.80	713.8	19.05	11.50	1.80	70.0	LOGT 06..
GD-DHL 12.00X800-22	12.00	801.80	733.8	20.00	11.50	1.80	50.0	LOGT 06..
GD-DHL 12.00X800-34	12.00	801.80	733.8	20.00	11.50	1.80	50.0	LOGT 06..
GD-DHL 12.00X1000-U03	12.00	1001.80	913.8	19.05	11.50	1.80	70.0	LOGT 06..
GD-DHL 12.00X1000-22	12.00	1001.80	933.8	20.00	11.50	1.80	50.0	LOGT 06..
GD-DHL 12.00X1000-34	12.00	1001.80	933.8	20.00	11.50	1.80	50.0	LOGT 06..
GD-DHL 12.00X1650-U03	12.00	1651.80	1563.8	19.05	11.50	1.80	70.0	LOGT 06..
GD-DHL 12.00X1650-22	12.00	1651.80	1583.8	20.00	11.50	1.80	50.0	LOGT 06..
GD-DHL 12.00X1650-34	12.00	1651.80	1583.8	20.00	11.50	1.80	50.0	LOGT 06..
GD-DHL 13.00X800-U04	13.00	801.80	711.8	25.40	12.50	1.80	70.0	LOGT 06..
GD-DHL 13.00X800-23	13.00	801.80	725.8	25.00	12.50	1.80	56.0	LOGT 06..
GD-DHL 13.00X800-35	13.00	801.80	725.8	25.00	12.50	1.80	56.0	LOGT 06..
GD-DHL 13.00X1000-U04	13.00	1001.80	911.8	25.40	12.50	1.80	70.0	LOGT 06..
GD-DHL 13.00X1000-23	13.00	1001.80	925.8	25.00	12.50	1.80	56.0	LOGT 06..
GD-DHL 13.00X1000-35	13.00	1001.80	925.8	25.00	12.50	1.80	56.0	LOGT 06..
GD-DHL 13.00X1650-U04	13.00	1651.80	1561.8	25.40	12.50	1.80	70.0	LOGT 06..
GD-DHL 13.00X1650-23	13.00	1651.80	1575.8	25.00	12.50	1.80	56.0	LOGT 06..
GD-DHL 13.00X1650-35	13.00	1651.80	1575.8	25.00	12.50	1.80	56.0	LOGT 06..

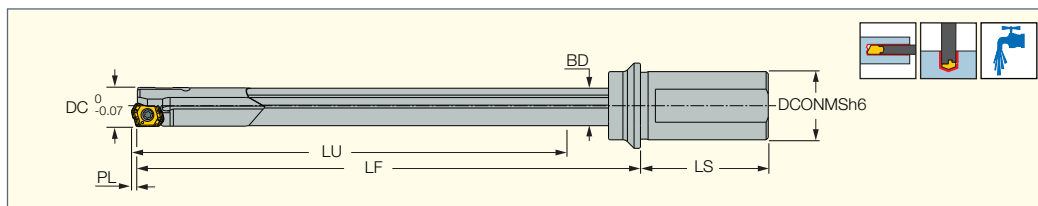
• **Note:** Gundrills can be supplied with up to 2400 mm length on request. • Inserts and guide pads should be ordered separately (they are not included with the tools).

• **Preventative measures:** • Do NOT operate the deep hole drill at full speed before engaging the guide hole. • Enter the guide hole slowly at a speed of 50 - 100 rpm.

⁽¹⁾ Master insert identification

GD-DH (12-13.5)

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



Designation	DC	LF	PL	LU	DCONMS	BD	LS	MIID ⁽¹⁾
GD-DH 12.00-M20-15D-06	12.00	218.00	1.80	189.8	20.00	11.50	50.0	LOGT 06..
GD-DH 12.00-M20-20D-06	12.00	280.00	1.80	251.8	20.00	11.50	50.0	LOGT 06..
GD-DH 12.00-M20-25D-06	12.00	343.00	1.80	314.8	20.00	11.50	50.0	LOGT 06..
GD-DH 12.50-M20-15D-06	12.50	226.00	1.80	196.8	20.00	12.00	50.0	LOGT 06..
GD-DH 12.50-M20-20D-06	12.50	291.00	1.80	261.8	20.00	12.00	50.0	LOGT 06..
GD-DH 12.50-M20-25D-06	12.50	356.00	1.80	326.8	20.00	12.00	50.0	LOGT 06..
GD-DH 13.00-M25-15D-06	13.00	238.00	1.80	204.8	25.00	12.50	56.0	LOGT 06..
GD-DH 13.00-M25-20D-06	13.00	305.00	1.80	271.8	25.00	12.50	56.0	LOGT 06..
GD-DH 13.00-M25-25D-06	13.00	373.00	1.80	339.8	25.00	12.50	56.0	LOGT 06..
GD-DH 13.50-M25-15D-06	13.50	245.00	1.80	211.8	25.00	13.00	56.0	LOGT 06..
GD-DH 13.50-M25-20D-06	13.50	315.00	1.80	281.8	25.00	13.00	56.0	LOGT 06..
GD-DH 13.50-M25-25D-06	13.50	385.00	1.80	351.8	25.00	13.00	56.0	LOGT 06..

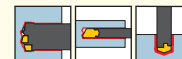
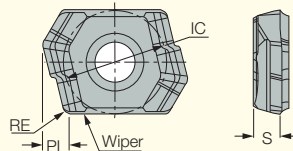
• **Note:** Gundrills can be supplied with up to 2400 mm length on request. • Inserts and guide pads should be ordered separately (they are not included with the tools).

• **Preventative measures:** • Do NOT operate the deep hole drill at full speed before engaging the guide hole. • Enter the guide hole slowly at a speed of 50 - 100 rpm.

⁽¹⁾ Master insert identification

LOGT

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

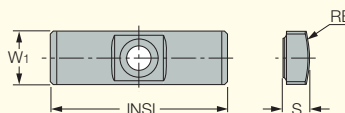


Dimensions					IC908
Designation	IC	RE	PL	S	
LOGT 060204R-DT	7.00	0.40	1.80	2.00	•

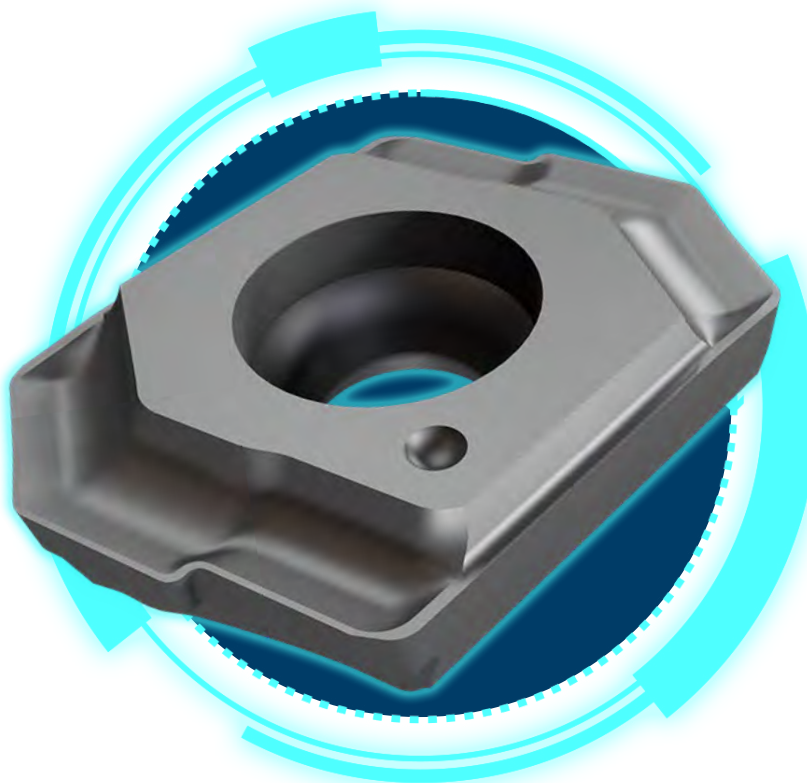
ISCARDEEPDRILL

GPS

Deep Drilling Solid Carbide Guide Pads

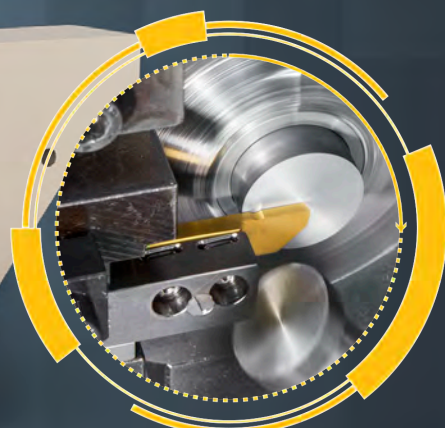


Dimensions					IC908
Designation	W1	RE	INSL	S	
GPS-04-16-055	4.0	5.50	16.00	2.0	•



LOGIQ GRIP

ISCAR CHESS LINES



High Productivity



For All
Materials



New Generation

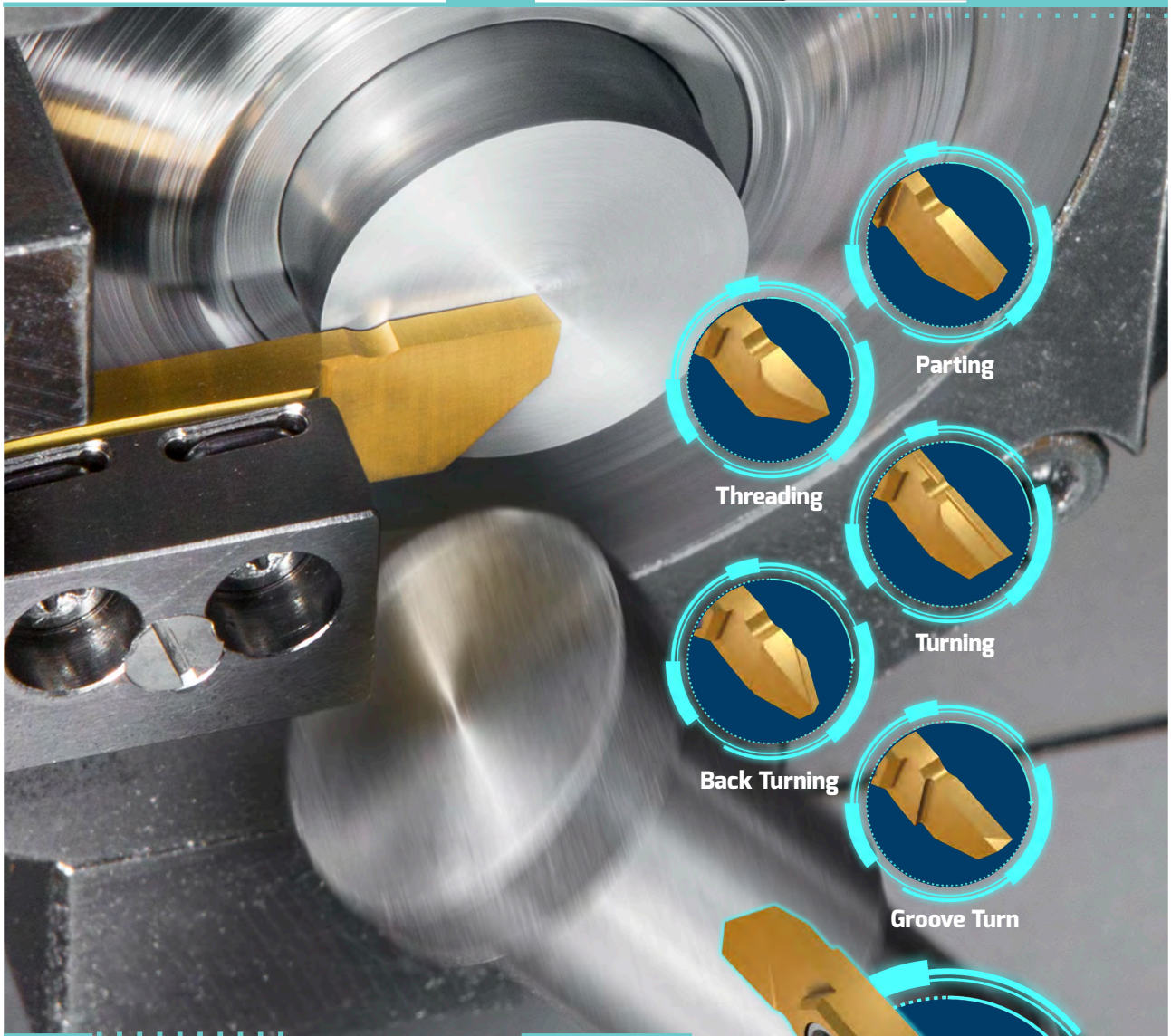


Cost Effective
Insert

MACHINING **IN** DUSTRY 4.0
TELLIGENTLY

SWISSCUT
EXTRA LONG

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



Parting

Threading

Turning

Back Turning

Groove Turn

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



Variety of
Geometries



Rigid Clamping



Precision



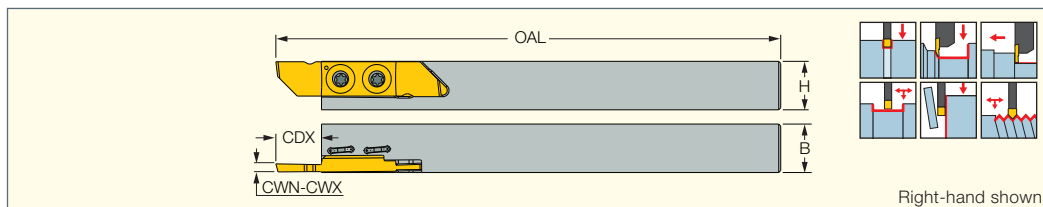
Deep Parting
and Grooving



Long Insert with
Two Clamping Screws

LOGIQGRIP
ISCAR CHESS LINES

SCHR/L-41BF

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


Right-hand shown

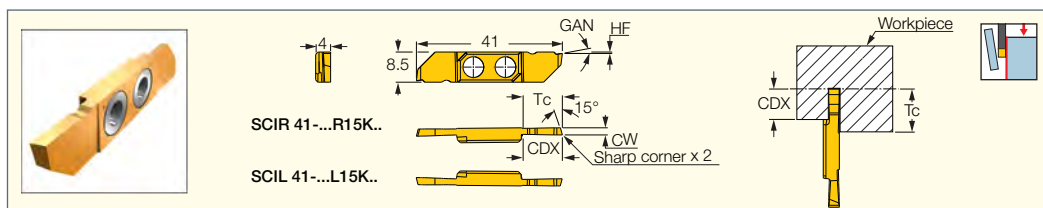
Designation	CWX ⁽¹⁾	CDX ⁽²⁾	H	B	OAL	SR M4.5X0.75-L7.9	BLD T15/S7	SR M2X0.4-L3.5	BLD T10/S7	SW6-SD
SCHR/L 12-41BF	3.00	11.00	12.0	12.0	125.00					
SCHR/L 16-41BF	3.00	11.00	16.0	16.0	125.00					

⁽¹⁾ Maximum cutting width

⁽²⁾ See insert data

SCIR/L-41-R/L

Parting Inserts

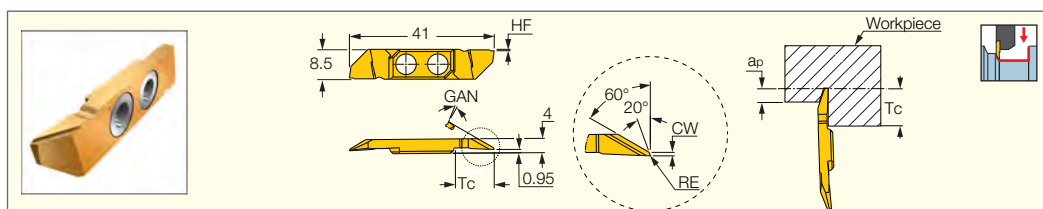


Designation	Dimensions						IC1008	Recommended Machining Data
	CW	GAN	HF ⁽¹⁾	CDX	Tc			
SCIL 41-100L15K00	1.00	0.0	0.2	6.00	11.0	●	●	0.02-0.04
SCIR 41-100R15K00	1.00	0.0	0.2	6.00	11.0	●	●	0.02-0.04
SCIL 41-150L15K00	1.50	0.0	0.2	8.00	11.0	●	●	0.03-0.06
SCIR 41-150R15K00	1.50	0.0	0.2	8.00	11.0	●	●	0.03-0.06
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

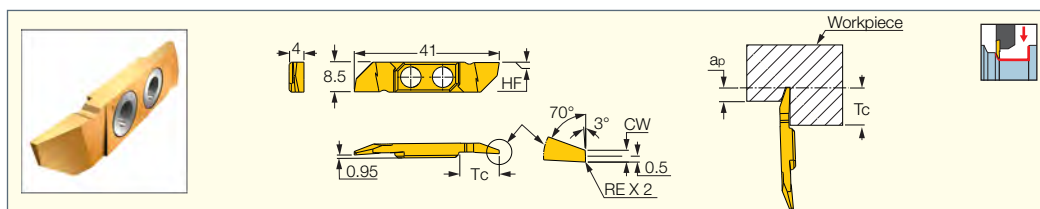
SCIR/L-41-BRA/BLA

Back Turning Inserts



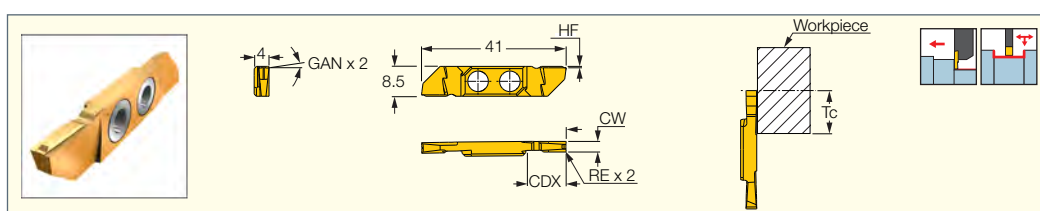
Designation	Dimensions						IC1008	Recommended Machining Data	
	CW	RE	Tc	HF ⁽¹⁾	GAN			a _p (mm)	f turn (mm/rev)
SCIL 41-BLA08-05K8	0.50	0.08	11.0	0.5	8.0	●	●	0.10-4.20	0.02-0.15
SCIR 41-BRA08-05K8	0.50	0.08	11.0	0.5	8.0	●	●	0.10-4.20	0.02-0.15
SCIL 41-BLA08-10K8	1.00	0.08	11.0	0.5	8.0	●	●	0.10-4.20	0.02-0.15
SCIR 41-BRA08-10K8	1.00	0.08	11.0	0.5	8.0	●	●	0.10-4.20	0.02-0.15

⁽¹⁾ Cutting edge below center

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


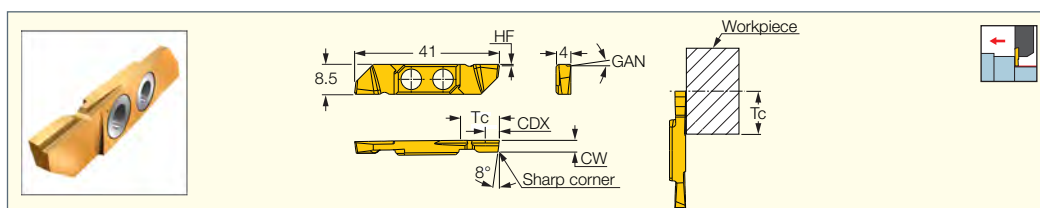
Designation	Dimensions					IC1008	Recommended Machining Data	
	CW	RE	Tc	HF(1)			a _p (mm)	f turn (mm/rev)
SCIL 41-ELA00-10K0	1.00	0.00	11.0	0.2		●	0.05-5.00	0.02-0.15
SCIR 41-ERA00-10K0	1.00	0.00	11.0	0.2		●	0.05-5.00	0.02-0.15
SCIL 41-ELA08-10K0	1.00	0.08	11.0	0.2		●	0.10-5.00	0.02-0.15
SCIR 41-ERA08-10K0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

(1) Cutting edge below center

SCIR/L-41-AD
 Turning Inserts


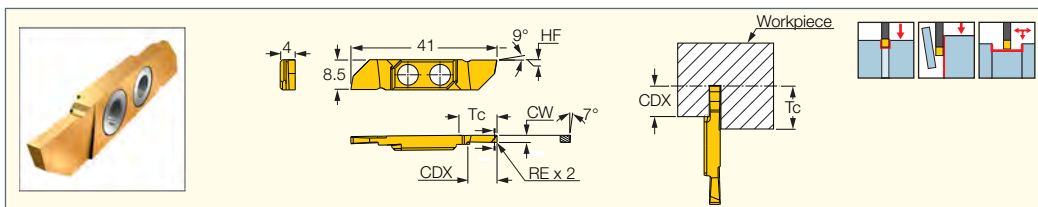
Designation	Dimensions						IC1008	Recommended Machining Data		
	CW	RE	CDX	Tc	HF(1)	GAN		a _p (mm)	f turn (mm/rev)	f groove (mm/rev)
SCIR/L 41-AD08-30K8	3.00	0.08	11.00	11.0	0.5	8.0	●	0.12-4.00	0.02-0.15	0.01-0.06

(1) Cutting edge below center

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


Designation	Dimensions					IC1008	Recommended Machining Data	
	CDX	CW	HF(1)	Tc	GAN		a _p (mm)	f turn (mm/rev)
SCIL 41-AL00-33K16	4.00	3.30	0.5	11.0	16.0	●	0.05-4.00	0.02-0.15
SCIR 41-AR00-33K16	4.00	3.30	0.5	11.0	16.0	●	0.05-4.00	0.02-0.15

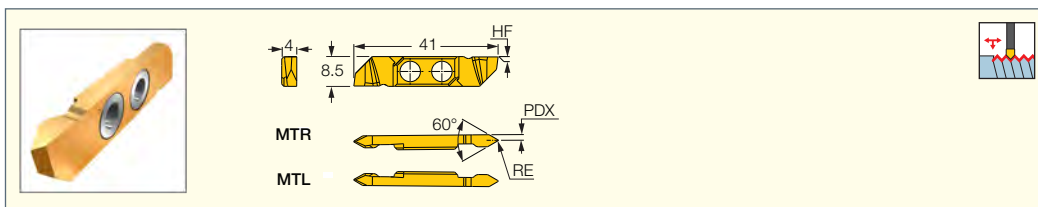
(1) Cutting edge below center



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	11.0	●	0.10-1.80	0.02-0.10	0.02-0.07
SCIR/L 41-200NP08	2.00	0.08	0.2	8.00	11.0	●	0.10-2.50	0.02-0.15	0.02-0.09
SCIR/L 41-250NP08	2.50	0.08	0.2	10.00	11.0	●	0.10-3.00	0.02-0.17	0.02-0.11
SCIR/L 41-300NP08	3.00	0.08	0.2	10.00	11.0	●	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



Designation	Dimensions							IC1008
	RE	PDX	TPN ⁽¹⁾	TPX ⁽²⁾	TPIN ⁽³⁾	TPIX ⁽⁴⁾	HF ⁽⁵⁾	
SCIL 41-MTL006	0.06	0.9	0.400	1.500	17.00	64.00	0.2	●
SCIR 41-MTR006	0.06	0.9	0.400	1.500	17.00	64.00	0.2	●
SCIL 41-MTL020	0.20	1.6	1.500	2.500	10.00	17.00	0.2	●
SCIR 41-MTR020	0.20	1.6	1.500	2.500	10.00	17.00	0.2	●

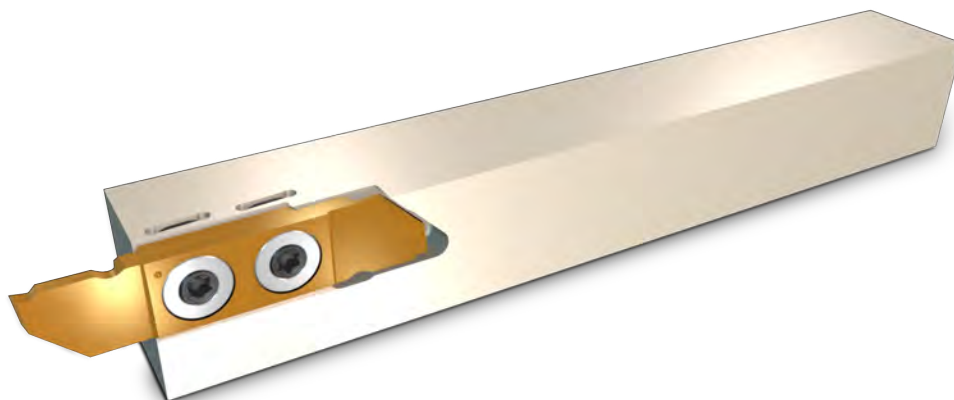
⁽¹⁾ Thread pitch minimum (mm)

⁽²⁾ Thread pitch maximum (mm)

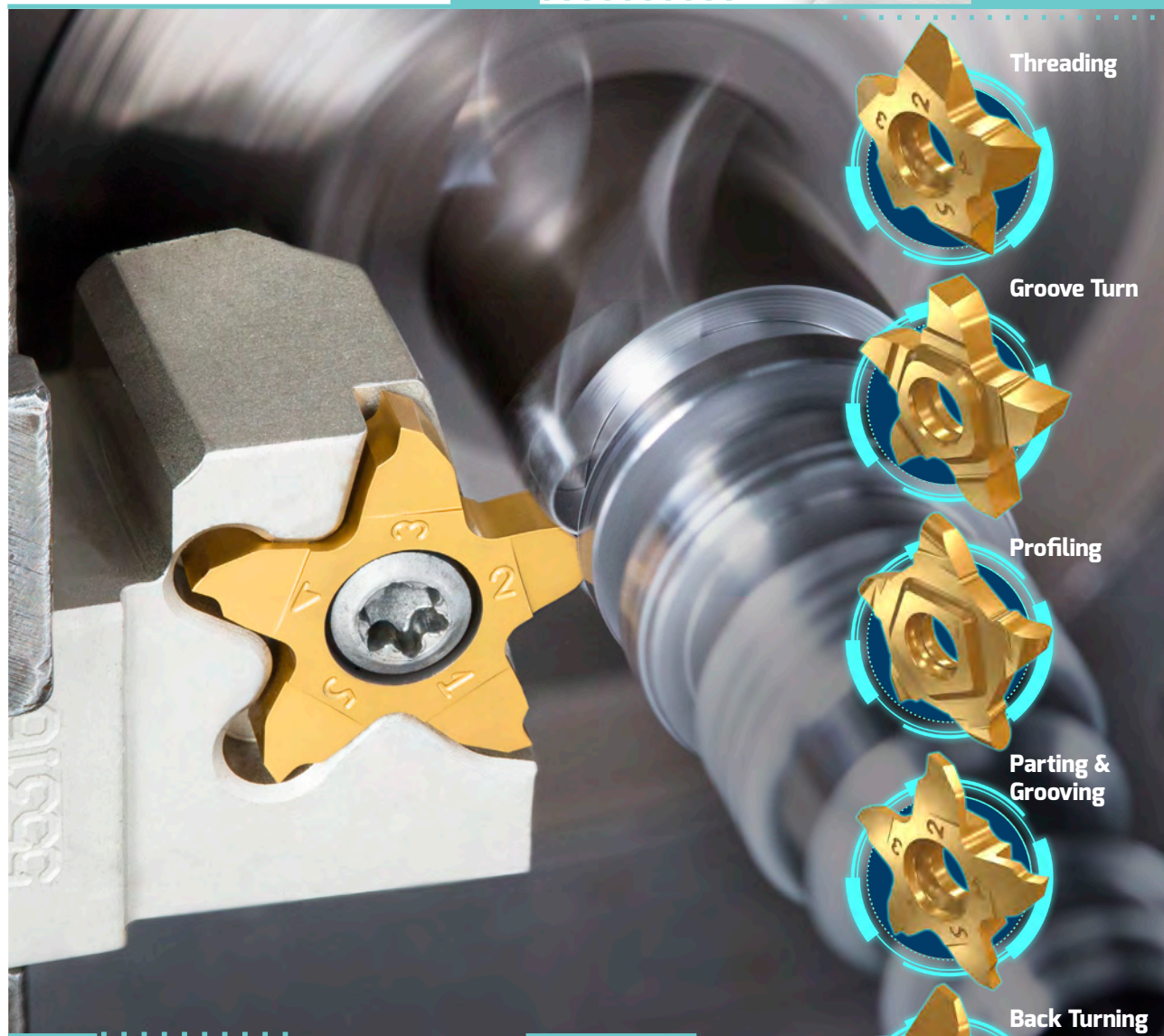
⁽³⁾ Threads per inch minimum

⁽⁴⁾ Threads per inch maximum

⁽⁵⁾ Cutting edge below center



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



Threading



Groove Turn



Profiling



Parting & Grooving



Back Turning

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



For Grooving,
Parting, Turning
& Threading
Applications



For Every Type
of Material



Innovative

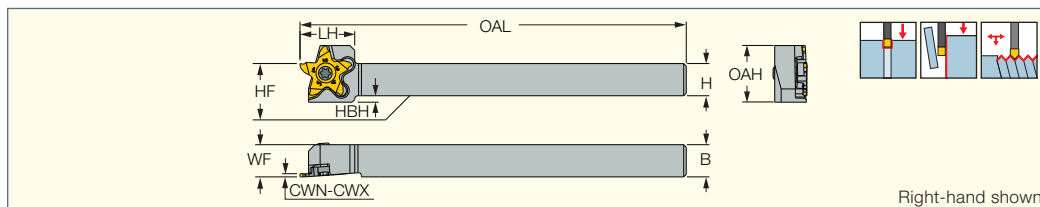


Cost Effective
Insert

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



Right-hand shown

Designation	H	B	CWN ⁽¹⁾	CWX ⁽²⁾	WF	OAL	LH	HBH	OAH	HF		
PCHR/LS 10-17	10.0	10.0	0.25	3.18	10.00	120.00	17.0	2.0	17.6	10.0	SR M4-39432	T-1508/5
PCHR/LS 12-17	12.0	12.0	0.25	3.18	12.00	120.00	17.0	-	17.6	12.0	SR M4-39432	T-1508/5
PCHR/LS 16-17	16.0	16.0	0.25	3.18	16.00	120.00	17.0	-	21.6	16.0	SR M4-39432	T-1508/5
PCHR/LS 20-17	20.0	20.0	0.25	3.18	20.00	120.00	17.0	-	25.6	20.0	SR M4-39432	T-1508/5

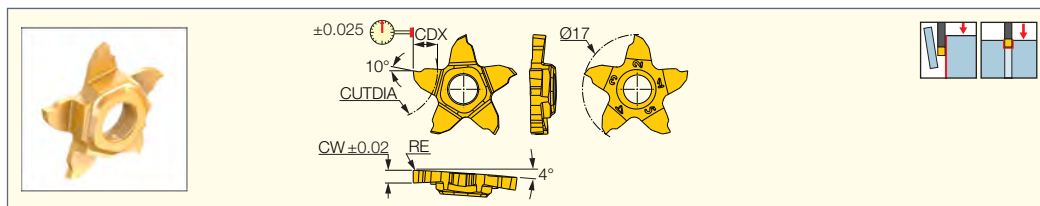
• Use right-hand inserts on right-hand tools and vice versa

⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

PENTA 17-P-RS/LS

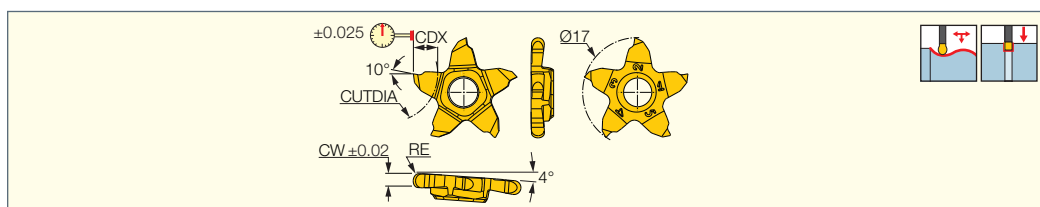
Pentagonal Inserts for Grooving
and Parting Soft Materials,
Thin and Miniature Parts



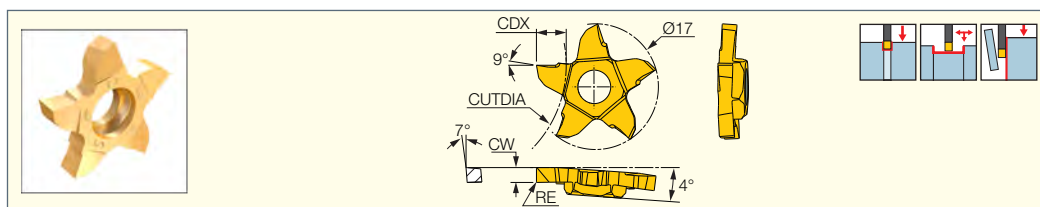
Designation	Dimensions				IC1008	Recommended Machining Data
	CW	RE	CDX	CUTDIA		f groove (mm/rev)
PENTA 17N025P000R/LS	0.25	0.00	0.60	1.2	•	0.02-0.03
PENTA 17N030P000R/LS	0.30	0.00	0.60	1.2	•	0.02-0.03
PENTA 17N033P000R/LS	0.33	0.00	0.60	1.2	•	0.02-0.03
PENTA 17N043P000R/LS	0.43	0.00	1.00	2.0	•	0.02-0.04
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 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 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 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 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 17-P-RS/LS

(full radius)
Precision Grooving Pentagonal Full
Radius Inserts for Soft Materials



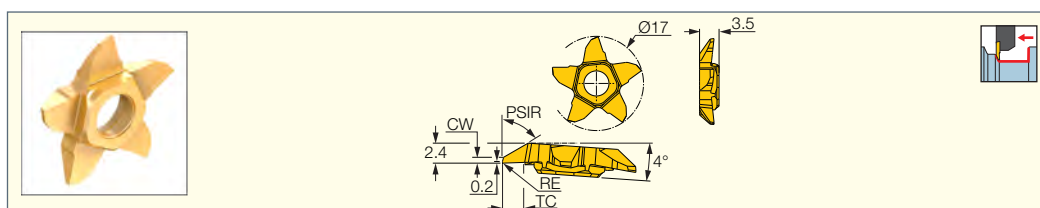
Designation	Dimensions				IC1008	Recommended Machining Data
	CW	RE	CDX	CUTDIA		f groove (mm/rev)
PENTA 17N100P050R/LS	1.00	0.50	3.00	6.0	•	0.02-0.05
PENTA 17N157P079R/LS	1.57	0.79	4.00	8.0	•	0.02-0.07
PENTA 17N200P100R/LS	2.00	1.00	4.00	8.0	•	0.02-0.08
PENTA 17N239P120R/LS	2.39	1.20	4.00	8.0	•	0.02-0.08

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


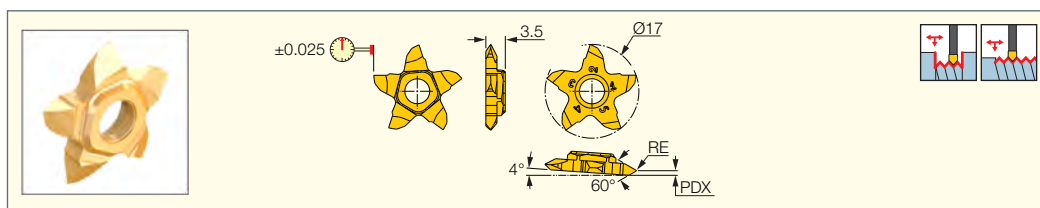
Designation	Dimensions				IC1008	Recommended Machining Data		
	CW	RE	CDX	CUTDIA		a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
PENTA 17-100NP08R/LS	1.00	0.08	3.00	32.0	●	0.05-0.70	0.02-0.06	0.03-0.06
PENTA 17-200NP08R/LS	2.00	0.08	4.00	32.0	●	0.05-2.50	0.05-0.15	0.05-0.09
PENTA 17-300NP08R/LS	3.00	0.08	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 CDX is 0.5 mm

Designation	Dimensions			CUTDIA as a function of depth of cut (CDX)				
	CW	RE	CDX	CDX ≤ 2.5	CDX ≤ 3.0	CDX ≤ 3.5	CDX ≤ 3.8	CDX ≤ 4.0
PENTA 17-100NP08-R/LS	1.00	0.08	3.00	N.L.	100	-	-	-
PENTA 17-200NP08-R/LS	2.00	0.08	4.00	N.L.	100	75	45	32
PENTA 17-300NP08-R/LS	3.00	0.08	4.00	N.L.	100	75	45	32

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


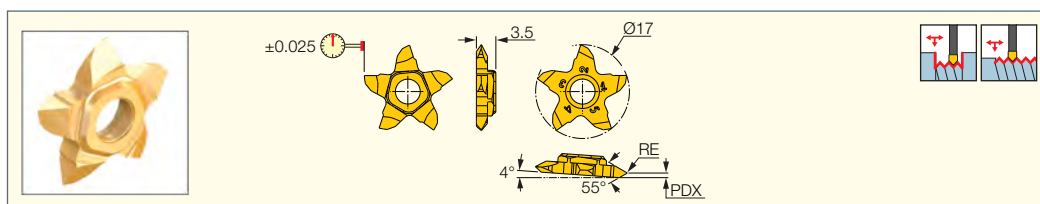
Designation	Dimensions				IC1008	Recommended Machining Data	
	CW	RE	PSIR	Tc		a_p (mm)	f turn (mm/rev)
PENTA 17EL00-07K0LS	0.70	0.00	60.0	4.0	●	0.05-2.50	0.01-0.15
PENTA 17ER00-07K0RS	0.70	0.00	60.0	4.0	●	0.05-2.50	0.01-0.15
PENTA 17EL08-07K0LS	0.70	0.08	60.0	4.0	●	0.05-2.50	0.01-0.15
PENTA 17ER08-07K0RS	0.70	0.08	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	0.300	1.750	0.03	0.8	●
PENTA 17-MTR003RS	0.300	1.750	0.03	0.8	●
PENTA 17-MTL008LS	0.700	3.500	0.08	1.4	●
PENTA 17-MTR008RS	0.700	3.500	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	●

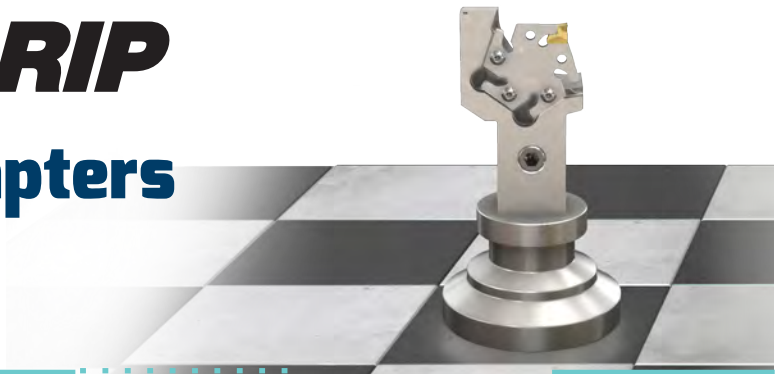
⁽¹⁾ Threads per inch maximum

⁽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
Narrow GFT Inserts 1.2 and 1.6 mm



Pentagonal Economical Adapters,
5 Pockets for Parting & Grooving



Ease of Use



High Pressure
Coolant



New Generation



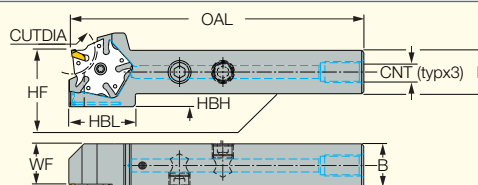
Cost Effective
Insert



**SCAN
NOW!**

LOGIQ5GRIP
ISCAR CHESS LINES

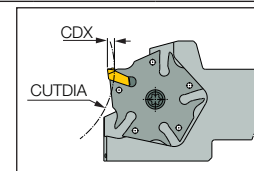
THMPR/L D22-JHP

 Holders with High Pressure
 Coolant Channels for Pentagonal
 SLIM-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

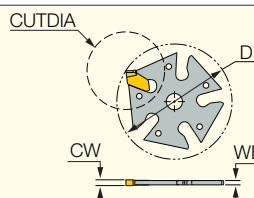
THMPR/L...-D22-JHP CDX to CUTDIA

CDX	≤2.0	≤3.0	≤4.0	≤5.0	≤6.0	≤7.0	≤8.0	≤11.0
CUTDIA	85	80	75	70	65	60	55	50


Spare Parts

Designation				
THMPL 16-D22-JHP	SR 5/16UNF TL360	HW 5/32"	SR M4-39432	T-15/5
THMPR 16-D22-JHP	SR 5/16UNF TL360	HW 5/32"	SR M4-39432	T-15/5
THMPL 20-D22-JHP	PLUG G1/8-6.5 TL360	HW 5.0	SR M4-39432	T-15/5
THMPR 20-D22-JHP	PLUG G1/8-6.5 TL360	HW 5.0	SR M4-39432	T-15/5

ADMP D22

 Parting and Grooving
 Adapters With 5 Pockets
 for SLIM-GRIP Inserts


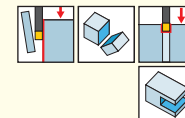
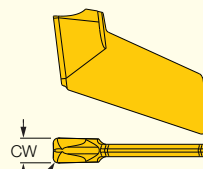
Designation	CW	WB	D	CUTDIA	Insert
ADMP D22-1.2	1.20	1.06	32	22.0	GFT 1.2
ADMP D22-1.6	1.60	1.20	32	22.0	GFT 1.6

Spare Parts

Designation	
ADMP D22	ESG-SLM*

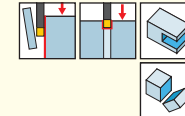
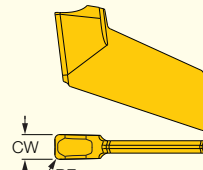
* Optional, should be ordered separately

GFT-J

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


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

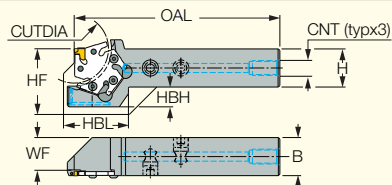
GFT-C

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


Designation	Dimensions		Tough ↔ Hard		Recommended Machining Data
	CW	RE	IC1028	IC1008	
GFT 1.6C-0.16	1.60	0.16	•	•	f groove (mm/rev) 0.05-0.15

THMPR/L D45-JHP

Holders with High Pressure
Coolant Channels for Pentagonal
TANG-GRIP Adapters



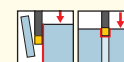
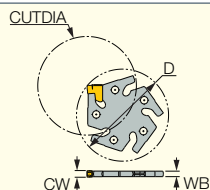
Designation	H	HF	HBH	B	WF	CUTDIA	OAL	HBL	CNT
THMPR/L 20-D45-JHP	20.0	20.1	18.0	20.0	17.35	45.0	135.00	35.6	G1/8
THMPR/L 25-D45-JHP	25.0	25.1	13.0	25.0	22.35	45.0	135.00	35.6	G1/8

Spare Parts

Designation				
THMPR/L D45-JHP	SR M3X8 ISO 14580 BLACK	T-10/5	PLUG G1/8-6.5 TL360	HW 5.0

ADMP D45

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

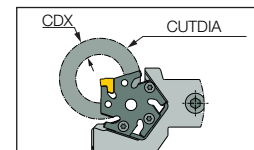


Designation	CWN ⁽¹⁾	CWX ⁽²⁾	WB	D	CUTDIA	Insert
ADMP D45-2.0	1.80	2.40	1.60	42	45.0	TAG 2
ADMP D45-3.0	2.80	3.50	2.50	42	45.0	TAG 3

⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

THMPR/L....-D45-JHP Tmax. to Dmax.									
Tmax	T≤3.0	T≤4.0	T≤5.0	T≤6.0	T≤7.0	T≤8.0	T≤9.0	T≤10.0	T≤22.5
Dmax	85	80	75	70	65	60	55	50	45



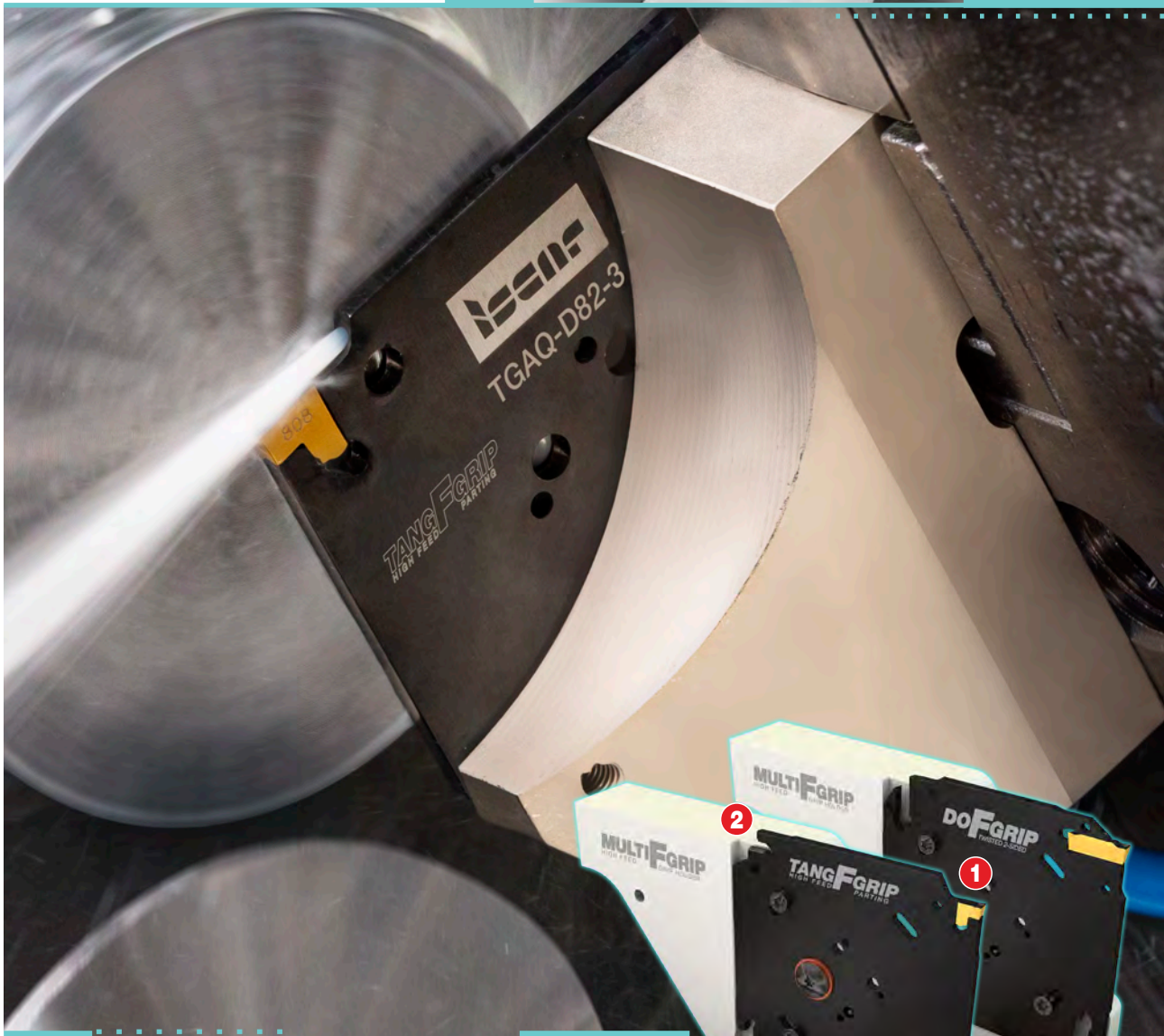
Spare Parts

Designation	
ADMP D45-2.0	ETG 2*
ADMP D45-3.0	ETG 3-4-SH*

* Optional, should be ordered separately

MULTI**F****GRIP**
HIGH FEED GRIP HOLDER

High Productivity Parting Master



Reinforced and Robust Tool
Extra Stability and Higher Productivity
Block Suitable for All Machine Types



Rigid Clamping



Extra High Feed



High Pressure Coolant



Cost Effective Insert



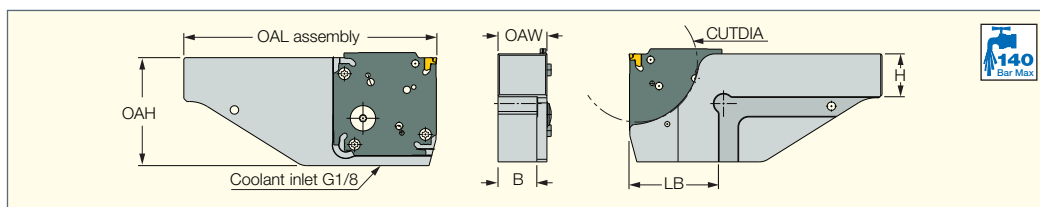
Anti-Vibration

Ultra High Feed
Parting Insert and Tool
Guarantee Higher
Productivity

LOGIQ**GRIP**
ISCAR CHESS LINES

TGTBQ-JHP

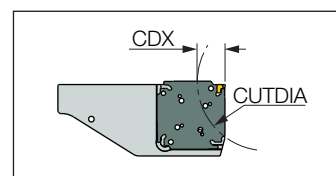
Tool Blocks for Parting and Grooving Square Blades
TANG-F-GRIP and DO-F-GRIP
for High Pressure Coolant



Designation	OAH	H	B	OAW	OAL	LB	CUTDIA
TGTBQ 20L-D52-JHP	50.0	20.0	20.5	26.50	122.00	34.00	52.0
TGTBQ 20R-D52-JHP	50.0	20.0	20.5	26.50	122.00	34.00	52.0
TGTBQ 25L-D52-JHP	50.0	25.0	25.5	31.50	132.00	34.00	52.0
TGTBQ 25R-D52-JHP	50.0	25.0	25.5	31.50	132.00	34.00	52.0
TGTBQ 20L-D82-JHP	64.0	20.0	20.5	26.50	140.00	53.00	82.0
TGTBQ 20R-D82-JHP	64.0	20.0	20.5	26.50	140.00	53.00	82.0
TGTBQ 25L-D82-JHP	64.0	25.0	25.5	31.50	150.00	53.00	82.0
TGTBQ 25R-D82-JHP	64.0	25.0	25.5	31.50	150.00	53.00	82.0
TGTBQ 32L-D82-JHP	64.0	32.0	32.5	38.50	150.50	53.50	82.0
TGTBQ 32R-D82-JHP	64.0	32.0	32.5	38.50	150.50	53.50	82.0
TGTBQ 25L-D120-JHP	95.0	25.0	25.5	31.50	165.00	67.00	120.0
TGTBQ 25R-D120-JHP	95.0	25.0	25.5	31.50	165.00	67.00	120.0
TGTBQ 32L-D120-JHP	95.0	32.0	32.5	38.50	165.00	67.00	120.0
TGTBQ 32R-D120-JHP	95.0	32.0	32.5	38.50	165.00	67.00	120.0

Table determining depth of cut for grooving as function of workpiece diameter

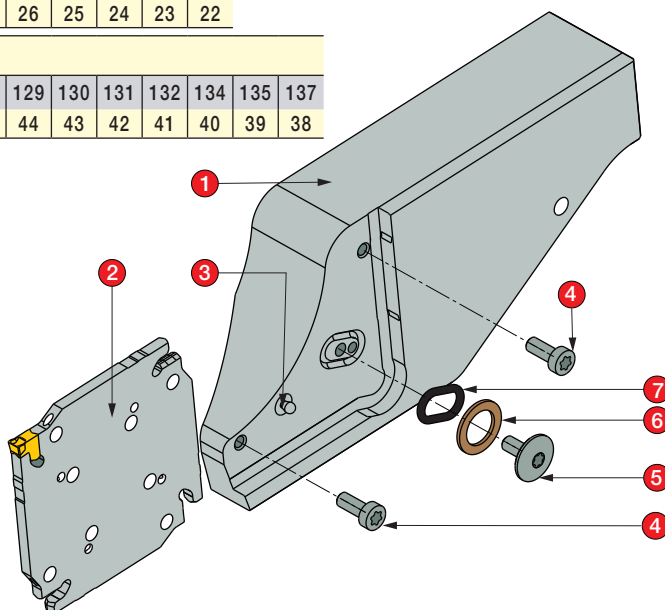
Designation	CUTDIA															
TGTBQ...D52-JHP	53	54	55	56	57	59	61	64	67	71	75	81	88	96	107	122
TGTBQ...D82-JHP	107	110	114	119	124	130	137	145	154	165	178	194	213	237	267	308
TGTBQ...D120-JHP	202	210	219	229	240	253	267	283	302	324	349	380	417	462	518	592
CDX	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6



Designation	CUTDIA															
TGTBQ...D82-JHP	83	83	84	84	85	86	87	88	89	91	92	94	96	98	101	103
TGTBQ...D120-JHP	139	141	143	145	148	150	153	156	160	164	168	172	177	183	188	195
CDX	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22

Designation	CUTDIA															
TGTBQ...D120-JHP	121	122	123	123	124	125	125	126	127	128	129	130	131	132	134	135
CDX	56-60	53-55	52	51	50	49	48	47	46	45	44	43	42	41	40	39

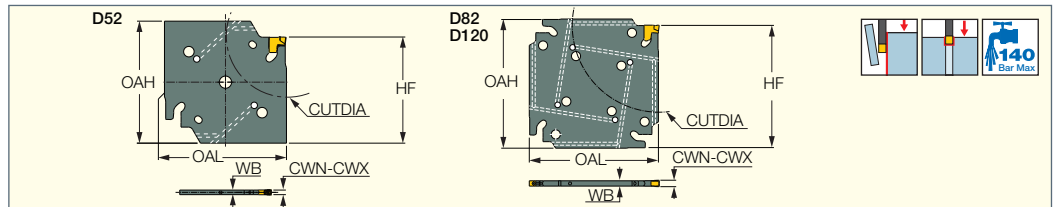
1. Block: TGTBQ...D...
2. Blade: T/DGAQ...
3. Locating Pin: Side thrust Pin 3mm
4. Screw: SR M4x10 ISO 14580
5. Screw: SR M4x9-Seal-JHP
6. Seal washer: CSW 1/8"
7. O-ring: O-ring 10x2 NBR



Spare Parts

Designation						
TGTBQ-JHP	SR M4X9-SEAL-JHP	SIDE THRUST PIN 3mm	JHP COPPER SEAL 1/8"	SR ISO 14580 M4X10	SW6-SD	BLD T20/S7

TGAQ-JHP

Parting and Grooving Square
Blades for TANG-GRIP
Tangentially Clamped Inserts


Designation	OAL	OAH	CWN ⁽¹⁾	CWX ⁽²⁾	WB	HF	CUTDIA	Insert
TGAQ D52-2-2Z-JHP	50.00	50.0	1.80	2.50	1.65	43.5	52.0	TAG 2
TGAQ D52-3-2Z-JHP	50.00	50.0	2.80	3.50	2.50	43.5	52.0	TAG 3
TGAQ D52-4-2Z-JHP	50.00	50.0	3.70	4.50	3.40	43.5	52.0	TAG 4
TGAQ D82-2-4Z-JHP	61.00	61.0	1.80	2.50	1.65	58.0	82.0	TAG 2
TGAQ D82-3-4Z-JHP	61.00	61.0	2.80	3.50	2.50	58.0	82.0	TAG 3
TGAQ D82-4-4Z-JHP	61.00	61.0	3.70	4.50	3.40	58.0	82.0	TAG 4
TGAQ D120-3-4Z-JHP	90.50	90.5	2.80	3.50	2.50	84.0	120.0	TAG 3
TGAQ D120-4-4Z-JHP	90.50	90.5	3.70	4.50	3.40	84.0	120.0	TAG 4
TGAQ D120-5-4Z-JHP	90.50	90.5	4.70	5.50	4.00	84.0	120.0	TAG 5

• Suitable for all TANG-GRIP inserts

⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

Flow Rate vs. Pressure

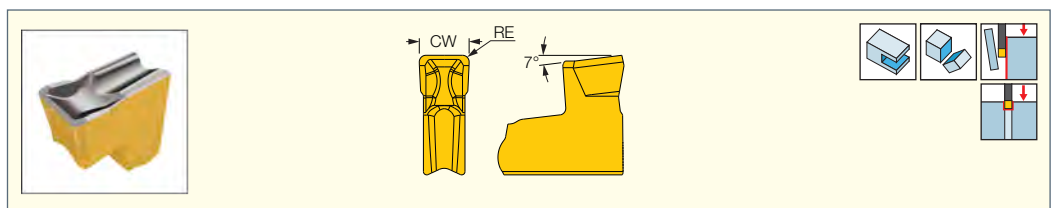
Designation	70 Bar Flow Rate (liters/min)	100 Bar Flow Rate (liters/min)	140 Bar Flow Rate (liters/min)
TGAQ D52/82/-2-...-JHP	4-7	5-8	6-9
TGAQ D52/82/120-3-...-JHP			
TGAQ D52/82/120-4-...-JHP	6-7	7-8	8-9
TGAQ D120-5-JHP			

Spare Parts

Designation			
TGAQ D52-2-2Z-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	ETG 2"
TGAQ D52-3-2Z-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	ETG 3-4-SH*
TGAQ D52-4-2Z-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	ETG 3-4-SH*
TGAQ D82-2-4Z-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	ETG 2"
TGAQ D82-3-4Z-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	ETG 3-4-SH*
TGAQ D82-4-4Z-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	ETG 3-4-SH*
TGAQ D120-3-4Z-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	ETG 3-4-SH*
TGAQ D120-4-4Z-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	ETG 3-4-SH*
TGAQ D120-5-4Z-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	ETG 5-7*

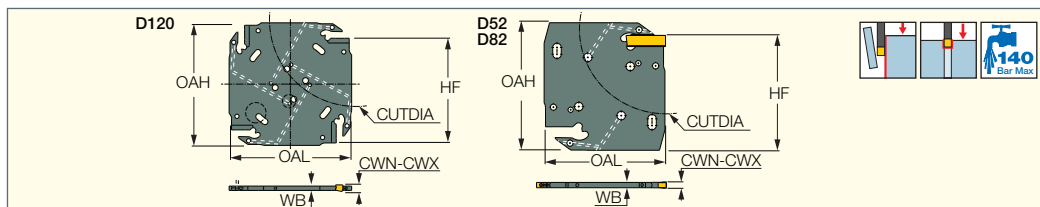
* Optional, should be ordered separately

TAG N-HF

Single-Ended Inserts for High
Feed Parting and Grooving, Hard
Materials and Tough Applications


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

⁽¹⁾ Cutting width tolerance (+/-)



Designation	OAL	OAH	CWN ⁽¹⁾	CWX ⁽²⁾	WB	HF	CUTDIA	Insert
DGAQ D52-2-2Z-JHP	50.00	50.0	1.90	2.50	1.72	43.5	52.0	DGN/R/L 2
DGAQ D52-3-2Z-JHP	50.00	50.0	3.00	3.18	2.50	43.5	52.0	DGN/R/L 3
DGAQ D52-4-2Z-JHP	50.00	50.0	4.00	4.00	3.20	43.5	52.0	DGN/R/L 4
DGAQ D82-3-2Z-JHP	61.00	64.4	3.00	3.18	2.50	58.0	82.0	DGN/R/L 3
DGAQ D82-4-2Z-JHP	61.00	64.4	4.00	4.00	3.20	58.0	82.0	DGN/R/L 4
DGAQ D82-5-2Z-JHP	61.00	64.4	5.00	5.00	4.00	58.0	82.0	DGN/R/L 5
DGAQ D120-4-4Z-JHP	90.50	90.5	4.00	4.00	3.20	84.0	120.0	DGN/R/L 4
DGAQ D120-5-4Z-JHP	90.50	90.5	5.00	5.00	4.00	84.0	120.0	DGN/R/L 5

• When using 2 and 3mm double-sided inserts, the depth of cut is limited up to 19mm. For larger depth, use a DGNM type single-ended insert.

• Suitable for all DO-GRIP inserts

⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

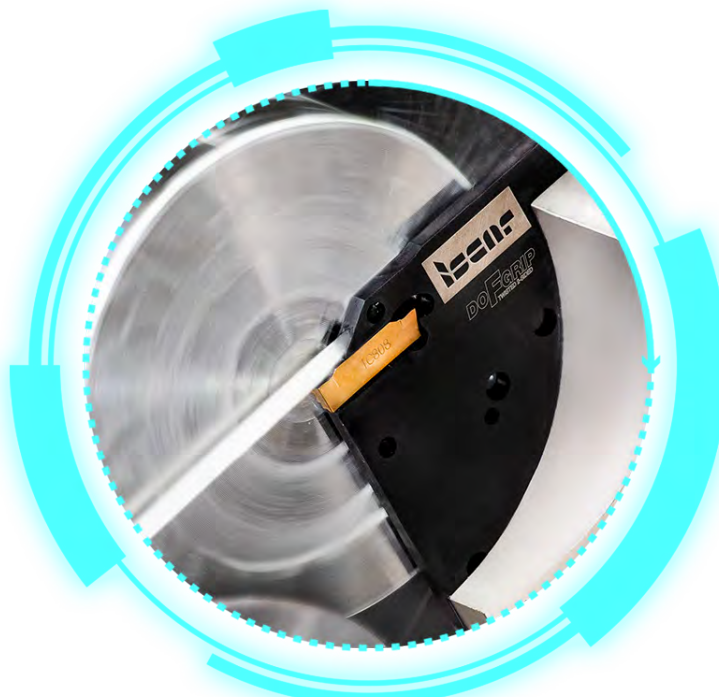
Flow Rate vs. Pressure

Designation	70 Bar Flow Rate (liters/min)	100 Bar Flow Rate (liters/min)	140 Bar Flow Rate (liters/min)
DGAQ D52-2-2Z-JHP	4-7	5-8	6-9
DGAQ D52/82-3-2Z-JHP			
DGAQ D52/82/120-4-...-JHP	6-7	7-8	8-9
DGAQ D82/120-5-...-JHP			

Spare Parts

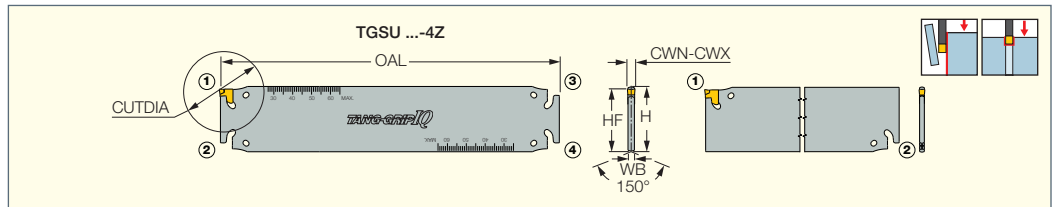
Designation			
DGAQ-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	EDG 33A*

* Optional, should be ordered separately



TGSU

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



Designation	H	CWN ⁽²⁾	CWX ⁽³⁾	CUTDIA	NOP ⁽⁴⁾	WB	OAL	HF	CSP ⁽⁵⁾	Insert	
TGSU 35-1.4-IQ	35.0	1.40	1.40	35.0	2	2.50 ⁽⁶⁾	180.00	33.2	0	TAG 1.4	ETG 1.4/1.6*
TGSU 35-2-IQ	35.0	1.80	2.40	59.5	2	2.50 ⁽⁷⁾	160.00	33.2	0	TAG 2	ETG 2*
TGSU 35-3-IQ-4Z	35.0	2.80	3.50	120.0	4	2.50	180.00	33.2	0	TAG 3	ETG 3-4-SH*
TGSU 35-4-IQ-4Z	35.0	3.70	4.50	120.0	4	3.40	180.00	33.2	0	TAG 4	ETG 3-4-SH*
TGSU 35-5-IQ	35.0	4.70	5.50	144.0	2	4.00	180.00	33.2	0	TAG 5	ETG 5-7*
TGSU 35-6-IQ	35.0	5.70	6.50	144.0	2	5.20	180.00	33.2	0	TAG 6	ETG 5-7*
TGSU 35-7-IQ	35.0	6.80	7.50	144.0	2	6.00	180.00	33.2	0	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	1	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	1	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	1	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	1	TAG 8	ETG 8-12*
TGSU 56C-9-IQ ⁽¹⁾	56.0	8.70	10.00	220.0	2	8.20	260.00	53.6	1	TAG 9	ETG 8-12*

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

⁽²⁾ Minimum cutting width

⁽³⁾ Maximum cutting width

⁽⁴⁾ Number of pockets

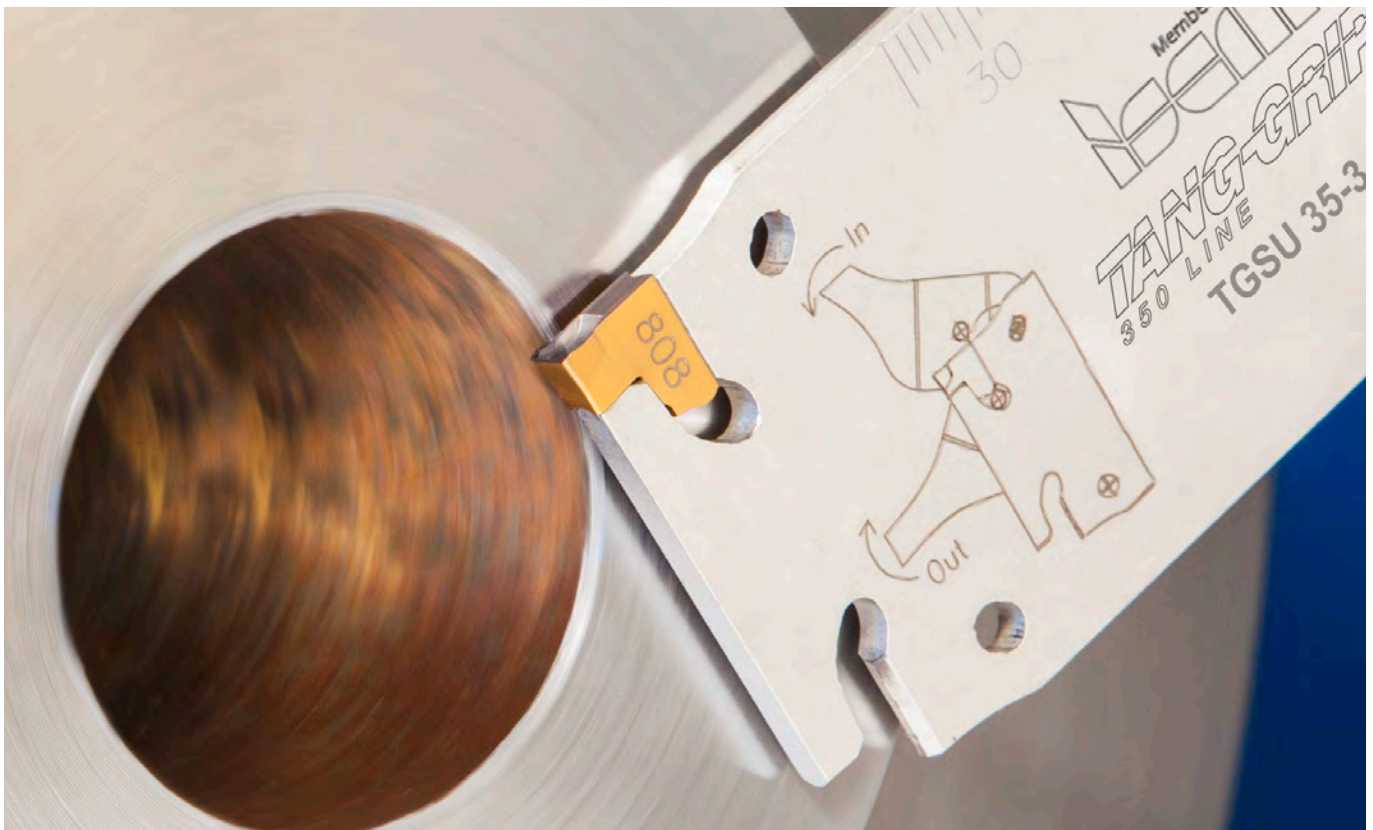
⁽⁵⁾ 0 - Without coolant supply, 1 - With coolant supply

⁽⁶⁾ Thickness at the D.O.C. area is 1.05 mm

⁽⁷⁾ Thickness at the D.O.C. area is 1.65 mm

* Optional, should be ordered separately

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



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



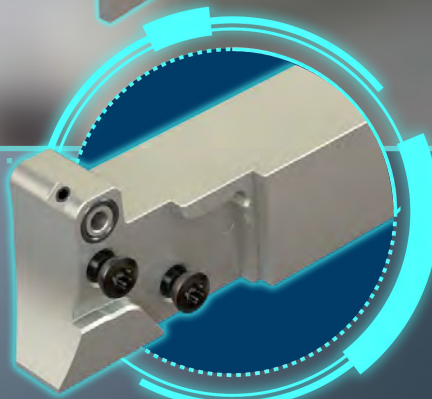
Variety of
Cartridges on Shank



High Pressure
Coolant



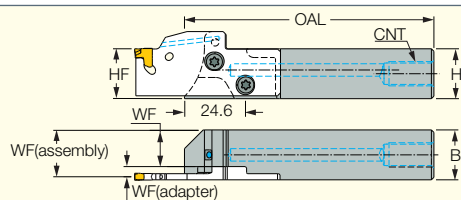
Cost Effective
Insert



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


WF(assembly)=WF+WF(adapter)

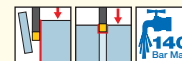
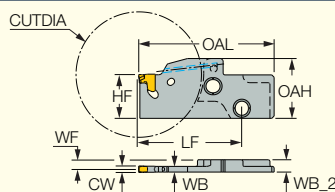
Designation	H	B	OAL	WF	CNT	HF
NMAHR/L 20-MG-JHP	20.0	20.0	100.00	14.70	G1/8	20.0
NMAHR/L 25-MG-JHP	25.0	25.0	100.00	19.70	G1/8	25.0

Spare Parts

Designation				
NMAHR/L-JHP	SR M5-04451	SW6-T-SH	BLD T20/S7	OR 5X1N

MODUGRIP
 MODULAR GRIP CARTRIDGES

TGAD RE/LE-JHP

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


Right-hand shown

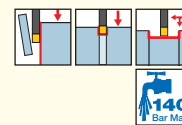
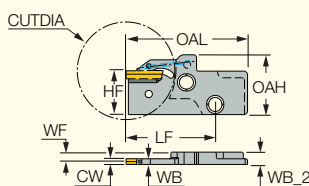
Designation	CWN ⁽¹⁾	CWX ⁽²⁾	WF	WB	WB_2	LF	OAL	OAH	HF	CUTDIA	Insert	
TGAD 2R/LE-D54-JHP	1.80	2.40	4.48	1.65	5.3	44.40	58.30	25.8	18.9	54.0	TAG 2	ETG 3-4-SH*
TGAD 3R/LE-D54-JHP	3.00	3.50	4.08	2.45	5.3	44.40	58.30	25.8	18.9	54.0	TAG 3	ETG 3-4-SH*

⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

MODUGRIP
 MODULAR GRIP CARTRIDGES

D/HGAD RE/LE-JHP

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


Designation	CWN ⁽²⁾	CWX ⁽³⁾	WF	WB	WB_2	LF	OAL	OAH	HF	CUTDIA	Insert	
DGAD 2R/LE-D38-JHP ⁽¹⁾	1.90	2.50	4.50	1.60	5.3	40.40	54.35	25.8	18.9	38.0	DGN 2	EDG 33A*
DGAD 3R/LE-D38-JHP ⁽¹⁾	3.00	3.18	4.08	2.45	5.3	40.40	54.35	25.8	18.9	38.0	DGN 3	EDG 33A*
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/GRIP 3	EDG 23B*

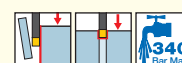
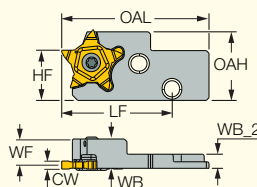
⁽¹⁾ For parting and external grooving only

⁽²⁾ Minimum cutting width

⁽³⁾ Maximum cutting width

MODUGRIP
 MODULAR GRIP CARTRIDGES

PCAD RE/LE-JHP

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


Right-hand shown

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⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

Spare Parts

Designation		
PCAD 24LE-JHP	SR 16-212-01397L	T-2010/5
PCAD 24RE-JHP	SR 16-212-01397	T-2010/5

Anti-Vibration Grip Whisper Master



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



Internal
Coolant



High Productivity

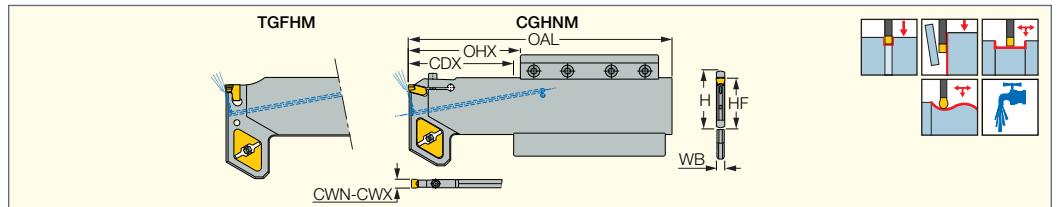


Deep Parting
and Grooving



High Efficiency
in Large Overhangs

Innovative Counterweight Design
to Compensate Oscillation



Designation	CWN ⁽¹⁾	CWX ⁽²⁾	OHX ⁽³⁾	CDX ⁽⁴⁾	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/T/Y 6 GIM 6	SGCU 341*		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	SGCU 341*		ETG 8-12*
CGHNM 53-P8-AV	8.00	8.00	100.0	93.00 ⁽⁵⁾	7.40	45.0	52.6	235.00	GIMY/F/MM 8	SGCU 341*	HW 4.0	

⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

⁽³⁾ Maximum overhang

⁽⁴⁾ Cutting depth maximum

⁽⁵⁾ For CUTDIA<200 CDX=98

* Optional, should be ordered separately

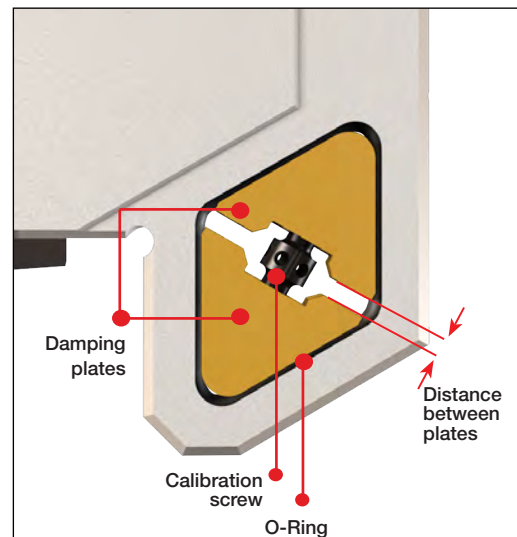
User Guide

- 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).

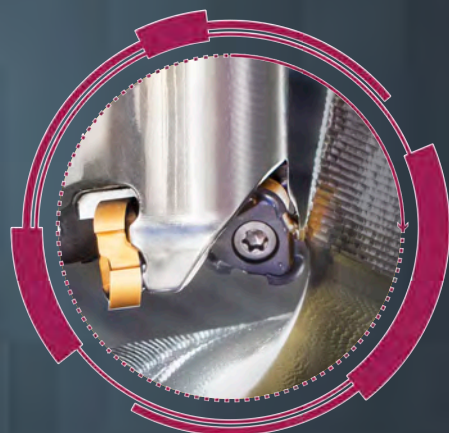
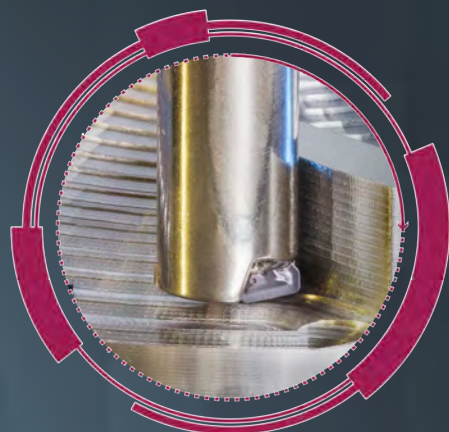


2. If the blade's overhang is bigger than 100mm, it is recommended to decrease the compression of the O-ring by rotating the calibration screw counter clockwise (make sure the distance between the damping plates decreases).
3. The fine tuning resolution should be about a half-turn for each 30mm difference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



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



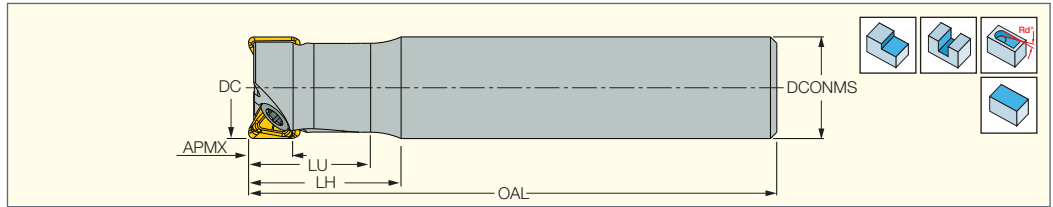
Performs
90° Shoulder



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	LU	LH	DCONMS	Shank ⁽²⁾	RMPX ⁽³⁾	kg
HM390 ETP D08-2-C08-04	8.00	3.00	2	60.00	9.6	12.0	8.00	C	3.0	0.02
HM390 ETP D10-3-C10-04	10.00	3.00	3	80.00	12.6	15.0	10.00	C	2.5	0.05

• Tightening torque 0.5 Nxm

⁽¹⁾ Number of inserts

⁽²⁾ C-Cylindrical

⁽³⁾ Maximum ramping angle

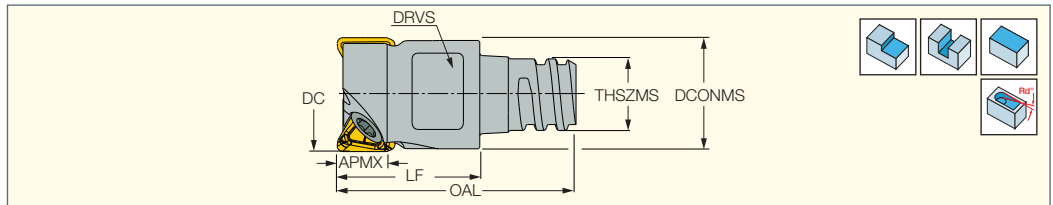
Spare Parts

Designation		
HM390 ETP D08-2-C08-04	SR M2X0.4-3 T6	T-6/5 MAGNET 3X3
HM390 ETP D10-3-C10-04	SR M2X0.4-3.5 T6	T-6/5 MAGNET 3X3

MULTI-MASTER

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⁾	kg
HM390 ETP D08-2-MMT05-04	8.00	3.00	2	10.00	7.60	T05	16.75	6.0	3.0	0.00
HM390 ETP D10-3-MMT06-04	10.00	3.00	3	12.00	9.60	T06	18.30	8.0	2.5	0.00

• Insert tightening torque 0.5 N*m

⁽¹⁾ Number of inserts

⁽²⁾ Clamping wrench size

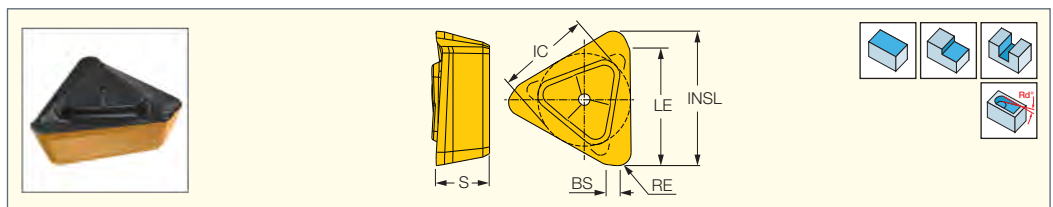
⁽³⁾ Maximum ramping angle

Spare Parts

Designation		
HM390 ETP D08-2-MMT05-04	SR M2X0.4-3 T6	T-6/5 MAGNET 3X3
HM390 ETP D10-3-MMT06-04	SR M2X0.4-3.5 T6	T-6/5 MAGNET 3X3

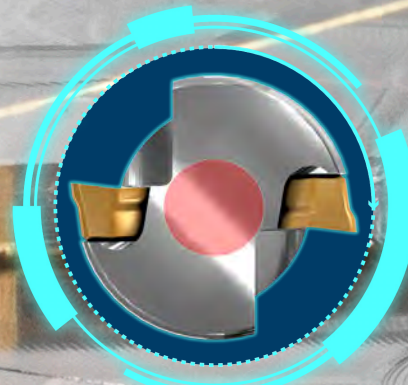
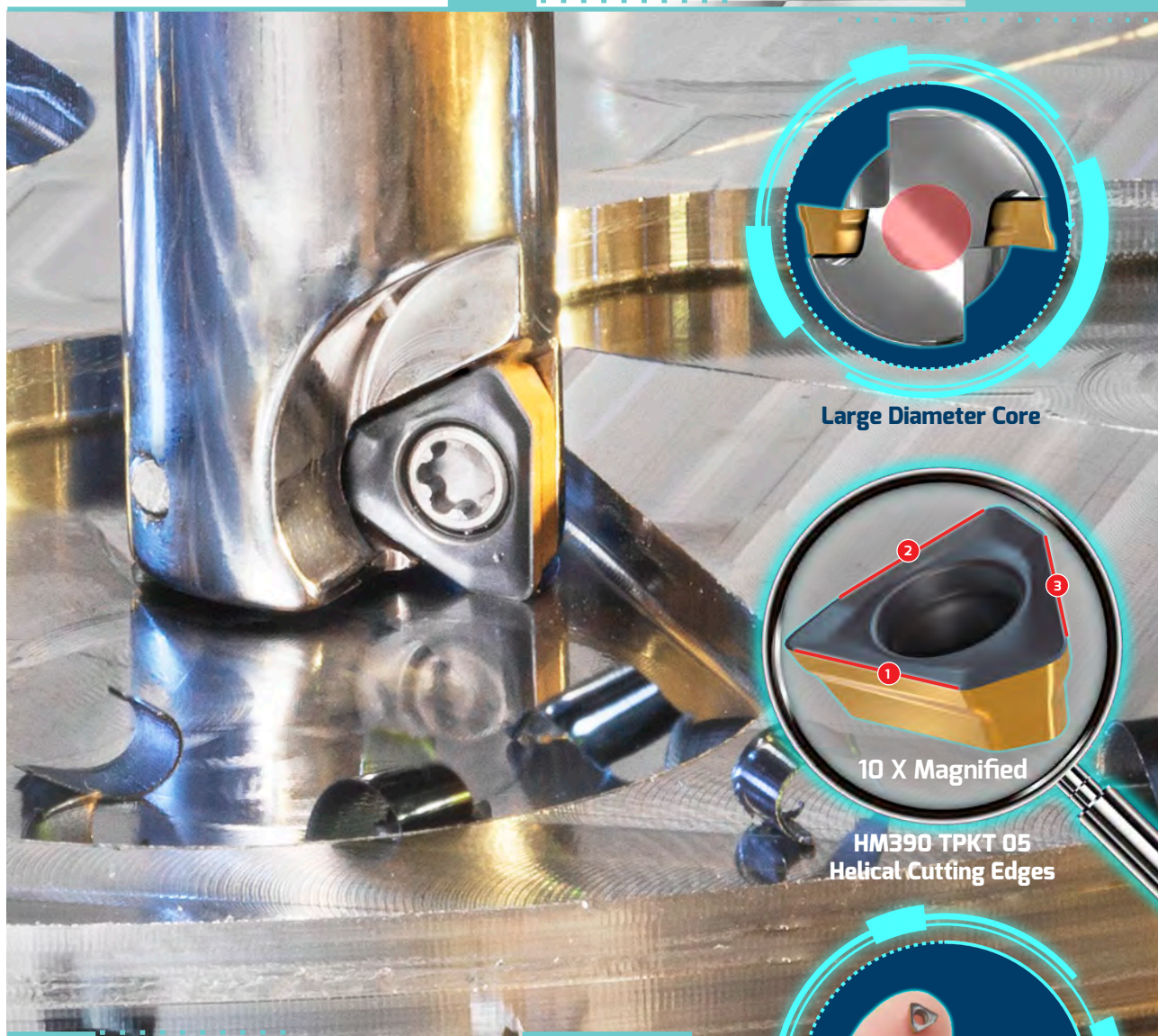
HM390 TPKR 0401

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

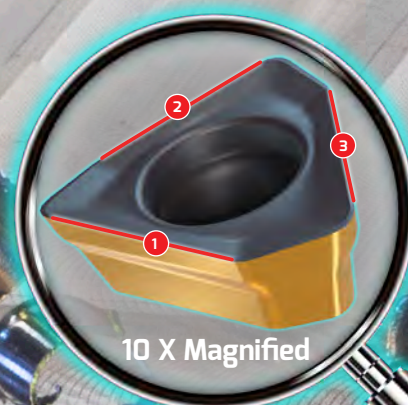


Designation	Dimensions						IC830	Recommended Machining Data	
	INSL	IC	S	LE	RE	BS		a ₀ (mm)	f _z (mm/t)
HM390 TPKR 0401-PCTR	4.00	2.80	1.60	3.00	0.40	0.40	•	0.50-3.00	0.04-0.10

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



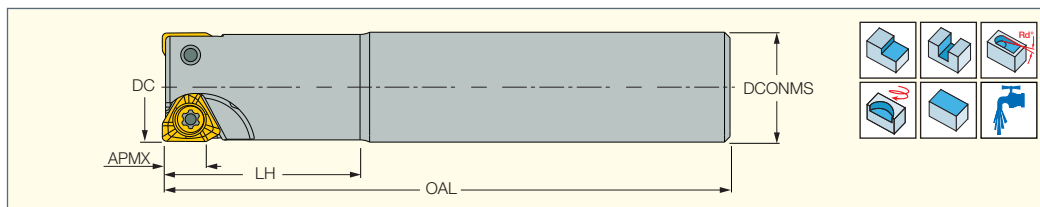
Performs
90° Shoulder



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

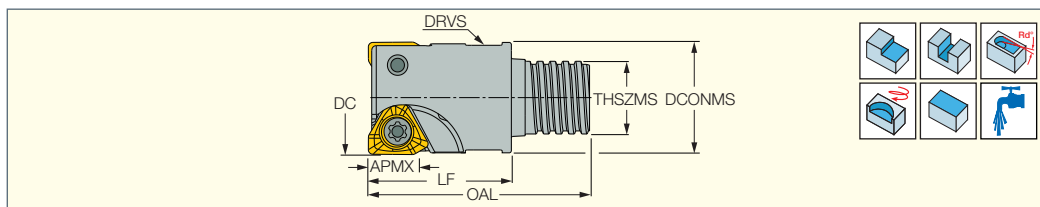
⁽³⁾ Maximum ramping angle

Spare Parts

Designation		
HM390 ETP-05	TS 18041VHG	T-6IP/51

MULTI-MASTER
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⁾	kg
HM390 ETP D10-02-MMT06-05	10.00	3.50	2	15.00	9.60	T06	21.60	8.0	2.0	0.01
HM390 ETP D12-03-MMT08-05	12.00	3.50	3	16.00	11.60	T08	24.20	10.0	1.5	0.00
HM390 ETP D14-03-MMT08-05	14.00	3.50	3	16.00	13.60	T08	22.90	10.0	1.5	0.01
HM390 ETP D16-04-MMT10-05	16.00	3.50	4	18.00	15.60	T10	29.80	13.0	1.5	0.03

• Insert tightening torque 0.5 N*m

⁽¹⁾ Number of inserts

⁽²⁾ Clamping wrench size

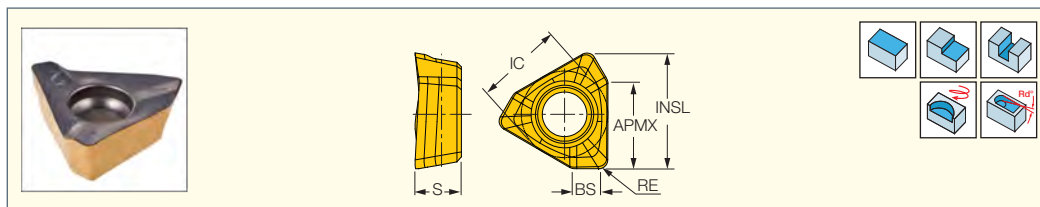
⁽³⁾ Maximum ramping angle

Spare Parts

Designation		
HM390 ETP-MM-05	TS 18041VHG	T-6IP/51

HM390 TPKT/CT 0502

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

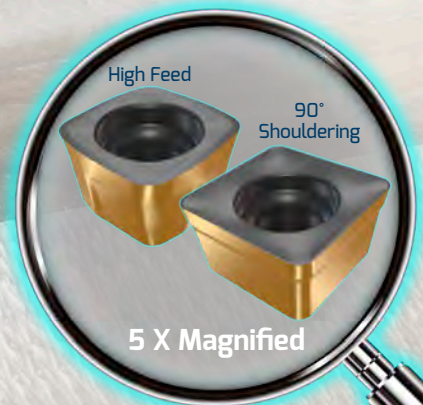


Designation	Dimensions						Tough ↔ Hard			Recommended Machining Data	
	INSL	IC	S	APMX	RE	BS	IC830	IC808	IC810	a _p (mm)	f _z (mm/t)
HM390 TPKT 0502PDR	5.26	3.94	2.10	3.50	0.40	1.00	•	•	•	0.50-3.50	0.05-0.10
HM390 TPKT 0502PDR	5.26	3.94	2.10	3.50	0.40	1.00	•	•	•	0.50-3.50	0.05-0.15

Extra Small 10-20 mm SQ Master



Endmills and MULTI-MASTER Range
10 -20mm



5 X Magnified

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



Positive Rake
Angle



High Pressure
Coolant



Performs
90° Shoulder

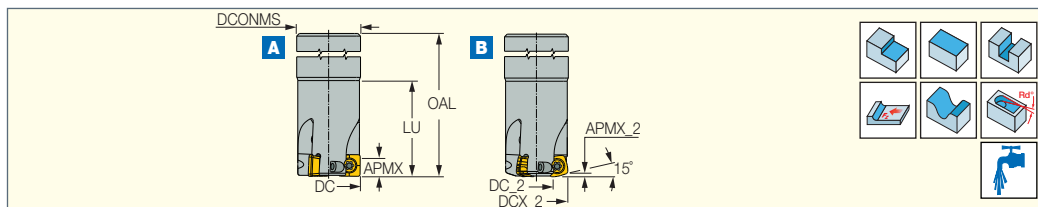


Cost Effective
Insert



Small Quad Insert with
4 Cutting Edges

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⁾	RMPX ⁽³⁾		MIID ⁽⁴⁾	MIID_2 ⁽⁵⁾
E90SO D10-2-C10-04-C	10.00	3.50	3.90	10.17	0.50	18.0	70.00	10.00	C	2	6.0	0.04	SOMT 040204 PNTR	SOMT 040208 PNR-FF
E90SO D12-2-C12-04-C	12.00	3.50	5.90	12.17	0.50	18.0	70.00	12.00	C	2	3.0	0.05	SOMT 040204 PNTR	SOMT 040208 PNR-FF
E90SO D12-3-C12-04-C	12.00	3.50	5.90	12.17	0.50	18.0	70.00	12.00	C	3	3.0	0.05	SOMT 040204 PNTR	SOMT 040208 PNR-FF
E90SO D14-4-C14-04-C	14.00	3.50	7.90	14.17	0.50	20.0	80.00	14.00	C	4	2.0	0.08	SOMT 040204 PNTR	SOMT 040208 PNR-FF
E90SO D16-4-C16-04-C	16.00	3.50	9.90	16.17	0.50	20.0	90.00	16.00	C	4	2.0	0.12	SOMT 040204 PNTR	SOMT 040208 PNR-FF
E90SO D16-5-C16-04-C	16.00	3.50	9.90	16.17	0.50	20.0	90.00	16.00	C	5	2.0	0.12	SOMT 040204 PNTR	SOMT 040208 PNR-FF
E90SO D20-6-C20-04-C	20.00	3.50	13.90	20.17	0.50	25.0	110.00	20.00	C	6	1.0	0.23	SOMT 040204 PNTR	SOMT 040208 PNR-FF

• 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⁾ Maximum ramping angle - valid only with SOMT 040208 PNR-FF insert

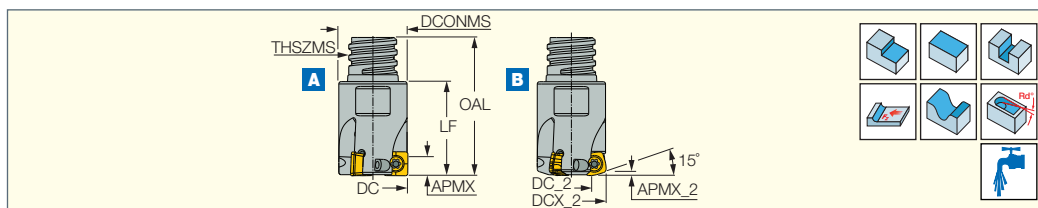
⁽⁴⁾ Master insert identification

⁽⁵⁾ Master insert identification 2

Spare Parts

Designation		
E90SO-04	TS 18041/HG	T-6IP/51

MULTI-MASTER
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⁾	RMPX ⁽³⁾		MIID ⁽⁴⁾	MIID_2 ⁽⁵⁾
E90SO D10-2-MMT06-04	10.00	3.50	3.90	10.17	0.50	15.00	21.30	2	9.70	T06	8.0	6.0	0.05	SOMT 040204 PNTR	SOMT 040208 PNR-FF
E90SO D12-3-MMT08-04	12.00	3.50	5.90	12.17	0.50	16.00	23.50	3	11.60	T08	10.0	3.0	0.15	SOMT 040204 PNTR	SOMT 040208 PNR-FF
E90SO D14-4-MMT08-04	14.00	3.50	7.90	14.17	0.50	16.00	23.50	4	13.60	T08	10.0	2.0	0.01	SOMT 040204 PNTR	SOMT 040208 PNR-FF
E90SO D16-5-MMT10-04	16.00	3.50	9.90	16.17	0.50	18.00	29.30	5	15.60	T10	13.0	2.0	0.03	SOMT 040204 PNTR	SOMT 040208 PNR-FF
E90SO D20-6-MMT12-04	20.00	3.50	13.90	20.17	0.50	20.00	38.80	6	19.60	T12	16.0	1.0	0.08	SOMT 040204 PNTR	SOMT 040208 PNR-FF

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

⁽¹⁾ Number of inserts

⁽²⁾ Key flat size

⁽³⁾ Maximum ramping angle - valid only with SOMT 040208 PNR-FF insert

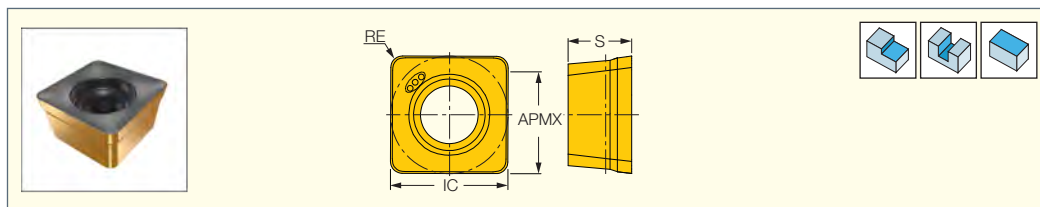
⁽⁴⁾ Master insert identification

⁽⁵⁾ Master insert identification 2

Spare Parts

Designation		
E90SO-MM-04	TS 18041/HG	T-6IP/51

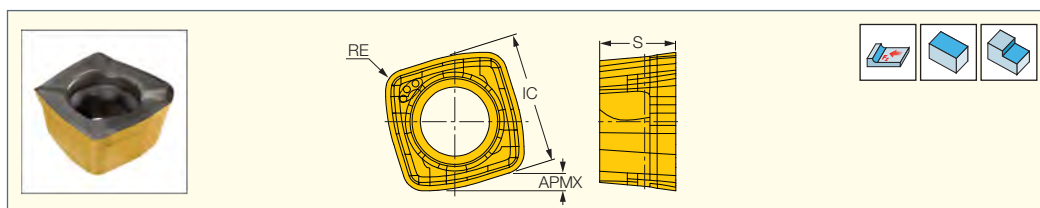
SOMT/CT 0402
Square Milling Inserts
for General Use



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

FEEDMILL

SOMT 0402-FF
Square Milling Inserts for
Fast Feed Milling



Designation	Dimensions					IC830	Recommended Machining Data	
	IC	APMX	RE	Rg ⁽¹⁾	S		a_p (mm)	f_z (mm/t)
SOMT 040208 PNR-FF	4.08	0.50	0.80	1.10	2.20	●	0.20-0.50	0.10-0.50

• When mounting this insert in a HELI4MILL tool for fast feed milling, the tool pockets should be modified by a corner rounding of 2 mm radius

⁽¹⁾ Radius for programming



LOGIQ8TANG
T890 MILLING LINE

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



8 Cutting Edges

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



Tangential
Advantage



Large Body
Core



Performs
90° Shoulder



Dovetail

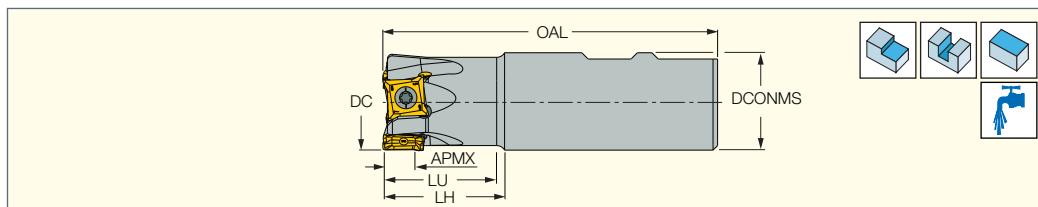


**SCAN
NOW!**

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	kg
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

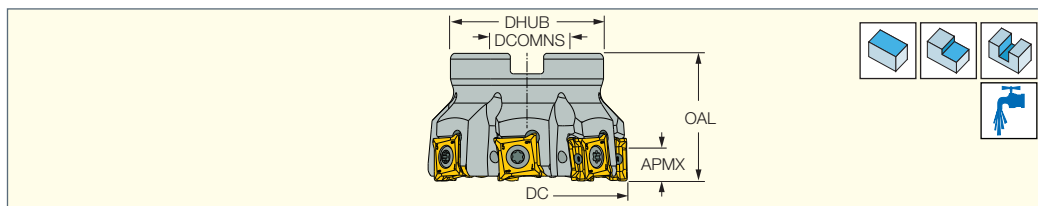
Spare Parts

Designation			
T890HT ELN-13	SR 10513105 ^(a)	BLD IP20/M7	SW6-T-SH

^(a) Recommended tightening torque: 8.0 N*m (71.0 lbf*in)

T890HT FLN-R13

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



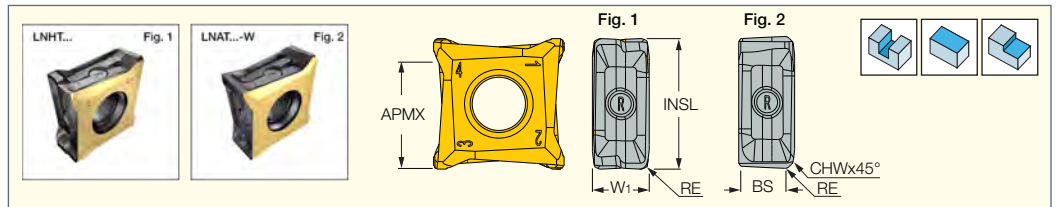
Designation	DC	APMX	CICT ⁽¹⁾	DCONMS	DHUB	OAL	Arbor	kg
T890HT FLN D040-03-16-R13	40.00	9.50	3	16.00	38.00	40.00	A	0.22
T890HT FLN D040-04-16-R13	40.00	9.50	4	16.00	38.00	40.00	A	0.21
T890HT FLN D040-05-16-R13	40.00	9.50	5	16.00	38.00	40.00	A	0.21
T890HT FLN D050-04-22-R13	50.00	9.50	4	22.00	48.00	40.00	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
T890HT FLN D160-12-40-R13	160.00	9.50	12	40.00	95.00	63.00	C	3.24
T890HT FLN D160-20-40-R13	160.00	9.50	20	40.00	95.00	63.00	C	3.53

⁽¹⁾ Number of inserts

Spare Parts

Designation				
T890HT FLN D040-03-16-R13	SR 10513105-L10.5 ^(a)	BLD IP20/M7	SW6-T-SH	SR M8X30DIN912
T890HT FLN D040-04-16-R13	SR 10513105-L10.5 ^(a)	BLD IP20/M7	SW6-T-SH	SR M8X30DIN912
T890HT FLN D040-05-16-R13	SR 10513105-L10.5 ^(a)	BLD IP20/M7	SW6-T-SH	SR M8X30DIN912
T890HT FLN D050-04-22-R13	SR 10513105 ^(a)	BLD IP20/M7	SW6-T-SH	SR M10X25 DIN912
T890HT FLN D050-05-22-R13	SR 10513105 ^(a)	BLD IP20/M7	SW6-T-SH	SR M10X25 DIN912
T890HT FLN D050-06-22-R13	SR 10513105 ^(a)	BLD IP20/M7	SW6-T-SH	SR M10X25 DIN912
T890HT FLN D063-06-22-R13	SR 10513105 ^(a)	BLD IP20/M7	SW6-T-SH	SR M10X25 DIN912
T890HT FLN D063-07-22-R13	SR 10513105 ^(a)	BLD IP20/M7	SW6-T-SH	SR M10X25 DIN912
T890HT FLN D063-08-22-R13	SR 10513105 ^(a)	BLD IP20/M7	SW6-T-SH	SR M10X25 DIN912
T890HT FLN D080-06-27-R13	SR 10513105 ^(a)	BLD IP20/M7	SW6-T-SH	
T890HT FLN D080-07-27-R13	SR 10513105 ^(a)	BLD IP20/M7	SW6-T-SH	
T890HT FLN D080-09-27-R13	SR 10513105 ^(a)	BLD IP20/M7	SW6-T-SH	
T890HT FLN D100-08-32-R13	SR 10513105 ^(a)	BLD IP20/M7	SW6-T-SH	
T890HT FLN D100-12-32-R13	SR 10513105 ^(a)	BLD IP20/M7	SW6-T-SH	
T890HT FLN D125-09-40-R13	SR 10513105 ^(a)	BLD IP20/M7	SW6-T-SH	
T890HT FLN D125-15-40-R13	SR 10513105 ^(a)	BLD IP20/M7	SW6-T-SH	
T890HT FLN D160-12-40-R13	SR 10513105 ^(a)	BLD IP20/M7	SW6-T-SH	
T890HT FLN D160-20-40-R13	SR 10513105 ^(a)	BLD IP20/M7	SW6-T-SH	

^(a) Recommended tightening torque: 8.0 N*m (71.0 lbf*in)



Designation	Dimensions								Tough $\longleftrightarrow$ Hard							Recommended Machining Data	
	APMX	INSL	W1	BS	RE	CHW	CEDC ⁽²⁾	Fig.	IC845	IC830	IC5400	IC5500	IC808	IC810	IC5100	a_p (mm)	f_z (mm/t)
T890 LNHT 1306PNTR	9.50	13.78	6.00	-	0.80	-	8	1	•	•	•	•	•	•	•	1.00-9.50	0.10-0.20
T890 LNAT 1306PN-W ⁽¹⁾	9.50	13.92	5.90	4.30	0.60	0.60	4	2						•		0.50-1.00	0.10-0.20

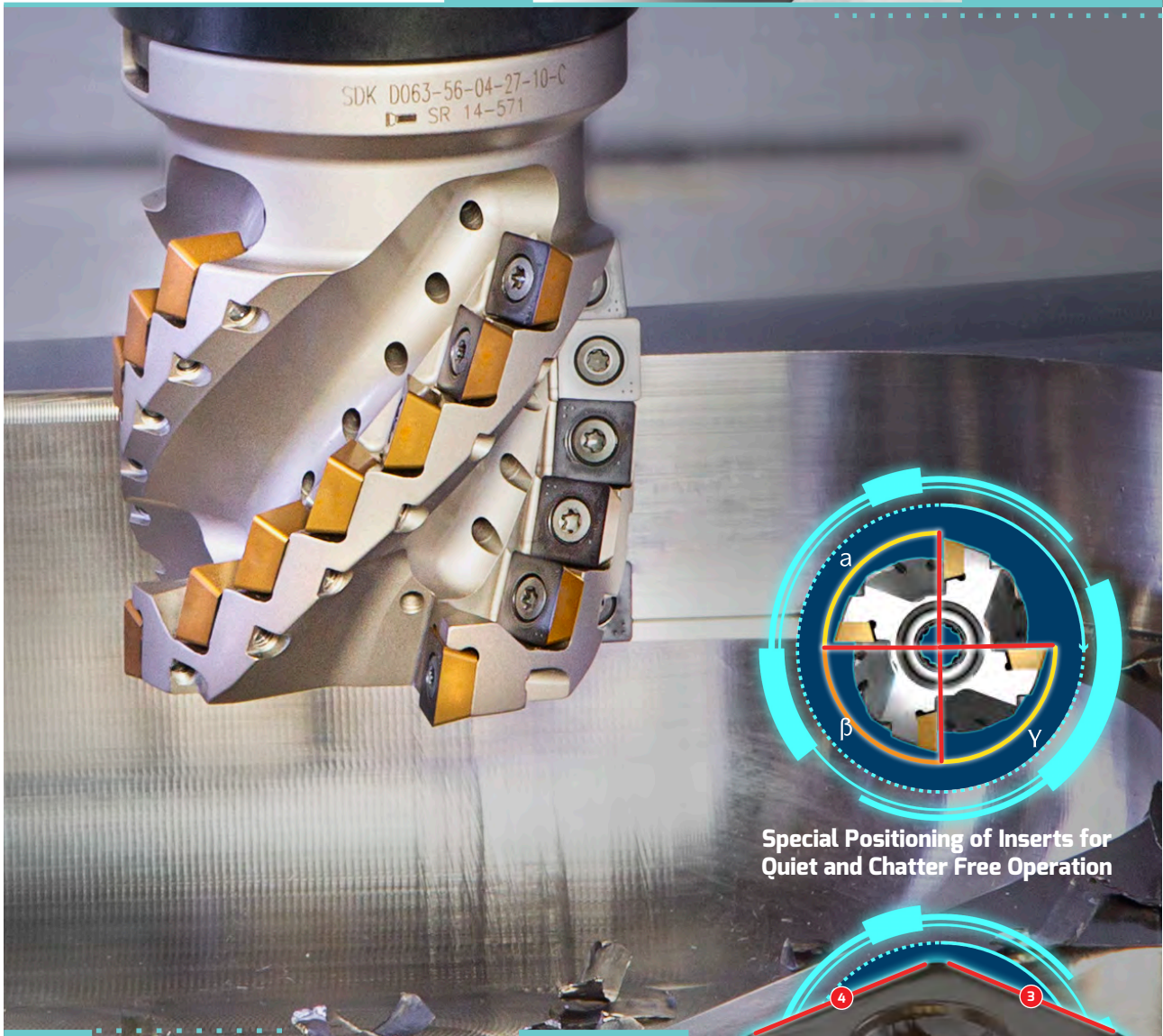
⁽¹⁾ A wiper insert for finishing only

⁽²⁾ Cutting edge count



XQUAD
EXTENDED FLUTE

Extended Flute Milling Dia 50-100 mm Aerospace Master



Extended Flute for
Aerospace Parts Machining
High Productivity Metal Removal



Easy Chip
Evacuation



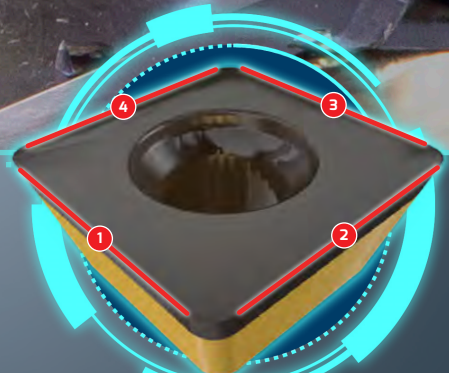
For Exotic
Materials



High Pressure
Coolant



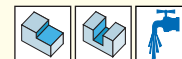
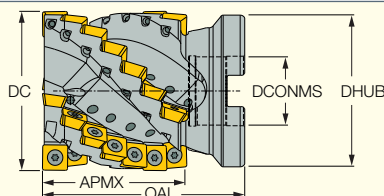
Cost Effective
Insert



4 Cutting Edged
Square Insert

LOGIQMILL
ISCAR CHESS LINES

SDK-10-C/HP

 Extended Flute Shell Mills Carrying
 SDHW/T 100408... Inserts


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

⁽¹⁾ Designed with coolant nozzles for high pressure coolant

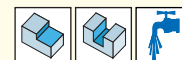
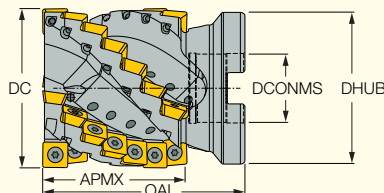
⁽²⁾ Number of flutes

⁽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 M10X60 DIN912
SDK D050-48-03-27-10-C	SR M3.5X0.6-L8.5 IP10	BLD IP10/S7	SW6-SD	SR M12X65 DIN912
SDK D050-48-04-27-10-C	SR M3.5X0.6-L8.5 IP10	BLD IP10/S7	SW6-SD	SR M12X65 DIN912
SDK D050-48-04-27-10-HP	SR M3.5X0.6-L8.5 IP10	BLD IP10/S7	SW6-SD	SR M12X65 DIN912
SDK D063-56-04-27-10-C	SR M3.5X0.6-L8.5 IP10	BLD IP10/S7	SW6-SD	SR M12X65 DIN912
SDK D080-64-05-32-10-C	SR M3.5X0.6-L8.5 IP10	BLD IP10/S7	SW6-SD	SR M16X65 DIN912

SDK-12-C/HP

 Extended Flute Shell Mills
 Carrying SDHT 1205... Inserts


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

⁽¹⁾ With coolant nozzles for high pressure coolant

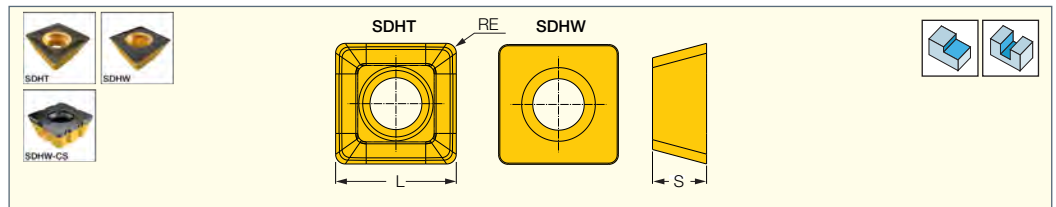
⁽²⁾ Number of flutes

⁽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	SR M12X65 DIN912
SDK D63-55-05-27-12-HP	SR M4X0.7-L9.5 IP15-4623	BLD IP15/M7	SW6-T	SR M12X65 DIN912
SDK D63-66-04-27-12-C	SR M4X0.7-L9.5 IP15-4623	BLD IP15/M7	SW6-T	SR M12X80 DIN912
SDK D63-98-04-27-12-C	SR M4X0.7-L9.5 IP15-4623	BLD IP15/M7	SW6-T	SR M12X110 DIN912
SDK D80-66-05-32-12-C	SR M4X0.7-L9.5 IP15-4623	BLD IP15/M7	SW6-T	SR M16X70 DIN912
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	SR M20X85 DIN912
SDK D100-130-06-40-12-C	SR M4X0.7-L9.5 IP15-4623	BLD IP15/M7	SW6-T	SR M20X140 DIN912

SDHW/T 100408
Square Inserts for Machining
Titanium, High Temperature
Alloys and Stainless Steel



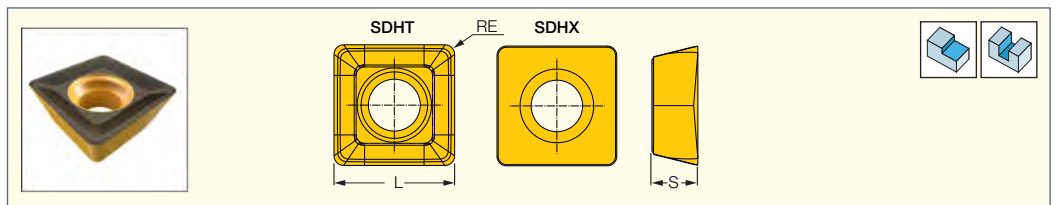
Designation	Dimensions			Tough ↔ Hard			Recommended Machining Data f_z (mm/t)
	L	S	RE	IC882	IC5820	IC380	
SDHT 100408-PDEN ⁽¹⁾	10.00	4.50	0.80	●	●		0.05-0.10
SDHW 100408-TN ⁽²⁾	10.00	4.50	0.80	●	●	●	0.05-0.12
SDHW 100408-TN-CS ⁽³⁾	10.00	4.50	0.80		●		0.05-0.12

⁽¹⁾ First choice for machining stainless steel

⁽²⁾ First choice for machining titanium

⁽³⁾ Chip splitting cutting edge

SDHT/X 120508
Square Inserts for Machining
Titanium, High Temperature
Alloys and Stainless Steel

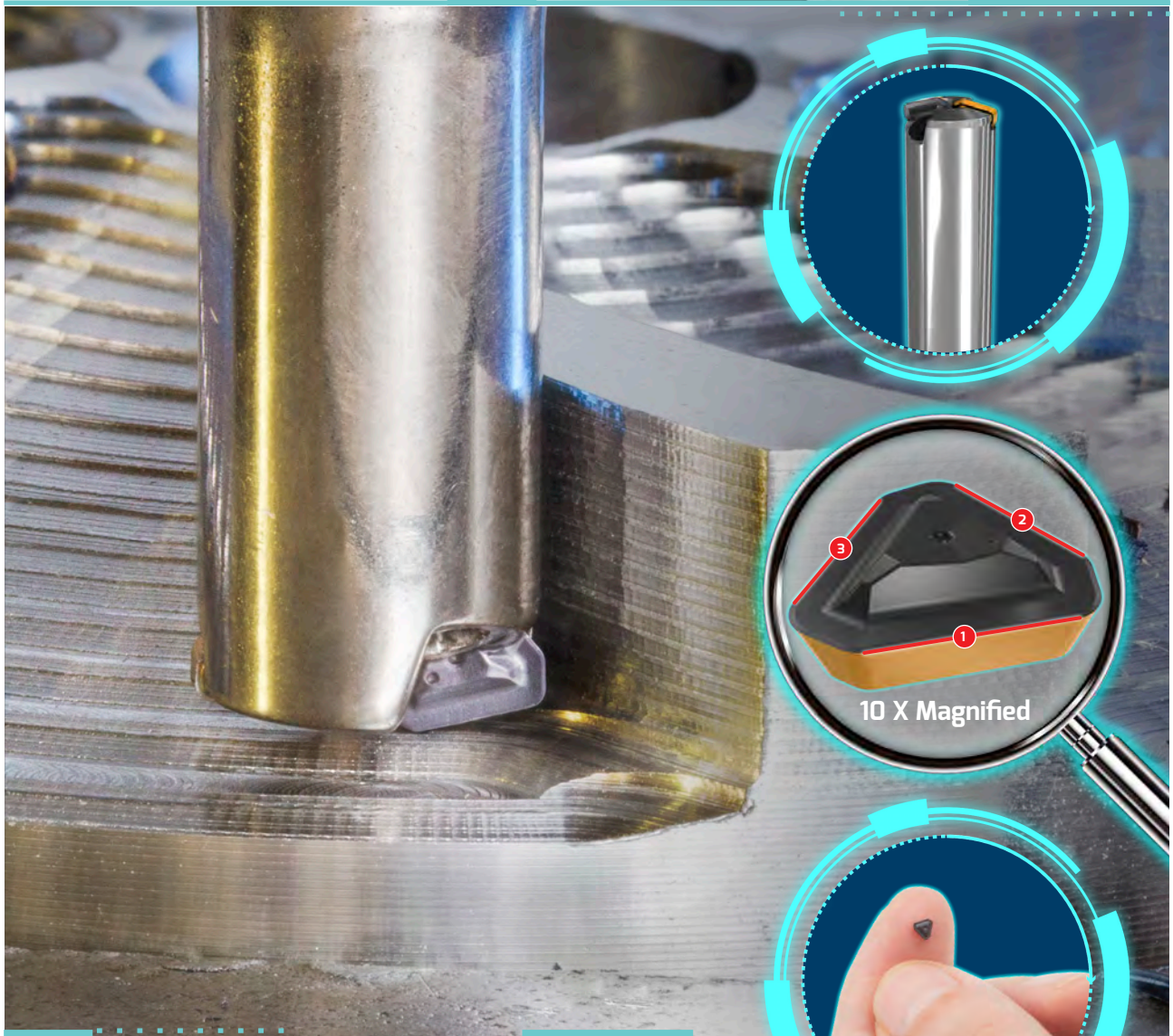


Designation	Dimensions			Tough ↔ Hard		Recommended Machining Data f_z (mm/t)
	L	S	RE	IC882	IC5820	
SDHT 120508-PDEN ⁽¹⁾	12.70	4.90	0.80		●	0.05-0.15
SDHX 120508-PD-N ⁽²⁾	12.70	4.94	0.80	●	●	0.05-0.15

⁽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



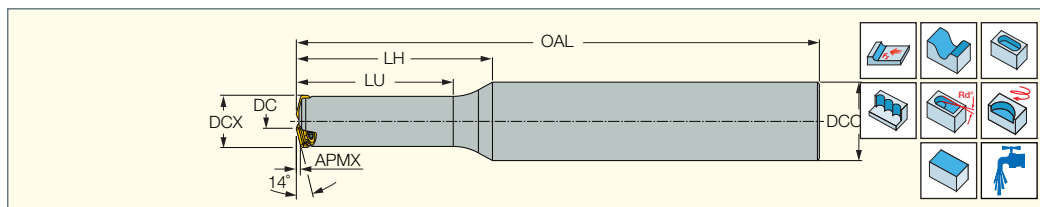
Easy Chip
Evacuation



High Pressure
Coolant

FFT3 EFM-02

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



Designation	DCX ⁽¹⁾	DC	APMX	AE ⁽²⁾	CICT ⁽³⁾	LU	LH	OAL	DCONMS	Shank ⁽⁴⁾	RMPX ⁽⁵⁾	MDN ⁽⁶⁾	MDX ⁽⁷⁾	kg	MIID ⁽⁸⁾	TQ ⁽⁹⁾
FFT3 EFM D08-2-060-C10-02	8.00	2.20	0.60	2.9	2	17.0	20.0	60.00	10.00	C	10.8	10.20	15.00	0.03	FFT3 TXMT 0201205T	0.5
FFT3 EFM D08-2-080-C12-02	8.00	2.20	0.60	2.9	2	26.0	30.0	80.00	12.00	C	10.8	10.20	15.00	0.05	FFT3 TXMT 0201205T	0.5
FFT3 EFM D10-3-070-C10-02	10.00	4.20	0.60	2.9	3	19.5	20.0	70.00	10.00	C	4.7	14.20	19.00	0.04	FFT3 TXMT 0201205T	0.5
FFT3 EFM D10-3-090-C12-02	10.00	4.20	0.60	2.9	3	30.0	33.0	90.00	12.00	C	4.7	14.20	19.00	0.06	FFT3 TXMT 0201205T	0.5

• Radius for programming 1.1 mm • To generate a straight surface without cusps, the width of cut must not exceed DC

(1) Cutting diameter maximum (2) Maximum plunging width (3) Number of inserts (4) C-Cylindrical (5) Maximum ramping angle (6) Machinable diameter minimum for interpolation

(7) Machinable diameter maximum for interpolation (8) Master insert identification (9) Recommended tightening torque (N*m) for insert screw

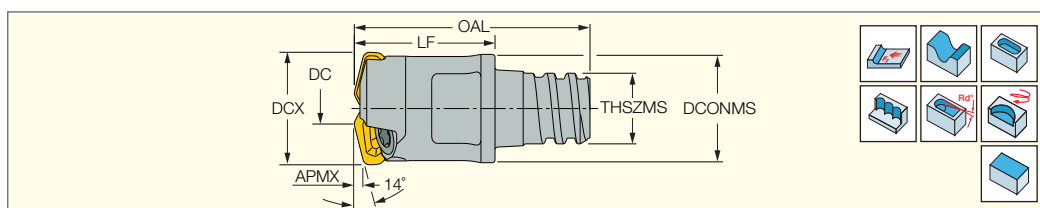
Spare Parts

Designation		
FFT3 EFM-02	SR M2X0.4-2.9 T6-HG ^(a)	T-6/5 MAGNET 3X3

(a) Recommended tightening torque: 0.5 N*m

FFT3 EFM-MM 02

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



Designation	DCX ⁽¹⁾	DC	APMX	AE ⁽²⁾	CICT ⁽³⁾	LF	DCONMS	THSZMS	OAL	DRVS ⁽⁴⁾	RMPX ⁽⁵⁾	MDN ⁽⁶⁾	MDX ⁽⁷⁾	kg	MIID ⁽⁸⁾	TQ ⁽⁹⁾
FFT3 EFMD08/31-2MMT05-02	8.00	2.20	0.60	2.9	2	10.00	7.60	T05	16.75	5.5	10.8	10.20	15.00	0.01	FFT3 TXMT 0201205T	0.5
FFT3 EFMD10/39-3MMT06-02	10.00	4.20	0.60	2.9	3	10.00	9.70	T06	16.30	8.0	4.7	14.20	19.00	0.01	FFT3 TXMT 0201205T	0.5

• Radius for programming 1.1 mm • To generate a straight surface without cusps, the width of cut must not exceed DC

(1) Cutting diameter maximum (2) Maximum plunging width (3) Number of inserts (4) Key flat size (5) Maximum ramping angle (6) Machinable diameter minimum for interpolation

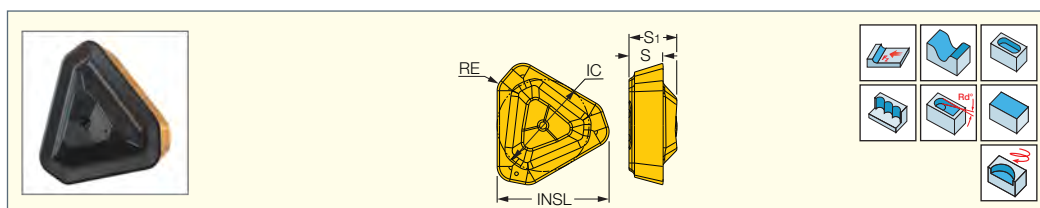
(7) Machinable diameter maximum for interpolation (8) Master insert identification (9) Recommended tightening torque (N*m) for insert screw

Spare Parts

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

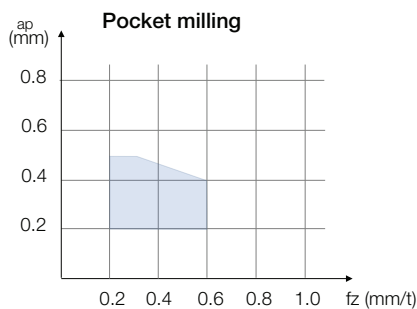
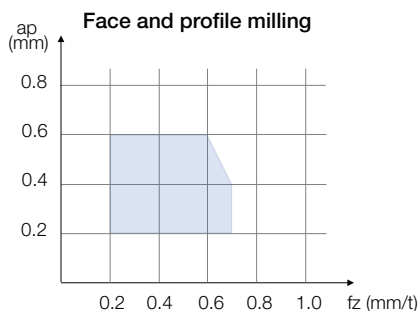
FFT3 TXMT 02

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



Designation	Dimensions					IC830	Recommended Machining Data	
	INSL	IC	RE	S	S1		a _p (mm)	f _z (mm/t)
FFT3 TXMT 020105T	3.66	2.00	0.50	1.10	1.56	●	0.20-0.60	0.20-0.45

• For side plunging, the initial cutting feed is 0.06 mm/t

Application Range FFT3-02


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

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

**Small Diameter Multi-Toothed Endmill
for High Feed and Productivity**



High Feed
Milling



High Positive
Rake Angle



High
Productivity

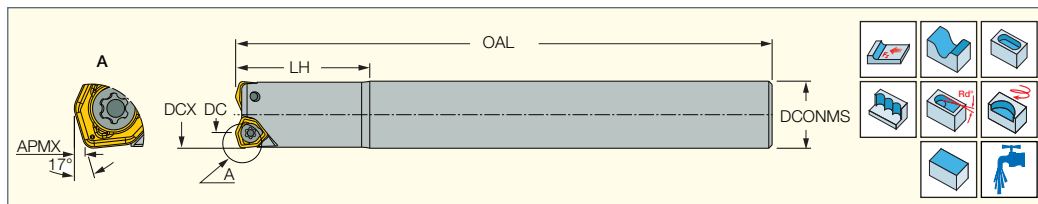


Through-Tool
Coolant

LOGIQMILL
ISCAR CHESS LINES

FFT3 EFM-03

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



Designation	DCX ⁽¹⁾	DC	APMX	AE ⁽²⁾	CICT ⁽³⁾	LH	OAL	DCONMS	Shank ⁽⁴⁾	RMPX ⁽⁵⁾	MDN ⁽⁶⁾	MDX ⁽⁷⁾	kg	MIID ⁽⁸⁾	TQ ⁽⁹⁾
FFT3 EFM D10-2-080-C10-03	10.00	5.60	0.60	2.2	2	20.0	80.00	10.00	C	6.9	15.60	19.00	0.11	FFT3 WXMT 030206T	0.5
FFT3 EFM D12-3-120-C12-03	12.00	7.60	0.60	2.2	3	25.0	120.00	12.00	C	4.7	19.60	23.00	0.14	FFT3 WXMT 030206T	0.5
FFT3 EFM D16-4-140-C16-03	16.00	11.60	0.60	2.2	4	35.0	140.00	16.00	C	2.9	27.60	31.00	0.18	FFT3 WXMT 030206T	0.5

• Radius for programming 1.1 mm • To generate a straight surface without cusps, the width of cut must not exceed DC

(1) Cutting diameter maximum

(2) Maximum plunging width

(3) Number of inserts

(4) C-Cylindrical

(5) Maximum ramping angle

(6) Machinable diameter minimum for interpolation

(7) Machinable diameter maximum for interpolation

(8) Master insert identification

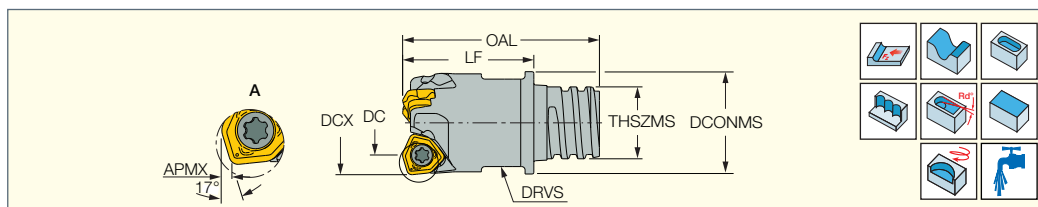
(9) Recommended tightening torque (N*m) for insert screw

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 ⁽¹⁾	DC	APMX	AE ⁽²⁾	CICT ⁽³⁾	LF	DCONMS	THSZMS	OAL	DRVS ⁽⁴⁾	RMPX ⁽⁵⁾	MDN ⁽⁶⁾	MDX ⁽⁷⁾	kg	MIID ⁽⁸⁾	TQ ⁽⁹⁾
FFT3 EFMD10/.39-2MMT06-03	10.00	5.60	0.60	2.2	2	10.00	9.70	T06	16.30	8.0	6.9	15.60	19.00	0.02	FFT3 WXMT 030206T	0.5
FFT3 EFMD12/.47-3MMT08-03	12.00	7.60	0.60	2.2	3	15.00	11.70	T08	22.50	10.0	4.7	19.60	23.00	0.03	FFT3 WXMT 030206T	0.5
FFT3 EFMD16/.63-4MMT10-03	16.00	11.60	0.60	2.2	4	20.00	15.30	T10	31.30	13.0	2.9	27.60	31.00	0.05	FFT3 WXMT 030206T	0.5

• Radius for programming 1.1 mm • To generate a straight surface without cusps, the width of cut must not exceed DC

(1) Cutting diameter maximum

(2) Maximum plunging width

(3) Number of inserts

(4) Key flat size

(5) Maximum ramping angle

(6) Machinable diameter minimum for interpolation

(7) Machinable diameter maximum for interpolation

(8) Master insert identification

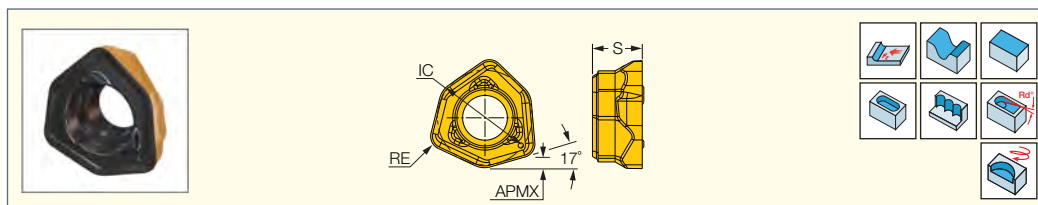
(9) Recommended tightening torque (N*m) for insert screw

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

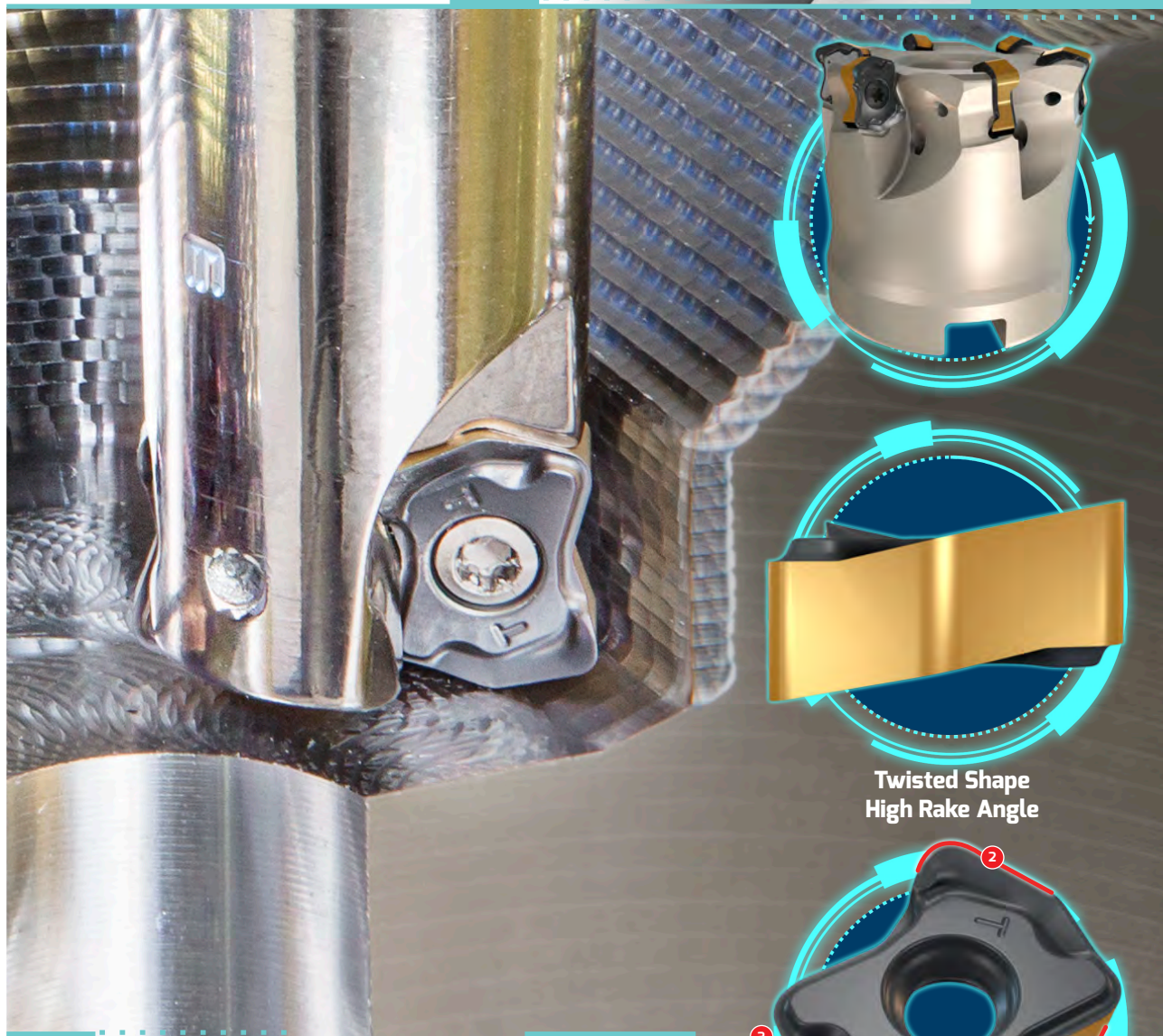
• For side plunging, the initial cutting feed is 0.08 mm/t

LOGIQ4FEED

HIGH FEED MILLING

High Feed Milling 12-52 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

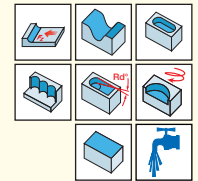
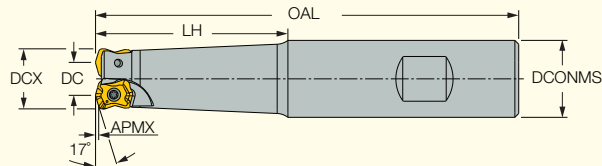


**SCAN
NOW!**

LOGIQMILL
ISCAR CHESS LINES

FFX4 ED

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



Designation	DCX ⁽¹⁾	DC	APMX	AE ⁽²⁾	CICT ⁽³⁾	LH	KAPR	OAL	DCONMS	RMPX ⁽⁴⁾	MDN ⁽⁵⁾	MDX ⁽⁶⁾	Shank ⁽⁷⁾	kg	MIID ⁽⁸⁾	TQ ⁽⁹⁾
FFX4 ED12-1-030-C12-04	12.00	4.60	0.80	3.7	1	30.0	17.0	90.00	12.00	3.6	16.60	23.00	C	0.07	FFX4 XNMU 040310T	0.9
FFX4 ED16-2-030-C16-04	16.00	8.60	0.80	3.7	2	30.0	17.0	120.00	16.00	4.3	24.60	31.00	C	0.16	FFX4 XNMU 040310T	0.9
FFX4 ED16-2-050-W20-04	16.00	8.60	0.80	3.7	2	50.0	17.0	110.00	20.00	4.3	24.60	31.00	W	0.20	FFX4 XNMU 040310T	0.9
FFX4 ED20-3-050-C20-04	20.00	12.60	0.80	3.7	3	50.0	17.0	140.00	20.00	2.7	32.60	39.00	C	0.29	FFX4 XNMU 040310T	0.9
FFX4 ED20-3-060-W20-04	20.00	12.60	0.80	3.7	3	60.0	17.0	120.00	20.00	2.7	32.60	39.00	W	0.24	FFX4 XNMU 040310T	0.9
FFX4 ED25-4-060-C25-04	25.00	17.60	0.80	3.7	4	60.0	17.0	150.00	25.00	1.8	42.60	49.00	C	0.50	FFX4 XNMU 040310T	0.9
FFX4 ED25-4-080-W25-04	25.00	17.60	0.80	3.7	4	80.0	17.0	140.00	25.00	1.8	42.60	49.00	W	0.45	FFX4 XNMU 040310T	0.9
FFX4 ED32-5-080-W32-04	32.00	24.60	0.80	3.7	5	80.0	17.0	150.00	32.00	1.2	56.60	63.00	W	0.80	FFX4 XNMU 040310T	0.9
FFX4 ED32-5-120-C32-04	32.00	24.60	0.80	3.7	5	120.0	17.0	205.00	32.00	1.2	56.60	63.00	C	1.02	FFX4 XNMU 040310T	0.9

• Radius for programming 1.8 mm • To generate a straight surface without cusps, the width of cut must not exceed DC

(1) Cutting diameter maximum (2) Maximum plunging width (3) Number of inserts (4) Maximum ramping angle (5) Machinable diameter minimum for interpolation

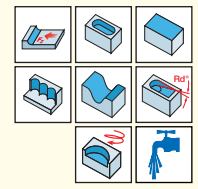
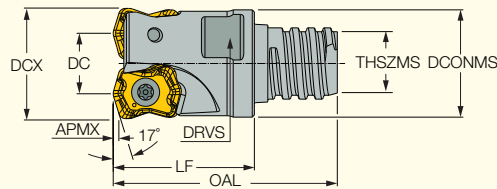
(6) Machinable diameter maximum for interpolation (7) C-Cylindrical, W-Weldon (8) Master insert identification (9) Recommended tightening torque (N*m) for insert screw

Spare Parts

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

MULTI-MASTER
FFX4 ED-MM

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



Designation	DCX ⁽¹⁾	DC	CICT ⁽²⁾	APMX	AE ⁽³⁾	THSZMS	LF	OAL	DCONMS	RMPX ⁽⁴⁾	MDN ⁽⁵⁾	MDX ⁽⁶⁾	DRVS ⁽⁷⁾	kg	MIID ⁽⁸⁾	TQ ⁽⁹⁾
FFX4 ED16/.63-2-MMT10-04	16.00	8.60	2	0.80	3.7	T10	20.00	31.75	15.20	4.3	24.60	31.00	13.0	0.02	FFX4 XNMU 040310T	0.9

• Radius for programming 1.8 mm • To generate a straight surface without cusps, the width of cut must not exceed DC

(1) Cutting diameter maximum (2) Number of inserts (3) Maximum plunging width (4) Maximum ramping angle (5) Machinable diameter minimum for interpolation

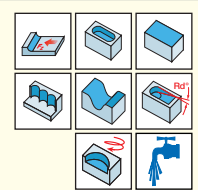
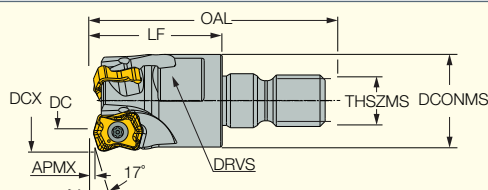
(6) Machinable diameter maximum for interpolation (7) Key flat size (8) Master insert identification (9) Recommended tightening torque (N*m) for insert screw

Spare Parts

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

FLEXFIT
FFX4 ED-M

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



Designation	DCX ⁽¹⁾	DC	CICT ⁽²⁾	APMX	AE ⁽³⁾	THSZMS	LF	OAL	DCONMS	RMPX ⁽⁴⁾	MDN ⁽⁵⁾	MDX ⁽⁶⁾	DRVS ⁽⁷⁾	kg	MIID ⁽⁸⁾	TQ ⁽⁹⁾
FFX4 ED20/.78-3-M10-04	20.00	12.60	3	0.80	3.7	M10	25.00	45.00	18.00	2.7	32.60	39.00	15.0	0.04	FFX4 XNMU 040310T	0.9
FFX4 ED25/.98-4-M12-04	25.00	17.60	4	0.80	3.7	M12	30.00	52.00	21.00	1.8	42.60	49.00	19.0	0.08	FFX4 XNMU 040310T	0.9
FFX4 ED32/1.26-5-M16-04	32.00	24.60	5	0.80	3.7	M16	35.00	60.00	29.00	1.2	56.60	63.00	27.0	0.18	FFX4 XNMU 040310T	0.9
FFX4 ED35/1.38-5-M16-04	35.00	27.60	5	0.80	3.7	M16	35.00	60.00	29.00	1.1	62.60	69.00	25.0	0.20	FFX4 XNMU 040310T	0.9
FFX4 ED42/1.65-6-M16-04	42.00	34.60	6	0.80	3.7	M16	40.00	65.00	29.00	0.8	76.60	83.00	25.0	0.00	FFX4 XNMU 040310T	0.9

• Radius for programming 1.8 mm • To generate a straight surface without cusps, the width of cut must not exceed DC

(1) Cutting diameter maximum (2) Number of inserts (3) Maximum plunging width (4) Maximum ramping angle (5) Machinable diameter minimum for interpolation

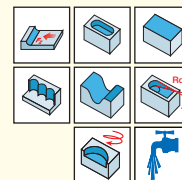
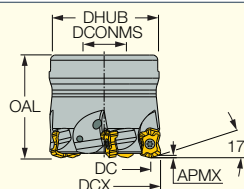
(6) Machinable diameter maximum for interpolation (7) Key flat size (8) Master insert identification (9) Recommended tightening torque (N*m) for insert screw

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 ⁽¹⁾	DC	CICT ⁽²⁾	APMX	AE ⁽³⁾	OAL	DCONMS	DHUB	RMPX ⁽⁴⁾	MDN ⁽⁵⁾	MDX ⁽⁶⁾	Arbor	kg	MIID ⁽⁷⁾	TQ ⁽⁸⁾
FFX4 FD032-5-16-04	32.00	24.60	5	0.80	3.7	40.00	16.00	38.00	1.2	56.60	63.00	A	0.12	FFX4 XNMU 040310T	0.9
FFX4 FD040-6-16-04	40.00	32.60	6	0.80	3.7	40.00	16.00	38.00	0.9	72.60	79.00	A	0.23	FFX4 XNMU 040310T	0.9
FFX4 FD042-6-16-04	42.00	34.60	6	0.80	3.7	40.00	16.00	38.00	0.8	76.60	83.00	A	0.00	FFX4 XNMU 040310T	0.9
FFX4 FD050-7-22-04	50.00	42.60	7	0.80	3.7	40.00	22.00	48.00	0.7	92.60	99.00	A	0.39	FFX4 XNMU 040310T	0.9
FFX4 FD052-7-22-04	52.00	44.60	7	0.80	3.7	40.00	22.00	48.00	0.7	96.60	103.00	A	0.00	FFX4 XNMU 040310T	0.9

• Radius for programming 1.8 mm • To generate a straight surface without cusps, the width of cut must not exceed DC

⁽¹⁾ Cutting diameter maximum

⁽²⁾ Number of inserts

⁽³⁾ Maximum plunging width

⁽⁴⁾ Maximum ramping angle

⁽⁵⁾ Machinable diameter minimum for interpolation

⁽⁶⁾ Machinable diameter maximum for interpolation

⁽⁷⁾ Master insert identification

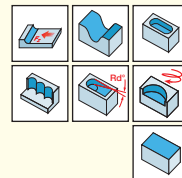
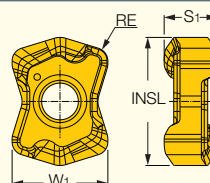
⁽⁸⁾ Recommended tightening torque (N*m) for insert screw

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 FD042-6-16-04	SR M2.5X6-T7-60	T-7/51	SR M8X25DIN912
FFX4 FD050-7-22-04	SR M2.5X6-T7-60	T-7/51	SR M10X25 DIN912
FFX4 FD052-7-22-04	SR M2.5X6-T7-60	T-7/51	SR M10X25 DIN912

FFX4 XNMU

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



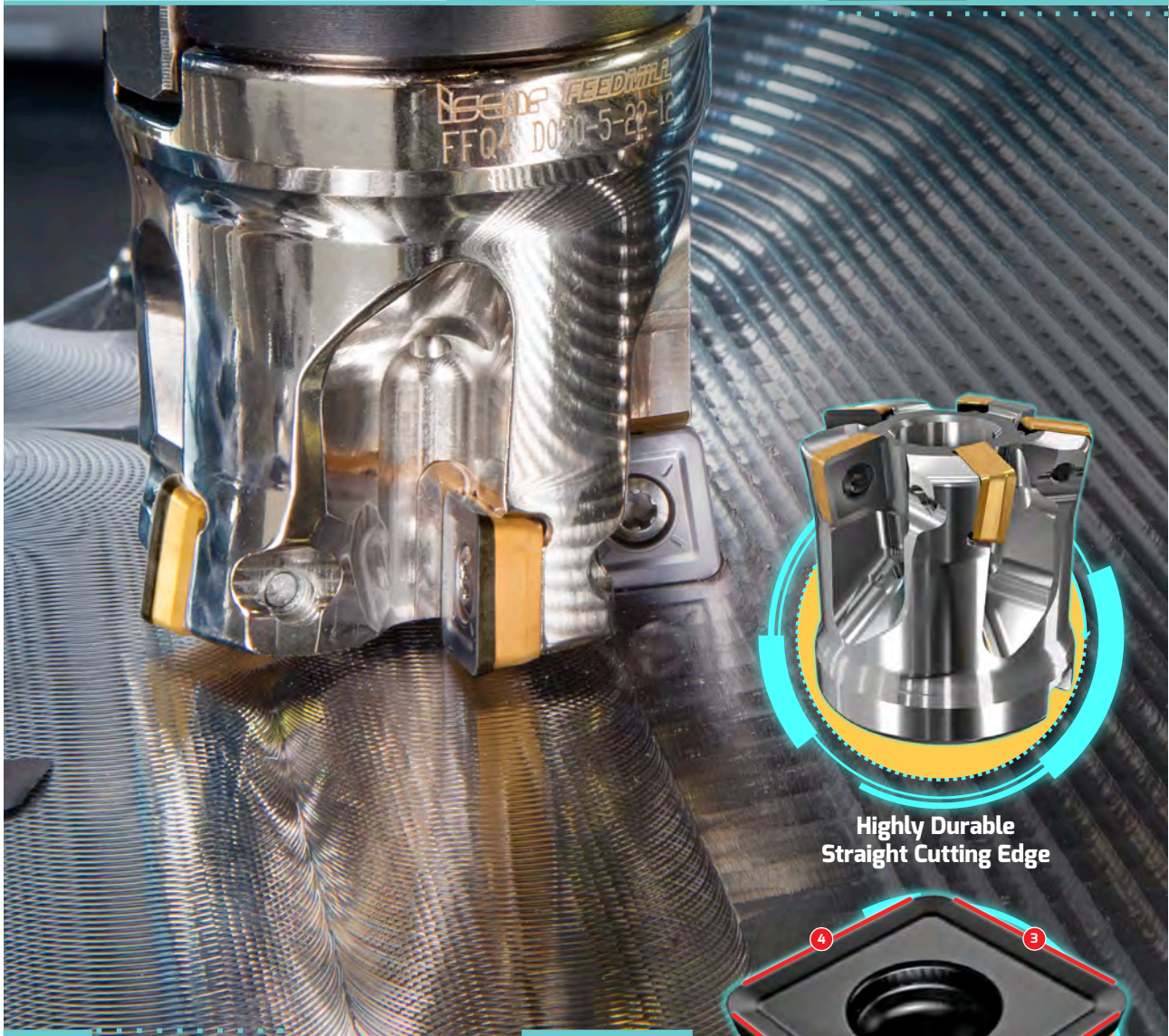
Designation	Dimensions				Tough ↔ Hard						Recommended Machining Data	
	INSL	S1	RE	W1	IC882	IC840	IC830	IC5820	IC808	IC810	a _p (mm)	f _z (mm/t)
FFX4 XNMU 040310HP	9.58	3.97	1.00	7.16	•	•	•	•			0.20-0.80	0.20-0.90
FFX4 XNMU 040310RM-HP	9.58	3.97	1.00	7.16					•		0.20-0.80	0.20-0.90
FFX4 XNMU 040310T	9.58	3.95	1.00	7.16			•		•	•	0.20-0.80	0.20-1.20
FFX4 XNMU 040310RM-T	9.58	3.95	1.00	7.16					•		0.20-0.80	0.20-1.20

• For side plunging, the initial cutting feed is 0.1 mm/t • HP- for austenitic stainless steel and high temperature alloys • T- for steel, ferritic and martensitic stainless steel, cast iron and hardened steel • RM-reinforced type insert



MILL4FEED
HIGH FEED

High Feed Face Milling 22-160 mm Diameter Feed Master



Highly Durable
Straight Cutting Edge



4 Cutting Edged
Square Insert

Square Insert for
High Feed Face Milling with
Higher Productivity



Reinforced
Insert Radius



For Stainless Steel,
Cast Iron
& Exotic Materials



Positive Insert
Positioning

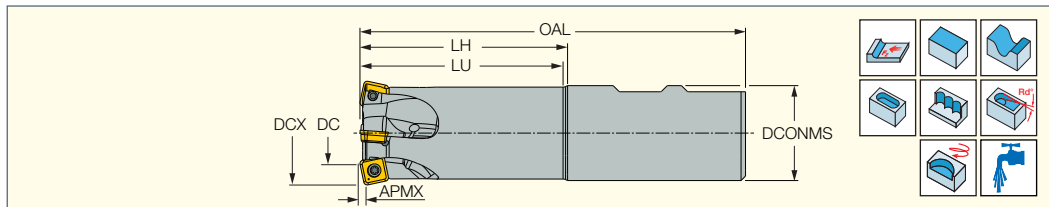


Interrupted Cut

LOGIQMILL
ISCAR CHESS LINES

FFQ4 D-W-09

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



Designation	DC	DCX ⁽¹⁾	APMX	AE ⁽²⁾	CICT ⁽³⁾	LU	LH	DCONMS	OAL	RMPX ⁽⁴⁾	MDN ⁽⁵⁾	MDX ⁽⁶⁾	kg	MIID ⁽⁷⁾	TQ ⁽⁸⁾
FFQ4 D022-2-044-W20-09	7.70	22.00	1.20	7.1	2	-	44.0	20.00	94.00	8.2	29.70	43.00	0.19	FFQ4 SOMT 090412T	2.0
FFQ4 D025-3-050-W25-09	10.70	25.00	1.20	7.1	3	-	50.0	25.00	110.00	5.5	35.70	49.00	0.25	FFQ4 SOMT 090412T	2.0
FFQ4 D032-4-064-W25-09	17.70	32.00	1.20	7.1	4	-	64.0	25.00	120.00	3.2	49.70	63.00	0.50	FFQ4 SOMT 090412T	2.0
FFQ4 D035-5-070-W32-09	20.70	35.00	1.20	7.1	5	68.5	70.0	32.00	130.00	2.7	55.70	69.00	0.70	FFQ4 SOMT 090412T	2.0

- Radius for programming 2.5 mm
- To generate a straight surface without cusps, the width of cut must not exceed DC
- For slot milling or machining with high tool overhang, the maximum depth of cut should be reduced by 50%.

⁽¹⁾ Cutting diameter maximum

⁽²⁾ Maximum plunging width

⁽³⁾ Number of inserts

⁽⁴⁾ Maximum ramping angle

⁽⁵⁾ Machinable diameter minimum for interpolation

⁽⁶⁾ Machinable diameter maximum for interpolation

⁽⁷⁾ Master insert identification

⁽⁸⁾ Recommended tightening torque (N*m) for insert screw

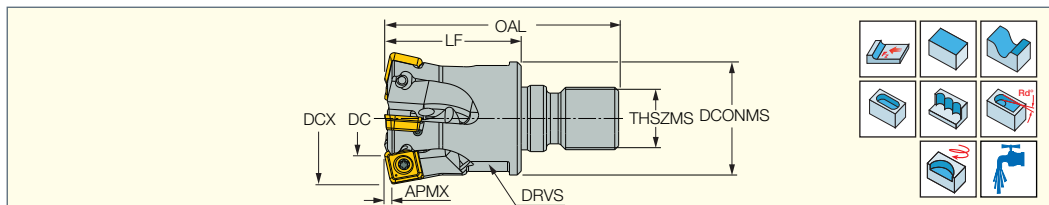
Spare Parts

Designation		
FFQ4 D-W-09	SR M3X0.5-L7.4 IP9 ^(a)	IP-9/151

^(a) Recommended tightening torque: 2.0 N*m

FFQ4 D-M-09

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



Designation	DC	DCX ⁽¹⁾	APMX	AE ⁽²⁾	CICT ⁽³⁾	LF	OAL	DCONMS	THSZMS	RMPX ⁽⁴⁾	MDN ⁽⁵⁾	MDX ⁽⁶⁾	DRVS ⁽⁷⁾	kg	MIID ⁽⁸⁾	TQ ⁽⁹⁾
FFQ4 D022-02-M10-09	7.70	22.00	1.20	7.1	2	25.00	45.00	18.00	M10	8.2	29.70	43.00	15.0	0.04	FFQ4 SOMT 090412T	2.0
FFQ4 D025-02-M12-09	10.70	25.00	1.20	7.1	2	30.00	52.00	21.00	M12	5.5	35.70	49.00	17.0	0.05	FFQ4 SOMT 090412T	2.0
FFQ4 D025-03-M12-09	10.70	25.00	1.20	7.1	3	30.00	52.00	21.00	M12	5.5	35.70	49.00	17.0	0.07	FFQ4 SOMT 090412T	2.0
FFQ4 D032-03-M16-09	17.70	32.00	1.20	7.1	3	35.00	60.00	29.00	M16	3.2	49.70	63.00	25.0	0.14	FFQ4 SOMT 090412T	2.0
FFQ4 D032-04-M16-09	17.70	32.00	1.20	7.1	4	35.00	60.00	29.00	M16	3.2	49.70	63.00	25.0	0.14	FFQ4 SOMT 090412T	2.0
FFQ4 D035-05-M16-09	20.70	35.00	1.20	7.1	5	35.00	60.00	29.00	M16	2.7	55.70	69.00	25.0	0.16	FFQ4 SOMT 090412T	2.0
FFQ4 D040-05-M16-09	25.70	40.00	1.20	7.1	5	35.00	60.00	29.00	M16	2.0	65.70	79.00	25.0	0.18	FFQ4 SOMT 090412T	2.0

- Radius for programming 2.5 mm
- To generate a straight surface without cusps, the width of cut must not exceed DC
- For slot milling or machining with high tool overhang, the maximum depth of cut should be reduced by 50%.

⁽¹⁾ Cutting diameter maximum

⁽²⁾ Maximum plunging width

⁽³⁾ Number of inserts

⁽⁴⁾ Maximum ramping angle

⁽⁵⁾ Machinable diameter minimum for interpolation

⁽⁶⁾ Machinable diameter maximum for interpolation

⁽⁷⁾ Key flat size

⁽⁸⁾ Master insert identification

⁽⁹⁾ Recommended tightening torque (N*m) for insert screw

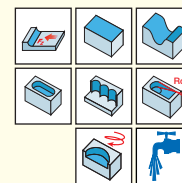
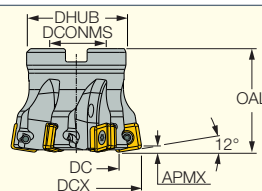
Spare Parts

Designation		
FFQ4 D-M-09	SR M3X0.5-L7.4 IP9 ^(a)	IP-9/151

^(a) Recommended tightening torque: 2.0 N*m

FFQ4 D-09

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



Designation	DC	DCX ⁽¹⁾	APMX	AE ⁽²⁾	CICT ⁽³⁾	OAL	DCONMS	DHUB	RMPX ⁽⁴⁾	MDN ⁽⁵⁾	MDX ⁽⁶⁾	Arbor	kg	MIID ⁽⁷⁾	TQ ⁽⁸⁾
FFQ4 D40-05-16-09	25.70	40.00	1.20	7.1	5	35.00	16.00	38.00	2.0	65.70	79.00	A	0.17	FFQ4 SOMT 090412T	2.0
FFQ4 D50-07-22-09	35.70	50.00	1.20	7.1	7	40.00	22.00	48.00	1.5	85.70	99.00	A	0.32	FFQ4 SOMT 090412T	2.0
FFQ4 D52-07-22-09	37.70	52.00	1.20	7.1	7	40.00	22.00	48.00	1.4	89.70	103.00	A	0.34	FFQ4 SOMT 090412T	2.0
FFQ4 D63-08-22-09	48.70	63.00	1.20	7.1	8	45.00	22.00	48.00	1.1	111.70	125.00	A	0.49	FFQ4 SOMT 090412T	2.0

- Radius for programming 2.5 mm
- To generate a straight surface without cusps, the width of cut must not exceed DC
- For slot milling or machining with high tool overhang, the maximum depth of cut should be reduced by 50%.

⁽¹⁾ Cutting diameter maximum

⁽²⁾ Maximum plunging width

⁽³⁾ Number of inserts

⁽⁴⁾ Maximum ramping angle

⁽⁵⁾ Machinable diameter minimum for interpolation

⁽⁶⁾ Machinable diameter maximum for interpolation

⁽⁷⁾ Master insert identification

⁽⁸⁾ Recommended tightening torque (N*m) for insert screw

Recommended Machining Conditions for FFQ4-09 Fast Feed Mills

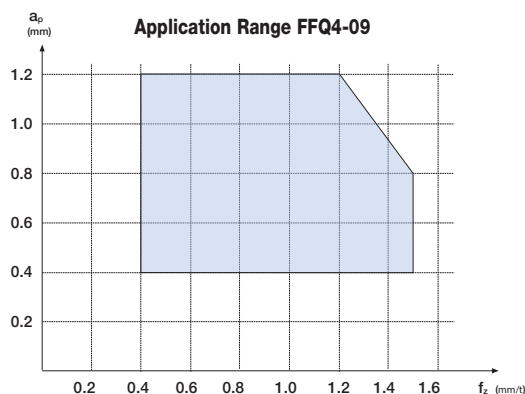
Workpiece Material						Insert type	Carbide grade	D.O.C. ap [mm]		Cutting speed Vc, [m/min]	Feed fz [mm/tooth]		Coolant
ISO class DIN/ISO 513	Description	ISCAR mat. group*	Hardness, HB	Typical materials				Recom- mended	Range		Recom- mended	Range	
				AISI/SAE/ ASTM	DIN W.-Nr.								
P	Non-alloy steel	1-5	130-180	1020	1.0402	T / RM-T	IC808	1.0	0.4-1.2	150-220	1.2	0.5-1.5	Dry
	Low alloy steel	6-8	260-300	4340	1.6582		IC830			140-200	1.3	0.5-1.5	Dry/Wet
		9	HRC 35-42**	3135	1.5710		IC808			140-200	1.2	0.5-1.5	Dry
							IC830			120-180	1.3	0.5-1.5	Dry/Wet
							IC808			130-180	1.2	0.5-1.4	Dry
		High alloy steel	10-11	200-220	H13		1.2344			IC830	120-160	1.2	0.5-1.4
	IC808									120-170	1.2	0.5-1.4	Dry
	Ferritic/martensitic stainless steel	12-13	200	420	1.4021		IC830			100-150	1.3	0.5-1.4	Dry/Wet
							IC808			110-160	1.2	0.5-1.4	Dry
	M	Austenitic stainless steel	14	200	304L		1.4306			HP	IC830	1.0	0.4-1.2
IC808						100-160		1.0	0.5-1.2				
IC5820						100-160		1.0	0.5-1.3				
IC882						80-130		1.0	0.5-1.4				
K	Gray cast iron	15-16	250	Class 40	0.6025 (GG25)	T / RM-T	IC810	1.0	0.4-1.2	150-220	1.2	0.5-1.5	Dry
	Nodular cast iron	17-18	200	Class 65- 45-12	0.7050 (GGG50)		IC810			120-200	1.2	0.5-1.5	
S	High temperature alloys	33-35	340	Inconel 718	2.4668	HP	IC882	1.0	0.4-1.2	20-30	0.6	0.4-1.0	Wet
							IC5820			23-35	0.6	0.5-1.0	
							IC830			23-35	0.6	0.5-1.0	
							IC808			25-40	0.6	0.4-1.0	
		36-37	HRC 35-40	AMS R56400	3.7165 (Ti6Al4V ELI)		IC882			20-30	0.6	0.5-1.0	
							IC5820			20-30	0.6	0.4-1.0	
							IC830			20-45	0.6	0.5-1.0	
							IC808			20-30	0.6	0.5-1.0	
H	Hardened steel	38	HRC 45-49	HARDOX 450 plate		T / RM-T	IC808	1.0	0.4-1.2	50-75	0.5	0.4-0.5	Dry

* ISCAR material group in accordance with VDI 3323 standard ** Quenched and tempered
For machining in unstable conditions, the recommended cutting data should be reduced by 20-30%

Spare Parts

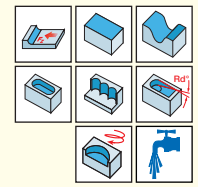
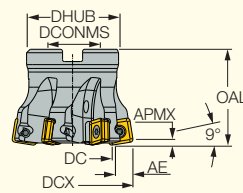
Designation			
FFQ4 D40-05-16-09	SR M3X0.5-L7.4 IP9(a)	IP-9/151	SR M8X25DIN912
FFQ4 D50-07-22-09	SR M3X0.5-L7.4 IP9(a)	IP-9/151	SR M10X25 DIN912
FFQ4 D52-07-22-09	SR M3X0.5-L7.4 IP9(a)	IP-9/151	SR M10X25 DIN912
FFQ4 D63-08-22-09	SR M3X0.5-L7.4 IP9(a)	IP-9/151	SR M10X30 DIN912

(a) Recommended tightening torque: 2.0 N*m



FFQ4 D-12

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



Designation	DC	DCX ⁽¹⁾	APMX	AE ⁽²⁾	CICT ⁽³⁾	OAL	DHUB	DCONMS	Arbor	RMPX ⁽⁴⁾	MDN ⁽⁵⁾	MDX ⁽⁶⁾		MIID ⁽⁷⁾	TQ ⁽⁸⁾
FFQ4 D040-3-16-12	18.00	40.00	1.50	10.0	3	45.00	38.00	16.00	A	4.3	58.00	79.00	0.23	FFQ4 SOMT 120516HP	4.8
FFQ4 D040-4-16-12	18.00	40.00	1.50	10.0	4	45.00	38.00	16.00	A	4.3	58.00	79.00	0.22	FFQ4 SOMT 120516HP	4.8
FFQ4 D050-4-22-12	28.00	50.00	1.50	10.0	4	50.00	48.00	22.00	A	2.7	78.00	99.00	0.38	FFQ4 SOMT 120516HP	4.8
FFQ4 D050-5-22-12	28.00	50.00	1.50	10.0	5	50.00	48.00	22.00	A	2.7	78.00	99.00	0.37	FFQ4 SOMT 120516HP	4.8
FFQ4 D052-5-22-12	29.00	52.00	1.50	10.0	5	50.00	48.00	22.00	A	2.5	81.00	103.00	0.39	FFQ4 SOMT 120516HP	4.8
FFQ4 D063-6-22-12	41.00	63.00	1.50	10.0	6	50.00	48.00	22.00	A	1.8	104.00	125.00	0.50	FFQ4 SOMT 120516HP	4.8
FFQ4 D066-6-27-12	43.00	66.00	1.50	10.0	6	50.00	60.00	27.00	A	1.6	109.00	131.00	0.65	FFQ4 SOMT 120516HP	4.8
FFQ4 D080-7-27-12	58.00	80.00	1.50	10.0	7	50.00	60.00	27.00	A	1.2	138.00	159.00	0.84	FFQ4 SOMT 120516HP	4.8
FFQ4 D100-8-32-12	78.00	100.00	1.50	10.0	8	50.00	78.00	32.00	B	0.9	178.00	199.00	1.30	FFQ4 SOMT 120516HP	4.8

- Radius for programming 3.1 mm
- To generate a straight surface without cusps, the width of cut must not exceed DC
- For slot milling or machining with high tool overhang, the maximum depth of cut should be reduced by 50%.

⁽¹⁾ Cutting diameter maximum

⁽²⁾ Maximum plunging width

⁽³⁾ Number of inserts

⁽⁴⁾ Maximum ramping angle

⁽⁵⁾ Machinable diameter minimum for interpolation

⁽⁶⁾ Machinable diameter maximum for interpolation

⁽⁷⁾ Master insert identification

⁽⁸⁾ Recommended tightening torque (N*m) for insert screw

Recommended Machining Conditions for FFQ4-12 Fast Feed Face Mills

Workpiece Material						Insert type	Carbide grade	D.O.C. ap [mm]		Cutting speed Vc, [m/min]	Feed fz [mm/tooth]		Coolant	
ISO class DIN/ISO 513	Description	ISCAR mat. group*	Hardness, HB	Typical representative				Recom- mended	Range		Recom- mended	Range		
				AISI/SAE/ASTM	DIN W.-Nr.									
P	Non-alloy steel	1-5	130-180	1020	1.0402	T/ RM-T	IC808	1.5	0.5-1.5	150-220	1.5	0.5-2.0	Dry	
	Low alloy steel	6-8	260-300	4340	1.6582		IC830			140-200	1.6	0.5-2.0	Dry/Wet	
							IC808			140-200	1.5	0.5-2.0	Dry	
							IC830			120-180	1.6	0.5-2.0	Dry/Wet	
		High alloy steel	9	HRC 35-42**	3135		1.5710			IC808	130-180	1.5	0.5-1.8	Dry
	IC830									120-160	1.5	0.5-1.8	Dry/Wet	
	IC808									120-170	1.3	0.5-1.8	Dry	
	Ferritic/martensitic stainless steel	10-11	200-220	H13	1.2344		IC830			100-150	1.4	0.5-1.8	Dry/Wet	
							IC808			110-160	1.3	0.5-1.8	Dry	
							IC830			100-150	1.4	0.5-1.8	Dry/Wet	
M	Austenitic stainless steel	14	200	304L	1.4306	HP/ RM-HP	IC830	1.5	0.5-1.5	80-140	1.0	0.5-1.5	Wet	
							IC808			100-160	1.0	0.5-1.5		
							IC5820			100-160	1.0	0.5-1.6		
							IC882			80-130	1.0	0.5-1.8		
K	Gray cast iron	15-16	250	Class 40	0.6025 (GG25)	T20 / T	IC810	1.5	0.5-1.5	150-220	1.5	0.5-2.0	Dry	
	Nodular cast iron	17-18	200	Class 65-45-12	0.7050 (GGG50)		IC810			120-200	1.5	0.5-2.0		
S	High temperature alloys	33-35	340	Inconel 718	2.4668	HP/ RM-HP	IC830	1.5	0.5-1.5	23-35	0.7	0.5-1.0	Wet	
							IC808			25-40	0.7	0.4-1.0		
							IC5820			23-35	0.7	0.5-1.0		
							IC882			20-30	0.7	0.5-1.0		
		36-37	HRC 35-40	AMS R56400	3.7165 (Ti6Al4V)		IC830			20-45	0.7	0.5-1.0		
							IC808			20-30	0.7	0.4-1.0		
							IC5820			20-30	0.7	0.5-1.0		
							IC882			20-30	0.9	0.5-1.0		
H	Hardened steel	38	HRC 45-49	HARDOX 450 plate		RM-T/T	IC808	1	0.5-1.5	50-75	0.5	0.4-0.5	Dry	

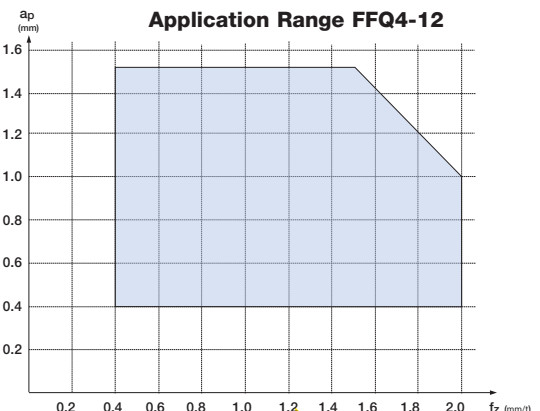
* ISCAR material group in accordance with VDI 3323 standard

** Quenched and tempered

For machining in unstable conditions, the recommended cutting data should be reduced by 20-30%.

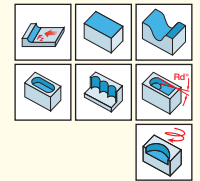
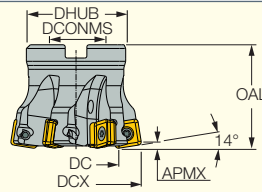
Spare Parts

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 M12X30 DIN912	
FFQ4 D080-7-27-12	SR M4X0.7-L9.6 IP15	SW6-T	BLD IP15/S7	SR M12X30 DIN912	
FFQ4 D100-8-32-12	SR M4X0.7-L9.6 IP15	SW6-T	BLD IP15/S7		



FFQ4 D-17

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



Designation	DCX ⁽¹⁾	DC	APMX	AE ⁽²⁾	CICT ⁽³⁾	OAL	DCONMS	Da	DHUB	RMPX ⁽⁴⁾	MDN ⁽⁵⁾	MDX ⁽⁶⁾	CSP ⁽⁷⁾	Arbor		MIID ⁽⁸⁾	TQ ⁽⁹⁾
FFQ4 D080-06-27-17	80.00	50.80	3.00	14.6	6	50.00	27.00	27.00	60.00	1.2	130.80	159.00	1	A	0.78	FFQ4 SOMT 170625T	9.0
FFQ4 D100-07-32-17	100.00	70.80	3.00	14.6	7	50.00	32.00	32.00	78.00	0.8	170.80	199.00	1	A	1.18	FFQ4 SOMT 170625T	9.0
FFQ4 D125-08-40-17	125.00	95.80	3.00	14.6	8	63.00	40.00	40.00	92.00	0.6	220.80	249.00	1	B	2.48	FFQ4 SOMT 170625T	9.0
FFQ4 D160-10-40-17	160.00	130.80	3.00	14.6	10	63.00	40.00	40.00	95.00	0.2	290.80	319.00	0	C	2.90	FFQ4 SOMT 170625T	9.0

- Radius for programming 5.5 mm
- To generate a straight surface without cusps, the width of cut must not exceed DC
- For slot milling or machining with high tool overhang, the maximum depth of cut should be reduced by 50%

⁽¹⁾ Cutting diameter maximum

⁽²⁾ Maximum plunging width

⁽³⁾ Number of inserts

⁽⁴⁾ Maximum ramping angle

⁽⁵⁾ Machinable diameter minimum for interpolation

⁽⁶⁾ Machinable diameter maximum for interpolation

⁽⁷⁾ 0 - Without coolant supply, 1 - With coolant supply

⁽⁸⁾ Master insert identification

⁽⁹⁾ Recommended tightening torque (N*m) for insert screw

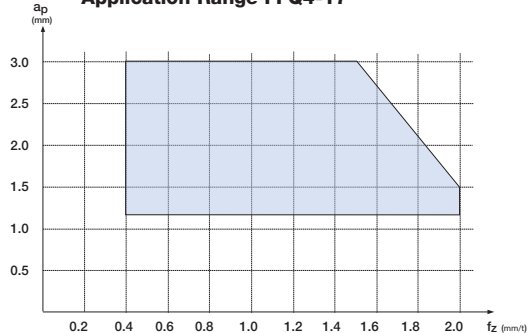
Recommended Machining Conditions for FFQ4-17 Fast Feed Mills

Workpiece material						Insert type	Carbide grade	D.O.C. ap [mm]	Cutting speed Vc [m/min]	Feed fz [mm/tooth]	Coolant
ISO class DIN/ISO 513	Description	ISCAR mat. group*	Hardness, HB	Typical material							
				AISI/SAE/ASTM	DIN W.-Nr.						
P	Non-alloy	1-5	130-180	1020	1.0402	T / RM-T	IC808	1.2-3.0	150-220	0.5-2.0	Dry
	Low alloy steel	6-8	260-300	4340	1.6582		IC830		140-200	0.5-2.0	Dry/Wet
		9	HRC 35-42**	3135	1.5710		IC808		140-200	0.5-1.8	Dry
							IC830		120-180	0.5-1.8	Dry/Wet
		High alloy	10-11	200-220	H13		1.2344		IC808	130-180	0.5-1.5
	IC830								120-160	0.5-1.5	Dry/Wet
	IC808								120-170	0.5-1.5	Dry
	IC830								100-150	0.5-1.5	Dry/Wet
	Ferritic/martensitic stainless steel	12-13	200	420	1.4021		IC808		110-160	0.5-1.5	Dry
M	Austenitic stainless steel	14	200	304L	1.4306	HP	IC830	80-140	0.5-1.2	Wet	
							IC808	100-160	0.5-1.2		
							IC882	80-160	0.5-1.2		
K	Grey cast iron	15-16	250	Class 40	0.6025 (GG25)	T	IC810	1.2-3.0	150-220	0.5-2.0	Dry
	Nodular cast iron	17-18	200	Class 65-45-12	0.7050 (GGG50)		IC810		120-200	0.5-2.0	
S	High temperature alloys	33-35	340	Inconel 718	2.4668	HP	IC830	1.2-3.0	25-35	0.4-0.8	Wet
		36-37	HRC 30-32	AMS R56400	3.717 (Ti6Al4V ELI)		IC808		25-40	0.4-0.8	
							IC882		23-30	0.4-0.8	
							IC830		25-45	0.4-0.9	
							IC808		20-40	0.4-0.9	
		IC882	20-40	0.4-0.9							
H	Hardened steel	38	HRC 45-49	HARDOX 450 plate		T / RM-T	IC808	1.2-3.0	50-75	0.4-0.6	Dry

* ISCAR material group in accordance with VDI 3323 standard

** Quenched and tempered

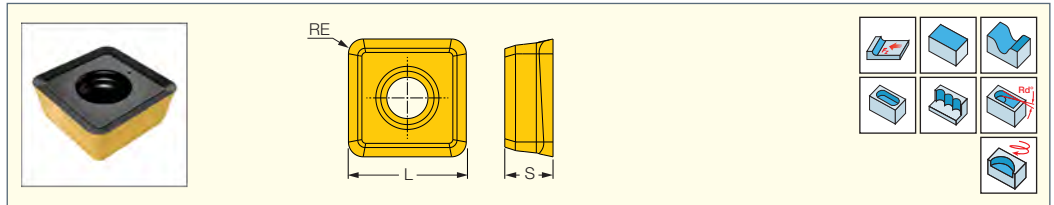
For machining in unstable conditions, the recommended cutting data should be reduced by 20-30%

Application Range FFQ4-17

Spare Parts

Designation				
FFQ4 D080-06-27-17	SR M5-14 IP20	SW6-T	BLD IP20/S7	SR M12X30 DIN912
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 0904

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

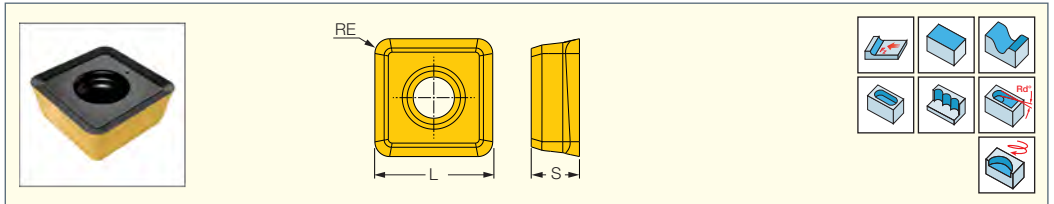


Designation	Dimensions			Tough ↔ Hard					Recommended Machining Data	
	L	S	RE	IC882	IC830	IC5820	IC808	IC810	a_p (mm)	f_z (mm/t)
FFQ4 SOMT 090412T	8.60	3.90	1.20		•		•	•	0.50-1.20	0.40-1.50
FFQ4 SOMT 0904RM-T	8.60	3.80	1.20				•		0.50-1.20	0.40-1.50
FFQ4 SOMT 0904RM-HP	8.60	3.80	1.20	•			•		0.50-1.20	0.40-1.50
FFQ4 SOMT 090412HP	8.60	3.80	1.20	•	•	•	•		0.50-1.20	0.40-1.40

- For side plunging, the initial cutting feed is 0.1 mm/t
- T type for steel, ferritic and martensitic stainless steel, cast iron and hardened steel
- RM-.. type for interrupted cut and machining near straight shoulders wall
- HP type for austenitic stainless steel and high temperature alloys

FFQ4 SOMT 1205

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

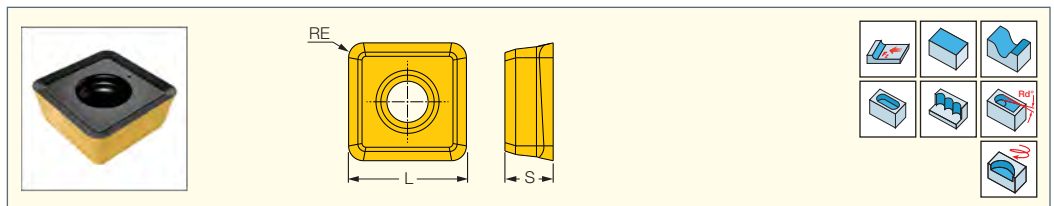


Designation	Dimensions			Tough ↔ Hard					Recommended Machining Data	
	L	S	RE	IC882	IC830	IC5820	IC808	IC810	a_p (mm)	f_z (mm/t)
FFQ4 SOMT 1205RM-HP	12.70	5.20	1.60		•		•		0.50-1.50	0.40-1.80
FFQ4 SOMT 1205RM-T	12.70	5.20	1.60				•		0.50-1.50	0.40-2.00
FFQ4 SOMT 120516HP	12.70	5.20	1.60	•	•	•	•		0.50-1.50	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 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
FFQ4 SOMT 1706RM-HP (4)	17.50	6.80	2.50		•			1.20-2.50	0.40-1.20

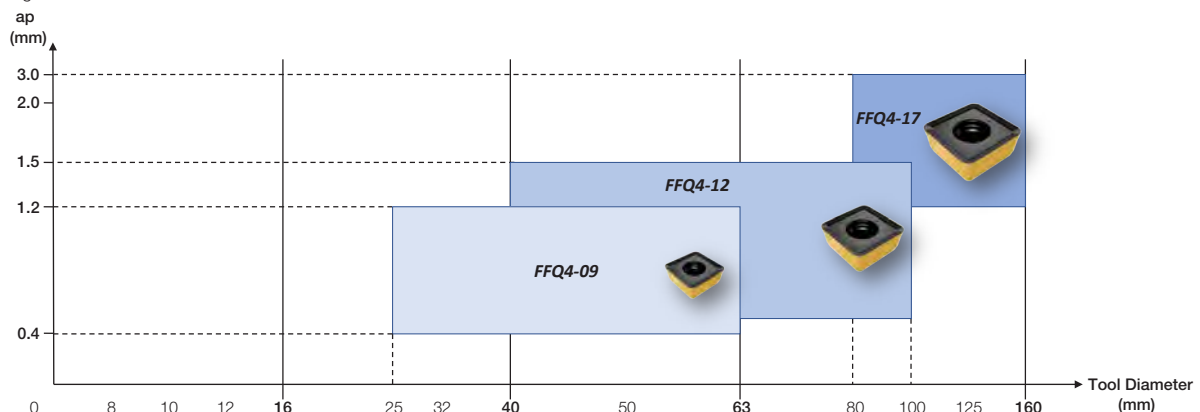
- For side plunging, the initial cutting feed is 0.1 mm/t

(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

(4) Chip splitting inserts



Machining Power: Low Medium High

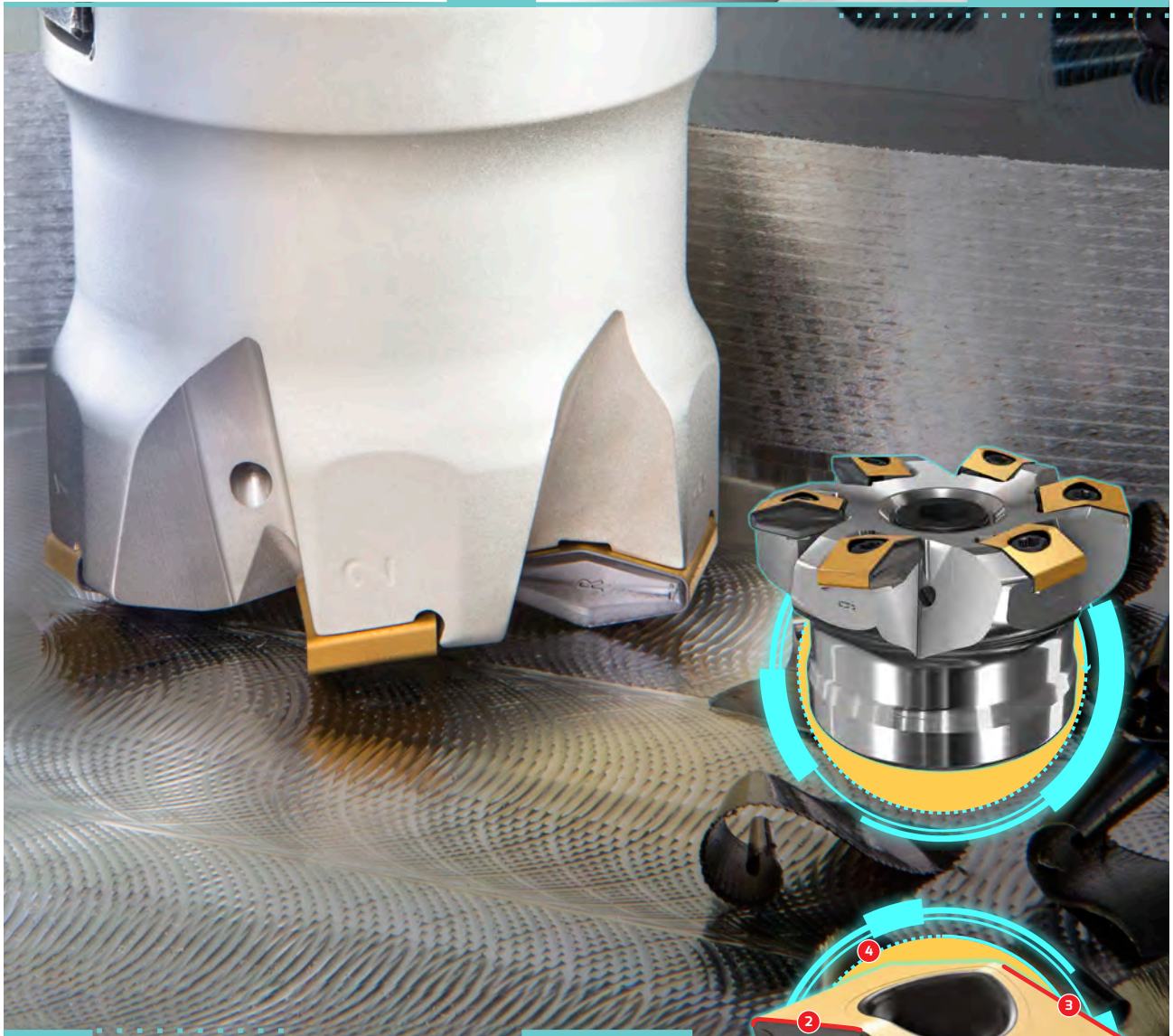
TANG4FEED

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

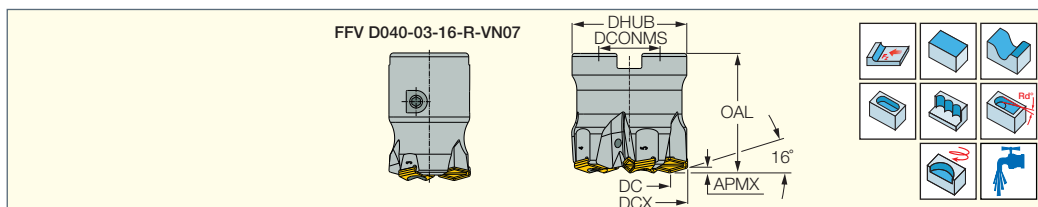


Up to 3.1°
Ramp Down Angle

LOGIQMILL
ISCAR CHESS LINES

FFV-D-R-VN07

Fast Feed Shell Mill Carrying
Tangentially Clamped Inserts
with 4 Cutting Edges



Designation	DCX ⁽²⁾	DC	APMX	AE ⁽³⁾	CICT ⁽⁴⁾	OAL	DCONMS	DHUB	RMPX ⁽⁵⁾	MDN ⁽⁶⁾	MDX ⁽⁷⁾	Arbor		MIID ⁽⁸⁾	TQ ⁽⁹⁾
FFV D040-03-16-R-VN07 ⁽¹⁾	40.00	25.00	1.50	7.5	3	60.00	16.00	25.00	3.0	65.00	79.00	Special	0.36	FF VNMT 0706ZN-ER	4.8
FFV D050-05-22-R-VN07	50.00	35.00	1.50	7.5	5	50.00	22.00	48.00	3.2	85.00	99.00	A	0.47	FF VNMT 0706ZN-ER	4.8
FFV D063-06-22-R-VN07	63.00	48.00	1.50	7.5	6	40.00	22.00	48.00	2.2	111.00	125.00	A	1.17	FF VNMT 0706ZN-ER	4.8
FFV D080-07-27-R-VN07	80.00	65.00	1.50	7.5	7	50.00	27.00	60.00	1.5	145.00	159.00	A	0.81	FF VNMT 0706ZN-ER	4.8
FFV D100-08-32-R-VN07	100.00	85.00	1.50	7.5	8	50.00	32.00	78.00	1.2	185.00	199.00	B	1.61	FF VNMT 0706ZN-ER	4.8

- Radius for programming 2.8 mm
- To generate a straight surface without cusps, the width of cut must not exceed DC

⁽¹⁾ Use with the supplied retention screw this screw was designed to be used instead of the standard cutter's frontal screw

⁽²⁾ Cutting diameter maximum

⁽³⁾ Maximum plunging width

⁽⁴⁾ Number of inserts

⁽⁵⁾ Maximum ramping angle

⁽⁶⁾ Machinable diameter minimum for interpolation

⁽⁷⁾ Machinable diameter maximum for interpolation

⁽⁸⁾ Master insert identification

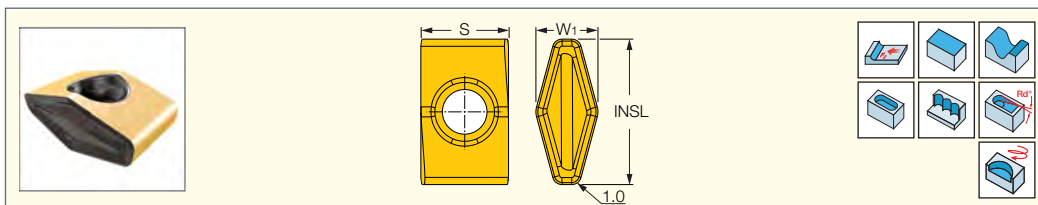
⁽⁹⁾ Recommended tightening torque (N*m) for insert screw

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	
	W1	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

- For side plunging, the initial cutting feed is 0.1 mm/t

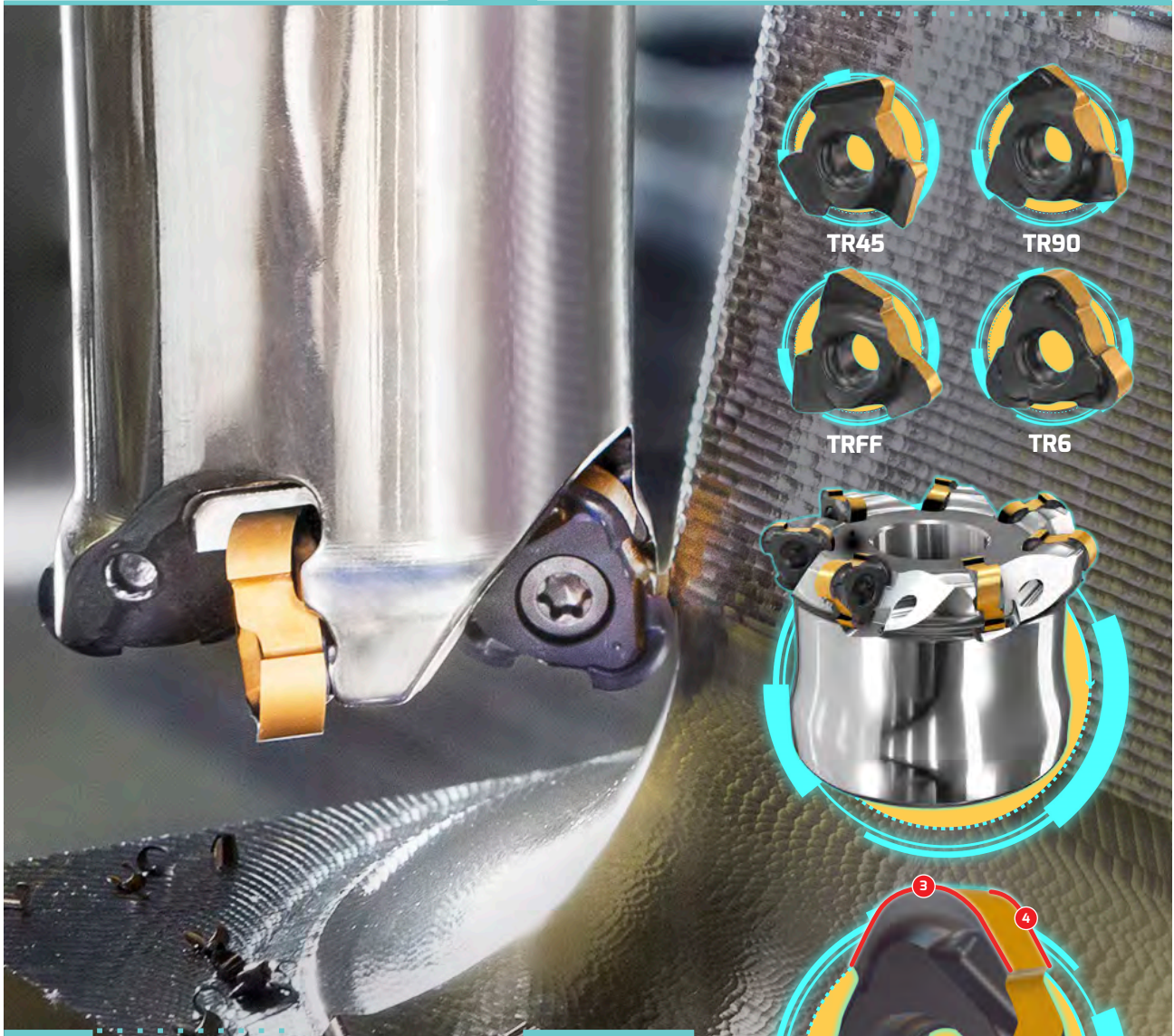
⁽¹⁾ For general applications

⁽²⁾ Reinforced cutting edges for interrupted cut and unfavorable conditions

TOR6MILL

PROFILING

Profile Milling 16-80 mm Diameters Radius Master



TR45



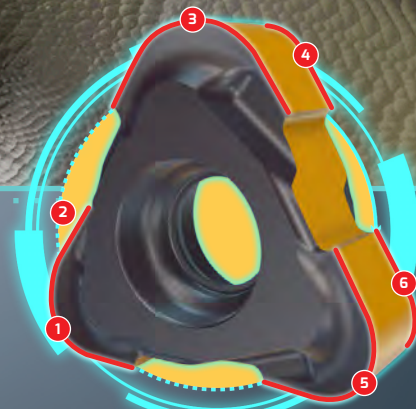
TR90



TRFF



TR6



Radial Profile Insert for Die & Mold and General Applications



High Positive
Rake Angle



Innovative Insert
Design



Variety of
Cutting Geometries

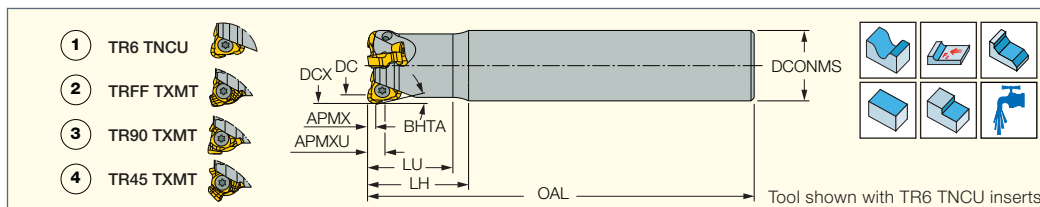


Cost Effective
Insert

Double Sided Inserts with
6 Round Cutting Edges

LOGIQMILL
ISCAR CHESS LINES

TR6 ER

 Multifunction Endmills that
 can Carry Four Different
 Insert Geometries


Designation	DCX ⁽¹⁾	DCX_2	DCX_3	DCX_4	DC	DC_2	DC_4	APMX	APMX_2	APMX_3	APMX_4	APMXU ⁽²⁾	BHTA ⁽³⁾	CICT ⁽⁴⁾	LU	LU_2	LU_3	LU_4	LH
TR6 ER D16-50-2-C16-07	16.00	16.00	16.00	-	14.00	12.10	-	1.00	0.60	2.50	-	2.00	21.0	2	46.5	46.7	46.8	-	50.0
TR6 ER D20-60-4-C20-07	20.00	20.00	20.00	-	18.00	16.10	-	1.00	0.60	2.50	-	2.00	21.0	4	56.5	56.7	56.8	-	60.0
TR6 ER D25-70-5-C25-07	25.00	25.00	25.00	-	23.00	21.10	-	1.00	0.60	2.50	-	2.00	21.0	5	65.5	65.7	65.8	-	70.0
TR6 ER D32-80-6-C32-07	32.00	32.00	32.00	-	30.00	28.10	-	1.00	0.60	2.50	-	2.00	21.0	6	75.5	75.7	75.8	-	80.0
TR6 ER D25-70-3-C25-10	25.00	25.00	25.00	26.80	20.00	19.00	20.60	2.50	0.80	4.00	3.00	4.20	20.5	3	65.0	65.2	64.9	65.1	70.0
TR6 ER D32-80-4-C32-10	32.00	32.00	32.00	33.80	27.00	26.00	27.60	2.50	0.80	4.00	3.00	4.20	20.5	4	75.0	75.2	74.9	75.1	80.0

Designation	LH_2	LH_3	LH_4	OAL	OAL_2	OAL_3	OAL_4	DCONMS	MIID ⁽⁵⁾	MIID_2 ⁽⁶⁾	MIID_3 ⁽⁷⁾	MIID_4 ⁽⁸⁾	kg
TR6 ER D16-50-2-C16-07	50.2	50.3	-	100.00	100.20	100.30	-	16.00	TR6 TNCU 070210	TRFF TXMT 0702	TR90 TXMT 070204	-	0.12
TR6 ER D20-60-4-C20-07	60.2	60.3	-	120.00	120.20	120.30	-	20.00	TR6 TNCU 070210	TRFF TXMT 0702	TR90 TXMT 070204	-	0.22
TR6 ER D25-70-5-C25-07	70.2	70.3	-	140.00	140.20	140.30	-	25.00	TR6 TNCU 070210	TRFF TXMT 0702	TR90 TXMT 070204	-	0.42
TR6 ER D32-80-6-C32-07	80.2	80.3	-	160.00	160.20	160.30	-	32.00	TR6 TNCU 070210	TRFF TXMT 0702	TR90 TXMT 070204	-	0.82
TR6 ER D25-70-3-C25-10	70.2	69.9	70.1	140.00	140.15	139.91	140.12	25.00	TR6 TNCU 100425	TRFF TXMT 1004	TR90 TXMT 100408	TR45 TXMT 1004	0.41
TR6 ER D32-80-4-C32-10	80.2	79.9	80.1	160.00	160.15	159.91	160.12	32.00	TR6 TNCU 100425	TRFF TXMT 1004	TR90 TXMT 100408	TR45 TXMT 1004	0.81

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

(1) Cutting diameter maximum (2) For undercutting with TR6 TNCU/TNMT inserts only (3) For undercutting with TR6 TNCU/TNMT inserts only (4) Number of inserts

(5) Master insert identification (6) Master insert identification 2 (7) Master insert identification 3 (8) Master insert identification 4

Tool	Insert	DCX	DC	APMX	LU	LH	OAL	For undercutting		
								RMPX ⁽¹⁾	APMX_2	BHTA
TR6 ER D16-50-2-C16-07	TR6 TNCU 070205	16.00	15.00	0.50	46.40	49.90	99.90	-	1.60	17.0
	TR6 TNMT 070215		13.00	1.50	45.60	50.10	100.10	-	2.40	21.0
	TRFF TXMT 0702		12.10	0.60	46.70	50.20	100.20	1.1	-	-
	TR90 TXMT 070204		-	2.50	46.80	50.30	100.30	1.6	-	-
TR6 ER D20-60-4-C20-07	TR6 TNCU 070205	20.00	19.00	0.50	56.40	59.90	119.90	-	1.60	17.0
	TR6 TNMT 070215		17.00	1.50	56.60	60.10	120.10	-	2.40	21.0
	TRFF TXMT 0702		16.10	0.60	56.70	60.20	120.20	0.8	-	-
	TR90 TXMT 070204		-	2.50	56.80	60.30	120.30	1.2	-	-
TR6 ER D25-70-5-C25-07	TR6 TNCU 070205	25.00	24.00	0.50	65.40	69.90	139.90	-	1.60	17.0
	TR6 TNMT 070215		22.00	1.50	65.60	70.10	140.10	-	2.40	21.0
	TRFF TXMT 0702		21.10	0.60	65.70	70.20	140.20	0.6	-	-
	TR90 TXMT 070204		-	2.50	65.80	70.30	140.30	0.9	-	-
TR6 ER D32-80-6-C32-07	TR6 TNCU 070205	32.00	31.00	0.50	75.40	79.90	159.90	-	1.60	17.0
	TR6 TNMT 070215		29.00	1.50	75.60	80.10	160.10	-	2.40	21.0
	TRFF TXMT 0702		28.10	0.60	75.70	80.20	160.20	0.4	-	-
	TR90 TXMT 070204		-	2.50	75.80	80.30	160.30	0.7	-	-
TR6 ER D25-70-3-C25-10	TR6 TNCU 100405	25.00	24.00	0.50	64.52	69.52	139.52	-	1.80	17.5
	TR6 TNCU 100410		23.00	1.00	64.64	69.64	139.65	-	2.30	20.5
	TR6 TNCU/MU 100415		22.00	1.50	64.76	69.76	139.76	-	2.70	20.5
	TR6 TNCU 100420		21.00	2.00	64.88	69.88	139.88	-	3.50	20.5
	TR6 TNCU 100430	26.80	19.00	3.00	65.12	70.12	140.12	-	4.50	20.5
	TRFF TXMT 1004		19.00	0.80	65.15	70.15	140.15	1.7	-	-
	TR90 TXMT 100408		-	4.00	64.91	69.91	139.91	1.6	-	-
	TR45 TXMT 1004		20.60	3.00	65.12	70.12	140.12	1.4	-	-
TR6 ER D32-80-4-C32-10	TR6 TNCU 100405	32.00	31.00	0.50	75.52	79.52	159.52	-	1.80	17.5
	TR6 TNCU 100410		30.00	1.00	74.64	79.65	159.64	-	2.30	20.5
	TR6 TNCU/MU 100415		29.00	1.50	76.76	79.76	159.76	-	2.70	20.5
	TR6 TNCU 100420		28.00	2.00	74.88	79.88	159.88	-	3.50	20.5
	TR6 TNCU 100430	33.80	26.00	3.00	75.12	80.12	160.12	-	4.50	20.5
	TRFF TXMT 1004		26.00	0.80	75.15	80.15	160.15	1.2	-	-
	TR90 TXMT 100408		-	4.00	74.91	79.91	159.91	1.2	-	-
	TR45 TXMT 1004		27.60	3.00	75.12	80.12	160.12	1.0	-	-

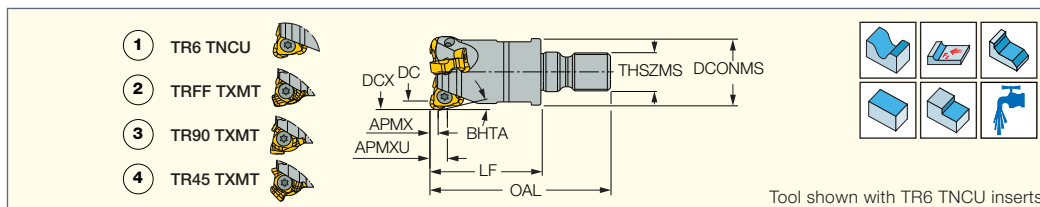
(1) Maximum ramp down angle

Spare Parts

Designation		
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

TR6 ER-M

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



Tool shown with TR6 TNCU inserts

Designation	DCX ⁽¹⁾	DCX_2	DCX_3	DCX_4	DC	DC_2	DC_4	APMX	APMX_2	APMX_3	APMX_4	APMXU ⁽²⁾	BHTA ⁽³⁾	CICT ⁽⁴⁾	LF	LF_2
TR6 ER D16/0.63-2-M08-07	16.00	16.00	16.00	-	14.00	12.10	-	1.00	0.60	2.50	-	2.00	21.0	2	24.70	24.90
TR6 ER D20/0.79-4-M10-07	20.00	20.00	20.00	-	18.00	16.10	-	1.00	0.60	2.50	-	2.00	21.0	4	24.70	24.90
TR6 ER D25/0.98-5-M12-07	25.00	25.00	25.00	-	23.00	21.10	-	1.00	0.60	2.50	-	2.00	21.0	5	29.70	29.90
TR6 ER D32/1.26-6-M16-07	32.00	32.00	32.00	-	30.00	28.10	-	1.00	0.60	2.50	-	2.00	21.0	6	34.70	34.90
TR6 ER D35/1.38-6-M16-07	35.00	35.00	35.00	-	33.00	31.10	-	1.00	0.60	2.50	-	2.00	21.0	6	34.70	34.90
TR6 ER D25/0.98-3-M12-10	25.00	25.00	25.00	26.80	20.00	20.60	20.60	2.50	0.80	4.00	3.00	4.20	20.5	3	35.00	25.15
TR6 ER D32/1.26-4-M16-10	32.00	32.00	32.00	33.80	27.00	27.60	27.60	2.50	0.80	4.00	3.00	4.20	20.5	4	35.00	35.15
TR6 ER D35/1.38-5-M16-10	35.00	35.00	35.00	36.80	30.00	30.60	30.60	2.50	0.80	4.00	3.00	4.20	20.5	5	35.00	35.15

Designation	LF_3	LF_4	OAL	OAL_2	OAL_3	OAL_4	DCONMS	THSZMS	MIID ⁽⁵⁾	MIID_2 ⁽⁶⁾	MIID_3 ⁽⁷⁾	MIID_4 ⁽⁸⁾	kg
TR6 ER D16/0.63-2-M08-07	25.00	-	42.20	42.40	42.50	-	13.00	M08	TR6 TNCU 070210	TRFF TXMT 0702	TR90 TXMT 070204	-	0.03
TR6 ER D20/0.79-4-M10-07	25.00	-	44.70	44.90	45.00	-	18.00	M10	TR6 TNCU 070210	TRFF TXMT 0702	TR90 TXMT 070204	-	0.05
TR6 ER D25/0.98-5-M12-07	30.00	-	51.70	51.90	52.00	-	21.00	M12	TR6 TNCU 070210	TRFF TXMT 0702	TR90 TXMT 070204	-	0.08
TR6 ER D32/1.26-6-M16-07	35.00	-	59.70	59.90	60.00	-	29.00	M16	TR6 TNCU 070210	TRFF TXMT 0702	TR90 TXMT 070204	-	0.18
TR6 ER D35/1.38-6-M16-07	35.00	-	59.70	59.90	60.00	-	29.00	M16	TR6 TNCU 070210	TRFF TXMT 0702	TR90 TXMT 070204	-	0.19
TR6 ER D25/0.98-3-M12-10	25.12	25.12	47.00	47.15	46.91	47.12	21.00	M12	TR6 TNCU 100425	TRFF TXMT 1004	TR90 TXMT 100408	TR45 TXMT 1004	0.06
TR6 ER D32/1.26-4-M16-10	35.12	35.12	60.00	60.15	59.91	60.12	29.00	M16	TR6 TNCU 100425	TRFF TXMT 1004	TR90 TXMT 100408	TR45 TXMT 1004	0.17
TR6 ER D35/1.38-5-M16-10	35.12	35.12	60.00	60.15	59.91	60.12	29.00	M16	TR6 TNCU 100425	TRFF TXMT 1004	TR90 TXMT 100408	TR45 TXMT 1004	0.18

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

(1) Cutting diameter maximum (2) For undercutting with TR6 TNCU/TNNU inserts only (3) For undercutting with TR6 TNCU/TNNU inserts only (4) Number of inserts

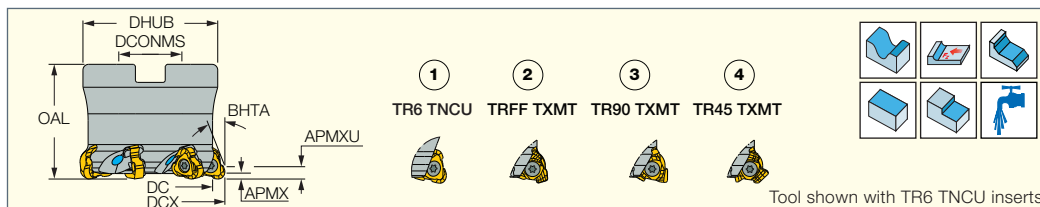
(5) Master insert identification (6) Master insert identification 2 (7) Master insert identification 3 (8) Master insert identification 4

Tool	Insert	DCX	DC	APMX	LF	OAL	RMPX	For undercutting	
								APMX_2	BHTA
TR6 ER D16/0.63-2-M08-07	TR6 TNCU 070205	16.00	15.00	0.50	24.6	42.1	-	1.60	17.0
	TR6 TNMU 070215		13.00	1.50	24.8	42.3	-	2.40	21.0
	TRFF TXMT 0702		12.10	0.60	24.9	42.4	1.1	-	-
	TR90 TXMT 070204		-	2.50	25.0	42.5	1.6	-	-
TR6 ER D20/0.79-4-M10-07	TR6 TNCU 070205	20.00	19.00	0.50	24.6	44.6	-	1.60	17.0
	TR6 TNMU 070215		17.00	1.50	24.8	44.8	-	2.40	21.0
	TRFF TXMT 0702		16.10	0.60	24.9	44.9	0.8	-	-
	TR90 TXMT 070204		-	2.50	25.0	45.0	1.2	-	-
TR6 ER D25/0.98-5-M12-07	TR6 TNCU 070205	25.00	24.00	0.50	29.6	51.6	-	1.60	17.0
	TR6 TNMU 070215		22.00	1.50	29.8	51.8	-	2.40	21.0
	TRFF TXMT 0702		21.10	0.60	29.9	51.9	0.6	-	-
	TR90 TXMT 070204		-	2.50	30.0	52.0	0.9	-	-
TR6 ER D32/1.26-6-M16-07	TR6 TNCU 070205	32.00	31.00	0.50	34.6	59.6	-	1.60	17.0
	TR6 TNMU 070215		29.00	1.50	34.8	59.8	-	2.40	21.0
	TRFF TXMT 0702		28.10	0.60	34.9	59.9	0.4	-	-
	TR90 TXMT 070204		-	2.50	35.0	60.0	0.7	-	-
TR6 ER D35/1.38-6-M16-07	TR6 TNCU 070205	35.00	34.00	0.50	34.6	59.6	-	1.60	17.0
	TR6 TNMU 070215		32.00	1.50	34.8	59.8	-	2.40	21.0
	TRFF TXMT 0702		31.10	0.60	34.9	59.9	0.4	-	-
	TR90 TXMT 070204		-	2.50	35	60	0.4	-	-
TR6 ER D25/0.98-3-M12-10	TR6 TNCU 100405	25.00	24.00	0.50	24.52	46.52	-	1.80	17.5
	TR6 TNCU 100410		23.00	1.00	24.64	46.64	-	2.30	20.5
	TR6 TNCU/MU 100415		22.00	1.50	24.76	46.76	-	2.70	20.5
	TR6 TNCU 100420		21.00	2.00	24.88	46.88	-	3.50	20.5
	TR6 TNCU 100430	26.80	19.00	3.00	25.12	47.12	-	4.50	20.5
	TRFF TXMT 1004		20.60	0.80	25.15	47.15	1.7	-	-
	TR90 TXMT 100408		-	4.00	24.91	46.91	1.6	-	-
	TR45 TXMT 1004		20.60	3.00	25.12	47.12	1.4	-	-
TR6 ER D32/1.26-4-M16-10	TR6 TNCU 100405	32.00	31.00	0.50	34.52	59.52	-	1.80	17.5
	TR6 TNCU 100410		30.00	1.00	34.64	59.64	-	2.30	20.5
	TR6 TNCU/MU 100415		29.00	1.50	34.76	59.76	-	2.70	20.5
	TR6 TNCU 100420		28.00	2.00	34.88	59.88	-	3.50	20.5
	TR6 TNCU 100430	33.80	26.00	3.00	35.12	60.12	-	4.50	20.5
	TRFF TXMT 1004		27.60	0.80	35.15	60.15	1.2	-	-
	TR90 TXMT 100408		-	4.00	34.91	59.91	1.1	-	-
	TR45 TXMT 1004		27.60	3.00	35.12	60.12	0.9	-	-
TR6 ER D35/1.38-5-M16-10	TR6 TNCU 100405	35.00	34.00	0.50	34.52	59.52	-	1.80	17.5
	TR6 TNCU 100410		33.00	1.00	34.64	59.64	-	2.30	20.5
	TR6 TNCU/MU 100415		32.00	1.50	34.76	59.76	-	2.70	20.5
	TR6 TNCU 100420		31.00	2.00	34.88	59.88	-	3.50	20.5
	TR6 TNCU 100430	36.80	29.00	3.00	35.12	60.12	-	4.50	20.5
	TRFF TXMT 1004		30.60	0.80	35.15	60.15	1.2	-	-
	TR90 TXMT 100408		-	4.00	34.91	59.91	1.1	-	-
	TR45 TXMT 1004		30.60	3.00	35.12	60.12	0.9	-	-

Spare Parts

Designation		
TR6 ER D...-07	SR M2.5X0.45-L6 IP7	IP-7/51
TR6 ER D...-10	SR 10508600	T-9/51

TR6 FR

 Multifunction Face Mills that
 can Carry Four Different
 Insert Geometries


Designation	DCX ⁽¹⁾	DCX_2	DCX_3	DCX_4	DC	DC_2	DC_4	APMX	APMX_2	APMX_3	APMX_4	APMXU ⁽²⁾	BHTA ⁽³⁾	CICT ⁽⁴⁾	OAL	OAL_2	OAL_3	OAL_4
TR6 FR D40-06-16-10	40.00	40.00	40.00	41.80	35.00	34.00	35.60	2.50	0.80	4.00	3.00	4.20	20.5	6	37.00	37.15	36.91	37.12
TR6 FR D42-06-16-10	42.00	42.00	42.00	43.80	37.00	36.00	37.60	2.50	0.80	4.00	3.00	4.20	20.5	6	37.00	37.15	36.91	37.12
TR6 FR D50-07-22-10	50.00	50.00	50.00	51.80	45.00	44.00	45.60	2.50	0.80	4.00	3.00	4.20	20.5	7	40.00	40.15	39.91	40.12
TR6 FR D52-07-22-10	52.00	52.00	52.00	53.80	47.00	46.00	47.60	2.50	0.80	4.00	3.00	4.20	20.5	7	40.00	40.15	39.91	40.12
TR6 FR D63-08-22-10	63.00	63.00	63.00	64.80	58.00	57.00	58.60	2.50	0.80	4.00	3.00	4.20	20.5	8	40.00	40.15	39.91	40.12
TR6 FR D66-08-22-10	66.00	66.00	66.00	67.80	61.00	60.00	61.60	2.50	0.80	4.00	3.00	4.20	20.5	8	40.00	40.15	39.91	40.12
TR6 FR D80-10-27-10	80.00	80.00	80.00	81.80	75.00	74.00	75.60	2.50	0.80	4.00	3.00	4.20	20.5	10	50.00	50.15	49.91	50.12

Designation	DCONMS	DHUB	Arbor	MIID ⁽⁵⁾	MIID_2 ⁽⁶⁾	MIID_3 ⁽⁷⁾	MIID_4 ⁽⁸⁾	kg			
TR6 FR D40-06-16-10	16.00	32.00	A	TR6 TNCU 100425	TRFF TXMT 1004	TR90 TXMT 100408	TR45 TXMT 1004	0.14	SR 10508600	T-9/51	SR M8X25DIN912
TR6 FR D42-06-16-10	16.00	32.00	A	TR6 TNCU 100425	TRFF TXMT 1004	TR90 TXMT 100408	TR45 TXMT 1004	0.15	SR 10508600	T-9/51	SR M8X25DIN912
TR6 FR D50-07-22-10	22.00	47.00	A	TR6 TNCU 100425	TRFF TXMT 1004	TR90 TXMT 100408	TR45 TXMT 1004	0.29	SR 10508600	T-9/51	SR M10X25 DIN912
TR6 FR D52-07-22-10	22.00	47.00	A	TR6 TNCU 100425	TRFF TXMT 1004	TR90 TXMT 100408	TR45 TXMT 1004	0.33	SR 10508600	T-9/51	SR M10X25 DIN912
TR6 FR D63-08-22-10	22.00	48.00	A	TR6 TNCU 100425	TRFF TXMT 1004	TR90 TXMT 100408	TR45 TXMT 1004	0.42	SR 10508600	T-9/51	SR M10X25 DIN912
TR6 FR D66-08-22-10	22.00	48.00	A	TR6 TNCU 100425	TRFF TXMT 1004	TR90 TXMT 100408	TR45 TXMT 1004	0.46	SR 10508600	T-9/51	SR M10X25 DIN912
TR6 FR D80-10-27-10	27.00	60.00	A	TR6 TNCU 100425	TRFF TXMT 1004	TR90 TXMT 100408	TR45 TXMT 1004	0.91	SR 10508600	T-9/51	SR M12X30 DIN912

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

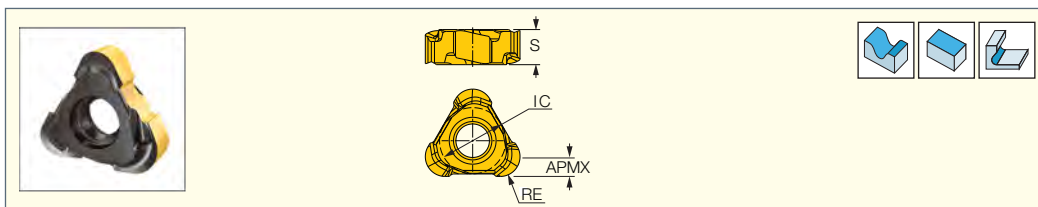
(1) Cutting diameter maximum (2) For undercutting with TR6 TNCU/TNMT inserts only (3) For undercutting with TR6 TNCU/TNMT inserts only (4) Number of inserts

(5) Master insert identification (6) Master insert identification 2 (7) Master insert identification 3 (8) Master insert identification 4

Tool	Insert	DCX	DC	APMX	OAL	RMPX	For undercutting	
							APMX 2	BHTA
TR6 FR D40-06-16-10	TR6 TNCU 100405	40.00	39.00	0.50	36.52	-	1.80	17.5
	TR6 TNCU 100410		38.00	1.00	36.64	-	2.30	20.5
	TR6 TNCU/MU 100415		37.00	1.50	36.76	-	2.70	20.5
	TR6 TNCU 100420		36.00	2.00	36.88	-	3.50	20.5
	TR6 TNCU 100430		34.00	3.00	37.12	-	4.50	20.5
	TRFF TXMT 1004		34.00	0.80	37.15	0.9	-	-
	TR90 TXMT 100408		-	4.00	36.91	0.9	-	-
	TR45 TXMT 1004	41.80	35.60	3.00	37.12	0.7	-	-
TR6 FR D42-06-16-10	TR6 TNCU 100405	42.00	41.00	0.50	36.52	-	1.80	17.5
	TR6 TNCU 100410		40.00	1.00	36.64	-	2.30	20.5
	TR6 TNCU/MU 100415		39.00	1.50	36.76	-	2.70	20.5
	TR6 TNCU 100420		38.00	2.00	36.88	-	3.50	20.5
	TR6 TNCU 100430		36.00	3.00	37.12	-	4.50	20.5
	TRFF TXMT 1004		36.00	0.80	37.15	0.90	-	-
	TR90 TXMT 100408		-	4.00	36.91	0.90	-	-
	TR45 TXMT 1004	43.80	37.60	3.00	37.12	0.70	-	-
TR6 FR D50-07-22-10	TR6 TNCU 100405	50.00	49.00	0.50	39.52	-	1.80	17.5
	TR6 TNCU 100410		48.00	1.00	39.64	-	2.30	20.5
	TR6 TNCU/MU 100415		47.00	1.50	39.76	-	2.70	20.5
	TR6 TNCU 100420		46.00	2.00	39.88	-	3.50	20.5
	TR6 TNCU 100430		44.00	3.00	40.12	-	4.50	20.5
	TRFF TXMT 1004		44.00	0.80	40.15	0.70	-	-
	TR90 TXMT 100408		-	4.00	39.91	0.70	-	-
	TR45 TXMT 1004	51.80	45.60	3.00	40.12	0.60	-	-
TR6 FR D52-07-22-10	TR6 TNCU 100405	52.00	51.00	0.50	39.52	-	1.80	17.5
	TR6 TNCU 100410		50.00	1.00	39.64	-	2.30	20.5
	TR6 TNCU/MU 100415		49.00	1.50	39.76	-	2.70	20.5
	TR6 TNCU 100420		48.00	2.00	39.88	-	3.50	20.5
	TR6 TNCU 100430		46.00	3.00	40.12	-	4.50	20.5
	TRFF TXMT 1004		46.00	0.80	40.15	0.70	-	-
	TR90 TXMT 100408		-	4.00	39.91	0.70	-	-
	TR45 TXMT 1004	53.80	53.80	3.00	40.12	0.60	-	-
TR6 FR D63-08-22-10	TR6 TNCU 100405	63.00	62.00	0.50	39.52	-	1.80	17.5
	TR6 TNCU 100410		61.00	1.00	39.64	-	2.30	20.5
	TR6 TNCU/MU 100415		60.00	1.50	39.76	-	2.70	20.5
	TR6 TNCU 100420		59.00	2.00	39.88	-	3.50	20.5
	TR6 TNCU 100430		57.00	3.00	40.12	-	4.50	20.5
	TRFF TXMT 1004		57.00	0.80	40.15	0.50	-	-
	TR90 TXMT 100408		-	4.00	39.91	0.50	-	-
	TR45 TXMT 1004	64.80	58.60	3.00	40.12	0.40	-	-
TR6 FR D66-08-22-10	TR6 TNCU 100405	66.00	65.00	0.50	39.52	-	1.80	17.5
	TR6 TNCU 100410		64.00	1.00	39.64	-	2.30	20.5
	TR6 TNCU/MU 100415		63.00	1.50	39.76	-	2.70	20.5
	TR6 TNCU 100420		62.00	2.00	39.88	-	3.50	20.5
	TR6 TNCU 100430		60.00	3.00	40.12	-	4.50	20.5
	TRFF TXMT 1004		60.00	0.80	40.15	0.50	-	-
	TR90 TXMT 100408		-	4.00	39.91	0.50	-	-
	TR45 TXMT 1004	67.80	61.60	3.00	40.12	0.40	-	-
TR6 FR D80-10-27-10	TR6 TNCU 100405	80.00	79.00	0.50	49.52	-	1.80	17.5
	TR6 TNCU 100410		78.00	1.00	49.64	-	2.30	20.5
	TR6 TNCU/MU 100415		77.00	1.50	49.76	-	2.70	20.5
	TR6 TNCU 100420		76.00	2.00	49.88	-	3.50	20.5
	TR6 TNCU 100430		74.00	3.00	50.12	-	4.50	20.5
	TRFF TXMT 1004		74.00	0.80	50.15	0.40	-	-
	TR90 TXMT 100408		-	4.00	49.91	0.40	-	-
	TR45 TXMT 1004	81.80	75.60	3.00	50.12	0.30	-	-

TR6 TNCU/MU

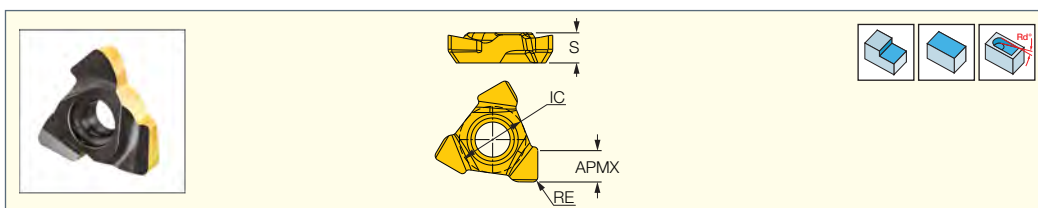
Double Sided Inserts with Six Round Cutting Edges, Available in 0.5 to 3.0 mm Corner Radii



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	2.50		●	●		0.20-0.50	0.10-0.30
TR6 TNCU 070210	1.00	1.00	5.30	2.50		●	●		0.20-1.00	0.10-0.30
TR6 TNMU 070215	1.50	1.50	5.30	2.50		●	●		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

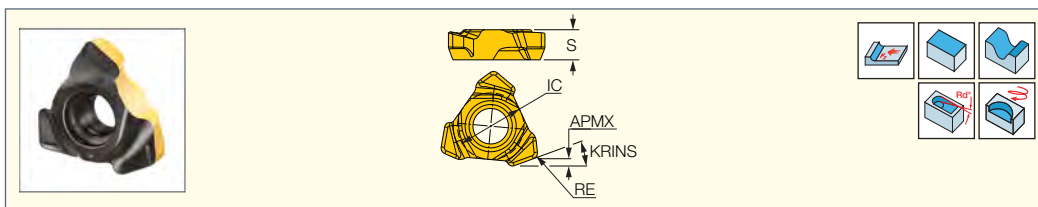
Single Sided Insert with Three Cutting Edges for 90° Shoulder and Face Milling



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



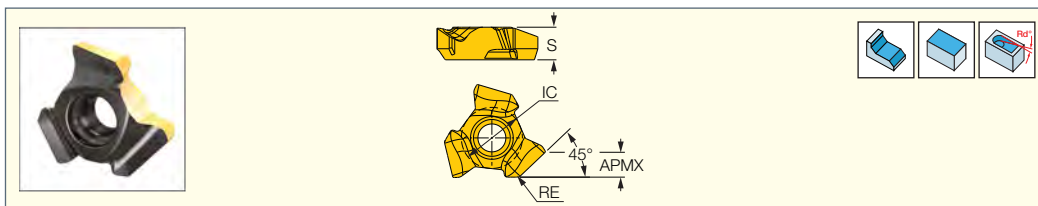
Designation	Dimensions						Tough ↔ Hard		Recommended Machining Data	
	APMX	RE	Rg ⁽¹⁾	IC	S	KRINS ⁽²⁾	IC830	IC808	a_p (mm)	f_z (mm/t)
TRFF TXMT 0702	0.60	0.50	1.00	5.30	2.40	18.0	●	●	0.20-0.60	0.50-0.80
TRFF TXMT 1004	0.80	0.70	1.40	7.30	3.90	17.0	●	●	0.20-0.80	0.70-1.20

⁽¹⁾ Radius for programming

⁽²⁾ Edge angle related to the wiper

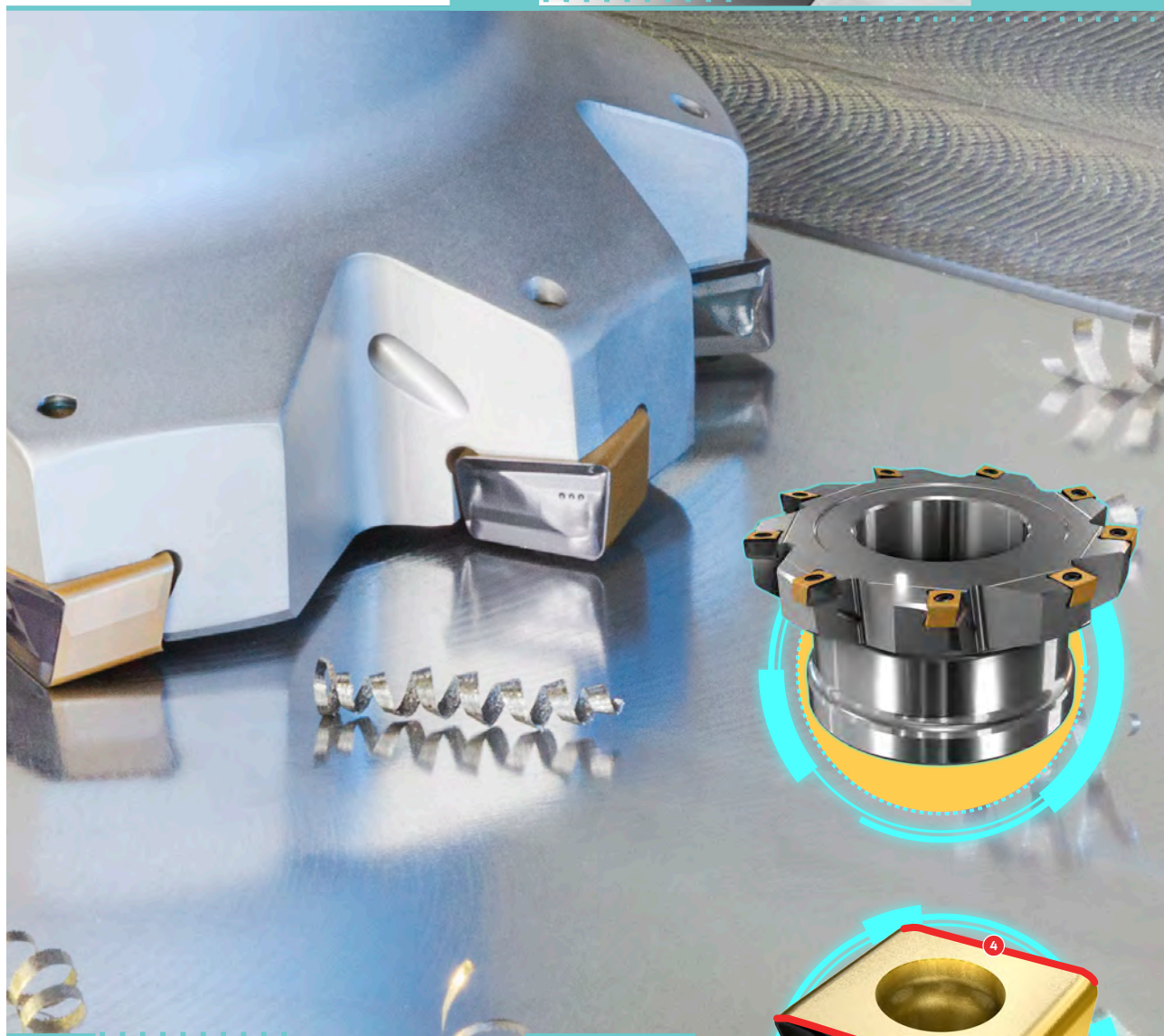
TR45 TXMT

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

Mirror Face Milling 50-160 mm Diameters Finish Master



Superior Finish Achieved with
Tangential Step Mounted Inserts



Super Surface
Finish



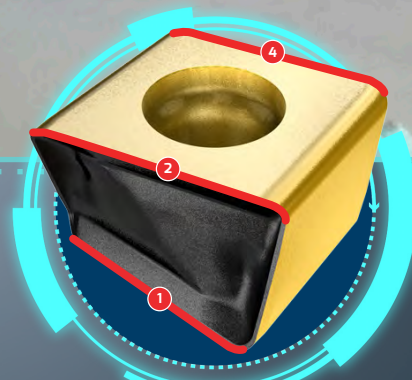
Tangential
Clamping



Double Sided
Insert



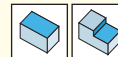
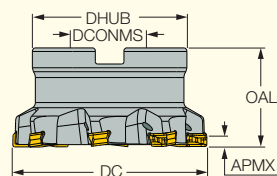
Strong Body
Insert



Tangential Inserts with
4 Cutting Edges

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	CSP ⁽²⁾	kg
HTF D050-05-22-R-LN10	50.00	0.25	5	40.00	48.00	22.00	A	1	0.31
HTF D063-06-22-R-LN10	63.00	0.30	6	40.00	48.00	22.00	A	1	0.43
HTF D080-07-27-R-LN10	80.00	0.35	7	50.00	60.00	27.00	B	1	0.81
HTF D100-08-32-R-LN10	100.00	0.40	8	50.00	78.00	32.00	B	1	1.44
HTF D125-09-40-R-LN10	125.00	0.45	9	63.00	92.00	40.00	B	1	2.55
HTF D160-10-40-R-LN10	160.00	0.50	10	63.00	95.00	40.00	C	0	3.75

• For best surface finish it is highly recommended to operate the cutter at maximal depth of cut

⁽¹⁾ Number of inserts

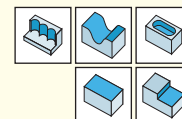
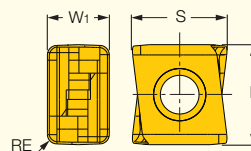
⁽²⁾ 0 - Without coolant supply, 1 - With coolant supply

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	SR M10X25 DIN912
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

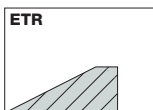


Designation	Dimensions				Tough ↔ Hard					Recommended Machining Data f _z (mm/t)
	W1	L	S	RE	IC330	IC830	IC808	IC810	IC07	
HTP LNAR 1006 FR-P	6.50	10.50	10.13	1.00						0.05-0.15
HTP LNHT 1006 ER	6.50	10.50	9.93	1.00	•	•	•	•	•	0.10-0.15
HTP LNHT 1006 ETR	6.50	10.50	9.93	1.00	•	•	•	•	•	0.12-0.20
HTP LNMT 1006 ER ⁽¹⁾	6.50	10.50	9.96	1.00	•	•	•	•	•	0.08-0.15

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



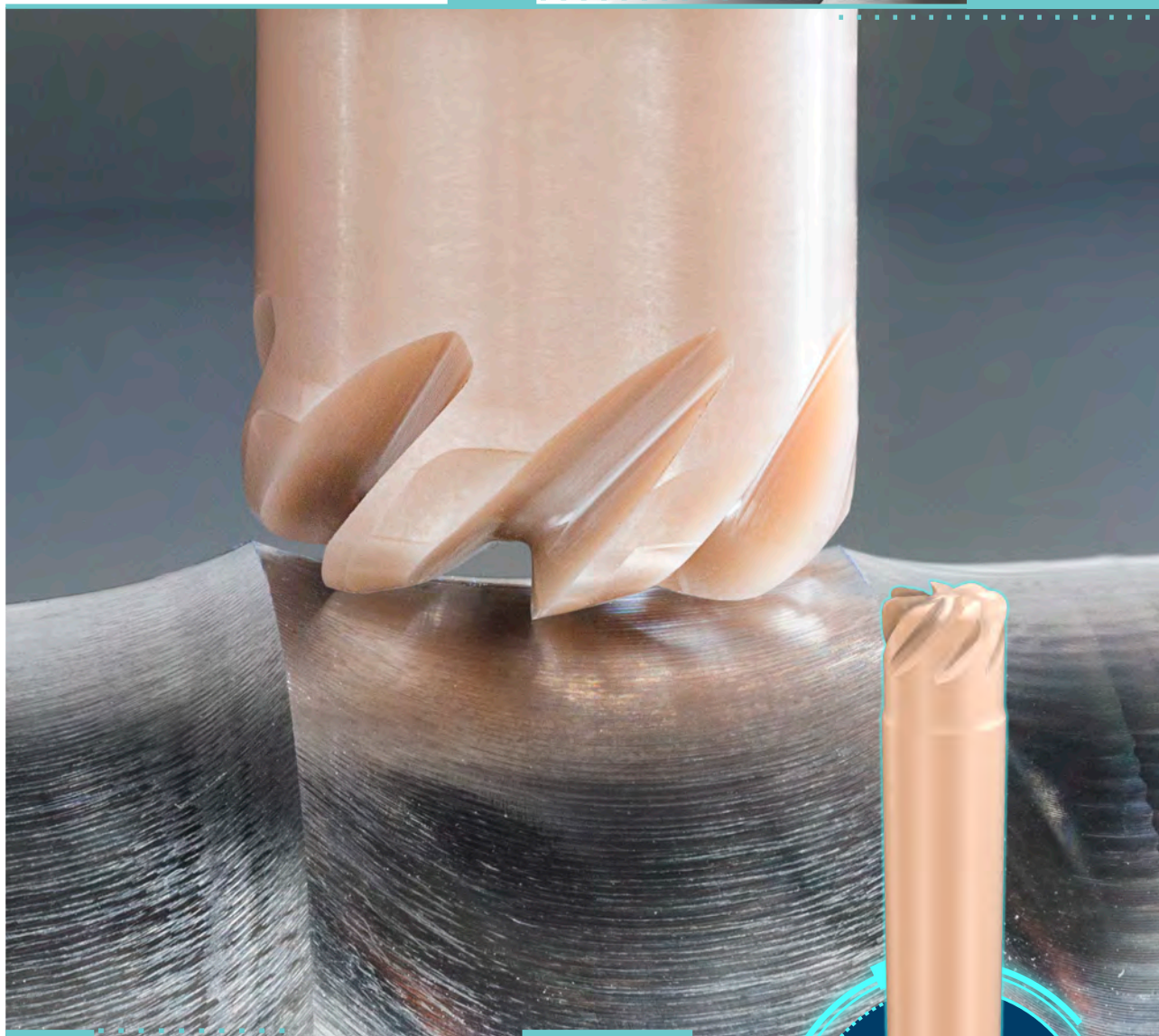
ER- For general
applications



ETR- First priority for
hardened steel

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

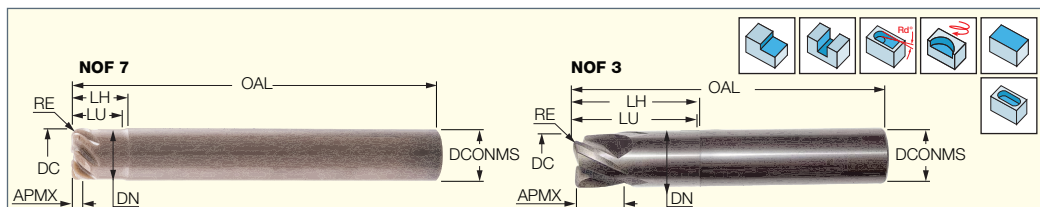


Solid Ceramic
Endmill Cutter

LOGIQMILL
ISCAR CHESS LINES

EC-E3/E7-CE (ceramic)

3 and 7 Flute Solid Ceramic Endmills with Relieved Necks for Machining Nickel base alloys, Cast Iron and Graphite



Designation	Dimensions											Tough ↔ Hard		Recommended Machining Data
	DC	APMX	LU	LH	DN	RE ⁽¹⁾	NOF ⁽²⁾	DCONMS	RMPX ⁽³⁾	OAL	Shank ⁽⁴⁾	IS35	IS6	
EC-E3 06-06/15C06R.4N50CE	6.00	6.00	14.5	15.0	5.50	0.42	3	6.00	3.0	50.00	C	●		0.02-0.03
EC-E3 08-08/20C08R.5N57CE	8.00	8.00	19.5	20.0	7.50	0.56	3	8.00	3.0	57.00	C	●		0.02-0.03
EC-E3 10-10/25C10R.7N65CE	10.00	10.00	24.5	25.0	9.50	0.70	3	10.00	3.0	65.00	C	●		0.02-0.03
EC-E3 12-12/30C12R1.N72CE	12.00	12.00	29.5	30.0	11.50	1.10	3	12.00	3.0	72.00	C	●		0.02-0.03
EC-E3 16-16/35C16R2.N83CE	16.00	16.00	34.5	35.0	15.50	1.90	3	16.00	3.0	83.00	C	●		0.02-0.04
EC-E3 20-20/40C20R2.N93CE	20.00	20.00	39.5	40.0	19.50	2.50	3	20.00	3.0	93.00	C	●		0.02-0.04
EC-E7 08-02C08R1.0N63CE	8.00	0.40	8.0	9.5	7.50	1.00	7	8.00	3.0	63.00	C		●	0.02-0.03
EC-E7 10-02C10R1.5N72CE	10.00	0.70	10.0	11.5	9.50	1.50	7	10.00	3.0	72.00	C		●	0.02-0.03
EC-E7 12-02C12R1.5N83CE	12.00	1.30	10.0	12.0	11.50	1.50	7	12.00	3.0	83.00	C		●	0.02-0.03

• Recommended cutting speed on high temperature nickel-based superalloys: 250-1000 m/min • Maximum width of cut for the 3 flute cutters is 0.1xDC • Maximum width of cut for the 7 flute cutters is DC • Only air coolant should be used

⁽¹⁾ Programming radius

⁽²⁾ Number of flutes

⁽³⁾ Maximum ramping angle

⁽⁴⁾ C-Cylindrical

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



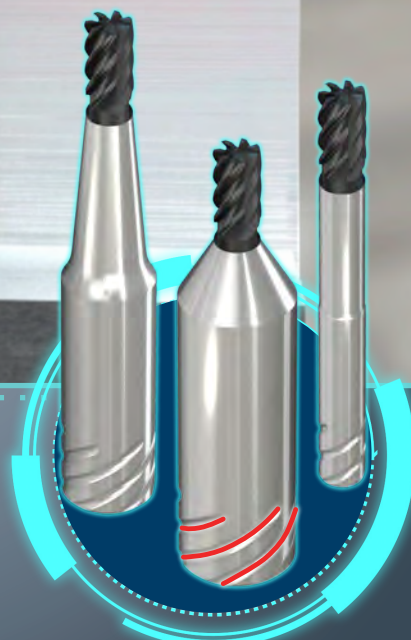
Variety



New Generation
Insert



Rigid Clamping



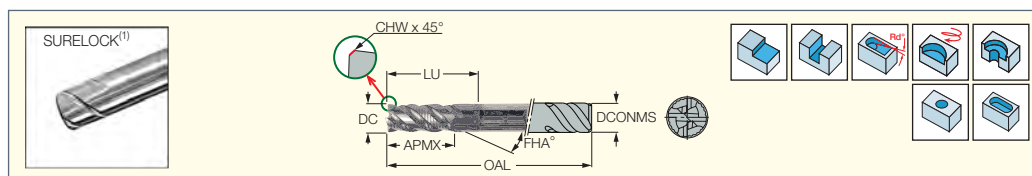
SURELOCK Solid Carbide and Steel
MULTI-MASTER Shanks

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	CSP ⁽⁴⁾		
EFS-B44 10-22/32SL10-72	10.00	10.00	22.00	32.0	72.00	4	45.0	5.0	0.30	0	●	0.03-0.09
EFS-B44 10-22SL10-72	10.00	10.00	22.00	-	72.00	4	45.0	5.0	0.30	0	●	0.03-0.09
EFS-B44 10-22SL10-72C	10.00	10.00	22.00	-	72.00	4	45.0	5.0	0.30	1	●	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	0	●	0.04-0.10
EFS-B44 12-26SL12-83	12.00	12.00	26.00	-	83.00	4	45.0	5.0	0.40	0	●	0.04-0.10
EFS-B44 12-26SL12-83C	12.00	12.00	26.00	-	83.00	4	45.0	5.0	0.40	1	●	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	0	●	0.05-0.11
EFS-B44 16-34SL16-92	16.00	16.00	34.00	-	92.00	4	45.0	5.0	0.60	0	●	0.05-0.11
EFS-B44 16-34SL16-92C	16.00	16.00	34.00	-	92.00	4	45.0	5.0	0.60	1	●	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	0	●	0.05-0.11
EFS-B44 20-42SL20-104	20.00	20.00	42.00	-	104.00	4	45.0	5.0	0.60	0	●	0.05-0.11
EFS-B44 25-52SL25-121	25.00	25.00	52.00	-	121.00	4	45.0	5.0	0.60	0	●	0.06-0.11

⁽¹⁾ Safe-Lock® by Haimer, helical grooves that prevent pull-out

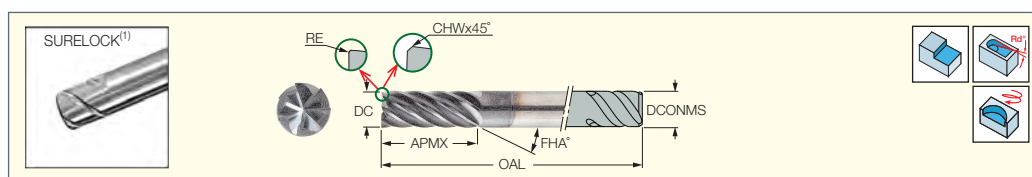
⁽²⁾ Number of flutes

⁽³⁾ Helix angle

⁽⁴⁾ 0 - Without coolant supply, 1 - With coolant supply

EC-H7-CF

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



	Dimensions										Recommended Machining Data
Designation	DC	DCONMS	APMX	OAL	NOF ⁽²⁾	FHA ⁽³⁾	RMPX	CHW	RE	IC902	f _z (mm/t)
EC-H7 12-24SL12CF-M83	12.00	12.00	24.00	83.00	7	37.0	3.0	-	0.0	●	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	-	0.0	●	0.04-0.12
EC-H7 20-40SL20CFR1M104	20.00	20.00	40.00	104.00	7	37.0	3.0	-	1.0	●	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

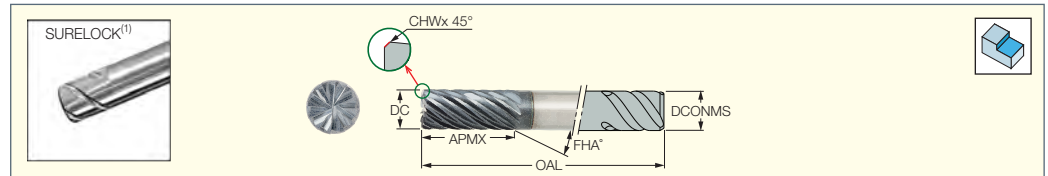
⁽¹⁾ Safe-Lock® by Haimer, helical grooves that prevent pull-out

⁽²⁾ Number of flutes

⁽³⁾ Helix angle

EC-H-CF

10-20 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⁽¹⁾	10.00	10.00	20.00	72.00	10	35.0	3.0	●	0.03-0.10	
EC-H12 12-24SL12CF-H83 92⁽¹⁾	12.00	12.00	20.00	72.00	12	35.0	3.0	●	0.04-0.11	
EC-H16 16-32SL16CF-H92 92⁽¹⁾	16.00	16.00	20.00	72.00	16	35.0	3.0	●	0.05-0.13	
EC-H20 20-40SL20CFH104 92⁽¹⁾	20.00	20.00	20.00	72.00	20	35.0	3.0	●	0.05-0.13	

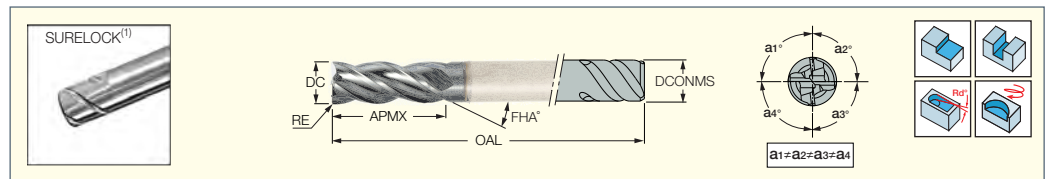
⁽¹⁾ Safe-Lock® by Haimer, helical grooves that prevent pull-out

⁽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	RMPX ⁽³⁾	CSP ⁽⁴⁾		f_z (mm/t)	
ECK-H4 10-20SL10CFR.5-72C⁽¹⁾	10.00	10.00	20.00	72.00	4	0.50	36.0	5.0	1	●	0.03-0.07	
ECK-H4 10-20SL10CFR0.5-72⁽¹⁾	10.00	10.00	20.00	72.00	4	0.50	36.0	5.0	0	●	0.03-0.07	
ECK-H4 12-24SL12CFR0.6-83⁽¹⁾	12.00	12.00	24.00	83.00	4	0.60	36.0	5.0	0	●	0.04-0.08	
ECK-H4 16-32SL16CFR.8-92C⁽¹⁾	16.00	16.00	32.00	92.00	4	0.80	36.0	5.0	1	●	0.05-0.08	
ECK-H4 16-32SL16CFR0.8-92⁽¹⁾	16.00	16.00	32.00	92.00	4	0.80	36.0	5.0	0	●	0.05-0.08	
ECK-H4 20-40SL20CFR1.-104⁽¹⁾	20.00	20.00	40.00	104.00	4	1.00	36.0	5.0	0	●	0.05-0.08	

⁽¹⁾ Safe-Lock® by Haimer, helical grooves that prevent pull-out

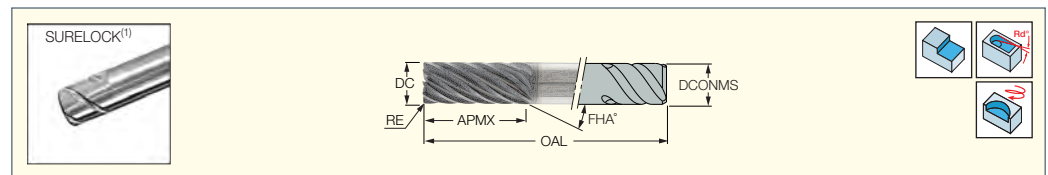
⁽²⁾ Number of flutes

⁽³⁾ Maximum ramping angle

⁽⁴⁾ 0 - Without coolant supply, 1 - With coolant supply

ECK-H7/9-CFR

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



Designation	Dimensions								IC900	Recommended Machining Data	
	DC	DCONMS	APMX	OAL	NOF ⁽²⁾	RE	FHA ⁽³⁾	RMPX		f_z (mm/t)	
ECK-H7 10-22SL10CFR0.5T72⁽¹⁾	10.00	10.00	22	72.00	7	0.50	35.0	5.0	●		
ECK-H7 12-26SL12CFR0.6T83⁽¹⁾	12.00	12.00	26	83.00	7	0.60	35.0	5.0	●		
ECK-H9 16-32SL16CFR0.8T92⁽¹⁾	16.00	16.00	32	92.00	9	0.80	35.0	5.0	●		
ECK-H9 20-38SL20CFR1T104⁽¹⁾	20.00	20.00	38	104.00	9	1.00	35.0	5.0	●		

⁽¹⁾ Safe-Lock® by Haimer, helical grooves that prevent pull-out

⁽²⁾ Number of flutes

⁽³⁾ Helix angle

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

New Long Flute
MULTI-MASTER Heads
Length Ratio 1.5xD



Ease of Use



Different Types
of Materials



Roughing
Semi-Finishing &
Finishing

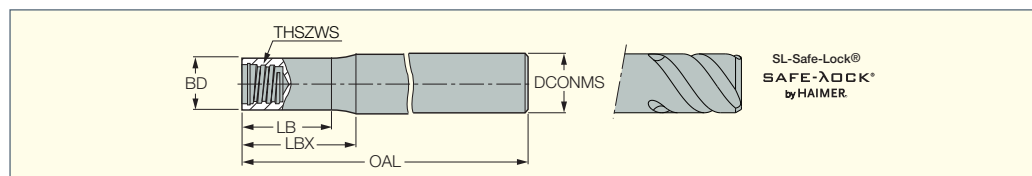


Cost Effective
Insert

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 ⁽¹⁾	RPM _{max} ⁽²⁾
MM S-A-L065/24-SL08T05C	T05	8.00	7.60	24.00	25.6	65.00	C	60000
MM S-A-L075/30-SL10T06C	T06	10.00	9.60	30.00	31.7	75.00	C	53940
MM S-A-L085/36-C12T08C	T08	12.00	11.60	36.00	37.7	85.00	C	60000
MM S-A-L100/48-C16T10C	T10	16.00	15.30	48.00	50.3	100.00	C	38040
MM S-A-L110/50-SL20T12C	T12	20.00	18.30	50.00	53.3	110.00	C	60000
MM S-A-L125/63-C25T15C	T15	25.00	24.00	63.00	65.8	125.00	C	41700
MM S-A-L135/64-C32T21C	T21	32.00	30.00	64.00	67.5	135.00	C	12690

• Do not apply lubricant to the threaded connection.

• Safe-Lock® by Haimer, helical grooves that prevent pull-out (available upon request)

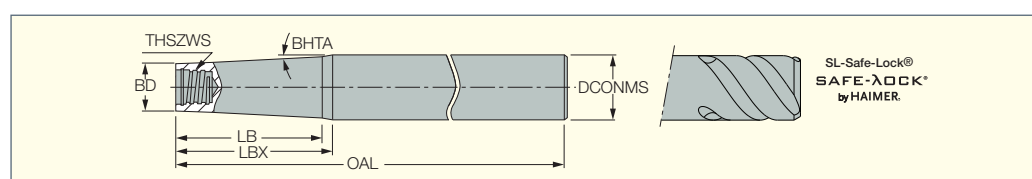
⁽¹⁾ C-carbide

⁽²⁾ 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	LB	OAL	Shank m	LBX	RPM _{max} ⁽¹⁾
MM S-B-L085/32-C16T05	T05	16.00	7.60	5.0	27.0	85.00	S	32.00	41280
MM S-B-L095/40-C20T06	T06	20.00	9.60	5.0	34.0	95.00	S	40.00	41280
MM S-B-L100/48-C20T08	T08	20.00	11.60	5.0	48.0	100.00	S	-	25590
MM S-B-L120/55-C25T10	T10	25.00	15.30	5.0	55.4	120.00	S	-	29490
MM S-B-L150/78-C32T12	T12	32.00	18.30	5.0	78.3	150.00	S	-	34890
MM S-B-L180/92-C40T15	T15	40.00	23.90	5.0	92.0	180.00	S	-	14160
MM S-B-L150/57-C40T21	T21	40.00	30.00	5.0	57.0	150.00	S	-	21840

• Shank material (Shank m.): S-steel

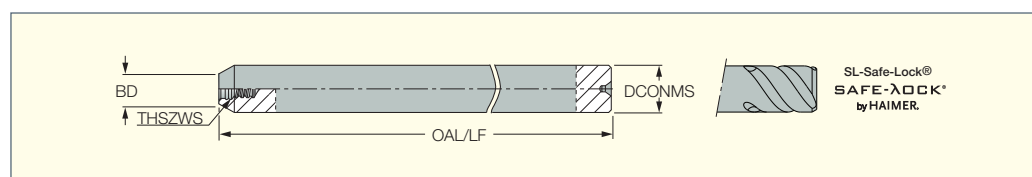
• Do not apply lubricant to the threaded connection.

• Safe-Lock® by Haimer, helical grooves that prevent pull-out (available upon request)

⁽¹⁾ 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 ⁽¹⁾	RPM _{max} ⁽²⁾
MM S-A-L070-C20T05	T05	20.00	7.60	70.00	S	60000
MM S-A-L080-C25T06	T06	25.00	9.60	80.00	S	60000
MM S-A-L080-C25T08	T08	25.00	11.60	80.00	S	60000
MM S-A-L080-C32T10	T10	32.00	15.30	80.00	S	60000
MM S-A-L080-C32T12	T12	32.00	18.30	80.00	S	60000
MM S-A-L100-C40T15	T15	40.00	23.90	100.00	S	60000
MM S-A-L100-C40T21	T21	40.00	30.00	100.00	S	60000

• Do not apply lubricant to the threaded connection.

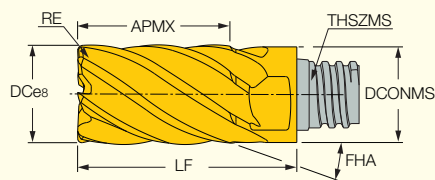
• Safe-Lock® by Haimer, helical grooves that prevent pull-out (available upon request)

⁽¹⁾ S-steel

⁽²⁾ 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 36° Helix with 1.5xD Flute Lengths



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

- Intended for high-speed trochoidal milling and finishing operations with max. width of cut = $0.1 \times DC$
- Reinforced Weldon or SURELOCK (Safe-Lock® by Haimer, helical grooves that prevent pull-out) shanks are strongly recommended
- In case of unfavorable machining conditions, the cutting data should be decreased by 20-30%
- Do not apply lubricant to the threaded connection

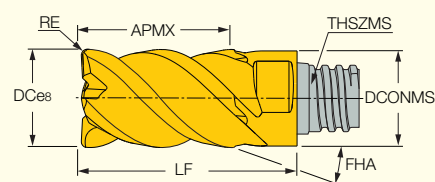
⁽¹⁾ Number of flutes

⁽²⁾ Maximum ramping angle

CHATTERFREE
MULTI-MASTER LINE

MM EC-CF-Z4-1.5xD

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



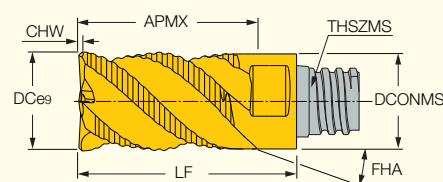
Designation	Dimensions									IC908	Recommended Machining Data	
	DC	NOF ⁽¹⁾	APMX	RE	THSZMS	DCONMS	LF	FHA			f_z (mm/t)	
MM EC080H12R05CF-4T05	8.00	4	12.00	0.50	T05	7.70	18.00	46.5	●	●	0.03-0.09	
MM EC100H15R05CF-4T06	10.00	4	15.00	0.50	T06	9.60	22.00	46.5	●	●	0.03-0.10	
MM EC120H18R05CF-4T08	12.00	4	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	

- Maximum depth of cut APMX while milling full slot from solid material is $1 \times DC$
- Maximum width of cut for milling shoulder with $APMX = 1.5 \times DC$ is $0.3 \times DC$
- Reinforced Weldon or SURELOCK (Safe-Lock® by Haimer, helical grooves that prevent pull-out) shanks are strongly recommended
- In case of unfavorable machining conditions, the cutting data should be decreased by 20-30%
- 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	5.0	●	0.03-0.08	
MM ERS100B15-4T06	10.00	4	15.00	0.30	T06	9.60	22.00	46.0	5.0	●	0.03-0.09	
MM ERS120B18-4T08	12.00	4	18.00	0.35	T08	11.70	27.00	46.0	5.0	●	0.04-0.10	
MM ERS160B24-5T10	16.00	5	24.00	0.40	T10	15.30	33.50	40.0	5.0	●	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	

- Maximum depth of cut APMX while milling full slot from solid material is $1 \times DC$
- Maximum width of cut for milling shoulder with $APMX = 1.5 \times DC$ is $0.3 \times DC$
- Reinforced Weldon or SURELOCK (Safe-Lock® by Haimer, helical grooves that prevent pull-out) shanks are strongly recommended
- In case of unfavorable machining conditions, the cutting data should be decreased by 20-30%
- Do not apply lubricant to the threaded connection

⁽¹⁾ Number of flutes

⁽²⁾ Maximum ramping angle

Interchangeable Solid Carbide Face Milling Heads

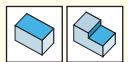
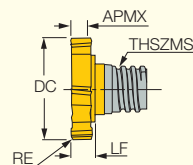


MULTI-MASTER

INDEXABLE SOLID CARBIDE LINE

MM FM

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



Designation	Dimensions							IC908	Recommended Machining Data f_z (mm/t)
	DC	APMX	RE	NOF ⁽¹⁾	THSZMS	LF			
MM FM120-36R0.2-06T05	12.00	3.60	0.20	6	T05	4.40	T-20/3*	•	0.04-0.10
MM FM160-48R0.4-06T06	16.00	4.80	0.40	6	T06	5.60	T-25/3*	•	0.05-0.10
MM FM200-60R0.4-06T08	20.00	6.00	0.40	6	T08	6.80	T-40/3 L*	•	0.05-0.10
MM FM250-75R0.4-06T10	25.00	7.50	0.40	6	T10	8.40	T-50/3 L*	•	0.05-0.10

⁽¹⁾ Number of flutes

* Optional, should be ordered separately

T-FACE
FACEMILL

Indexable Solid Carbide Dia 32-50 mm Face Milling Master



No Setup
Time



Uniquely Shaped for
Easy Head Clamping

Small Diameter
Exchangeable Solid Carbide
Heads for **Face Milling**



High
Productivity



Shorter Overhang
Provides Stability



Precision



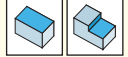
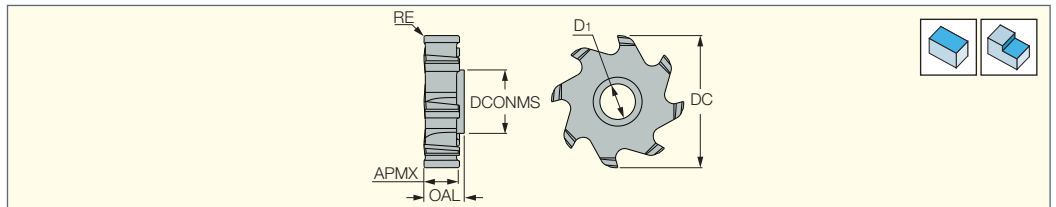
Cost Effective
Insert



Multiple Cutting Edges
Face Milling Heads

LOGIQMILL
ISCAR CHESS LINES

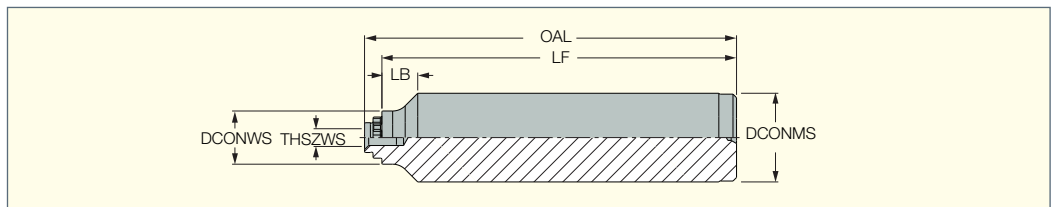
SD FM

 Interchangeable Solid Carbide
 Face Milling Heads


Designation	Dimensions							IC908	Recommended Machining Data f _z (mm/t)
	DC	APMX	NOF ⁽¹⁾	RE	D1	DCONMS	OAL		
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-R0.4-SP17	39.25	10.00	10	0.40	9.80	17.00	10.00	●	0.04-0.15
SD FM D50-12-R0.4-SP19	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⁾	kg
SD FM-S-A-L100-C25-SP15	25.00	15.00	M5x0.5	10.10	104.90	104.90	C	0.37
SD FM-S-A-L120-W25-SP15	25.00	15.00	M5x0.5	10.10	124.90	124.90	W	0.44
SD FM-S-A-L125-W32-SP17	32.00	17.00	M6x0.5	12.50	131.00	131.00	W	0.75
SD FM-S-A-L140-C32-SP17	32.00	17.00	M6x0.5	12.50	146.00	146.00	C	0.85
SD FM-S-A-L140-C32-SP19	32.00	19.00	M6x0.5	10.00	148.50	148.50	C	1.41
SD FM-S-A-L130-W40-SP19	40.00	19.00	M6x0.5	14.00	138.50	138.50	W	1.21

• Apply lubricant to the clamping screw

⁽¹⁾ C-Cylindrical, W-Weldon

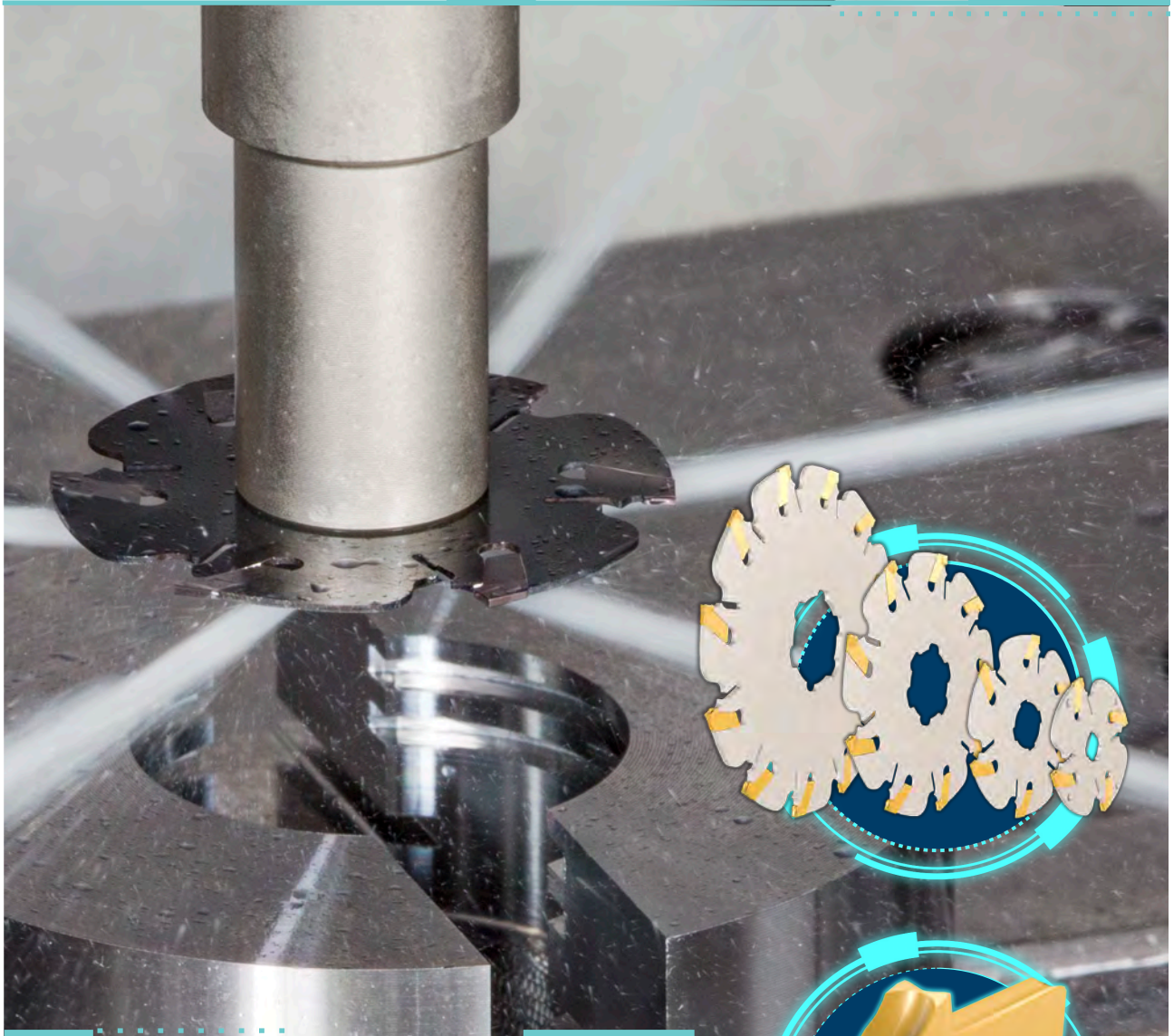
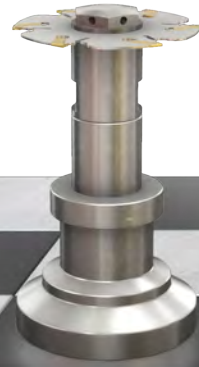
Spare Parts

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

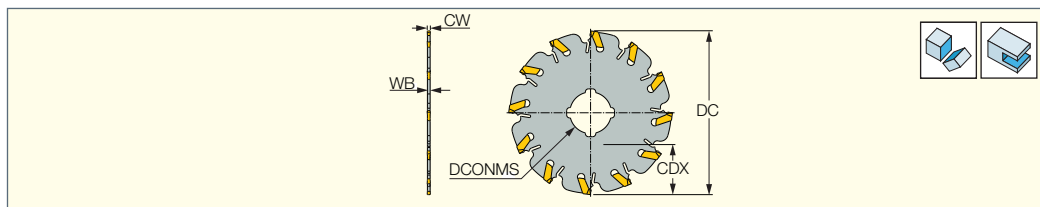


Cost Effective
Insert



Narrowest Insert Width of
0.8-1.2 mm

LOGIQMILL
ISCAR CHESS LINES

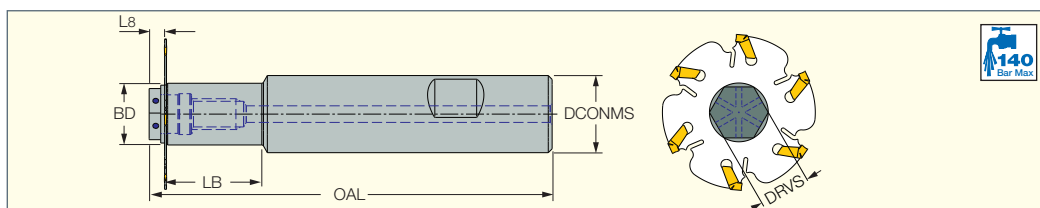
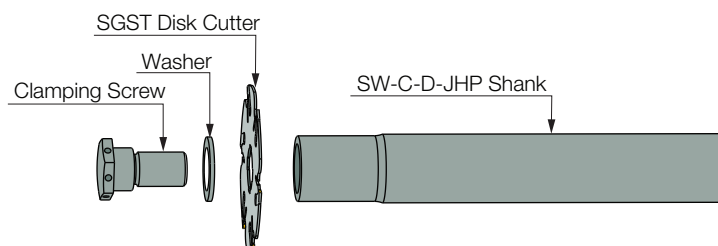


Designation	DC	CW	CICT ⁽¹⁾	WB	DCONMS	CDX	RPMX ⁽²⁾	Insert	
SGST 32-8-0.8-4Z	32.00	0.80	4	0.69	8.00	8.00	2490	GFT 0.8J-0.1	ESG-SLM*
SGST 32-8-1.0-4Z	32.00	1.00	4	0.90	8.00	8.00	2490	GFT 1.0J-0.1	ESG-SLM*
SGST 32-8-1.2-4Z	32.00	1.20	4	1.06	8.00	8.00	2490	GFT 1.2J-0.14	ESG-SLM*
SGST 40-10-0.8-6Z	40.00	0.80	6	0.69	10.00	12.00	1990	GFT 0.8J-0.1	ESG-SLM*
SGST 40-10-1.0-6Z	40.00	1.00	6	0.90	10.00	12.00	1990	GFT 1.0J-0.1	ESG-SLM*
SGST 40-10-1.2-6Z	40.00	1.20	6	1.06	10.00	12.00	1990	GFT 1.2J-0.14	ESG-SLM*
SGST 50-13-0.8-9Z	50.00	0.80	9	0.69	13.00	12.50	1590	GFT 0.8J-0.1	ESG-SLM*
SGST 50-13-1.0-9Z	50.00	1.00	9	0.90	13.00	12.50	1590	GFT 1.0J-0.1	ESG-SLM*
SGST 50-13-1.2-9Z	50.00	1.20	9	1.06	13.00	12.50	1590	GFT 1.2J-0.14	ESG-SLM*
SGST 63-16-1.0-12Z	63.00	1.00	12	0.90	16.00	19.00	1260	GFT 1.0J-0.1	ESG-SLM*
SGST 63-16-1.2-12Z	63.00	1.20	12	1.06	16.00	19.00	1260	GFT 1.2J-0.14	ESG-SLM*

⁽¹⁾ Number of inserts

⁽²⁾ Maximum RPM

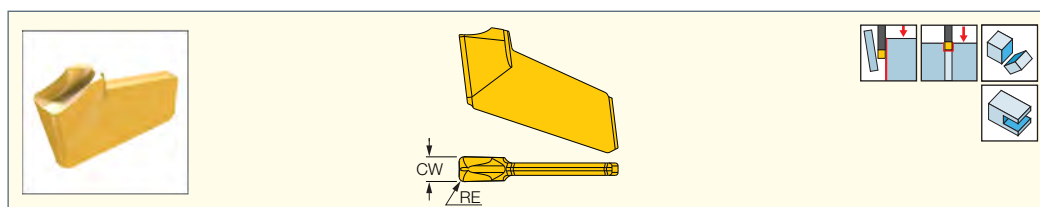
* Optional, should be ordered separately



Designation	DCONMS	BD	LB	OAL	L8	DRVS ⁽¹⁾			
SW 16C-D32-JHP	16.00	15.00	25.00	104.00	4.00	13.0	SCREW CLAMP-D32-JHP	MM KEY 13X8*	WASHER 8X14.5-D32
SW 20C-D40-JHP	20.00	16.00	25.00	104.00	4.00	13.0	SCREW CLAMP-D40-JHP	MM KEY 13X8*	WASHER 10X15-D40
SW 25C-D50-JHP	25.00	-	-	115.00	5.00	20.0	SCREW CLAMP-D50-JHP	MM KEY 20*	WASHER 13X24-D50
SW 25C-D63-JHP	25.00	-	-	115.00	5.00	20.0	SCREW CLAMP-D63-JHP	MM KEY 20*	WASHER 16X24-D63

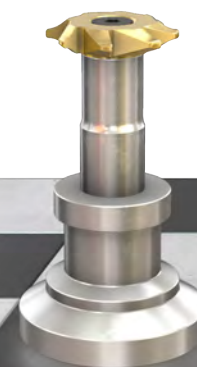
⁽¹⁾ Clamping wrench size

* Optional, should be ordered separately



Designation	Dimensions		Tough ↔ Hard		Recommended Machining Data
	CW	RE	IC1028	IC1008	
GFT 0.8J-0.1	0.80	0.10	•	•	f groove (mm/rev)
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

Indexable Solid Carbide Gear Master



Uniquely Shaped for
Easy Head Clamping

Indexable Solid Carbide Heads for Machining Involute Gear Profiles



Precise
Indexable
Head



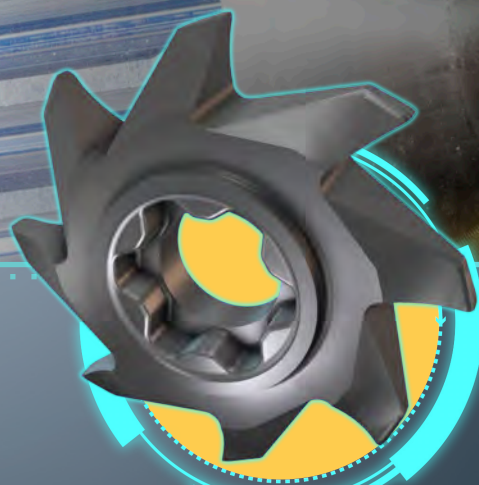
Strong Mechanism
of Torque Transfer to
the Head



High
Productivity



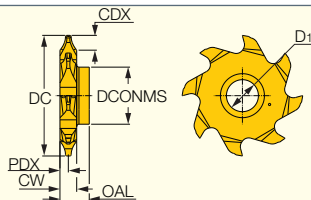
Cost Effective
Insert



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										ISO 803
	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	●

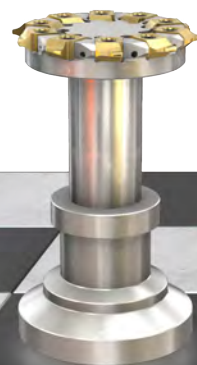
• Tightening torque 4 Nxm

⁽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**



Tangential
Insert



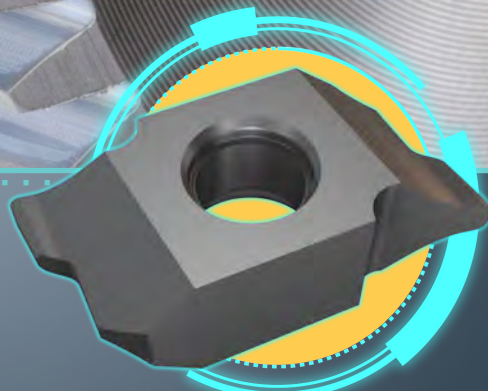
High Pressure
Coolant



High
Productivity



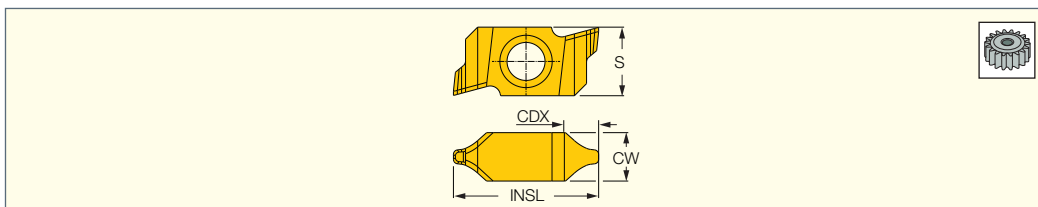
Cost Effective
Insert



Insert with 2 Cutting Edges

LNET 18-M

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



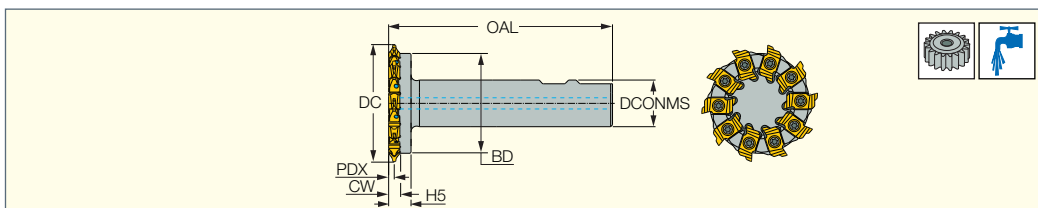
Designation	Dimensions						IC908
	Module	T range ⁽¹⁾	CW	CDX	INSL	S	
LNET 18-M1.50-N03-C-CL10	1.50	17-20	6.00	4.00	18.00	8.50	●

• 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	CW	BD	CICT ⁽¹⁾	H5	DCONMS	OAL	MIID ⁽²⁾
ETS D63-M1-1.75-W25-C	63.00	3.0	6.00	53.50	10	12.00	25.00	120.00	LNET 18

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

⁽¹⁾ Number of inserts

⁽²⁾ Master insert identification

Spare Parts

Designation			
ETS Gear Mill	SR 14-500-L11.5	BLD T15/S7	SW6-T



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 Diameter Slitting Cutter
with Unique Small
2 Cutting Edged Insert



Ease of Use



High Pressure
Coolant



Cost
Effective

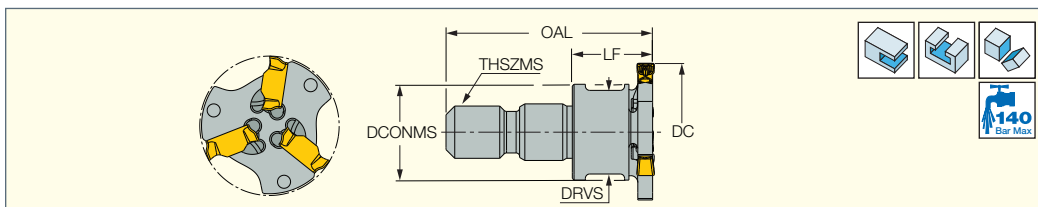


Small Insert with
2 Cutting Edges

LOGIQMILL
ISCAR CHESS LINES

DGSM-M-JHP

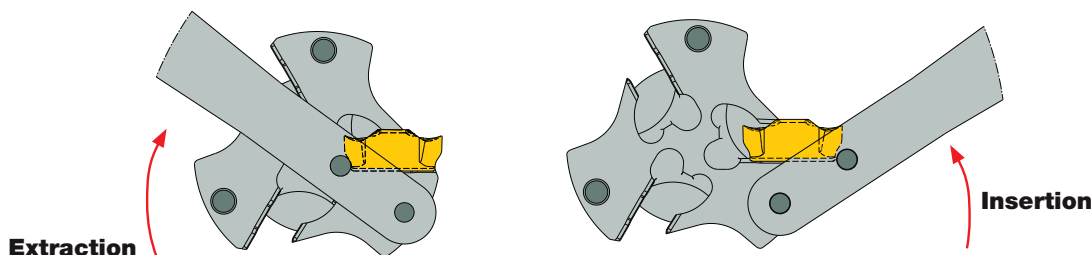
Groove milling and Slitting
Small Diameter Cutters with
FLEXFIT Threaded Adaptation



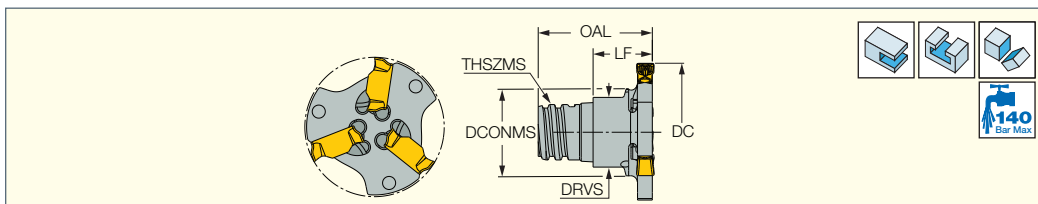
Designation	DC	CW	CDX	CICT ⁽¹⁾	DCONMS	THSZMS	LF	OAL	DRVS ⁽²⁾	Insert	
DGSM 16-2-M06-3Z-JHP	16.00	2.00	3.70	3	10.00	M06	9.65	24.15	8.0	DGM 2002V	MM KEY 8X5
DGSM 16-3-M06-3Z-JHP	16.00	3.00	3.70	3	10.00	M06	8.30	22.50	8.0	DGM 3002V	MM KEY 8X5
DGSM 18-2-M06-3Z-JHP	18.00	2.00	4.70	3	10.00	M06	9.65	24.15	8.0	DGM 2002V	MM KEY 8X5
DGSM 18-3-M06-3Z-JHP	18.00	3.00	4.70	3	10.00	M06	9.80	24.00	8.0	DGM 3002V	MM KEY 8X5
DGSM 22-2-M08-4Z-JHP	22.00	2.00	5.70	4	12.00	M08	8.65	26.15	10.0	DGM 2002V	MM KEY 10X7
DGSM 22-3-M08-4Z-JHP	22.00	3.00	5.70	4	12.00	M08	9.30	26.50	10.0	DGM 3002V	MM KEY 10X7

⁽¹⁾ Number of inserts

⁽²⁾ Key flat size


MULTI-MASTER
DGSM-MM-JHP

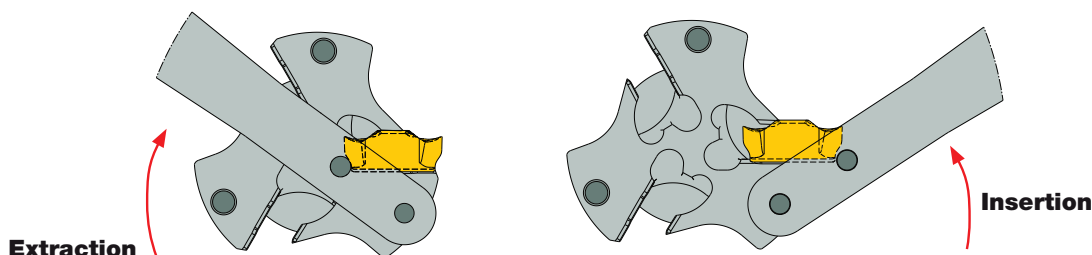
Groove Milling and Slitting Small
Diameter Cutters with MULTI-
MASTER Threaded Adaptation



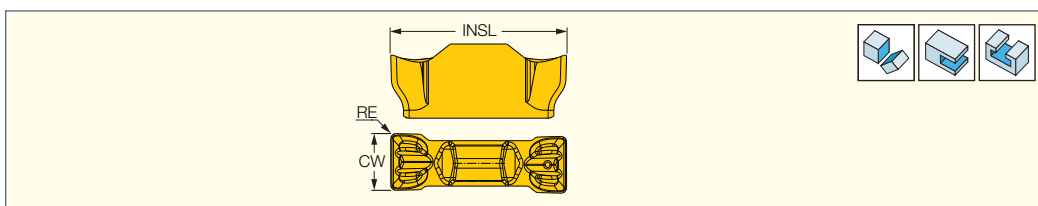
Designation	DC	CW	CDX	CICT ⁽¹⁾	DCONMS	THSZMS	LF	OAL	DRVS ⁽²⁾	Insert	
DGSM 16-2-MMT06-3Z-JHP	16.00	2.00	3.70	3	10.00	T06	9.65	15.95	8.0	DGM 2002V	MM KEY 8X5
DGSM 16-3-MMT06-3Z-JHP	16.00	3.00	3.70	3	10.00	T06	9.70	14.30	8.0	DGM 3002V	MM KEY 8X5
DGSM 18-2-MMT06-3Z-JHP	18.00	2.00	4.70	3	10.00	T06	9.65	15.95	8.0	DGM 2002V	MM KEY 8X5
DGSM 18-3-MMT06-3Z-JHP	18.00	3.00	4.70	3	10.00	T06	9.90	16.25	8.0	DGM 3002V	MM KEY 8X5
DGSM 22-2-MMT08-4Z-JHP	22.00	2.00	5.70	4	12.00	T08	8.50	15.80	10.0	DGM 2002V	MM KEY 10X7
DGSM 22-3-MMT08-4Z-JHP	22.00	3.00	5.70	4	12.00	T08	9.15	16.40	10.0	DGM 3002V	MM KEY 10X7

⁽¹⁾ Number of inserts

⁽²⁾ Key flat size


DGM-V

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

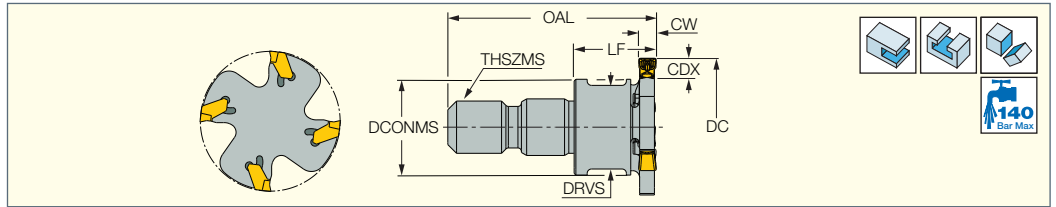


Designation	Dimensions			IC1008	Recommended Machining Data f groove (mm/t)
	CW	RE	INSL		
DGM 2002V	2.00	0.20	6.20	•	0.03-0.10
DGM 3002V	3.00	0.20	6.20	•	0.04-0.15

SELFGRIP FLEXFIT

SGSF/A-M-JHP

Grooving and Slitting Small Diameter Cutters with FLEXFIT Threaded Adaptation



Designation	DC	CW	CDX	CICT ⁽¹⁾	DCONMS	THSZMS	LF	OAL	DRVS ⁽²⁾	Insert	
SGSF 32-2-M08-3Z-JHP	32.00	2.00	7.80	3	13.00	M08	12.00	29.50	9.6	GSFN 2...	ESG 1.4-2*
SGSA 32-3-M08-4Z-JHP	32.00	3.00	7.80	4	13.00	M08	12.00	29.50	9.6	GSAN 3...	ESG 1.4-2*
SGSF 40-2-M10-4Z-JHP	40.00	2.00	11.80	4	18.00	M10	12.00	29.50	15.0	GSFN 2...	ESG 1.4-2*
SGSA 40-3-M10-6Z-JHP	40.00	3.00	11.80	6	18.00	M10	12.00	29.50	15.0	GSAN 3...	ESG 1.4-2*

⁽¹⁾ Number of inserts

⁽²⁾ Key flat size

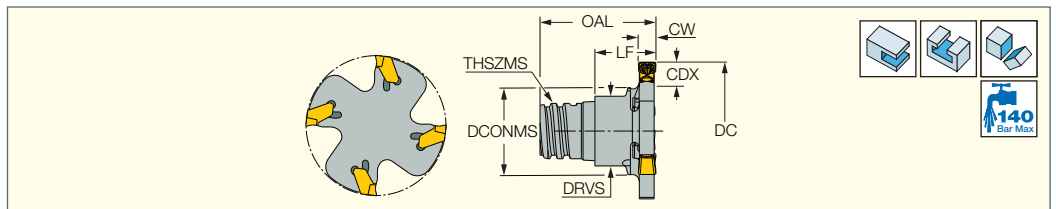
* Optional, should be ordered separately

SELFGRIP

MULTI-MASTER

SGSF/A-MM-JHP

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



Designation	DC	CW	CDX	CICT ⁽¹⁾	DCONMS	THSZMS	LF	OAL	DRVS ⁽²⁾	Insert	
SGSF 32-2-MMT08-3Z-JHP	32.00	2.00	9.00	3	11.70	T08	10.60	18.10	10.0	GSFN 2...	ESG 1.4-2*
SGSA 32-3-MMT08-4Z-JHP	32.00	3.00	9.00	4	11.70	T08	11.40	18.90	10.0	GSAN 3...	ESG 1.4-2*
SGSF 40-2-MMT10-4Z-JHP	40.00	2.00	11.30	4	15.30	T10	10.60	21.90	13.0	GSFN 2...	ESG 1.4-2*
SGSA 40-3-MMT10-6Z-JHP	40.00	3.00	11.30	6	15.30	T10	11.40	22.70	13.0	GSAN 3...	ESG 1.4-2*

⁽¹⁾ Number of inserts

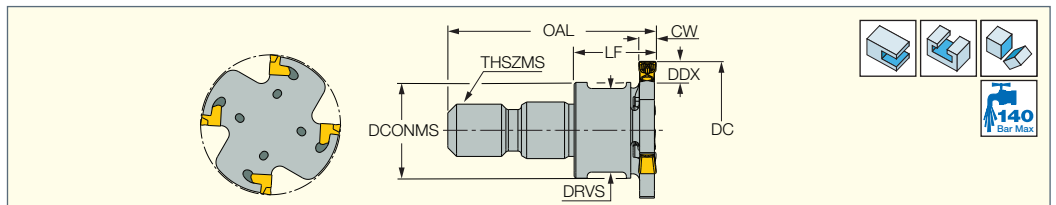
⁽²⁾ Key flat size

* Optional, should be ordered separately

TANGSLIT FLEXFIT

TGSF-M-JHP

Grooving and Slitting Small Diameter Cutters with FLEXFIT Threaded Adaptation



Designation	DC	CW	CDX	CICT ⁽¹⁾	DCONMS	THSZMS	LF	OAL	DRVS ⁽²⁾	Insert	
TGSF 50-2-M12 5Z-JHP	50.00	2.00	13.00	5	21.00	M12	10.80	24.00	17.0	TAG 2	ETG 2*
TGSF 50-3-M12 5Z-JHP	50.00	3.00	13.00	5	21.00	M12	10.70	24.70	17.0	TAG 3	ETG 3-4-SH*

⁽¹⁾ Number of inserts

⁽²⁾ Key flat size

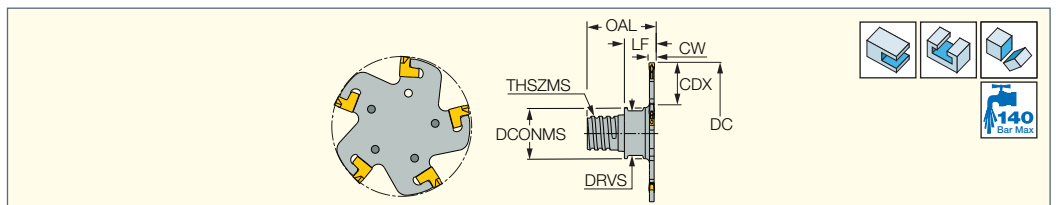
* Optional, should be ordered separately

TANGSLIT

MULTI-MASTER

TGSF-MM-JHP

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



Designation	DC	CW	CDX	CICT ⁽¹⁾	DCONMS	THSZMS	LF	OAL	DRVS ⁽²⁾	Insert	
TGSF 50-2-MMT12-5Z-JHP	50.00	2.00	14.00	5	19.00	T12	10.70	24.00	16.0	TAG 2	ETG 2*
TGSF 50-3-MMT12-5Z-JHP	50.00	3.00	14.00	5	19.00	T12	11.50	24.70	16.0	TAG 3	ETG 3-4-SH*

⁽¹⁾ Number of inserts

⁽²⁾ Key flat size

* Optional, should be ordered separately

LOGIQHOLD

ISCAR CHESS LINES



High Productivity



For All
Materials



New Generation



Cost Effective

MACHINING **IN** DUSTRY 4.0
TELLIGENTLY

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

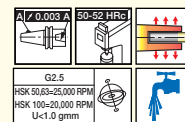
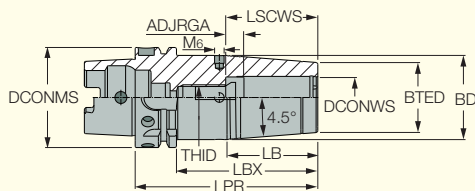


Cost Effective
Prolonged Tool Life

LOGIQHOLD
ISCAR CHESS LINES

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⁾	kg
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

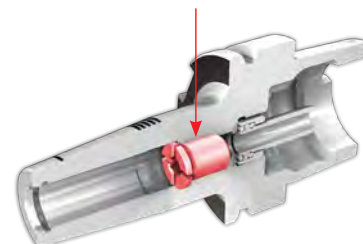
- A cooling tube must be used with all coolant through HSK spindles (should be ordered separately)
- Use only inductive heating device for SRKIN holders
- Preset CX screw allows supply of coolant via JET channels - do not remove ⁽¹⁾ Adjustment screw hexagon key size

Features

- Increased coolant velocity is obtained due to flow-rate conservation and a smaller coolant discharge area
- Coolant directed to cutting edges
- Prolonged tool life
- Eliminates chip sticking at the cutting edges
- Suitable for High Speed Milling
- Effective chip evacuation prevents chip re-cutting

Applications and Advantages

- CNC milling machines with poor external coolant flow
- Cavity and pocket milling applications
- Semi-finishing and finishing profile milling titanium blisk blades
- Milling applications that generate high temperatures, such as very hard alloy steels, high temperature alloys etc.



Note: Preset CX screw allows coolant supply via jet channels - do not remove!

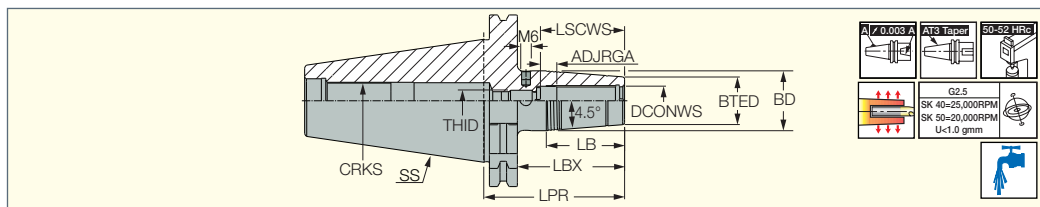
* Optional, should be ordered separately

Spare Parts

Designation			
HSK A63 SRKIN6X80 CX	COOLING TUBE HSK A63*	WRENCH COOL TUBE HSK63*	PRESET CX M5X13
HSK A63 SRKIN6X120 CX	COOLING TUBE HSK A63*	WRENCH COOL TUBE HSK63*	PRESET CX M5X13
HSK A63 SRKIN8X80 CX	COOLING TUBE HSK A63*	WRENCH COOL TUBE HSK63*	PRESET CX M6X12
HSK A63 SRKIN8X120 CX	COOLING TUBE HSK A63*	WRENCH COOL TUBE HSK63*	PRESET CX M6X12
HSK A63 SRKIN10X85 CX	COOLING TUBE HSK A63*	WRENCH COOL TUBE HSK63*	PRESET CX M8X16
HSK A63 SRKIN10X120 CX	COOLING TUBE HSK A63*	WRENCH COOL TUBE HSK63*	PRESET CX M8X16
HSK A63 SRKIN12X90 CX	COOLING TUBE HSK A63*	WRENCH COOL TUBE HSK63*	PRESET CX M10X16
HSK A63 SRKIN12X120 CX	COOLING TUBE HSK A63*	WRENCH COOL TUBE HSK63*	PRESET CX M10X16
HSK A63 SRKIN14X90 CX	COOLING TUBE HSK A63*	WRENCH COOL TUBE HSK63*	PRESET CX M10X16
HSK A63 SRKIN16X75 CX	COOLING TUBE HSK A63*	WRENCH COOL TUBE HSK63*	PRESET CX M5X5
HSK A63 SRKIN16X95 CX	COOLING TUBE HSK A63*	WRENCH COOL TUBE HSK63*	PRESET CX M12X16
HSK A63 SRKIN16X120 CX	COOLING TUBE HSK A63*	WRENCH COOL TUBE HSK63*	PRESET CX M12X16
HSK A63 SRKIN18X95 CX	COOLING TUBE HSK A63*	WRENCH COOL TUBE HSK63*	PRESET CX M12X16
HSK A63 SRKIN20X75 CX	COOLING TUBE HSK A63*	WRENCH COOL TUBE HSK63*	PRESET CX M5X5
HSK A63 SRKIN20X100 CX	COOLING TUBE HSK A63*	WRENCH COOL TUBE HSK63*	PRESET CX M16X14
HSK A63 SRKIN20X120 CX	COOLING TUBE HSK A63*	WRENCH COOL TUBE HSK63*	PRESET CX M16X14
HSK A63 SRKIN25X85 CX	COOLING TUBE HSK A63*	WRENCH COOL TUBE HSK63*	PRESET CX M5X5
HSK A63 SRKIN32X85 CX	COOLING TUBE HSK A63*	WRENCH COOL TUBE HSK63*	PRESET CX M5X5
HSK A100 SRKIN6X85 CX	COOLING TUBE HSK A100*	WRENCH COOL TUBE HSK100*	PRESET CX M5X13
HSK A100 SRKIN8X85 CX	COOLING TUBE HSK A100*	WRENCH COOL TUBE HSK100*	PRESET CX M6X12
HSK A100 SRKIN10X90 CX	COOLING TUBE HSK A100*	WRENCH COOL TUBE HSK100*	PRESET CX M8X16
HSK A100 SRKIN12X95 CX	COOLING TUBE HSK A100*	WRENCH COOL TUBE HSK100*	PRESET CX M10X16
HSK A100 SRKIN14X95 CX	COOLING TUBE HSK A100*	WRENCH COOL TUBE HSK100*	PRESET CX M10X16
HSK A100 SRKIN16X100 CX	COOLING TUBE HSK A100*	WRENCH COOL TUBE HSK100*	PRESET CX M12X16
HSK A100 SRKIN18X100 CX	COOLING TUBE HSK A100*	WRENCH COOL TUBE HSK100*	PRESET CX M12X16
HSK A100 SRKIN20X105 CX	COOLING TUBE HSK A100*	WRENCH COOL TUBE HSK100*	PRESET CX M16X14
HSK A100 SRKIN25X115 CX	COOLING TUBE HSK A100*	WRENCH COOL TUBE HSK100*	PRESET CX M16X14
HSK A100 SRKIN32X120 CX	COOLING TUBE HSK A100*	WRENCH COOL TUBE HSK100*	PRESET CX M16X14

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	kg
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 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 • Preset screw CX allows supply of coolant via JET channels - do not remove

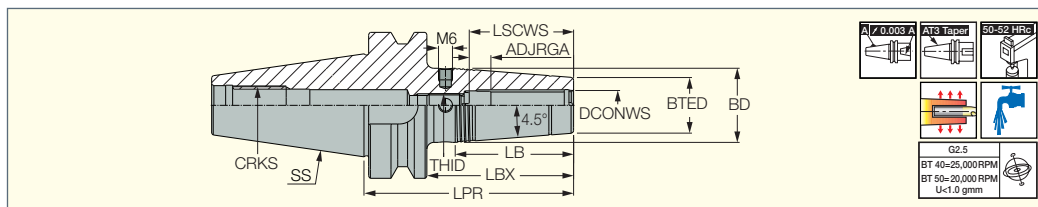
⁽¹⁾ Hex key size for the rear stopper screw

Spare Parts

Designation	
DIN69871 40 SRKIN 6X80 CX	PRESET CX M5X13
DIN69871 40 SRKIN 8X80 CX	PRESET CX M6X12
DIN69871 40 SRKIN 10X80CX	PRESET CX M8X16
DIN69871 40 SRKIN 12X80CX	PRESET CX M10X16
DIN69871 40 SRKIN 14X80CX	PRESET CX M10X16
DIN69871 40 SRKIN 16X80CX	PRESET CX M12X16
DIN69871 40 SRKIN 20X80CX	PRESET CX M16X14
DIN69871 40 SRKIN25X100CX	PRESET CX M16X14
DIN69871 50 SRKIN 6X80 CX	PRESET CX M5X13
DIN69871 50 SRKIN 8X80 CX	PRESET CX M6X12
DIN69871 50 SRKIN 10X80CX	PRESET CX M8X16
DIN69871 50 SRKIN 12X80CX	PRESET CX M10X16
DIN69871 50 SRKIN 14X80CX	PRESET CX M10X16
DIN69871 50 SRKIN 16X80CX	PRESET CX M12X16
DIN69871 50 SRKIN 18X80CX	PRESET CX M12X16
DIN69871 50 SRKIN 20X80CX	PRESET CX M16X14
DIN69871 50 SRKIN25X100CX	PRESET CX M16X14
DIN69871 50 SRKIN32X100CX	PRESET CX M16X14

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 ⁽¹⁾	CRKS	kg
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 • Preset screw CX allows supply of coolant via JET channels - do not remove

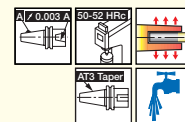
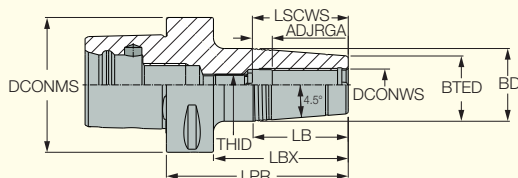
(1) Hex key size for the rear stopper screw

Spare Parts

Designation	
BT40 SRKIN 6X90 CX	PRESET CX M5X13
BT40 SRKIN 8X90 CX	PRESET CX M6X12
BT40 SRKIN 10X90 CX	PRESET CX M8X16
BT40 SRKIN 12X90 CX	PRESET CX M10X16
BT40 SRKIN 16X90 CX	PRESET CX M12X16
BT40 SRKIN 20X90 CX	PRESET CX M16X14
BT40 SRKIN 25X110 CX	PRESET CX M16X14
BT50 SRKIN 6X100 CX	PRESET CX M5X13
BT50 SRKIN 8X100 CX	PRESET CX M6X12
BT50 SRKIN 10X100 CX	PRESET CX M8X16
BT50 SRKIN 12X100 CX	PRESET CX M10X16
BT50 SRKIN 16X100 CX	PRESET CX M12X16
BT50 SRKIN 20X100 CX	PRESET CX M16X14
BT50 SRKIN 25X120 CX	PRESET CX M16X14
BT50 SRKIN 32X120 CX	PRESET CX M16X14

C#-SRKIN-CX

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



Designation	DCONMS	DCONWS	BTED	BD	LPR	LBX	LB	LSCWS	ADJRGA	THID	Key ⁽¹⁾	kg
C6 SRKIN 6X80 CX	63.00	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	63.00	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	63.00	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	63.00	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	63.00	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	63.00	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	63.00	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	63.00	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	63.00	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	63.00	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 • Preset screw CX allows supply of coolant via JET channels - do not remove

⁽¹⁾ Hex key size for the rear stopper screw

Spare Parts

Designation			
C6 SRKIN 6X80 CX	PRESET CX M5X13	COOLING TUBE C6*	WRENCH COOL TUBE C6*
C6 SRKIN 8X80 CX	PRESET CX M6X12	COOLING TUBE C6*	WRENCH COOL TUBE C6*
C6 SRKIN 10X80 CX	PRESET CX M8X16	COOLING TUBE C6*	WRENCH COOL TUBE C6*
C6 SRKIN 12X80 CX	PRESET CX M10X16	COOLING TUBE C6*	WRENCH COOL TUBE C6*
C6 SRKIN 14X85 CX	PRESET CX M10X16	COOLING TUBE C6*	WRENCH COOL TUBE C6*
C6 SRKIN 16X85 CX	PRESET CX M12X16	COOLING TUBE C6*	WRENCH COOL TUBE C6*
C6 SRKIN 18X85 CX	PRESET CX M12X16	COOLING TUBE C6*	WRENCH COOL TUBE C6*
C6 SRKIN 20X85 CX	PRESET CX M16X14	COOLING TUBE C6*	WRENCH COOL TUBE C6*
C6 SRKIN 25X90 CX	PRESET CX M16X14	COOLING TUBE C6*	WRENCH COOL TUBE C6*
C6 SRKIN 32X95 CX	PRESET CX M16X14	COOLING TUBE C6*	WRENCH COOL TUBE C6*

* Optional, should be ordered separately

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ISCAR CHESS LINES



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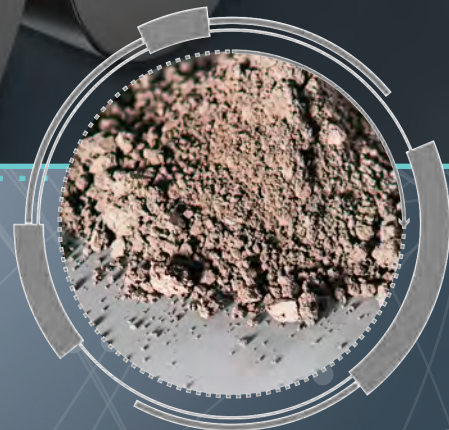
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TELLIGENTLY

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.



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.

Turning Grades



A hard substrate, MTCVD TiCN and thick Al_2O_3 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 Al_2O_3 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.

Parting



AlTiN + TiN PVD coated grade on very tough substrate for parting and grooving applications at high feeds and low to medium speeds. Suitable for steels and stainless steel. The grade is recommended for interrupted cut and machining at unstable conditions.



AlTiCrN + TiN PVD coated grade with a special SUMO TEC surface treatment on very tough substrate for parting and grooving of steel and stainless steel at low to medium speeds and medium to high feeds. The grade is recommended for interrupted cut and machining at unstable conditions.



AlTiN + TiN PVD coated grade overlays on tough submicron substrate. Recommended for general use in parting and grooving operations on large variety of materials as well as steel, alloy steels, austenitic stainless steel, high temperature alloys at medium cutting speeds.



A tough submicron substrate with AlTiCrN + TiN PVD coating and a special SUMO TEC surface treatment. Recommended for general use in parting and grooving operations on large variety of materials as well as steel, alloy steels, austenitic stainless steel, heat resistant alloys at medium cutting speeds.



A very hard submicron substrate with AlTiCrN + TiN PVD coating and a special SUMO TEC surface treatment. Suitable for parting and grooving of steel, alloy steels, austenitic stainless steel, high temperature alloys and hard steels at medium to high cutting speeds.

Drilling Grades

SUMO TEC
107

P M K N S H

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.

NEW!

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.

NEW!

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.

Milling Grades

NEW!



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



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.

NEW!



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.

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.

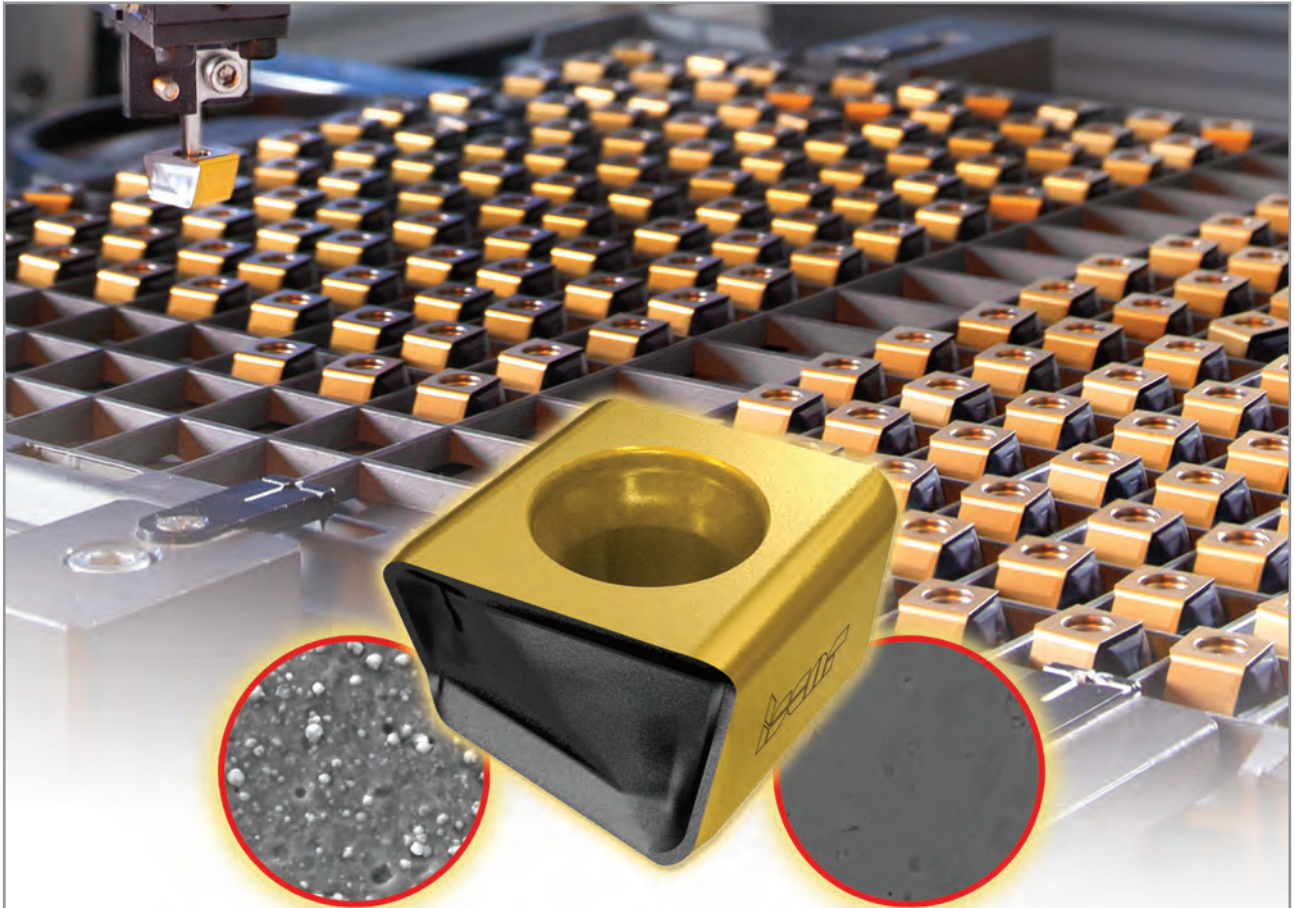


A tough submicron substrate, TiAlN PVD coated grade. Designed for machining heat resistant alloys, austenitic stainless steel, hard alloys and carbon steel at medium to high cutting speeds, interrupted cut and unfavorable conditions. Excellent notch wear and built-up edge resistance.

NEW!



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



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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