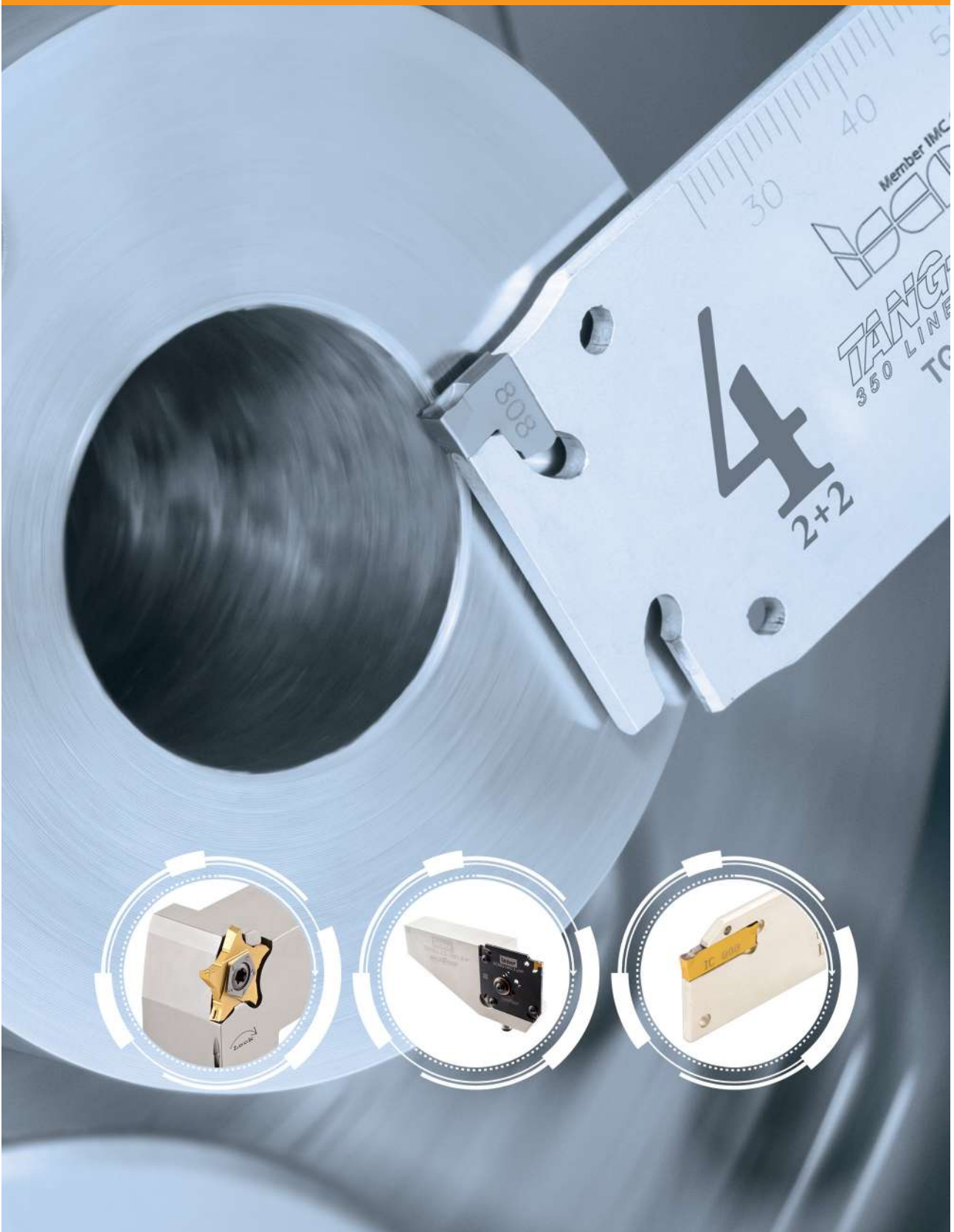


PARTING



CONTENTS

Full range of PENTACUT Tools & Inserts 308

Selection Guide 462

Tools and Inserts 462

DO-GRIP 468

TANG-GRIP 494

LOGIQ-F-GRIP 512

TANG-F-GRIP 515

DO-F-GRIP 517

JET-CROWN 518

SELF-5-GRIP 521

TANG-5-GRIP 522

CUT-GRIP 523

PENTA-IQ-GRIP 527

PENTACUT R/L Parting Inserts 532

User Guide 540

Modular-Grip Adaptations 749

Clamping Systems

DO-GRIP

- First choice for parting
- Double-ended insert
- Self-clamped for deeper grooving and parting medium to large diameters
- Screw-clamped for small diameters
- See also **HELI-GRIP**, page 259

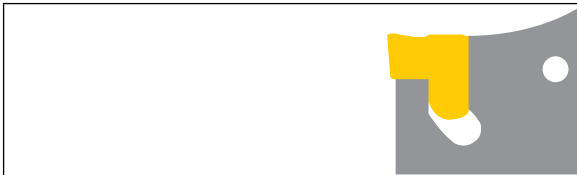
FIRST CHOICE!

Self-clamped

Screw-clamped

TANG-GRIP

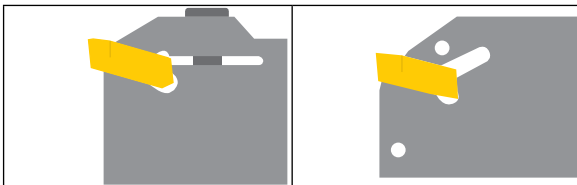
- Very rigid clamping in a tangentially oriented pocket
- Enables machining at very high feed rates and provides excellent straightness and surface finish
- Recommended for parting large diameter parts and for interrupted cuts
- Offers a free, unobstructed chip flow



TANG-GRIP

CUT-GRIP

- Single-ended insert
- Self- and screw-clamped options

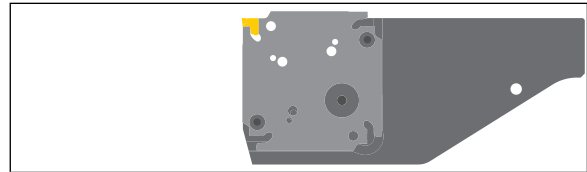


Screw-clamped

Self-clamped

LOGIQ-FGRIP
HIGH FEED GRIP HOLDER

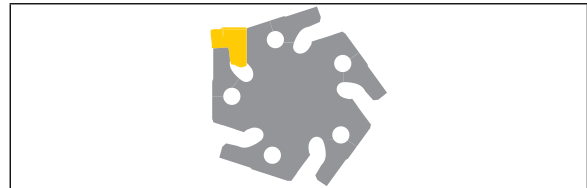
- Unique adaptation for Quad /Square type adapters with 4 pockets
- Outstanding stability, vibration free parting system also on big diameters
- Improves insert life, surface finish and workpiece straightness due to robust design
- Enables reduction of cutting width due to excellent stability, leading to material savings
- **Ø120mm** bar can be cut with only 3 mm insert width
- Guarantees high productivity, especially when using **TAG N...HF** inserts with feed of up to 0.4 mm\rev.
- Economical adapters with 4 pockets
- User friendly, easy to operate
- Saves set up time after pocket replacement; adapter can be positioned with new pocket without set up
- Several adapters can be clamped on one tool block
- The tools and adapters are designed for **JET-CUT** cooling up to 140 Bar



LOGIQ-F-GRIP

TANG5GRIP
PARTING AND GROOVING

- Economical pentagonal adapters with 5 pockets
- No setup time after pocket replacement
- Several adapters can be clamped on one holder
- The tools and adapters are designed for **JET-CUT** cooling up to 340 Bar



TANG5-GRIP

PENTACUT

- 5 cutting edges
- Fast edge indexing
- For shallow grooving and up to 20 mm parting diameter
- **PENTA-IQ** for parting up to 40mm bar diameter



PENTACUT

PENTA-IQ

PARTING

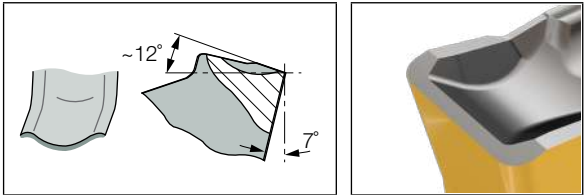
Main Chipformers

HF-Type

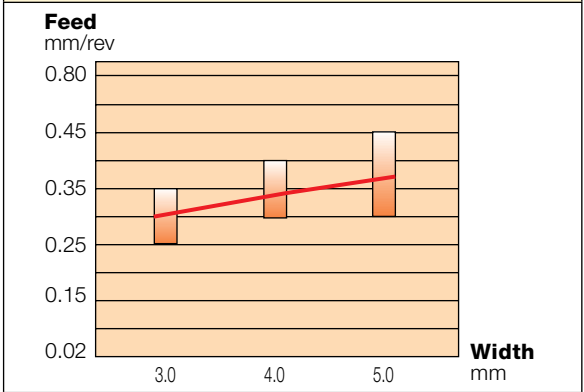
- For high feed machining only!
- Reinforced cutting edge (negative rake)
- Should be used with short extension tools

$$f \approx \frac{W_{\text{insert}}}{12} \text{ [mm/rev]}$$

Alloy Steel	Austenitic Stainless	High Temp. Alloys	Nonferrous Materials	Cast Iron
✓	✗	✗	✗	✓



Recommended feed range as a function of insert width



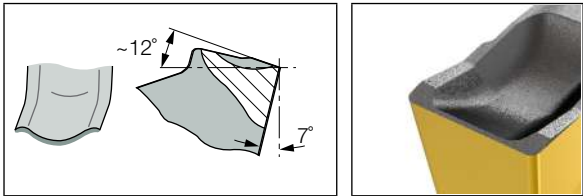
C-Type

- First choice for parting of bars, hard materials and tough applications
- A positive rake, single cavity with negative land and shoulders provides extra cutting-edge strength
- Medium-to-high feed

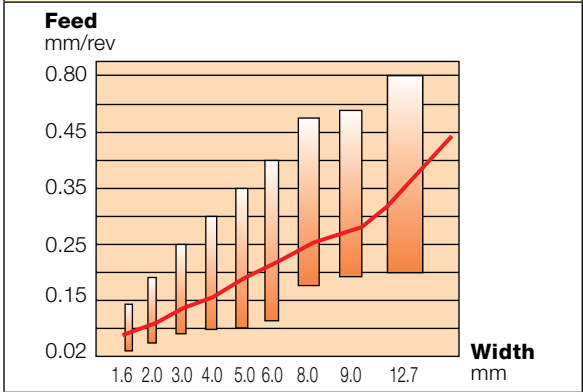
$$f \approx \frac{W_{\text{insert}}}{18} \text{ [mm/rev]}$$

Alloy Steel	Austenitic Stainless	High Temp. Alloys	Nonferrous Materials	Cast Iron
✓	✗	✓ (IC20 only)	✓ (IC20 only)	✓

Recommendations are for neutral inserts.
For R/L inserts, reduce feed by 20-40%.



Recommended feed range as a function of insert width

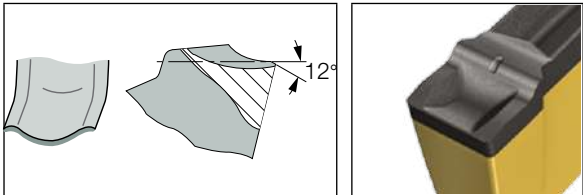


MF Type

- Parting and Grooving Insert for Soft and Hard Materials, Medium Feed

$$f \approx \frac{W_{\text{insert}}}{21} \text{ [mm/rev]}$$

Alloy Steel	Austenitic Stainless	High Temp. Alloys	Nonferrous Materials	Cast Iron
✓	✓	✓	✗	✓



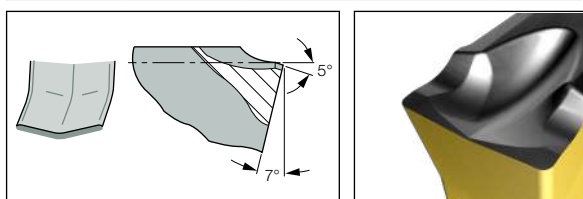
JT-Type

Based on the J-type chipformer with a T-land reinforced frontal cutting edge.

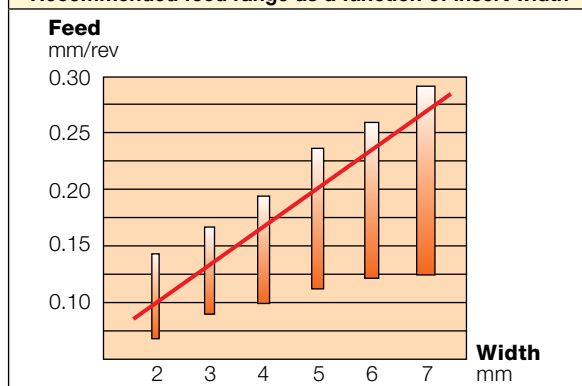
- Provides a solution for the intermediate range between the strong and negative C-type configuration and the positive edged J-type chipformer.
- Can be used on a wide range of materials.
- Same manner as the J-type, but it can be used at higher feeds due to its reinforced edge.

$$f \approx \frac{W_{\text{insert}}}{24} \text{ [mm/rev]}$$

Alloy Steel	Austenitic Stainless	High Temp. Alloys	Nonferrous Materials	Cast Iron
✓	✓	✓	✗	✓



Recommended feed range as a function of insert width

**J-Type**

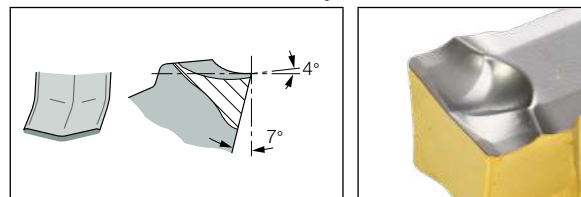
- First choice for soft materials, parting tubes, small diameters and thin-walled parts
- Cutting edge with positive rake
- Low-to-medium feed

$$f \approx \frac{W_{\text{insert}}}{26} \text{ [mm/rev]}$$

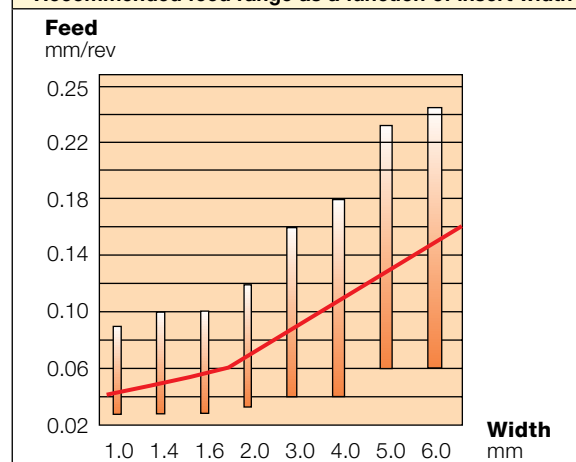
Alloy Steel	Austenitic Stainless	High Temp. Alloys	Nonferrous Materials	Cast Iron
✓	✓	✓	✓	✗

Recommendations are for neutral inserts.

For R/L inserts, reduce feed by 20-40%.



Recommended feed range as a function of insert width

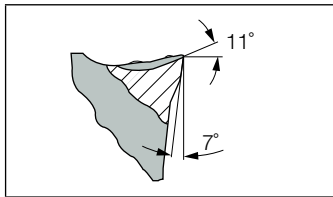


Z-Type

- Cutting edge with high positive rake, suitable for parting tubes, thin walled parts and for small diameters
- Suitable for soft materials
- Excellent for cutting bearing steel and stainless steel
- Low-to-medium feeds

$$f \approx \frac{W_{\text{insert}}}{28} \text{ [mm/rev]}$$

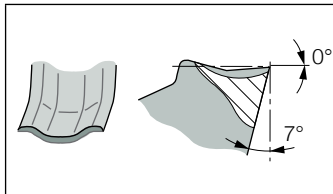
Alloy Steel	Austenitic Stainless	High Temp. Alloys	Nonferrous Materials	Cast Iron
✓	✓	✓	✓	X

**LF**

- Parting and Grooving Insert for Stainless Steel & soft materials
- Miniature Parts
- Low Feeds

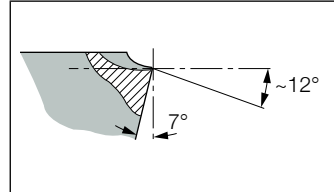
$$f \approx \frac{W_{\text{insert}}}{31} \text{ [mm/rev]}$$

Alloy Steel	Austenitic Stainless	High Temp. Alloys	Nonferrous Materials	Cast Iron
✓	✓	✓	X	X

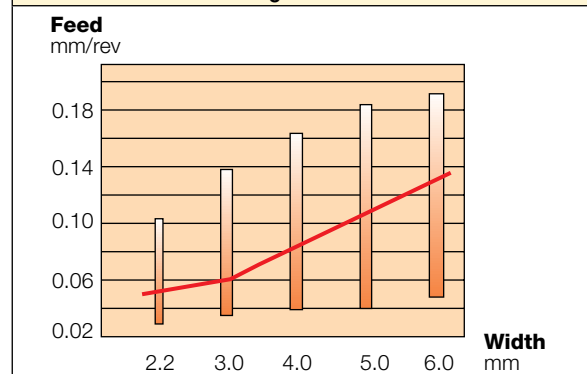
**UA/UT-Type**

- A chipformer for use at low feeds
- Recommended for CrNi alloys and low carbon steel, especially in the bearing industry and on similar, ductile materials
- The narrow chipformer design ensures short deformed chips and provides improved performance
- **UA** and **UT** are similar chipformers. **UT** is slightly tighter than the **UA** chipformer

$$f \approx \frac{W_{\text{insert}}}{40} \text{ [mm/rev]}$$



Recommended feed range as a function of insert width

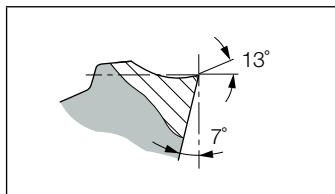


P-Type

- Very positive rake inclination and sharp cutting edge
- For soft materials, slim parts and general parting
- Low feeds

$$f \approx \frac{W_{\text{insert}}}{55} \text{ [mm/rev]}$$

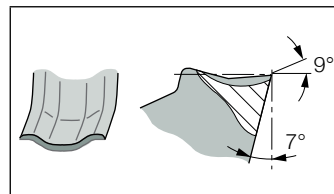
Alloy Steel	Austenitic Stainless	High Temp. Alloys	Nonferrous Materials	Cast Iron
✓	✓	✗	✓	✗

**A-Type**

- Positive rake, sharp edge
- For parting aluminum
- In grade **IC20**

$$f \approx \frac{W_{\text{insert}}}{43} \text{ [mm/rev]}$$

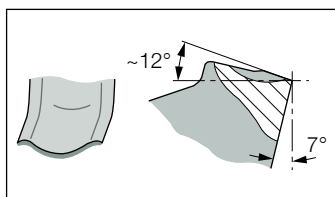
Alloy Steel	Austenitic Stainless	High Temp. Alloys	Nonferrous Materials	Cast Iron
✗	✗	✗	✓	✗

**M-Type**

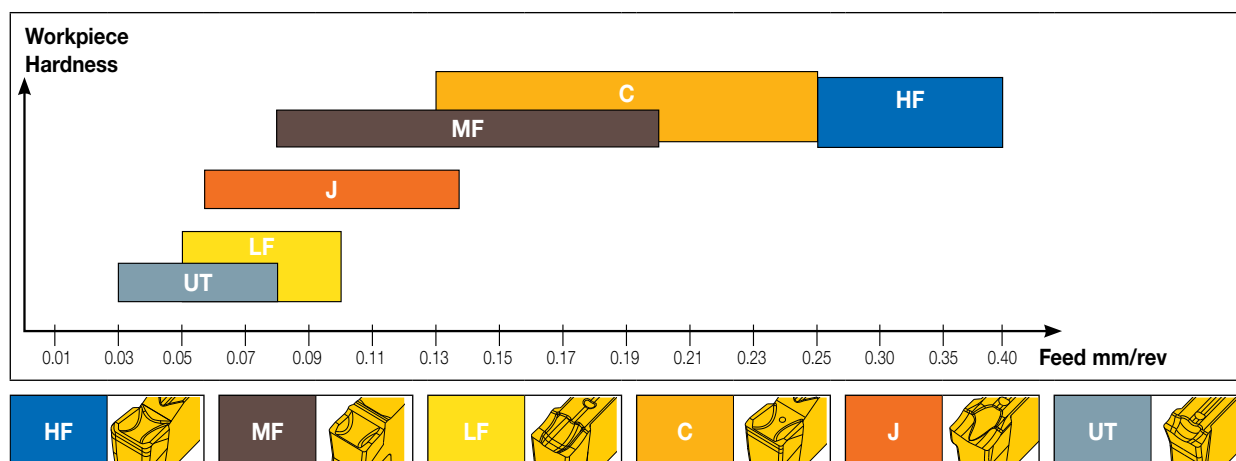
- Similar to C-type, but with modified edge (smaller K-land)
- Improved chip control at medium feed

$$f \approx \frac{W_{\text{insert}}}{22} \text{ [mm/rev]}$$

Alloy Steel	Austenitic Stainless	High Temp. Alloys	Nonferrous Materials	Cast Iron
✓	✗	✓	✗	✗



Main Chipformers Recommended Feed



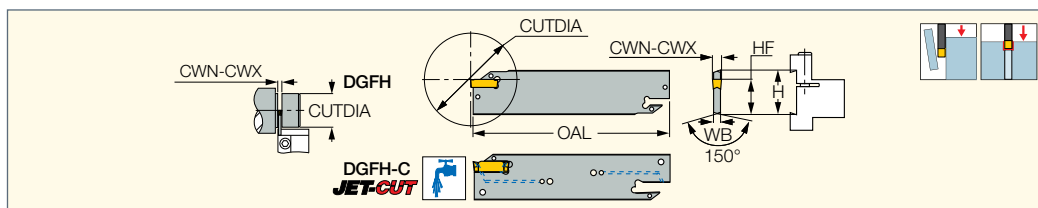
Selection of Chipformers for Various Workpiece Materials

Inserts		Alloy Steel	Austenitic Stainless	High Temp. Alloys	Nonferrous Materials	Cast Iron
High	HF	✓	✗	✗	✗	✓
	C	✓	✗	✓ (IC20 only)	✓ (IC20 only)	✓
	W	✓	✗	✗	✗	✓
	C-jet (Coolant)	✓	✓	✓	✗	✗
Feed	MF	✓	4 Medium to high feed	✓	✗	✓
	JT	✓	✓	✓	✗	✓
	J	✓	✓	✓	✓	✗
	Z	✓	✓	✓	✓	✗
Low	LFT	✓	✓	✓	✗	✗
	LF	✓	✓	✓	✗	✗
	UT	✓	✗	✗	✗	✗
	P	✓	✓	✗	✓	✗
	A	✗	✗	✗	✓	✗

✓ First choice

DO-GRIP *TWISTED 2-SIDED* **HELI-GRIP**
DGFH

Parting and Grooving Blades
with and without Coolant
Channels Carrying DO-GRIP
and HELI-GRIP Inserts



Designation	H	CWN ⁽⁴⁾	CWX ⁽⁵⁾	WB	OAL	HF	CUTDIA	Insert
DGFH 26-1.4	26.0	1.40	1.40	2.50 ⁽⁷⁾	110.00	21.4	26.0	DG. 14..
DGFH 26-2 ⁽¹⁾	26.0	1.90 ⁽⁶⁾	2.50	1.60	110.00	21.4	39.0 ⁽⁸⁾	DG. 1.../DG. 2...
DGFH 26-3 ⁽¹⁾	26.0	3.00 ⁽⁶⁾	3.18	2.40	110.00	21.4	39.0 ⁽⁸⁾	DG. 1.../DG. 3...
DGFH 26C-3 ⁽²⁾	26.0	3.00	3.18	2.40	110.00	21.4	39.0 ⁽⁸⁾	DGNC/DGRC/DGLC 3...
DGFH 26-4	26.0	4.00	4.00	3.20	110.00	21.4	80.0	DG. 4.../GRIP 4...
DGFH 32-1.4	32.0	1.40	1.40	2.50 ⁽⁷⁾	150.00	24.8	26.0	DG. 14
DGFH 32-2 ⁽¹⁾	32.0	1.90 ⁽⁶⁾	2.50	1.80	150.00	24.8	39.0 ⁽⁸⁾	DG. 1.../DG. 2...
DGFH 32-3 ⁽¹⁾	32.0	3.00 ⁽⁶⁾	3.18	2.40	150.00	24.8	39.0 ⁽⁸⁾	DG. 1.../DG. 3...
DGFH 32C-3 ⁽²⁾	32.0	3.00	3.18	2.40	150.00	24.8	39.0 ⁽⁸⁾	DGNC/DGRC/DGLC 3...
DGFH 32-4	32.0	4.00	4.00	3.20	150.00	24.8	100.0	DG. 4.../GRIP 4...
DGFH 32C-4 ⁽³⁾	32.0	4.00	4.00	3.20	150.00	24.8	69.0	DGNC/DGRC/DGLC 4...
DGFH 32-5	32.0	5.00	5.00	4.00	150.00	24.8	120.0	DG. 5.../GRIP 5...
DGFH 32-6	32.0	6.00	6.35	5.20	150.00	24.8	120.0	DG. 6.../GRIP 6...
DGFH 45-3	45.0	3.00 ⁽⁶⁾	3.18	2.40	225.00	38.0	160.0	DG. 1.../DG. 3...
DGFH 45-4	45.0	4.00	4.10	3.20	225.00	38.0	160.0	DG. 4.../GRIP 4...
DGFH 45-5	45.0	4.80	5.00	4.00	225.00	38.0	160.0	DG. 5.../GRIP 5...
DGFH 45-6	45.0	6.00	6.40	5.20	225.00	38.0	160.0	DG. 6.../GRIP 6...

• DG..1.0 insert can be mounted into pocket sizes 2 and 3, in which case the pocket width has to be modified • For user guide, see pages 540-547

⁽¹⁾ For CUTDIA 50 mm, use single-ended insert (should be modified by the user)

⁽²⁾ Blades with frontal coolant holes (JET-CUT) • For CUTDIA 50 mm, use single-ended insert (should be modified by the user)

⁽³⁾ These blades are suitable for turning, using GRIP 4 inserts • Blades with frontal coolant holes (JET-CUT)

⁽⁴⁾ Minimum cutting width

⁽⁵⁾ Maximum cutting width

⁽⁶⁾ For DG. 1... insert, modify holder

⁽⁷⁾ Thickness at the D.O.C. area is 1.0 mm

⁽⁸⁾ Maximum diameter with double-sided inserts.

Inserts: DGN-LF/LFT • DGN-MF • DGN/DGNC/DGNM-C • DGR/L-C DGRC/LC-C • DGN/DGNM-J/JS/JT • DGR/L-J/JS • DGN-P • DGN-UT/UA

• DGN-W • DGN-WP • DGN-Z • DGR-P • DGR-WP • DGR-Z/ZS • GRIP • GRIP (full radius)

Holders: C#-TBK-R/L • HSK A-WH-TBK-R/L • SGTBF • SGTBK • SGTBR/L • SGTBU/SGTBN • UBHCR/L

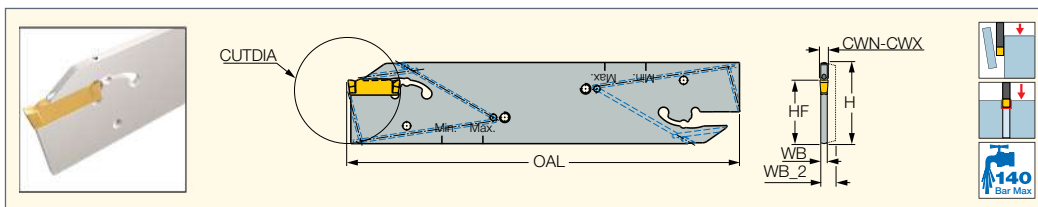
Spare Parts

Designation						
DGFH 26-1.4	EDG 23B*					
DGFH 26-2	EDG 23A*					
DGFH 26-3	EDG 23A*					
DGFH 26C-3	EDG 23A*	SGC 340	SGCU 341*	CGF 343*	CF 343*	CGM 343*
DGFH 26-4	EDG 23A*					
DGFH 32-1.4	EDG 23B*					
DGFH 32-2	EDG 33A*					
DGFH 32-3	EDG 33A*					
DGFH 32C-3	EDG 33A*	SGC 340	SGCU 341*	CGF 343*	CF 343*	CGM 343*
DGFH 32-4	EDG 33A*					
DGFH 32C-4	EDG 33A*	SGC 340	SGCU 341*	CGF 343*	CF 343*	CGM 343*
DGFH 32-5	EDG 33A*					
DGFH 32-6	EDG 33A*					
DGFH 45-3	EDG 33A*					
DGFH 45-4	EDG 33A*					
DGFH 45-5	EDG 33A*					
DGFH 45-6	EDG 33A*					

* Optional, should be ordered separately

DGFH-JHP

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



Designation	CWN ⁽²⁾	CWX ⁽³⁾	WB	WB_2	OAL	H	HF	CUTDIA	Insert			
DGFH 32-2-JHP ⁽¹⁾	1.90 ⁽⁴⁾	2.50	1.80	2.5	150.00	32.0	24.8	39.0	DG. 1.../DG. 2...		SGC 340	EDG 33A-JHP*
DGFH 32-3-JHP	3.00 ⁽⁴⁾	3.18	2.50	-	152.00	32.0	24.8	90.0	DG. 1.../DG. 3...	SR M2.0X2.5DIN916	SGC 340	EDG 33A-JHP*
DGFH 32-4-JHP	4.00	4.00	3.20	-	152.00	32.0	24.9	90.0	DG. 4.../GRIP 4...	SR M2.0X2.5DIN916	SGC 340	EDG 33A-JHP*
DGFH 32-5-JHP	5.00	5.00	4.00	-	152.00	32.0	24.9	90.0	DG. 5.../GRIP 5...	SR M2.0X2.5DIN916	SGC 340	EDG 33A-JHP*
DGFH 32-6-JHP ⁽¹⁾	6.00	6.35	5.20	-	160.00	32.0	24.9	90.0	DG. 6.../GRIP 6...		SGC 340	EDG 33A-JHP*

• For user guide and accessories, see pages 540-547

⁽¹⁾ Only an upper channel

⁽²⁾ Minimum cutting width

⁽³⁾ Maximum cutting width

⁽⁴⁾ For DG. 1... insert, modify holder

* Optional, should be ordered separately

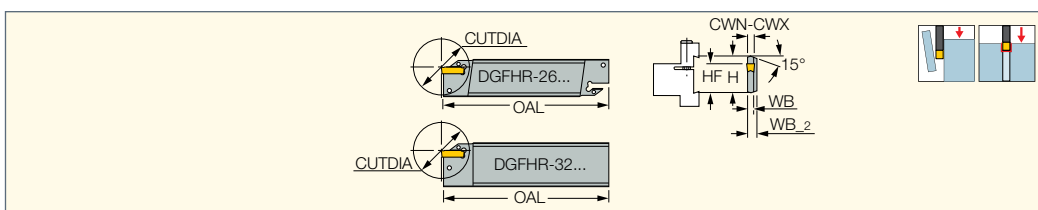
Inserts: DGN-LF/LFT • DGN-MF • DGN-P • DGN-UT/UA • DGN-W • DGN-WP • DGN-Z • DGN/DGNC/DGNM-C • DGN/DGNM-J/JS/JT • DGR-P

• DGR-WP • DGR-Z/ZS • DGR/L-C DGR/LC-C • DGR/L-J/JS • GRIP • GRIP (full radius)

Holders: TGTBU-JHP

DGFHR/L

Parting and Grooving Reinforced
Blades Carrying DO-GRIP Inserts



Designation	H	CWN ⁽¹⁾	CWX ⁽²⁾	WB_2	WB	OAL	HF	CUTDIA ⁽³⁾	Machines	Insert	
DGFHR 26T16-2	26.0	1.90	2.50	8.0	1.70	110.00	21.4	42.0	TNS-30	DG. 1.../DG. 2...	EDG 23A*
DGFHR/L 26T23-2	26.0	1.90	2.50	8.0	1.60	110.00	21.4	42.0	TNS-30/112	DG. 1.../DG. 2...	EDG 23A*
DGFHR/L 26T16-3	26.0	3.00	3.18	8.0	2.40	110.00	21.4	30.0	TNS-30	DG. 1.../DG. 3...	EDG 23A*
DGFHR/L 26T23-3	26.0	3.00	3.18	8.0	2.40	110.00	21.4	42.0	TNS-30/42	DG. 1.../DG. 3...	EDG 23A*
DGFHR/L 32T22-2	32.0	1.90	2.50	8.0	1.60	110.00	24.8	42.0	TNS-42	DG. 1.../DG. 2...	EDG 33A*
DGFHR/L 32T33-3	32.0	3.00	3.18	8.0	2.40	110.00	24.8	60.0	TNS-42/60/65	DG. 1.../DG. 3...	EDG 33A*
DGFHR/L 32T33-4	32.0	4.00	4.00	8.0	3.40	110.00	24.8	60.0	TNS-42/60/65	DG. 4.../GRIP 4...	EDG 33A*
DGFHL 32T41-4	32.0	4.00	4.00	10.0	3.40	110.00	24.8	80.0	TNS-65/80/480	DG. 4.../GRIP 4...	EDG 33A*
DGFHR 32T41-4	32.0	4.00	4.00	8.0	3.40	110.00	24.8	80.0	TNS-65/80/480	DG. 4.../GRIP 4...	

• Insert limit is T_{max}=18 mm. If deeper penetration is required, the insert should be modified into single-ended by the user.

• DG..1.0 insert can be mounted into pocket sizes 2 and 3. in which case the pocket width has to be modified - see page 480

• For user guide, see pages 540-547

⁽¹⁾ Minimum cutting width • For DG. 1.0 insert - modify holder

⁽²⁾ Maximum cutting width

⁽³⁾ The specified limit refers to the tool

* Optional, should be ordered separately

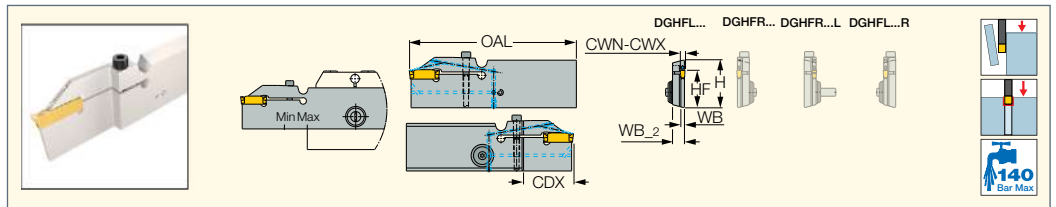
Inserts: DGN-LF/LFT • DGN-P • DGN-UT/UA • DGN-WP • DGN-Z • DGN/DGNC/DGNM-C • DGN/DGNM-J/JS/JT • DGR-P • DGR-WP • DGR-Z/ZS

• DGR/L-C DGR/LC-C • DGR/L-J/JS

Holders: C#-TBK-R/L • HSK A-WH-TBK-R/L • SGTBF • SGTBR/L • SGTBU/SGTBN • UBHCR/L



DO-GRIP
 TWISTED 2-SIDED **JETCUT**
DGFHR/L-BC-JHP

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


Designation	CWN ⁽¹⁾	CWX ⁽²⁾	WB_2	WB	OAL	H	HF	CDX ⁽³⁾	Insert				
DGFHR/L 32BC-3T33-JHP	3.00	3.18	7.9	2.40	111.00	32.0	24.8	33.00	DG. 3..	SR M4-21532	HW 3.0	SGC 340	SR M3X3DIN913
DGFHL 32BC-3T33R-JHP	3.00	3.18	7.9	2.40	111.00	32.0	24.8	33.00	DG. 3..	SR M4-21532	HW 3.0	SGC 340	SR M3X3DIN913
DGFHR 32BC-3T33L-JHP	3.00	3.18	7.9	2.40	111.00	32.0	24.8	33.00	DG. 3..	SR M4-21532	HW 3.0	SGC 340	SR M3X3DIN913

• For user guide and accessories, see pages 540-547

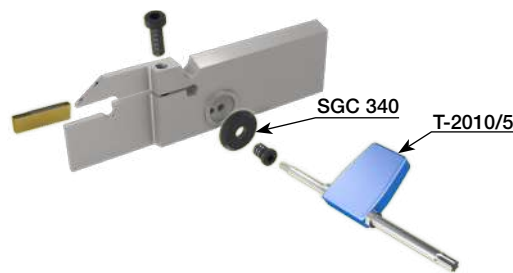
 • ⁽¹⁾ Minimum cutting width • For DG: 1.0 insert - modify holder

 • ⁽²⁾ Maximum cutting width

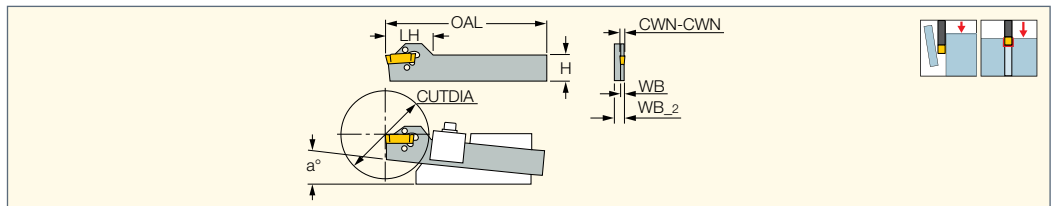
 • ⁽³⁾ The specified limit refers to the tool

Inserts: DGN-LF/LFT • DGN-MF • DGN-P • DGN-UT/UA • DGN-Z • DGN/DGNC/DGNM-C • DGN/DGNM-J/JS/JT • DGR-Z/ZS • DGR/L-C DGRC/LC-C

• DGR/L-J/JS

Holders: TGTBU-JHP

DO-GRIP
 TWISTED 2-SIDED

DGFS

 Blades for Multi-Spindle
 Machines, Replacement for
 HSS and Brazed Tools


Designation	H	CWN ⁽⁷⁾	CWX ⁽⁸⁾	CUTDIA	WB	WB_2	OAL	LH	a°	
DGFS 0-12-2 ⁽¹⁾	12.7	1.90	2.50	32.0	1.60	3.2	110.00	32.0	0	EDG 33B*
DGFS 0-17-2 ⁽²⁾	17.4	1.90	2.50	35.0	1.60	3.2	110.00	32.0	0	EDG 33B*
DGFS 0-17-3 ⁽²⁾	17.4	3.00	3.18	60.0	2.40	3.2	110.00	32.0	0	EDG 33B*
DGFS 5-17-2 ⁽³⁾	17.4	1.90	2.50	35.0	1.60	3.2	110.00	32.0	5	EDG 33B*
DGFS 5-17-3 ⁽³⁾	17.4	3.00	3.18	60.0	2.40	3.2	110.00	32.0	5	EDG 33B*
DGFS 5-17-4 ⁽³⁾	17.4	4.00	4.00	60.0	3.20	3.2	110.00	32.0	5	EDG 33B*
DGFS 5-22-2 ⁽⁴⁾	22.2	1.90	2.50	50.0	1.60	3.2	150.00	32.0	5	EDG 33B*
DGFS 5-22-3 ⁽⁵⁾	22.2	3.00	3.18	75.0	2.40	3.2	150.00	32.0	5	EDG 33B*
DGFS 5-22-4 ⁽⁵⁾	22.2	4.00	4.00	80.0	3.20	3.2	150.00	32.0	5	EDG 33B*
DGFS 5-24-3	23.8	3.00	3.18	80.0	2.40	3.2	150.00	32.0	5	EDG 33B*
DGFS 5-28-2 ⁽⁶⁾	28.5	1.90	2.50	65.0	1.60	3.2	150.00	32.0	5	EDG 33B*
DGFS 5-28-4 ⁽⁶⁾	28.5	4.00	4.00	100.0	3.20	3.2	150.00	32.0	5	EDG 33B*

• DG..1.0 insert can be mounted into pocket sizes 2 and 3. in which case the pocket width has to be modified -see page 480

• For user guide, see pages 540-547

 • ⁽¹⁾ Toolholder assembly X18-1,46,47-WT,160-CL,354-CL,701-ACL,702,702-CL,703,703-CL,704,704-CL,6921,6925

 • ⁽²⁾ Toolholder assembly E-7,47,102-CL,103-CL,161-A-CL,162-A-CL

 • ⁽³⁾ Toolholder assembly 226,226-CL,275,275-CL,276-CL,361-CL,431,630,707-A,707-A-CL

 • ⁽⁴⁾ Toolholder assembly 100-CL,274,277,277-CL,274-CL,370,383-CL, 6722,6754,6755,6854,6855,6922,51,51-CL,353-CL,167,370-CL

 • ⁽⁵⁾ Toolholder assembly 100-CL,274,277,277-CL,274-CL,370,383-CL, 6722,6754,6755,6854,6855,51,51-CL,353-CL,167,370-CL

 • ⁽⁶⁾ Toolholder assembly 278,278-CL,279,279-CL,280,280-CL,281,281-CL,375-CL,359-CL,372-CL,A6120,52,52-CL

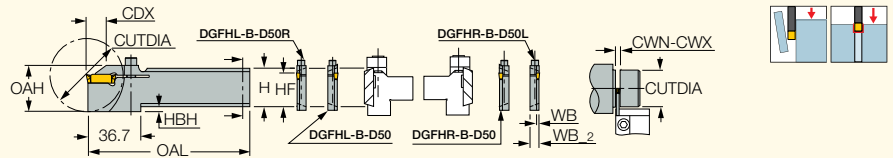
 • ⁽⁷⁾ Minimum cutting width • For DG: 1.0 insert - modify holder

 • ⁽⁸⁾ Maximum cutting width

* Optional, should be ordered separately

Inserts: DGN-LF/LFT • DGN/DGNC/DGNM-C • DGR/L-C DGRC/LC-C • DGN/DGNM-J/JS/JT • DGR/L-J/JS • DGN-P • DGN-UT/UA • DGN-WP

• DGN-Z • DGR-P • DGR-WP • DGR-Z/ZS • GRIP • GRIP (full radius)

DGFHR/L-B-D..(R/L)
 Reinforced Type Blades
 with Screw Clamping


Designation	H ⁽⁴⁾	CWN ⁽⁵⁾	CWX ⁽⁶⁾	WB	WB_2	OAL	OAH	HF	HBH	CDX ⁽⁷⁾	CUTDIA ⁽⁸⁾	Insert		
DGFHR/L 26B-2D50 ⁽¹⁾	26.0	1.90	2.50	1.60	8.0	110.00	33.7	21.4	3.6	18.00	50.0	DG. 1.../DG. 2..	SR M4X20 DIN912	HW 3.0
DGFHL 26B-2D50R ⁽²⁾	26.0	1.90	2.50	1.60	8.0	110.00	31.5	21.4	3.7	18.00	50.0	DG. 1.../DG. 2..	SR M4X20 DIN912	HW 3.0
DGFHR 26B-2D50L ⁽²⁾	26.0	1.90	2.50	1.60	8.0	110.00	31.5	21.4	3.7	18.00	50.0	DG. 1.../DG. 2..	SR M4X20 DIN912	HW 3.0
DGFHR/L 26B-3D50 ⁽¹⁾	26.0	3.00	3.18	2.40	8.0	110.00	31.5	21.4	3.7	18.00	50.0	DG. 1.../DG. 3..	SR M4X20 DIN912	HW 3.0
DGFHL 26B-3D50R ⁽²⁾	26.0	3.00	3.18	2.40	8.0	110.00	31.5	21.4	3.7	18.00	50.0	DG. 1.../DG. 3..	SR M4X20 DIN912	HW 3.0
DGFHR 26B-3D50L ⁽²⁾	26.0	3.00	3.18	2.40	8.0	110.00	31.5	21.4	3.7	18.00	50.0	DG. 1.../DG. 3..	SR M4X20 DIN912	HW 3.0
DGFHR/L 32B-2D50 ⁽³⁾	32.0	1.90	2.50	1.60	8.0	120.00	31.5	24.8	-	18.00	50.0	DG. 1.../DG. 2..	SR M4X20 DIN912	HW 3.0
DGFHL 32B-2D50R ⁽²⁾	32.0	1.90	2.50	1.60	8.0	120.00	31.5	24.8	-	18.00	50.0	DG. 1.../DG. 2..	SR M4X20 DIN912	HW 3.0
DGFHR 32B-2D50L ⁽²⁾	32.0	1.90	2.50	1.60	8.0	120.00	31.5	24.8	-	18.00	50.0	DG. 1.../DG. 2..	SR M4X20 DIN912	HW 3.0
DGFHR/L 32B-3D50 ⁽³⁾	32.0	3.00	3.18	2.40	8.0	120.00	31.5	24.8	-	18.00	50.0	DG. 1.../DG. 3..	SR M4X20 DIN912	HW 3.0
DGFHL 32B-3D50R ⁽²⁾	32.0	3.00	3.18	2.40	8.0	120.00	31.5	24.8	-	18.00	50.0	DG. 1.../DG. 3..	SR M4X20 DIN912	HW 3.0
DGFHR 32B-3D50L ⁽²⁾	32.0	3.00	3.18	2.40	8.0	120.00	31.5	24.8	-	18.00	50.0	DG. 1.../DG. 3..	SR M4X20 DIN912	HW 3.0

• Insert (double sided) limit is CDX=18 mm, If deeper penetration is required the insert should be changed to a single-ended insert DGNM type.

• DG..1.0 insert can be mounted into pocket sizes 2 and 3, in which case the pocket width has to be modified-see page 480

• For user guide, see pages 540-547

⁽¹⁾ For Traub machines, model TNC 30, TNM 28, TNS 26/30/42/112, TNA 300, TNK 260

⁽²⁾ For Tornos Bechler, Emco 2000/20, 2000/26 machines

⁽³⁾ For TRAUB machines, model TNC 42/65, TNM 42/65, TNS 42/60/65, TNA 300/400

⁽⁴⁾ Mounted on all ISCAR standard blocks

⁽⁵⁾ Minimum cutting width • For DG: 1.0 insert - modify holder

⁽⁶⁾ Maximum cutting width

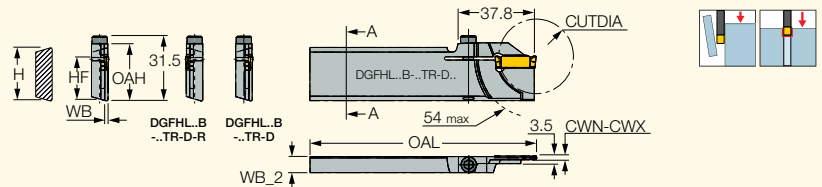
⁽⁷⁾ Cutting depth maximum

⁽⁸⁾ The specified limit refers to the tool

Inserts: DGN-LF/LFT • DGN-MF • DGN-P • DGN-UT/UA • DGN-WP • DGN-Z • DGN/DGNC/DGNM-C • DGN/DGNM-J/JS/JT • DGR-P • DGR-WP

• DGR-Z/ZS • DGR/L-C DGRC/LC-C • DGR/L-J/JS

Holders: C#-TBK-R/L • HSK A-WH-TBK-R/L • SGTBF • SGTBR/L • SGTBU/SGTBN • UBHCR/L

DGFHL-26B-TR-D
 Reinforced Type Blades with
 Screw Clamping for TRAUB
 and Index Machines


Designation	H ⁽²⁾	CWN ⁽³⁾	CWX ⁽⁴⁾	WB	WB_2	OAL	OAH	HF	CUTDIA ⁽⁵⁾	Insert		
DGFHL 26B-1.5TR-D20 ⁽¹⁾	26.0	1.00	1.50	1.20	7.9	110.00	27.9	21.4	20.0	DG. 1.../DG. 15..	SR M4X20 DIN912	HW 3.0
DGFHL 26B-2TR-D36	26.0	1.90 ⁽⁶⁾	2.50	1.60	7.9	110.00	27.9	21.4	36.0	DG. 1.../DG. 2..	SR M5X20-01172	HW 3.0
DGFHL 26B-2TR-D36R	26.0	1.90 ⁽⁶⁾	2.50	1.60	7.9	110.00	27.9	21.4	36.0	DG. 1.../DG. 2..	SR M4X20 DIN912	HW 3.0
DGFHL 26B-3TR-D36	26.0	3.00 ⁽⁶⁾	3.18	2.40	7.9	110.00	27.9	21.4	36.0	DG. 1.../DG. 3..	SR M4X20 DIN912	HW 3.0
DGFHL 26B-3TR-D36R	26.0	3.00 ⁽⁶⁾	3.18	2.40	7.9	110.00	27.9	21.4	36.0	DG. 1.../DG. 3..	SR M5X20-01172	HW 3.0

• Insert limit is Tmax=18 mm. If deeper penetration is required, the insert should be modified into single-ended by the user

• DG..1.0 insert can be mounted into pocket sizes 2 and 3, in which case the pocket width has to be modified - see page 480

• For user guide, see pages 540-547

⁽¹⁾ Do not use DG.. 1.4 on this tool!

⁽²⁾ Mounted on all ISCAR standard blocks

⁽³⁾ Minimum cutting width

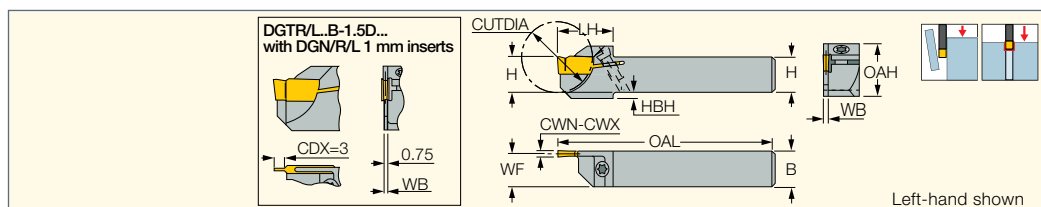
⁽⁴⁾ Maximum cutting width

⁽⁵⁾ The specified limit refers to the tool

⁽⁶⁾ For DG: 1.0 insert - modify holder

Inserts: DGN-LF/LFT • DGN-P • DGN-UT/UA • DGN-WP • DGN-Z • DGN/DGNC/DGNM-C • DGN/DGNM-J/JS/JT • DGR-Z/ZS • DGR/L-C DGRC/LC-C

• DGR/L-J/JS

DGTR/L-B-D-SHParting and Grooving Short
Head Tools for CNC and
Swiss Automatics

Designation	CWN ⁽²⁾	CWX ⁽³⁾	H	B	WB	WF	LH	CUTDIA	OAH	HBH	OAL	Insert		
DGTR/L 8B-1.4SH	1.40	1.40	8.0	8.0	1.00	7.50	18.0	10.0	15.4	2.0	125.00	DG. 14..	SR 16-236 P(a)	T-15/5
DGTR/L 10B-1.4D20SH	1.40	1.40	10.0	10.0	1.00	9.50	18.0	20.0	13.7	2.0	120.00	DG. 14..	SR 16-236 P(a)	T-15/5
DGTR/L 10B-1.5D20SH ⁽¹⁾	1.00	1.50	10.0	10.0	1.00	9.50	19.0	20.0	15.7	2.0	120.00	DG. 1.../DG. 15..	SR 16-236 P(a)	T-15/5
DGTR/L 10B-2D20SH	1.90	2.50	10.0	10.0	1.60	9.20	19.0	20.0	15.7	2.0	120.00	DG. 1.../DG. 2..	SR 16-236 P(a)	T-15/5
DGTR/L 12B-1.4D24SH	1.40	1.40	12.0	12.0	1.00	11.50	19.0	24.0	15.7	-	120.00	DG. 14..	SR 16-236 P(a)	T-15/5
DGTR/L 12B-1.5D24SH ⁽¹⁾	1.00	1.50	12.0	12.0	1.00	11.40	19.0	24.0	15.7	-	120.00	DG. 1.../DG. 15..	SR 16-236 P(a)	T-15/5
DGTR/L 12B-2D24SH	1.90	2.50	12.0	12.0	1.60	11.20	19.0	24.0	15.7	-	120.00	DG. 1.../DG. 2..	SR 16-236 P(a)	T-15/5
DGTR 12B-2D24SH-L85	1.90	2.50	12.0	12.0	1.60	11.20	19.0	24.0	15.7	-	85.00	DG. 1.../DG. 2..	SR 16-236 P(a)	T-15/5
DGTR/L 12B-3D24SH	3.00	3.18	12.0	12.0	2.40	10.80	19.0	24.0	15.7	-	120.00	DG. 3.../DG. 10..	SR 16-236 P(a)	T-15/5
DGTR/L 16B-1.5D25SH ⁽¹⁾	1.00	1.50	16.0	16.0	1.20	15.40	19.5	25.4	19.7	-	120.00	DG. 1.../DG. 15..	SR 16-236 P(a)	T-15/5
DGTR/L 16B-2D25SH	1.90	2.50	16.0	16.0	1.60	15.20	19.5	25.4	19.7	-	120.00	DG. 1.../DG. 2..	SR 16-236 P(a)	T-15/5
DGTR/L 16B-3D25SH	3.00	3.18	16.0	16.0	2.40	14.80	19.5	25.4	19.7	-	120.00	DG. 1.../DG. 3..	SR 16-236 P(a)	T-15/5
DGTR/L 20B-1.5D25SH ⁽¹⁾	1.00	1.50	20.0	20.0	1.20	19.40	19.5	25.4	23.7	-	120.00	DG. 1.../DG. 15..	SR 16-236 P(a)	T-15/5
DGTR/L 20B-3D25SH	3.00	3.18	20.0	20.0	2.40	18.80	19.5	25.4	23.7	-	120.00	DG. 1.../DG. 3..	SR 16-236 P(a)	T-15/5

• DGN/R/L 1 mm inserts can also be mounted into pocket sizes 2 and 3. For insert depth capacity table and modification instructions

For the 2 and 3 holder pockets, see page 480 • For user guide, see pages 540-547

⁽¹⁾ Do not use DG.. 1.4 on this tool!

⁽²⁾ Minimum cutting width

⁽³⁾ Maximum cutting width

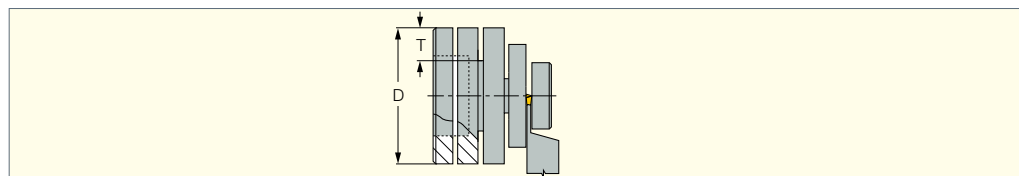
^(a) Recommended tightening torque for this item: 3 N*m (26.5 lbf*in)

Inserts: DGN-LF/LFT • DGN-P • DGN-UT/UA • DGN-WP • DGN-Z • DGN/DGNC/DGNM-C • DGN/DGNM-J/JS/JT • DGR-P • DGR-WP • DGR-Z/ZS

• DGR/L-C DGRC/LC-C • DGR/L-J/JS

Depth Capacity DGTR/L-B-D

Depth of Cut as Function
of Workpiece Diameter
(DGN/R/L-100... excluded)



Designation	øDmax															
DGTR/L 10B-1.4D20	—	—	—	—	—	—	—	—	—	20	23	26	32	45	76	NL
DGTR/L 12B-1.4D30	—	—	—	—	—	30	32	35	38	43	50	62	83	125	300	NL
DGTR/L 16B-1.4D30	—	—	—	—	—	30	32	35	38	43	50	62	83	125	300	NL
DGTR/L 20B-1.4D30	—	—	—	—	—	30	32	35	38	43	50	62	83	125	300	NL
DGTR/L 10B-2D30	—	—	—	—	—	30	32	35	38	43	50	62	83	125	300	NL
DGTR/L 12B-2D30	—	—	—	—	—	30	32	35	38	43	50	62	83	125	300	NL
DGTR/L 16B-2D32	—	—	—	—	32	35	37	41	47	55	69	93	150	400	NL	NL
DGTR/L 20B-2D35	—	—	—	75	90	113	155	250	650	NL	NL	NL	NL	NL	NL	NL
DGTR/L 25B-2D35	—	—	—	75	90	113	155	250	650	NL	NL	NL	NL	NL	NL	NL
DGTR/L 12B-3D30	—	—	—	—	—	30	32	35	38	43	50	62	83	125	300	NL
DGTR/L 16B-3D35	—	—	—	35	39	42	46	51	59	71	91	130	230	1200	NL	NL
DGTR/L 20B-3D40	56	62	71	83	102	134	200	400	NL	NL	NL	NL	NL	NL	NL	NL
DGTR/L 25B-3D40	56	62	71	83	102	134	200	400	NL	NL	NL	NL	NL	NL	NL	NL

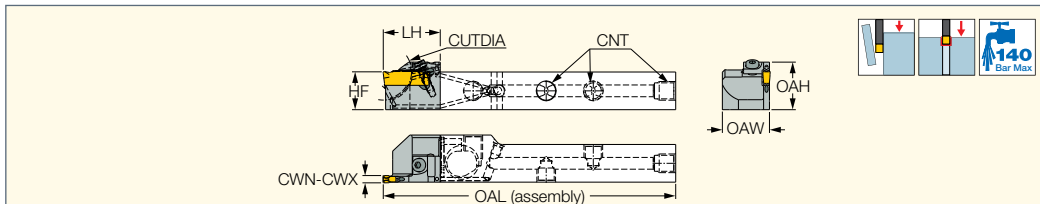
Depth T → 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4

NL- No Limit

Example:

For 9 mm depth of groove on a 75 mm workpiece diameter, six tools may be used.

NQCH-DGTR/L-D-SH-JHP
Screw Lock JETCUT Modular
Heads for Swiss Type Machines
- Double-Sided Parting Inserts



Designation	CWN ⁽¹⁾	CWX ⁽²⁾	HF	OAW	OAH	LH	OAL	CUTDIA	Insert		
NQCH12-DGTL-2D24SH-JHP	1.90	2.50	12.1	20.00	16.20	24.0	124.00	24.0	DGN 2	SR M3X10DIN912	HW 2.5
NQCH12-DGTR-2D24SH-JHP	1.90	2.50	12.1	20.00	16.20	24.2	124.20	24.0	DGN 2	SR M3X10DIN912	HW 2.5
NQCH16-DGTL-2D24SH-JHP	1.90	2.50	16.1	20.00	20.20	24.0	124.00	24.0	DGN 2	SR M3X10DIN912	HW 2.5
NQCH16-DGTR-2D24SH-JHP	1.90	2.50	16.1	20.00	20.20	24.2	124.20	24.0	DGN 2	SR M3X10DIN912	HW 2.5
NQCH12-DGTL-3D24SH-JHP	3.00	3.18	12.1	20.00	16.20	24.0	124.00	24.0	DGN 3	SR M3X10DIN912	HW 2.5
NQCH12-DGTR-3D24SH-JHP	3.00	3.18	12.1	20.00	16.20	24.2	124.20	24.0	DGN 3	SR M3X10DIN912	HW 2.5
NQCH16-DGTL-3D24SH-JHP	3.00	3.18	16.1	20.00	20.20	24.0	124.00	24.0	DGN 3	SR M3X10DIN912	HW 2.5
NQCH16-DGTR-3D24SH-JHP	3.00	3.18	16.1	20.00	20.20	24.2	124.20	24.0	DGN 3	SR M3X10DIN912	HW 2.5

⁽¹⁾ Minimum cutting width

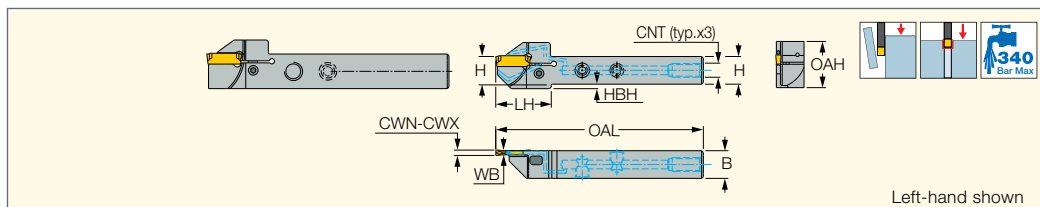
⁽²⁾ Maximum cutting width

Inserts: DGN-LF/LFT • DGN-MF • DGN-P • DGN-UT/UA • DGN-W • DGN-WP • DGN-Z • DGN/DGNC/DGNM-C • DGN/DGNM-J/JS/JT • DGR-P
• DGR-WP • DGR-Z/ZS • DGR/L-C DGR/LC-C • DGR/L-J/JS

Holders: NQCH-JHP



DGTR/L-B-D-JHP-SL
 Parting and Grooving Side Lock
 Type Tools with High-Pressure
 Coolant for CNC and Swiss
 Automatics



Designation	CWN ⁽¹⁾	CWX ⁽²⁾	H	B	WB	LH	CUTDIA ⁽³⁾	OAH	HBH	OAL	Insert	CNT
DGTR/L 12B-2D24-JHP-SL	1.90	2.50	12.0	12.0	1.70	29.4	24.0	25.7	6.5	100.00	DG. 2...	5/16"-24 UNF
DGTR/L 16B-2D35-JHP-SL	1.90	2.50	16.0	16.0	1.70	32.0	35.0	26.7	2.6	120.00	DG. 2...	5/16"-24 UNF
DGTL 20B-2D35-JHP-SL	1.90	2.50	20.0	20.0	1.70	32.0	35.0	28.1	-	140.00	DG. 2...	1/8"-28 BSPP
DGTR 20B-2D35-JHP-SL	1.90	2.50	20.0	20.0	1.70	32.0	35.0	28.1	-	140.00	DG. 2...	1/8"-28 BSPP
DGTR/L 12B-3D24-JHP-SL	3.00	3.18	12.0	12.0	2.40	29.4	24.0	25.7	6.5	100.00	DG. 3...	5/16"-24 UNF
DGTR/L 16B-3D35-JHP-SL	3.00	3.18	16.0	16.0	2.40	32.0	35.0	26.7	2.6	120.00	DG. 3...	5/16"-24 UNF
DGTR/L 20B-3D40-JHP-SL	3.00	3.18	20.0	20.0	2.40	35.6	40.0	28.1	-	140.00	DG. 3...	1/8"-28 BSPP
DGTR/L 25B-2D35-JHP-SL	1.90	2.50	25.0	25.0	1.70	32.1	35.0	33.1	-	140.00	DG. 2...	1/8"-28 BSPP
DGTR/L 25B-3D40-JHP-SL	3.00	3.18	25.0	25.0	2.40	35.6	40.0	33.1	-	140.00	DG. 3...	1/8"-28 BSPP
DGTR 25B-4D40-JHP-SL	4.00	4.76	25.0	25.0	3.40	34.6	40.0	33.0	-	140.00	DG. 4...	1/8"-28 BSPP

• For insert depth capacity table and modification instructions for the holder pockets, see page 480 • For user guide, see pages 540-547

⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

⁽³⁾ Maximum cutting diameter

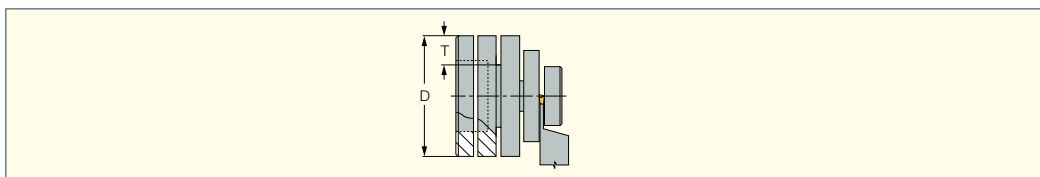
Inserts: DGN-LF/LFT • DGN-MF • DGN-P • DGN-UT/UA • DGN-WP • DGN-Z • DGN/DGNC/DGNM-C • DGN/DGNM-J/JS/JT • DGR-P • DGR-WP

• DGR-Z/ZS • DGR/L-C DGR/LC-C • DGR/L-J/JS

Depth Capacity

DGTR/L-B-D-JHP-SL

Depth of Cut as Function
 of Workpiece Diameter
 (DGN/R/L-100... excluded)



Designation	øDmax														
DGTR/L 12B-2D24-JHP-SL	—	—	—	—	—	—	—	24	26	27	28	30	32	36	52
DGTR/L 16B-2D35-JHP-SL	—	—	—	—	—	—	—	24	26	27	28	30	32	36	52
DGTR/L 20B-2D35-JHP-SL	—	—	—	35	39	42	46	51	59	71	91	130	230	1200	NL
DGTR/L 25B-2D35-JHP-SL	—	—	—	65	70	75	80	90	100	120	140	180	250	410	1200
DGTR/L 12B-3D24-JHP-SL	—	—	—	35	39	42	46	51	59	71	91	130	230	1200	NL
DGTR/L 16B-3D35-JHP-SL	—	—	—	75	90	113	155	250	650	NL	NL	NL	NL	NL	NL
DGTR/L 20B-3D40-JHP-SL	56	62	71	83	102	134	200	400	NL	NL	NL	NL	NL	NL	NL
DGTR/L 25B-3D40-JHP-SL	50	55	60	67	75	85	100	115	140	200	350	NL	NL	NL	NL
Depth T	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6

NL - No Limit

Example:

For a 9 mm depth of groove on a 75 mm workpiece diameter, six tools may be used.

Flow Rate vs. Pressure

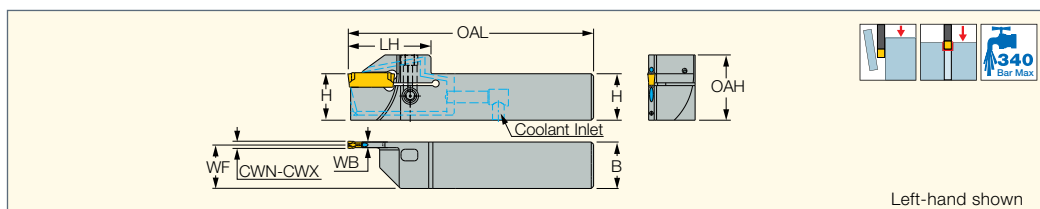
Designation	70 Bar Flow Rate (liters/min)	100 Bar Flow Rate (liters/min)	140 Bar Flow Rate (liters/min)
DGTR/L ...2-JHP-SL	3-4	4-5	5-6
DGTR/L ...3-JHP-SL	5-6	6-7	7-8

Spare Parts

Designation							
DGTR/L 12B-2D24-JHP-SL	PIN-32121	SR M5-24145-RL		SR 5/16UNF TL360	BLD HW2.5	HW 5/32"	SW6-SD
DGTR/L 16B-2D35-JHP-SL	PIN-32121	SR M5-24145-RL		SR 5/16UNF TL360	BLD HW2.5	HW 5/32"	SW6-SD
DGTR/L 20B-2D35-JHP-SL	PIN-32121	SR M5-24145-RL		PLG G1/8 TL360	BLD HW2.5	HW 5.0	SW6-SD
DGTL 12B-3D24-JHP-SL	PIN-32121	SR M5-24145	SR M5-24145-RL	SR 5/16UNF TL360	BLD HW2.5	HW 5/32"	SW6-SD
DGTR 12B-3D24-JHP-SL	PIN-32121	SR M5-24145-RL		SR 5/16UNF TL360	BLD HW2.5	HW 5/32"	SW6-SD
DGTR/L 16B-3D35-JHP-SL	PIN-32121	SR M5-24145-RL		SR 5/16UNF TL360	BLD HW2.5	HW 5/32"	SW6-SD
DGTR/L 20B-3D40-JHP-SL	PIN-32121	SR M5-24145-RL		PLG G1/8 TL360	BLD HW2.5	HW 5.0	SW6-SD
DGTL 25B-2D35-JHP-SL	PIN-32121	SR M5-24145-RL		PLG G1/8 TL360	BLD HW2.5	HW 5.0	SW6-SD
DGTR 25B-2D35-JHP-SL	PIN-32121	SR M5-24145-RL		PLG G1/8 TL360	BLD HW2.5	HW 5.0	SW6-SD
DGTL 25B-3D40-JHP-SL					BLD HW2.5		SW6-SD
DGTR/L 25B-3D40-JHP-SL	PIN-32121	SR M5-24145-RL		PLG G1/8 TL360		HW 5.0	
DGTR 25B-3D40-JHP-SL					BLD HW2.5*		SW6-SD*

* Optional, should be ordered separately

DOGRIP JETCUT
TWISTED 2-SIDED
DGTR/L-B-D-JHP-SL-MC
Parting and Grooving Side Lock
Type Tools with Bottom Inlets
for High-Pressure Coolant



Designation	CWN ⁽¹⁾	CWX ⁽²⁾	H	B	WB	WF	LH	CUTDIA ⁽³⁾	OAH	OAL	Insert
DGTR/L 20B-2D35-JHP-SL-MC	1.90	2.50	20.0	20.0	1.70	19.15	32.1	35.0	28.10	102.10	DG. 2...
DGTR/L 20B-3D40-JHP-SL-MC	3.00	3.18	20.0	20.0	2.40	18.80	35.6	40.0	28.10	105.60	DG. 3...
DGTR/L 25B-2D35-JHP-SL-MC	1.90	2.50	25.0	25.0	1.70	24.15	32.1	35.0	33.10	117.10	DG. 2...
DGTR/L 25B-3D40-JHP-SL-MC	3.00	3.18	25.0	25.0	2.40	23.80	35.6	40.0	33.10	120.60	DG. 3...

• For insert depth capacity table and modification instructions for the holder pockets, see page 480 • For user guide, see pages 540-547

⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

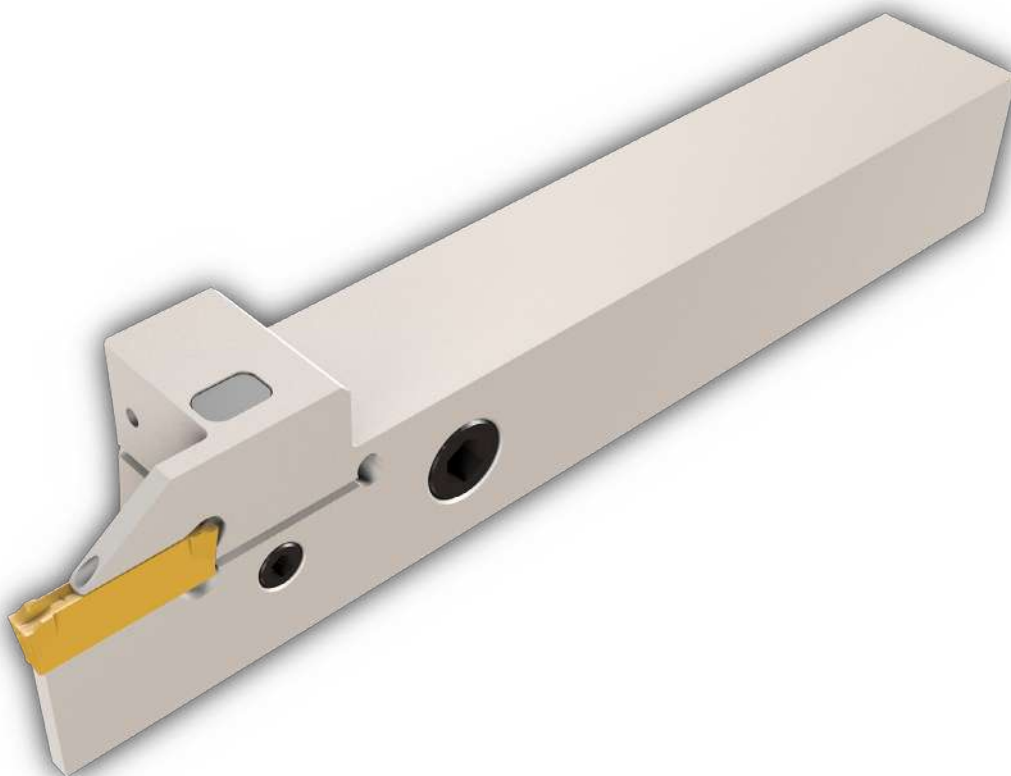
⁽³⁾ Maximum cutting diameter

Inserts: DGN-LF/LFT • DGN-MF • DGN-P • DGN-UT/UA • DGN-WP • DGN-Z • DGN/DGNC/DGNM-C • DGN/DGNM-J/JS/JT • DGR-P • DGR-WP

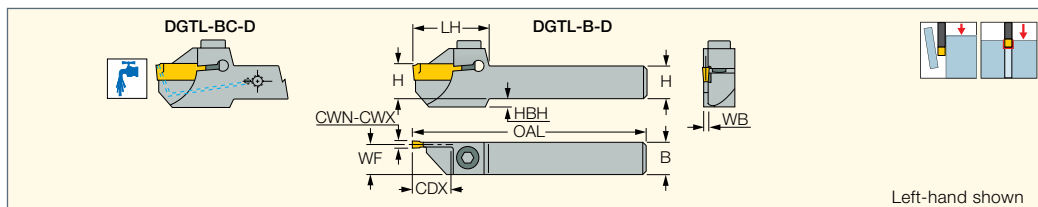
• DGR-Z/ZS • DGR/L-C DGRC/LC-C • DGR/L-J/JS

Spare Parts

Designation							
DGTR/L-B-D-JHP-SL-MC	SR M5-24145-RL	SR M8X10 DIN913	PIN-32121	SW6-SD	BLD HW2.5	SR M3X3DIN913	SR M2.5X2.5 DIN913



DGTR/L-B/BC-D

 Integral Shank Reinforced Parting
 and Grooving Tools Especially
 for DGNC Type of Inserts


Designation	CWN ⁽³⁾	CWX ⁽⁴⁾	H	B	WB	OAL	LH	CDX ⁽⁵⁾	WF	HBH	CSP ⁽⁶⁾	Insert
DGTR/L 10B-1.4D20	1.40	1.40	10.0	10.0	1.00	140.00	23.6	10.00	9.50	2.0	0	DG. 14..
DGTR/L 12B-1.4D30	1.40	1.40	12.0	12.0	1.00	140.00	29.6	15.00	11.50	3.5	0	DG. 14..
DGTR/L 16B-1.4D30	1.40	1.40	16.0	16.0	1.00	140.00	29.6	15.00	15.50	-	0	DG. 14..
DGTR/L 20B-1.4D30	1.40	1.40	20.0	20.0	1.00	140.00	29.6	15.00	19.50	-	0	DG. 14..
DGTR/L 10B-2D30	1.90	2.50	10.0	10.0	1.60	140.00	29.6	15.00	9.20	6.6	0	DG. 1.../DG. 2..
DGTR/L 12B-2D30	1.90	2.50	12.0	12.0	1.60	140.00	29.6	15.00	11.20	3.5	0	DG. 1.../DG. 2..
DGTR/L 16B-2D32	1.90	2.50	16.0	16.0	1.60	140.00	30.6	16.00	15.20	-	0	DG. 1.../DG. 2..
DGTR/L 20B-2D35	1.90	2.50	20.0	20.0	1.60	140.00	32.1	17.50	19.20	-	0	DG. 1.../DG. 2..
DGTR/L 25B-2D35	1.90	2.50	25.0	25.0	1.60	140.00	32.1	17.50	24.20	-	0	DG. 1.../DG. 2..
DGTR/L 12B-3D30	3.00	3.18	12.0	12.0	2.40	140.00	29.6	15.00	10.80	3.5	0	DG. 1.../DG. 3..
DGTR/L 16B-3D35	3.00	3.18	16.0	16.0	2.40	140.00	32.1	16.00	14.80	2.6	0	DG. 1.../DG. 3..
DGTR/L 16BC-3D35 ⁽¹⁾	3.00	3.18	16.0	16.0	2.40	140.00	31.1	16.00	14.80	2.6	1	DGNC/DGRC/DGLC 3...
DGTR/L 20B-3D40 ⁽²⁾	3.00	3.18	20.0	20.0	2.40	140.00	35.6	20.00	18.80	-	0	DG. 1.../DG. 3..
DGTR/L 20BC-3D40 ⁽¹⁾	3.00	3.18	20.0	20.0	2.40	140.00	34.6	20.00	18.80	-	1	DGNC/DGRC/DGLC 3...
DGTR/L 25B-3D40 ⁽²⁾	3.00	3.18	25.0	25.0	2.40	140.00	35.6	20.00	23.80	-	0	DG. 1.../DG. 3..

• Important: 1.4 mm width inserts should be used only on tools for 1.4 mm specific width tools • DGN/R/L 1 mm inserts can also be mounted into pocket sizes 2 and 3.

• For insert depth capacity table and modification instructions for the 2 and 3 holder pockets, see page 480 • For user guide, see pages 540-547

⁽¹⁾ Tools for inserts with coolant holes for high temperature alloys and stainless steel

⁽²⁾ Insert's Tmax=18 mm, for deeper penetration modify insert into single-ended

⁽³⁾ Minimum cutting width

⁽⁴⁾ Maximum cutting width

⁽⁵⁾ The specified limit refers to the tool

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

Inserts: DGN-LF/LFT • DGN-P • DGN-UT/UA • DGN-WP • DGN-Z • DGN/DGNC/DGNM-C • DGN/DGNM-J/JS/JT • DGR-P • DGR-WP • DGR-Z/ZS

• DGR/L-C DGRC/LC-C • DGR/L-J/JS

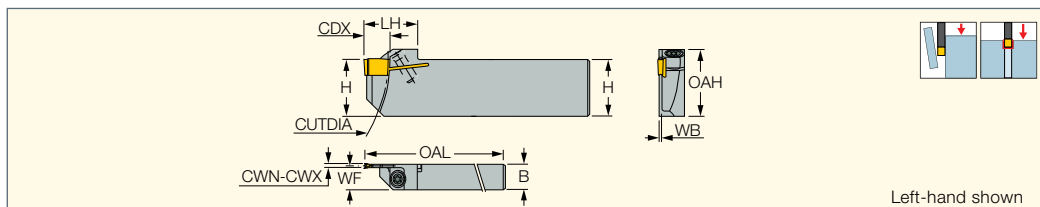
Spare Parts

Designation						
DGTR/L 10B-1.4D20	SR M5X12 DIN912	HW 4.0				
DGTR/L 12B-1.4D30	SR M5X12 DIN912	HW 4.0				
DGTR/L 16B-1.4D30	SR M5X12 DIN912	HW 4.0				
DGTR/L 20B-1.4D30	SR M5X12 DIN912	HW 4.0				
DGTR/L 10B-2D30	SR M5X12 DIN912	HW 4.0				
DGTR/L 12B-2D30	SR M5X12 DIN912	HW 4.0				
DGTR/L 16B-2D32	SR M4X14 DIN912	HW 3.0				
DGTR/L 20B-2D35	SR M4X14 DIN912	HW 3.0				
DGTL 25B-2D35	SR M5X12 DIN912	HW 4.0				
DGTR 25B-2D35	SR M4X14 DIN912	HW 3.0				
DGTR/L 12B-3D30	SR M5X12 DIN912	HW 4.0				
DGTR/L 16B-3D35	SR M5X12 DIN912	HW 4.0				
DGTR/L 16BC-3D35	SR M5X12 DIN912	HW 4.0	CGM 343*	CF 343*	SGCU 341*	CGF 343*
DGTR/L 20B-3D40	SR M5X12 DIN912	HW 4.0				
DGTR/L 20BC-3D40	SR M5X12 DIN912	HW 4.0	CGM 343*	CF 343*	SGCU 341*	CGF 343*
DGTR/L 25B-3D40	SR M5X12 DIN912	HW 4.0				

* Optional, should be ordered separately



DGTR/L-B-T-SH

 Reinforced Parting and Grooving
 Short Head Tools Carrying
 DGN Double-Ended Inserts


Designation	CWN ⁽¹⁾	CWX ⁽²⁾	H	B	WB	WF	OAL	LH	CWDIA	CDX ⁽³⁾	OAH		
DGTR/L 2009B-1.5T9SH	1.00	1.50	20.0	9.0	1.20	8.40	100.00	19.0	95.0	9.00	23.7	SR 16-236 P	T-15/5

• Important: 1.4 mm width inserts should be used only on tools for 1.4 mm specific width • For user guide, see pages 540-547

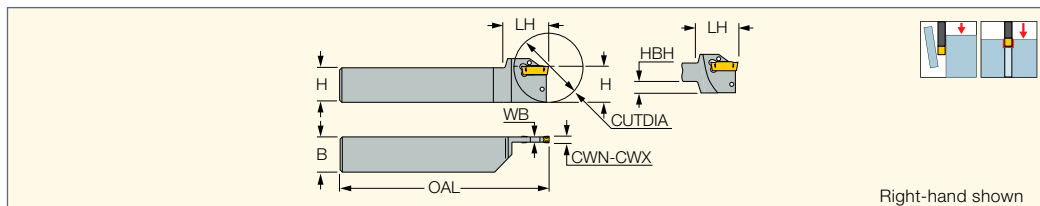
⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

⁽³⁾ Cutting depth maximum

Inserts: DGN-P • DGN/DGNM-J/JS/JT • DGR-P • DGR/L-J/JS

DGTR/L

 Integral Shank Parting
 and Grooving Tools


Designation	CWN ⁽¹⁾	CWX ⁽²⁾	H	B	WB	OAL	LH	HBH	CWDIA	Insert	
DGTR/L 1010-2	1.90	2.50	10.0	10.0	1.80	150.00	29.0	6.6	35.0	DG. 1.../DG. 2..	EDG 33B*
DGTR/L 1212-2	1.90	2.50	12.0	12.0	1.80	150.00	29.0	6.6	35.0	DG. 1.../DG. 2..	EDG 33B*
DGTR/L 1616-2	1.90	2.50	16.0	16.0	1.80	150.00	29.0	2.6	35.0	DG. 1.../DG. 2..	EDG 33B*
DGTR/L 2012-2	1.90	2.50	20.0	12.0	1.80	125.00	29.0	-	35.0	DG. 1.../DG. 2..	EDG 33A*
DGTR/L 1212-3	3.00	3.18	12.0	12.0	2.50	150.00	29.0	6.6	35.0 ⁽³⁾	DG. 1.../DG. 3..	EDG 33B*
DGTR/L 1616-3	3.00	3.18	16.0	16.0	2.50	150.00	29.0	6.6	35.0 ⁽⁴⁾	DG. 1.../DG. 3..	EDG 33B*
DGTR/L 2012-3	3.00	3.18	20.0	12.0	2.50	125.00	29.0	-	35.0 ⁽³⁾	DG. 1.../DG. 3..	EDG 33A*
DGTR/L 2020-3	3.00	3.18	20.0	20.0	2.50	125.00	29.0	-	35.0 ⁽³⁾	DG. 1.../DG. 3..	EDG 33A*
DGTR/L 2525-3	3.00	3.18	25.0	25.0	2.50	150.00	29.0	-	35.0 ⁽³⁾	DG. 1.../DG. 3..	EDG 33A*
DGTR/L 2020-4	4.00	4.76	20.0	20.0	3.40	125.00	31.0	-	51.0	DG. 4.../GRIP 4..	EDG 33A*
DGTR/L 2525-4	4.00	4.76	25.0	25.0	3.40	150.00	31.0	-	51.0	DG. 4.../GRIP 4..	EDG 33A*
DGTR/L 2020-5	4.80	5.00	20.0	20.0	4.00	125.00	33.0	-	59.0	DG. 5.../GRIP 5..	EDG 33A*
DGTR/L 2525-5	4.80	5.00	25.0	25.0	4.00	150.00	33.0	-	76.0	DG. 5.../GRIP 5..	EDG 33A*
DGTR/L 2525-6	6.00	6.35	25.0	25.0	5.30	150.00	33.0	-	76.0	DG. 6.../GRIP 6..	EDG 33A*

• Insert limit is Tmax=18 mm. If deeper penetration is required, the insert should be modified into single-ended by the user

• DG..1.0 insert can be mounted into pocket sizes 2 and 3, in which case the pocket width has to be modified - see page 480

• For user guide, see pages 540-547

⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

⁽³⁾ Dmax=43 mm when single-ended insert is used

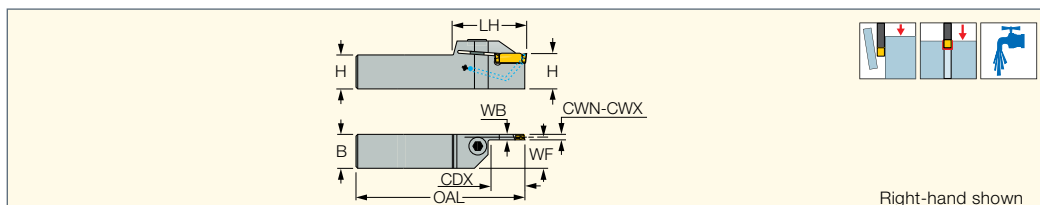
⁽⁴⁾ Dmax=43(1.69") when single-ended insert is used

* Optional, should be ordered separately

Inserts: DGN-LF/LFT • DGN-MF • DGN/DGNC/DGNM-C • DGR/L-C DGRC/LC-C • DGN/DGNM-J/JS/JT • DGR/L-J/JS • DGN-P • DGN-UT/UA

• DGN-W • DGN-WP • DGN-Z • DGR-P • DGR-WP • DGR-Z/ZS • GRIP • GRIP (full radius)

DGTR/L-BC-T

 Parting and Grooving
 Tools with Coolant Holes
 Carrying JET-CUT Inserts


Designation	H	B	CWN ⁽¹⁾	CWX ⁽²⁾	OAL	WB	WF	LH	CDX ⁽³⁾	Insert
DGTR/L 20BC-4T25	20.0	20.0	4.00	4.00	140.00	3.40	18.30	42.0	25.00	DGNC/DGRC/DGLC 4...
DGTR/L 25BC-4T25	25.0	25.0	4.00	4.00	140.00	3.40	23.30	42.0	25.00	DGNC/DGRC/DGLC 4...

• For user guide, see pages 540-547

⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

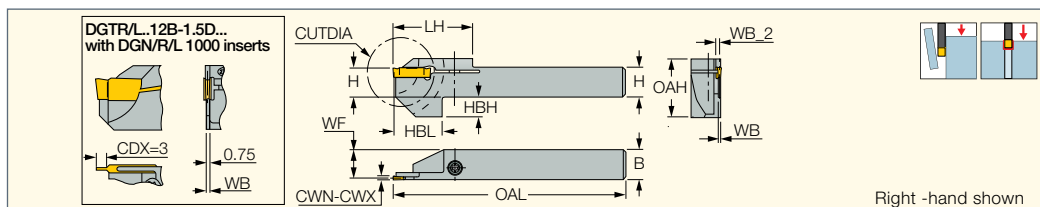
⁽³⁾ Cutting depth maximum

Inserts: DGN-UT/UA • DGN/DGNC/DGNM-C • DGN/DGNM-J/JS/JT • DGR/L-C DGRC/LC-C • DGR/L-J/JS

Spare Parts

Designation						
DGTR/L-BC-T	SR M6x16 DIN912	SGCU 341*	CGF 343*	CF 343*	CGM 343*	HW 5.0

* Optional, should be ordered separately

DO-GRIP
TWISTED 2-SIDED**DGTR/L-B-D-TR**Reinforced Parting and Grooving
Tools Carrying Double-Ended
DO-GRIP Inserts

Designation	CWN ⁽¹⁾	CWX ⁽²⁾	H	B	WB	WB_2	WF	OAL	LH	HBL	CUTDIA	OAH	HBH	Insert
DGTR/L 12B-1.4D20-TR12	1.40	1.40	12.0	12.0	1.00	2.3	11.50	95.00	32.5	20.00	20.0	23.7	8.0	DG. 14..
DGTL 12B-1.5D20-TR12	1.00	1.50	12.0	12.0	1.20	2.3	11.30	95.00	32.5	20.00	20.0	23.7	8.0	DG. 1.../DG. 15..
DGTR 12B-1.5-D20-TR12	1.00	1.50	12.0	12.0	1.20	2.3	11.30	95.00	32.5	20.00	20.0	23.7	8.0	DG. 1.../DG. 15..

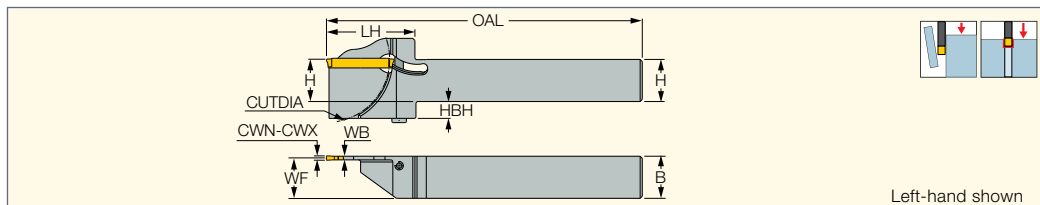
- Important: 1.4 mm width inserts should be used only on tools for 1.4 mm specific width!
- For TRAUB machines, model TNL 12/7
- For user guide, see pages 540-547

⁽¹⁾ Minimum cutting width⁽²⁾ Maximum cutting width

Inserts: DGN-P • DGN/DGNM-J/JS/JT • DGR-P • DGR/L-J/JS

Spare Parts

Designation		
DGTR/L-B-D-TR	SR 16-236 P ^(a)	T-15/5

^(a) 3N*M(26.5LBF*in)**DO-GRIPXL****DGTR/L-XL**Integral Shank Reinforced Parting
and Grooving Tools for Parting
Up to 65 mm Diameters

Designation	CW	CUTDIA	H	B	WB	OAL	LH	WF	HBH		
DGTR/L 20B-2XL-D60	2.00	60.0	20.0	20.0	1.74	150.00	43.2	19.10	8.0	SR M4X35DIN912	HW 3.0
DGTR/L 25B-2XL-D60	2.00	60.0	25.0	25.0	1.74	150.00	43.2	24.10	3.0	SR M4X35DIN912	HW 3.0
DGTR/L 20B-3XL-D65	3.00	65.0	20.0	20.0	2.40	150.00	43.2	18.80	12.0	SR M5X40DIN912	HW 4.0
DGTR/L 25B-3XL-D65	3.00	65.0	25.0	25.0	2.40	150.00	43.2	23.80	7.0	SR M5X40DIN912	HW 4.0

- For insert depth capacity table, see page 478
- For user guide, see pages 540-547

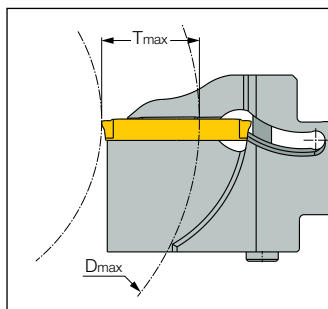
Inserts: DGN-C-XL • DGN-J-XL • DGR/L-C-XL • DGR/L-J-XL

Depth of Cut as Function of Workpiece DiameterT_{max}/D_{max} for
DGTR/L...-2XL

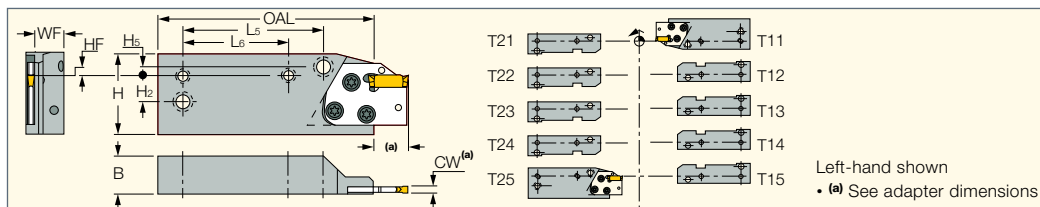
T _{max}	D _{max}
15	No limit
16	600
17	300
18	200
19	150
20	130
21	120
22	100
23	90
24	85
25	80
26	75
27	70
28	65
29	63
30	60

T_{max}/D_{max} for
DGTR/L...-3XL

T _{max}	D _{max}
15	No limit
16	1000
17	400
18	300
19	230
20	180
21	150
22	130
23	115
24	105
25	95
26	90
27	85
28	80
29	75
30	72
31	70
32.5	65



DGHAL-DECO

 Holders for DGAD Adapters for
 Tornos Bechler Deco Machines


Designation	H	B	OAL	WF	HF	H2	H5	L6	L5
DGHAL DECO 7-10 ⁽¹⁾	40.3	18.2	106.00	15.0	-	12.8	4.8	52.00	69.00
DGHAL DECO 13 ⁽²⁾	42.0	35.2	115.00	28.7	2.0	16.0	16.0	60.00	60.00
DGHAL DECO 20-26 ⁽²⁾	44.8	23.2	120.00	20.0	4.0	17.0	17.0	65.00	65.00

• DGAD-... HGAD-... adapters should be ordered separately

⁽¹⁾ Positioning combinations: T11; T25

⁽²⁾ Positioning combinations: All

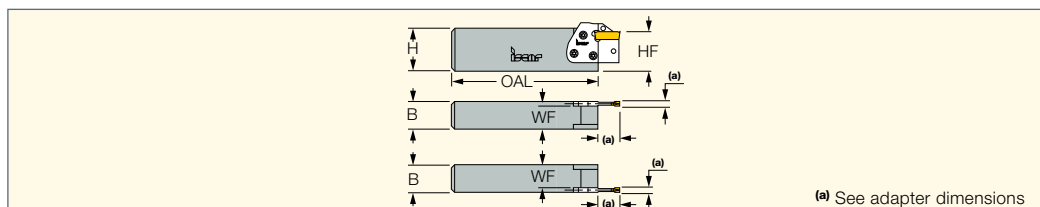
Tools: DGAD-B-D • DGAD/HGAD • SCLCR-PAD • SDJCR-PAD • SVJCR-PAD • SWAPR-PAD • TGAD

Spare Parts

Designation							
DGHAL DECO 7-10	SR 14-519-L9.7 ^(a)	HW 4.0	SR 16-212-L9.5	T-20/5	SR 16-212	SR M5X25DIN912	
DGHAL DECO 13	SR 14-519-L9.7 ^(a)	HW 5.0	SR 16-212-L7.5	T-20/5	SR 16-212	SR M6X25 DIN912	
DGHAL DECO 20-26	SR 14-519-L12.8 ^(a)	HW 5.0	SR 16-212-L7.5	T-20/5	SR 16-212	SR M6X25 DIN912	EZ 104

^(a) Recommended tightening torque: 9 N*m (80lbf*in)

HMSN-New Britain

 Holders for Grooving and
 Turning Adapters for New Britain
 Multi-Spindle Bar Machines


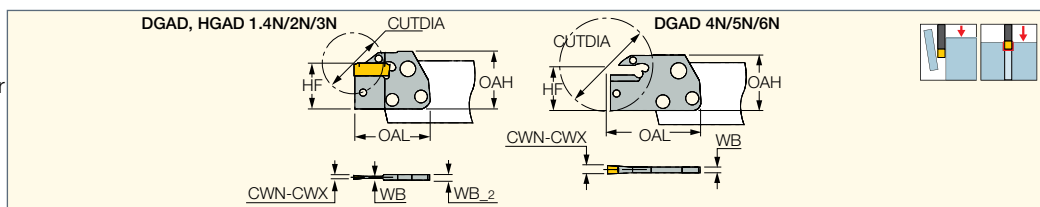
Designation	H	B	HF	OAL	WF	S1 ⁽²⁾			
HMSN 35/3722 ⁽¹⁾	36.5	22.4	34.5	181.70	18.4	226	SR 16-212	SR 14-519	T-20/5

• DGAD-... HGAD-..., adapters should be ordered separately

⁽¹⁾ For models #42; #52; #60; #61; #62; #602

⁽²⁾ Comparable Empire block

Tools: DGAD-B-D • DGAD/HGAD • SCLCR-PAD • SDJCR-PAD • SVJCR-PAD • SWAPR-PAD

DGAD/HGADParting and Grooving Adapters for
DO-GRIP Double-Ended Inserts

Designation	CWN ⁽²⁾	CWX ⁽³⁾	WB	WB_2	OAH	HF	OAL	CUTDIA	
DGAD 1.4N	1.40	1.40	1.00	3.2	30.0	24.0	41.50	28.0	EDG 23B*
DGAD 2N	1.90 ⁽⁴⁾	2.50	1.60	3.2	30.0	24.0	41.50	32.0	EDG 33A*
DGAD 3N ⁽¹⁾	3.00 ⁽⁴⁾	3.18	2.40	4.0	30.0	24.0	41.50	32.0	EDG 33A*
HGAD 3N	3.00	3.00	2.40	4.0	30.0	24.0	50.50	50.0	EDG 23B*
DGAD 4N	4.00	4.00	3.20	-	30.0	24.0	50.50	50.0	EDG 33A*
DGAD 5N	4.80	5.00	4.00	-	30.0	24.0	50.50	50.0	EDG 33A*
DGAD 6N	6.00	6.35	5.20	-	30.0	24.0	50.50	50.0	EDG 33A*

• DG..1.0 insert can be mounted into pocket sizes 2 and 3 in which case the pocket width has to be modified - see page 480

• For user guide, see pages 540-547

⁽¹⁾ Only the DGN/R/L inserts are suitable for this adapter

⁽²⁾ Minimum cutting width

⁽³⁾ Maximum cutting width

⁽⁴⁾ For 1 mm inserts, modify adapter

* Optional, should be ordered separately

Inserts: DGN-P • DGN-UT/UA • DGN-W • DGN-WP • DGN-Z • DGN/DGNC/DGNM-C • DGN/DGNM-J/JS/JT • DGR-P • DGR-WP • DGR-Z/ZS

• DGR/L-C DGRC/LC-C • DGR/L-J/JS • GRIP • GRIP (full radius) • HGN-C • HGN-J • HGN-UT • HGR/L-C • HGR/L-J/JS

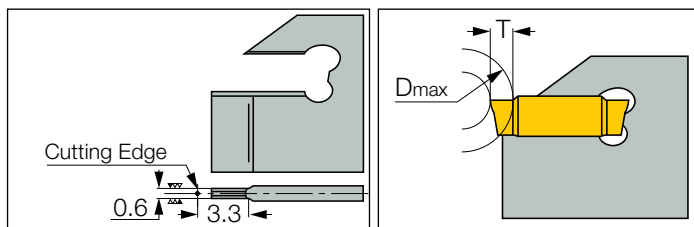
Holders: MAHPR/L-JHP • MAHR/L-JHP • MAHR/L • MAHPR/L • C#-MAHD • C#-MAHPD • C#-MAHDR-45 • C#-MAHDOR • HSK A63WH-MAHUR/L

• HSK A63WH-MAHDR-45 • HSK A63WH-MAHDOR • IM-MAHD • IM-MAHPD • C#-MAHD-JHP • C#-MAHPD-JHP • MAHR/L-JHP-MC • HMSN-New Britain

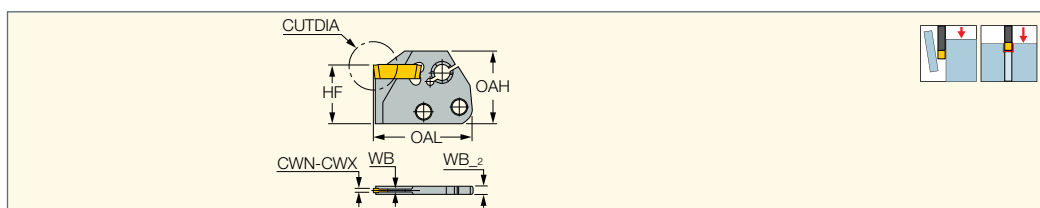
• DGHAL-DECO

Depth Capacity for DGN/R-1002J**Insert on Standard Holders**

Depth: T	D _{max}	Depth: T	D _{max}
Up to 1.2	No limit	Up to 2.2	32.3
1.3	830	2.3	29.3
1.4	218	2.4	26.7
1.5	126	2.5	24.8
1.6	88.4	2.6	23.2
1.7	68.2	2.7	21.7
1.8	55.6	2.8	20.5
1.9	46.9	2.9	19.4
2.0	40.7	3.0	18.4
2.1	36.0		

**Standard Holders Modification**

To achieve no limitation on the workpiece diameter up to 3 mm depth, the steel support under the insert should be ground, as per the shown sketch.

DGAD-B-DParting and Grooving Screw-
Clamped Adapters for DO-GRIP
Double-Ended Inserts

Designation	CWN ⁽²⁾	CWX ⁽³⁾	WB	WB_2	OAL	CUTDIA	HF	OAH
DGAD 1.4B-D16	1.40	1.40	1.00	3.2	36.80	16.0	24.0	30.3
DGAD 1.5B-D20 ⁽¹⁾	1.00	1.50	1.00	3.2	41.00	20.0	24.0	30.3
DGAD 2B-D20	1.90	2.50	1.60	3.2	41.00	20.0	24.0	30.3

• Up to 3 mm depth, without any limitation on the diameter • DG..1.0 insert can also be mounted into pocket sizes 2 and 3,

In which case the pocket width has to be modified-see page 480 • For user guide, see pages 540-547

⁽¹⁾ Do not use DG.. 1.4 on this tool!

⁽²⁾ Minimum cutting width

⁽³⁾ Maximum cutting width

Inserts: DGN-LF/LFT • DGN-P • DGN-UT/UA • DGN-WP • DGN-Z • DGN/DGNC/DGNM-C • DGN/DGNM-J/JS/JT • DGR-P • DGR-WP • DGR-Z/ZS

• DGR/L-C DGRC/LC-C • DGR/L-J/JS

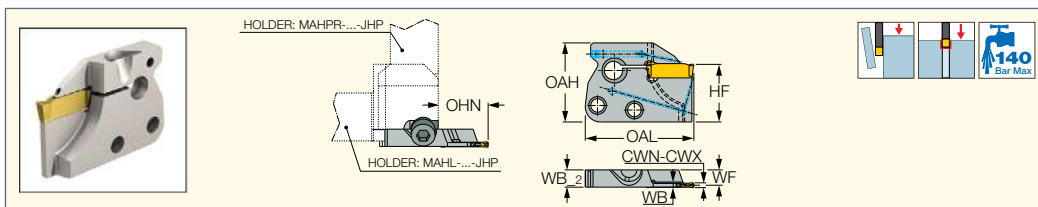
Holders: C#-MAHD-JHP • C#-MAHPD-JHP • MAHR/L-JHP-MC • MAHPR/L-JHP • MAHR/L-JHP • MAHR/L • MAHPR/L • C#-MAHD • C#-MAHPD

• C#-MAHDR-45 • C#-MAHDOR • HSK A63WH-MAHUR/L • HSK A63WH-MAHDR-45 • HSK A63WH-MAHDOR • IM-MAHD • IM-MAHPD • HMSN-New Britain

• DGHAL-DECO

DGPAD-JHP

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



Designation	CWN ⁽¹⁾	CWX ⁽²⁾	CUTDIA	OHN ⁽³⁾	WF	WB	WB_2	OAL	OAH	HF	Insert
DGPAD 2R/L-D22-JHP	1.90	2.50	22.0	21.0	6.40	1.60	7.2	45.50	33.0	24.0	DG. 2...
DGPAD 2R/L-D32-JHP	1.90	2.50	32.0	21.0	6.40	1.60	7.2	45.50	33.0	24.0	DG. 2...
DGPAD 3R/L-D32-JHP	3.00	3.18	32.0	21.0	6.00	2.40	7.2	45.50	33.0	24.0	DG. 3...
DGPAD 2R/L-D42-JHP	1.90	2.50	42.0	21.0	6.30	1.70	7.2	49.00	33.0	24.0	DG. 2...

• For user guide and accessories, see pages 540-547

⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

⁽³⁾ Minimum overhang

Inserts: DGN-LF/LFT • DGN-MF • DGN-P • DGN-UT/UA • DGN-WP • DGN-Z • DGN/DGNC/DGNM-C • DGN/DGNM-J/JS/JT • DGR-P • DGR-WP

• DGR-Z/ZS • DGR/L-C DGRC/LC-C • DGR/L-J/JS

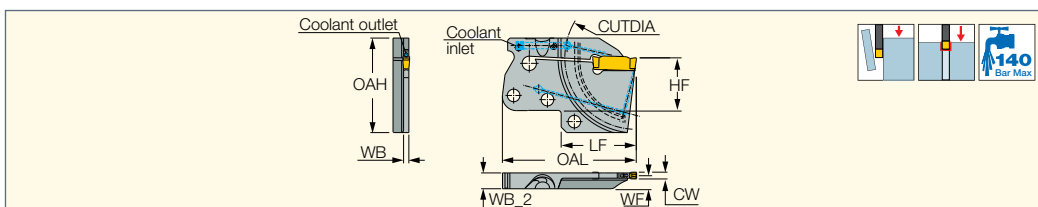
Flow Rate vs. Pressure

Designation	70 Bar Flow Rate (liters/min)	100 Bar Flow Rate (liters/min)	140 Bar Flow Rate (liters/min)
DGPAD 2R/L-D22-JHP	5	6	7
DGPAD 2R/L-D32-JHP	5	6	7
DGPAD 3R/L-D32-JHP	8.5	10	12



DGPAD-XL-JHP

Parting and Grooving Extra Long
Adapters with Coolant Channels
Carrying DO-GRIP Inserts



Designation	CW	CUTDIA	WF	WB	WB_2	LF	OAL	OAH	HF	Insert
DGPAD-XL 3R/L-D52-JHP	3.00	52.0	6.00	2.40	7.2	27.70	54.40	43.00	34.0	DG. 3...
DGPAD-XL 3L-D65-JHP	3.00	65.0	6.00	2.40	7.2	34.20	60.40	43.00	34.0	DG. 3...
DGPAD-XL 3R-D65-JHP	3.00	65.0	6.00	2.40	7.2	34.20	60.00	43.00	34.0	DG. 3...

• For user guide and accessories, see pages 540-547

Inserts: DGN-LF/LFT • DGN-MF • DGN-P • DGN-UT/UA • DGN-Z • DGN/DGNC/DGNM-C • DGN/DGNM-J/JS/JT • DGR-Z/ZS • DGR/L-C DGRC/LC-C

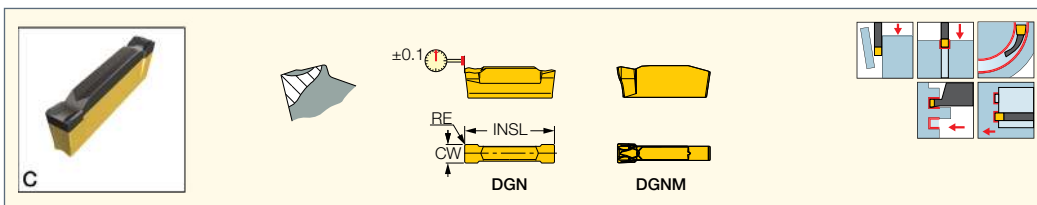
• DGR/L-J/JS

Holders: ABC MAHDR-#-XL-JHP • MAHPR/L-XL-JHP • MAHR/L-MG-XL-JHP • MAHR/L-MG-XL-JHP-MC • TR TNK36 MAHDL-R-XL-JHP • TR45TNL MAHDN-R-XL-JHP

• V## MAHD#-#-XL-##-JHP



DGN/DGNC/DGNM-C
Double-Sided Parting Inserts for
Parting and Grooving Bars, Hard
Materials and Tough Applications



Designation	Dimensions						Tough ↔ Hard												Recommended Machining Data			
	CW	CWTOL ⁽³⁾	RE	RETOL ⁽⁴⁾	CDX ⁽⁵⁾	INSL	IC928	IC830	IC928	IC1030	IC1028	IC354	IC5400	IC1010	IC308	IC808	IC908	IC30N	IC20	IC907	IC907	f groove (mm/rev)
DGN 2002C	2.00	0.03	0.20	0.020	18.00	19.90	●	●		●	●	●	●	●	●	●	●	●	●			0.05-0.16
DGN 2202C	2.20	0.03	0.20	0.020	18.00	19.80	●	●		●	●	●	●	●	●	●	●	●	●		●	0.05-0.16
DGN 2502C	2.50	0.03	0.20	0.020	18.00	20.70			●	●			●				●					0.08-0.20
DGN 3102C	3.10	0.04	0.20	0.020	18.00	20.10	●	●		●	●	●		●	●	●	●	●	●	●	●	0.10-0.25
DGNC 3102C ⁽¹⁾	3.10	0.04	0.20	0.020	18.00	21.00										●	●					0.10-0.25
DGNM 3202C ⁽²⁾	3.18	0.04	0.20	0.020	- ⁽⁶⁾	20.40	●					●					●					0.10-0.25
DGN 4003C	4.00	0.04	0.30	0.030	- ⁽⁶⁾	18.80	●	●		●	●	●		●	●	●	●	●	●	●		0.10-0.30
DGNC 4003C ⁽¹⁾	4.00	0.04	0.30	0.030	- ⁽⁶⁾	19.00										●	●					0.10-0.30
DGN 4803C	4.80	0.04	0.30	0.030	- ⁽⁶⁾	19.90	●															0.12-0.35
DGN 5003C	5.00	0.04	0.30	0.030	- ⁽⁶⁾	19.10	●	●		●	●	●		●		●	●	●	●			0.12-0.35
DGN 6303C	6.35	0.04	0.35	0.030	- ⁽⁶⁾	19.10	●	●			●	●		●		●	●		●			0.15-0.40

• Feed values for grade IC20 should be decreased by 50% • For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Inserts with coolant holes, recommended coolant pressure 10 bar minimum

⁽²⁾ Single-ended insert

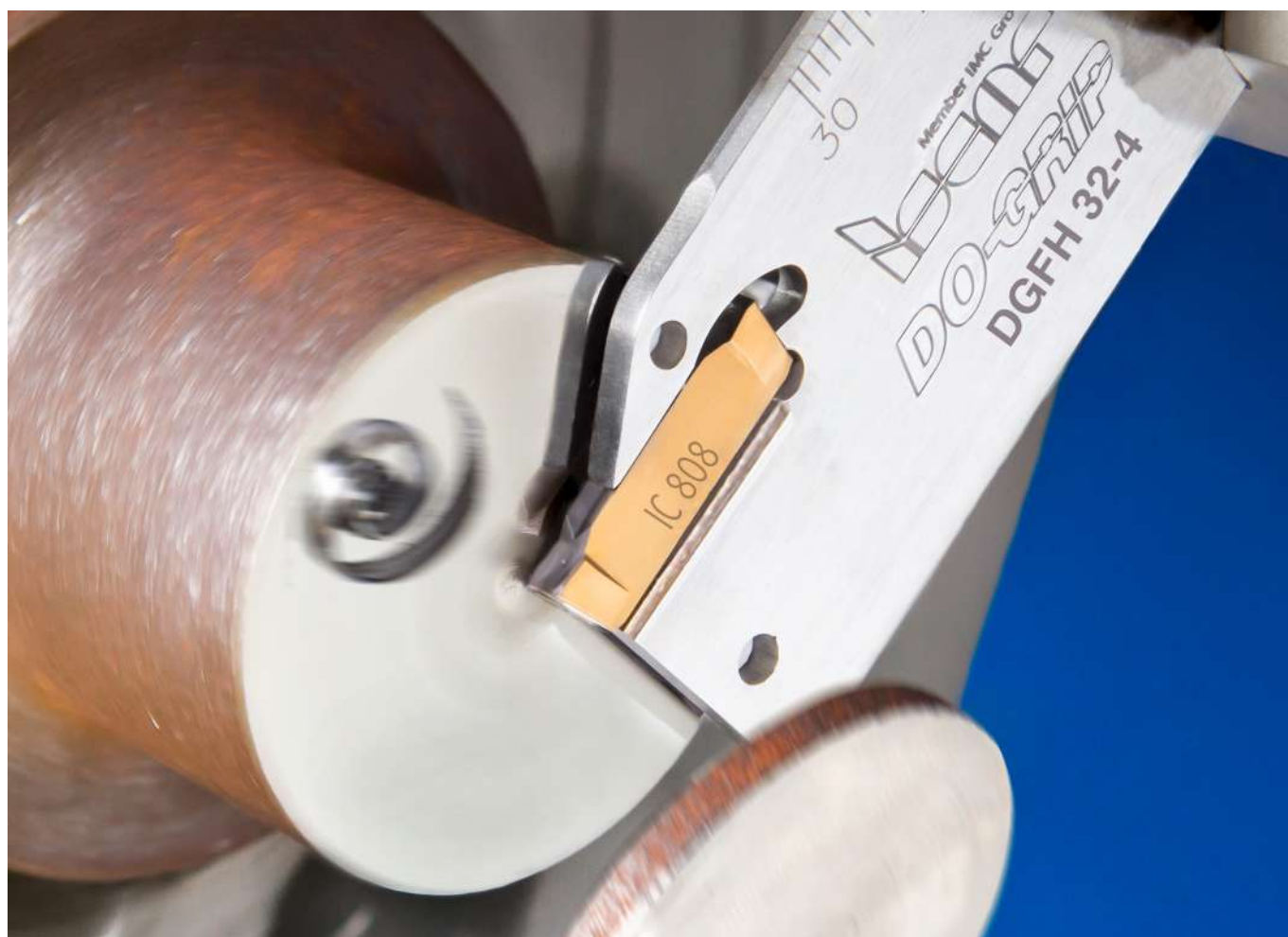
⁽³⁾ Cutting width tolerance (+/-)

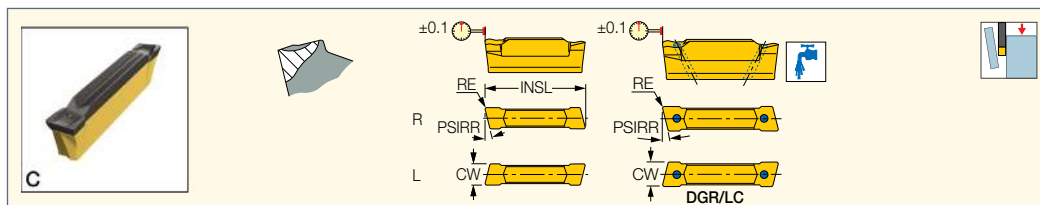
⁽⁴⁾ Corner radius tolerance (+/-)

⁽⁵⁾ Cutting depth maximum

⁽⁶⁾ No depth limit

Tools: C#-HELIR/L • C#-HFIR/L-MC • CR HFIR-M • D/HGAD RE/LE-JHP • DGAD-B-D • DGAD/HGAD • DGAQ • DGAQ-JHP • DGFH
• DGFH-JHP • DGFHL-26B-TR-D • DGFHR/L • DGFHR/L-B-D..(R/L) • DGFHR/L-BC-JHP • DGFS • DGPAD-JHP • DGPAD-XL-JHP • DGTR/L
• DGTR/L-B-D-JHP-SL • DGTR/L-B-D-JHP-SL-MC • DGTR/L-B-D-SH • DGTR/L-B/BC-D • DGTR/L-BC-T • HELIR/L • HFAER/L-4 • HFAER/L-5T, 6T
• HFAIR/L-4 • HFAIR/L-DG • HFFR/L-T • HFFR/L-4T • HFFR/L-5T • HFFR/L-6T • HFIR/L-MC • HFPAD-4 • HFPAD-5 • HFPAD-6
• HFPAD-JHP • HGPAD • HGPAD-JHP • IM-HFIR-MC • NQCH-DGTR/L-D-SH-JHP



DGR/L-C DGRC/LC-C
 Double-Sided Inserts for
 Parting Bars, Hard Materials
 and Tough Applications


Designation	Dimensions						Tough ↔ Hard									Recommended Machining Data
	CW	RE	CDX ⁽²⁾	PSIRL	PSIRR	INSL	IC328	IC830	IC1030	IC1028	IC354	IC1010	IC808	IC908	IC20	f groove (mm/rev)
DGL 2202C-6D	2.20	0.20	18.00	6.0	-	20.80	●		●	●	●	●		●	●	0.04-0.12
DGR 2202C-6D	2.20	0.20	18.00	-	6.0	20.80	●	●	●	●	●	●	●	●	●	0.04-0.12
DGL 3102C-15D	3.10	0.20	18.00	15.0	-	21.00	●	●	●	●				●	●	0.08-0.14
DGL 3102C-6D	3.10	0.20	18.00	6.0	-	21.00	●	●	●	●	●	●	●	●	●	0.08-0.18
DGLC 3102C-6D ⁽¹⁾	3.10	0.20	18.00	6.0	-	21.00							●	●		0.08-0.18
DGR 3102C-15D	3.10	0.20	18.00	-	15.0	20.90	●	●	●	●		●		●		0.08-0.14
DGR 3102C-6D	3.10	0.20	18.00	-	6.0	21.00	●	●	●	●	●	●	●	●	●	0.08-0.18
DGR 3102C-8D	3.10	0.20	18.00	-	8.0	21.10	●	●	●	●			●			0.05-0.15
DGRC 3102C-6D ⁽¹⁾	3.10	0.20	18.00	-	6.0	20.90							●	●		0.08-0.18
DGL 4003C-4D	4.00	0.30	- ⁽³⁾	4.0	-	18.90	●		●	●	●	●		●	●	0.08-0.20
DGLC 4003C-4D ⁽¹⁾	4.00	0.30	- ⁽³⁾	4.0	-	19.00							●			0.08-0.20
DGR 4003C-4D	4.00	0.30	- ⁽³⁾	-	4.0	18.80	●	●		●	●	●		●	●	0.08-0.20
DGRC 4003C-4D ⁽¹⁾	4.00	0.30	- ⁽³⁾	-	4.0	19.00							●	●		0.08-0.20
DGR 4800CS-4D	4.80	0.02	- ⁽³⁾	-	4.0	19.70	●									0.05-0.15
DGR 4800CS-8D	4.80	0.02	- ⁽³⁾	-	8.0	19.70	●									0.05-0.15
DGR 4803C-4D	4.80	0.30	- ⁽³⁾	-	4.0	20.30	●									0.10-0.25
DGR 4803C-8D	4.80	0.30	- ⁽³⁾	-	8.0	20.30	●									0.10-0.20
DGL 5003C-4D	5.00	0.30	- ⁽³⁾	4.0	-	19.10	●				●				●	0.10-0.25
DGR 5003C-4D	5.00	0.30	- ⁽³⁾	-	4.0	19.20	●				●				●	0.10-0.25
DGL 6303C-4D	6.35	0.35	- ⁽³⁾	4.0	-	19.10	●				●				●	0.12-0.30
DGR 6303C-4D	6.35	0.35	- ⁽³⁾	-	4.0	19.10	●				●				●	0.12-0.30

• Feed values for grade IC20 should be decreased by 50% • For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Inserts with coolant holes, recommended coolant pressure 10 bar minimum

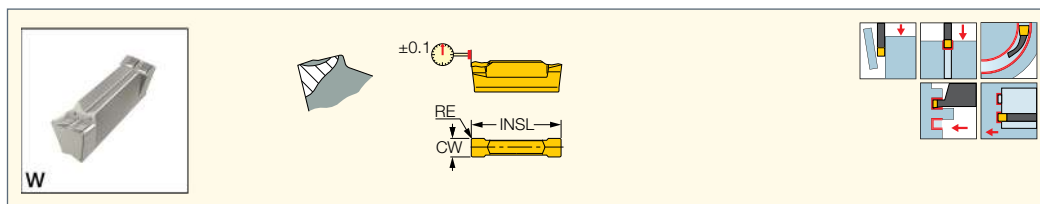
⁽²⁾ Cutting depth maximum

⁽³⁾ No depth limit

Tools: C#-HELIR/L • D/HGAD RE/LE-JHP • DGAD-B-D • DGAD/HGAD • DGAQ • DGAQ-JHP • DGFH • DGFH-JHP • DGFHL-26B-TR-D

• DGFHR/L • DGFHR/L-B-D..(R/L) • DGFHR/L-BC-JHP • DGFS • DGPAD-JHP • DGPAD-XL-JHP • DGTR/L • DGTR/L-B-D-JHP-SL • DGTR/L-B-D-JHP-SL-MC

• DGTR/L-B-D-SH • DGTR/L-B/BC-D • DGTR/L-BC-T • HELIR/L • NQCH-DGTR/L-D-SH-JHP

DGN-W
 Double-Sided Inserts with
 Central Ridged Chipformer for
 Parting and Grooving Hard
 Materials and Interrupted Cuts


Designation	Dimensions					Tough ↔ Hard			Recommended Machining Data
	CW	RE	CWTOL ⁽¹⁾	RETOL ⁽²⁾	INSL	IC328	IC1030	IC354	f groove (mm/rev)
DGN 5003W	5.00	0.30	0.04	0.030	19.00	•	•	•	0.12-0.33

• No depth limit • For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Cutting width tolerance (+/-)

⁽²⁾ Corner radius tolerance (+/-)

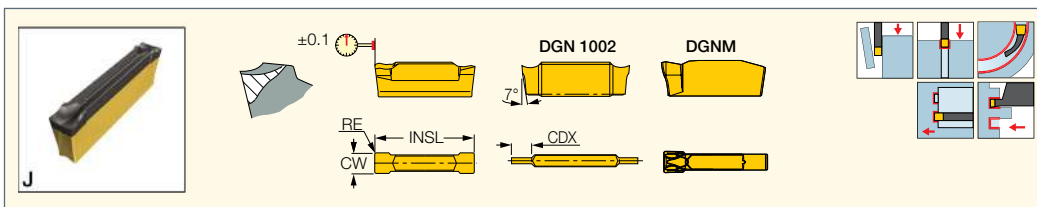
Tools: C#-HELIR/L • C#-HFIR/L-MC • CR HFIR-M • DGAD/HGAD • DGAQ • DGAQ-JHP • DGFH • DGFH-JHP • DGTR/L • HELIR/L

• HFAER/L-5T, 6T • HFAIR/L-DG • HFFR/L-T • HFHR/L-5T • HFIR/L-MC • HFPAD-5 • HFPAD-JHP • HGPAD • HGPAD-JHP • IM-HFIR-MC

• NQCH-DGTR/L-D-SH-JHP

DGN/DGNM-J/JS/JT

Double-Sided Inserts for Parting and Grooving Soft Materials, Parting Tubes, Small Diameters and Thin-Walled Parts



Designation	Dimensions						Tough ↔ Hard														Recommended Machining Data
	CW	CWTOL ⁽³⁾	RE	RETOL ⁽⁴⁾	CDX ⁽⁵⁾	INSL	IC328	IC830	IC928	IC1030	IC1028	IC354	IC5400	IC1010	IC308	IC808	IC908	IC20	IC807	IC907	f groove (mm/rev)
DGN 1002J	1.00	0.02	0.16	0.020	3.00	21.00	•			•	•			•			•				0.02-0.07
DGN 1402J	1.40	0.03	0.16	0.020	15.00	15.80	•	•		•	•	•		•	•	•	•				0.03-0.12
DGN 1502J	1.50	0.03	0.16	0.020	18.00	20.90	•			•	•			•			•				0.03-0.12
DGN 2002JT	2.00	0.03	0.20	0.020	18.00	19.80										•					0.04-0.14
DGN 2200JS ⁽¹⁾	2.20	0.03	0.02	0.020	18.00	19.00	•	•		•				•							0.03-0.08
DGN 2202J	2.20	0.03	0.20	0.020	18.00	19.80	•	•		•	•	•	•	•	•	•	•	•	•		0.04-0.12
DGN 2202JT	2.20	0.03	0.20	0.020	18.00	19.80		•					•			•					0.04-0.14
DGN 3100JS ⁽¹⁾	3.10	0.04	0.02	0.020	18.00	19.70	•			•				•	•						0.03-0.10
DGN 3102J	3.10	0.04	0.20	0.020	18.00	20.10	•	•		•	•	•	•	•	•	•	•	•		•	0.04-0.16
DGN 3102JT	3.10	0.04	0.20	0.020	18.00	20.10		•					•			•				•	0.05-0.18
DGN 3202J	3.18	0.04	0.20	0.020	18.00	20.10											•				0.04-0.16
DGNM 3202J ⁽²⁾	3.18	0.04	0.20	0.020	- ⁽⁶⁾	20.30	•			•		•		•			•				0.04-0.16
DGN 4003J	4.00	0.04	0.30	0.030	- ⁽⁶⁾	18.90	•	•		•	•	•		•	•	•	•	•	•		0.05-0.18
DGN 4003JT	4.00	0.04	0.30	0.030	- ⁽⁶⁾	18.90		•													0.05-0.18
DGN 4803J	4.80	0.04	0.30	0.030	- ⁽⁶⁾	20.40	•														0.05-0.20
DGN 5003J	5.00	0.04	0.30	0.030	- ⁽⁶⁾	19.00	•	•		•	•	•		•		•	•	•			0.05-0.20
DGN 5003JT	5.00	0.04	0.30	0.030	- ⁽⁶⁾	19.00			•								•				0.05-0.20
DGN 6303J	6.35	0.04	0.35	0.030	- ⁽⁶⁾	19.10	•	•		•	•	•		•		•	•	•			0.05-0.25
DGN 6303JT	6.35	0.04	0.35	0.030	- ⁽⁶⁾	19.10			•								•				0.05-0.25

- JT chipformer has the basic positive configuration of the J-type and a reinforced negative frontal edge; most suitable for soft materials at low to medium feeds
- For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Sharp corners

⁽²⁾ Single-ended insert

⁽³⁾ Cutting width tolerance (+/-)

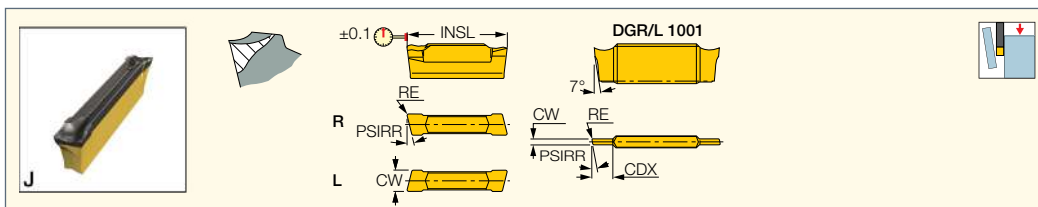
⁽⁴⁾ Corner radius tolerance (+/-)

⁽⁵⁾ Cutting depth maximum

⁽⁶⁾ No depth limit

Tools: C#-HELIR/L • C#-HFIR/L-MC • CR HFIR-M • D/HGAD RE/LE-JHP • DGAD-B-D • DGAD/HGAD • DGAQ • DGAQ-JHP • DGFH
 • DGFH-JHP • DGFHL-26B-TR-D • DGFHR/L • DGFHR/L-B-D..(R/L) • DGFHR/L-BC-JHP • DGFS • DGPAD-JHP • DGPAD-XL-JHP • DGTR/L
 • DGTR/L-B-D-JHP-SL • DGTR/L-B-D-JHP-SL-MC • DGTR/L-B-D-SH • DGTR/L-B-D-TR • DGTR/L-B-T-SH • DGTR/L-B/BC-D • DGTR/L-BC-T
 • HELIR/L • HFAER/L-4 • HFAER/L-5T, 6T • HFAIR/L-4 • HFAIR/L-DG • HFFR/L-T • HFHR/L-4T • HFHR/L-5T • HFHR/L-6T • HFIR/L-MC
 • HFPAD-4 • HFPAD-5 • HFPAD-6 • HFPAD-JHP • HGPAD • HGPAD-JHP • IM-HFIR-MC • NQCH-DGTR/L-D-SH-JHP

DGR/L-J/JS

 Double-Sided Inserts for
 Parting Soft Materials, Parting
 Tubes, Small Diameters
 and Thin-Walled Parts


Designation	Dimensions						Tough ↔ Hard										Recommended Machining Data
	CW	RE	CDX ⁽²⁾	INSL	PSIRL	PSIRR	IC328	IC830	IC1030	IC1028	IC354	IC1010	IC308	IC808	IC908	IC20	f groove (mm/rev)
DGL 1001J-8D	1.00	0.07	3.00	21.00	-	8.0							•		•		0.02-0.06
DGR 1001J-8D	1.00	0.07	3.00	21.00	8.0	-	•			•		•	•		•		0.02-0.06
DGL 1400JS-15D ⁽¹⁾	1.40	0.02	14.00	15.40	-	15.0	•		•								0.03-0.07
DGR 1400JS-15D ⁽¹⁾	1.40	0.02	14.00	15.40	15.0	-	•	•	•	•		•	•		•		0.03-0.07
DGL 1402J-8D	1.40	0.16	14.00	15.80	-	8.0	•			•							0.03-0.08
DGR 1402J-8D	1.40	0.16	14.00	15.80	8.0	-	•	•	•	•			•		•		0.03-0.08
DGR 1500J-8D	1.50	0.05	18.00	20.90	8.0	-	•	•	•	•		•	•				0.03-0.08
DGL 2200JS-15D ⁽¹⁾	2.20	0.02	18.00	20.60	-	15.0	•		•	•			•		•		0.03-0.07
DGL 2200JS-6D ⁽¹⁾	2.20	0.02	18.00	20.60	-	6.0	•			•			•		•		0.03-0.08
DGR 2200JS-15D ⁽¹⁾	2.20	0.02	18.00	20.60	15.0	-	•		•	•	•	•	•		•	•	0.03-0.07
DGR 2200JS-6D ⁽¹⁾	2.20	0.02	18.00	20.60	6.0	-	•	•	•	•	•	•	•		•		0.03-0.08
DGL 2202J-6D	2.20	0.20	18.00	21.00	-	6.0	•		•	•	•	•			•	•	0.03-0.10
DGR 2202J-15D	2.20	0.20	18.00	21.00	15.0	-	•	•	•	•							0.03-0.08
DGR 2202J-6D	2.20	0.20	18.00	21.00	6.0	-	•	•	•	•	•	•			•	•	0.03-0.10
DGL 3100JS-15D ⁽¹⁾	3.10	0.02	18.00	20.60	-	15.0	•			•	•		•		•		0.03-0.07
DGL 3100JS-6D ⁽¹⁾	3.10	0.02	18.00	20.60	-	6.0	•			•			•		•		0.03-0.08
DGR 3100JS-15D ⁽¹⁾	3.10	0.02	18.00	20.60	15.0	-	•	•	•	•	•	•	•		•		0.03-0.07
DGR 3100JS-6D ⁽¹⁾	3.10	0.02	18.00	20.60	6.0	-	•	•	•	•	•	•	•		•		0.03-0.08
DGL 3102J-15D	3.10	0.20	18.00	21.00	-	15.0	•			•							0.04-0.10
DGL 3102J-6D	3.10	0.20	18.00	21.00	-	6.0	•	•	•	•	•	•			•	•	0.04-0.14
DGR 3102J-15D	3.10	0.20	18.00	21.00	15.0	-	•		•	•	•	•			•	•	0.04-0.10
DGR 3102J-6D	3.10	0.20	18.00	21.00	6.0	-	•	•	•	•	•	•		•	•	•	0.04-0.14
DGR 4000JS-15D ⁽¹⁾	4.00	0.00	- ⁽³⁾	19.30	15.0	-	•		•								0.04-0.10
DGL 4003J-4D	4.00	0.30	- ⁽³⁾	18.90	-	4.0	•		•	•	•	•			•	•	0.04-0.15
DGR 4003J-4D	4.00	0.30	- ⁽³⁾	18.90	-	4.0	•	•		•	•	•		•	•	•	0.04-0.15
DGR 4800JS-4D ⁽¹⁾	4.80	0.03	- ⁽³⁾	19.80	-	4.0	•										0.04-0.12
DGR 4800JS-8D ⁽¹⁾	4.80	0.03	- ⁽³⁾	19.80	-	8.0	•										0.04-0.14
DGR 4803J-4D	4.80	0.30	- ⁽³⁾	19.80	-	4.0	•										0.04-0.18
DGR 4803J-8D	4.80	0.30	- ⁽³⁾	19.80	-	8.0	•										0.04-0.15
DGL 5003J-4D	5.00	0.30	- ⁽³⁾	19.80	-	4.0	•				•						0.05-0.20
DGR 5003J-4D	5.00	0.30	- ⁽³⁾	19.80	-	4.0	•			•	•					•	0.05-0.20
DGL 6303J-4D	6.35	0.35	- ⁽³⁾	19.10	-	4.0	•				•						0.05-0.25
DGR 6303J-4D	6.35	0.35	- ⁽³⁾	19.10	-	4.0	•										0.05-0.25

• For cutting speed recommendations and user guide, see pages 540-547

(1) Sharp corners

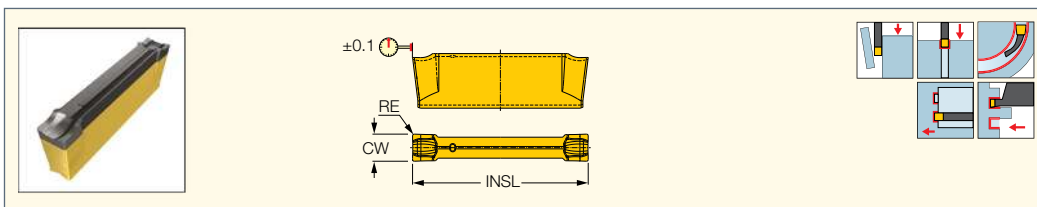
(2) Cutting depth maximum

(3) No depth limit.

Tools: C#-HELIR/L • D/HGAD RE/LE-JHP • DGAD-B-D • DGAD/HGAD • DGAQ • DGAQ-JHP • DGFH • DGFH-JHP • DGFHL-26B-TR-D

• DGFHR/L • DGFHR/L-B-D..(R/L) • DGFHR/L-BC-JHP • DGFS • DGPAD-JHP • DGPAD-XL-JHP • DGTR/L • DGTR/L-B-D-JHP-SL • DGTR/L-B-D-JHP-SL-MC

• DGTR/L-B-D-SH • DGTR/L-B-D-TR • DGTR/L-B-T-SH • DGTR/L-B/BC-D • DGTR/L-BC-T • HELIR/L • NQCH-DGTR/L-D-SH-JHP

DO-GRIP
TWISTED 2-SIDED**DGN-LF/LFT**Double-Sided Inserts for Parting
and Grooving Stainless Steel

Designation	Dimensions						Tough ↔ Hard							Recommended Machining Data
	CW	CWTOL ⁽¹⁾	RE	RETOL ⁽²⁾	CDX ⁽³⁾	INSL	IC830	IC928	IC1030	IC5400	IC1010	IC808	IC908	f groove (mm/rev)
DGN 2002LF	2.00	0.03	0.20	0.020	18.00	19.80	●			●	●	●		0.03-0.08
DGN 2202LF	2.20	0.03	0.20	0.020	18.00	19.80		●	●	●	●		●	0.03-0.08
DGN 2502LF	2.50	0.03	0.20	0.020	18.00	19.80			●		●			0.03-0.08
DGN 3102LF	3.10	0.04	0.20	0.020	18.00	20.10	●	●	●	●	●	●	●	0.04-0.10
DGN 3102LFT	3.10	0.04	0.20	0.020	18.00	21.10		●					●	0.04-0.12

• The LFT chipformer features basically the same design as the LF chipformer, except that it is reinforced by a T-land to improve its durability in interrupted-cut or on hard materials applications. It can be applied at higher feeds than the LF chipformer

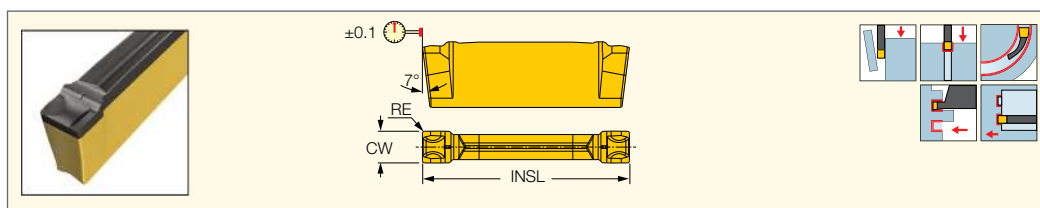
• For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Cutting width tolerance (+/-)

⁽²⁾ Corner radius tolerance (+/-)

⁽³⁾ Cutting depth maximum

Tools: DGAD-B-D • DGAQ • DGAQ-JHP • DGFH • DGFH-JHP • DGFHL-26B-TR-D • DGFHR/L • DGFHR/L-B-D..(R/L) • DGFHR/L-BC-JHP
 • DGFS • DGPAD-JHP • DGPAD-XL-JHP • DGTR/L • DGTR/L-B-D-JHP-SL • DGTR/L-B-D-JHP-SL-MC • DGTR/L-B-D-SH • DGTR/L-B/BC-D
 • NQCH-DGTR/L-D-SH-JHP

DO-GRIP
TWISTED 2-SIDED**DGN-MF**Double-Sided Inserts for Parting
and Grooving Soft and Hard
Materials at Medium Feeds

Designation	Dimensions					Tough ↔ Hard					Recommended Machining Data
	CW	RE	CWTOL ⁽¹⁾	CDX ⁽²⁾	INSL	IC830	IC1030	IC5400	IC1010	IC808	f groove (mm/rev)
DGN 2002MF	2.00	0.20	0.04	18.00	19.90	●	●	●	●	●	0.04-0.12
DGN 2202MF	2.20	0.20	0.04	18.00	19.90		●		●		0.04-0.12
DGN 3002MF	3.00	0.20	0.04	18.00	20.10			●			0.06-0.18
DGN 3102MF	3.10	0.20	0.04	18.00	20.10	●	●	●	●	●	0.06-0.18
DGN 4003MF	4.00	0.30	0.04	- ⁽³⁾	18.80	●				●	0.08-0.20

• For cutting speed recommendations and user guide, see pages 540-547

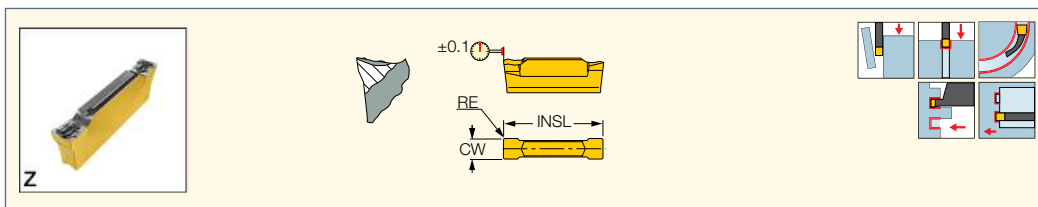
⁽¹⁾ Cutting width tolerance (+/-)

⁽²⁾ Cutting depth maximum

⁽³⁾ No depth limit

Tools: C#-HELIR/L • C#-HFIR/L-MC • CR HFIR-M • DGAQ • DGAQ-JHP • DGFH • DGFH-JHP • DGFHR/L-B-D..(R/L) • DGFHR/L-BC-JHP
 • DGPAD-JHP • DGPAD-XL-JHP • DGTR/L • DGTR/L-B-D-JHP-SL • DGTR/L-B-D-JHP-SL-MC • HELIR/L • HFAER/L-4 • HFAIR/L-4
 • HFAIR/L-DG • HFFR/L-T • HFHR/L-4T • HFIR/L-MC • HFPAD-4 • HFPAD-JHP • HGPAD • HGPAD-JHP • IM-HFIR-MC • NQCH-DGTR/L-D-SH-JHP

DGN-Z

 Double-Sided Inserts
 for Parting Tubes, Thin-
 Walled and Small Parts


Designation	Dimensions						Tough ↔ Hard				Recommended Machining Data
	CW	CDX ⁽¹⁾	CWTOL ⁽²⁾	RE	RETOL ⁽³⁾	INSL	IC1030	IC1010	IC808	IC908	
DGN 2002Z	2.00	18.00	0.03	0.20	0.020	20.90	●	●	●	●	f groove (mm/rev) 0.03-0.12
DGN 3002Z	3.00	18.00	0.03	0.20	0.020	20.90			●	●	0.03-0.16

• For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Cutting depth maximum

⁽²⁾ Cutting width tolerance (+/-)

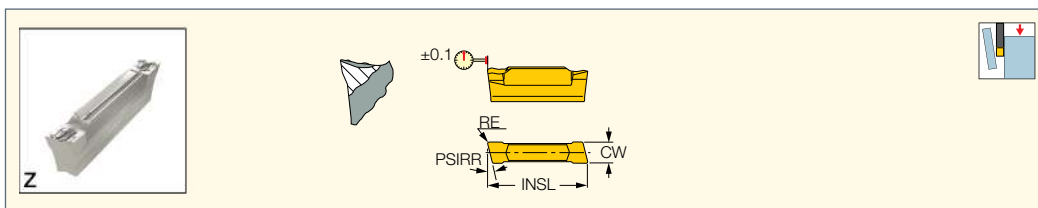
⁽³⁾ Corner radius tolerance (+/-)

Tools: D/HGAD RE/LE-JHP • DGAD-B-D • DGAD/HGAD • DGAQ • DGAQ-JHP • DGFH • DGFH-JHP • DGFHL-26B-TR-D • DGFHR/L • DGFHR/L-B-D..(R/L)

• DGFHR/L-BC-JHP • DGFS • DGPAD-JHP • DGPAD-XL-JHP • DGTR/L • DGTR/L-B-D-JHP-SL • DGTR/L-B-D-JHP-SL-MC • DGTR/L-B-D-SH

• DGTR/L-B/BC-D • NQCH-DGTR/L-D-SH-JHP

DGR-Z/ZS

 Double-Sided Inserts with Very
 Positive Rake for Parting Tubes
 and Thin-Walled and Small Parts


Designation	Dimensions						IC908	Recommended Machining Data
	CW	RE	INSL	CDX ⁽²⁾	PSIRR			
DGR 2000ZS-15D ⁽¹⁾	2.00	0.02	20.40	18.00	15.0	●	●	f groove (mm/rev) 0.03-0.07
DGR 2000ZS-6D ⁽¹⁾	2.00	0.02	20.40	18.00	6.0	●	●	0.03-0.08
DGR 2002Z-15D	2.00	0.20	20.90	18.00	15.0	●	●	0.03-0.10
DGR 2002Z-6D	2.00	0.20	20.90	18.00	6.0	●	●	0.03-0.10
DGR 3000ZS-15D ⁽¹⁾	3.00	0.02	20.40	18.00	15.0	●	●	0.03-0.10
DGR 3000ZS-6D ⁽¹⁾	3.00	0.02	20.40	18.00	6.0	●	●	0.03-0.12
DGR 3002Z-6D	3.00	0.20	20.90	18.00	6.0	●	●	0.03-0.14

• For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Sharp corners

⁽²⁾ Cutting depth maximum

Tools: D/HGAD RE/LE-JHP • DGAD-B-D • DGAD/HGAD • DGAQ • DGAQ-JHP • DGFH • DGFH-JHP • DGFHL-26B-TR-D • DGFHR/L • DGFHR/L-B-D..(R/L)

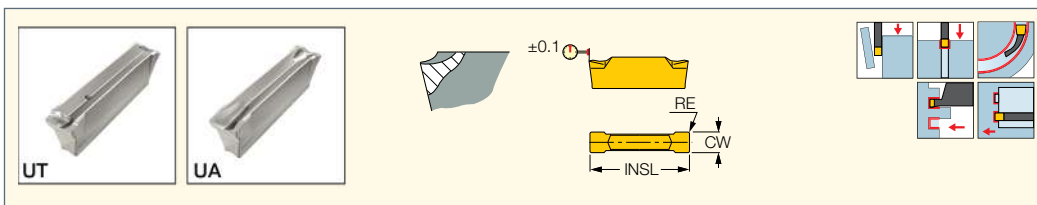
• DGFHR/L-BC-JHP • DGFS • DGPAD-JHP • DGPAD-XL-JHP • DGTR/L • DGTR/L-B-D-JHP-SL • DGTR/L-B-D-JHP-SL-MC • DGTR/L-B-D-SH

• DGTR/L-B/BC-D • NQCH-DGTR/L-D-SH-JHP



DGN-UT/UA

Double-Sided Inserts for Parting and Grooving Cr-Ni Alloys, Low Carbon Steel and Ductile Materials at Low Feeds



Designation	Dimensions						Tough ↔ Hard										Recommended Machining Data
	CW	CWTOL ⁽¹⁾	RE	RETOL ⁽²⁾	CDX ⁽³⁾	INSL	IC328	IC1030	IC1028	IC354	IC350	IC1010	IC308	IC908	IC20	f groove (mm/rev)	
DGN 2202UA	2.20	0.03	0.20	0.020	18.00	19.90	●		●	●						0.04-0.13	
DGN 2202UT	2.20	0.03	0.20	0.020	18.00	19.60					●			●		0.03-0.11	
DGN 3003UA	3.00	0.03	0.25	0.020	18.00	20.50	●	●	●	●		●	●		●	0.04-0.15	
DGN 3003UT	3.00	0.03	0.25	0.020	18.00	20.50							●	●		0.04-0.13	
DGN 4003UA	4.00	0.04	0.30	0.020	- (4)	19.40	●			●						0.05-0.16	
DGN 4003UT	4.00	0.04	0.30	0.020	- (4)	19.30	●			●				●		0.04-0.15	
DGN 5003UT	5.00	0.04	0.30	0.020	- (4)	19.00	●		●				●	●		0.05-0.18	
DGN 6008UT	6.00	0.04	0.80	0.050	- (4)	19.10	●			●			●	●		0.06-0.20	

• For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Cutting width tolerance (+/-)

⁽²⁾ Corner radius tolerance (+/-)

⁽³⁾ Cutting depth maximum

⁽⁴⁾ No depth limit

Tools: C#-HELIR/L • D/HGAD RE/LE-JHP • DGAD-B-D • DGAD/HGAD • DGAQ • DGAQ-JHP • DGFH • DGFH-JHP • DGFHL-26B-TR-D

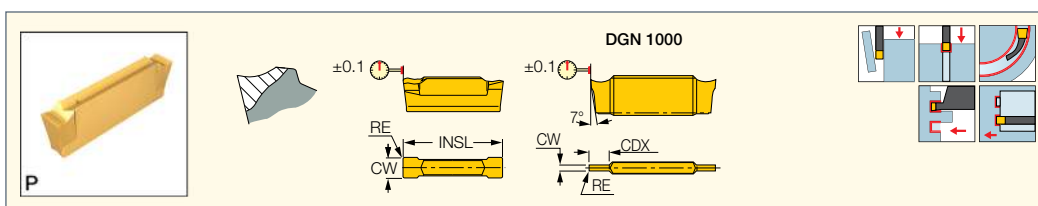
• DGFHR/L • DGFHR/L-B-D..(R/L) • DGFHR/L-BC-JHP • DGFS • DGPAD-JHP • DGPAD-XL-JHP • DGTR/L • DGTR/L-B-D-JHP-SL • DGTR/L-B-D-JHP-SL-MC

• DGTR/L-B-D-SH • DGTR/L-B/BC-D • DGTR/L-BC-T • HELIR/L • HGPAD • HGPAD-JHP • NQCH-DGTR/L-D-SH-JHP



DGN-P

Double-Sided Inserts for Parting and Grooving Soft Materials, Thin and Miniature Parts



Designation	Dimensions						IC508	Recommended Machining Data
	CW	RE	CWTOL ⁽¹⁾	RETOL ⁽²⁾	INSL	CDX ⁽³⁾		
DGN 1000P	1.00	0.05	0.02	0.020	20.00	3.00	●	0.02-0.05
DGN 1500P	1.50	0.05	0.02	0.020	20.00	18.00	●	0.02-0.07
DGN 2000P	2.00	0.05	0.02	0.020	20.00	18.00	●	0.02-0.08
DGN 3000P	3.00	0.05	0.02	0.020	20.00	18.00	●	0.02-0.10

• For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Cutting width tolerance (+/-)

⁽²⁾ Corner radius tolerance (+/-)

⁽³⁾ Cutting depth maximum

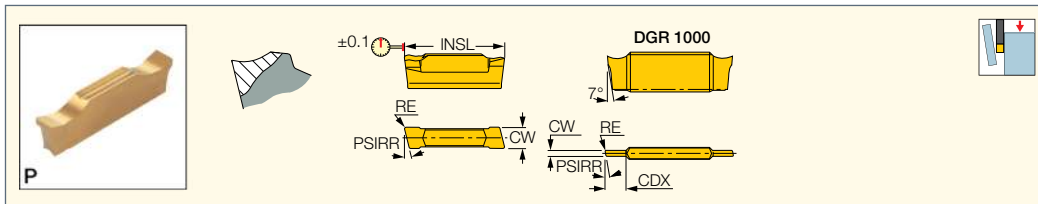
Tools: D/HGAD RE/LE-JHP • DGAD-B-D • DGAD/HGAD • DGAQ • DGAQ-JHP • DGFH • DGFH-JHP • DGFHL-26B-TR-D • DGFHR/L • DGFHR/L-B-D..(R/L)

• DGFHR/L-BC-JHP • DGFS • DGPAD-JHP • DGPAD-XL-JHP • DGTR/L • DGTR/L-B-D-JHP-SL • DGTR/L-B-D-JHP-SL-MC • DGTR/L-B-D-SH

• DGTR/L-B-D-TR • DGTR/L-B-T-SH • DGTR/L-B/BC-D • NQCH-DGTR/L-D-SH-JHP

DGR-P

Double-Sided Inserts for Parting Soft Materials, Thin and Miniature Parts



Designation	Dimensions						Recommended Machining Data
	CW	RE	INSL	CDX ⁽¹⁾	PSIRR	IC508	f groove (mm/rev)
DGR 1000P-15D	1.00	0.05	20.60	2.90	15.0	●	0.02-0.03
DGR 1000P-6D	1.00	0.05	20.60	2.90	6.0	●	0.02-0.04
DGR 1500P-15D	1.50	0.05	20.60	18.00	15.0	●	0.02-0.04
DGR 1500P-6D	1.50	0.05	20.60	18.00	6.0	●	0.02-0.05
DGR 2000P-15D	2.00	0.05	20.60	18.00	15.0	●	0.02-0.05
DGR 2000P-6D	2.00	0.05	20.60	18.00	6.0	●	0.02-0.07

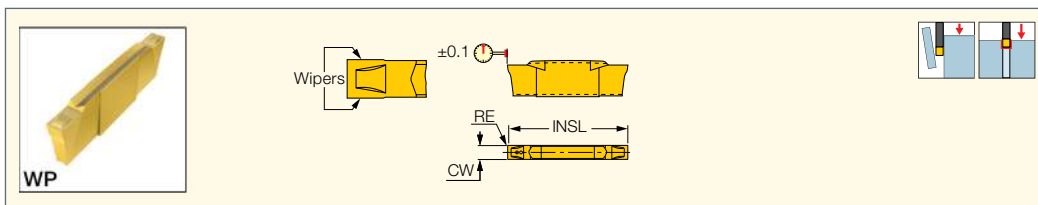
• For cutting speed recommendations and user guide, see pages 540-547

(1) Cutting depth maximum

Tools: D/HGAD RE/LE-JHP • DGAD-B-D • DGAD/HGAD • DGAQ • DGAQ-JHP • DGFH • DGFH-JHP • DGFHR/L • DGFHR/L-B-D..(R/L)
 • DGFS • DGPAD-JHP • DGTR/L • DGTR/L-B-D-JHP-SL • DGTR/L-B-D-JHP-SL-MC • DGTR/L-B-D-SH • DGTR/L-B-D-TR • DGTR/L-B-T-SH
 • DGTR/L-B/BC-D • NQCH-DGTR/L-D-SH-JHP

DGN-WP

Double-Sided Parting and Grooving Inserts with a Wiper Design for High Flatness and Surface Finish



Designation	Dimensions						Tough ↔ Hard		Recommended Machining Data
	CW	RE	CWTOL ⁽¹⁾	RETOL ⁽²⁾	CDX ⁽³⁾	INSL	IC328	IC1030	
DGN 1900WP	1.90	0.05	0.02	0.020	6.00	19.70	●	●	0.04-0.12
DGN 2400WP	2.39	0.05	0.02	0.020	6.00	20.40	●	●	0.05-0.14

• For cutting speed recommendations and user guide, see pages 540-547

(1) Cutting width tolerance (+/-)

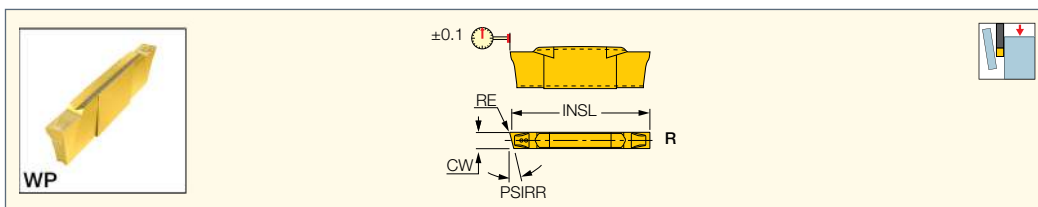
(2) Corner radius tolerance (+/-)

(3) Cutting depth maximum

Tools: D/HGAD RE/LE-JHP • DGAD-B-D • DGAD/HGAD • DGAQ • DGAQ-JHP • DGFH • DGFH-JHP • DGFHL-26B-TR-D • DGFHR/L • DGFHR/L-B-D..(R/L)
 • DGFS • DGPAD-JHP • DGTR/L • DGTR/L-B-D-JHP-SL • DGTR/L-B-D-JHP-SL-MC • DGTR/L-B-D-SH • DGTR/L-B/BC-D • NQCH-DGTR/L-D-SH-JHP

DGR-WP

Double-Sided Parting Inserts with a Wiper Design for High Flatness and Surface Finish

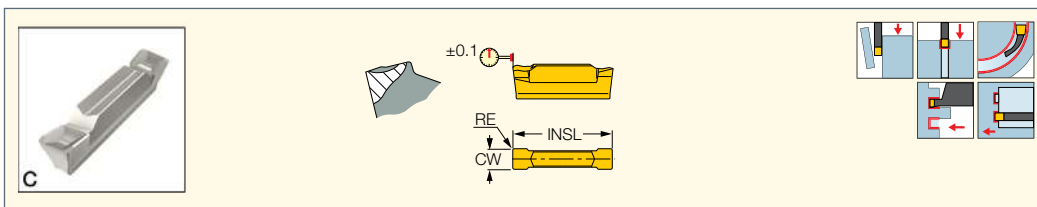


Designation	Dimensions						Tough ↔ Hard		Recommended Machining Data
	CW	RE	CDX ⁽¹⁾	INSL	PSIRR		IC328	IC1030	
DGR 1900WP-12D	1.90	0.05	6.00	19.70	12.0		●	●	0.04-0.10
DGR 1900WP-5D	1.90	0.05	6.00	19.70	5.0		●	●	0.04-0.10
DGR 2400WP-12D	2.39	0.05	6.00	20.40	12.0		●	●	0.04-0.10
DGR 2400WP-5D	2.39	0.05	6.00	20.40	5.0		●	●	0.04-0.12

• For cutting speed recommendations and user guide, see pages 540-547

(1) Cutting depth maximum

Tools: D/HGAD RE/LE-JHP • DGAD-B-D • DGAD/HGAD • DGAQ • DGAQ-JHP • DGFH • DGFH-JHP • DGFHR/L • DGFHR/L-B-D..(R/L)
 • DGFS • DGPAD-JHP • DGTR/L • DGTR/L-B-D-JHP-SL • DGTR/L-B-D-JHP-SL-MC • DGTR/L-B-D-SH • DGTR/L-B/BC-D • NQCH-DGTR/L-D-SH-JHP

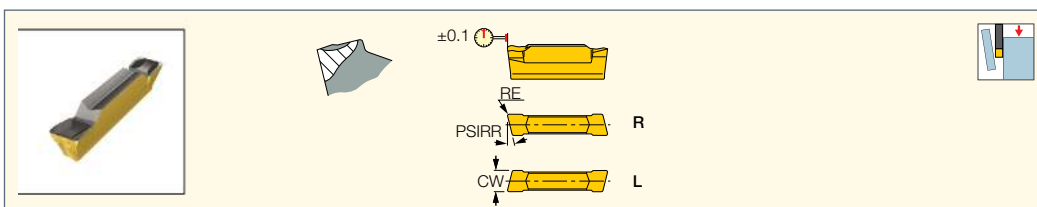
DO-GRIP
TWISTED 2-SIDED**HGN-C**Parting and Grooving Inserts
for Parting Bars, Hard Materials
and Tough Applications

Designation	Dimensions				Tough $\leftrightarrow$ Hard					Recommended Machining Data
	CW	RE	CWTOL ⁽¹⁾	INSL	IC328	IC830	IC354	IC308	IC908	
HGN 3003C	3.00	0.30	0.05	15.80	●	●	●	●	●	f groove (mm/rev) 0.08-0.20

- No depth limit
- For cutting speed recommendations and user guide, see pages 540-547

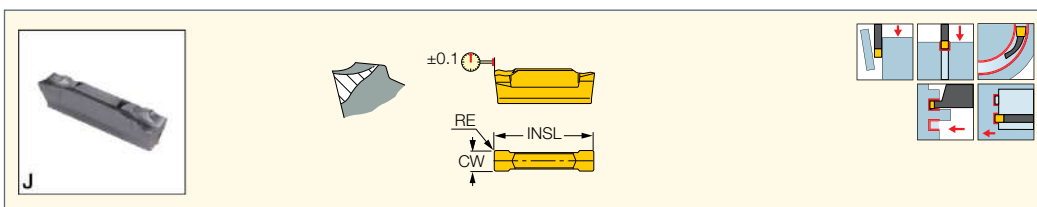
(1) Cutting width tolerance (+/-)

Tools: C#-HELIR/L • D/HGAD RE/LE-JHP • DGAD/HGAD • HELIR/L • HFPAD-3 • HFPAD-JHP • HGAIR/L-3 • HGFH • HGHR/L-3 • HGPAD
• HGPAD-JHP

DO-GRIP
TWISTED 2-SIDED**HGR/L-C**Inserts for Parting Bars, Hard
Materials and Tough Applications

Designation	Dimensions					Tough $\leftrightarrow$ Hard		Recommended Machining Data
	CW	RE	INSL	PSIRL	PSIRR	IC328	IC830	
HGL 3003C-6D	3.00	0.30	15.60	6.0	-	●		f groove (mm/rev) 0.06-0.16
HGR 3003C-6D	3.00	0.30	15.60	-	6.0	●	●	0.06-0.16

- No depth limit
- For cutting speed recommendations and user guide, see pages 540-547

Tools: D/HGAD RE/LE-JHP • DGAD/HGAD • HELIR/L • HGFH**DO-GRIP**
TWISTED 2-SIDED**HGN-J**Inserts for Parting and
Grooving Soft Materials,
Parting Tubes, Small Diameters
and Thin-Walled Parts

Designation	Dimensions					Tough $\leftrightarrow$ Hard				Recommended Machining Data
	CW	RE	CWTOL ⁽¹⁾	RETOL ⁽²⁾	INSL	IC328	IC830	IC354	IC308	
HGN 3002J	3.00	0.20	0.05	0.030	16.10	●	●	●	●	f groove (mm/rev) 0.04-0.15

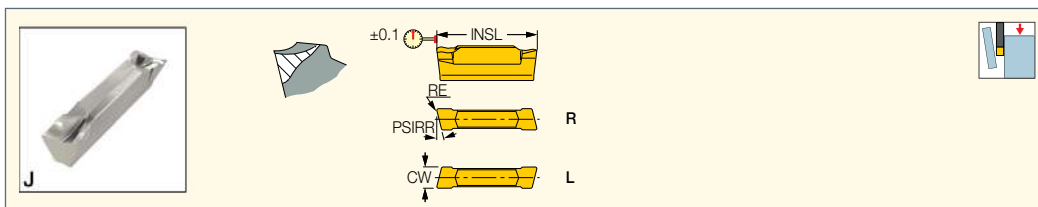
- No depth limit
- For cutting speed recommendations and user guide, see pages 540-547

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

Tools: C#-HELIR/L • D/HGAD RE/LE-JHP • DGAD/HGAD • HELIR/L • HFPAD-3 • HFPAD-JHP • HGAIR/L-3 • HGFH • HGHR/L-3 • HGPAD
• HGPAD-JHP

HGR/L-J/JS

 Double-Sided Inserts for Parting
 Soft Materials, Tubes, Small
 Diameters and Thin-Walled Parts


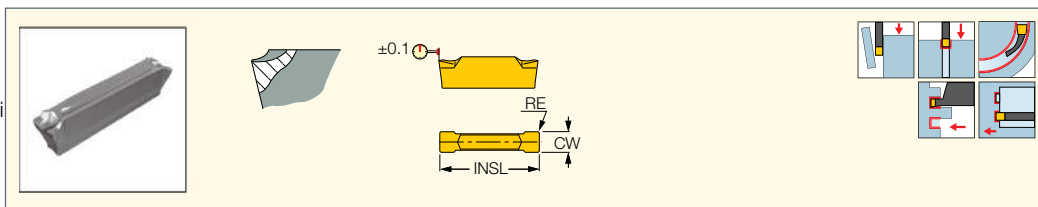
Designation	Dimensions					Tough ↔ Hard			Recommended Machining Data
	CW	RE	PSIRL	PSIRR	INSL	IC328	IC830	IC354	
HGL 3000JS-15D ⁽¹⁾	3.00	0.02	15.0	-	15.20	•			f groove (mm/rev) 0.03-0.07
HGR 3000JS-15D ⁽¹⁾	3.00	0.02	-	15.0	15.20	•			0.03-0.07
HGL 3002J-6D	3.00	0.20	6.0	-	15.70	•			0.04-0.12
HGR 3002J-6D	3.00	0.20	-	6.0	15.70	•	•	•	0.04-0.12

• No depth limit • For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Sharp corners

Tools: D/HGAD RE/LE-JHP • DGAD/HGAD • HELIR/L • HGFH

HGN-UT

 Double-Sided Inserts for Parting
 and Grooving Low Feeds on Cr-Ni
 Alloys and Low Carbon Steel


Designation	Dimensions					Tough ↔ Hard			Recommended Machining Data
	CW	RE	CWTOL ⁽¹⁾	RETOL ⁽²⁾	INSL	IC328	IC354		
HGN 3003UT	3.00	0.30	0.05	0.030	15.80	•	•		f groove (mm/rev) 0.04-0.13

• No depth limit • For cutting speed recommendations and user guide, see pages 540-547

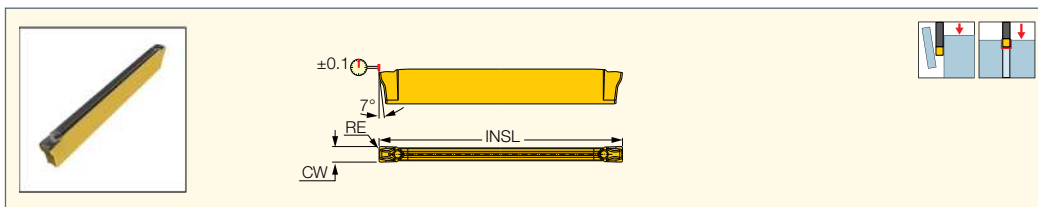
⁽¹⁾ Cutting width tolerance (+/-)

⁽²⁾ Corner radius tolerance (+/-)

Tools: C#-HELIR/L • D/HGAD RE/LE-JHP • DGAD/HGAD • HELIR/L • HFPAD-3 • HFPAD-JHP • HGAIR/L-3 • HGFH • HGHR/L-3 • HGPAD

• HGPAD-JHP

DGN-C-XL

 Extra Long Parting and Grooving
 Inserts for Parting Bars Up to 65
 mm Diameters, Hard Materials
 and Tough Applications


Designation	Dimensions						Tough ↔ Hard			Recommended Machining Data
	CW	RE	CWTOL ⁽¹⁾	RETOL ⁽²⁾	CDX ⁽³⁾	INSL	IC830	IC5400	IC808	f groove (mm/rev)
DGN 2002C-XL	2.05	0.20	0.04	0.030	30.00	32.00	●	●	●	0.05-0.16
DGN 3002C-XL	3.00	0.20	0.04	0.030	32.50	35.00	●		●	0.07-0.20

• For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Cutting width tolerance (+/-)

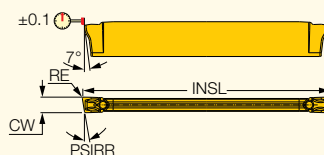
⁽²⁾ Corner radius tolerance (+/-)

⁽³⁾ Cutting depth maximum

Tools: DGTR/L-XL

DO-GRIPXL**DGR/L-C-XL**

Extra Long Double-Sided Inserts for Parting Bars, Hard Materials and Tough Applications



Right-hand shown

Designation	Dimensions						Tough ↔ Hard		Recommended Machining Data
	CW	RE	CDX ⁽¹⁾	PSIRL	PSIRR	INSL	IC830	IC808	
DGL 2002C-6D-XL	2.00	0.20	30.00	6.0	-	32.00	●	●	f groove (mm/rev) 0.05-0.12
DGR 2002C-6D-XL	2.00	0.20	30.00	-	6.0	32.00	●	●	0.05-0.12
DGL 3002C-6D-XL	3.00	0.20	32.50	6.0	-	35.00	●	●	0.08-0.18
DGR 3002C-6D-XL	3.00	0.20	32.50	-	6.0	35.00	●	●	0.08-0.18

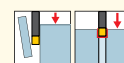
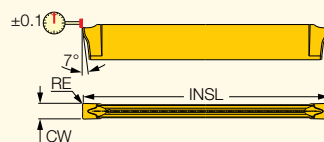
• For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Cutting depth maximum

Tools: DGTR/L-XL

DO-GRIPXL**DGN-J-XL**

Extra Long Inserts for Parting and Grooving Soft Materials, Parting Tubes, Small Diameters and Thin-Walled Parts



Designation	Dimensions						Tough ↔ Hard			Recommended Machining Data
	CW	RE	CWTOL ⁽¹⁾	RETOL ⁽²⁾	CDX ⁽³⁾	INSL	IC830	IC5400	IC808	
DGN 2002J-XL	2.05	0.20	0.04	0.030	30.00	32.00	●	●	●	f groove (mm/rev) 0.04-0.14
DGN 3002J-XL	3.00	0.20	0.04	0.030	32.50	35.00	●	●	●	0.04-0.16

• For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Cutting width tolerance (+/-)

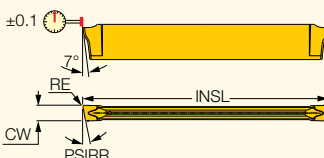
⁽²⁾ Corner radius tolerance (+/-)

⁽³⁾ Cutting depth maximum

Tools: DGTR/L-XL

DO-GRIPXL**DGR/L-J-XL**

Extra Long Double-Sided Inserts for Parting Soft Materials, Tubes, Small Diameters and Thin-Walled Parts



Right-hand shown

Designation	Dimensions						Tough ↔ Hard		Recommended Machining Data
	CW	RE	CDX ⁽¹⁾	PSIRL	PSIRR	INSL	IC830	IC808	
DGL 2002J-6D-XL	2.00	0.20	30.00	6.0	-	32.00	●	●	f groove (mm/rev) 0.04-0.10
DGR 2002J-6D-XL	2.00	0.20	30.00	-	6.0	32.00	●	●	0.04-0.10
DGL 3002J-6D-XL	3.00	0.20	32.50	6.0	-	35.00	●	●	0.04-0.14
DGR 3002J-6D-XL	3.00	0.20	32.50	-	6.0	35.00	●	●	0.04-0.14

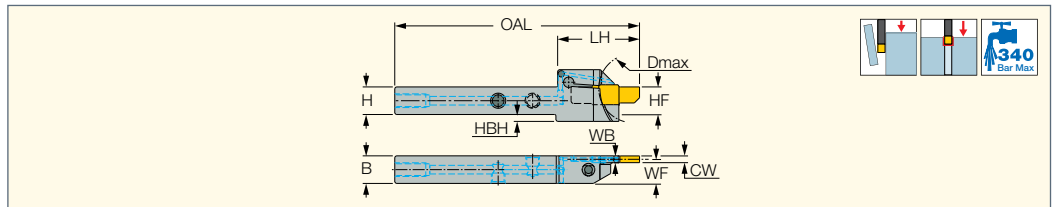
• For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Cutting depth maximum

Tools: DGTR/L-XL

BGTR/L-B-JHP

Integral Shank Parting and Grooving Tools with Coolant Channels Carrying Narrow Inserts for Parting up to 20 mm Bars



Designation	CWN ⁽¹⁾	CWX ⁽²⁾	H	HF	B	WB	OAL	LH	D max ⁽³⁾	WF	HBH
BGTR/L 16B-D20-JHP	0.80	1.50	16.0	16.0	16.0	4.00	142.00	47.5	40.0 ⁽⁴⁾	14.00	4.0
BGTR/L 20B-D20-JHP	0.80	1.50	20.0	20.0	20.0	4.00	142.00	47.5	40.0 ⁽⁴⁾	18.00	-
BGTR/L 25B-D20-JHP	0.80	1.50	25.0	25.0	25.0	4.00	142.00	47.5	40.0 ⁽⁴⁾	23.00	-

• For user guide, see pages 540-547

⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

⁽³⁾ The specified limit refers to the tool

⁽⁴⁾ for grooving

Inserts: BGM N-J • BGM R/L-J

Holders: AVC-D80-VH • C#-ADE • C#-ADES • C#-ASHA • C#-ASHR/L • C#-ASHR/L-45 • DT30/2 ASH# 16/20-1-35080 • HSK A-WH-ASHR/L-1

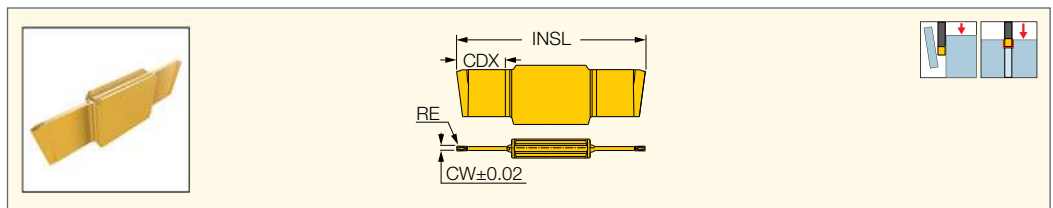
• HSK A63WH-ASHN-45 • HSK A63WH-ASHR/L-2 • HSK A63WH-ASHR/L-3 • HSK A63WH-ASHR/L-45

Spare Parts

Designation				
BGTR/L 16B-D20-JHP	SR M5X16 DIN912		SR 5/16UNF TL360	HW 4.0
BGTR/L 20B-D20-JHP	SR M5X16 DIN912	HW 3.0	PLG G1/8 TL360	HW 5.0
BGTR/L 25B-D20-JHP	SR M5X16 DIN912	HW 3.0	PLG G1/8 TL360	HW 5.0
BGTR 25B-D20-JHP	SR M5X16 DIN912	HW 4.0	PLG G1/8 TL360	HW 5.0

BGM N-J

Narrow Material Cost Saving Inserts for Grooving and Parting up to 20 mm Bar Diameters



Designation	Dimensions						IC1008	Recommended Machining Data
	CW	CWTOL ⁽¹⁾	RE	RETOL ⁽²⁾	CDX	INSL		f groove (mm/rev)
BGM N0801J	0.80	0.02	0.10	0.020	10.00	38.70	•	0.02-0.05
BGM N1001J	1.00	0.02	0.10	0.020	10.00	38.70	•	0.02-0.08
BGM N1201J	1.20	0.02	0.10	0.020	10.00	38.70	•	0.03-0.10
BGM N1501J	1.50	0.02	0.10	0.020	10.00	38.70	•	0.05-0.12

• For cutting speed recommendations and user guide, see pages 540-547

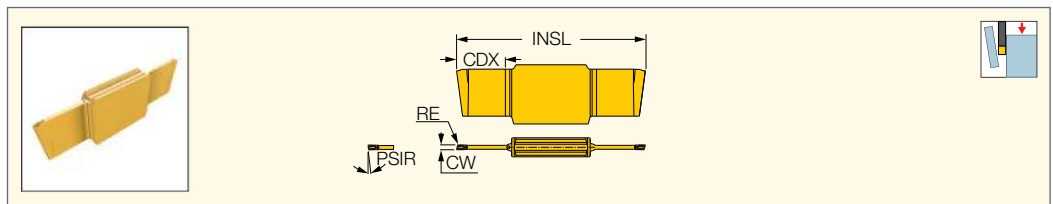
⁽¹⁾ Cutting width tolerance (+/-)

⁽²⁾ Corner radius tolerance (+/-)

Tools: BGTR/L-B-JHP

BGM R/L-J

Narrow Material Cost Saving Inserts for Parting up to 20 mm Bar Diameters



Designation	Dimensions						IC1008	Recommended Machining Data
	CW	RE	INSL	CDX	PSIR			f groove (mm/rev)
BGM R/L1001J-15D	1.00	0.10	38.70	10.00	15.0		•	0.02-0.06
BGM R/L1001J-6D	1.00	0.10	38.70	10.00	6.0		•	0.02-0.08

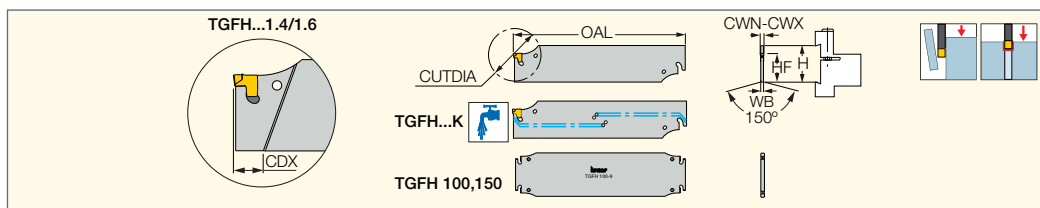
• For cutting speed recommendations and user guide, see pages 540-547

Tools: BGTR/L-B-JHP

TANG-GRIP

**TGFH/R/L**

Blades with a Tangentially Oriented Pocket Carrying TANG-GRIP Single-Ended Inserts for Parting and Grooving



Designation	H	CWN ⁽²⁾	CWX ⁽³⁾	WB	OAL	CDX	HF	CUTDIA	CSP ⁽⁴⁾	Insert		
TGFH 19-1.4	19.0	1.40	1.40	1.05 ⁽⁵⁾	86.00	9.60	15.7	30.0	0	TAG 1.4	ETG 1.4/1.6*	
TGFH 19-1.6	19.0	1.60	1.60	1.30 ⁽⁶⁾	86.00	11.00	15.7	32.0	0	TAG 1.6	ETG 1.4/1.6*	
TGFH 19-2	19.0	1.80	2.40	1.65	86.00	-	15.7	38.0	0	TAG 2	ETG 2*	
TGFH 26-1.4	26.0	1.40	1.40	1.05 ⁽⁵⁾	110.00	8.30	21.4	29.0	0	TAG 1.4	ETG 1.4/1.6*	
TGFH 26-1.6	26.0	1.60	1.60	1.30 ⁽⁶⁾	110.00	10.00	21.4	35.0	0	TAG 1.6	ETG 1.4/1.6*	
TGFH 26-2	26.0	1.80	2.40	1.65	110.00	-	21.4	50.0	0	TAG 2	ETG 2*	
TGFH 26-3	26.0	2.80	3.50	2.50	110.00	-	21.4	75.0	0	TAG 3	ETG 3-4*	
TGFH 26K-3 ⁽¹⁾	26.0	2.80	3.50	2.50	110.00	-	21.4	75.0	1	TAG 3	ETG 3-4-SH*	SGC 340
TGFH 26-4	26.0	3.70	4.50	3.40	110.00	-	21.4	80.0	0	TAG 4	ETG 3-4*	
TGFH 26-5	26.0	4.70	5.50	4.00	150.00	-	21.4	80.0	0	TAG 5	ETG 5-7*	
TGFH 32-1.4	32.0	1.40	1.40	1.05 ⁽⁵⁾	150.00	7.10	24.8	29.0	0	TAG 1.4	ETG 1.4/1.6*	
TGFH 32-1.6	32.0	1.60	1.60	1.30 ⁽⁵⁾	150.00	10.00	24.8	38.0	0	TAG 1.6	ETG 1.4/1.6*	
TGFH 32-2	32.0	1.80	2.40	1.65 ⁽⁵⁾	150.00	-	24.8	50.0	0	TAG 2	ETG 2*	
TGFH 32-3	32.0	2.80	3.50	2.50	150.00	-	24.8	100.0	0	TAG 3	ETG 3-4*	
TGFH 32K-3 ⁽¹⁾	32.0	2.80	3.50	2.50	150.00	-	24.8	100.0	1	TAG 3	ETG 3-4-SH*	SGC 340
TGFH 32-4	32.0	3.70	4.50	3.40	150.00	-	24.8	100.0	0	TAG 4	ETG 3-4*	
TGFH 32K-4 ⁽¹⁾	32.0	3.70	4.50	3.40	150.00	-	24.8	100.0	1	TAG 4	ETG 3-4-SH*	SGC 340
TGFH 32-5	32.0	4.70	5.50	4.00	150.00	-	24.8	120.0	0	TAG 5	ETG 5-7*	
TGFH 32-6	32.0	5.70	6.50	5.20	150.00	-	24.8	120.0	0	TAG 6	ETG 5-7*	
TGFH 32-7	32.0	6.80	7.50	6.00	148.00	-	24.8	120.0	0	TAG 7	ETG 5-7*	
TGFH 45-3	45.0	2.80	3.50	2.50	225.00	-	38.1	160.0	0	TAG 3	ETG 3-4*	
TGFH 45-4	45.0	3.70	4.50	3.40	225.00	-	38.1	160.0	0	TAG 4	ETG 3-4*	
TGFH 45-5	45.0	4.70	5.50	4.00	225.00	-	38.1	160.0	0	TAG 5	ETG 5-7*	
TGFH 45-6	45.0	5.70	6.50	5.20	225.00	-	38.1	160.0	0	TAG 6	ETG 5-7*	
TGFH 45-7	45.0	6.80	7.50	6.00	225.00	-	38.1	160.0	0	TAG 7	ETG 5-7*	
TGFH 52-7	52.6	6.80	7.50	6.00	190.00	-	45.2	190.0	0	TAG 7	ETG 5-7*	
TGFH 53-7	52.6	6.80	7.50	6.00	260.00	-	45.2	220.0	0	TAG 7	ETG 5-7*	
TGFH 52K-8 ⁽¹⁾	52.6	7.70	8.50	7.20	190.00	-	45.2	190.0	1	TAG 8	ETG 8-12*	
TGFH 53K-8 ⁽¹⁾	52.6	7.70	8.50	7.20	260.00	-	45.2	215.0	1	TAG 8	ETG 8-12*	
TGFH 52K-9 ⁽¹⁾	52.6	8.70	10.00	8.20	190.00	-	45.2	190.0	1	TAG 9	ETG 8-12*	
TGFH 53K-9 ⁽¹⁾	52.6	8.70	10.00	8.20	260.00	-	45.2	215.0	1	TAG 9	ETG 8-12*	
TGFHR/L 53K-12 ⁽¹⁾	52.6	11.70	12.70	10.00	260.00	-	45.2	215.0	1	TAG 12	ETG 8-12*	
TGFH 100-9	100.0	8.70	10.00	8.20	460.00	-	92.5	450.0	0	TAG 9	ETG 8-12*	
TGFH 100-12	100.0	11.70	12.70	10.00	460.00	-	92.5	450.0	0	TAG 12	ETG 8-12*	
TGFH 150-12	150.0	11.70	12.70	10.00	610.00	-	142.5	600.0	0	TAG 12	ETG 8-12*	

• For user guide, see pages 540-547

⁽¹⁾ With coolant holes, the recommended coolant pressure is 10 bar min.; cooling tube SGC 341 should be ordered separately

⁽²⁾ Minimum cutting width

⁽³⁾ Maximum cutting width

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

⁽⁵⁾ Thickness beyond the D.O.C. area is 2.50 mm

⁽⁶⁾ Thickness beyond the D.O.C. area is 1.60 mm

* Optional, should be ordered separately

Inserts: TAG N-A • TAG N-C/W/M • TAG N-HF • TAG N-J/JS/JT • TAG N-LF • TAG N-MF • TAG N-UT • TAG R/L-C • TAG R/L-J/JS

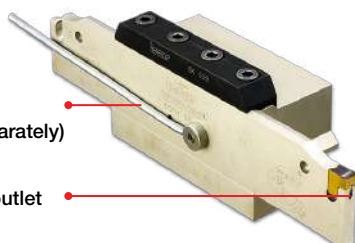
• TAGB/TAGBA

Holders: C#-TBK-R/L • HSK A-WH-TBK-R/L • SGTBF • SGTBK • SGTBR/L • SGTBU/SGTBN • UBHCR/L

K TYPE COOLANT

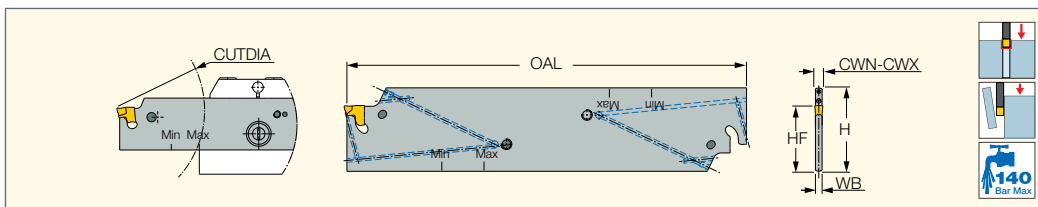
Coolant inlet SGC 341
(should be ordered separately)

Coolant outlet



TGFH-JHP

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



Designation	H	CWN ⁽²⁾	CWX ⁽³⁾	WB	OAL	HF	CUTDIA	Insert		
TGFH 26C-3-JHP	26.0	2.80	3.50	2.50	140.00	21.4	75.0	TAG 3	SGC 340	ETG 3-4-SH*
TGFH 32C-3-JHP	32.0	2.80	3.50	2.50	150.00	24.8	90.0	TAG 3	SGC 340	ETG 3-4-SH*
TGFH 26C-4-JHP	26.0	3.70	4.50	3.40	140.00	21.4	75.0	TAG 4	SGC 340	ETG 3-4-SH*
TGFH 32C-4-JHP	32.0	3.70	4.50	3.40	150.00	24.8	90.0	TAG 4	SGC 340	ETG 3-4-SH*
TGFH 32C-5-JHP	32.0	4.70	5.50	4.00	160.00	24.8	120.0	TAG 5	SGC 340	ETG 5-7*
TGFH 32C-6-JHP ⁽¹⁾	32.0	5.70	6.50	5.20	160.00	24.8	120.0	TAG 6	SGC 340	ETG 5-7*

• For user guide and accessories, see pages 540-547

⁽¹⁾ Only an upper channel

⁽²⁾ Minimum cutting width

⁽³⁾ Maximum cutting width

* Optional, should be ordered separately

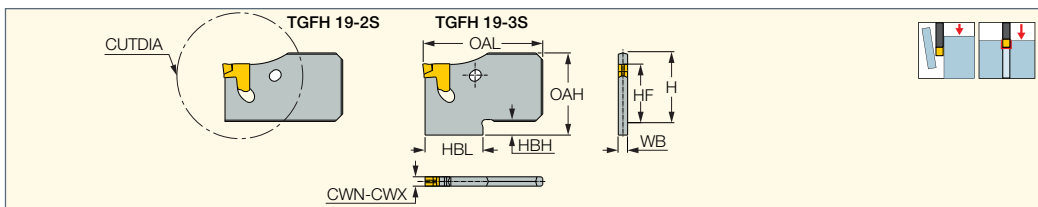
Inserts: TAG N-A • TAG N-C/W/M • TAG N-HF • TAG N-J/JS/JT • TAG N-LF • TAG N-MF • TAG N-UT • TAG R/L-C • TAG R/L-J/JS

• TAGB/TAGBA

Holders: TGTBU-JHP

TGFH-S

Parting and Grooving Single-
Sided Blades Carrying
TANG-GRIP Inserts



Designation	H	CWN ⁽¹⁾	CWX ⁽²⁾	WB	OAL	HF	OAH	HBH	HBL	CDX ⁽³⁾	CUTDIA	
TGFH 19-2S	19.0	1.80	2.40	1.65	32.00	15.7	19.0	-	-	12.00	36.0	ETG 2*
TGFH 19-3S	19.0	2.80	3.50	2.50	34.60	15.7	22.0	3.0	15.5	16.00	40.0	ETG 3-4-SH*

• For Dmax and Tmax drawing, see SGBHR/L holder

⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

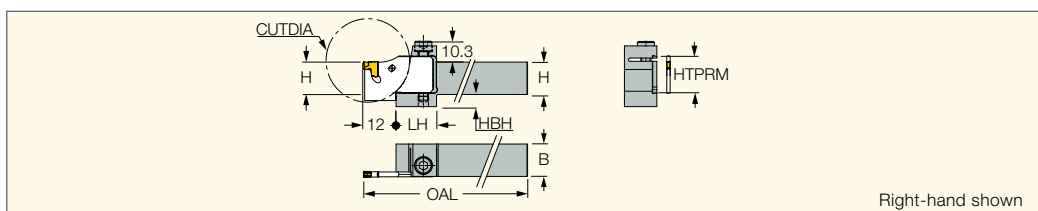
⁽³⁾ Cutting depth maximum

* Optional, should be ordered separately

Inserts: TAG N-A • TAG N-C/W/M • TAG N-HF • TAG N-J/JS/JT • TAG N-LF • TAG N-MF • TAG N-UT • TAG R/L-C • TAG R/L-J/JS

SGBHR/L

Tool Blocks for SELF-GRIP
Single-Sided Blades



Right-hand shown

Designation	H	B	HBH	OAL	HTPRM	LH	CDX ⁽¹⁾	CUTDIA
SGBHR/L 1010	10.0	10.0	10.0	154.00	19.0	20.0	16.00	40.0
SGBHR 1212	12.0	12.0	8.0	154.00	19.0	20.0	16.00	40.0
SGBHR 1414	14.0	14.0	6.0	154.00	19.0	20.0	16.00	40.0
SGBHR/L 1616	16.0	16.0	6.0	154.00	19.0	20.0	16.00	40.0
SGBHR/L 2020	20.0	20.0	2.0	154.00	19.0	20.0	16.00	40.0
SGBHR/L 2525	25.0	25.0	-	154.00	19.0	20.0	16.00	40.0

• For Dmax and Tmax dimensions, see TGFH-S adapters

⁽¹⁾ Cutting depth maximum

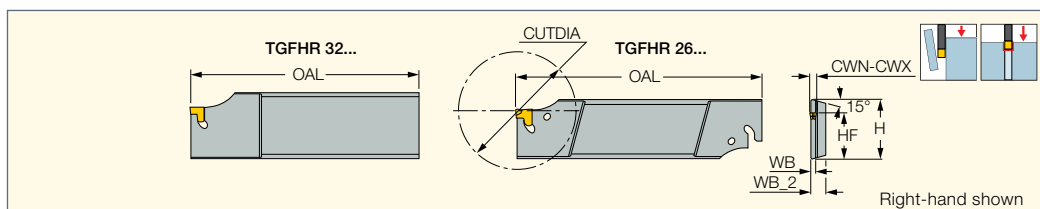
Tools: TGFH-S

Spare Parts

Designation			
SGBHL 1010	SET ESG 1	SR M5X25DIN912	HW 4.0
SGBHR 1010		SR M5X25DIN912	HW 4.0
SGBHR 1212		SR M5X25DIN912	HW 4.0
SGBHR 1414	SET ESG 1	SR M5X25DIN912	HW 4.0
SGBHR/L 1616		SR M5X25DIN912	HW 4.0
SGBHL 2020		SR M5X25DIN912	HW 4.0
SGBHR 2020	SET ESG 1	SR M5X25DIN912	HW 4.0
SGBHR/L 2525		SR M5X25DIN912	HW 4.0

TANG-GRIP
PARTING LINE**TGFHR/L**

Single- and Double-Ended
Parting and Grooving Reinforced
Blades Carrying TANG-GRIP
Tangentially Clamped Inserts



Designation	H	CWN ⁽¹⁾	CWX ⁽²⁾	WB	WB_2	OAL	HB	CUTDIA	
TGFHL 26T16-2	26.0	1.80	2.40	1.65	7.9	110.50	21.4	43.0	ETG 2"
TGFHR 26T16-3	26.0	2.80	3.50	2.50	7.9	110.50	21.4	43.0	ETG 3-4-SH*
TGFHR/L 26T23-2	26.0	1.80	2.40	1.65	7.9	110.50	21.4	46.0	ETG 2"
TGFHR/L 26T23-3	26.0	2.80	3.50	2.50	7.9	110.50	21.4	46.0	ETG 3-4-SH*
TGFHR/L 32T22-2	32.0	1.80	2.40	1.65	7.9	110.50	24.8	42.0	ETG 2"
TGFHR/L 32T22-3	32.0	2.80	3.50	2.50	7.9	110.50	24.8	42.0	ETG 3-4-SH*
TGFHR/L 32T33-3	32.0	2.80	3.50	2.50	7.9	110.50	24.8	66.0	ETG 3-4-SH*
TGFHR/L 32T33-4	32.0	3.70	4.50	3.40	7.9	110.50	24.8	66.0	ETG 3-4-SH*

• For user guide, see pages 540-547

⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

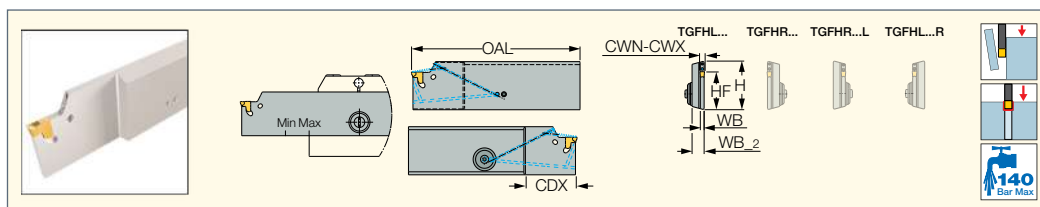
* Optional, should be ordered separately

Inserts: TAG N-A • TAG N-C/W/M • TAG N-HF • TAG N-J/JS/JT • TAG N-LF • TAG N-MF • TAG N-UT • TAG R/L-C • TAG R/L-J/JS

Holders: C#-TBK-R/L • HSK A-WH-TBK-R/L • SGTBF • SGTBK • SGTBR/L • SGTBU/SGTBN • UBHCR/L

TANG-GRIP JETCUT
PARTING LINE**TGFHR/L-JHP**

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



Designation	CWN ⁽¹⁾	CWX ⁽²⁾	WB_2	WB	OAL	H	HB	CDX ⁽³⁾	Insert		
TGFHR/L 32C-3T33-JHP	2.80	3.50	7.9	2.50	110.50	32.0	24.8	33.00	TAG 3	ETG 3-4-SH*	SGC 340
TGFHL 32C-3T33R-JHP	2.80	3.50	7.9	2.50	110.50	32.0	24.8	33.00	TAG 3	ETG 3-4-SH*	SGC 340
TGFHR 32C-3T33L-JHP	2.80	3.50	7.9	2.50	110.50	32.0	24.8	33.00	TAG 3	ETG 3-4-SH*	SGC 340

• For user guide and accessories, see pages 540-547

⁽¹⁾ Minimum cutting width

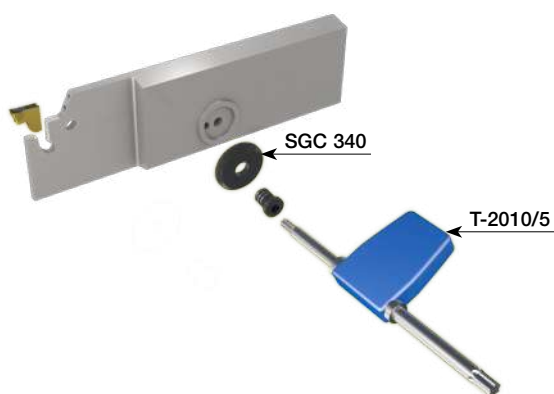
⁽²⁾ Maximum cutting width

⁽³⁾ Cutting depth maximum

* Optional, should be ordered separately

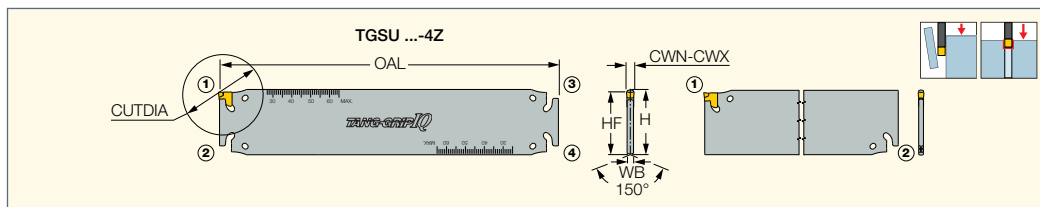
Inserts: TAG N-A • TAG N-C/W/M • TAG N-HF • TAG N-J/JS/JT • TAG N-LF • TAG N-MF • TAG N-UT • TAG R/L-C • TAG R/L-J/JS

Holders: TGTBU-JHP



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*

• For user guide, see pages 540-547

⁽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

Inserts: TAG N-A • TAG N-C/W/M • TAG N-HF • TAG N-J/JS/JT • TAG N-LF • TAG N-MF • TAG N-UT • TAG R/L-C • TAG R/L-J/JS

• TAGB/TAGBA

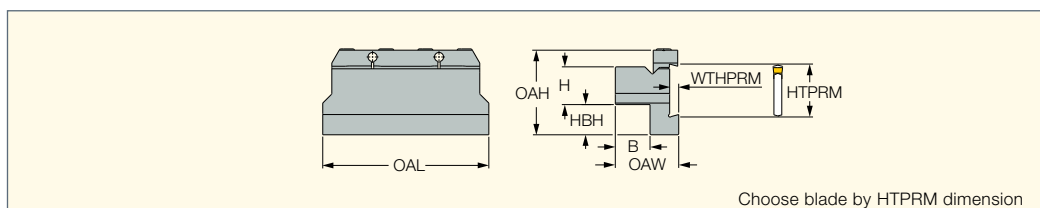
Holders: TGTBU

TGSU 35-3-IQ-4Z

TGSU 35-4-IQ-4Z


TGTBU

Tool Blocks for TGSU Parting
and Grooving Blades



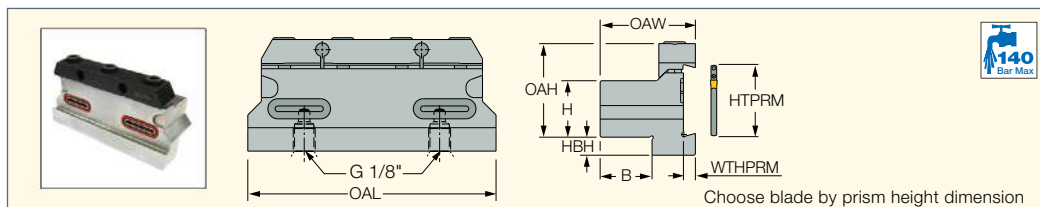
Designation	H	B	HTPRM	WTHPRM	OAW	OAH	HBH	OAL			
TGTBU 20-35	20.0	19.0	35.0	6.00	38.00	56.0	23.7	110.00	BKU 110	SR M6X16 DIN912	HW 5.0
TGTBU 25-35	25.0	23.0	35.0	6.00	42.00	56.0	18.7	110.00	BKU 110	SR M6X16 DIN912	HW 5.0
TGTBU 32-35	32.0	29.0	35.0	6.00	48.00	56.0	11.7	110.00	BKU 110	SR M6X16 DIN912	HW 5.0
TGTBU 32-35 HD ⁽¹⁾	32.0	30.0	35.0	8.00	55.00	64.0	18.0	130.00	BK 509	SR M8X20DIN912	HW 6.0
TGTBU 40-35	40.0	41.0	35.0	6.00	60.00	56.0	3.7	110.00	BKU 110	SR M6X16 DIN912	HW 5.0
TGTBU 40-35 HD ⁽¹⁾	40.0	41.0	35.0	8.00	66.00	64.0	10.0	130.00	BK 509	SR M8X20DIN912	HW 6.0
TGTBU 40-56 HD ⁽¹⁾	40.0	41.0	56.0	8.00	66.00	72.0	28.0	130.00	BK 509	SR M8X20DIN912	HW 6.0

⁽¹⁾ HD - recommended blocks for TGSU....-8, TGSU....-9 blades

Tools: TGSU

JETCUT**TGTBU-JHP**

Tool Blocks for Parting
and Grooving Blades for
High-Pressure Coolant



Designation	H	B	HTPRM	OAW	OAH	HBH	WTHPRM	OAL				
TGTBU 16-5G-JHP	16.0	16.9	26.0	35.60	29.9	13.1	4.10	86.00	BKU 86	SR M6X16 DIN912	HW 5.0	OR 14X2.5N N
TGTBU 20-5G-JHP	20.0	20.9	26.0	39.60	33.9	9.1	4.10	86.00	BKU 86	SR M6X16 DIN912	HW 5.0	OR 14X2.5N N
TGTBU 20-35-JHP	20.0	19.0	35.0	38.00	32.3	23.7	6.00	110.00	BKU 210	SR M6X20 DIN912	HW 5.0	OR 14X2.5N N
TGTBU 20-6G-JHP	20.0	19.0	32.0	39.20	36.4	15.0	5.30	100.00	BKU 100	SR M6X16 DIN912	HW 5.0	OR 14X2.5N N
TGTBU 25-5G-JHP	25.0	26.1	26.0	44.10	39.0	5.5	4.10	110.00	BKU 105	SR M6X16 DIN912	HW 5.0	OR 14X2.5N N
TGTBU 25-6G-JHP	25.0	23.0	32.0	43.20	41.4	8.0	5.30	110.00	BKU 110	SR M6X16 DIN912	HW 5.0	OR 14X2.5N N
TGTBU 25-35-JHP	25.0	23.0	35.0	42.00	37.3	18.7	6.00	110.00	BKU 210	SR M6X20 DIN912	HW 5.0	OR 14X2.5N N
TGTBU 32-6G-JHP	32.0	29.0	32.0	49.20	48.4	5.0	5.30	110.00	BKU 110	SR M6X16 DIN912	HW 5.0	OR 14X2.5N N
TGTBU 32-35-JHP	32.0	29.0	35.0	48.00	44.3	11.7	6.00	110.00	BKU 210	SR M6X20 DIN912	HW 5.0	OR 14X2.5N N

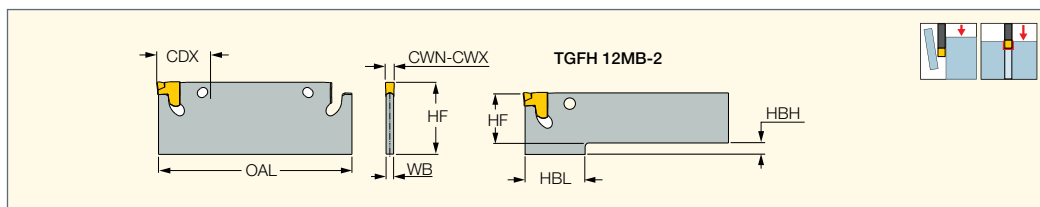
Tools: DGFH-JHP • DGFHR/L-BC-JHP • TGFH-JHP • TGFHR/L-JHP

TANGGRIP

PARTING LINE

TGFH-MB

Parting and Grooving Blades for
Other Manufacturers Blocks



Designation	CWN ⁽¹⁾	CWX ⁽²⁾	WB	OAL	HF	HBH	HBL	CDX ⁽³⁾	Insert	
TGFH 12MB-2 L58	1.80	2.40	1.65	58.00	12.2	2.8	15.5	11.50	TAG 2	ETG 2"
TGFH 17MB-2 L58	1.80	2.40	1.65	58.00	17.2	-	-	11.50	TAG 2	ETG 2"
TGFH 22MB-2 L58	1.80	2.40	1.65	58.00	22.2	-	-	11.50	TAG 2	ETG 2"
TGFH 17MB-3	2.80	3.50	2.50	64.00	17.2	-	-	12.00	TAG 3	ETG 3-4-SH*
TGFH 22MB-3	2.80	3.50	2.50	64.00	22.2	-	-	12.00	TAG 3	ETG 3-4-SH*
TGFH 22MB-3-L84	2.80	3.50	2.50	84.00	22.2	-	-	16.00	TAG 3	ETG 3-4-SH*
TGFH 28MB-3	2.80	3.50	2.50	100.00	28.0	-	-	19.00	TAG 3	ETG 3-4-SH*
TGFH 17MB-4	3.70	4.50	3.40	70.00	17.2	-	-	14.00	TAG 4	ETG 3-4-SH*
TGFH 22MB-4	3.70	4.50	3.40	70.00	22.2	-	-	14.00	TAG 4	ETG 3-4-SH*
TGFH 22MB-4-L90	3.70	4.50	3.40	90.00	22.2	-	-	17.00	TAG 4	ETG 3-4-SH*
TGFH 28MB-4	3.70	4.50	3.40	100.00	28.0	-	-	19.00	TAG 4	ETG 3-4-SH*

• For user guide, see pages 540-547

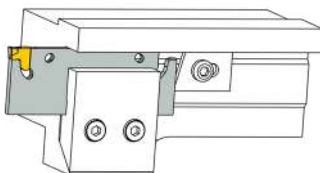
⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

⁽³⁾ Cutting depth maximum

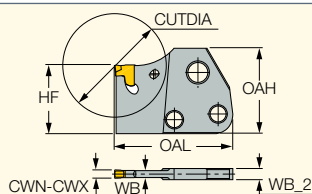
* Optional, should be ordered separately

Inserts: TAG N-A • TAG N-C/W/M • TAG N-HF • TAG N-J/JS/JT • TAG N-LF • TAG N-MF • TAG N-UT • TAG R/L-C • TAG R/L-J/JS



TGAD

Parting and Grooving
Adapters Carrying TANG-GRIP
Tangentially Clamped Inserts



Designation	CWN ⁽¹⁾	CWX ⁽²⁾	WB_2	WB	OAL	CUTDIA	HF	OAH	Insert	
TGAD 1.4N	1.40	1.40	3.20	1.1	41.50	32.0	24.0	29.0	TAG 1.4	ETG 1.4/1.6*
TGAD 2N	1.80	2.40	3.20	1.7	41.50	32.0	24.0	30.0	TAG 2	ETG 2*
TGAD 3N	2.80	3.50	4.00	2.4	41.50	35.0	24.0	30.0	TAG 3	ETG 3-4-SH*
TGAD 4N	3.70	4.50	3.20	3.2	50.50	50.0	24.0	30.0	TAG 4	ETG 3-4-SH*
TGAD 5N	4.70	5.50	4.00	4.0	50.50	50.0	24.0	30.0	TAG 5	ETG 5-7*

• For user guide, see pages 540-547

⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

* Optional, should be ordered separately

Inserts: TAG N-A • TAG N-C/W/M • TAG N-HF • TAG N-J/JS/JT • TAG N-LF • TAG N-MF • TAG N-UT • TAG R/L-C • TAG R/L-J/JS

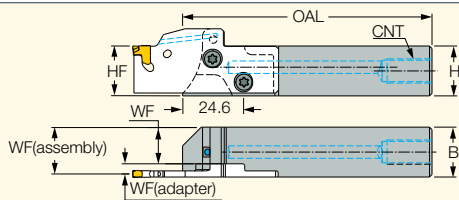
Holders: DGHAL-DECO • MAHPR/L-JHP • MAHR/L-JHP • MAHR/L • MAHPR/L • C#-MAHD • C#-MAHPD • C#-MAHDR-45 • HSK A63WH-MAHUR/L

• HSK A63WH-MAHDR-45 • HSK A63WH-MAHDOR • IM-MAHD • C#-MAHD-JHP • C#-MAHPD-JHP • IM-MAHPD • MAHR/L-JHP-MC

MODUGRIP JETCUT
MODULAR GRIP CARTRIDGES

NMAHR/L-JHP

Holders with High-Pressure
Coolant Channels Carrying
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

Tools: D/HGAD RE/LE-JHP • PCAD RE/LE-JHP • TGAD RE/LE-JHP

Spare Parts

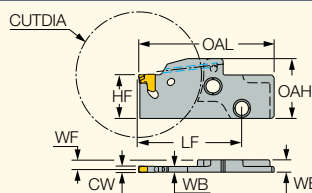
Designation				
NMAHR/L-JHP	SR M5-04451	SW6-T-SH	BLD T20/S7	OR 5X1N

TANG-GRIP JETCUT
PARTING LINE

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	25.80	18.9	54.0	TAG 2
TGAD 3R/LE-D54-JHP	3.00	3.50	4.08	2.45	5.3	44.40	58.30	25.80	18.9	54.0	TAG 3

• For user guide and accessories, see pages 540-547

⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

Inserts: TAG N-A • TAG N-C/W/M • TAG N-HF • TAG N-J/JS/JT • TAG N-LF • TAG N-MF • TAG N-UT • TAG R/L-C • TAG R/L-J/JS

Holders: NMAHR/L-JHP

Spare Parts

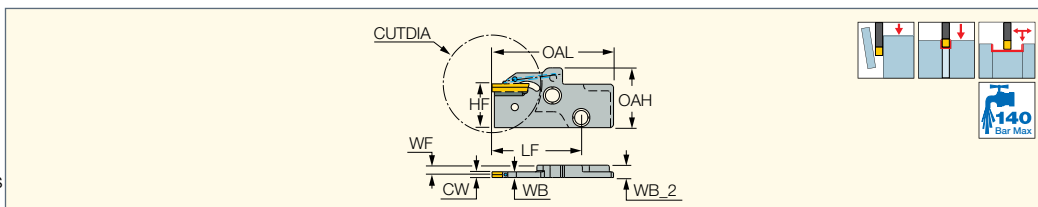
Designation	
TGAD 2R/LE-D54-JHP	ETG 2*
TGAD 3R/LE-D54-JHP	ETG 3-4-SH*

* Optional, should be ordered separately

DO-GRIP JETCUT
TWISTED 2-SIDED
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	25.80	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	25.80	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	25.80	18.9	42.0	HGN 3/GRIP 3	EDG 23B*

• For user guide and accessories, see pages 540-547

⁽¹⁾ For parting and external grooving only

⁽²⁾ Minimum cutting width

⁽³⁾ Maximum cutting width

* Optional, should be ordered separately

Inserts: DGN-P • DGN-UT/JA • DGN-WP • DGN-Z • DGN/DGNC/DGNM-C • DGN/DGNM-J/JS/JT • DGR-P • DGR-WP • DGR-Z/ZS • DGR/L-C DGRC/LC-C

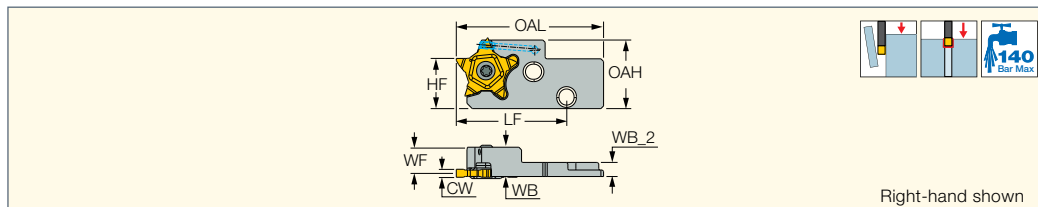
• DGR/L-J/JS • GRIP • GRIP (full radius) • HGN-C • HGN-J • HGN-UT • HGR/L-C • HGR/L-J/JS

Holders: NMAHR/L-JHP

PENTACUT JETCUT
PARTING & GROOVING LINE
MODUGRIP
MODULAR GRIP CARTRIDGES

PCAD RE/LE-JHP

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



Designation	CWN ⁽¹⁾	CWX ⁽²⁾	WF	WB	WB_2	LF	OAL	OAH	HF	Insert
PCAD 24R/LE-JHP	0.50	3.18	5.20	11.00	5.3	41.40	55.30	25.80	18.9	PENTA 24

• For user guide and accessories, see pages 540-547

⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

Inserts: PENTA 24-BSPT • PENTA 24-ISO • PENTA 24-MT • PENTA 24-NPT • PENTA 24-UN • PENTA 24-W • PENTA 24-WT • PENTA 24N-C

• PENTA 24N-C (full radius) • PENTA 24N-J • PENTA 24N-J (full radius) • PENTA 24N-PF (full radius) • PENTA 24N-PF/P

• PENTA 24N-Z • PENTA 24R-C • PENTA 24R-P • PENTA 24R/L-J • PENTA 24R/L-Z

Holders: NMAHR/L-JHP

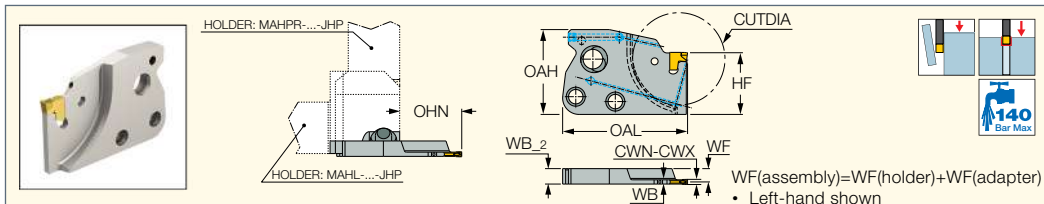
Spare Parts

Designation	
PCAD 24LE-JHP	SR 16-212-01397L
PCAD 24RE-JHP	SR 16-212-01397



TAGPAD-JHP

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



Designation	CWN ⁽¹⁾	CWX ⁽²⁾	CUTDIA	OHN ⁽³⁾	WF	WB	WB_2	OAL	OAH	HF	Insert	
TAGPAD 2R/L-D42-JHP	1.80	2.40	42.0	24.0	5.18	1.65	6.0	48.40	33.0	24.0	TAG 2	ETG 2*
TAGPAD 2R/L-D52-JHP	1.80	2.40	52.0	29.0	5.18	1.65	6.0	53.40	33.0	24.0	TAG 2	ETG 2*
TAGPAD 3R/L-D42-JHP	2.80	3.50	42.0	24.0	4.80	2.40	6.0	48.40	33.0	24.0	TAG 3	ETG 3-4-SH*
TAGPAD 3R/L-D52-JHP	2.80	3.50	52.0	29.0	4.80	2.40	6.0	53.40	33.0	24.0	TAG 3	ETG 3-4-SH*

• For user guide and accessories see pages 540-547

⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

⁽³⁾ Minimum overhang

* Optional, should be ordered separately

Inserts: TAG N-A • TAG N-C/W/M • TAG N-HF • TAG N-J/JS/JT • TAG N-LF • TAG N-MF • TAG N-UT • TAG R/L-C • TAG R/L-J/JS

Holders: ABC MAHDR-#-XL-JHP • DT##/2 MAHD#-#-XL-JHP • MAHR/L-JHP-MC • MS##-##-MG-JHP • MS-ES####-GWS-MG-JHP • TR45 MAHDR-#-XL-JHP

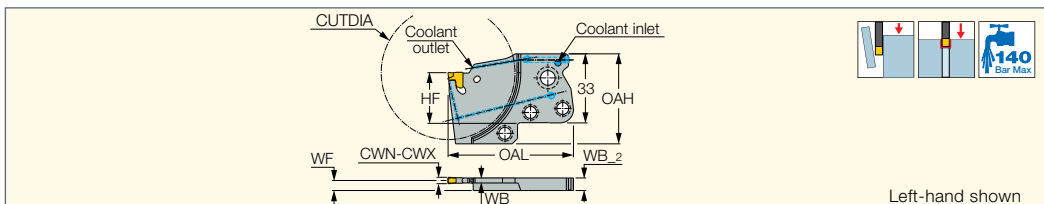
• V## MAHD#-#-XL-##-JHP • V## MAHD-XL-JHP

Flow Rate vs. Pressure

Designation	70 Bar Flow Rate (liters/min)	100 Bar Flow Rate (liters/min)	140 Bar Flow Rate (liters/min)
TAGPAD 2R/L-D42-JHP	5	6	7
TAGPAD 2R/L-D52-JHP	5	6	7
TAGPAD 3R/L-D42-JHP	8.5	10	12
TAGPAD 3R/L-D52-JHP	8.5	10	12

TAGPAD-XL-JHP

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



Designation	CWN ⁽¹⁾	CWX ⁽²⁾	WF	WB	WB_2	OAL	OAH	HF	CUTDIA	Insert	
TAGPAD-XL 2R/L-D65-JHP	1.80	2.40	5.20	1.60	6.0	60.00	43.0	34.0	65.0	TAG 2	ETG 2*
TAGPAD-XL 3R/L-D52-JHP	2.80	3.50	4.80	2.40	6.0	53.40	43.0	34.0	52.0	TAG 3	ETG 3-4-SH*
TAGPAD-XL 3R/L-D65-JHP	2.80	3.50	4.80	2.40	6.0	59.90	43.0	34.0	65.0	TAG 3	ETG 3-4-SH*
TAGPAD-XL 3R/L-D82-JHP	2.80	3.50	4.80	2.40	6.0	70.40	43.0	34.0	82.0	TAG 3	ETG 3-4-SH*
TAGPAD-XL 3R/L-D102-JHP	2.80	3.50	4.80	2.40	6.0	82.50	43.0	34.0	102.0	TAG 3	ETG 3-4-SH*
TAGPAD-XL 4R/L-D52-JHP	3.70	4.50	4.30	3.40	6.0	53.40	43.0	34.0	52.0	TAG 4	ETG 3-4-SH*
TAGPAD-XL 4R/L-D65-JHP	3.70	4.50	4.30	3.40	6.0	60.00	43.0	34.0	65.0	TAG 4	ETG 3-4-SH*
TAGPAD-XL 4R/L-D82-JHP	3.70	4.50	4.30	3.40	6.0	70.00	43.0	34.0	82.0	TAG 4	ETG 3-4-SH*
TAGPAD-XL 4R/L-D102-JHP	3.70	4.50	4.30	3.40	6.0	83.00	43.0	34.0	102.0	TAG 4	ETG 3-4-SH*

• For user guide and accessories, see pages 540-547

⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

* Optional, should be ordered separately

Inserts: TAG N-A • TAG N-C/W/M • TAG N-HF • TAG N-J/JS/JT • TAG N-LF • TAG N-MF • TAG N-UT • TAG R/L-C • TAG R/L-J/JS

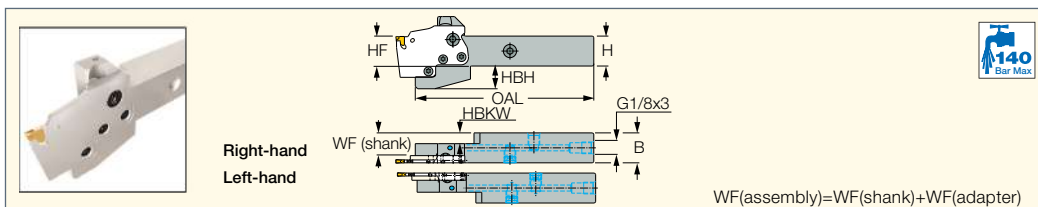
Holders: ABC MAHDR-#-XL-JHP • MAHPR/L-XL-JHP • MAHR/L-MG-XL-JHP • MAHR/L-MG-XL-JHP-MC • TR TNK36 MAHD-L-R-XL-JHP • TR45 MAHDR-#-XL-JHP

• TR45TNL MAHDN-R-XL-JHP • V## MAHD#-#-XL-##-JHP • V## MAHD-XL-JHP

JETCUT

MAHR/L-MG-XL-JHP

Holders with High-Pressure Coolant Channels for Interchangeable Adapters



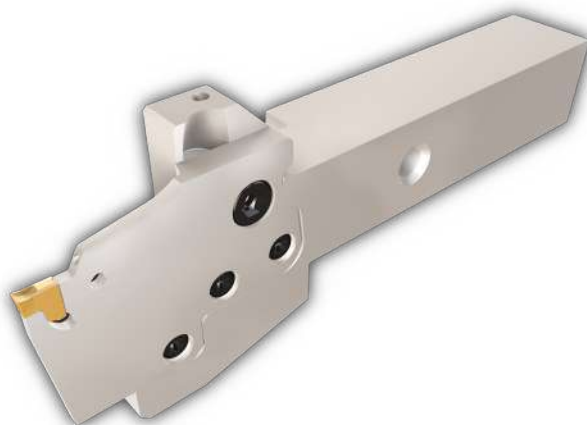
Designation	H	B	OAL	HBH	WF	HBKW
MAHR/L 20-MG-XL-JHP	20.0	20.0	149.10	24.0	14.0	4.00
MAHR/L 25-MG-XL-JHP	25.0	25.0	149.10	19.0	19.0	9.00

• For user guide and accessories, see pages 540-547

Tools: DGPAD-XL-JHP • TAGPAD-XL-JHP • TAGPAD-Y-JHP • TNFPAD-XL-JHP

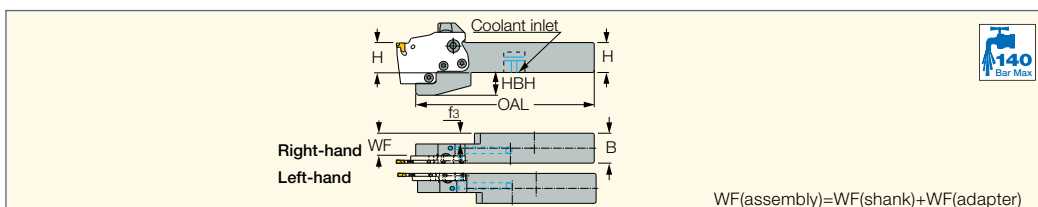
Spare Parts

Designation							
MAHR/L 20-MG-XL-JHP	SR M6X12DIN6912-P	HW 5.0	SR M5-04451	T-20/5	SR M6X14-XT DIN 912	OR 5X1N	PLG G1/8 TL360
MAHR/L 25-MG-XL-JHP	SR M6X12DIN6912-P	HW 5.0	SR M5-04451	T-20/5	SR M6X14-XT DIN 912	OR 5X1N	PLG G1/8 TL360

**JETCUT**

MAHR/L-MG-XL-JHP-MC

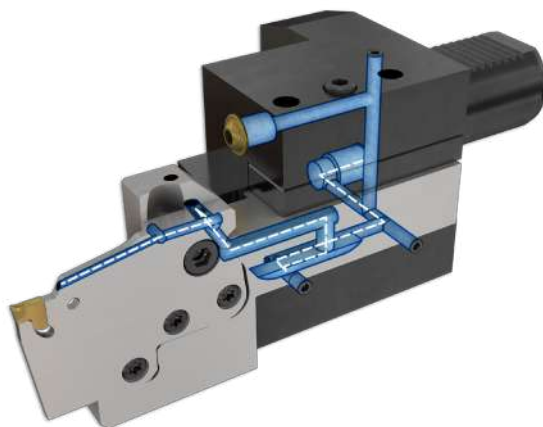
Holders with Bottom Inlets for High-Pressure Coolant Channels Carrying Parting and Grooving Adapters



Designation	H	B	OAL	HBH	WF	HBKW
MAHR/L 20-MG-XL-JHP-MC	20.0	20.0	116.10	10.0	14.0	4.00
MAHR/L 25-MG-XL-JHP-MC	25.0	25.0	114.00	10.0	19.0	9.00

• For Tmax, refer to the adapters data

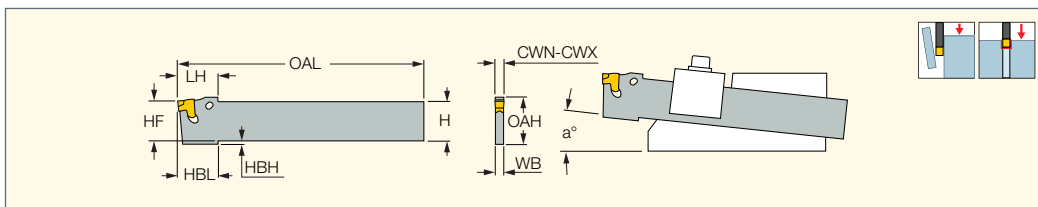
Tools: DGPAD-XL-JHP • TAGPAD-XL-JHP • TAGPAD-Y-JHP • TNFPAD-XL-JHP



Spare Parts

Designation						
MAHR/L-MG-XL-JHP-MC	SR M6X14-XT DIN 912	HW 5.0	SR M5-04451	T-20/5	SR M6X12DIN6912-P	OR 5X1N

TGFS

 Blades for Multi-Spindle
 Machines - Replacement for
 HSS and Brazed Tools


Designation	CWN ⁽¹⁾	CWX ⁽²⁾	H	WB	OAL	OAH	HF	LH	HBL	HBH	CUTDIA	a°	Insert	
TGFS 0-17-2	1.80	2.40	17.2	1.65	110.00	17.2	17.2	-	18.00	1.8	35.0	0	TAG 2	ETG 2*
TGFS 0-17-3	2.80	3.50	17.2	2.50	110.00	19.0	17.2	-	18.00	1.8	60.0	0	TAG 3	ETG 3-4-SH*
TGFS 5-17-2	1.80	2.40	17.4	1.65	110.00	18.9	17.5	18.0	18.00	1.5	35.0	5	TAG 2	ETG 2*
TGFS 5-17-3	2.80	3.50	17.4	2.50	110.00	20.7	17.5	18.0	18.00	1.5	60.0	5	TAG 3	ETG 3-4-SH*
TGFS 5-17-4	3.70	4.50	17.4	3.40	110.00	20.7	17.5	18.0	18.00	1.5	60.0	5	TAG 4	ETG 3-4-SH*
TGFS 5-22-2	1.80	2.40	22.2	1.65	150.00	23.8	22.4	18.0	-	-	50.0	5	TAG 2	ETG 2*
TGFS 5-22-3	2.80	3.50	22.2	2.50	150.00	24.1	22.4	18.0	-	-	75.0	5	TAG 3	ETG 3-4-SH*
TGFS 5-22-4	3.70	4.50	22.2	3.40	150.00	24.1	22.4	18.0	-	-	80.0	5	TAG 4	ETG 3-4-SH*
TGFS 5-28-4	3.70	4.50	28.6	3.40	150.00	30.4	28.7	18.0	-	-	100.0	5	TAG 4	ETG 3-4-SH*

• For user guide, see pages 540-547

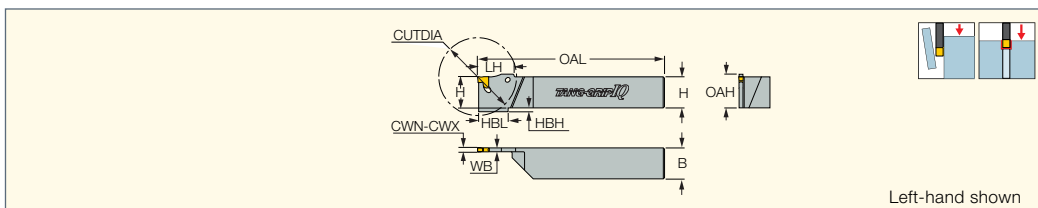
(1) Minimum cutting width

(2) Maximum cutting width

* Optional, should be ordered separately

Inserts: TAG N-A • TAG N-C/W/M • TAG N-HF • TAG N-J/JS/JT • TAG N-LF • TAG N-MF • TAG N-UT • TAG R/L-C • TAG R/L-J/JS

TGTR/L-IQ

 Integral Shank TANG-GRIP
 Toolholders for Parting
 and Grooving


Left-hand shown

Designation	CWN ⁽²⁾	CWX ⁽³⁾	H	B	WB	OAL	OAH	LH	HBL	HBH	CUTDIA	Insert	
TGTR/L 1010-1.4-IQ	1.40	1.45	10.0	10.0	1.05	140.00	15.0	-	15.50	5.0	20.0	TAG 1.4	ETG 1.4/1.6*
TGTR/L 1212-1.4-IQ	1.40	1.45	12.0	12.0	1.05	140.00	12.0	-	16.00	3.0	30.0	TAG 1.4	ETG 1.4/1.6*
TGTR/L 1616-1.4-IQ	1.40	1.45	16.0	16.0	1.05	140.00	16.0	-	16.00	-	30.0	TAG 1.4	ETG 1.4/1.6*
TGTR/L 2020-1.4-IQ	1.40	1.45	20.0	20.0	1.05	140.00	20.0	-	16.00	-	30.0	TAG 1.4	ETG 1.4/1.6*
TGTR/L 1010-1.6-IQ	1.60	1.64	10.0	10.0	1.30	120.00	-	-	16.00	5.0	28.0	TAG 1.6	ETG 1.4/1.6*
TGTR/L 1212-1.6-IQ	1.60	1.64	12.0	12.0	1.30	120.00	-	-	16.00	3.0	32.0	TAG 1.6	ETG 1.4/1.6*
TGTR/L 1616-1.6-IQ	1.60	1.64	16.0	16.0	1.30	120.00	-	-	16.00	-	35.0	TAG 1.6	ETG 1.4/1.6*
TGTR/L 1010-2-IQ	1.80	2.40	10.0	10.0	1.65	150.00	15.0	-	15.50	5.0	28.0	TAG 2	ETG 2*
TGTR/L 1212-2-IQ	1.80	2.40	12.0	12.0	1.65	150.00	15.0	-	17.00	3.0	32.0	TAG 2	ETG 2*
TGTR/L 1612-2-L120-IQ	1.80	2.50	16.0	12.0	1.65	120.00	16.0	-	16.00	-	35.0	TAG 2	ETG 2*
TGTR/L 1616-2-IQ	1.80	2.40	16.0	16.0	1.65	150.00	16.0	-	16.00	-	35.0	TAG 2	ETG 2*
TGTR/L 2012-2-IQ	1.80	2.40	20.0	12.0	1.65	125.00	20.0	-	16.00	-	35.0	TAG 2	ETG 2*
TGTR/L 1212-3-IQ	2.80	3.50	12.0	12.0	2.50	150.00	19.0	-	19.00	7.0	32.0	TAG 3	ETG 3-4-SH*
TGTR/L 1612-3-L120-IQ	2.80	3.50	16.0	12.0	2.50	120.00	19.0	-	19.00	3.0	35.0	TAG 3	ETG 3-4-SH*
TGTR/L 1616-3-IQ	2.80	3.50	16.0	16.0	2.50	150.00	19.0	-	19.00	3.0	35.0	TAG 3	ETG 3-4-SH*
TGTR/L 2012-3-IQ	2.80	3.50	20.0	12.0	2.50	125.00	20.0	-	19.00	-	43.0	TAG 3	ETG 3-4-SH*
TGTR/L 2020-3-IQ	2.80	3.50	20.0	20.0	2.50	120.50	21.7	23.4	19.00	-	54.0	TAG 3	ETG 3-4*
TGTR/L 2525-3-IQ	2.80	3.50	25.0	25.0	2.50	150.50	26.7	23.4	19.00	-	56.0	TAG 3	ETG 3-4*
TGTR 2525K-3 ⁽¹⁾	2.80	3.50	25.0	25.0	2.50	150.00	26.7	23.4	19.00	-	56.0	TAG 3	ETG 3-4*
TGTR/L 2020-4-IQ	3.70	4.50	20.0	20.0	3.40	120.50	21.7	23.4	19.00	-	57.0	TAG 4	ETG 3-4*
TGTR/L 2525-4-IQ	3.70	4.50	25.0	25.0	3.40	150.50	26.7	23.4	19.00	-	65.0	TAG 4	ETG 3-4*
TGTR/L 2020-5-IQ	4.70	5.50	20.0	20.0	4.00	120.00	21.7	-	19.00	-	57.0	TAG 5	ETG 5-7*
TGTR/L 2525-5-IQ	4.70	5.50	25.0	25.0	4.00	150.00	25.0	-	19.00	-	76.0	TAG 5	ETG 5-7*
TGTR/L 2525-6-IQ	5.70	6.50	25.0	25.0	5.20	150.00	25.0	-	19.00	-	76.0	TAG 6	ETG 5-7*

• For user guide, see pages 540-547

(1) With coolant

(2) Minimum cutting width

(3) Maximum cutting width

* Optional, should be ordered separately

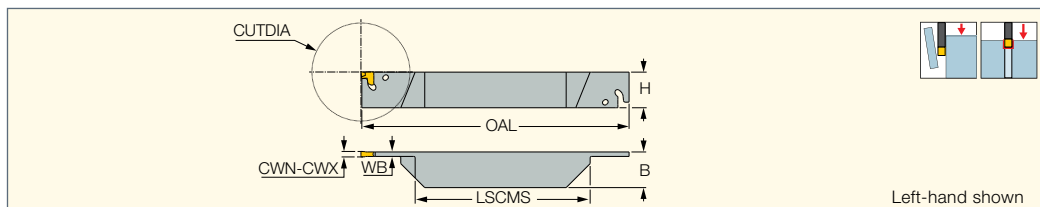
Inserts: TAG N-A • TAG N-C/W/M • TAG N-HF • TAG N-J/JS/JT • TAG N-LF • TAG N-MF • TAG N-UT • TAG R/L-C • TAG R/L-J/JS

• TAGB/TAGBA



TGTR/L-IQ-2Z

Integral Shank TANG-GRIP
Toolholders with 2 Pockets
for Parting and Grooving



Designation	CWN ⁽¹⁾	CWX ⁽²⁾	CUTDIA	H	B	WB	OAL	LSCMS	Insert	
TGTR/L 2020-3-IQ-2Z	2.80	3.50	54.0	20.0	20.0	2.50	150.00	98.90	TAG 3	ETG 3-4-SH*
TGTR/L 2525-3-IQ-2Z	2.80	3.50	56.0	25.0	25.0	2.50	150.00	98.00	TAG 3	ETG 3-4-SH*
TGTR/L 2020-4-IQ-2Z	3.70	4.50	57.0	20.0	20.0	3.40	150.00	95.00	TAG 4	ETG 3-4-SH*
TGTR/L 2525-4-IQ-2Z	3.70	4.50	65.0	25.0	25.0	3.40	150.00	88.00	TAG 4	ETG 3-4-SH*

• For user guide, see pages 540-547

⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

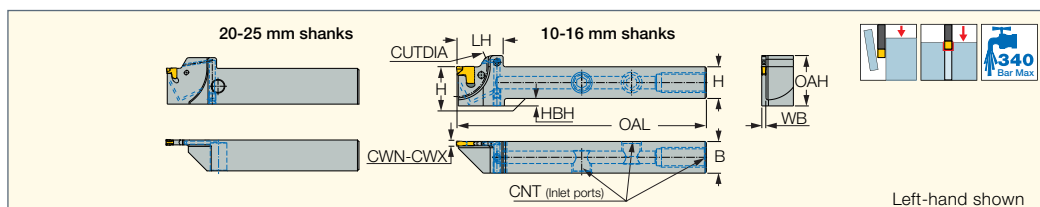
* Optional, should be ordered separately

Inserts: TAG N-A • TAG N-C/W/M • TAG N-HF • TAG N-J/JS/JT • TAG N-LF • TAG N-MF • TAG N-UT • TAG R/L-C • TAG R/L-J/JS



TGTR/L-JHP

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



Designation	CWN ⁽¹⁾	CWX ⁽²⁾	H	B	WB	OAL	OAH	LH	HBH	CNT	CUTDIA	Insert
TGTR/L 1010-2JHP	1.80	2.50	10.0	10.0	1.72	100.00	19.5	18.5	5.0	UNF 5/16-24	24.0	TAG 2
TGTR/L 1212-2JHP	1.80	2.50	12.0	12.0	1.72	100.00	19.5	18.5	3.0	UNF 5/16-24	24.0	TAG 2
TGTR/L 1616-2JHP	1.80	2.50	16.0	16.0	1.72	120.00	21.5	25.5	-	UNF 5/16-24	35.0	TAG 2
TGTR/L 2012-2JHP	1.80	2.50	20.0	12.0	1.72	120.00	25.6	25.5	-	UNF 5/16-24	35.0	TAG 2
TGTR/L 1616-3JHP	2.80	3.50	16.0	16.0	2.50	120.00	24.5	25.5	3.0	UNF 5/16-24	35.0	TAG 3
TGTR/L 2020-3JHP	2.80	3.50	20.0	20.0	2.50	120.00	27.0	35.0	-	G 1/8-28	54.0	TAG 3
TGTR/L 2525-3JHP	2.80	3.50	25.0	25.0	2.50	150.00	32.5	35.0	-	G 1/8-28	56.0	TAG 3
TGTR/L 2020-4JHP	3.70	4.50	20.0	20.0	3.40	120.00	27.0	35.0	-	G 1/8-28	54.0	TAG 4
TGTR/L 2525-4JHP	3.70	4.50	25.0	25.0	3.40	150.00	32.5	35.0	-	G 1/8-28	56.0	TAG 4

• For user guide and accessories, see pages 540-547

⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

Inserts: TAG N-A • TAG N-C/W/M • TAG N-HF • TAG N-J/JS/JT • TAG N-LF • TAG N-MF • TAG N-UT • TAG R/L-C • TAG R/L-J/JS

Flow Rate vs. Pressure

Designation	70 Bar Flow Rate (liters/min)	100 Bar Flow Rate (liters/min)	140 Bar Flow Rate (liters/min)
TGTR/L...-2JHP	2-4	4-6	6-8
TGTR/L...-3JHP	7-9	9-11	11-13
TGTR/L...-4JHP	7-9	9-11	11-13

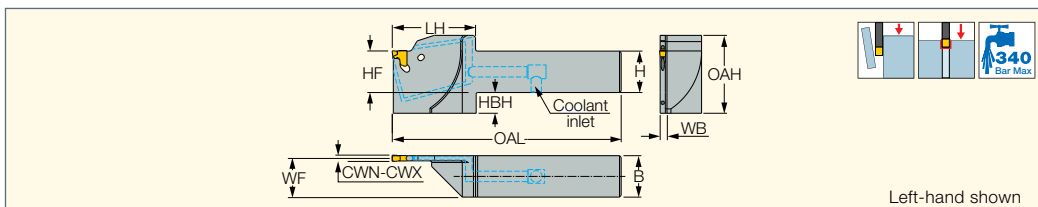
Spare Parts

Designation					
TGTR/L 1010-2JHP	ETG 2-SH-T*		SR 5/16XUNF-TL-S		HW 5/32"
TGTR/L 1212-2JHP	ETG 2-SH-T*		SR 5/16UNF TL360		HW 5/32"
TGTR/L 1616-2JHP	ETG 2*		SR 5/16UNF TL360		HW 5/32"
TGTR/L 2012-2JHP	ETG 2*		SR 5/16UNF TL360		HW 5/32"
TGTR/L 1616-3JHP	ETG 3-4-SH*		SR 5/16UNF TL360		HW 5/32"
TGTR/L 2020-3JHP	ETG 3-4-SH*	PLG G1/8 TL360		HW 5.0	
TGTR/L 2525-3JHP	ETG 3-4-SH*	PLG G1/8 TL360	SR 5/16UNF TL360	HW 5.0	HW 5/32"
TGTR/L 2020-4JHP	ETG 3-4-SH*	PLG G1/8 TL360		HW 5.0	
TGTR/L 2525-4JHP	ETG 3-4-SH*	PLG G1/8 TL360	SR 5/16UNF TL360	HW 5.0	HW 5/32"

* Optional, should be ordered separately

TGTR/L-JHP-MC

Parting and Grooving Toolholders
with Bottom Inlets for
High-Pressure Coolant
Carrying TANG-GRIP Inserts



Designation	CWN ⁽¹⁾	CWX ⁽²⁾	H	B	HF	WB	OAL	OAH	LH	HBH	CUTDIA ⁽³⁾	Insert
TGTR/L 2020-D42-2-JHP-MC	1.80	2.50	20.0	20.0	20.0	1.72	99.00	25.70	29.0	-	42.0	TAG 2
TGTR/L 2020-D65-3-JHP-MC	2.80	3.50	20.0	20.0	20.1	2.50	110.50	37.60	40.5	10.0	65.0	TAG 3
TGTR/L 2020-D82-3-JHP-MC	2.80	3.50	20.0	20.0	20.1	2.50	119.00	38.80	49.0	10.0	82.0	TAG 3
TGTR/L 2525-D65-3-JHP-MC	2.80	3.50	25.0	25.0	25.1	2.50	126.00	37.60	41.0	5.0	65.0	TAG 3
TGTR/L 2525-D82-3-JHP-MC	2.80	3.50	25.0	25.0	25.1	2.50	134.50	38.80	49.5	5.0	82.0	TAG 3

• For user guide and accessories, see pages 540-547

⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

⁽³⁾ Maximum cutting diameter

Inserts: TAG N-A • TAG N-C/W/M • TAG N-HF • TAG N-J/JS/JT • TAG N-LF • TAG N-MF • TAG N-UT • TAG R/L-C • TAG R/L-J/JS

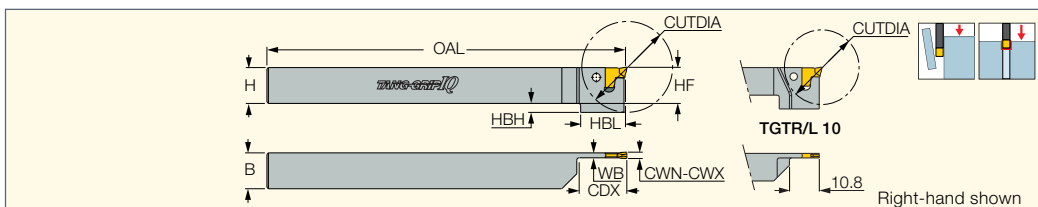
Spare Parts

Designation	
TGTR/L 2020-D42-2-JHP-MC	ETG 2*
TGTR/L 2020-D65-3-JHP-MC	ETG 3-4-SH*
TGTR/L 2020-D82-3-JHP-MC	ETG 3-4-SH*
TGTR/L 2525-D65-3-JHP-MC	ETG 3-4-SH*
TGTR/L 2525-D82-3-JHP-MC	ETG 3-4-SH*

* Optional, should be ordered separately

TGTR/L-2T.SH-L120

Integral Shank Short-Head
TANG-GRIP Toolholders for
Parting and Grooving



Designation	CWN ⁽¹⁾	CWX ⁽²⁾	H	HF	B	WB	OAL	HBL	HBH	CDX ⁽³⁾	CUTDIA ⁽⁴⁾
TGTR/L 1010-2T10SH-L120-IQ	1.80	2.50	10.0	10.1	10.0	1.65	120.00	15.0	5.0	10.00	26.0
TGTR/L 1212-2T15SH-L120-IQ	1.80	2.50	12.0	12.1	12.0	1.65	120.00	15.0	3.0	15.00	30.0
TGTR/L 1616-2T18SH-L120-IQ	1.80	2.50	16.0	16.1	16.0	1.65	120.00	-	-	18.00	36.0

• For user guide, see pages 540-547

⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

⁽³⁾ Cutting depth maximum

⁽⁴⁾ For parting

* Optional, should be ordered separately

Inserts: TAG N-A • TAG N-C/W/M • TAG N-J/JS/JT • TAG N-LF • TAG N-MF • TAG N-UT • TAG R/L-C • TAG R/L-J/JS

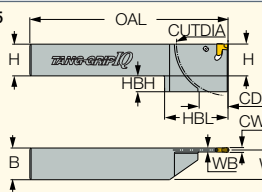


TGTR/L-D

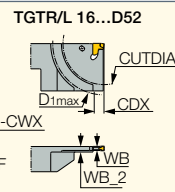
Integral Shank TANG-GRIP
Toolholders with Reinforced
Blades for Parting and Grooving
Mainly Sub-Spindle Machines



TGTR/L 19...D65



TGTR/L 16...D52



Right-hand shown

Designation	CW	CWN ⁽¹⁾	CWX ⁽²⁾	H	B	WB	WB_2	OAL	HBH	WF	HBH	CUTDIA	D1 _{max}	CDX	Insert	
TGTR/L 1616-2-D52-IQ	2.00	1.80	2.40	16.0	16.0	1.65	3.50	125.00	40.0	15.20	14.0	52.0	65.0	6.00	TAG 2	ETG 2*
TGTR/L 2020-2-D65-IQ	2.00	1.80	2.40	20.0	20.0	1.65	-	125.00	40.0	19.20	10.0	65.0	-	18.00	TAG 2	ETG 2*
TGTR/L 1616-3-D52-IQ	3.00	2.80	3.50	16.0	16.0	2.50	3.50	125.00	40.0	14.80	14.0	52.0	65.0	6.00	TAG 3	ETG 3-4-SH*
TGTR/L 2020-3-D65-IQ	3.00	2.80	3.50	20.0	20.0	2.50	-	125.00	40.0	18.80	10.0	65.0	-	18.00	TAG 3	ETG 3-4-SH*

• For user guide, see pages 540-547

⁽¹⁾ Minimum cutting width

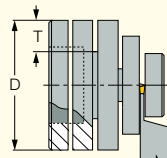
⁽²⁾ Maximum cutting width

* Optional, should be ordered separately

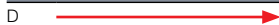
Inserts: TAG N-A • TAG N-C/W/M • TAG N-HF • TAG N-J/JS/JT • TAG N-LF • TAG N-MF • TAG N-UT • TAG R/L-C • TAG R/L-J/JS

Depth Capacity DGTR/L-D

Table Determining Depth
of Cut as Function of
Workpiece Diameter

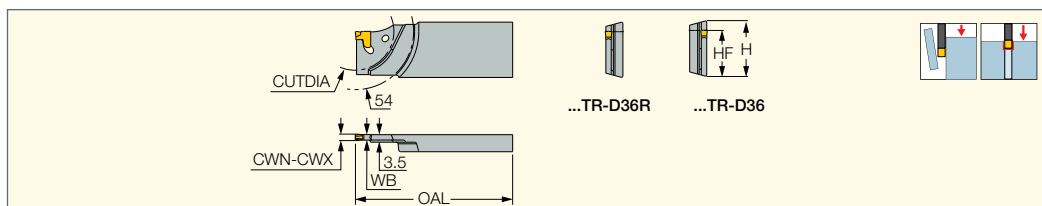


Designation	Tmax									
TGTR/L 1616-2-D52-IQ	20	25	19	16	15	13	11	10	9	8
TGTR/L 2020-2-D65-IQ	20	25	30	31	29	26	24	23	22	20
TGTR/L 1616-3-D52-IQ	20	25	20	17	15	13	11	10	9	8
TGTR/L 2020-3-D65-IQ	20	25	30	31	29	26	24	23	22	20



TGFHL-TR

Reinforced Blades for TRAUB
and Index Machines Carrying
TANG-GRIP Tangentially
Clamped Inserts



Designation	H	CWN ⁽¹⁾	CWX ⁽²⁾	WB	OAL	HF	CUTDIA	Insert	
TGFHL 26-2TR-D36	26.0	1.80	2.40	1.65	110.00	21.4	36.0	TAG 2	ETG 2*
TGFHL 26-2TR-D36R	26.0	1.80	2.40	1.65	110.00	21.4	36.0	TAG 2	ETG 2*
TGFHL 26-3TR-D36	26.0	2.80	3.50	2.50	110.00	21.4	36.0	TAG 3	ETG 3-4-SH*
TGFHL 26-3TR-D36R	26.0	2.80	3.50	2.50	110.00	21.4	36.0	TAG 3	ETG 3-4-SH*

• For user guide, see pages 540-547

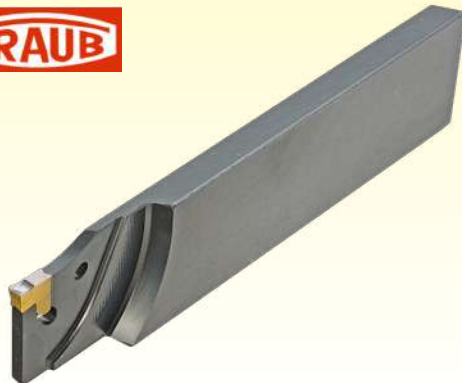
⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

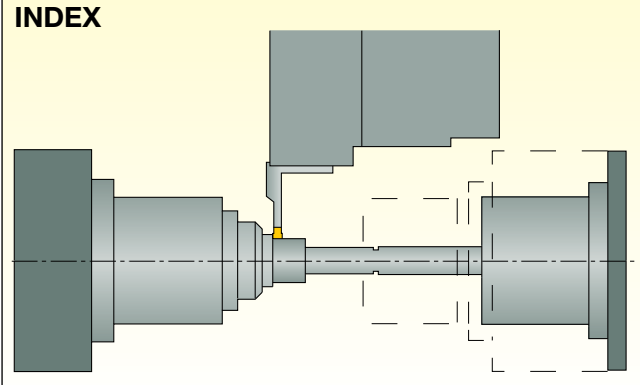
* Optional, should be ordered separately

Inserts: TAG N-A • TAG N-C/W/M • TAG N-HF • TAG N-J/JS/JT • TAG N-LF • TAG N-MF • TAG N-UT • TAG R/L-C • TAG R/L-J/JS

Holders: SGTBR/L • SGTBU/SGTBN • UBHCR/L

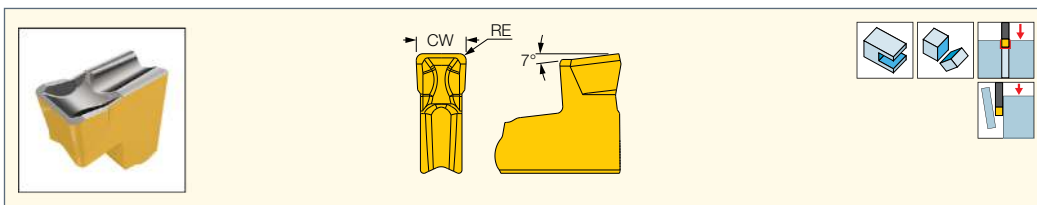


INDEX



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	IC1030	IC1010	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

• For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Cutting width tolerance (+/-)

Tools: ADMP D45 • TAGPAD-JHP • TAGPAD-XL-JHP • TAGPAD-Y-JHP • TGAD • TGAD RE/LE-JHP • TGAQ • TGAQ-ECD (JET-CROWN)

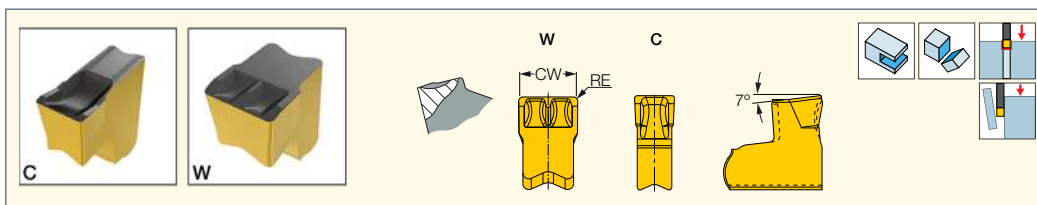
• TGAQ-JHP • TGFH-JHP • TGFH-MB • TGFH-S • TGFH-R/L • TGFHL-TR • TGFHR/L • TGFHR/L-JHP • TGFS • TGSU • TGTR/L-D

• TGTR/L-IQ • TGTR/L-IQ-2Z • TGTR/L-JHP • TGTR/L-JHP-MC

TANGGRIP

TAG N-C/W/M

Single-Ended Inserts for Parting, Grooving and Slitting Bars, Hard Materials and Tough Applications



Designation	Dimensions			Tough ↔ Hard										Recommended Machining Data
	CW	CWTOL ⁽³⁾	RE	IC830	IC928	IC1030	IC5400	IC1010	IC808	IC908	IC30N	IC20	IC807	f groove (mm/rev)
TAG N1.4C	1.40	0.04	0.16	●					●				●	0.04-0.10
TAG N1.6C	1.60	0.04	0.16	●					●					0.04-0.14
TAG N2C	2.00	0.04	0.20	●		●	●	●	●		●	●		0.05-0.16
TAG N2.4C	2.40	0.04	0.16	●					●					0.06-0.18
TAG N3CB ⁽¹⁾	3.00	0.04	0.35	●					●					0.12-0.30
TAG N3C	3.05	0.04	0.20	●	●	●	●	●	●	●	●	●	●	0.10-0.25
TAG N3M ⁽²⁾	3.05	0.04	0.20	●						●				0.06-0.18
TAG N3W	3.05	0.04	0.20	●						●				0.10-0.25
TAG N4C	4.00	0.04	0.24	●	●	●	●	●	●	●		●	●	0.10-0.30
TAG N4CB ⁽¹⁾	4.00	0.04	0.40	●						●				0.10-0.33
TAG N4M ⁽²⁾	4.00	0.04	0.24	●						●				0.06-0.20
TAG N4W	4.00	0.04	0.24	●						●				0.10-0.30
TAG N4.8C	4.80	0.04	0.30	●					●					0.10-0.35
TAG N5C	5.05	0.04	0.25	●					●			●		0.10-0.35
TAG N6.3C	6.30	0.04	0.35	●					●					0.15-0.40
TAG N7W	7.00	0.08	0.50	●					●					0.18-0.40
TAG N8C	8.00	0.10	0.50	●					●					0.20-0.70
TAG N9.5W	9.50	0.05	0.50	●					●					0.22-0.80
TAG N9.5C	9.50	0.10	0.50	●					●					0.25-0.80
TAG N12.7W	12.70	0.10	0.85	●					●					0.30-0.80

• Feed values for grade IC20 should be decreased by 50% • For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Larger corner radii for interrupted cut and high feed applications

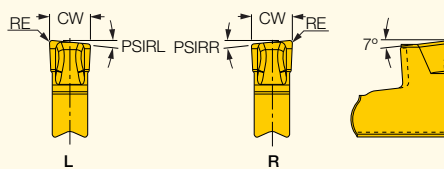
⁽²⁾ Similar to C-type, but with a modified edge; improved chip control at medium feeds

⁽³⁾ Cutting width tolerance (+/-)

Tools: ADMP D45 • Anti-Vibration Blades • TAGPAD-JHP • TAGPAD-XL-JHP • TAGPAD-Y-JHP • TGAD • TGAD RE/LE-JHP • TGAQ

• TGAQ-ECD (JET-CROWN) • TGAQ-JHP • TGBHR/L • TGBHR/L-JHP • TGFH-JHP • TGFH-MB • TGFH-S • TGFH-R/L • TGFHL-TR • TGFHR/L

• TGFHR/L-JHP • TGFS • TGSU • TGTR/L-2T..SH-L120 • TGTR/L-D • TGTR/L-IQ • TGTR/L-IQ-2Z • TGTR/L-JHP • TGTR/L-JHP-MC

TANG-GRIP
PARTING LINE**TAG R/L-C**Single-Ended Inserts for Parting
Bars, Hard Materials and
Tough Parting Applications

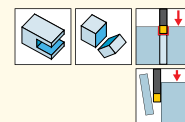
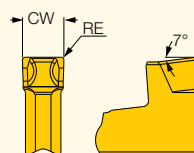
Designation	Dimensions					Tough ↔ Hard					Recommended Machining Data
	CW	CWTOL ⁽¹⁾	RE	PSIRR	PSIRL	IC830	IC928	IC808	IC908	IC30N	
TAG L2C-6D	2.05	0.10	0.20	-	6.0	●		●			0.04-0.12
TAG R2C-6D	2.05	0.10	0.20	6.0	-	●		●			0.04-0.12
TAG R2.4C-8D	2.40	0.10	0.16	8.0	-			●			0.05-0.13
TAG L3C-6D	3.00	0.10	0.20	-	6.0	●	●	●	●		0.08-0.18
TAG R3C-6D	3.00	0.10	0.20	6.0	-	●	●	●	●		0.08-0.18
TAG R3C-8D	3.00	0.10	0.20	8.0	-					●	0.06-0.16
TAG L3C-15D	3.00	0.10	0.20	-	15.0	●	●	●	●		0.08-0.16
TAG R3C-15D	3.00	0.10	0.20	15.0	-	●	●	●	●		0.08-0.16
TAG L4C-4D	4.05	0.10	0.24	-	4.0	●		●			0.08-0.20
TAG R4C-4D	4.05	0.10	0.24	4.0	-	●	●	●	●		0.08-0.20
TAG L5C-4D	5.05	0.10	0.25	-	4.0	●		●			0.10-0.25
TAG R5C-4D	5.05	0.10	0.25	4.0	-	●		●			0.10-0.25
TAG L6.3C-4D	6.35	0.10	0.35	-	4.0	●		●			0.12-0.30
TAG R6.3C-4D	6.35	0.10	0.35	4.0	-	●		●			0.12-0.30

• For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Cutting width tolerance (+/-)**Tools:** ADMP D45 • TAGPAD-JHP • TAGPAD-XL-JHP • TAGPAD-Y-JHP • TGAD • TGAD RE/LE-JHP • TGAQ • TGAQ-ECD (JET-CROWN)

• TGAQ-JHP • TGBHR/L • TGFH-JHP • TGFH-MB • TGFH-S • TGFH/R/L • TGFHL-TR • TGFHR/L • TGFHR/L-JHP • TGFS • TGSU

• TGTR/L-2T..SH-L120 • TGTR/L-D • TGTR/L-IQ • TGTR/L-IQ-2Z • TGTR/L-JHP • TGTR/L-JHP-MC

TANG-GRIP
PARTING LINE**TAG N-MF**Single-Ended Inserts for Parting
Grooving and Slitting Stainless
and Alloy Steel at Medium Feed

Designation	Dimensions			Tough ↔ Hard					Recommended Machining Data
	CW	CWTOL ⁽¹⁾	RE	IC830	IC1030	IC5400	IC1010	IC808	
TAG N2MF	2.00	0.05	0.20	●	●	●	●	●	0.04-0.15
TAG N3MF	3.05	0.05	0.20	●	●	●	●	●	0.06-0.18
TAG N4MF	4.00	0.05	0.25	●	●	●	●	●	0.07-0.22
TAG N5MF	5.00	0.05	0.25	●				●	0.08-0.25

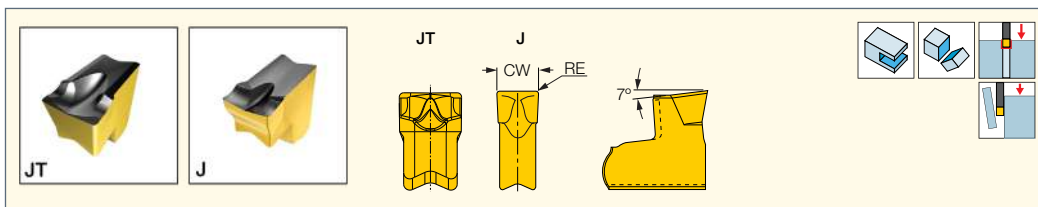
• For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Cutting width tolerance (+/-)**Tools:** ADMP D45 • TAGPAD-JHP • TAGPAD-XL-JHP • TAGPAD-Y-JHP • TGAD • TGAD RE/LE-JHP • TGAQ • TGAQ-ECD (JET-CROWN)

• TGAQ-JHP • TGFH-JHP • TGFH-MB • TGFH-S • TGFH/R/L • TGFHL-TR • TGFHR/L • TGFHR/L-JHP • TGFS • TGSU • TGTR/L-2T..SH-L120

• TGTR/L-D • TGTR/L-IQ • TGTR/L-IQ-2Z • TGTR/L-JHP • TGTR/L-JHP-MC

TAG N-J/JS/JT

 Single-Ended Inserts for
 Parting, Grooving and
 Slitting Soft Materials


Designation	Dimensions				Tough ↔ Hard										Recommended Machining Data
	CW	RE	CWTOL ⁽²⁾	RETOL ⁽³⁾	IC830	IC928	IC1030	IC5400	IC1010	IC808	IC908	IC20	IC807	f groove (mm/rev)	
TAG N1.4J	1.40	0.16	0.04	0.030	•					•			•	0.03-0.10	
TAG N1.6J	1.60	0.16	0.04	0.030	•					•				0.03-0.12	
TAG N2JS ⁽¹⁾	2.00	0.02	0.04	0.020	•					•				0.03-0.08	
TAG N2J	2.00	0.20	0.04	0.040	•		•	•	•	•		•		0.04-0.12	
TAG N2JT	2.00	0.20	0.04	0.040	•	•		•		•	•			0.04-0.14	
TAG N3JS ⁽¹⁾	3.05	0.02	0.04	0.020	•					•				0.04-0.10	
TAG N3J	3.05	0.20	0.04	0.030	•	•	•	•	•	•	•	•	•	0.04-0.16	
TAG N3JT	3.05	0.20	0.04	0.030	•			•		•	•			0.05-0.18	
TAG N3.2JT	3.25	0.20	0.04	0.030	•					•				0.05-0.18	
TAG N4J	4.00	0.24	0.04	0.030	•	•	•	•	•	•	•		•	0.04-0.18	
TAG N4JT	4.05	0.24	0.04	0.030	•			•		•	•			0.06-0.20	
TAG N5J	5.05	0.25	0.04	0.040	•				•	•				0.05-0.20	
TAG N5JT	5.05	0.25	0.04	0.040	•					•	•			0.06-0.22	
TAG N6.3J	6.35	0.34	0.04	0.040	•					•				0.06-0.22	
TAG N6.3JT	6.35	0.34	0.04	0.040	•						•			0.08-0.25	
TAG N7JT	7.05	0.50	0.04	0.040	•					•				0.10-0.28	

• JT chipformer has the basic positive configuration of the J-type and a reinforced negative frontal edge; most suitable for soft materials at low to medium feeds.

• For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Sharp corners cannot be used on TGSF slitting cutters

⁽²⁾ Cutting width tolerance (+/-)

⁽³⁾ Corner radius tolerance (+/-)

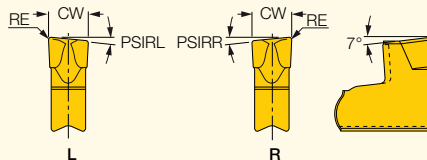
Tools: ADMP D45 • TAGPAD-JHP • TAGPAD-XL-JHP • TAGPAD-Y-JHP • TGAD • TGAD RE/LE-JHP • TGAQ • TGAQ-ECD (JET-CROWN)

• TGAQ-JHP • TGBHR/L • TGFH-JHP • TGFH-MB • TGFH-S • TGFH/R/L • TGFHL-TR • TGFHR/L • TGFHR/L-JHP • TGFS • TGSU

• TGTR/L-2T..SH-L120 • TGTR/L-D • TGTR/L-IQ • TGTR/L-IQ-2Z • TGTR/L-JHP • TGTR/L-JHP-MC



TAG R/L-J/JS

 TANG-GRIP Inserts for Parting
 Soft Materials, Tubes, Small
 Diameters and Thin-Walled Parts


Designation	Dimensions				Tough ↔ Hard					Recommended Machining Data
	CW	RE	PSIRL	PSIRR	IC830	IC928	IC808	IC908	IC807	f groove (mm/rev)
TAG L1.4J-8D	1.40	0.16	8.0	-	●		●		●	0.03-0.08
TAG R1.4J-8D	1.40	0.16	-	8.0	●		●		●	0.03-0.08
TAG L1.4JS-10D ⁽¹⁾	1.40	0.02	10.0	-	●		●		●	0.02-0.06
TAG R1.4JS-10D ⁽¹⁾	1.40	0.02	-	10.0	●		●		●	0.02-0.06
TAG L2J-6D	2.00	0.20	6.0	-	●		●			0.03-0.10
TAG R2J-6D	2.00	0.20	-	6.0	●		●			0.03-0.10
TAG L2JS-6D ⁽¹⁾	2.00	0.02	6.0	-	●		●			0.02-0.08
TAG R2JS-6D ⁽¹⁾	2.00	0.02	-	6.0	●		●			0.02-0.08
TAG L2J-15D	2.00	0.20	15.0	-	●		●			0.03-0.08
TAG R2J-15D	2.00	0.20	-	15.0	●		●			0.03-0.08
TAG L2JS-15D ⁽¹⁾	2.00	0.02	15.0	-	●		●			0.02-0.06
TAG R2JS-15D ⁽¹⁾	2.00	0.02	-	15.0	●		●			0.02-0.06
TAG L3J-6D	3.00	0.20	6.0	-	●	●	●	●		0.04-0.14
TAG R3J-6D	3.00	0.20	-	6.0	●	●	●	●		0.04-0.14
TAG L3JS-6D ⁽¹⁾	3.00	0.02	6.0	-	●		●			0.03-0.10
TAG R3JS-6D ⁽¹⁾	3.00	0.02	-	6.0	●		●			0.03-0.10
TAG L3J-15D	3.00	0.20	15.0	-	●	●	●	●		0.04-0.12
TAG R3J-15D	3.00	0.20	-	15.0	●	●	●	●		0.04-0.12
TAG L3JS-15D ⁽¹⁾	3.00	0.02	15.0	-	●		●			0.03-0.08
TAG R3JS-15D ⁽¹⁾	3.00	0.02	-	15.0	●		●			0.03-0.08
TAG L4J-4D	4.00	0.24	4.0	-	●		●			0.04-0.15
TAG R4J-4D	4.00	0.24	-	4.0	●	●	●	●		0.04-0.15
TAG L5J-4D	5.05	0.25	4.0	-	●		●			0.05-0.18
TAG R5J-4D	5.05	0.25	-	4.0	●		●			0.05-0.18
TAG L6.3J-4D	6.35	0.35	4.0	-	●		●			0.05-0.20
TAG R6.3J-4D	6.35	0.35	-	4.0	●		●			0.05-0.20

• For cutting speed recommendations and user guide, see pages 540-547

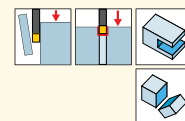
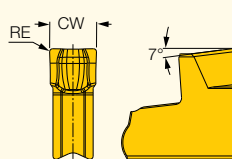
⁽¹⁾ Sharp corners cannot be used on TGSF slitting cutters

Tools: ADMP D45 • TAGPAD-JHP • TAGPAD-XL-JHP • TAGPAD-Y-JHP • TGAD • TGAD RE/LE-JHP • TGAQ • TGAQ-ECD (JET-CROWN)

• TGAQ-JHP • TGBHR/L • TGFH-JHP • TGFH-MB • TGFH-S • TGFH/R/L • TGFHL-TR • TGFHR/L • TGFHR/L-JHP • TGFS • TGSU

• TGTR/L-2T..SH-L120 • TGTR/L-D • TGTR/L-IQ • TGTR/L-IQ-2Z • TGTR/L-JHP • TGTR/L-JHP-MC

TAG N-LF

 Single-Ended Inserts for
 Parting, Grooving and
 Slitting Stainless Steel


Designation	Dimensions				Tough ↔ Hard					Recommended Machining Data
	CW	RE	CWTOL ⁽¹⁾	RETOL ⁽²⁾	IC830	IC1030	IC5400	IC1010	IC808	f groove (mm/rev)
TAG N2LF	2.00	0.20	0.04	0.030	●	●	●	●	●	0.03-0.08
TAG N3LF	3.05	0.20	0.04	0.030	●	●	●	●	●	0.04-0.10

• For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Cutting width tolerance (+/-)

⁽²⁾ Corner radius tolerance (+/-)

Tools: ADMP D45 • TAGPAD-JHP • TAGPAD-XL-JHP • TGAD • TGAD RE/LE-JHP • TGAQ • TGAQ-ECD (JET-CROWN) • TGAQ-JHP • TGFH-JHP

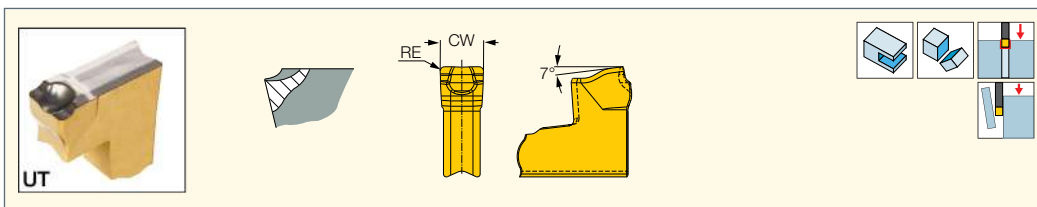
• TGFH-MB • TGFH-S • TGFH/R/L • TGFHL-TR • TGFHR/L • TGFHR/L-JHP • TGFS • TGSU • TGTR/L-2T..SH-L120 • TGTR/L-D

• TGTR/L-IQ • TGTR/L-IQ-2Z

• TGTR/L-JHP • TGTR/L-JHP-MC

TAG N-UT

Single-Sided Inserts for Parting,
Grooving & Slitting at Low
Feeds on Cr-Ni Alloys, Ductile
Materials & Low Carbon Steel



Designation	Dimensions				Tough ↔ Hard			Recommended Machining Data
	CW	RE	CWTOL ⁽¹⁾	RETOL ⁽²⁾	IC830	IC808	IC908	
TAG N2UT	2.00	0.20	0.04	0.040	●	●	●	f groove (mm/rev) 0.03-0.10
TAG N3UT	3.00	0.30	0.04	0.040	●	●		0.04-0.12
TAG N4UT	4.00	0.30	0.04	0.040			●	0.05-0.15
TAG N5UT	5.00	0.30	0.04	0.040			●	0.05-0.18
TAG N6UT	6.00	0.85	0.04	0.040			●	0.06-0.22

• For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Cutting width tolerance (+/-)

⁽²⁾ Corner radius tolerance (+/-)

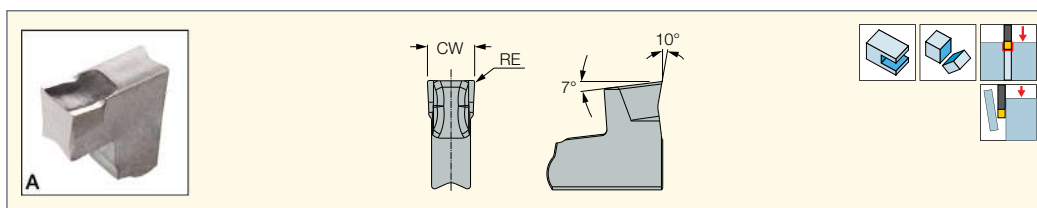
Tools: ADMP D45 • TAGPAD-JHP • TAGPAD-XL-JHP • TAGPAD-Y-JHP • TGAD • TGAD RE/LE-JHP • TGAQ • TGAQ-ECD (JET-CROWN)

• TGAQ-JHP • TGBHR/L • TGFH-JHP • TGFH-MB • TGFH-S • TGFH/R/L • TGFHL-TR • TGFHR/L • TGFHR/L-JHP • TGFS • TGSU

• TGTR/L-2T..SH-L120 • TGTR/L-D • TGTR/L-IQ • TGTR/L-IQ-2Z • TGTR/L-JHP • TGTR/L-JHP-MC

TAG N-A

Single-Ended Inserts for Parting,
Grooving and Slitting Aluminum



Designation	Dimensions				IC20	Recommended Machining Data
	CW	RE	CWTOL ⁽¹⁾	RETOL ⁽²⁾		
TAG N2A	2.00	0.20	0.04	0.040	●	f groove (mm/rev) 0.02-0.10
TAG N3A	3.07	0.20	0.04	0.040	●	0.03-0.14
TAG N4A	4.00	0.24	0.04	0.030	●	0.03-0.16

• For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Cutting width tolerance (+/-)

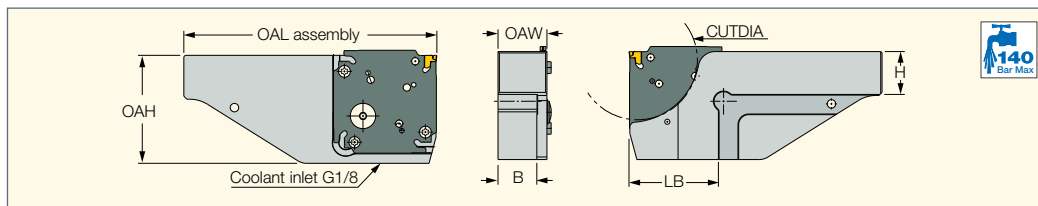
⁽²⁾ Corner radius tolerance (+/-)

Tools: ADMP D45 • TAGPAD-JHP • TAGPAD-XL-JHP • TAGPAD-Y-JHP • TGAD • TGAD RE/LE-JHP • TGAQ • TGAQ-ECD (JET-CROWN)

• TGAQ-JHP • TGFH-JHP • TGFH-MB • TGFH-S • TGFH/R/L • TGFHL-TR • TGFHR/L • TGFHR/L-JHP • TGFS • TGSU • TGTR/L-2T..SH-L120

• TGTR/L-D • TGTR/L-IQ • TGTR/L-IQ-2Z • TGTR/L-JHP • TGTR/L-JHP-MC

LOGIQ-F-GRIP

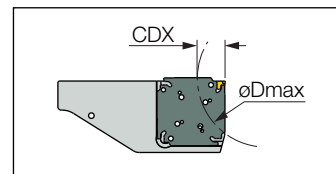
LOGIQ FGRIP
 HIGH FEED GRIP HOLDER
TGTBQ-JHP
 Tool Blocks for Square
 TANG-F-GRIP and DO-F-GRIP
 Parting and Grooving Adapters
 for High-Pressure Coolant


Designation	OAH	H	B	OAW	OAL	LB	CUTDIA
TGTBQ 20L-D52-JHP	50.00	20.0	20.5	26.50	122.00	34.00	52.0
TGTBQ 20R-D52-JHP	50.00	20.0	20.5	26.50	122.00	34.00	52.0
TGTBQ 25L-D52-JHP	50.00	25.0	25.5	31.50	132.00	34.00	52.0
TGTBQ 25R-D52-JHP	50.00	25.0	25.5	31.50	132.00	34.00	52.0
TGTBQ 20L-D82-JHP	64.00	20.0	20.5	26.50	140.00	53.00	82.0
TGTBQ 20R-D82-JHP	64.00	20.0	20.5	26.50	140.00	53.00	82.0
TGTBQ 25L-D82-JHP	64.00	25.0	25.5	31.50	150.00	53.00	82.0
TGTBQ 25R-D82-JHP	64.00	25.0	25.5	31.50	150.00	53.00	82.0
TGTBQ 32L-D82-JHP	64.00	32.0	32.5	38.50	150.50	53.50	82.0
TGTBQ 32R-D82-JHP	64.00	32.0	32.5	38.50	150.50	53.50	82.0
TGTBQ 25L-D120-JHP	95.00	25.0	25.5	31.50	165.00	67.00	120.0
TGTBQ 25R-D120-JHP	95.00	25.0	25.5	31.50	165.00	67.00	120.0
TGTBQ 32L-D120-JHP	95.00	32.0	32.5	38.50	165.00	67.00	120.0
TGTBQ 32R-D120-JHP	95.00	32.0	32.5	38.50	165.00	67.00	120.0
TGTBQ 25L-D160-JHP	107.00	25.0	25.5	31.50	190.50	92.50	160.0
TGTBQ 25R-D160-JHP	107.00	25.0	25.5	31.50	190.50	92.50	160.0
TGTBQ 32L-D160-JHP	107.00	32.0	32.5	38.50	190.50	92.50	160.0
TGTBQ 32R-D160-JHP	107.00	32.0	32.5	38.50	190.50	92.50	160.0
TGTBQ 40L-D160-JHP	107.00	40.0	40.5	46.50	190.50	92.50	160.0
TGTBQ 40R-D160-JHP	107.00	40.0	40.5	46.50	190.50	92.50	160.0

Tools: DGAQ • DGAQ-JHP • TGAQ • TGAQ-JHP

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

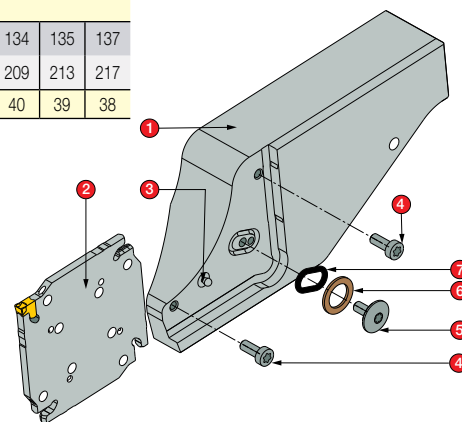
Designation	øDmax															
TGTBQ...D52-JHP	53	54	55	56	57	59	61	64	67	71	75	81	88	96	107	122
TGTBQ...D82-JHP	107	110	114	119	124	130	137	145	154	165	178	194	213	237	267	308
TGTBQ...D120-JHP	202	210	219	229	240	253	267	283	302	324	349	380	417	462	518	592
TGTBQ...D160-JHP	345	361	377	396	418	441	468	499	534	576	624	682	753	840	951	1096
CDX	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6



Designation	øDmax															
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
TGTBQ...D160-JHP	220	225	229	234	239	245	251	257	264	271	279	288	298	308	320	332
CDX	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22

Designation	øDmax															
TGTBQ...D120-JHP	121	122	123	123	124	125	125	126	127	128	129	130	131	132	134	135
TGTBQ...D160-JHP	171	177	181	183	184	186	188	190	193	195	198	200	203	206	209	213
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

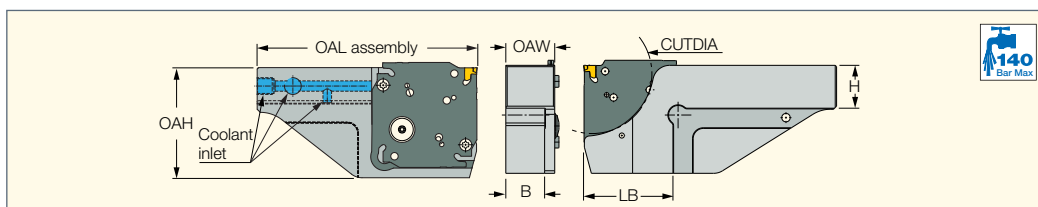


Spare Parts

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	O-RING 10x2 NBR

TGTBQ-JHP-MC

Tool Blocks for Parting and Grooving Square Adapters for High-Pressure Coolant with Three Cooling Inlets



Designation	OAH	H	B	OAW	OAL	LB	CUTDIA
TGTBQ 20R/L-D52-JHP-MC	50.00	20.0	20.5	26.50	112.00	42.00	52.0
TGTBQ 25R/L-D52-JHP-MC	50.00	25.0	26.5	31.50	125.00	40.00	52.0
TGTBQ 20R/L-D82-JHP-MC	64.00	20.0	20.5	26.50	127.50	57.50	82.0
TGTBQ 25R/L-D82-JHP-MC	64.00	25.0	26.5	31.50	142.50	57.50	82.0
TGTBQ 25R/L-D120-JHP-MC	95.00	25.0	26.5	31.50	158.00	73.00	120.0

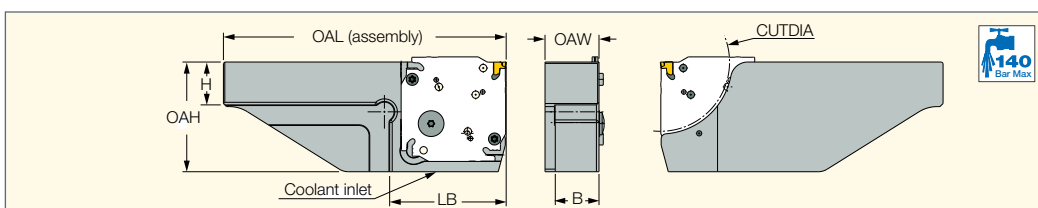
Tools: DGAQ • DGAQ-JHP • TGAQ • TGAQ-JHP

Spare Parts

Designation								
TGTBQ-JHP-MC	SR M4X9-SEAL-JHP	SIDE THRUST PIN 3mm	JHP COPPER SEAL 1/8"	SR ISO 14580 M4X10	BLD T20/S7	SW6-SD	O-RING 10X2 NBR	PLG G1/8 TL360

TGTBQ-JHP-RIB

Tool Blocks for Square F-GRIP Parting and Grooving Adapters with High-Pressure Coolant for Machining next to Spindle



Designation	OAH	H	B	OAW	OAL	LB	CUTDIA
TGTBQ 25L-R-D52-JHP	50.00	25.0	25.5	31.50	153.50	55.50	52.0
TGTBQ 25R-L-D52-JHP	50.00	25.0	25.5	31.50	153.50	55.50	52.0
TGTBQ 25L-R-D82-JHP	64.00	25.0	25.5	31.50	165.00	68.00	82.0
TGTBQ 25R-L-D82-JHP	64.00	25.0	25.5	31.50	165.00	68.00	82.0
TGTBQ 25L-R-D120-JHP	95.00	25.0	25.5	31.50	195.00	97.00	120.0
TGTBQ 25R-L-D120-JHP	95.00	25.0	25.5	31.50	195.00	97.00	120.0

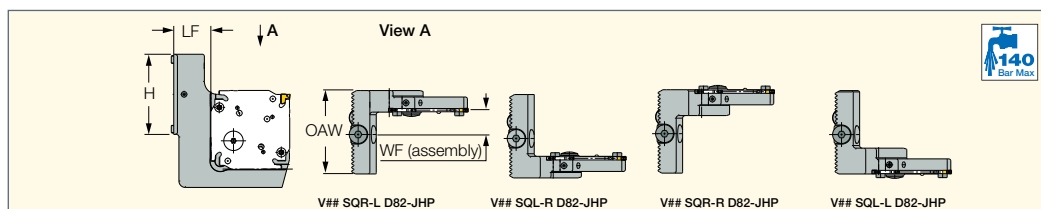
Tools: DGAQ • DGAQ-JHP • TGAQ • TGAQ-JHP

Standard Holders		NEW Reinforced Rib on the Opposite Side	
TGTBQ 25 L -D82 -JHP	TGTBQ 25 R -D82 -JHP	TGTBQ 25 R -D82L -JHP	TGTBQ 25 L -D82R-JHP
L- Pocket orientation	R- Pocket orientation	R- Pocket orientation L-Reinforcement rib side	L- Pocket orientation R-Reinforcement rib side

Spare Parts

Designation							
TGTBQ-JHP-RIB	SR ISO 14580 M4X10	SIDE THRUST PIN 3mm	SR M4X9-SEAL-JHP	BLD T20/S7	SW6-SD	O-RING 10X2 NBR	JHP COPPER SEAL 1/8"

V## SQ#-#-D82-JHP
 Intermediate Holders for
 TANG-F-GRIP and DO-F-GRIP
 Square Type D82 Adapters
 Designed for Modular
 Tooling Systems



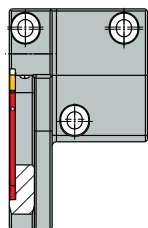
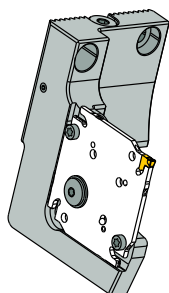
Designation	H	LF	OAW	WF ⁽¹⁾
V60 SQL-L-D82-JHP	62.0	34.70	64.50	28.95
V60 SQL-R-D82-JHP	62.0	34.70	64.50	15.35
V60 SQR-L-D82-JHP	62.0	34.70	64.50	18.85
V60 SQR-R-D82-JHP	62.0	34.70	64.50	32.45
V85 SQL-L-D82-JHP	83.0	34.70	85.00	40.95
V85 SQL-R-D82-JHP	83.0	34.70	85.00	27.35
V85 SQR-L-D82-JHP	83.0	34.70	85.00	27.35
V85 SQR-R-D82-JHP	83.0	34.70	85.00	40.95

⁽¹⁾ When 3mm width insert is used.

Tools: DGAQ • DGAQ-JHP • TGAQ • TGAQ-JHP

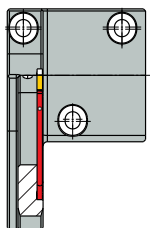
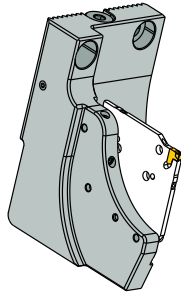
Identification Key

V60 SQL-L-D82-JHP



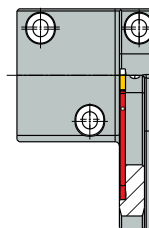
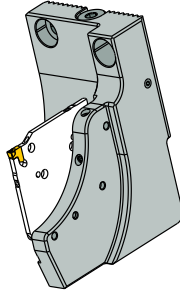
L- Holder (prism) orientation
 L- Pocket side

V60 SQL-R-D82-JHP



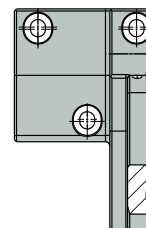
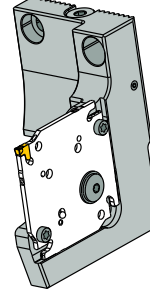
L- Holder (prism) orientation
 R- Pocket side

V60 SQR-L-D82-JHP



R- Holder (prism) orientation
 L- Pocket side

V60 SQR-R-D82-JHP



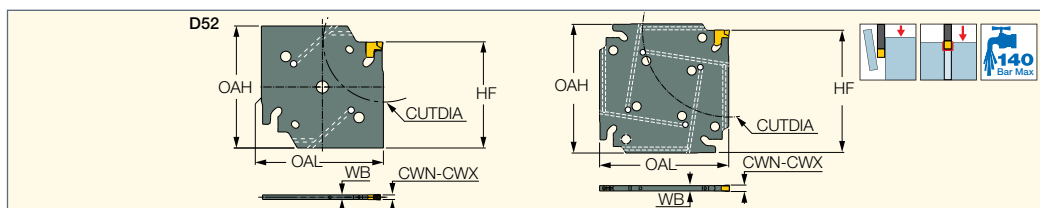
R- Holder (prism) orientation
 R- Pocket side

Spare Parts

Designation					
V## SQ#-#-D82-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	O-RING 10X2 NBR	SIDE THRUST PIN 3mm	SR ISO 14580 M4X10

TGAQ-JHP

Parting and Grooving Square
Adapters with Internal Coolant
Holes Carrying TANG-GRIP
Tangentially Clamped Inserts



Designation	OAL	OAH	CWN ⁽¹⁾	CWX ⁽²⁾	WB	HF	CUTDIA ⁽³⁾	MIID ⁽⁴⁾	CSP ⁽⁵⁾
TGAQ D52-2-2Z-JHP	50.00	50.00	1.80	2.50	1.65	43.5	52.0	TAG 2	1
TGAQ D52-3-2Z-JHP	50.00	50.00	2.80	3.50	2.50	43.5	52.0	TAG 3	1
TGAQ D52-4-2Z-JHP	50.00	50.00	3.70	4.50	3.40	43.5	52.0	TAG 4	1
TGAQ D82-2-4Z-JHP	61.00	61.00	1.80	2.50	1.65	58.0	82.0	TAG 2	1
TGAQ D82-3-4Z-JHP	61.00	61.00	2.80	3.50	2.50	58.0	82.0	TAG 3	1
TGAQ D82-4-4Z-JHP	61.00	61.00	3.70	4.50	3.40	58.0	82.0	TAG 4	1
TGAQ D120-3-4Z-JHP	90.50	90.50	2.80	3.50	2.50	84.0	120.0	TAG 3	1
TGAQ D120-4-4Z-JHP	90.50	90.50	3.70	4.50	3.40	84.0	120.0	TAG 4	1
TGAQ D120-5-4Z-JHP	90.50	90.50	4.70	5.50	4.00	84.0	120.0	TAG 5	1
TGAQ D160-3-4Z-JHP	100.00	100.00	2.80	3.50	2.50	97.0	160.0	TAG 3	1
TGAQ D160-4-4Z-JHP	100.00	100.00	3.70	4.50	3.40	97.0	160.0	TAG 4	1
TGAQ D160-5-4Z-JHP	100.00	100.00	4.70	5.50	4.00	97.0	160.0	TAG 5	1

• Suitable for all TANG-GRIP inserts

⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

⁽³⁾ Maximum diameter for parting

⁽⁴⁾ Master insert identification

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

Inserts: TAG N-A • TAG N-C/W/M • TAG N-HF • TAG N-J/JS/JT • TAG N-LF • TAG N-MF • TAG N-UT • TAG R/L-C • TAG R/L-J/JS

Holders: TGTBQ-JHP • TGTBQ-JHP-MC • TGTBY-JHP • V## SQ#-#-D82-JHP

Flow Rate vs. Pressure

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

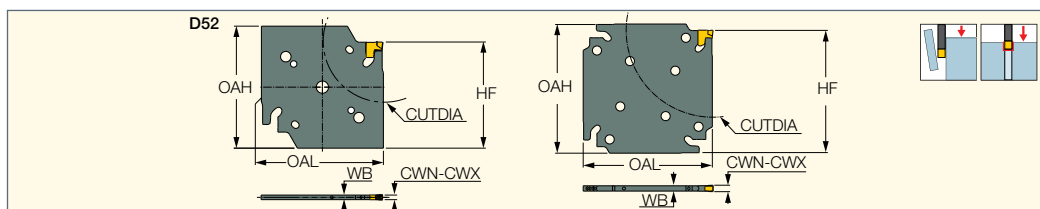
Spare Parts

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*
TGAQ D160-3-4Z-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	ETG 3-4-SH*
TGAQ D160-4-4Z-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	ETG 3-4-SH*
TGAQ D160-5-4Z-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	ETG 5-7*

* Optional, should be ordered separately

TGAQ

Parting and Grooving Square
Adapters Carrying TANG-GRIP
Tangentially Clamped Inserts



Designation	OAL	OAH	CWN ⁽¹⁾	CWX ⁽²⁾	WB	HF	CUTDIA ⁽³⁾	MIID ⁽⁴⁾	CSP ⁽⁵⁾
TGAQ D52-2-2Z	50.00	50.00	1.80	2.50	1.65	43.5	52.0	TAG 2	0
TGAQ D52-3-2Z	50.00	50.00	2.80	3.50	2.50	43.5	52.0	TAG 3	0
TGAQ D52-4-2Z	50.00	50.00	3.70	4.50	3.40	43.5	52.0	TAG 4	0
TGAQ D82-2-4Z	61.00	61.00	1.80	2.50	1.65	58.0	82.0	TAG 2	0
TGAQ D82-3-4Z	61.00	61.00	2.80	3.50	2.50	58.0	82.0	TAG 3	0
TGAQ D82-4-4Z	61.00	61.00	3.70	4.50	3.40	58.0	82.0	TAG 4	0
TGAQ D120-3-4Z	90.50	90.50	2.80	3.50	2.50	84.0	120.0	TAG 3	0
TGAQ D120-4-4Z	90.50	90.50	3.70	4.50	3.40	84.0	120.0	TAG 4	0
TGAQ D120-5-4Z	90.50	90.50	4.70	5.50	4.00	84.0	120.0	TAG 5	0
TGAQ D160-3-4Z	100.00	100.00	2.80	3.50	2.50	97.0	160.0	TAG 3	0
TGAQ D160-4-4Z	100.00	100.00	3.70	4.50	3.40	97.0	160.0	TAG 4	0
TGAQ D160-5-4Z	100.00	100.00	4.70	5.50	4.00	97.0	160.0	TAG 5	0

• Suitable for all TANG-GRIP inserts

⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

⁽³⁾ Maximum diameter for parting

⁽⁴⁾ Master insert identification

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

Inserts: TAG N-A • TAG N-C/W/M • TAG N-HF • TAG N-J/JS/JT • TAG N-LF • TAG N-MF • TAG N-UT • TAG R/L-C • TAG R/L-J/JS

Holders: TGTBQ-JHP • TGTBQ-JHP-MC • TGTBY-JHP • V## SQ#-#-D82-JHP

Spare Parts

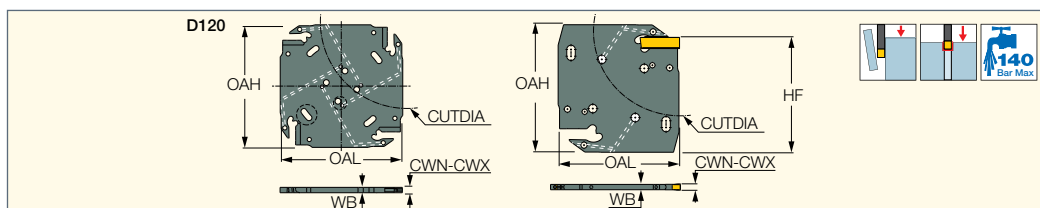
Designation		
TGAQ D52-2-2Z	SR ISO 14580 M4X10	ETG 2*
TGAQ D52-3-2Z	SR ISO 14580 M4X10	ETG 3-4-SH*
TGAQ D52-4-2Z	SR ISO 14580 M4X10	ETG 3-4-SH*
TGAQ D82-2-4Z	SR ISO 14580 M4X10	ETG 2*
TGAQ D82-3-4Z	SR ISO 14580 M4X10	ETG 3-4-SH*
TGAQ D82-4-4Z	SR ISO 14580 M4X10	ETG 3-4-SH*
TGAQ D120-3-4Z	SR ISO 14580 M4X10	ETG 3-4-SH*
TGAQ D120-4-4Z	SR ISO 14580 M4X10	ETG 3-4-SH*
TGAQ D120-5-4Z	SR ISO 14580 M4X10	ETG 5-7*
TGAQ D160-3-4Z	SR ISO 14580 M4X10	ETG 3-4-SH*
TGAQ D160-4-4Z	SR ISO 14580 M4X10	ETG 3-4-SH*
TGAQ D160-5-4Z	SR ISO 14580 M4X10	ETG 5-7*

* Optional, should be ordered separately



**DGAQ-JHP**

Parting and Grooving Square
Adapters with Internal Coolant
Holes Carrying DO-GRIP Inserts



Designation	OAL	OAH	CWN ⁽¹⁾	CWX ⁽²⁾	WB	HF	CUTDIA ⁽³⁾	MIID ⁽⁴⁾	CSP ⁽⁵⁾
DGAQ D52-2-2Z-JHP	50.00	50.00	1.90	2.50	1.72	43.5	52.0	DGN 2	1
DGAQ D52-3-2Z-JHP	50.00	50.00	3.00	3.18	2.50	43.5	52.0	DGN 3	1
DGAQ D52-4-2Z-JHP	50.00	50.00	4.00	4.00	3.20	43.5	52.0	DGN 4	1
DGAQ D82-3-2Z-JHP	64.40	64.40	3.00	3.18	2.50	58.0	82.0	DGN 3	1
DGAQ D82-4-2Z-JHP	64.40	64.40	4.00	4.00	3.20	58.0	82.0	DGN 4	1
DGAQ D82-5-2Z-JHP	64.40	64.40	5.00	5.00	4.00	58.0	82.0	DGN 5	1
DGAQ D120-4-4Z-JHP	90.50	90.50	4.00	4.00	3.20	84.0	120.0	DGN 4	1
DGAQ D120-5-4Z-JHP	90.50	90.50	5.00	5.00	4.00	84.0	120.0	DGN 5	1

• 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.

⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

⁽³⁾ Maximum diameter for parting

⁽⁴⁾ Master insert identification

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

Inserts: DGN-LF/LFT • DGN-MF • DGN-P • DGN-UT/UA • DGN-W • DGN-WP • DGN-Z • DGN/DGNC/DGNM-C • DGN/DGNM-J/JS/JT • DGR-P • DGR-WP • DGR-Z/ZS • DGR/L-C DGRC/LC-C • DGR/L-J/JS

Holders: TGTBQ-JHP • TGTBQ-JHP-MC • TGTBY-JHP • V## SQ#-#-D82-JHP

Flow Rate vs. Pressure

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

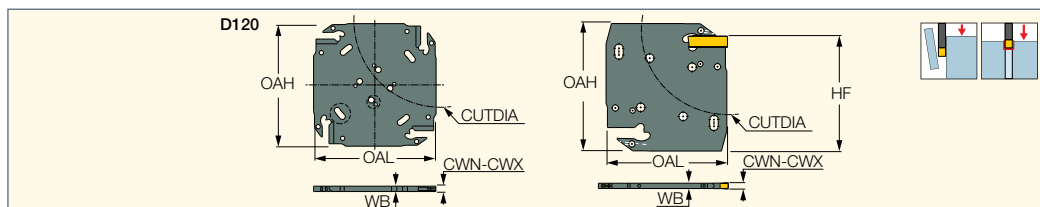
Spare Parts

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

* Optional, should be ordered separately

**DGAQ**

Parting and Grooving
Square Adapters Carrying
DO-GRIP Inserts



Designation	OAL	OAH	CWN ⁽¹⁾	CWX ⁽²⁾	WB	HF	CUTDIA ⁽³⁾	MIID ⁽⁴⁾	CSP ⁽⁵⁾
DGAQ D52-2-2Z	50.00	50.00	1.90	2.50	1.72	43.5	52.0	DGN 2	0
DGAQ D52-3-2Z	50.00	50.00	3.00	3.18	2.50	43.5	52.0	DGN 3	0
DGAQ D52-4-2Z	50.00	50.00	4.00	4.00	3.20	43.5	52.0	DGN 4	0
DGAQ D82-3-2Z	64.40	64.40	3.00	3.18	2.50	58.0	82.0	DGN 3	0
DGAQ D82-4-2Z	64.40	64.40	4.00	4.00	3.20	58.0	82.0	DGN 4	0
DGAQ D82-5-2Z	64.40	64.40	5.00	5.00	4.00	58.0	82.0	DGN 5	0
DGAQ D120-4-4Z	90.50	90.50	4.00	4.00	3.20	84.0	120.0	DGN 4	0
DGAQ D120-5-4Z	90.50	90.50	5.00	5.00	4.00	84.0	120.0	DGN 5	0

• 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.

⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

⁽³⁾ Maximum diameter for parting

⁽⁴⁾ Master insert identification

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

Inserts: DGN-LF/LFT • DGN-MF • DGN-P • DGN-UT/UA • DGN-W • DGN-WP • DGN-Z • DGN/DGNC/DGNM-C • DGN/DGNM-J/JS/JT • DGR-P • DGR-WP • DGR-Z/ZS • DGR/L-C DGRC/LC-C • DGR/L-J/JS

Holders: TGTBQ-JHP • TGTBQ-JHP-MC • TGTBY-JHP • V## SQ#-#-D82-JHP

Spare Parts

Designation		
DGAQ	SR ISO 14580 M4X10	EDG 33A*

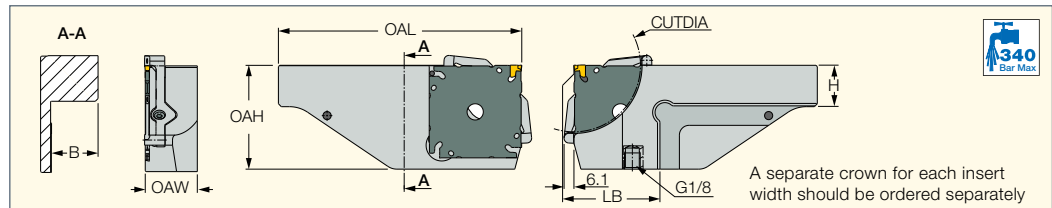
* Optional, should be ordered separately

JET-CROWN



TGTBQ-ECD-JHP (JET-CROWN)

Tool Blocks for Square
TANG-F-GRIP (TGAQ-ECD)
Parting and Grooving Adapters
for High-Pressure Coolant



Designation	OAH	H	B	OAW	OAL	LB	CUTDIA
TGTBQ 20L-D65-ECD-JHP	55.00	20.0	20.5	26.50	129.00	42.00	65.0
TGTBQ 20R-D65-ECD-JHP	55.00	20.0	20.5	26.50	129.00	42.00	65.0
TGTBQ 25L-D65-ECD-JHP	55.00	25.0	25.5	31.50	139.00	42.00	65.0
TGTBQ 25R-D65-ECD-JHP	55.00	25.0	25.5	31.50	139.00	42.00	65.0
TGTBQ 20L-D82-ECD-JHP	64.00	20.0	20.5	26.50	140.00	53.00	82.0
TGTBQ 20R-D82-ECD-JHP	64.00	20.0	20.5	26.50	140.00	53.00	82.0
TGTBQ 25L-D82-ECD-JHP	64.00	25.0	25.5	31.50	150.00	53.00	82.0
TGTBQ 25R-D82-ECD-JHP	64.00	25.0	25.5	31.50	150.00	53.00	82.0

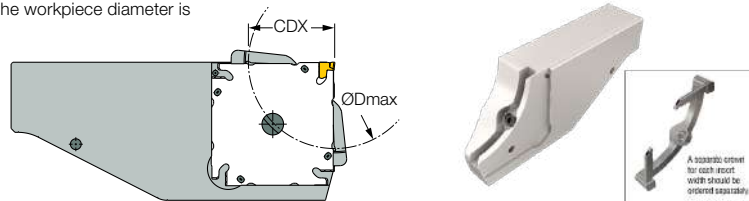
- A separate crown for each insert width should be ordered separately.

Tools: TGAQ-ECD (JET-CROWN)

Depth of cut as function of workpiece diameter

[illegible]

The tool cannot be used for grooving applications when the workpiece diameter is larger than 118mm.



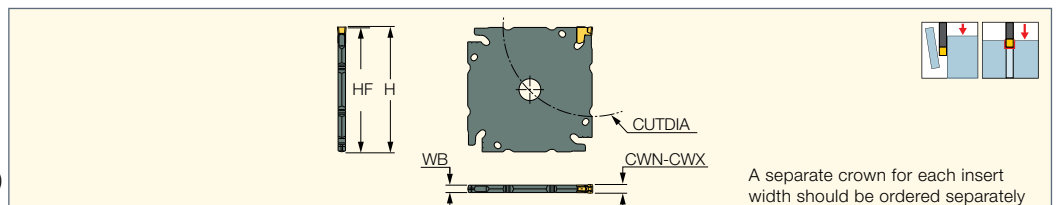
Spare Parts

Designation			
TGTBQ-ECD-JHP (JET-CROWN)	SR M7-R-L	BLD T20/S7	SW6-SD



TGAQ-ECD (JET-CROWN)

Parting and Grooving Square
Adapters Compatible with
TANG-GRIP Inserts (Single-Ended)



Designation	CWN ⁽¹⁾	CWX ⁽²⁾	WB	H	HF ⁽³⁾	CUTDIA	MIID ⁽⁴⁾
TGAQ D65-2-4Z-ECD	1.80	2.50	1.65	49.0	48.7	65.0	TAG N2
TGAQ D65-3-4Z-ECD	2.80	3.50	2.50	49.0	48.7	65.0	TAG N3
TGAQ D82-2-4Z-ECD	1.80	2.50	1.65	58.0	57.7	82.0	TAG N2
TGAQ D82-3-4Z-ECD	2.80	3.50	2.50	58.0	57.7	82.0	TAG N3
TGAQ D82-4-4Z-ECD	3.70	3.40	3.40	58.0	57.7	82.0	TAG N4

- Suitable for all TANG-GRIP inserts

(1) Minimum cutting width

(2) Maximum cutting width

(3) Related to insert

(4) Master insert identification

Inserts: TAG N-A • TAG N-C/W/M • TAG N-HF • TAG N-J/JS/JT • TAG N-LF • TAG N-MF • TAG N-UT • TAG R/L-C • TAG R/L-J/JS

Holders: TGTBQ-ECD-JHP (JET-CROWN)

Spare Parts

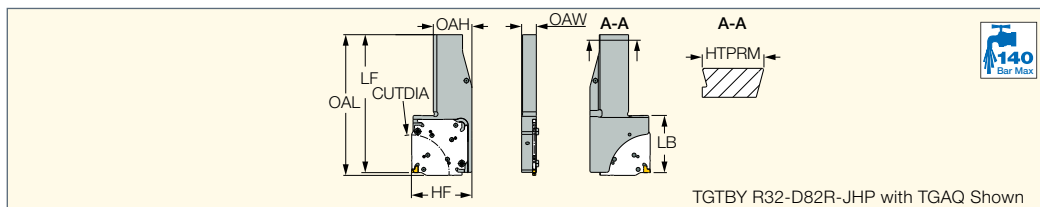
Designation		
TGAQ D65-2-4Z-ECD	ECD D65-2-TG*	ETG 2"
TGAQ D65-3-4Z-ECD	ECD D65-3-TG*	ETG 3-4-SH*
TGAQ D82-2-4Z-ECD	ECD D82-2-TG*	ETG 2"
TGAQ D82-3-4Z-ECD	ECD D82-3-TG*	ETG 3-4-SH*
TGAQ D82-4-4Z-ECD	ECD D82-4-TG*	ETG 3-4-SH*

* Optional, should be ordered separately



TGTBY-JHP

Y-Axis Intermediate Prismatic
Holders for Square JHP
Adapters on Multi-Task Machines
for Parting and Grooving



Designation	OAH	HF	OAW	LF	LB	CUTDIA	OAL ⁽¹⁾	OAL_2 ⁽²⁾	HTPRM
TGTBY L32-D82R-JHP	42.00	65.8	16.00	150.00	62.00	82.0	153.00	156.40	32.00
TGTBY R32-D82L-JHP	42.00	65.8	16.00	150.00	62.00	82.0	153.00	156.40	32.00
TGTBY R32-D82R-JHP	42.00	65.8	16.00	150.00	62.00	82.0	153.00	156.40	32.00
TGTBY L32-D82L-JHP	42.00	65.8	16.00	150.00	62.00	82.0	153.00	156.40	32.00

• Can be used also for X-axis (multi-task machines) - location pin should be removed • For set up procedure see page 520

⁽¹⁾ Overall length with TGAQ adapter

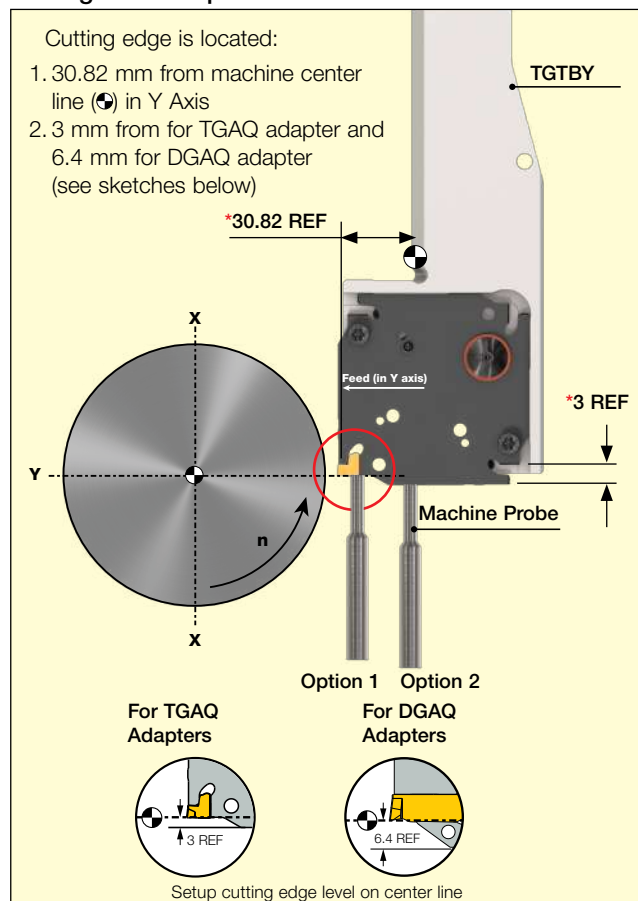
⁽²⁾ Overall length with DGAQ adapter

Tools: DGAQ • DGAQ-JHP • TGAQ • TGAQ-JHP



Y-Axis Tool Setup on Multi-Task Machines

Parting and Setup in Y-Axis Direction



* For Y-Axis cut off, compensate 30.82 mm in Y-Axis direction and compensate 3 mm for TGAQ adapters or 6.4 mm for DGAQ adapters in X-Axis direction.

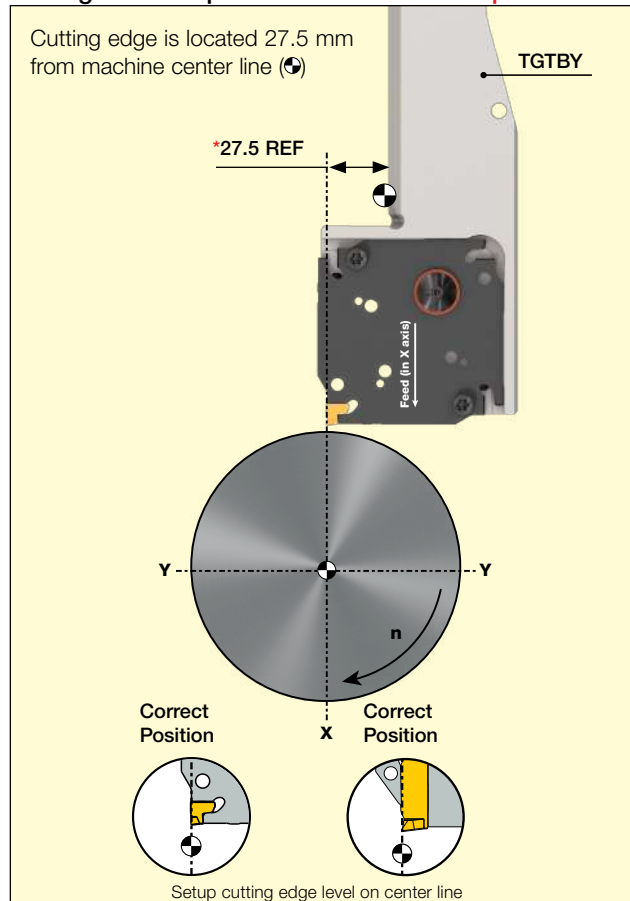
Set the cutting edge on the center line:

Option 1 - Gauge the cutting edge - this is preferable due to better accuracy

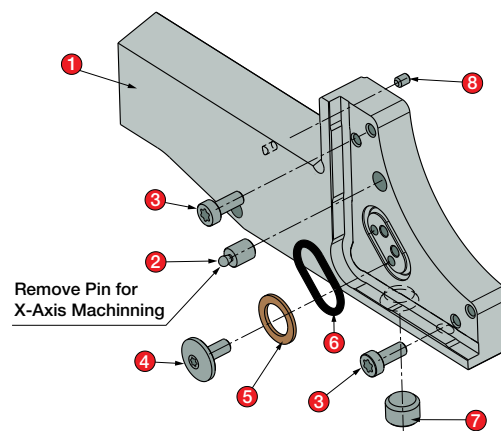
Option 2 - Gauge the blade and compensate 3mm / 6.4mm

- Block:** TGTBY
- Locating pin:** Side thrust Pin 3 mm
- Clamping screw :** SR M4x10 ISO 14580
- Clamping & sealing screw:** SR M4x9-Seal-JHP
- Seal washer:** CSW 1/8"
- O-ring:** O-ring 10x2 NBR
- Lower sealing plug:** Plug G1/8-6.5 TL360
- Upper sealing screw:** SR M3x4-DIN913

Parting and Setup in X-Axis Direction - Optional



* For X-Axis cut off, compensate 27.5 mm in Y-Axis direction. Location pin should be removed.



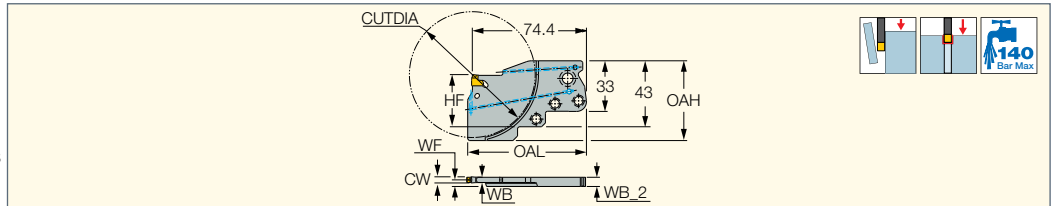
Spare Parts

Designation									
TGTBY-JHP	SR ISO 14580 M4X10	SR M4X9-SEAL-JHP	OR 16X2 NBR	JHP COPPER SEAL 1/8"	BLD T20/S7	SW6-SD	PLG G1/8 TL360	HW 5.0	SIDE THRUST PIN 3mm

TANG-GRIP
Y AXIS PARTING LINE

TAGPAD-Y-JHP

Y-Axis Adapters for Parting & Grooving on Multi-Task Machines & Turning Centers with JHP Channels and TANG-GRIP Inserts



Designation	CW	WF	WB	WB_2	OAL	OAH	HF	CUTDIA	MIID ⁽¹⁾	
TAGPAD-Y-D82R/L-3C	3.00	4.80	2.40	6.0	77.40	52.00	34.0	82.0	TAG N3HF	ETG 3-4-SH*
TAGPAD-Y-D82R/L-4C	4.00	4.30	3.40	6.0	77.40	52.00	34.0	82.0	TAG N4HF	ETG 3-4-SH*

• Can be offered for parting up to 125mm diameter as semi standard: TAGPAD-Y-125R/L-3C, TAGPAD-Y-125R/L-4C • For set up procedure and user guide, see page 550

(1) The tool types shown are currently unavailable in the USA, Canada, China, Japan and Korea.

Master insert identification

* Optional, should be ordered separately

Inserts: TAG N-A • TAG N-C/W/M • TAG N-HF • TAG N-J/JS/JT • TAG N-MF • TAG N-UT • TAG R/L-C • TAG R/L-J/JS

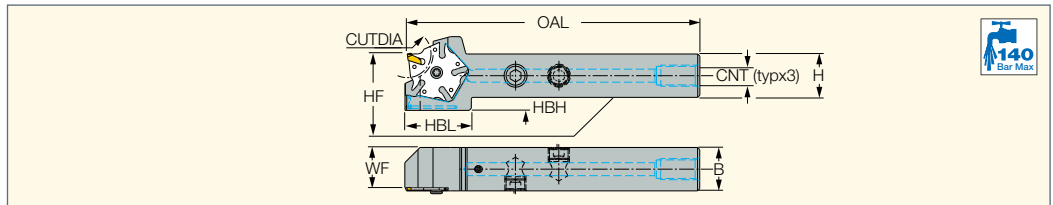
Holders: ABC MAHDR-#-XL-JHP • MAHPR/L-XL-JHP • MAHR/L-MG-XL-JHP • MAHR/L-MG-XL-JHP-MC • TR45 MAHDR-#-XL-JHP • V## MAHD-#-XL-##-JHP

• V## MAHD-XL-JHP

SLIMGRIP
NARROW INSERTS

THMPR/L D22-JHP

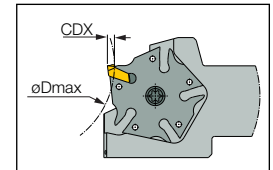
Holders with High-Pressure Coolant Channels for Pentagonal SLIM-GRIP Adapters



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

Tools: ADMP D22

THMPR/L...-D22-JHP CDX to øDmax								
CDX	≤2.0	≤3.0	≤4.0	≤5.0	≤6.0	≤7.0	≤8.0	≤11.0
øDmax	85	80	75	70	65	60	55	50



Spare Parts

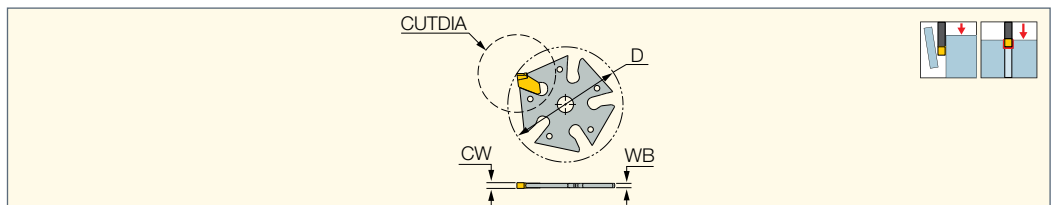
Designation				
THMPR/L 16-D22-JHP	SR 5/16UNF TL360	HW 5/32"	SR M4-39432	T-15/5
THMPR/L 20-D22-JHP	PLG G1/8 TL360	HW 5.0	SR M4-39432	T-15/5

SELF5GRIP
PARTING AND GROOVING

SLIMGRIP
NARROW INSERTS

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

• For user guide, see pages 540-547

Inserts: GFT-C • GFT-J

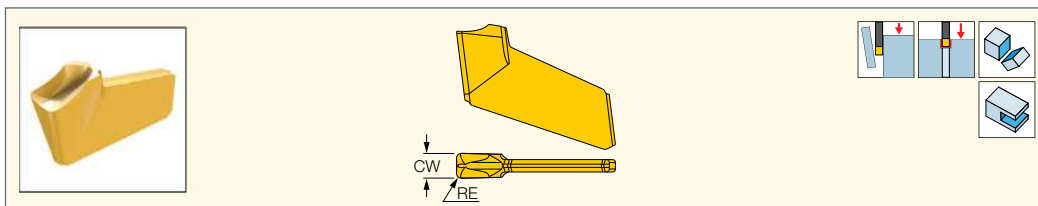
Holders: THMPR/L D22-JHP

Spare Parts

Designation	
ADMP D22	ESG-SLM*

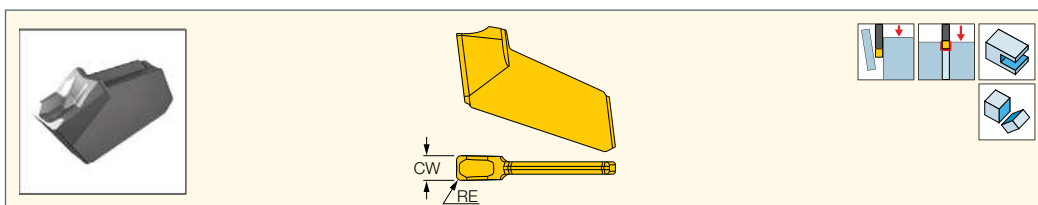
* Optional, should be ordered separately

TANG-5-GRIP

SLIMGRIP
NARROW INSERTS**GFT-J**Thin Parting, Grooving
and Slitting Single-Ended
Inserts for Soft Materials

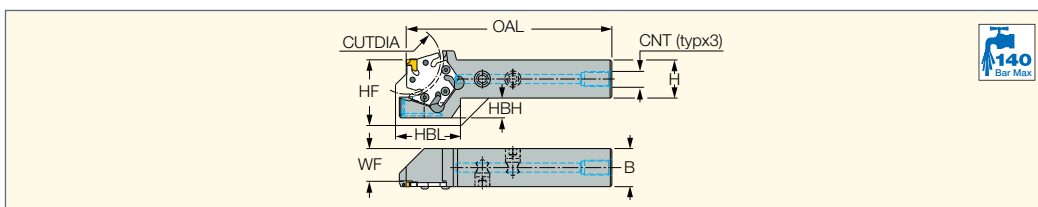
Designation	Dimensions		Tough ↔ Hard		Recommended Machining Data
	CW	RE	IC1028	IC1008	f groove (mm/rev)
GFT 0.6J-0.1	0.60	0.10	•	•	0.03-0.05
GFT 0.8J-0.1	0.80	0.10	•	•	0.03-0.07
GFT 1.0J-0.1	1.00	0.10	•	•	0.03-0.09
GFT 1.2J-0.14	1.20	0.14	•	•	0.03-0.10
GFT 1.6J-0.16	1.60	0.16	•	•	0.03-0.12

Tools: ADMP D22 • SGAQ

SLIMGRIP
NARROW INSERTS**GFT-C**Thin Parting, Grooving & Slitting
Single-Ended Inserts
for Soft Materials

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

Tools: ADMP D22

TANGGRIP
PARTING LINE
TANG5GRIP
PARTING AND GROOVING**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

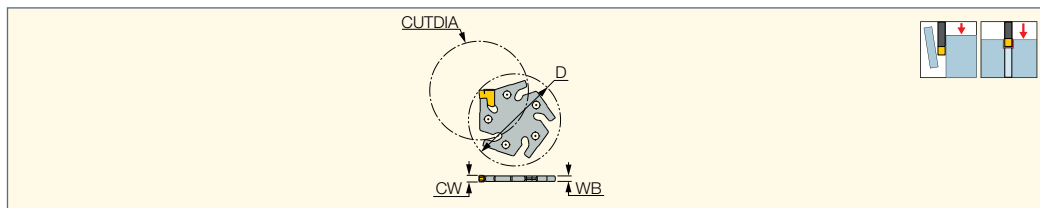
Tools: ADMP D45

Spare Parts

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

TANG5GRIP
 PARTING AND GROOVING

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

• For user guide, see pages 540-547

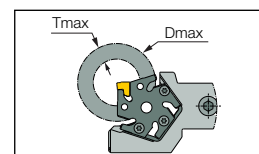
(1) Minimum cutting width

(2) Maximum cutting width

Inserts: TAG N-A • TAG N-C/W/M • TAG N-HF • TAG N-J/JS/JT • TAG N-LF • TAG N-MF • TAG N-UT • TAG R/L-C • TAG R/L-J/JS

Holders: THMPR/L D45-JHP

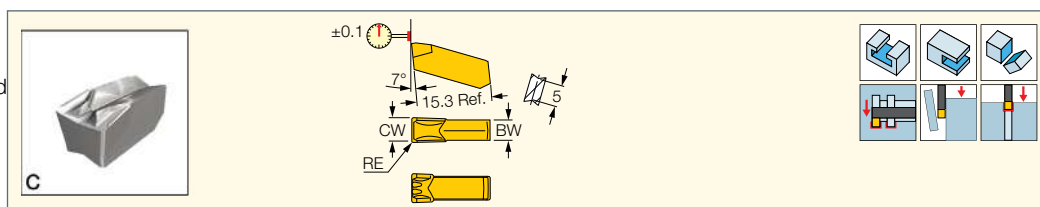
THMPR/L...-D45-JHP Tmax. to Dmax.									
Tmax	T≤3.0	T≤4.0	T≤5.0	T≤6.0	T≤7.0	T≤8.0	T≤9.0	T≤10.0	T≤22.5
Dmax	85	80	75	70	65	60	55	50	45


Spare Parts

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

* Optional, should be ordered separately

CUTGRIP
GIM-C

 Parting and Grooving Single-Sided
 Inserts for Parting Bars, Hard
 Materials and Tough Applications


Designation	Dimensions				Tough ↔ Hard					Recommended Machining Data
	CW	RE	CWTOL ⁽¹⁾	BW	IC328	IC830	IC354	IC908	IC20	
GIM 3C	3.00	0.22	0.05	2.40	•	•	•	•	•	0.15-0.25
GIM 4C	4.00	0.25	0.05	3.40	•	•	•	•	•	0.15-0.25
GIM 5C	5.00	0.40	0.05	4.00	•	•	•	•	•	0.15-0.30
GIM 6C	6.00	0.40	0.05	4.80	•	•	•	•	•	0.15-0.30

• For cutting speed recommendations and user guide, see pages 540-547

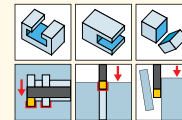
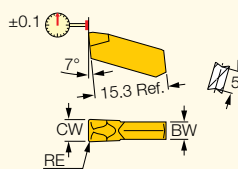
(1) Cutting width tolerance (+/-)

Tools: Anti-Vibration Blades • C#-GHDR/L • CGHN 26-M • CGHN 32-DGM • CGHN 32-M • CGHN-D • CGHN-DG • CGHN-S • CGPAD

• CGPAD-JHP • GHDR/L (short pocket) • GHDR/L-JHP (short pocket) • GHDR/L-JHP-MC (short pocket) • GHGR/L • GHMPR/L • GHMR/L

CUTGRIP**GIM-J**

Utility Single-Sided Inserts
for Parting and Grooving
Soft Materials, Tubes
and Small Diameters



Designation	Dimensions				Tough ↔ Hard					Recommended Machining Data
	CW	RE	CWTOL ⁽¹⁾	BW	IC328	IC830	IC354	IC908	IC20	
GIM 2.2J	2.20	0.17	0.05	1.70	●	●	●	●	●	0.06-0.13
GIM 3J	3.00	0.25	0.05	2.40	●	●	●	●	●	0.08-0.15
GIM 4J	4.00	0.25	0.05	3.20	●	●	●	●	●	0.08-0.18

• For cutting speed recommendations and user guide, see pages 540-547

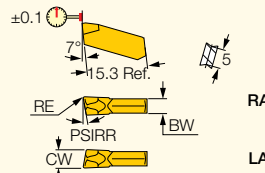
⁽¹⁾ Cutting width tolerance (+/-)

Tools: C#-GHDR/L • CGHN 26-M • CGHN 32-DGM • CGHN 32-M • CGHN-D • CGHN-DG • CGHN-S • CGPAD • CGPAD-JHP • GHDR/L (short pocket)

• GHDR/L-JHP (short pocket) • GHDR/L-JHP-MC (short pocket) • GHGR/L • GHMPR/L • GHMR/L • GHSR/L • GHSR/L-JHP-SL • NQCH-GHSR/L-JHP

CUTGRIP**GIM-J-RA/LA**

Utility Single-Sided Inserts
for Parting and Grooving
Soft Materials, Parting Tubes
and Small Diameters



Designation	Dimensions						Tough ↔ Hard						Recommended Machining Data
	CW	RE	CWTOL ⁽¹⁾	PSIRL	PSIRR	BW	IC656	IC328	IC830	IC354	IC908	IC20	
GIM 2.2J-8LA	2.20	0.17	0.05	8.0	-	1.70		●		●	●	●	0.05-0.10
GIM 2.2J-8RA	2.20	0.17	0.05	-	8.0	1.70	●	●	●	●	●	●	0.05-0.10
GIM 2.2JS-15LA	2.20	0.02	0.05	15.0	-	1.70		●			●	●	0.05-0.10
GIM 2.2JS-15RA	2.20	0.02	0.05	-	15.0	1.70		●	●	●	●	●	0.05-0.10
GIM 3J-4LA	3.00	0.22	0.05	4.0	-	2.40				●		●	0.05-0.12
GIM 3J-4RA	3.00	0.25	0.05	-	4.0	2.40		●	●	●		●	0.05-0.12
GIM 3J-8LA	3.00	0.25	0.05	8.0	-	2.40		●		●	●	●	0.05-0.12
GIM 3J-8RA	3.00	0.25	0.05	-	8.0	2.40	●	●	●	●	●	●	0.05-0.12
GIM 3JS-15LA	3.00	0.02	0.05	15.0	-	2.40		●	●			●	0.05-0.12
GIM 3JS-15RA	3.00	0.02	0.05	-	15.0	2.40		●	●		●	●	0.05-0.12
GIM 4J-6LA	4.00	0.25	0.05	6.0	-	3.20				●		●	0.08-0.15
GIM 4J-6RA	4.00	0.25	0.05	-	6.0	3.20				●		●	0.08-0.15

• For cutting speed recommendations and user guide, see pages 540-547

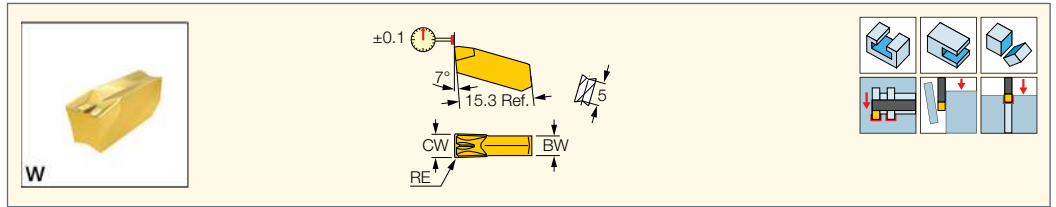
⁽¹⁾ Cutting width tolerance (+/-)

Tools: C#-GHDR/L • CGHN 26-M • CGHN 32-DGM • CGHN 32-M • CGHN-D • CGHN-DG • CGHN-S • CGPAD • CGPAD-JHP • GHDR/L (short pocket)

• GHDR/L-JHP (short pocket) • GHDR/L-JHP-MC (short pocket) • GHGR/L • GHMPR/L • GHMR/L • GHSR/L • GHSR/L-JHP-SL • NQCH-GHSR/L-JHP

GIM-W

Single-Sided Inserts with Central Ridged Chipformer and Reinforced Edge for Parting and Grooving Alloy Steel



Designation	Dimensions				Tough ↔ Hard					Recommended Machining Data f groove (mm/rev)
	CW	RE	CWTOL ⁽¹⁾	BW	IC328	IC830	IC354	IC908	IC20	
GIM 2.4	2.40	0.18	0.05	2.40			•	•	•	0.10-0.18
GIM 3	3.00	0.22	0.05	2.40	•	•	•	•	•	0.10-0.18
GIM 3.2	3.20	0.22	0.05	2.40	•	•	•	•	•	0.10-0.20
GIM 4	4.00	0.25	0.05	3.20	•	•	•	•	•	0.15-0.20

• For cutting speed recommendations and user guide, see pages 540-547

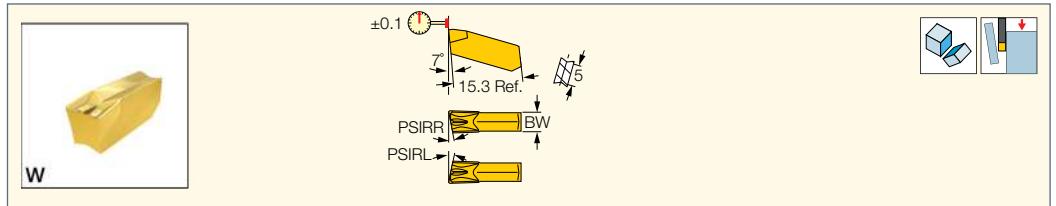
⁽¹⁾ Cutting width tolerance (+/-)

Tools: C#-GHDR/L • CGHN 26-M • CGHN 32-DGM • CGHN 32-M • CGHN-D • CGHN-DG • CGHN-S • CGPAD • CGPAD-JHP • GHDR/L (short pocket)

• GHDR/L-JHP (short pocket) • GHDR/L-JHP-MC (short pocket) • GHGR/L • GHMPR/L • GHMR/L

GIM-W-RA/LA

Single-Sided Screw-Clamped Inserts with Central Ridged Chipformer for Parting Alloy Steel



Designation	Dimensions						Tough ↔ Hard						Recommended Machining Data f groove (mm/rev)
	CW	RE	CWTOL ⁽¹⁾	PSIRL	PSIRR	BW	IC656	IC328	IC830	IC354	IC908	IC20	
GIM 3-4LA	3.00	0.20	0.05	4.0	-	2.40		•		•	•	•	0.08-0.16
GIM 3-8LA	3.00	0.20	0.05	8.0	-	2.40		•		•	•	•	0.08-0.16
GIM 3S-15RA	3.00	0.22	0.05	-	15.0	2.40		•		•	•	•	0.08-0.16
GIM 3-4RA	3.00	0.25	0.05	-	4.0	2.40	•	•	•	•	•	•	0.08-0.16
GIM 3-8RA	3.00	0.25	0.05	-	8.0	2.40	•	•	•	•	•	•	0.08-0.16
GIM 3.2-4LA	3.20	0.22	0.05	4.0	-	2.50				•			0.08-0.16
GIM 3.2-4RA	3.20	0.22	0.05	-	4.0	2.50		•		•		•	0.08-0.16
GIM 3.2-8LA	3.20	0.22	0.05	8.0	-	2.50				•			0.08-0.16
GIM 3.2-8RA	3.20	0.22	0.05	-	8.0	2.50		•		•	•	•	0.08-0.16
GIM 4-4LA	4.00	0.25	0.05	4.0	-	3.20				•		•	0.10-0.16
GIM 4-4RA	4.00	0.25	0.05	-	4.0	3.20	•			•	•	•	0.10-0.16
GIM 4-8LA	4.00	0.25	0.05	8.0	-	3.20				•			0.10-0.16
GIM 4-8RA	4.00	0.25	0.05	-	8.0	3.20		•		•	•	•	0.10-0.16

• For cutting speed recommendations and user guide, see pages 540-547

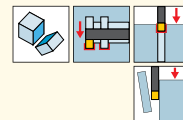
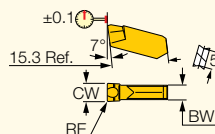
⁽¹⁾ Cutting width tolerance (+/-)

Tools: C#-GHDR/L • CGHN 26-M • CGHN 32-DGM • CGHN 32-M • CGHN-D • CGHN-DG • CGHN-S • CGPAD • CGPAD-JHP • GHDR/L (short pocket)

• GHDR/L-JHP (short pocket) • GHDR/L-JHP-MC (short pocket) • GHGR/L • GHMPR/L • GHMR/L

CUTGRIP**GIM-UT**

Single-Ended Screw-Clamped Inserts for Parting and Grooving at Low Feeds on CrNi Alloys and Low Carbon Steel



Designation	Dimensions				Tough ↔ Hard		Recommended Machining Data
	CW	RE	CWTOL ⁽¹⁾	BW	IC656	IC328	f groove (mm/rev)
GIM 4.6UT	4.60	0.60	0.03	3.80	•	•	0.03-0.10

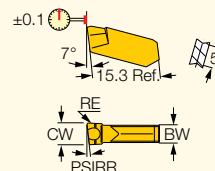
• For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Cutting width tolerance (+/-)

Tools: C#-GHDR/L • CGHN 26-M • CGHN 32-DGM • CGHN 32-M • CGHN-D • CGHN-DG • CGHN-S • CGPAD • CGPAD-JHP • GHDR/L (short pocket)
• GHDR/L-JHP (short pocket) • GHDR/L-JHP-MC (short pocket) • GHGR/L • GHMPR/L • GHMR/L

CUTGRIP**GIM-UT-RA/LA**

Single-Ended Screw-Clamped Inserts for Parting at Low Feeds on CrNi Alloys and Low Carbon Steel



Designation	Dimensions					IC328	Recommended Machining Data
	CW	RE	CWTOL ⁽¹⁾	PSIRR	BW		f groove (mm/rev)
GIM 3UT-1.5RA	3.12	0.25	0.03	1.5	2.50	•	0.03-0.10

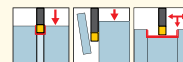
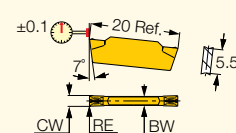
• For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Cutting width tolerance (+/-)

Tools: C#-GHDR/L • CGHN 26-M • CGHN 32-DGM • CGHN 32-M • CGHN-D • CGHN-DG • CGHN-S • CGPAD • CGPAD-JHP • GHDR/L (short pocket)
• GHDR/L-JHP (short pocket) • GHDR/L-JHP-MC (short pocket) • GHGR/L • GHMPR/L • GHMR/L

CUTGRIP**GDMW 2.4**

Utility Double-Ended Inserts for External Turning, Grooving and Parting



Designation	Dimensions						Tough ↔ Hard					Recommended Machining Data		
	CW	RE	CWTOL ⁽¹⁾	RETOL ⁽²⁾	BW	CDX ⁽³⁾	IC830	IC808	IC908	IC20	IC20N	a _p (mm)	f turn (mm/rev)	f groove (mm/rev)
GDMW 2.4	2.40	0.18	0.04	0.030	2.00	18.00	•	•	•	•	•	0.25-1.50	0.07-0.12	0.05-0.08

• For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Cutting width tolerance (+/-)

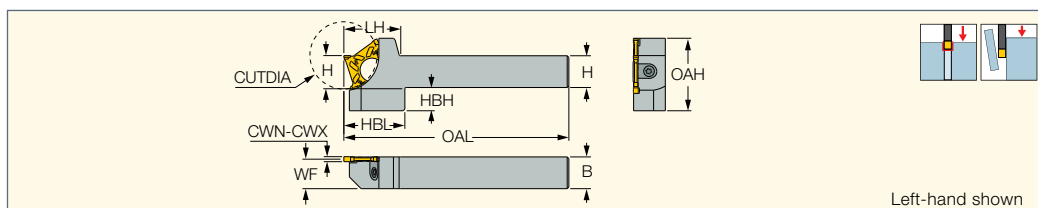
⁽²⁾ Corner radius tolerance (+/-)

⁽³⁾ Cutting depth maximum

Tools: PADR/L • PHGR/L • PHSR/L

PCHR/L-D-IQ

Grooving and Parting
Tools Carrying Inserts
with 5 Cutting Edges



Designation	H	B	CWN ⁽¹⁾	CWX ⁽²⁾	WF	CUTDIA	OAL	LH	HBL	HBH	OAH
PCHR/L 12-D22-2-IQ	12.0	12.0	2.00	2.40	11.40	22.0	100.00	26.9	25.70	8.0	25.5
PCHR/L 16-D22-2-IQ	16.0	16.0	2.00	2.40	15.40	22.0	120.00	26.9	23.20	4.0	25.5
PCHR/L 20-D22-2-IQ	20.0	20.0	2.00	2.40	19.40	22.0	120.00	26.9	-	-	25.5
PCHR/L 12-D22-3-IQ	12.0	12.0	3.00	3.20	10.70	22.0	120.00	19.7	20.00	11.0	25.5
PCHR/L 16-D22-3-IQ	16.0	16.0	3.00	3.20	14.70	22.0	120.00	19.7	20.00	7.0	25.5
PCHR/L 20-D22-3-IQ	20.0	20.0	3.00	3.20	18.70	22.0	120.00	19.7	-	-	25.5
PCHR/L 12-D32-2-IQ	12.0	12.0	2.00	2.40	11.50	32.0	100.00	28.4	29.50	14.0	33.6
PCHR/L 16-D32-2-IQ	16.0	16.0	2.00	2.40	15.50	32.0	120.00	28.4	29.50	10.0	33.6
PCHR/L 20-D32-2-IQ	20.0	20.0	2.00	2.40	19.50	32.0	120.00	28.4	29.50	6.0	33.6
PCHR/L 25-D32-2-IQ	25.0	25.0	2.00	2.40	24.50	32.0	120.00	28.4	-	-	33.6
PCHR/L 12-D32-3-IQ	12.0	12.0	3.00	3.20	10.70	32.0	100.00	26.0	32.00	16.0	32.6
PCHR/L 16-D32-3-IQ	16.0	16.0	3.00	3.20	14.70	32.0	120.00	26.0	32.00	12.0	32.6
PCHR/L 20-D32-3-IQ	20.0	20.0	3.00	3.20	18.70	32.0	120.00	26.0	32.00	8.0	32.6
PCHR/L 25-D32-3-IQ	25.0	25.0	3.00	3.20	23.70	32.0	120.00	26.0	-	-	32.6
PCHR/L 16-D40-3-IQ	16.0	16.0	3.00	3.20	14.70	40.0	135.00	33.3	36.80	17.0	43.5
PCHR/L 20-D40-3-IQ	20.0	20.0	3.00	3.20	18.70	40.0	135.00	33.3	35.60	13.0	43.5
PCHR/L 25-D40-3-IQ	25.0	25.0	3.00	3.20	23.70	40.0	135.00	33.3	33.60	8.0	43.5
PCHR/L 32-D40-3-IQ	32.0	32.0	3.00	3.20	30.70	40.0	135.00	33.3	-	-	43.5

(1) Minimum cutting width

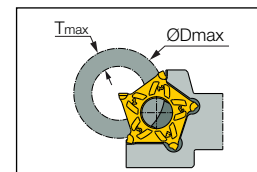
(2) Maximum cutting width

Inserts: PENTA D-N-C • PENTA D-N-J • PENTA D-N-PB • PENTA D-R/L-C • PENTA D-R/L-J • PENTA D-R/L-PB

Tmax as a Function of Dmax for PENTA D22								
Tmax	T≤1.2	T≤2.0	T≤3.0	T≤4.0	T≤5.0	T≤7.0	T≤9.0	T≤11.0
Dmax	N.L ⁽¹⁾	600	130	60	40	30	25	22

Tmax as a Function of Dmax for PENTA D32										
Tmax	T≤1.2	T≤2	T≤3.0	T≤4.0	T≤5.0	T≤6.0	T≤7.0	T≤8.0	T≤9.0	T≤16.0
Dmax	N.L ⁽¹⁾	N.L ⁽¹⁾	250	130	80	60	50	45	40	32

Tmax as a Function of Dmax for PENTA D40															
Tmax	T≤1.2	T≤2	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≤11.0	T≤12.0	T≤13.0	T≤16.0	T≤20.0
Dmax	N.L ⁽¹⁾	N.L ⁽¹⁾	N.L ⁽¹⁾	350	200	140	105	85	75	65	60	55	50	45	40



(1) N.L. = No Limit

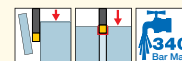
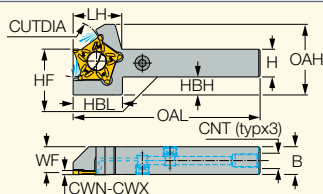
Spare Parts

Designation				
PCHR/L 12-D22-2-IQ	SR M6-R-L	LEVER PD22-2 INJ	BLD T15/S7	SW6-SD
PCHR/L 16-D22-2-IQ	SR M6-R-L	LEVER PD22-2 INJ	BLD T15/S7	SW6-SD
PCHR/L 20-D22-2-IQ	SR M6-R-L	LEVER PD22-2 INJ	BLD T15/S7	SW6-SD
PCHR/L 12-D22-3-IQ	SR M6-R-L	LEVER PD22-3 INJ	BLD T15/S7	SW6-SD
PCHR/L 16-D22-3-IQ	SR M6-R-L	LEVER PD22-3 INJ	BLD T15/S7	SW6-SD
PCHR/L 20-D22-3-IQ	SR M6-R-L	LEVER PD22-3 INJ*		
PCHR/L 20-D22-3-IQ	SR M6-R-L		BLD T15/S7	SW6-SD
PCHR/L 20-D22-3-IQ		LEVER PD22-3 INJ		
PCHR/L 12-D32-2-IQ	SR M6-R-L	LEVER PD32-2 INJ	BLD T15/S7	SW6-SD
PCHR/L 16-D32-2-IQ	SR M6-R-L	LEVER PD32-2 INJ	BLD T15/S7	SW6-SD
PCHR/L 20-D32-2-IQ	SR M6-R-L	LEVER PD32-2 INJ	BLD T15/S7	SW6-SD
PCHR/L 25-D32-2-IQ	SR M6-R-L	LEVER PD32-2 INJ	BLD T15/S7	SW6-SD
PCHR/L 12-D32-3-IQ		LEVER PD32-3 INJ		
PCHR/L 12-D32-3-IQ	SR M6-R-L		BLD T15/S7	SW6-SD
PCHR/L 12-D32-3-IQ		LEVER PD32-3 INJ*		
PCHR/L 16-D32-3-IQ	SR M6-R-L	LEVER PD32-3 INJ	BLD T15/S7	SW6-SD
PCHR/L 20-D32-3-IQ	SR M6-R-L	LEVER PD32-3 INJ	BLD T15/S7	SW6-SD
PCHR/L 25-D32-3-IQ	SR M6-R-L	LEVER PD32-3 INJ	BLD T15/S7	SW6-SD
PCHR/L 16-D40-3-IQ	SR M7-R-L	LEVER PD40 INJ	BLD T20/S7	SW6-SD
PCHR/L 20-D40-3-IQ	SR M7-R-L	LEVER PD40 INJ	BLD T20/S7	SW6-SD
PCHR/L 25-D40-3-IQ	SR M7-R-L	LEVER PD40 INJ	BLD T20/S7	SW6-SD
PCHR/L 32-D40-3-IQ	SR M7-R-L	LEVER PD40 INJ	BLD T20/S7	SW6-SD

* Optional, should be ordered separately

PCHR/L-D-JHP

Grooving and Parting Tools with Channels for High-Pressure Coolant Carrying Inserts with 5 Cutting Edges



Designation	H	HF	HBH	B	CWN ⁽¹⁾	CWX ⁽²⁾	WF	CUTDIA	OAL	LH	HBL	OAH	CNT
PCHR/L 12-D22-2-JHP	12.0	0.0	8.0	12.0	2.00	2.40	11.00	22.0	101.50	29.0	29.50	32.0	UNF 5/16-24
PCHR/L 16-D22-2-JHP	16.0	0.0	4.0	16.0	2.00	2.40	15.00	22.0	121.50	29.0	29.50	32.0	UNF 5/16-24
PCHR/L 20-D22-2-JHP	20.0	0.0	-	20.0	2.00	2.40	19.00	22.0	121.50	29.0	29.50	32.0	G 1/8-28
PCHR/L 12-D32-2-JHP	12.0	12.1	14.5	12.0	2.00	2.40	11.15	32.0	100.00	30.5	31.00	41.0	UNF 5/16-24
PCHR/L 16-D32-2-JHP	16.0	16.1	10.0	16.0	2.00	2.40	15.21	32.0	120.00	25.9	27.00	41.0	UNF 5/16-24
PCHR/L 20-D32-2-JHP	20.0	20.1	6.5	20.0	2.00	2.40	18.40	32.0	120.00	30.5	31.00	41.0	G 1/8-28
PCHR/L 25-D32-2-JHP	25.0	25.1	1.5	25.0	2.00	2.40	23.40	32.0	120.00	29.0	29.50	41.0	G 1/8-28
PCHR/L 16-D40-3-JHP	16.0	16.0	17.0	16.0	3.00	3.20	14.60	40.0	135.00	36.3	36.80	51.0	UNF 5/16-24
PCHR/L 20-D40-3-JHP	20.0	20.0	13.0	20.0	3.00	3.20	18.60	40.0	135.00	35.1	35.60	51.0	G 1/8-28
PCHR/L 25-D40-3-JHP	25.0	25.0	8.0	25.0	3.00	3.20	23.60	40.0	135.00	33.1	33.60	51.0	G 1/8-28

⁽¹⁾ Minimum cutting width

⁽²⁾ Maximum cutting width

Inserts: PENTA D-N-C • PENTA D-N-J • PENTA D-N-PB • PENTA D-R/L-C • PENTA D-R/L-J • PENTA D-R/L-PB

PCHR/L D22-2...-JHP Dmax for Parting Off 22/T11

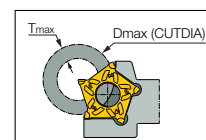
Tmax	T≤1.0	T≤2.0	T≤3.0	T≤4.0	T≤5.0	T≤6.0	T≤7.0	T≤8.0	T≤9.0	T≤10.0
Dmax	89	64	48	40	34	31	28	27	24	21

PCHR/L D32-2...-JHP Dmax for Parting Off 32/T16

Tmax	T≤1.0	T≤2.0	T≤3.0	T≤4.0	T≤5.0	T≤6.0	T≤7.0	T≤8.0	T≤9.0	T≤10.0
Dmax	150	125	100	78	65	57	51	46	43	40
Tmax	T≤11.0	T≤12.0	T≤13.0	T≤14.0	T≤15.0					
Dmax	39	37	35	34	33					

PCHR/L D40-3...-JHP Dmax for Parting Off 40/T20

Tmax	T≤1.0	T≤2.0	T≤3.0	T≤4.0	T≤5.0	T≤6.0	T≤7.0	T≤8.0	T≤9.0	T≤10.0
Dmax	400	300	200	145	114	95	82	73	66	61
Tmax	T≤11.0	T≤12.0	T≤13.0	T≤14.0	T≤15.0	T≤16.0	T≤17.0	T≤18.0	T≤19.0	
Dmax	57	54	51	49	47	46	45	44	42	


Flow Rate vs. Pressure

Designation	70 bar Flow Rate (liters/min)	100 bar Flow Rate (liters/min)	140 bar Flow Rate (liters/min)
PCHR/L...-2JHP	2-4	4-6	6-8
PCHR/L...-3JHP	7-9	9-11	11-13

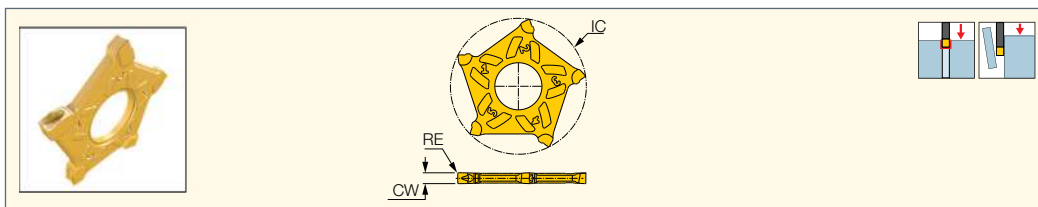
Spare Parts

Designation							
PCHR/L 12-D22-2-JHP	SR M6-R-L	LEVER PD22-2 INJ	BLD T15/S7	SW6-SD	HW 5/32"		SR 5/16UNF TL360
PCHR/L 16-D22-2-JHP	SR M6-R-L	LEVER PD22-2 INJ	BLD T15/S7	SW6-SD	HW 5/32"		SR 5/16UNF TL360
PCHR/L 20-D22-2-JHP		LEVER PD22-2 INJ*					
PCHR/L 20-D22-2-JHP	SR M6-R-L		BLD T15/S7	SW6-SD	HW 5.0	PLG G1/8 TL360	
PCHR/L 12-D32-2-JHP	SR M6-R-L	LEVER PD32-2 INJ	BLD T15/S7	SW6-SD	HW 5/32"		SR 5/16UNF TL360
PCHR/L 16-D32-2-JHP	SR M6-R-L	LEVER PD32-2 INJ	BLD T15/S7	SW6-SD	HW 5/32"		SR 5/16UNF TL360
PCHR/L 20-D32-2-JHP	SR M6-R-L	LEVER PD32-2 INJ	BLD T15/S7	SW6-SD	HW 5.0	PLG G1/8 TL360	
PCHR/L 25-D32-2-JHP	SR M6-R-L	LEVER PD32-2 INJ	BLD T15/S7	SW6-SD	HW 5.0	PLG G1/8 TL360	
PCHR/L 16-D40-3-JHP	SR M7-R-L	LEVER PD40 INJ	BLD T20/S7	SW6-SD	HW 5/32"		SR 5/16UNF TL360
PCHR/L 20-D40-3-JHP	SR M7-R-L	LEVER PD40 INJ	BLD T20/S7	SW6-SD	HW 5.0	PLG G1/8 TL360	
PCHR/L 25-D40-3-JHP	SR M7-R-L	LEVER PD40 INJ	BLD T20/S7	SW6-SD	HW 5.0	PLG G1/8 TL360	

* Optional, should be ordered separately

PENTA IQGRIP
 PARTING LINE

PENTA D-N-J

 Inserts with 5 Cutting Edges
 for Parting and Grooving Soft
 Materials, Parting Tubes, Small
 and Thin-Walled Parts


Designation	Dimensions					IC808G	Recommended Machining Data
	CW	RE	CWTOL ⁽¹⁾	RETOL ⁽²⁾	IC		f groove (mm/rev)
PENTA D22N200J020	2.00	0.20	0.02	0.030	22.00	●	0.04-0.12
PENTA D22N300J020	3.00	0.20	0.02	0.030	22.00	●	0.04-0.16

• For cutting speed recommendations and user guide, see pages 540-547

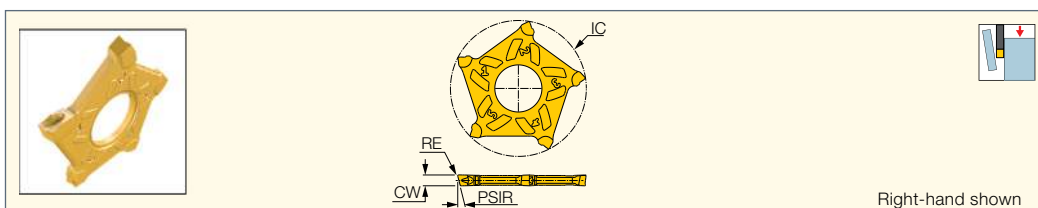
⁽¹⁾ Cutting width tolerance (+/-)

⁽²⁾ Corner radius tolerance (+/-)

Tools: PCHR/L-D-IQ • PCHR/L-D-JHP

PENTA IQGRIP
 PARTING LINE

PENTA D-R/L-J

 Inserts with 5 Cutting Edges
 for Parting Tubes, Small
 and Thin-Walled Parts


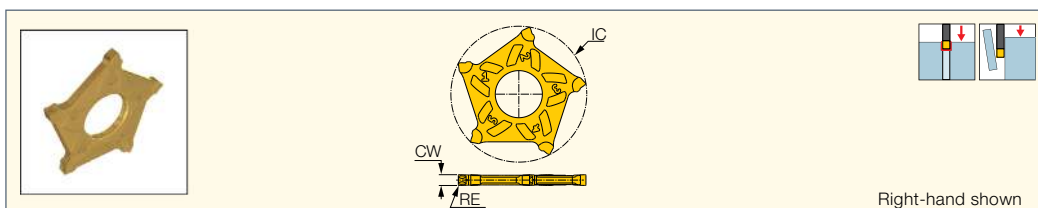
Designation	Dimensions					IC808G	Recommended Machining Data
	CW	RE	IC	PSIRL	PSIRR		f groove (mm/rev)
PENTA D22L200J-6D	2.00	0.20	22.00	6.0	-	●	0.04-0.10
PENTA D22R200J-6D	2.00	0.20	22.00	-	6.0	●	0.04-0.10
PENTA D22L200J-15D	2.00	0.20	22.00	15.0	-	●	0.04-0.08
PENTA D22R200J-15D	2.00	0.20	22.00	-	15.0	●	0.04-0.08
PENTA D22L300J-6D	3.00	0.20	22.00	6.0	-	●	0.04-0.12
PENTA D22R300J-6D	3.00	0.20	22.00	-	6.0	●	0.04-0.12
PENTA D22L300J-15D	3.00	0.20	22.00	15.0	-	●	0.04-0.10
PENTA D22R300J-15D	3.00	0.20	22.00	-	15.0	●	0.04-0.10

• For cutting speed recommendations and user guide, see pages 540-547

Tools: PCHR/L-D-IQ • PCHR/L-D-JHP

PENTA IQGRIP
 PARTING LINE

PENTA D-N-C

 Inserts with 5 Cutting Edges
 for Parting and Grooving
 Hard Materials, Tough and
 General Applications


Designation	Dimensions					IC808G	Recommended Machining Data
	RE	CW	RETOL ⁽¹⁾	CWTOL ⁽²⁾	IC		f groove (mm/rev)
PENTA D32N200C020	0.20	2.00	0.030	0.02	30.25	●	0.04-0.14
PENTA D32N300C020	0.20	3.00	0.030	0.02	30.25	●	0.06-0.22
PENTA D40N300C020	0.20	3.02	0.030	0.02	37.80	●	0.06-0.22

• For cutting speed recommendations and user guide, see pages 540-547

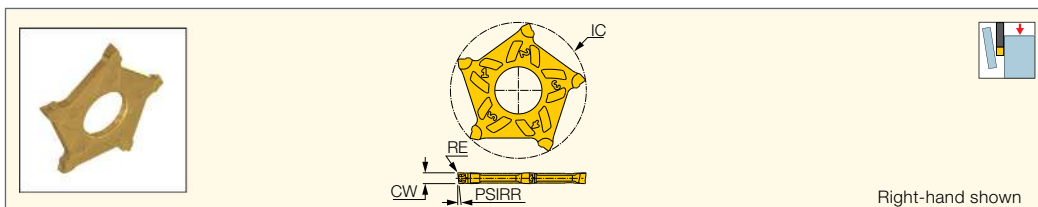
⁽¹⁾ Corner radius tolerance (+/-)

⁽²⁾ Cutting width tolerance (+/-)

Tools: PCHR/L-D-IQ • PCHR/L-D-JHP

PENTA IQGRIP
 PARTING LINE

PENTA D-R/L-C

 Inserts with 5 Cutting Edges for
 Parting Hard Materials, Tough
 and General Applications


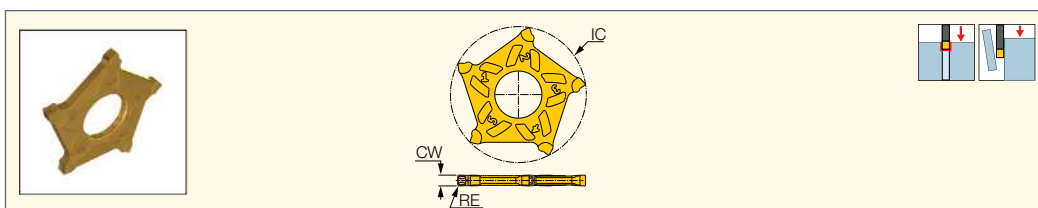
Designation	Dimensions					IC808G	Recommended Machining Data
	CW	RE	IC	PSIRL	PSIRR		f groove (mm/rev)
PENTA D32L200C-6D	2.00	0.10	30.25	6.0	-	●	0.04-0.12
PENTA D32R200C-6D	2.00	0.10	30.25	-	6.0	●	0.04-0.12
PENTA D32L200C-15D	2.00	0.20	30.25	15.0	-	●	0.04-0.10
PENTA D32R200C-15D	2.00	0.20	30.25	-	15.0	●	0.04-0.10
PENTA D32L300C-6D	3.00	0.20	30.25	6.0	-	●	0.04-0.14
PENTA D32R300C-6D	3.00	0.20	30.25	-	6.0	●	0.04-0.14
PENTA D32L300C-15D	3.00	0.20	30.25	15.0	-	●	0.04-0.10
PENTA D32R300C-15D	3.00	0.20	30.25	-	15.0	●	0.04-0.10
PENTA D40L300C-6D	3.00	0.20	37.80	6.0	-	●	0.04-0.14
PENTA D40R300C-6D	3.00	0.20	37.80	-	6.0	●	0.04-0.14
PENTA D40L300C-15D	3.00	0.20	37.80	15.0	-	●	0.04-0.10
PENTA D40R300C-15D	3.00	0.20	37.80	-	15.0	●	0.04-0.10

• For cutting speed recommendations and user guide, see pages 540-547

Tools: PCHR/L-D-IQ • PCHR/L-D-JHP

PENTA IQGRIP
 PARTING LINE

PENTA D-N-PB

 Pentagonal Inserts for Parting
 and Grooving Bearing Steel
 and Other Ductile Materials


Designation	Dimensions					IC808G	Recommended Machining Data
	CW	RE	CWTOL ⁽¹⁾	RETOL ⁽²⁾	IC		f groove (mm/rev)
PENTA D40N300PB020	3.00	0.20	0.02	0.030	37.80	●	0.03-0.10

• For cutting speed recommendations and user guide, see pages 540-547

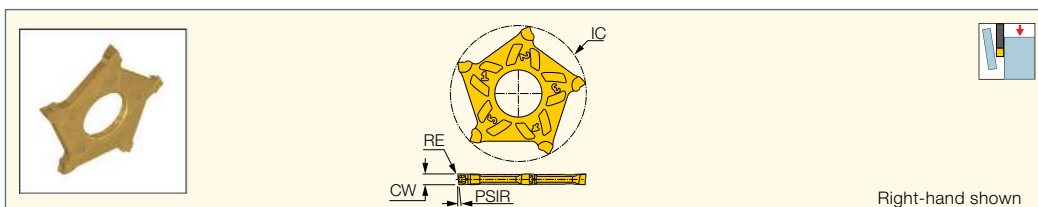
⁽¹⁾ Cutting width tolerance (+/-)

⁽²⁾ Corner radius tolerance (+/-)

Tools: PCHR/L-D-IQ • PCHR/L-D-JHP

PENTA IQGRIP
 PARTING LINE

PENTA D-R/L-PB

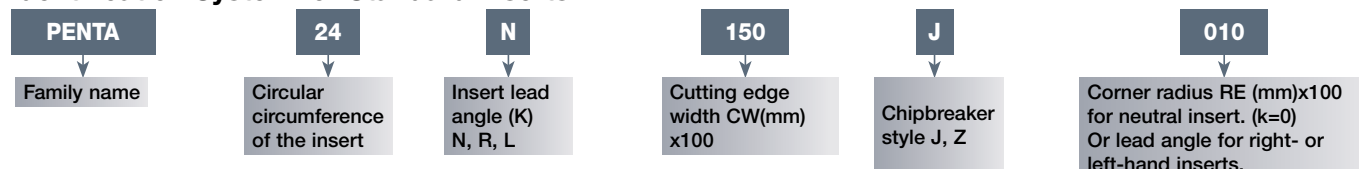
 Pentagonal Inserts for Parting
 Bearing Steel and
 other Ductile Materials


Designation	Dimensions					IC808G	Recommended Machining Data
	CW	RE	IC	PSIRL	PSIRR		f groove (mm/rev)
PENTA D40L300PB-6D	3.00	0.20	37.80	6.0	-	●	0.03-0.08
PENTA D40R300PB-6D	3.00	0.20	37.80	-	6.0	●	0.03-0.08
PENTA D40L300PB-15D	3.00	0.10	37.80	15.0	-	●	0.03-0.06
PENTA D40R300PB-15D	3.00	0.10	37.80	-	15.0	●	0.03-0.06

• For cutting speed recommendations and user guide, see pages 540-547

Tools: PCHR/L-D-IQ • PCHR/L-D-JHP

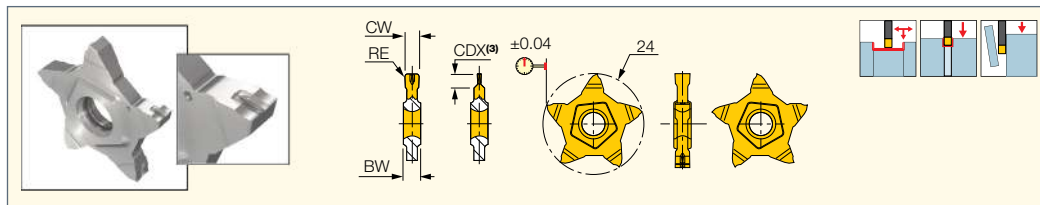
Identification System for Standard Inserts



PENTACUT
PARTING & GROOVING LINE

PENTA 24N-J

Inserts with 5 Cutting Edges for Parting and Grooving Soft Materials, Tubes, Small and Thin-Walled Parts



Designation	Dimensions						Tough ↔ Hard				Recommended Machining Data
	CW	RE	CWTOL ⁽¹⁾	RETOL ⁽²⁾	BW	CDX ⁽³⁾	IC1010	IC1008	IC908	IC807G	
PENTA 24N050J000	0.50	0.00	0.02	0.020	4.00	1.00			•		0.02-0.04
PENTA 24N050J004	0.50	0.04	0.02	0.020	4.00	2.50		•			0.02-0.05
PENTA 24N080J000	0.80	0.00	0.02	0.020	4.00	1.60			•		0.02-0.05
PENTA 24N100J004	1.00	0.04	0.02	0.020	4.00	3.50			•		0.03-0.07
PENTA 24N100J006	1.00	0.06	0.02	0.020	4.00	3.50		•		•	0.03-0.07
PENTA 24N104J000	1.04	0.00	0.02	0.020	4.00	2.00			•		0.02-0.07
PENTA 24N120J000	1.20	0.00	0.02	0.020	4.00	2.00			•	•	0.03-0.07
PENTA 24N125J010	1.25	0.10	0.02	0.020	4.00	2.00			•		0.03-0.07
PENTA 24N140J000	1.40	0.00	0.02	0.020	4.00	2.00			•		0.03-0.08
PENTA 24N147J000	1.47	0.00	0.02	0.020	4.00	2.50			•		0.03-0.08
PENTA 24N150J010	1.50	0.10	0.00	0.020	4.00	5.00	•	•	•	•	0.03-0.10
PENTA 24N157J015	1.57	0.15	0.02	0.030	4.00	3.00			•	•	0.00-0.12
PENTA 24N170J010	1.70	0.10	0.02	0.030	4.00	3.00			•	•	0.03-0.12
PENTA 24N178J018	1.78	0.18	0.02	0.030	4.00	3.00			•	•	0.04-0.12
PENTA 24N185J015	1.85	0.15	0.02	0.030	4.00	3.00			•		0.04-0.12
PENTA 24N196J015	1.96	0.15	0.02	0.030	4.00	3.00			•	•	0.04-0.12
PENTA 24N196J040	1.96	0.40	0.02	0.030	4.00	3.00			•		0.03-0.10
PENTA 24N200J020	2.00	0.20	0.02	0.030	4.00	6.00	•	•	•	•	0.04-0.12
PENTA 24N222J015	2.22	0.15	0.02	0.030	4.00	3.50			•	•	0.04-0.16
PENTA 24N230J020	2.30	0.20	0.02	0.030	4.00	3.50			•	•	0.04-0.16
PENTA 24N239J015	2.39	0.15	0.02	0.030	4.00	5.00			•	•	0.04-0.16
PENTA 24N247J020	2.47	0.20	0.02	0.030	4.00	5.00			•	•	0.04-0.16
PENTA 24N270J010	2.70	0.10	0.02	0.020	4.00	5.00			•		0.04-0.16
PENTA 24N287J020	2.87	0.20	0.02	0.030	4.00	6.50			•		0.04-0.16
PENTA 24N300J000	3.00	0.00	0.02	0.020	4.00	6.50			•		0.04-0.10
PENTA 24N300J020	3.00	0.20	0.02	0.030	4.00	6.50	•		•	•	0.04-0.16
PENTA 24N300J040	3.00	0.40	0.02	0.030	4.00	6.50			•	•	0.04-0.16
PENTA 24N315J015	3.15	0.15	0.02	0.030	4.00	6.50			•		0.04-0.16
PENTA 24N318J020	3.18	0.20	0.02	0.030	4.00	6.50			•	•	0.04-0.16
PENTA 24N330J010	3.30	0.10	0.02	0.030	5.00	6.40			•		0.04-0.16
PENTA 24N348J020	3.48	0.20	0.02	0.030	5.00	6.40			•		0.04-0.18
PENTA 24N356J020	3.56	0.20	0.02	0.030	5.00	6.40			•		0.04-0.18
PENTA 24N374J020	3.74	0.20	0.02	0.030	5.00	6.40			•		0.04-0.18
PENTA 24N398J020	3.98	0.20	0.02	0.030	5.00	6.20			•		0.04-0.18
PENTA 24N400J040	4.00	0.40	0.02	0.030	5.00	6.20			•		0.04-0.18
PENTA 24N423J010	4.23	0.10	0.02	0.030	5.00	6.20			•		0.04-0.18

• Recessing is possible only with 2.39 mm and wider inserts • For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Cutting width tolerance (+/-)

⁽²⁾ Corner radius tolerance (+/-)

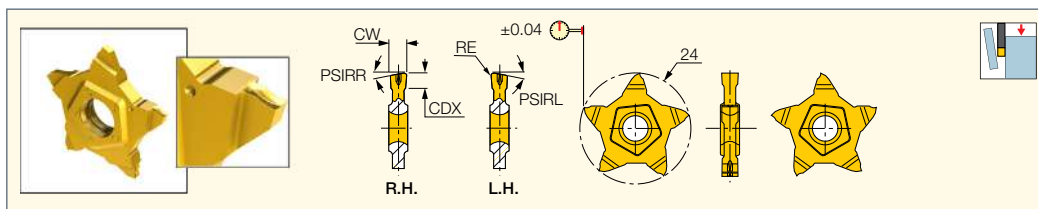
⁽³⁾ For grooving and parting depth relative to part diameter, see page 535

Tools: PCAD RE/LE-JHP • PCADR/L • PCADR/L-JHP • PCHBR/L • PCHPR/L • PCHR/L-24 • PCHR/L-24-JHP • PCHR/L-24-JHP-MC

PENTACUT R/L Parting Inserts

PENTACUT
PARTING & GROOVING LINE**PENTA 24R/L-J**

Inserts with 5 Cutting Edges
for Parting Tubes, Small
and Thin-Walled Parts



Designation	Dimensions							IC1008	Recommended Machining Data
	CW	CDX ⁽¹⁾	RE	CWTOL ⁽²⁾	PSIRL	PSIRR	CUTDIA ⁽³⁾		
PENTA 24L100J15D	1.00	3.50	0.06	0.02	15.0	-	7.0	●	0.02-0.06
PENTA 24R100J15D	1.00	3.50	0.06	0.02	-	15.0	7.0	●	0.02-0.06
PENTA 24L150J06D	1.50	5.00	0.10	0.02	6.0	-	10.0	●	0.03-0.09
PENTA 24L150J15D	1.50	5.00	0.06	0.02	15.0	-	10.0	●	0.03-0.08
PENTA 24R150J06D	1.50	5.00	0.06	0.02	-	6.0	10.0	●	0.03-0.09
PENTA 24R150J15D	1.50	5.00	0.06	0.02	-	15.0	10.0	●	0.03-0.08
PENTA 24L200J06D	2.00	6.00	0.10	0.02	6.0	-	12.0	●	0.04-0.10
PENTA 24L200J15D	2.00	6.00	0.10	0.02	15.0	-	12.0	●	0.04-0.09
PENTA 24R200J06D	2.00	6.00	0.10	0.02	-	6.0	12.0	●	0.04-0.10
PENTA 24R200J15D	2.00	6.00	0.10	0.02	-	15.0	12.0	●	0.04-0.09

• For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Cutting depth maximum

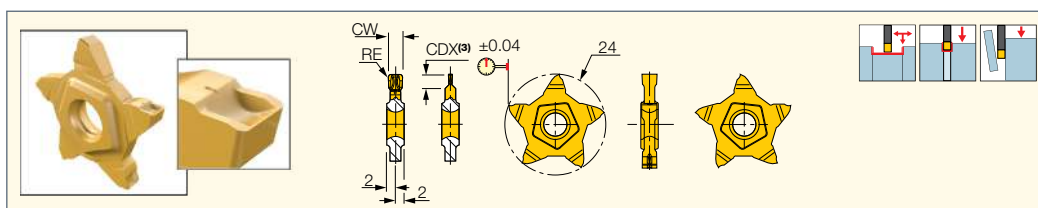
⁽²⁾ Cutting width tolerance (+/-)

⁽³⁾ For grooving and parting depths relative to part diameter, see page 535

Tools: PCAD RE/LE-JHP • PCADR/L • PCADR/L-JHP • PCHBR/L • PCHPR/L • PCHR/L-24 • PCHR/L-24-JHP • PCHR/L-24-JHP-MC

PENTACUT
PARTING & GROOVING LINE**PENTA 24N-C**

Inserts with 5 Cutting Edges for
Parting and Grooving Bars, Hard
Materials and Tough Applications



Designation	Dimensions					IC908	Recommended Machining Data
	CW	RE	CWTOL ⁽¹⁾	RETOL ⁽²⁾	CDX ⁽³⁾		
PENTA 24N150C010	1.50	0.10	0.02	0.050	5.00	●	0.05-0.11
PENTA 24N157C015	1.57	0.15	0.02	0.050	3.00	●	0.05-0.12
PENTA 24N170C010	1.70	0.10	0.02	0.050	3.00	●	0.05-0.13
PENTA 24N178C018	1.78	0.18	0.02	0.050	3.00	●	0.05-0.14
PENTA 24N196C015	1.96	0.15	0.02	0.050	3.00	●	0.05-0.15
PENTA 24N200C020	2.00	0.20	0.02	0.050	6.00	●	0.05-0.16
PENTA 24N222C015	2.22	0.15	0.02	0.050	3.50	●	0.05-0.16
PENTA 24N230C020	2.30	0.20	0.02	0.050	3.50	●	0.06-0.17
PENTA 24N239C015	2.39	0.15	0.02	0.050	5.00	●	0.07-0.18
PENTA 24N247C020	2.47	0.20	0.02	0.050	5.00	●	0.08-0.18
PENTA 24N270C010	2.70	0.10	0.02	0.050	6.20	●	0.09-0.18
PENTA 24N287C020	2.87	0.20	0.02	0.050	6.20	●	0.10-0.18
PENTA 24N300C020	3.00	0.20	0.02	0.050	6.20	●	0.10-0.20
PENTA 24N300C040	3.00	0.40	0.02	0.050	6.20	●	0.10-0.20
PENTA 24N318C020	3.18	0.20	0.02	0.050	6.20	●	0.10-0.20
PENTA 24N478C055	4.78	0.55	0.02	0.050	6.20	●	0.10-0.25
PENTA 24N486C040	4.86	0.40	0.02	0.050	6.20	●	0.10-0.25
PENTA 24N500C040	5.00	0.40	0.02	0.050	6.20	●	0.10-0.25

• Recessing is possible only with 2.39 mm and wider inserts • For cutting speed recommendations and user guide, see pages 540-547

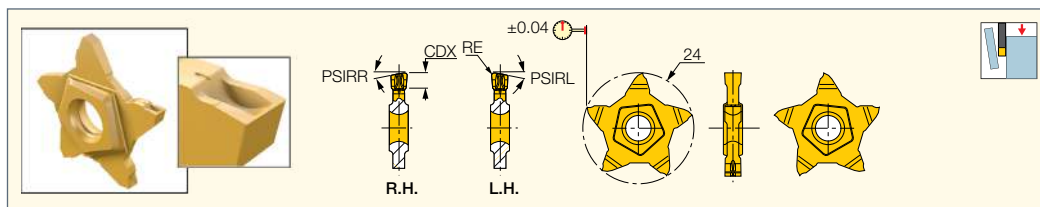
⁽¹⁾ Cutting width tolerance (+/-)

⁽²⁾ Corner radius tolerance (+/-)

⁽³⁾ For grooving and parting depths relative to part diameter, see page 535

Tools: PCAD RE/LE-JHP • PCADR/L • PCADR/L-JHP • PCHBR/L • PCHPR/L • PCHR/L-24 • PCHR/L-24-JHP • PCHR/L-24-JHP-MC

PENTA 24R-C

 Inserts with 5 Cutting Edges
 for Parting Bars, Hard Materials
 and Tough Applications


Designation	Dimensions					IC1008	Recommended Machining Data
	CW	RE	CWTOL ⁽¹⁾	CDX ⁽²⁾	PSIRR		f groove (mm/rev)
PENTA 24R150C06D	1.50	0.06	0.02	5.00	6.0	●	0.03-0.10
PENTA 24R200C06D	2.00	0.10	0.02	6.00	6.0	●	0.04-0.12

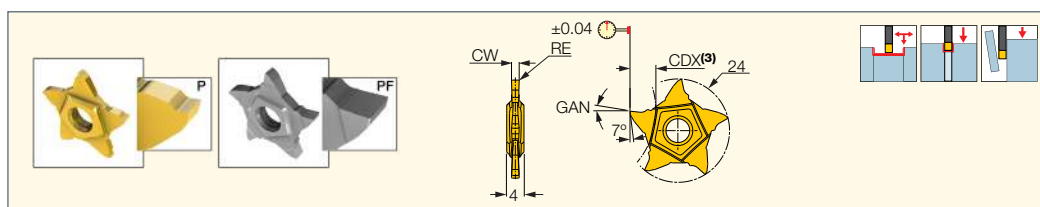
• For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Cutting width tolerance (+/-)

⁽²⁾ Cutting depth maximum

Tools: PCAD RE/LE-JHP • PCADR/L • PCADR/L-JHP • PCHBR/L • PCHPR/L • PCHR/L-24 • PCHR/L-24-JHP • PCHR/L-24-JHP-MC

PENTA 24N-PF/P

 Pentagonal Inserts with a High
 Positive Flat Rake for Parting
 and Precision Grooving


Designation	Dimensions						Tough ↔ Hard			Recommended Machining Data
	CW	RE	CWTOL ⁽¹⁾	RETOL ⁽²⁾	CDX ⁽³⁾	GAN	IC1008	IC908	IC30N	f groove (mm/rev)
PENTA 24N050PF005	0.50	0.05	0.02	0.020	2.50	6.0			●	0.01-0.04
PENTA 24N075PF005	0.75	0.05	0.02	0.020	2.50	6.0			●	0.02-0.05
PENTA 24N095PF005	0.95	0.05	0.02	0.020	4.00	6.0			●	0.02-0.05
PENTA 24N100P005	1.00	0.05	0.02	0.020	3.50	12.0	●			0.02-0.05
PENTA 24N100PF010	1.00	0.10	0.02	0.020	4.00	6.0		●	●	0.03-0.06
PENTA 24N125PF020	1.25	0.20	0.02	0.020	5.00	6.0			●	0.03-0.06
PENTA 24N145PF020	1.45	0.20	0.02	0.020	6.20	6.0			●	0.03-0.06
PENTA 24N150P005	1.50	0.05	0.02	0.020	5.00	12.0	●			0.02-0.07
PENTA 24N150PF020	1.50	0.20	0.02	0.030	6.00	6.0		●	●	0.03-0.09
PENTA 24N175PF020	1.75	0.20	0.02	0.030	6.20	6.0			●	0.02-0.08
PENTA 24N185PF020	1.85	0.20	0.02	0.030	6.00	6.0			●	0.03-0.10
PENTA 24N200P005	2.00	0.05	0.02	0.020	6.00	12.0	●			0.02-0.08
PENTA 24N200PF020	2.00	0.20	0.02	0.030	6.50	6.0		●	●	0.04-0.10
PENTA 24N230PF020	2.30	0.20	0.02	0.030	6.20	6.0			●	0.04-0.14
PENTA 24N239PF015	2.39	0.15	0.02	0.030	6.50	6.0		●	●	0.04-0.14
PENTA 24N250PF020	2.50	0.20	0.02	0.030	6.50	6.0		●	●	0.04-0.14
PENTA 24N300PF020	3.00	0.20	0.02	0.030	6.50	6.0		●	●	0.04-0.14
PENTA 24N300PF030	3.00	0.30	0.02	0.030	6.20	6.0			●	0.04-0.15
PENTA 24N400PF020	4.00	0.20	0.02	0.030	6.50	6.0			●	0.04-0.16
PENTA 24N400PF040	4.00	0.40	0.02	0.030	6.20	6.0			●	0.04-0.16

• For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Cutting width tolerance (+/-)

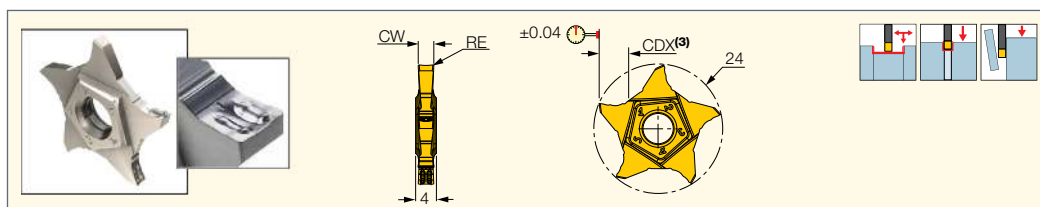
⁽²⁾ Corner radius tolerance (+/-)

⁽³⁾ For grooving and parting depths relative to part diameter, see page 535

Tools: PCAD RE/LE-JHP • PCADR/L • PCADR/L-JHP • PCHBR/L • PCHPR/L • PCHR/L-24 • PCHR/L-24-JHP • PCHR/L-24-JHP-MC

PENTA 24N-Z

Inserts with 5 Cutting Edges for Grooving and Parting Tubes, Small and Thin-Walled Parts



Designation	Dimensions					IC908	Recommended Machining Data
	CW	RE	CWTOL ⁽¹⁾	RETOL ⁽²⁾	CDX ⁽³⁾		f groove (mm/rev)
PENTA 24N150Z010	1.50	0.10	0.02	0.020	5.00	●	0.05-0.08
PENTA 24N200Z020	2.00	0.20	0.02	0.030	6.40	●	0.04-0.12
PENTA 24N300Z020	3.00	0.20	0.02	0.000	6.40	●	0.04-0.16

• Cutting edge with high positive rake, suitable for parting tubes, thin walled parts and for small diameters • Suitable for machining soft materials and bearing steel at low to medium feeds

• For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Cutting width tolerance (+/-)

⁽²⁾ Corner radius tolerance (+/-)

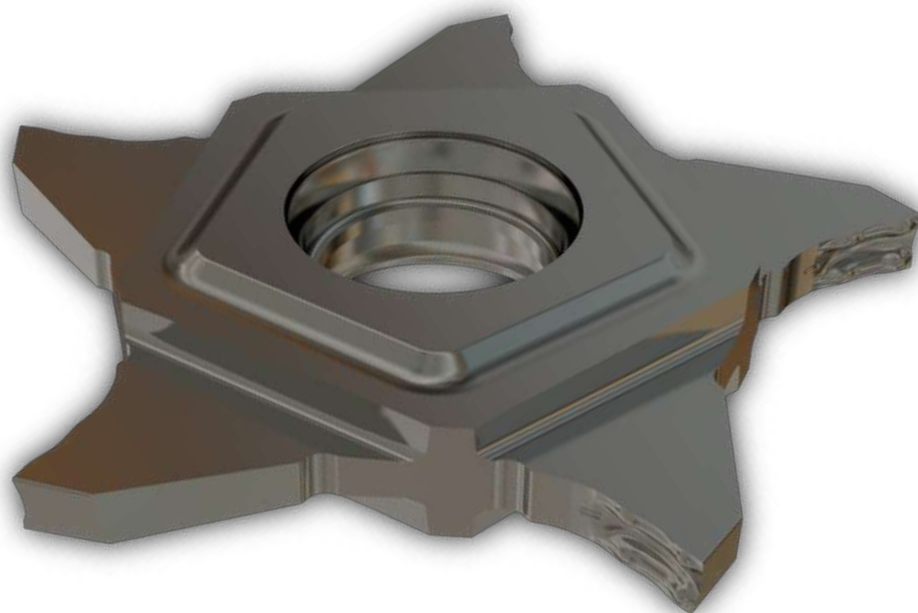
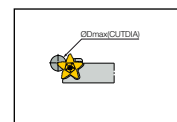
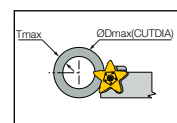
⁽³⁾ For grooving and parting depths relative to part diameter, see page 535

Tools: PCAD RE/LE-JHP • PCADR/L • PCADR/L-JHP • PCHBR/L • PCHPR/L • PCHR/L-24 • PCHR/L-24-JHP • PCHR/L-24-JHP-MC

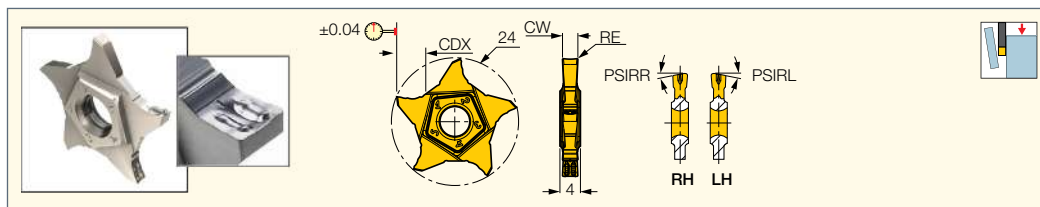
ØDmax as a Function of Parting / Grooving Depth (T) for PENTA 24 Inserts										
CW ^{+0.02}	CDX ⁽³⁾	CDX / ØDmax	T≤3.0	T≤3.5	T≤4.0	T≤4.5	T≤5.0	T≤5.5	T≤6.5	T≤6.4
CW=0.50 ⁽¹⁾	1.0	1.0 / N.L.	-	-	-	-	-	-	-	-
CW=0.50 ⁽²⁾	2.5			250						
CW=0.80	1.6	1.6 / N.L.	-	-	-	-	-	-	-	-
CW=1.00	3.5		N.L.	250	-	-	-	-	-	-
1.04≤CW≤1.40	2.0	2.0 / N.L.	-	-	-	-	-	-	-	-
CW=1.47	2.5	2.5 / N.L.	-	-	-	-	-	-	-	-
CW=1.50	5.0		N.L.	470	210	70	30	-	-	-
1.57≤CW≤1.96	3.0		N.L.	-	-	-	-	-	-	-
CW=2.00	6.0 ⁽⁴⁾		N.L.	470	210	130	75	45	20	-
2.22≤CW≤2.30	3.5		N.L.	250	-	-	-	-	-	-
2.39≤CW≤2.50	5.0		N.L.	470	210	70	30	-	-	-
2.70≤CW≤3.18	6.4		N.L.	470	210	135	100	70	40	20

⁽¹⁾ Refers to PENTA 24N050J000 - a precision grooving insert ⁽²⁾ Refers to PENTA 24N050J004 - a parting insert ⁽³⁾ CUTDIA for parting = 2 x CDX

⁽⁴⁾ For full radius insert, CDX = 3.0, ØDmax = No limit



PENTA 24R/L-Z
 Inserts with 5 Cutting Edges
 for Parting Tubes, Small
 and Thin-Walled Parts



Designation	Dimensions						IC1008	Recommended Machining Data
	CW	PSIRL	PSIRR	RE	CUTDIA	CDX ⁽¹⁾		f groove (mm/rev)
PENTA 24L150Z06D	1.50	6.0	-	0.06	10.0	5.00	●	0.03-0.09
PENTA 24L150Z15D	1.50	15.0	-	0.06	10.0	5.00	●	0.03-0.08
PENTA 24R150Z06D	1.50	-	6.0	0.06	10.0	5.00	●	0.03-0.09
PENTA 24R150Z15D	1.50	-	15.0	0.06	10.0	5.00	●	0.03-0.08
PENTA 24L200Z06D	2.00	6.0	-	0.10	12.8	6.40	●	0.04-0.10
PENTA 24L200Z15D	2.00	15.0	-	0.10	12.8	6.40	●	0.04-0.09
PENTA 24R200Z06D	2.00	-	6.0	0.10	12.8	6.40	●	0.04-0.10
PENTA 24R200Z15D	2.00	-	15.0	0.10	12.8	6.40	●	0.04-0.09
PENTA 24L300Z06D	3.00	6.0	-	0.20	12.8	6.40	●	0.04-0.13
PENTA 24L300Z15D	3.00	15.0	-	0.20	12.8	6.40	●	0.04-0.12
PENTA 24R300Z06D	3.00	-	6.0	0.20	12.8	6.40	●	0.04-0.15
PENTA 24R300Z15D	3.00	-	15.0	0.20	12.8	6.40	●	0.04-0.14

- Cutting edge with high positive rake, suitable for parting tubes, thin walled parts and for small diameters
- Suitable for machining soft materials and bearing steel at low to medium feeds

- For cutting speed recommendations and user guide, see pages 540-547

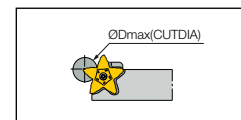
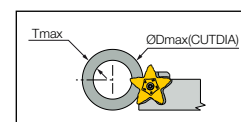
⁽¹⁾ Cutting depth maximum

Tools: PCAD RE/LE-JHP • PCADR/L • PCADR/L-JHP • PCHBR/L • PCHPR/L • PCHR/L-24 • PCHR/L-24-JHP • PCHR/L-24-JHP-MC

W ^{±0.02}	Tmax ⁽¹⁾	Tmax / Dmax	Dmax as a Function of Parting / Grooving Depth (T) for PENTA 24 Inserts								
			T≤3.0	T≤3.5	T≤4.0	T≤4.5	T≤5.0	T≤5.5	T≤6.0	T≤6.2	T≤6.4
W=0.50	1.0	1.0 / N.L.	-	-	-	-	-	-	-	-	-
W=0.50	2.5	2.5 / N.L.	-	-	-	-	-	-	-	-	-
W=0.80	1.6	1.6 / N.L.	-	-	-	-	-	-	-	-	-
W=1.00	3.5		N.L.	250	-	-	-	-	-	-	-
1.04≤W≤1.40	2.0	2.0 / N.L.	-	-	-	-	-	-	-	-	-
W=1.47	2.5	2.5 / N.L.	-	-	-	-	-	-	-	-	-
W=1.50	5.0		N.L.	470	210	70	30	-	-	-	-
1.57≤W≤1.96	3.0		N.L.	-	-	-	-	-	-	-	-
W=2.00	6.0 ⁽²⁾		N.L.	470	210	130	75	45	20	-	-
2.22≤W≤2.30	3.5		N.L.	250	-	-	-	-	-	-	-
2.39≤W≤2.50	5.0		N.L.	470	210	70	30	-	-	-	-
2.70≤W≤3.18	6.2		N.L.	470	210	135	100	70	40	20	-
3.19≤W≤3.74	6.4		N.L.	350	180	115	80	52	32	26	20
3.75≤W≤4.00	6.2		N.L.	350	180	115	80	62	32	18	-
4.01≤W≤4.23	6.2		N.L.	350	180	115	80	62	42	25	-

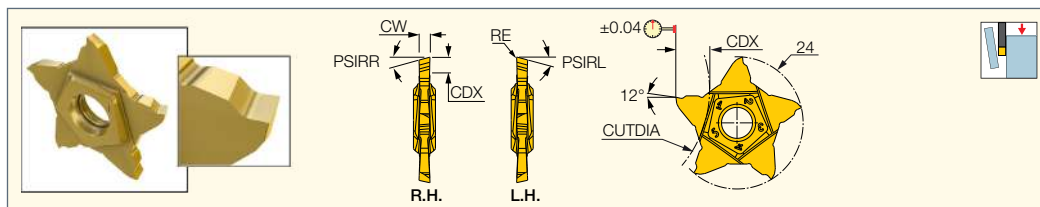
⁽¹⁾ Dmax for parting = 2 x Tmax

⁽²⁾ For full radius insert, Tmax = 3.0, Dmax = No limit



PENTACUT
PARTING & GROOVING LINE**PENTA 24R-P**

Inserts with 5 Cutting Edges
for Parting Soft Materials, Thin
Walls and Miniature Parts



Designation	Dimensions						IC1008	Recommended Machining Data
	CW	CDX ⁽¹⁾	RE	CWTOL ⁽²⁾	CUTDIA ⁽³⁾	PSIRR		f groove (mm/rev)
PENTA 24R100P06D	1.00	3.50	0.05	0.02	7.2	6.0	●	0.02-0.04
PENTA 24R100P15D	1.00	3.50	0.05	0.02	7.2	15.0	●	0.02-0.03
PENTA 24R150P06D	1.50	5.00	0.05	0.02	11.0	6.0	●	0.02-0.05
PENTA 24R150P15D	1.50	5.00	0.05	0.02	11.0	15.0	●	0.02-0.04
PENTA 24R200P06D	2.00	6.00	0.05	0.02	12.6	6.0	●	0.02-0.07
PENTA 24R200P15D	2.00	6.00	0.05	0.02	12.6	15.0	●	0.02-0.05

• For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Cutting depth maximum

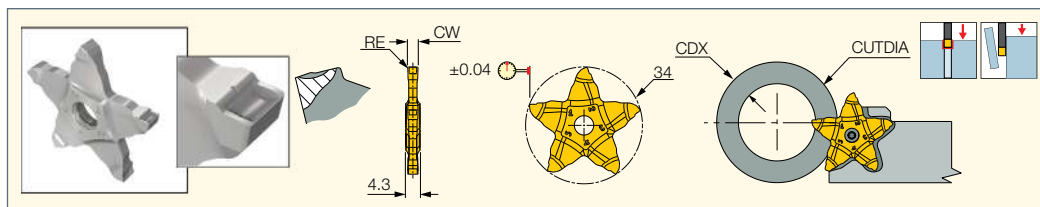
⁽²⁾ Cutting width tolerance (+/-)

⁽³⁾ For grooving and parting depths relative to part diameter, see page 535

Tools: PCAD RE/LE-JHP • PCADR/L • PCADR/L-JHP • PCHBR/L • PCHPR/L • PCHR/L-24 • PCHR/L-24-JHP • PCHR/L-24-JHP-MC

PENTACUT
PARTING & GROOVING LINE**PENTA 34N-C**

Inserts with 5 Cutting Edges
for Parting and Grooving
Hard Materials, Tough and
General Applications



Designation	Dimensions					IC908	Recommended Machining Data
	CW	RE	CWTOL ⁽¹⁾	RETOL ⁽²⁾	CDX ⁽³⁾		f groove (mm/rev)
PENTA 34N150C015	1.50	0.15	0.02	0.030	8.00	●	0.03-0.07
PENTA 34N200C020	2.00	0.20	0.02	0.030	8.00	●	0.04-0.14
PENTA 34N200C100	2.00	1.00	0.02	0.050	8.00	●	0.05-0.16
PENTA 34N222C015	2.22	0.15	0.02	0.030	8.00	●	0.05-0.14
PENTA 34N230C020	2.30	0.20	0.02	0.030	8.00	●	0.05-0.14
PENTA 34N239C015	2.39	0.15	0.02	0.030	8.00	●	0.05-0.15
PENTA 34N239C120	2.39	1.20	0.02	0.050	8.00	●	0.05-0.18
PENTA 34N247C020	2.47	0.20	0.02	0.030	8.00	●	0.05-0.18
PENTA 34N250C020	2.50	0.20	0.02	0.030	8.00	●	0.05-0.18
PENTA 34N270C010	2.70	0.10	0.02	0.030	10.00	●	0.05-0.18
PENTA 34N287C020	2.87	0.20	0.02	0.030	10.00	●	0.05-0.18
PENTA 34N300C000	3.00	0.00	0.02	0.000	10.00	●	0.04-0.10
PENTA 34N300C020	3.00	0.20	0.02	0.030	10.00	●	0.06-0.22
PENTA 34N300C040	3.00	0.40	0.02	0.030	10.00	●	0.06-0.25
PENTA 34N300C150	3.00	1.50	0.02	0.050	10.00	●	0.06-0.20
PENTA 34N315C015	3.15	0.15	0.02	0.030	10.00	●	0.06-0.20
PENTA 34N318C020	3.18	0.20	0.02	0.030	10.00	●	0.06-0.22
PENTA 34N330C010	3.30	0.10	0.02	0.020	10.00	●	0.06-0.20
PENTA 34N348C020	3.48	0.20	0.02	0.030	10.00	●	0.06-0.25
PENTA 34N350C025	3.50	0.25	0.02	0.030	10.00	●	0.06-0.30
PENTA 34N398C020	3.98	0.20	0.02	0.030	10.00	●	0.06-0.30
PENTA 34N400C030	4.00	0.30	0.02	0.030	10.00	●	0.06-0.30

• For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Cutting width tolerance (+/-)

⁽²⁾ Corner radius tolerance (+/-)

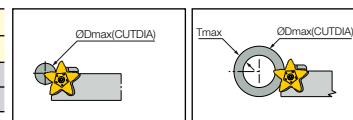
⁽³⁾ For grooving and parting depths relative to part diameter, see page 535

Tools: PCADR/L • PCADR/L 34N-RE • PCADR/L-JHP • PCHBR/L • PCHPR/L • PCHR/L-34 • PCHR/L-34-JHP

ØDmax as a Function of Parting / Grooving Depth (T) for PENTA 34 Inserts							
CW±0.02	T≤5.0	T≤6.0	T≤7.0	T≤8.0	T≤8.5	T≤9.0	T≤10.0
1.50 ≤ CW ≤ 2.69	N.L.	350	165	100	55	-	-
2.70 ≤ CW ≤ 4.00						55	20

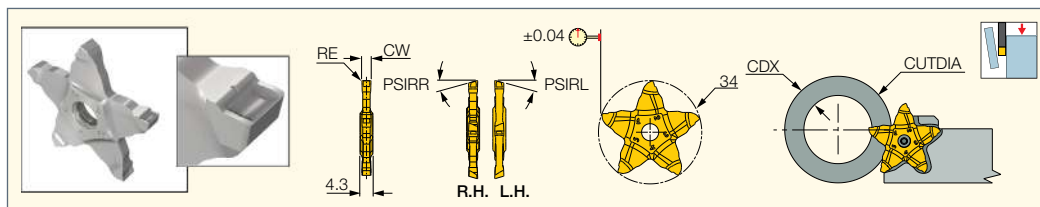
CUTDIA for parting = 2 x CDX

N.L. = No Limit



PENTA 34R/L-C

Inserts with 5 Cutting Edges for Parting Hard Materials, Tough and General Applications



Designation	Dimensions						IC908	Recommended Machining Data
	CW	RE	CUTDIA ⁽¹⁾	CDX ⁽²⁾	PSIRL	PSIRR		f groove (mm/rev)
PENTA 34L150C08D	1.50	0.07	18.0	8.00	8.0	-	●	0.03-0.08
PENTA 34R150C08D	1.50	0.07	18.0	8.00	-	8.0	●	0.03-0.08
PENTA 34L200C06D	2.00	0.10	18.0	8.00	6.0	-	●	0.04-0.12
PENTA 34R200C06D	2.00	0.10	18.0	8.00	-	6.0	●	0.04-0.12
PENTA 34L200C15D	2.00	0.10	18.0	8.00	15.0	-	●	0.04-0.10
PENTA 34R200C15D	2.00	0.10	18.0	8.00	-	15.0	●	0.04-0.10
PENTA 34L300C06D	3.00	0.20	20.0	10.00	6.0	-	●	0.04-0.14
PENTA 34R300C06D	3.00	0.20	20.0	10.00	-	6.0	●	0.06-0.14
PENTA 34L300C15D	3.00	0.20	20.0	10.00	15.0	-	●	0.04-0.10
PENTA 34R300C15D	3.00	0.20	20.0	10.00	-	15.0	●	0.06-0.12

• For cutting speed recommendations and user guide, see pages 540-547

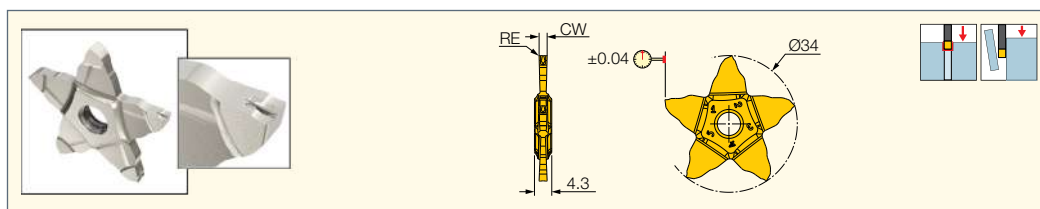
(1) For grooving and parting depths relative to part diameter, see page 536

(2) Cutting depth maximum

Tools: PCADR/L • PCADR/L 34N-RE • PCADR/L-JHP • PCHBR/L • PCHPR/L • PCHR/L-34 • PCHR/L-34-JHP

PENTA 34N-J

Inserts with 5 Cutting Edges for Parting and Grooving Soft Materials, Parting Tubes, Small and Thin-Walled Parts



Designation	Dimensions					IC908	Recommended Machining Data
	CW	RE	CWTOL ⁽¹⁾	RETOL ⁽²⁾	CDX ⁽³⁾		f groove (mm/rev)
PENTA 34N150J015	1.50	0.15	0.02	0.002	8.50	●	0.03-0.10
PENTA 34N200J020	2.00	0.20	0.02	0.002	8.50	●	0.04-0.12
PENTA 34N200J100	2.00	1.00	0.02	0.002	8.50	●	0.05-0.12
PENTA 34N239J015	2.39	0.15	0.02	0.002	8.50	●	0.04-0.16
PENTA 34N239J120	2.39	1.20	0.02	0.002	8.50	●	0.06-0.16
PENTA 34N250J020	2.50	0.20	0.02	0.002	8.50	●	0.04-0.16
PENTA 34N270J010	2.70	0.10	0.02	0.002	10.00	●	0.04-0.16
PENTA 34N300J000	3.00	0.00	0.02	0.000	10.00	●	0.04-0.10
PENTA 34N300J020	3.00	0.20	0.02	0.002	10.00	●	0.04-0.16
PENTA 34N300J040	3.00	0.40	0.02	0.002	10.00	●	0.04-0.16
PENTA 34N300J150	3.00	1.50	0.02	0.002	10.00	●	0.06-0.20
PENTA 34N318J020	3.18	0.20	0.02	0.002	10.00	●	0.20-0.16

• Recessing is possible only with 2.39 mm and wider inserts • For cutting speed recommendations and user guide, see pages 540-547

(1) Cutting width tolerance (+/-)

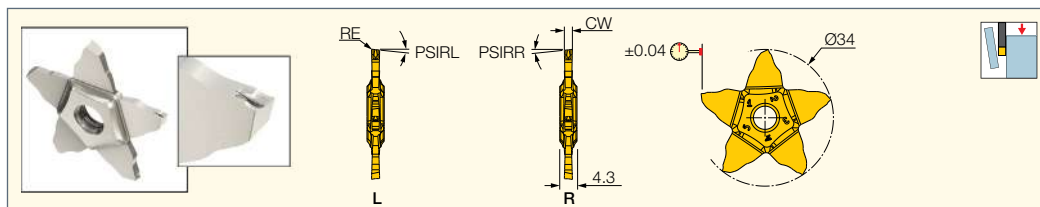
(2) Corner radius tolerance (+/-)

(3) For grooving and parting depths relative to part diameter, see page 536

Tools: PCADR/L • PCADR/L 34N-RE • PCADR/L-JHP • PCHBR/L • PCHPR/L • PCHR/L-34 • PCHR/L-34-JHP

PENTACUT
PARTING & GROOVING LINE**PENTA 34R/L-J**

Inserts with 5 Cutting Edges
for Parting Tubes, Small
and Thin-Walled Parts



Designation	Dimensions						IC908	Recommended Machining Data
	CW	RE	CWTOL ⁽¹⁾	CUTDIA ⁽²⁾	PSIRL	PSIRR		f groove (mm/rev)
PENTA 34L150J06D	1.50	0.07	0.02	18.0	6.0	-	●	0.03-0.09
PENTA 34L150J15D	1.50	0.07	0.02	18.0	15.0	-	●	0.03-0.08
PENTA 34R150J06D	1.50	0.07	0.02	18.0	-	6.0	●	0.03-0.09
PENTA 34R150J15D	1.50	0.07	0.02	18.0	-	15.0	●	0.03-0.08
PENTA 34L200J06D	2.00	0.10	0.02	18.0	6.0	-	●	0.04-0.10
PENTA 34L200J15D	2.00	0.10	0.02	18.0	15.0	-	●	0.04-0.09
PENTA 34R200J06D	2.00	0.10	0.02	18.0	-	6.0	●	0.04-0.10
PENTA 34R200J15D	2.00	0.10	0.02	18.0	-	15.0	●	0.04-0.09

• For cutting speed recommendations and user guide, see pages 540-547

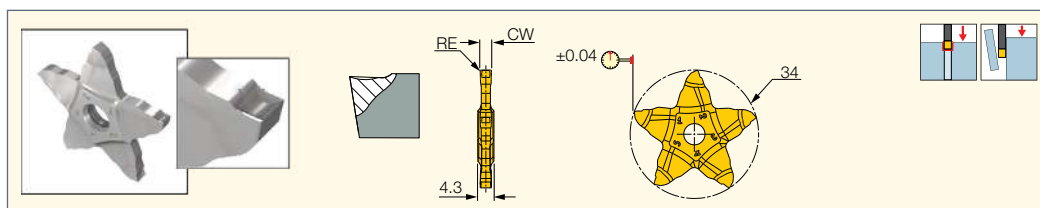
⁽¹⁾ Cutting width tolerance (+/-)

⁽²⁾ For grooving and parting depths relative to part diameter, see page 536

Tools: PCADR/L • PCADR/L 34N-RE • PCADR/L-JHP • PCHBR/L • PCHPR/L • PCHR/L-34 • PCHR/L-34-JHP

PENTACUT
PARTING & GROOVING LINE**PENTA 34N-PB**

Parting and Grooving Pentagonal
Inserts for Parting Bearing Steel
and Other Ductile Materials



Designation	Dimensions					IC908	Recommended Machining Data
	CW	RE	CWTOL ⁽¹⁾	RETOL ⁽²⁾	CDX ⁽³⁾		f groove (mm/rev)
PENTA 34N150PB015	1.50	0.15	0.02	0.030	8.50	●	0.03-0.06
PENTA 34N200PB020	2.00	0.20	0.02	0.030	8.50	●	0.03-0.08
PENTA 34N300PB020	3.00	0.20	0.02	0.030	9.50	●	0.03-0.10

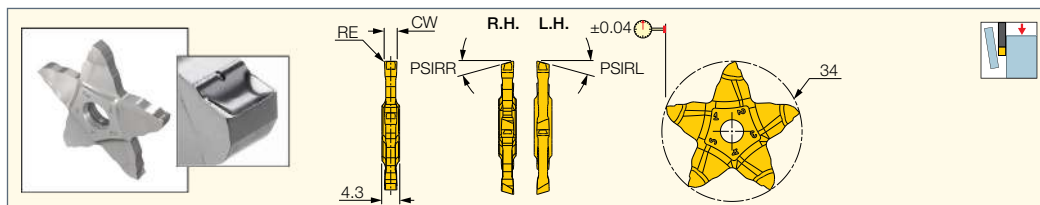
• For cutting speed recommendations and user guide, see pages 540-547

⁽¹⁾ Cutting width tolerance (+/-)

⁽²⁾ Corner radius tolerance (+/-)

⁽³⁾ For grooving and parting depths relative to part diameter, see page 536

Tools: PCADR/L • PCADR/L 34N-RE • PCADR/L-JHP • PCHBR/L • PCHPR/L • PCHR/L-34 • PCHR/L-34-JHP

PENTA 34R/L-PB
 Pentagonal Inserts for
 Parting Bearing Steel and
 other Ductile Materials


Designation	Dimensions					IC908	Recommended Machining Data
	CW	RE	CUTDIA	PSIRL	PSIRR		f groove (mm/rev)
PENTA 34R150PB-6D	1.50	0.07	18.0	-	6.0	●	0.03-0.05
PENTA 34L150PB-6D	1.50	0.07	18.0	6.0	-	●	0.03-0.05
PENTA 34R200PB-6D	2.00	0.10	18.0	-	6.0	●	0.03-0.06
PENTA 34L200PB-6D	2.00	0.10	18.0	6.0	-	●	0.03-0.06
PENTA 34R300PB-6D	3.00	0.20	20.0	-	6.0	●	0.03-0.08
PENTA 34L300PB-6D	3.00	0.20	20.0	6.0	-	●	0.03-0.08

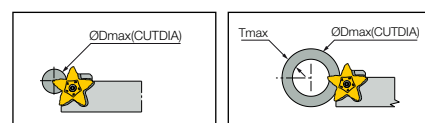
• For cutting speed recommendations and user guide, see pages 540-547

Tools: PCADR/L • PCADR/L 34N-RE • PCADR/L-JHP • PCHBR/L • PCHPR/L • PCHR/L-34 • PCHR/L-34-JHP

W±0.02	Dmax as a Function of Parting / Grooving Depth (T) for PENTA 34 Inserts						
	T≤5.0	T≤6.0	T≤7.0	T≤8.0	T≤8.5	T≤9.0	T≤10.0
1.50 ≤ W ≤ 2.69	N.L.	350	165	100	55	-	-
2.70 ≤ W ≤ 4.00						55	20

Dmax for parting = 2 x Tmax

N.L. = No Limit



Parting and Grooving

Selection of Inserts

For a proper match of insert and cutting material to application, the following variables must be taken into consideration:

- Width of cut (width of insert)
- Chipformer style
- Lead angle
- Corner radius
- Carbide grade

Width of Cut (W.O.C.) and Depth of Cut (D.O.C.)

In selecting **W.O.C.**, the main factor to consider is the required **D.O.C.** The ratio $D.O.C. \approx 8 \times W.O.C.$ is of practical use on alloy steel of average machinability. For example, applying a 3 mm **W.O.C.** insert **TAG N3C** to cut-off a 48 mm solid bar.

Additional factors which affect **D.O.C.** capacity, relative to the ratio, are:

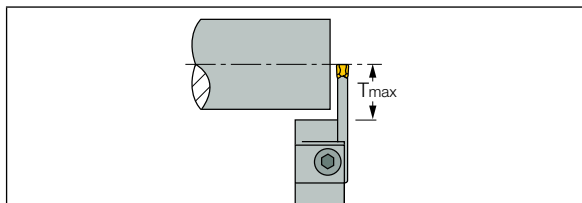
Holder or Blade Size

To minimize risk of vibration and deflection always choose:

- Blade or toolholder with smallest possible overhang.
- Toolholder with maximum shank dimension.
- Blade height (B) dimension which is larger than T_{max} .
- Blade or holder with maximum blade width (largest possible insert seat size).

Example:

- A **W.O.C.** 9.5 mm on blade TGFH 53K-9 (B=52.6 mm) extends the ratio of **D.O.C.** to **W.O.C.** by some 50% to 120 mm.



Insert Support

A self-clamped tool is recommended for deep radial machining. A screw-clamp holder is recommended for axial and small **D.O.C.** machining.

90° Mounting

It is very important that the insert is mounted at 90° to the center line of the workpiece in order to obtain perpendicular surfaces and reduce the risk of vibration.

Workpiece Machinability

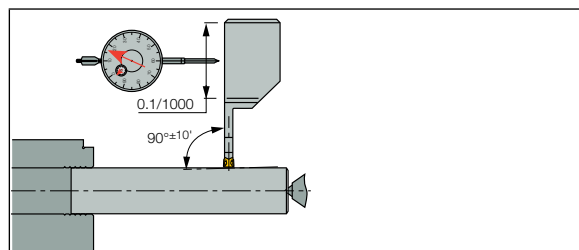
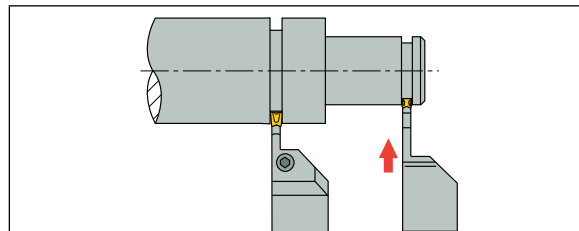
The workpiece material affects all of the above factors.

Machine Power and Setup Rigidity

Excessive **W.O.C.** on a light-duty machine will yield vibration and may even stop spindle rotation.

Expensive Workpiece Material

On costly metals the narrowest applicable **W.O.C.** should be used.

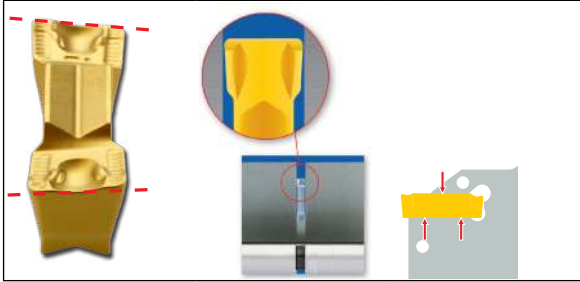


Insert Positioning

The Twisted Insert for Cut-Off and Grooving Applications

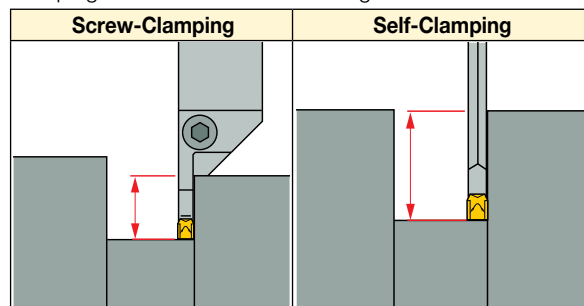
Machining depths longer than insert length is made possible with the double-ended, twisted insert body.

The rear edge is slanted in relation to the frontal edge so it does not come into contact with the machined groove surface when the tool penetrates deeply into the workpiece.



Clamping

Extended, prismatic surfaces guarantee reliable, foolproof clamping even in unstable machining conditions.



Small diameters (D.O.C.)
with screw-clamped Inserts

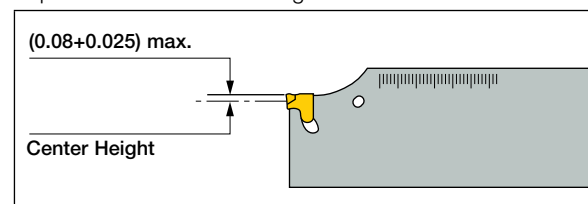
Large diameters (D.O.C.)
with self-clamped Inserts

Setup

- The optimal cutting edge height above the center of **TANG-GRIP** tools is up to 0.08 mm + 0.025 mm **W.O.C.**, an advantage when cutting solid bar to center
- Cut-off as close to chuck as possible
- On new applications, first machine in the low or middle range of recommended speeds and feeds

Machining

- Consistency of speed and feed improves performance
- Apply coolant abundantly
- Secure inserts into clean pockets
- Cutting forces on soft workpiece materials may be insufficient to push insert well into pocket. Tap insert into place using a plastic hammer
- On a conventional lathe, lock the carriage to prevent axial motion during cut-off

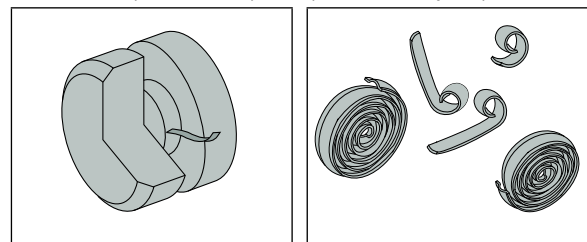


Usage

- Replace worn inserts promptly, the price of a new one is much less than the risk of damage from continuing with one that is worn out
- Replace blades that have worn or damaged pockets
- Never try to repair damaged pockets
- Chip curling is dependent on the chipformer type and the machining conditions

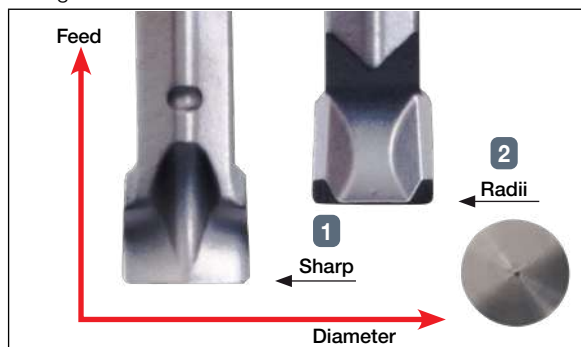
Chipformer Features

- Narrows the chip
- Eliminates friction with groove walls, prevents chip jam overload
- Permits higher feeds
- Produces unscratched surfaces, eliminating additional facing
- Curls the chips into compact spirals for easy disposal



Selection of Corner Radius

- 1 A smaller corner radius (r) will reduce the load on the workpiece and produce a smaller size burr
- 2 At the same time, a large corner radius allows for higher feeds and increased tool life

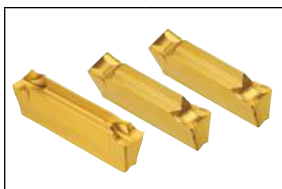


Standard Corner Radius

- Standard medium corner size
- For general applications and materials



Medium (standard) corner radius

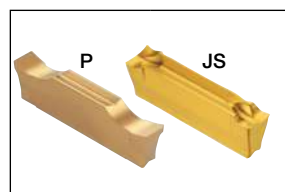


"S" Sharp Corners

- Cutting edge with positive rake and sharp corners
- When a minimum burr (pip) size is essential
- For small feeds
- For small diameters or thin walls
- For CNCs, multi-spindle and screw machines



Sharp corner



"B" Large Corner Radius

- Reinforced corners with stronger cutting edge
- For tough applications and interrupted cuts



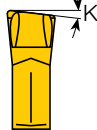
Large corner radius

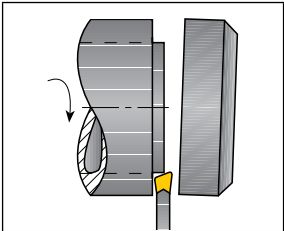


Lead Angle

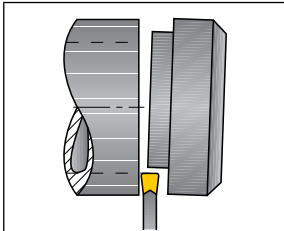
Lead angle (**K**) on cut-off inserts reduces size of burr remaining on workpiece. Increasing the lead angle reduces the burr, but also reduces possible feed rates and tool life. Therefore, neutral inserts are recommended for parts on which a burr is tolerated.

Insert designations such as **TAG R... DGR (R.H.)** and **TAG L... DGL (L.H.)** comply with standard terms for turning direction. When looking toward the chuck from the workpiece, **R.H.**=counterclockwise (**C.C.**) rotation of workpiece and **L.H.**=clockwise (**C**) rotation of workpiece. **C.C.** requires right-hand inserts; **C** requires left-hand inserts. A neutral insert with 0° lead angle increases **D.O.C.** capacity.

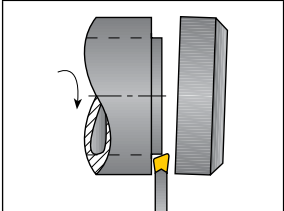
Left	Neutral	Right
TAG L/DGL	TAG N/DGN	TAG R/DGR
		



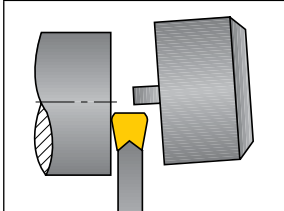
TAG R/GFR/DGR



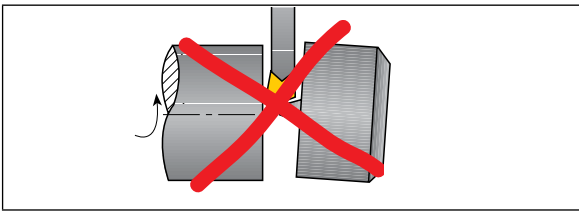
TAG R/GFN/DGN



TAG R/DGR



TAG N/DGN

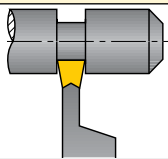
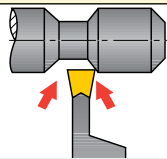
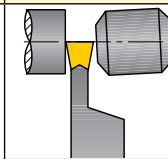
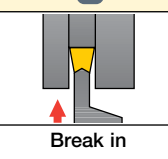
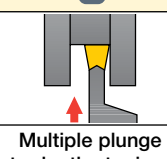
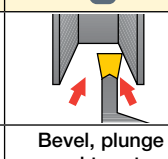
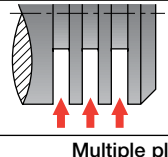
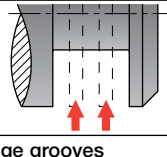


TAG R/DGR-WRONG

Neutral Insert vs. Lead Angle Type

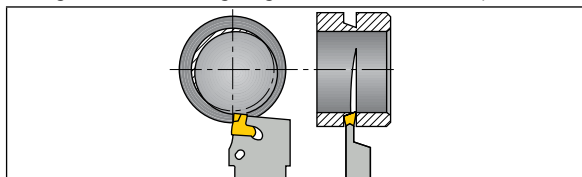
			
Lifetime		✓	
Chip Control		✓	
Burr Size			✓
Surface Finish		✓	
Part Straightness		✓	

General Rules for Specific Applications

Chamfer and Cut-Off		
1	2	3
		
Break in and/or groove	Chamfer	Cut-off
V-Belt Pulley Grooves		
1	2	3
		
Break in	Multiple plunge to depth at minor width of groove	Bevel, plunge and turn to minor diameter
Neck Recessing		
1	2	
		
Multiple plunge grooves		Necking On neck turning, DOC (a)=up to size of insert corner radius

Cut-Off on Eccentric Tubes

Inserts with 4° lead angle are usually recommended for tubes. However, the combination of eccentric bore and machine resiliency may increase feed-snap on breakthrough and damage the cutting edge. Changing to 6° lead angle inserts will moderate breakthrough. Alternatively, inserts with an extra negative rake-land that strengthens the cutting edge are available on request.

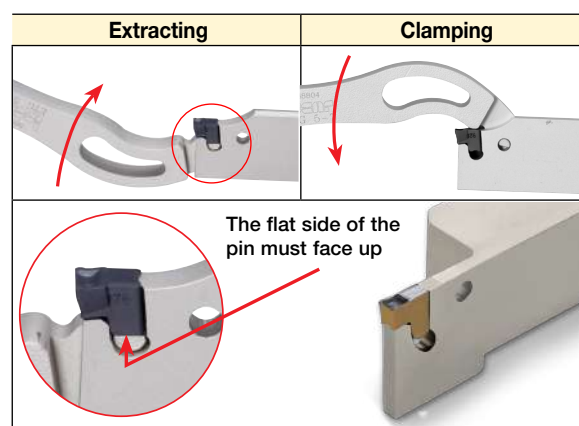


Clamping / Extraction Instructions

TANG-GRIP The tools are equipped with a user-friendly clamping and extraction device.



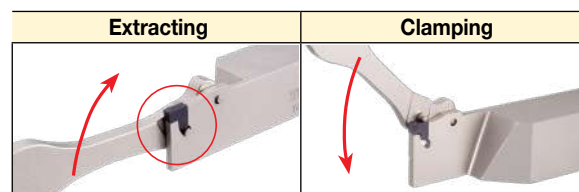
ETG 8-12 Extractor for 8 to 12.7 mm inserts



ETG 5-7 (for 5-7 mm tools)

ETG 2 (for 2 mm tools)

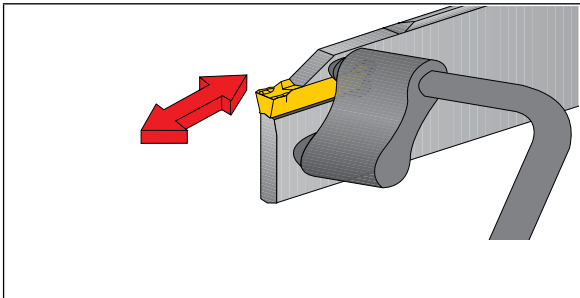
ETG 1.4 (for 1.4 mm tools)



ETG 3-4 (for 3 and 4 mm tools)

Clamping / Extraction Instructions

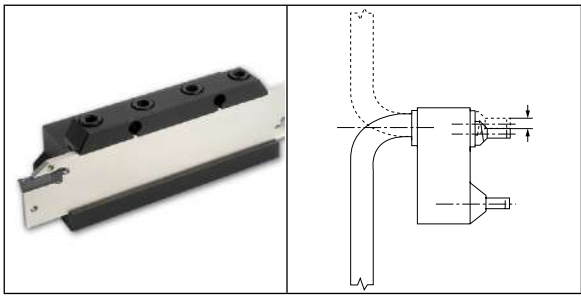
Extractor for DGN/R/L Double-Ended Inserts Do-Grip Insert Clamping/Extracting



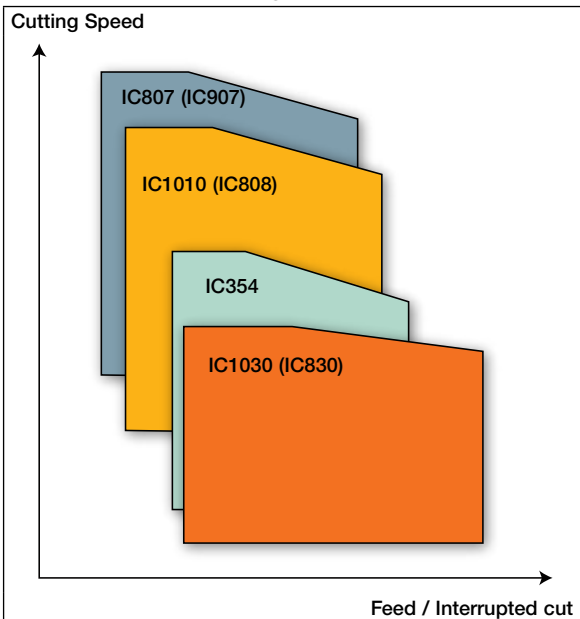
Extracting the insert

Eccentric Extractor for Insert Indexing

Simple to operate; controlled rotation requires low force; guarantees limited upper jaw movement and secures maximum load on blade.



Grade Application Range



Selection Guide for Parting Grades

		ISO P		ISO M	ISO K	ISO N	ISO S	ISO H
		1-11	12-13	14	15-20	21-28	31-37	38-41
		Steel	Stainless Steel Ferritic & Martensitic	Stainless Steel Austenitic & Duplex (Ferritic - Austenitic)	Cast Iron	Non-ferrous	High Temperature Alloys	Hard Steel & Cast Iron
Material groups	Harder	IC807 (IC907)	IC807 (IC907)	IC807 (IC907)		IC20	IC807 (IC907)	IC807 (IC907)
			IC808	IC808	IC807 (IC907)		IC20	
		IC808	IC1010	IC1010	IC20		IC808	IC808
		IC1010	IC5400	IC5400	IC808		IC1010	IC1010
PARTING	Tougher	IC830	IC830	IC830	IC1010		IC830	
		IC1030	IC1030	IC1030			IC1030	

■ First choice

Machining Data and Parting Speed Recommendations

ISO	Material	Condition	Tensile Strength [N/mm ²]	Hardness HB	Material Group No.
P	Non-alloy steel and cast steel, free cutting steel	< 0.25 %C Annealed	420	125	1
		>= 0.25 %C Annealed	650	190	2
		< 0.55 %C Quenched and tempered	850	250	3
		>= 0.55 %C Annealed	750	220	4
		Quenched and tempered	1000	300	5
	Low alloy steel and cast steel (less than 5% of alloying elements)	Annealed	600	200	6
		Quenched and tempered	930	275	7
			1000	300	8
			1200	350	9
	High alloyed steel, cast steel, and tool steel	Annealed	680	200	10
		Quenched and tempered	1100	325	11
M	Stainless steel and cast steel	Ferritic/martensitic	680	200	12
		Martensitic	820	240	13

M	Stainless steel and cast steel	Austenitic, duplex	600	180	14
---	--------------------------------	--------------------	-----	-----	----

K	Grey cast iron (GG)	Ferritic/pearlitic		180	15
		Pearlitic/martensitic		260	16
	Cast iron nodular (GGG)	Ferritic		160	17
		Pearlitic		250	18
	Malleable cast iron	Ferritic		130	19
		Pearlitic		230	20

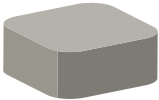
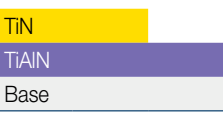
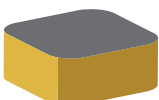
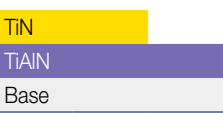
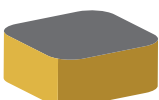
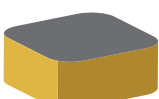
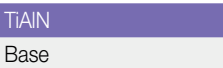
N	Aluminum-wrought alloys	Not hardenable		60	21
		Hardenable		100	22
	Aluminum-cast alloys	<=12% Si Not hardenable		75	23
		Hardenable		90	24
		>12% Si High temperature		130	25
		>1% Pb Free cutting		110	26
	Copper alloys	Brass		90	27
		Electrolitic copper		100	28
	Non-metallic	Duroplastics, fiber plastics			29
		Hard rubber			30

S	High temp. alloys	Fe based	Annealed		200	31
			Hardened		280	32
		Ni or Co based	Annealed		250	33
			Hardened		350	34
			Cast		320	35
	Titanium alloys	Pure	RM 400			36
		Alpha+beta alloys hardened	RM 1050			37

H	Hardened steel	Hardened		55 HRC	38
		Hardened		60 HRC	39
	Chilled cast iron	Cast		400	40
	Cast iron	Hardened		55 HRC	41

Material Group No.	IC907/807	IC30N	IC354	IC1010/ IC908/808/1008	IC5400	IC1030/ IC830/928/1028	IC328
1	160 - 240	130 - 190	115 - 170	135 - 200	110 - 160	100 - 150	95 - 140
2	150 - 205	120 - 160	105 - 145	125 - 170	100 - 135	95 - 125	85 - 120
3	115 - 170	90 - 135	80 - 120	95 - 140	75 - 110	70 - 105	65 - 100
4	125 - 190	100 - 150	90 - 135	105 - 160	85 - 130	80 - 120	75 - 110
5	100 - 160	80 - 130	70 - 115	85 - 135	70 - 110	65 - 100	60 - 95
6	125 - 190	100 - 150	90 - 135	105 - 160	85 - 130	80 - 120	75 - 110
7	100 - 170	80 - 135	70 - 120	85 - 140	70 - 110	65 - 105	60 - 100
8	100 - 160	80 - 130	70 - 115	85 - 135	70 - 110	65 - 100	60 - 95
9	90 - 150	70 - 120	65 - 105	75 - 125	60 - 100	55 - 95	50 - 85
10	150 - 205	120 - 160	105 - 145	125 - 170	100 - 135	95 - 125	85 - 120
11	90 - 150	70 - 120	65 - 105	75 - 125	60 - 100	55 - 95	50 - 85
	IC20N	IC907/807	IC808	IC908	IC5400	IC830/928/1028	IC328
12	170 - 300	115 - 210	110 - 200	105 - 190	85 - 150	80 - 140	75 - 135
13	150 - 290	105 - 200	100 - 190	95 - 180	75 - 145	70 - 135	65 - 125
	IC20N	IC907/807	IC808	IC908	IC5400	IC830/928/1028	IC328
14	140 - 260	95 - 175	90 - 170	85 - 160	70 - 130	65 - 120	60 - 110
	IC907/807	IC808	IC908	IC20			
15	170 - 305	145 - 270	140 - 255	70 - 125			
16	150 - 215	130 - 190	125 - 180	60 - 90			
17	160 - 265	140 - 230	135 - 220	65 - 110			
18	125 - 205	110 - 180	105 - 170	50 - 85			
19	190 - 320	170 - 280	160 - 265	80 - 130			
20	160 - 265	140 - 230	135 - 220	65 - 110			
	IC907/807	IC908/808	IC20				
21	360 - 1080	330 - 990	300 - 900				
22	270 - 900	250 - 825	225 - 750				
23	270 - 900	250 - 825	225 - 750				
24	180 - 540	165 - 495	150 - 450				
25	180 - 360	165 - 330	150 - 300				
26	180 - 360	165 - 330	150 - 300				
27	130 - 270	120 - 250	110 - 225				
28	90 - 180	80 - 165	75 - 150				
29	40 - 180	40 - 165	35 - 150				
	IC807	IC907	IC908	IC808	IC830/328/928/1028	IC20	
31	50 - 70	45 - 70	40 - 60	40 - 65	30 - 45	30 - 40	
32	35 - 55	35 - 50	30 - 45	30 - 45	20 - 35	20 - 30	
33	35 - 55	35 - 50	30 - 45	30 - 45	20 - 35	20 - 30	
34	30 - 50	30 - 45	25 - 40	25 - 40	20 - 30	15 - 30	
35	25 - 35	25 - 35	20 - 30	20 - 30	15 - 20	15 - 20	
36	115 - 190	110 - 185	95 - 160	100 - 170	70 - 120	65 - 110	
37	40 - 50	40 - 50	35 - 45	35 - 45	30 - 40	40 - 50	
	IC807	IC907	IC808	IC908			
38	35-45	30-40	30-40	25-35			
39	30-40	25-35	25-35	20-30			
40	45-65	40-60	40-60	30-50			
41	40-50	35-45	35-45	30-40			

ISCAR Parting Grades Chart

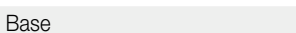
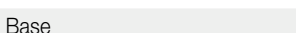
Grade	ISO	Grade Description	Coating Layers	Coating Color*
PVD COATED	P15-P30	A tough submicron grain size substrate with PVD coating. Suitable for steel, alloy steels and stainless steel at low to medium cutting speeds under stable conditions.		
	S15-S30			
	P30-P45	A tough substrate with PVD coating, suitable for a wide range of applications on steels and stainless steel at low to medium speeds and medium to high feeds. The grade is recommended for interrupted cuts and machining under unstable conditions.		
	M25-M40			
	P20-P40	A tough substrate with PVD coating, suitable for general use on a wide range of carbon steels, alloy steels and stainless steel at moderate speeds and feeds.		
	M20-M30			
	P10-P20	A hard submicron grain size substrate with PVD coating and a special SUMOTEC surface treatment. Suitable for machining steels, alloy steels, austenitic stainless steel, high temperature alloys and hard steels at moderate to relatively high cutting speeds under stable conditions. Features high wear resistance and plastic deformation durability.		
	M05-M15			
	K15-K30			
	S10-S20			
	H05-H15			
	P15-P30	A tough submicron grain size substrate with PVD coating and a special SUMOTEC surface treatment. Recommended for general use for a large variety of applications and materials such as steels, alloy steels, austenitic stainless steel and high temperature alloys at moderate cutting speeds and feeds. Features high wear resistance and chipping durability.		
	M20-M30			
	K20-K40			
	S15-S30			
	H20-H30			
	P30-P45	A tough substrate with PVD coating and a special SUMOTEC surface treatment. Suitable for machining steel and stainless steel at low to medium cutting speeds and moderate to high feeds. The grade features high toughness and recommended for interrupted cuts and machining under unstable conditions. May be used on high temperature alloys at low cutting speeds.		
	M25-M40			
	P10-P20	A hard submicron grain size substrate with PVD coating, suitable for a wide range of materials such as steels, alloy steels, hard steels, austenitic stainless steel and heat resistant alloys at moderate to relatively high cutting speeds under stable conditions. Features high wear resistance and plastic deformation durability.		
	M05-M15			
	K15-K30			
	S10-S20			
	H05-H15			
	P15-P30	A tough submicron grain size substrate with PVD coating, recommended general use in a large variety of operations and materials such as steels, alloy steels, austenitic stainless steel and high temperature alloys at moderate cutting speeds. Features high wear resistance and chipping durability.		
	M20-M30			
	K20-K40			
	S15-S30			
	H20-H30			
	P30-P45	A tough substrate with PVD coating, suitable for machining steel and stainless steel at low to medium cutting speeds and moderate to high feeds. The grade is recommended for interrupted cut and machining at unstable conditions.		
	M25-M40			

* For coated grades

ISCAR Parting Grades Chart

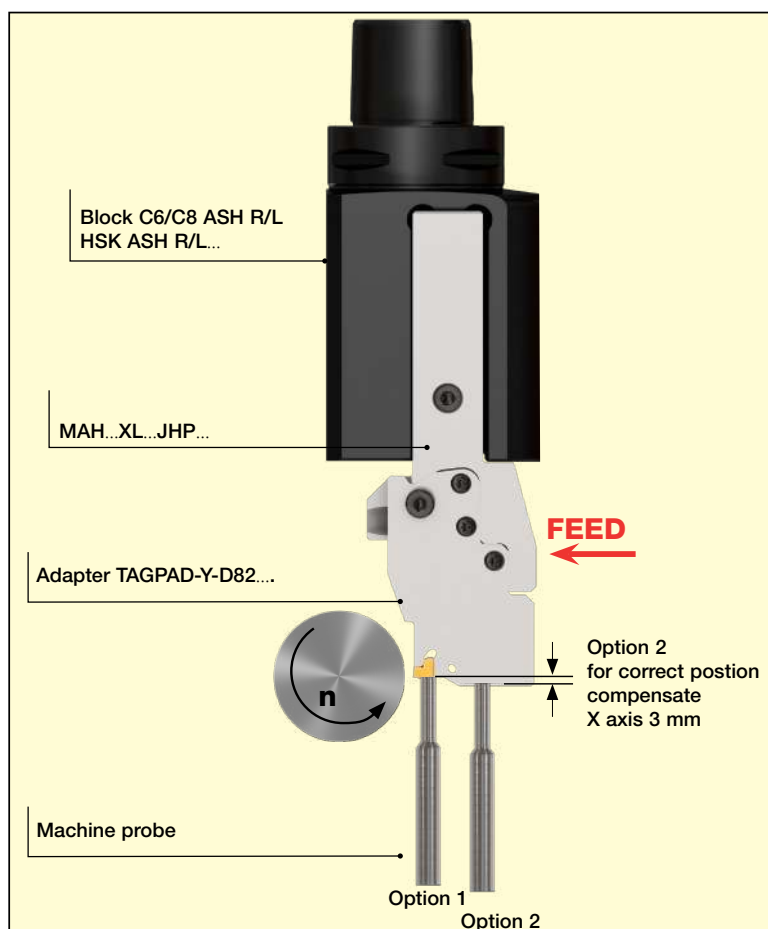
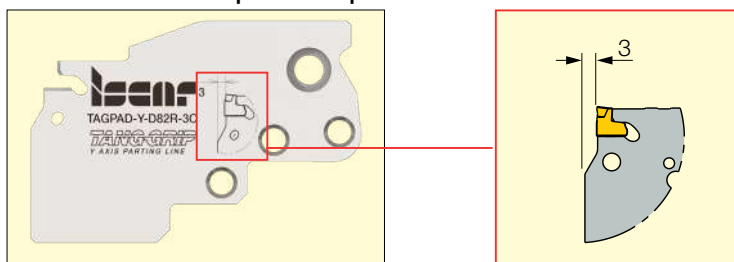
	Grade	ISO	Grade Description	Coating Layers	Coating Color*
PVD COATED	IC1008	P15-P30	A tough submicron grain size substrate with PVD coating. Recommended for general use on a wide range of applications and materials as steels, alloy steels, austenitic stainless steel and high temperature alloys at moderate cutting speeds.		
		M20-M30			
		K20-K40			
		S15-S30			
		H20-H30			
	IC1010	P15-P30	A tough submicron grain size substrate with PVD coating. Recommended for general use on a wide range of applications and materials such as steels, alloy steels, austenitic stainless steel and high temperature alloys at moderate cutting speeds and low to medium feeds. The grade features improved toughness and wear resistance which extends tool life.		
		M20-M30			
		K20-K40			
		S15-S30			
	IC1028	P30-P45	A tough substrate with PVD coating, suitable for machining steel and stainless steel at low to medium cutting speeds and moderate to high feeds. The grade is recommended for interrupted cuts and machining under unstable conditions.		
		M25-M40			
	IC1030	P30-P45	A tough substrate with PVD coating, suitable for machining steel and stainless steel at low to medium cutting speeds and moderate to high feeds. Recommended for interrupted cuts and machining under unstable conditions. The grade features improved toughness and wear resistance which extends tool life.		
		M25-M40			
CVD COATED	IC5400	P30-P45	A tough substrate with MTCVD coating and a special SUMOTEC post coating treatment. Suitable for machining steel and stainless steel at low to medium cutting speeds and moderate to high feeds under stable and unstable machining conditions.		
		M25-M45			

* For coated grades

	Grade	ISO	Grade Description	Uncoated Layers	Uncoated
CERMET	IC30N	P10-P30	A tough cermet grade, suitable for machining, steels and stainless steel at medium to high cutting speeds and low feeds. Features excellent surface finish, very good wear resistance and prevents built-up edge.		
		M10-M20			
UNCOATED	IC20		A hard-uncoated carbide grade for machining aluminum and other non-ferrous materials at medium to high cutting speeds. Can be used for cast iron at low cutting speeds. Suitable also for machining high temperature and Titanium alloys, at low cutting speeds.		
		K10-K20			
		N05-N25			
		S10-S20			
		H10-H20			

Y Axis TAGPAD setup on Multi-Task and Turning Center Machines

For setup in X direction, use the dimensions marked on the adapter. Setup in Y Axis is not needed.



* Option 1 is preferable due to better accuracy

Setting in X Axis

Set the cutting edge on the center line:

Option 1 - Gauge the cutting edge

Option 2 - Gauge the blade and compensate 3mm