

PARTING & GROOVING



PARTING & GROOVING



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Tool Selection Guide

Parting, Grooving and Turning holders

Series				WINCUT		CUTSPEED	
				COOLBURST SFTB SFTB-TB	COOLBURST TGTB TGTB-TB	SFGB	COOLBURST SFGB-TB
Pages				B34	B35	B38	B39
Application	External	Parting		●	●	●	●
		Grooving		●	●	●	●
		Turning					
	Facing	Grooving					
		Turning					
	Internal	Grooving					
		Turning					
	Profiling						
	Threading						
	Undercut						

Tool Selection Guide

Parting, Grooving and Turning holders

CUT SPEED		T-CLAMP			
SFER/L	COOLBURST SFER/L-TB	TGB	COOLBURST TGB-TB	TGBR/L TGBR/L-D..R/L TGBR/L-TI-D..R/L	TGBFR/L
					
B40	B41	B42	B43	B44-B46	B47
●	●	●	●	●	
●	●	●	●	●	
					●

● Recommended, ○ Suitable

Tool Selection Guide

Parting, Grooving and Turning holders

Series				T-CLAMP			QUAD RUSH	
				TGER/L	TCAER/L	COOLBURST TCAER/L-TB	TCAFR/L	TCAQR/L
Pages				B48	B52	B53	B54	B55-B56
Application	External	Parting		●	●	●		●
		Grooving		●	●	●		●
		Turning			●	●		○
	Facing	Grooving					●	
		Turning					●	
	Internal	Grooving						
		Turning						
	Profiling				●	●		○
	Threading							●
	Undercut							

Tool Selection Guide

Parting, Grooving and Turning holders

QUAD RUSH QUAD RUSH	WINSWISS WINSWISS			HUSHBORE HUSHBORE	T-CLAMP T-CLAMP
COOLBURST TCAQR/L-TB	QE1 TTER/L QE1 TTER/L-TB	QE1 TQHR/L QE1 TQHR/L-TB	QE1Y TQHR QE1Y TQHR-TB	COOLBURST QH TTIR/L-TB	TTER/L-SH
					
B55-B56	B64-B65	B66	B67	B70	B72
●	●	●	●		●
●	●	●	●		●
○	●	●	●		●
				●	
				●	
○	●	○	○		●
●		●	●		

● Recommended, ○ Suitable

Tool Selection Guide

Parting, Grooving and Turning holders

Series				T-CLAMP			
				COOLBURST TTER/L-SH-TB 	TTER/L-D 	TTER/L 	COOLBURST TTER/L-TB 
Pages				B73	B74-B75	B76-B77	B78
Application	External	Parting		•	•	•	•
		Grooving		•	•	•	•
		Turning		•	•	•	•
	Facing	Grooving					
		Turning					
	Internal	Grooving					
		Turning					
	Profiling			•	•	•	•
	Threading						
	Undercut						

Tool Selection Guide

Parting, Grooving and Turning holders

T-CLAMP					
TTSER/L	TGFR/L	TTFR/L	TTFR/L-RN	TGFPR/L	TTFPR/L
					
B79	B80	B81	B82-B83	B84	B85
○					
●	●			●	
●	○			○	
	●	●	●	●	●
	○	●	●	○	●
○					

● Recommended, ○ Suitable

Tool Selection Guide

Parting, Grooving and Turning holders

Series				T-CLAMP			
				TGIFR/L	TTFIR/L	TTIR/L-C TTIR/L	COOLBURN TTIR/L-TB
Pages				B86	B87	B88-B89	B90
Application	External	Parting					
		Grooving					
		Turning					
	Facing	Grooving		●	●		
		Turning		○	●		
	Internal	Grooving				●	●
		Turning				●	●
	Profiling						
	Threading						
	Undercut						

Tool Selection Guide

Parting, Grooving and Turning holders

T-CLAMP					
TTSIR/L	TGSIR/L	TGEUR/L	TGIUR/L	TTER/L-15A	TGIUR/L-15A
					
B91	B92	B93	B94	B95	B96
●	●				
●			○		
				●	●
		●	●		

● Recommended, ○ Suitable

Tool Selection Guide

Parting, Grooving and Turning holders

Series				FACE RUSH COOLBURST TXFR/L TXFR/L-TB TXFPR/L TXFPR/L-TB			
				TXFR/L 	TXFR/L-TB 	TXFPR/L 	TXFPR/L-TB 
Pages				B97	B98	B99	B100
Application	External	Parting					
		Grooving		○	○		
		Turning		○	○		
	Facing	Grooving		●	●	●	●
		Turning		●	●	●	●
	Internal	Grooving					
		Turning					
	Profiling						
	Threading			○	○		
	Undercut						

Tool Selection Guide

Parting, Grooving and Turning holders

TGROOVE	TOPCUT		QUAD RUSH	
<u>TTLEN</u>	<u>TTVER/L</u>	<u>TTVBR/L</u>	<u>TQHR/L-20</u>	<u>TQHR/L-20-TB</u>
				
B101	B102	B103	B104	B105
	●		●	●
●	●		●	●
	●	●	○	○
			○	○
		●	●	●

● Recommended, ○ Suitable

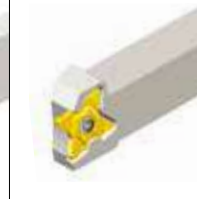
Tool Selection Guide

Parting, Grooving and Turning holders

Series							
							
				TQHR/L-20-Q	TQHR/L-20-TB-Q	TMS-TQHL	TMS-TQHL-TB
Pages				B104	B105	B106	B107
Application	External	Parting		●	●		
		Grooving		●	●	●	●
		Turning		○	○	○	○
	Facing	Grooving					
		Turning					
	Internal	Grooving					
		Turning					
	Profiling			○	○	○	○
	Threading			●	●	○	○
	Undercut						

Tool Selection Guide

Parting, Grooving and Turning holders

QUAD RUSH				
TMY TQHR	COOLBURST TMY TQHR-TB	TQBR/L-27	TQHR/L-27	COOLBURST TQHR/L-27-TB
				
B108	B109	B110	B111	B112
●	●	●	●	●
●	●	●	●	●
○	○		○	○
○	○		○	○
●	●		●	●

● Recommended, ○ Suitable

Tool Selection Guide

Parting, Grooving and Turning holders

Series							
							
Pages				B113	B114	B115	B116
Application	External	Parting		●	●	●	●
		Grooving		●	●	●	●
		Turning		○	○	○	○
	Facing	Grooving					
		Turning					
	Internal	Grooving					
		Turning					
	Profiling			○	○	○	○
	Threading			●			
	Undercut						

Tool Selection Guide

Parting, Grooving and Turning holders

 TQHR/L...EW-TB	 TQHIR/L	 TMS-TQHIL	 TMS-TQHIL-TB	 TMIHR/L TMIHR/L-C	 TMIHN TMIHN-C
					
B117	B118	B119	B119	B120	B121
●		●	●		
		○	○		
	●			●	●
	○			○	○

● Recommended, ○ Suitable

Tool Selection Guide

Internal application by diameter

Internal diameter (mm)	TOP MICRO	WIN GROOVE	MINI RUSH	TOP CAP	T-CLAMP	QUAD RUSH	T-CLAMP
	MIN	TMIHR/L	TMIHN	TCAP	TTSIR/L	TQHIR/L	TTIR/L
0							
0.6							
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
12.5							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							

Tool Selection Guide

Parting, Grooving and Turning Inserts

Series			CUT SPEED		T-CLAMP				
			SFC	SFJ	TDC	TSC	TDJ		
									
Material			P M K N S	P M N S	P M K N S	P M K N S	P M K N S	P M N S	
Pages			B128	B128	B129	B130	B131		
Application	External	Parting		●	●	●	●	●	
		Grooving		●	●	●	●	●	
		Turning							
	Facing	Grooving				○	○	○	
		Turning							
	Internal	Grooving				○	○	○	
		Turning							
	Profiling								
	Threading								
	Undercut								

● Recommended, ○ Suitable

Tool Selection Guide

Parting, Grooving and Turning Inserts

Series				T-CLAMP					VT-CLAMP
				TSJ	TDUF	TDV	TDCT	TDMV	
									
Material				P M N S P		P M N S	P M K N S	P M K N S	
Pages				B132	B133	B133	B134	B134	
Application	External	Parting		●	●	●	●	○	
		Grooving		●	●	●	●	○	
		Turning					●	●	
	Facing	Grooving		○	○	○	●		
		Turning					●		
	Internal	Grooving		○	○	○	●		
		Turning					●	●	
	Profiling							●	
	Threading								
	Undercut							●	

Tool Selection Guide

Parting, Grooving and Turning Inserts

T-CLAMP							
TDXU	TDXT	TDXY	TDT	TDT (Round Type)	TDT - RU (Round Type)	TDT - RS (Round Type)	TST - RS (Round Type)
							
P M K N S	P M K N S	P M K S	P M K N S	P M K N S	P M K S	P M K N S	P M K N S
B135	B135	B136	B137-B138	B139	B139	B140	B140
○	○	○	○				
●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●
●	●	●	○				
●	●	●	○				
●	●	●	○				
●	●	●	○				
				●	●	●	●
				●	●	●	●

● Recommended, ○ Suitable

Tool Selection Guide

Parting, Grooving and Turning Inserts

Series								
			<u>TDFT</u>	<u>TDIT</u>	<u>TDIM</u>	<u>TDIP</u>	<u>TSG</u> (CBN)	
								
Material			P M K N S	P M K N S	P M K N	P M K N S	H	
Pages			B141	B141-B142	B142	B143	B144	
Application	External	Parting						
		Grooving				●	●	●
		Turning				○	○	●
	Facing	Grooving		●		○	○	
		Turning		●				
	Internal	Grooving			●	●	●	
		Turning			●	●	●	
	Profiling						○	●
	Threading							
	Undercut				○			

Tool Selection Guide

Parting, Grooving and Turning Inserts

T-CLAMP			FACE RUSH		T-GROOVE	QUAD RUSH	
TSG-HF (CBN)	TDA	TSA (PCD)	TDFX	TDGX	TGUX	TQJ 20	TQS 20
							
	H N	N	P M K N S	P M N S	P M K N	P M N S	P M K N S
B144	B145	B145	B146	B146	B147	B149	B150
						●	●
○	○		○		●	●	●
●	●		○			●	●
			●				
			●				
	●	●					○
				●			
	○						

● Recommended, ○ Suitable

Tool Selection Guide

Parting, Grooving and Turning Inserts

Series			QUAD RUSH				
			TQS 20-MT	TQJ 27	TQC 27	TQS 27	TQS 27-MT TQS 27-WT
Material			P M N S	P M N S	P M K N S	P M K N S	P M N S
Pages			B150	B151-B153	B154-B155	B156	B157
Application	External	Parting		●	●	●	
		Grooving		●	●	●	
		Turning		●	●	●	
	Facing	Grooving					
		Turning					
	Internal	Grooving					
		Turning					
	Profiling			○	○	○	
	Threading			●			●
	Undercut						

Tool Selection Guide

Parting, Grooving and Turning Inserts

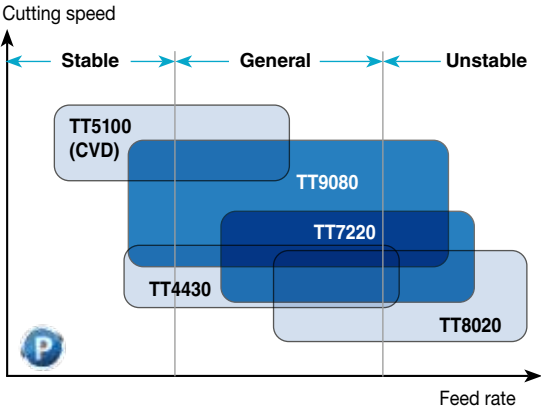
	QUAD RUSH		QUAD RUSH	WIN G ROOVE	MINI RUSH	TOP CUT	TOP MICRO
TQS 27-ISO TQS 27-UN TQS 27-W	TQBS 27	TQC 34	TQIS 14	TMIR/L	TMIS 8	TV..	MIN.
							
P M N S	P M K N	P M K N S	P M K N S	P M K N S	P M K N S	P M N S	P M N S
B158-B159	B159	B160-B161	B162	B163	B163	B164-B167	B168-B180
		●				●	
	●	●	○			●	
		●				●	
			●	●	●		●
			○	○	○		●
		○					●
●						●	●

● Recommended, ○ Suitable

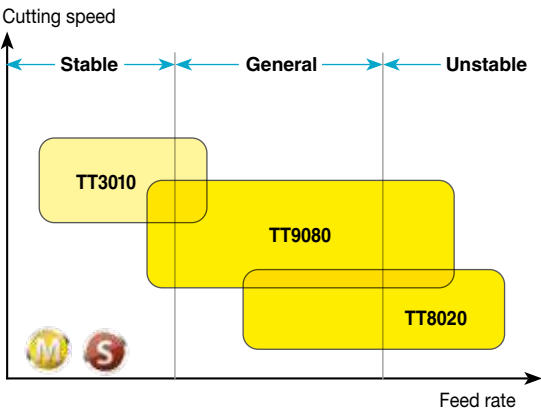
Grades

Selection guide for parting and grooving grades

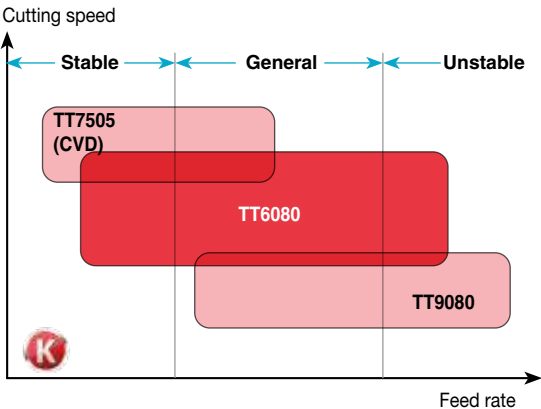
For steel (PVD & CVD coated)



For stainless steel & super alloy (PVD coated)



For cast iron (PVD & CVD coated)



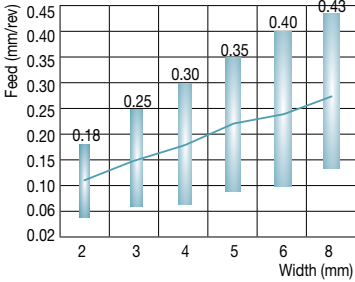
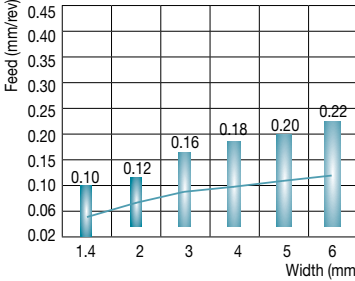
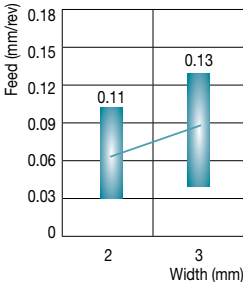
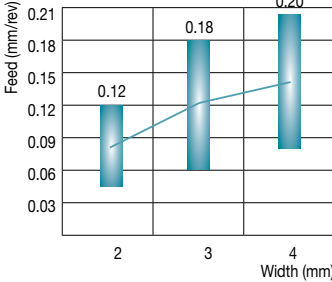
Grades

Parting and grooving grades

Grades	ISO	Characteristics & applications
TT7505 CVD coated	K05 — K15	• High speed grooving and turning of gray and ductile cast iron
TT6080 PVD coated	K05 — K25 H05 — H25	• General machining of gray and ductile cast iron for grooving and turning • Finish and medium machining of hardened steel
TT3010 PVD coated	S05 — S20	• High speed grooving and turning of heat-resistant super alloy
TT5100 CVD coated	P20 — P35 M20 — M35	• Medium grooving and turning of mild steel, low carbon steel and low carbon alloy steel • Low to medium speed machining of stainless steel
TT9080 PVD coated	P20 — P40 M20 — M40 S20 — S40	• General machining of steel, stainless steel and heat-resistant super alloy for parting, grooving and turning • Continuous cut and medium cutting speed
TT4430 PVD coated	P20 — P40 M20 — M40 S20 — S40	• General machining of steel, stainless steel and heat-resistant super alloy for small parts • Grooving, turning and parting
TT7220 PVD coated	P25 — P45 M25 — M45	• Rough machining of steel and stainless steel for parting, grooving and turning
TT8020 PVD coated	P30 — P50 M30 — M50 S30 — S50	• Low speed or rough and interrupted machining of steel, stainless steel and heat-resistant super alloy for parting, grooving and turning
CT3000 Cermet	P10 — P20 M10 — M20 K10 — K20	• Good surface finish turning of steel, stainless steel and cast iron
K10 Carbide	K05 — K15 N05 — N15 S05 — S15	• General machining of cast iron, aluminum alloys, non-ferrous materials and titanium alloys
TB2015 CBN	H10 — H20	• Continuous and light interrupted machining of hardened steel
TD1020 PCD	N10 — N25	• General machining of aluminum alloys

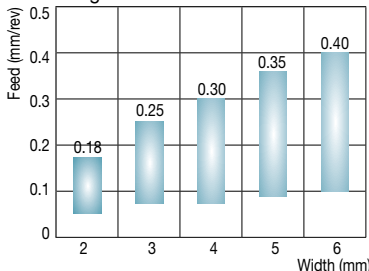
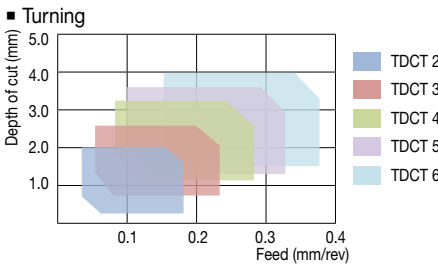
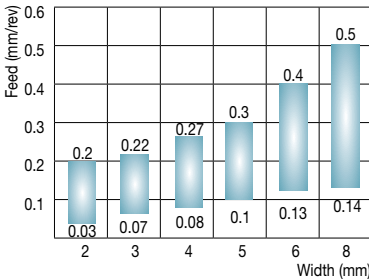
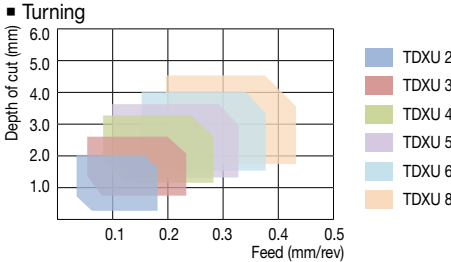
Chip Breakers

Parting and grooving

Chip breakers	Applications and features
C-Type 	 • 1st choice for general use in parting and deep grooving • Stable cutting edge & interrupted cut • Medium-to-high feed • For carbon steel, alloy steel and cast iron • For hard materials
J-Type 	 • 1st choice for soft materials in parting and deep grooving • Sharp cutting edge & low cutting force • Low-to-medium feed • Tubes, small diameter and thin-wall parts • For stainless steel & low carbon steel • For heat resistant super alloy
UF-Type 	 • Narrow chip breaker • Good chip control in low feed of ductile materials and low carbon steel • For Cr-Ni alloy steel and bearing steel
V-Type 	 • Sharp cutting edge and wide groove with minimized burrs • For tubes of small size workpieces • For stainless steel and mild steel

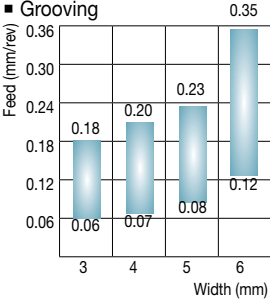
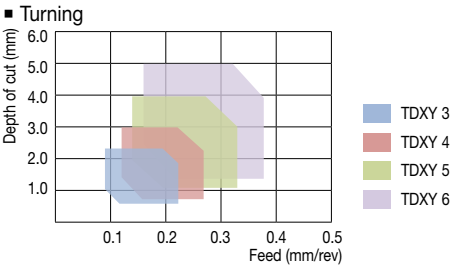
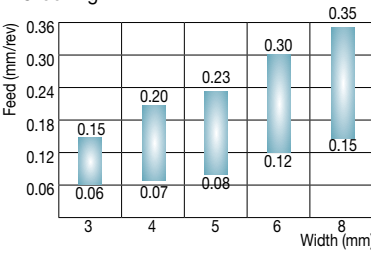
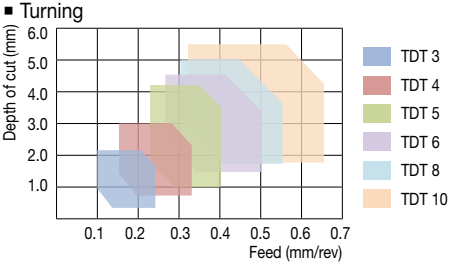
Chip Breakers

Groove-Turn

Chip breakers	Applications and features																																																								
CT-Type 	■ Grooving <table><tr><th>Width (mm)</th><th>Feed (mm/rev)</th></tr><tr><td>2</td><td>0.18</td></tr><tr><td>3</td><td>0.25</td></tr><tr><td>4</td><td>0.30</td></tr><tr><td>5</td><td>0.35</td></tr><tr><td>6</td><td>0.40</td></tr></table> ■ Turning <table><tr><th>Feed (mm/rev)</th><th>TDCT 2</th><th>TDCT 3</th><th>TDCT 4</th><th>TDCT 5</th><th>TDCT 6</th></tr><tr><td>0.1</td><td>0.8 - 1.8</td><td>1.0 - 2.5</td><td>1.2 - 3.2</td><td>1.5 - 3.5</td><td>1.8 - 4.0</td></tr><tr><td>0.2</td><td>1.0 - 2.0</td><td>1.2 - 2.2</td><td>1.5 - 3.0</td><td>1.8 - 3.2</td><td>2.2 - 3.8</td></tr><tr><td>0.3</td><td>1.2 - 2.2</td><td>1.5 - 2.5</td><td>1.8 - 3.0</td><td>2.2 - 3.5</td><td>2.5 - 4.0</td></tr><tr><td>0.4</td><td>1.5 - 2.5</td><td>1.8 - 2.8</td><td>2.2 - 3.2</td><td>2.5 - 3.8</td><td>2.8 - 4.0</td></tr></table> • Stable cutting edge in grooving and parting • Covers C-type chip breaker applications including a built-in chip breaker for turning applications • Medium-to-high feed range • Steel, cast iron, stainless steel and heat resistant alloys	Width (mm)	Feed (mm/rev)	2	0.18	3	0.25	4	0.30	5	0.35	6	0.40	Feed (mm/rev)	TDCT 2	TDCT 3	TDCT 4	TDCT 5	TDCT 6	0.1	0.8 - 1.8	1.0 - 2.5	1.2 - 3.2	1.5 - 3.5	1.8 - 4.0	0.2	1.0 - 2.0	1.2 - 2.2	1.5 - 3.0	1.8 - 3.2	2.2 - 3.8	0.3	1.2 - 2.2	1.5 - 2.5	1.8 - 3.0	2.2 - 3.5	2.5 - 4.0	0.4	1.5 - 2.5	1.8 - 2.8	2.2 - 3.2	2.5 - 3.8	2.8 - 4.0														
Width (mm)	Feed (mm/rev)																																																								
2	0.18																																																								
3	0.25																																																								
4	0.30																																																								
5	0.35																																																								
6	0.40																																																								
Feed (mm/rev)	TDCT 2	TDCT 3	TDCT 4	TDCT 5	TDCT 6																																																				
0.1	0.8 - 1.8	1.0 - 2.5	1.2 - 3.2	1.5 - 3.5	1.8 - 4.0																																																				
0.2	1.0 - 2.0	1.2 - 2.2	1.5 - 3.0	1.8 - 3.2	2.2 - 3.8																																																				
0.3	1.2 - 2.2	1.5 - 2.5	1.8 - 3.0	2.2 - 3.5	2.5 - 4.0																																																				
0.4	1.5 - 2.5	1.8 - 2.8	2.2 - 3.2	2.5 - 3.8	2.8 - 4.0																																																				
XU-Type 	■ Grooving <table><tr><th>Width (mm)</th><th>Feed (mm/rev)</th></tr><tr><td>2</td><td>0.2</td></tr><tr><td>3</td><td>0.22</td></tr><tr><td>4</td><td>0.27</td></tr><tr><td>5</td><td>0.3</td></tr><tr><td>6</td><td>0.4</td></tr><tr><td>8</td><td>0.5</td></tr></table> ■ Turning <table><tr><th>Feed (mm/rev)</th><th>TDXU 2</th><th>TDXU 3</th><th>TDXU 4</th><th>TDXU 5</th><th>TDXU 6</th><th>TDXU 8</th></tr><tr><td>0.1</td><td>0.8 - 1.8</td><td>1.0 - 2.5</td><td>1.2 - 3.2</td><td>1.5 - 3.5</td><td>1.8 - 4.0</td><td>2.2 - 4.5</td></tr><tr><td>0.2</td><td>1.0 - 2.0</td><td>1.2 - 2.2</td><td>1.5 - 3.0</td><td>1.8 - 3.2</td><td>2.2 - 3.8</td><td>2.5 - 4.5</td></tr><tr><td>0.3</td><td>1.2 - 2.2</td><td>1.5 - 2.5</td><td>1.8 - 3.0</td><td>2.2 - 3.5</td><td>2.5 - 3.8</td><td>2.8 - 4.5</td></tr><tr><td>0.4</td><td>1.5 - 2.5</td><td>1.8 - 2.8</td><td>2.2 - 3.2</td><td>2.5 - 3.8</td><td>2.8 - 3.8</td><td>3.2 - 4.5</td></tr><tr><td>0.5</td><td>1.8 - 2.8</td><td>2.2 - 3.2</td><td>2.5 - 3.2</td><td>2.8 - 3.8</td><td>3.2 - 3.8</td><td>3.5 - 4.5</td></tr></table> • 1st choice for general use in groove-turn • Multi functional chip breaker for external, internal and face machining • Low cutting force and good chip control • Medium-to-high feed grooving, low-to-medium feed turning • Steel, stainless steel and heat resistant alloy	Width (mm)	Feed (mm/rev)	2	0.2	3	0.22	4	0.27	5	0.3	6	0.4	8	0.5	Feed (mm/rev)	TDXU 2	TDXU 3	TDXU 4	TDXU 5	TDXU 6	TDXU 8	0.1	0.8 - 1.8	1.0 - 2.5	1.2 - 3.2	1.5 - 3.5	1.8 - 4.0	2.2 - 4.5	0.2	1.0 - 2.0	1.2 - 2.2	1.5 - 3.0	1.8 - 3.2	2.2 - 3.8	2.5 - 4.5	0.3	1.2 - 2.2	1.5 - 2.5	1.8 - 3.0	2.2 - 3.5	2.5 - 3.8	2.8 - 4.5	0.4	1.5 - 2.5	1.8 - 2.8	2.2 - 3.2	2.5 - 3.8	2.8 - 3.8	3.2 - 4.5	0.5	1.8 - 2.8	2.2 - 3.2	2.5 - 3.2	2.8 - 3.8	3.2 - 3.8	3.5 - 4.5
Width (mm)	Feed (mm/rev)																																																								
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Feed (mm/rev)	TDXU 2	TDXU 3	TDXU 4	TDXU 5	TDXU 6	TDXU 8																																																			
0.1	0.8 - 1.8	1.0 - 2.5	1.2 - 3.2	1.5 - 3.5	1.8 - 4.0	2.2 - 4.5																																																			
0.2	1.0 - 2.0	1.2 - 2.2	1.5 - 3.0	1.8 - 3.2	2.2 - 3.8	2.5 - 4.5																																																			
0.3	1.2 - 2.2	1.5 - 2.5	1.8 - 3.0	2.2 - 3.5	2.5 - 3.8	2.8 - 4.5																																																			
0.4	1.5 - 2.5	1.8 - 2.8	2.2 - 3.2	2.5 - 3.8	2.8 - 3.8	3.2 - 4.5																																																			
0.5	1.8 - 2.8	2.2 - 3.2	2.5 - 3.2	2.8 - 3.8	3.2 - 3.8	3.5 - 4.5																																																			

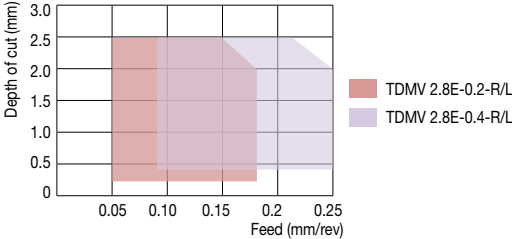
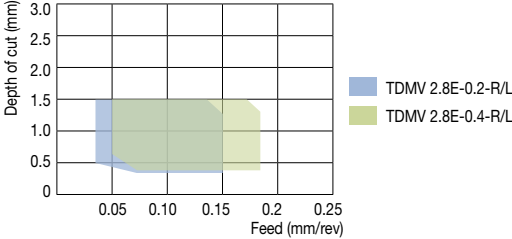
Chip Breakers

Groove-Turn

Chip breakers	Applications and features
XY-Type  Grooving  Turning  - For external and internal grooving as well as turning applications - Good chip control when external face grooving and turning - Flat bottom surface machining - Low-to-medium feed grooving, medium-to-high feed turning - Ideal for steel, stainless steel, cast iron and super alloys machining	
T-Type  Grooving  Turning  1st choice for side turning of cast iron - Turning and grooving with various geometry - Steel and cast iron - High feed rate	

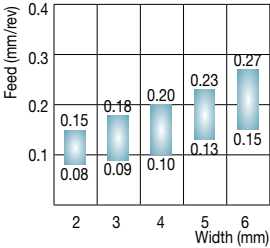
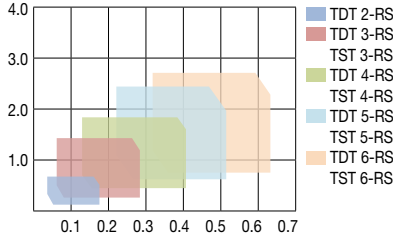
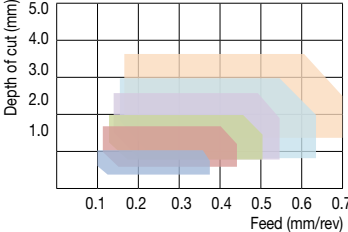
Chip Breakers

Groove-Turn

Chip breakers	Applications and features
MV-Type 	■ Backward turning  ■ Forward turning  • Versatile chip breaker: forward/backward turning, profiling, end facing and parting • Optimized chip breaker design for bi-directional turning enables superior chip control • Insert's 2.8 mm edge width allows for a variety of tasks in tight spaces • Roughing and finishing capable with a cutting depth of up to 2.5 mm • Available in 4 insert types: R/L-handed, Corner R0.2, R0.4 • Multi-application machining reduces tool cost and equipment downtime while maximizing productivity gains • Compatible with standard holders, maximizing performance when using internal high-pressure feed-type holders

Chip Breakers

Groove-Turn

Chip breakers	Applications and features																																																															
RS-Type 	■ Grooving <table><thead><tr><th>Width (mm)</th><th>Feed (mm/rev)</th><th>Model</th></tr></thead><tbody><tr><td>2</td><td>0.08</td><td>TDT 2-RS</td></tr><tr><td>2</td><td>0.15</td><td>TST 2-RS</td></tr><tr><td>3</td><td>0.09</td><td>TDT 3-RS</td></tr><tr><td>3</td><td>0.18</td><td>TST 3-RS</td></tr><tr><td>4</td><td>0.10</td><td>TDT 4-RS</td></tr><tr><td>4</td><td>0.20</td><td>TST 4-RS</td></tr><tr><td>5</td><td>0.13</td><td>TDT 5-RS</td></tr><tr><td>5</td><td>0.23</td><td>TST 5-RS</td></tr><tr><td>6</td><td>0.15</td><td>TDT 6-RS</td></tr><tr><td>6</td><td>0.27</td><td>TST 6-RS</td></tr></tbody></table> ■ Turning <table><thead><tr><th>Depth of cut (mm)</th><th>Feed (mm/rev)</th><th>Model</th></tr></thead><tbody><tr><td>0.5</td><td>0.1</td><td>TDT 2-RS</td></tr><tr><td>1.5</td><td>0.2</td><td>TDT 3-RS</td></tr><tr><td>1.5</td><td>0.3</td><td>TST 3-RS</td></tr><tr><td>2.5</td><td>0.4</td><td>TDT 4-RS</td></tr><tr><td>2.5</td><td>0.5</td><td>TST 4-RS</td></tr><tr><td>3.5</td><td>0.6</td><td>TDT 5-RS</td></tr><tr><td>3.5</td><td>0.7</td><td>TST 5-RS</td></tr><tr><td>4.5</td><td>0.6</td><td>TDT 6-RS</td></tr><tr><td>4.5</td><td>0.7</td><td>TST 6-RS</td></tr></tbody></table> • 1st choice for medium to finishing machining of heat-resistant super alloys • For external and internal profiling, turning and grooving applications • Low cutting force and good surface finish due to the sharp edge • Precision machining and excellent repeatability	Width (mm)	Feed (mm/rev)	Model	2	0.08	TDT 2-RS	2	0.15	TST 2-RS	3	0.09	TDT 3-RS	3	0.18	TST 3-RS	4	0.10	TDT 4-RS	4	0.20	TST 4-RS	5	0.13	TDT 5-RS	5	0.23	TST 5-RS	6	0.15	TDT 6-RS	6	0.27	TST 6-RS	Depth of cut (mm)	Feed (mm/rev)	Model	0.5	0.1	TDT 2-RS	1.5	0.2	TDT 3-RS	1.5	0.3	TST 3-RS	2.5	0.4	TDT 4-RS	2.5	0.5	TST 4-RS	3.5	0.6	TDT 5-RS	3.5	0.7	TST 5-RS	4.5	0.6	TDT 6-RS	4.5	0.7	TST 6-RS
Width (mm)	Feed (mm/rev)	Model																																																														
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RU-Type 	■ Turning <table><thead><tr><th>Depth of cut (mm)</th><th>Feed (mm/rev)</th><th>Model</th></tr></thead><tbody><tr><td>0.5</td><td>0.1</td><td>TDT 2-RU</td></tr><tr><td>1.5</td><td>0.2</td><td>TDT 3-RU</td></tr><tr><td>1.5</td><td>0.3</td><td>TST 3-RU</td></tr><tr><td>2.5</td><td>0.4</td><td>TDT 4-RU</td></tr><tr><td>2.5</td><td>0.5</td><td>TST 4-RU</td></tr><tr><td>3.5</td><td>0.6</td><td>TDT 6-RU</td></tr><tr><td>3.5</td><td>0.7</td><td>TST 6-RU</td></tr><tr><td>4.5</td><td>0.6</td><td>TDT 8-RU</td></tr><tr><td>4.5</td><td>0.7</td><td>TST 8-RU</td></tr></tbody></table> • Profiling in steel and cast iron • Tough cutting edge • Good chip control even in low depth • Good surface finish • High feed rate and low depth of cut	Depth of cut (mm)	Feed (mm/rev)	Model	0.5	0.1	TDT 2-RU	1.5	0.2	TDT 3-RU	1.5	0.3	TST 3-RU	2.5	0.4	TDT 4-RU	2.5	0.5	TST 4-RU	3.5	0.6	TDT 6-RU	3.5	0.7	TST 6-RU	4.5	0.6	TDT 8-RU	4.5	0.7	TST 8-RU																																	
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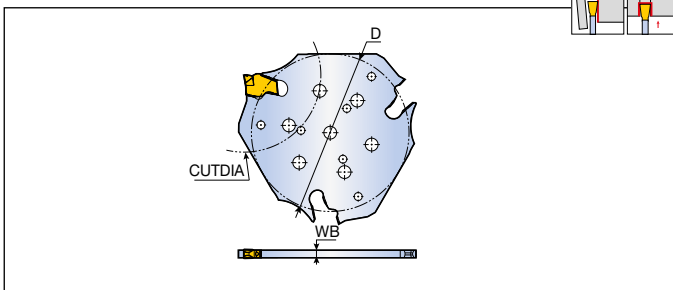
Parting & Grooving Toolholders



SFTB



Triangular blades for parting and deep grooving

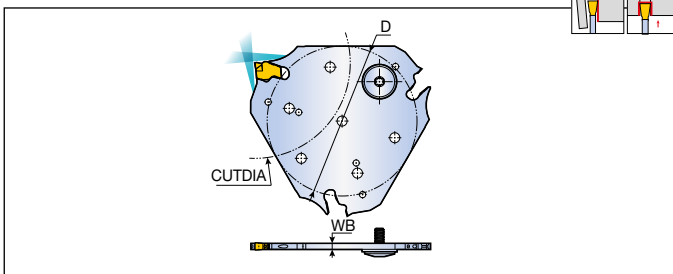


Designation	Insert seat size	Dimension (mm)			Block	Insert
		D	WB	CUTDIA		
SFTB D52-2	2	53.2	1.8	52	THTBR/L-TB	SFC
D52-3	3	53.2	2.5	52	THTBR/L-R/L-TB	SFJ
D82-2	2	64.3	1.8	82	B36-B37	B128
D82-3	3	64.3	2.5	82		
D120-2	2	85.5	1.8	120		
D120-3	3	85.5	2.5	120		

SFTB-TB



Triangular blades for parting and deep grooving with high pressure coolant



Designation	Insert seat size	Dimension (mm)			Block	Insert
		D	WB	CUTDIA		
SFTB D52-2-TB	2	53.2	1.8	52	THTBR/L-TB	SFC
D52-3-TB	3	53.2	2.5	52	THTBR/L-R/L-TB	SFJ
D82-2-TB	2	64.3	1.8	82	B36-B37	B128
D82-3-TB	3	64.3	2.5	82		
D120-2-TB	2	85.5	1.8	120		
D120-3-TB	3	85.5	2.5	120		

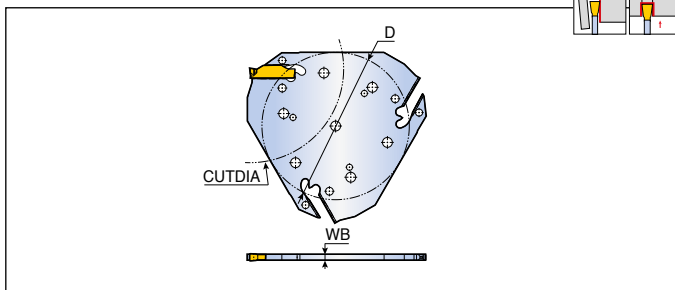
Spare parts

Designation	Sealing screw set	Extractor		
SFTB	-	ETG 3-4		
SFTB-TB	SGC 340-Q	ETG 3-4		

► Extractor should be ordered separately

TGTB

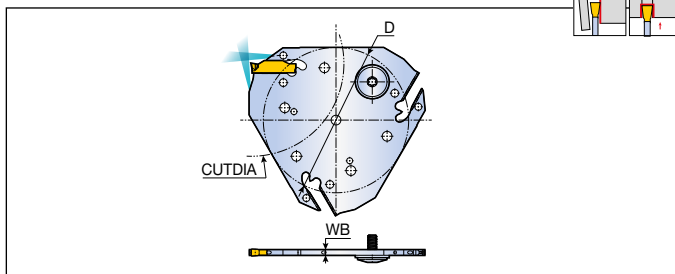
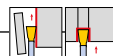
Triangular blades for parting and deep grooving



Designation	Insert seat size	Dimension (mm)			Block	Insert
		D	WB	CUTDIA		
TGTB D52-2	2	53.2	1.8	52	THTBR/L-TB	TDC/J/V/UF
D52-3	3	53.2	2.5	52	THTBR/L-R/L-TB	TSC/J
D82-2	2	64.3	1.8	82	B36-B37	TDCT/XU/XY/XT/T
D82-3	3	64.3	2.5	82		B129-B140

TGTB-TB

Triangular blades for parting and deep grooving with high pressure coolant



Designation	Insert seat size	Dimension (mm)			Block	Insert
		D	WB	CUTDIA		
TGTB D52-2-TB	2	53.2	1.8	52	THTBR/L-TB	TDC/J/V/UF
D52-3-TB	3	53.2	2.5	52	THTBR/L-R/L-TB	TSC/J
D82-2-TB	2	64.3	1.8	82	B36-B37	TDCT/XU/XY/XT/T
D82-3-TB	3	64.3	2.5	82		B129-B140

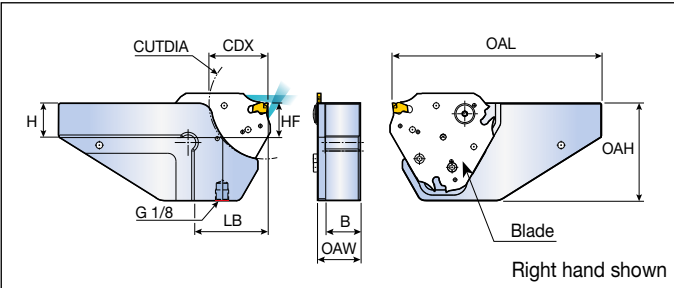
Spare parts

Designation	Sealing screw set	Extractor		
TGTB	-	EDG 33B		
TGTB-TB	SGC 340-Q	EDG 33B		

▶ Extractor should be ordered separately

THTBR/L-TB

Blocks for triangular blade



Designation	Dimension (mm)								Blade
	H	HF	B	OAL	OAH	OAW	LB	CUTDIA	
THTBR/L 20-D52-TB	20	20	17.5	125	52	23.5	40	52	SFTB/SFTB-TB TGTB/TGTB-TB  B34-B35
25-D52-TB	25	25	22.5	135	52	28.5	40	52	
20-D82-TB	20	20	17.5	140	72	23.5	51.5	82	
25-D82-TB	25	25	22.5	150	72	28.5	51.5	82	
25-D120-TB	25	25	22.5	165	95	28.5	67	120	
32-D120-TB	32	32	29.0	165	95	35.0	67	120	

► Please refer to B122 page for COOL-BURST accessories

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

Designation	CUTDIA											
CDX	5	6	7	8	9	10	11	12	13	14	15	
SFTB/TGTB D52	240	164	137	118	105	94	86	80	74	70	66	
D82	N.L.	N.L.	3686	1126	734	524	408	335	284	247	219	
SFTB D120	N.L.	N.L.	7752	2581	1548	1105	860	704	597	518	458	

► N.L.: No limit

Designation	CUTDIA											
CDX	16	17	18	19	20	21	22	23	24	25	26	
SFTB/TGTB D52	64	61	59	57	56	55	54	53	52	52	52	
D82	197	180	166	154	144	135	128	122	116	112	108	
SFTB D120	411	373	342	316	294	276	259	245	233	222	212	

Designation	CUTDIA														
CDX	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
SFTB/TGTB D82	104	101	98	96	93	91	90	88	87	86	85	84	83	82	82
SFTB D120	203	195	188	182	176	171	166	162	158	154	151	148	145	143	140

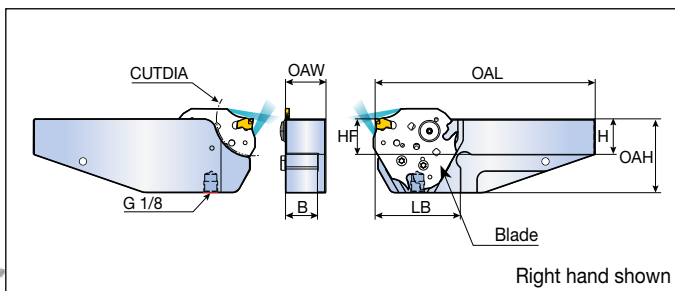
Designation	CUTDIA														
	CDX	42	43	44	45	46	47	48	49	51	52	55	54-53	57-56	58-60
SFTB D120		136	134	133	131	130	128	127	126	125	124	122	123	121	120

Spare parts

Designation	Locating pin	Screw	O-Ring	Wrench
				
THTBR/L-TB	SIDE THRUST PIN 3MM	SH M4X0.7X10-TX	O-RING ID10X2	T 20

THTBR-L-TB / THTBL-R-TB

Blocks for triangular blade for machining next to spindle

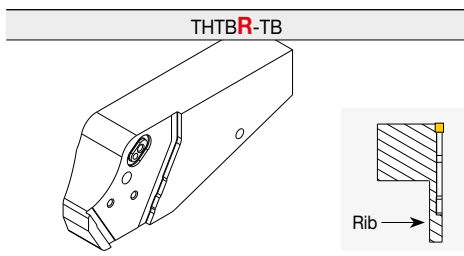


Designation	Dimension (mm)								Blade
	H	HF	B	OAL	OAH	OAW	LB	CUTDIA	
THTBR 25-L-D52-TB	25	25	22.5	155	52	28.5	60	52	SFTB/SFTB-TB TGTB/TGTB-TB B34-B35
25-L-D82-TB	25	25	22.5	176.5	72	28.5	78	82	
25-L-D120-TB	25	25	22.5	211	95	28.5	113	120	
THTBL 25-R-D52-TB	25	25	22.5	155	52	28.5	60	52	
25-R-D82-TB	25	25	22.5	176.5	72	28.5	78	82	
25-R-D120-TB	25	25	22.5	211	95	28.5	113	120	

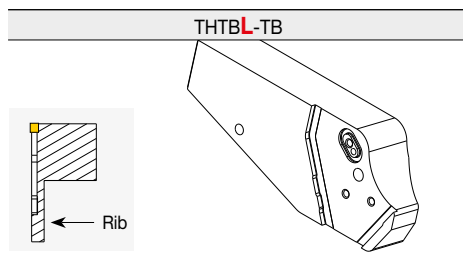
► Please refer to B122 page for COOL-BURST accessories

Spare parts

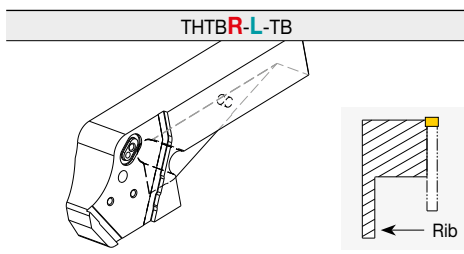
Designation	Locating pin	Screw	O-Ring	Wrench
THTBR/L--R/L-TB				
	SIDE THRUST PIN 3MM	SH M4X0.7X10-TX	O-RING ID10X2	T 20



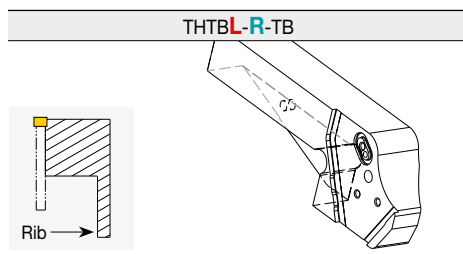
R-Pocket orientation



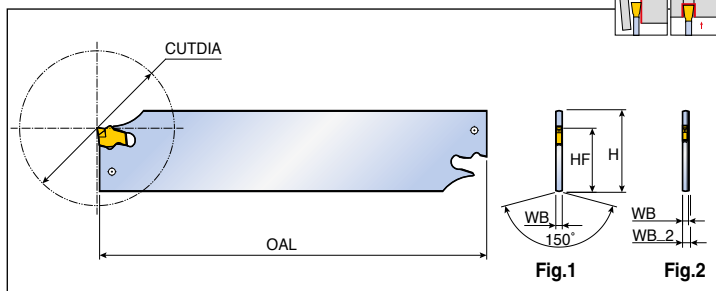
L-Pocket orientation



R-Pocket orientation / **L**-Reinforcement rib side



L-Pocket orientation / **R**-Reinforcement rib side

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► *: SFC 1.6 insert only

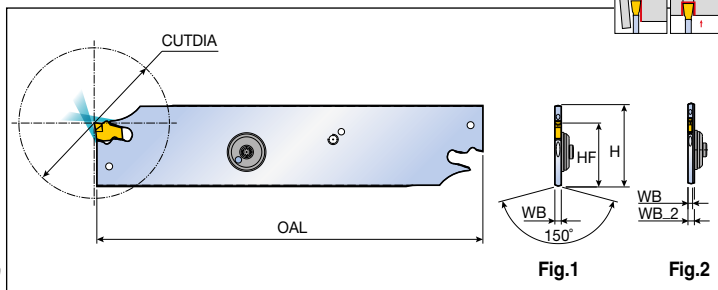
Spare parts

Designation	Extractor			
				
SFGB	ETG 3-4			

- ▶ Extractor should be ordered separately

SFGB-TB

Blades for parting and deep grooving with high pressure coolant

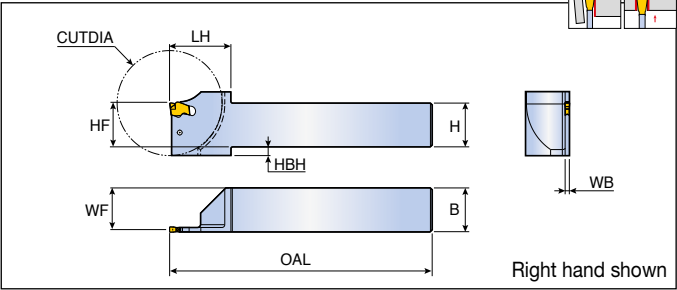
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Spare parts

Designation	Sealing screw set	Extractor		
				
SFGB -TB	SGC 340	ETG 3-4		

- ▶ Extractor should be ordered separately

Holders for parting and deep grooving



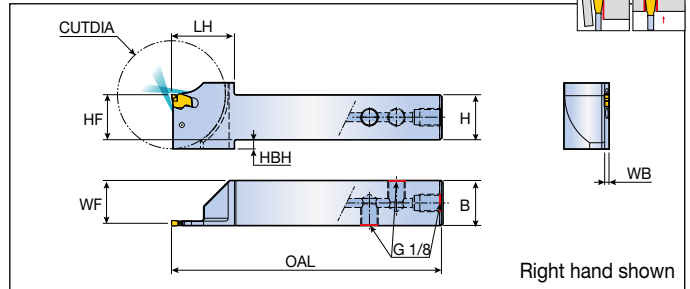
Designation		Insert seat size	Dimension (mm)									Insert
			H	HF	B	OAL	LH	WF	WB	HBH	CUTDIA	
SFER/L	2020-1.6T22-D45	1*	20	20	20	150	29.5	19.4	1.3	2.5	45	SFC
	2525-2T25-D50	2	25	25	25	150	32	24.1	1.8	-	50	SFJ
	2525-3T30-D60	3	25	25	25	150	35	23.8	2.4	5	60	B128

► *: SFC 1.6 insert only

Spare parts

Designation	Extractor			
SFER/L	ETG 3-4			

► Extractor should be ordered separately

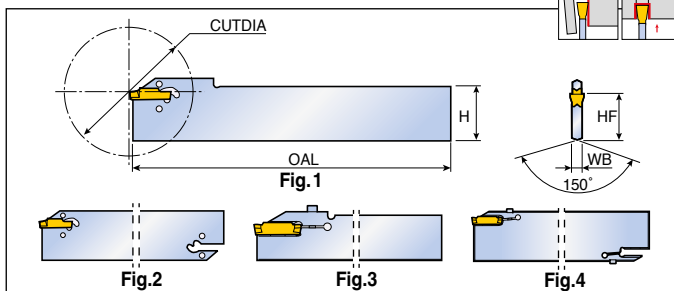


► Please refer to B122 page for COOL-BURST accessories

Designation	Plug	Wrench	Extractor	
SFER/L-TB	PLG G1/8-L6.5	L-W 5	ETG 3-4	



TaeguTec
Member IMC Group



- ▶ ⁽¹⁾Single ended blade
- ▶ ⁽²⁾Thickness at DOC area only. Overall thickness is 2.4mm
- ▶ *: TDJ 1.4 insert only

Designation	Extractor	Screw	Wrench	
TGB 26-1.4S / 32-1.4	EDG 23B	-	-	
TGB 26 / 32 / 45	EDG 33B	-	-	
TGB 32-8S-CL	-	SH M4x0.7x20-MO	L-W 3	
TGB 52-8-CL	-	SH M4x0.7x20-MO	L-W 3	

- ▶ Extractor should be ordered separately

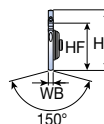
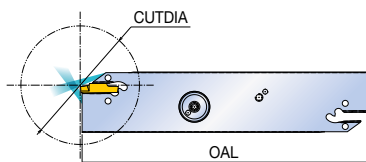


Fig. 1

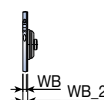


Fig.2

Spare parts

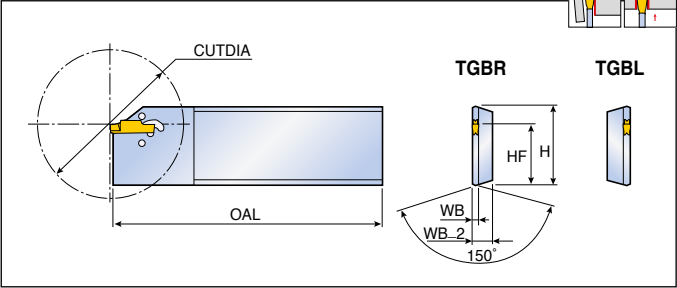
Designation	Sealing screw set	Extractor		
				
TGB-TB	SGC 340	EDG 33B		



TGBR/L



Reinforced blades for parting and deep grooving



Designation	Insert seat size	Dimension (mm)						Block	Insert
		H	HB	OAL	WB	WB_2	CUTDIA		
TGBR/L 32T24-2	2	32	24.9	110	1.8	8.0	42	TTBN/U..32 B49-B50	TDC/J/V/UF
32T33-3	3	32	24.9	110	2.4	8.0	60		TSC/J
32T41-4	4	32	24.9	110	3.2	10.0	80		TDCT/XU/XY/XT/T
								B129-B140	

Spare parts

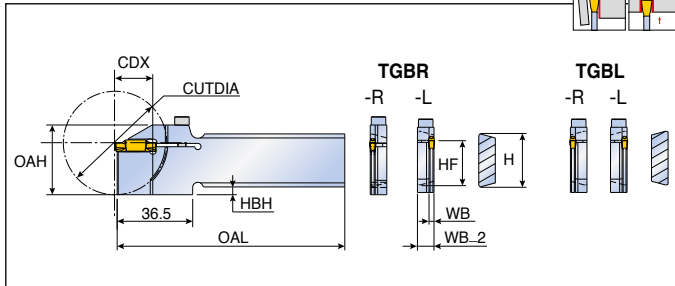
Designation	Extractor			
TGBR/L	EDG 33B			

► Extractor should be ordered separately

TGBR/L -D..R/L



Reinforced blades for parting and deep grooving with screw clamping



Designation	Insert seat size	Dimension (mm)									Block	Insert
		H	HF	OAL	OA H	WB	WB_2	HBH	CDX	CUTDIA		
TGBR 26-2-D50R ⁽¹⁾	2	26	21.4	110	33.7	1.8	8	3.6	18	50	TTBN/U...-26	TDC/J/V/UF TSC/J TDCT/XU/XY/XT/T B129-B140
26-2-D50L ⁽²⁾	2	26	21.4	110	33.7	1.8	8	3.6	18	50	TTBN/U...-26	
TGBL 26-2-D50R ⁽²⁾	2	26	21.4	110	33.7	1.8	8	3.6	18	50	TTBN/U...-26	
26-2-D50L ⁽¹⁾	2	26	21.4	110	33.7	1.8	8	3.6	18	50	TTBN/U...-26	
TGBR 26-3-D50R ⁽¹⁾	3	26	21.4	110	33.7	2.4	8	3.6	18	50	TTBN/U...-26	
26-3-D50L ⁽²⁾	3	26	21.4	110	33.7	2.4	8	3.6	18	50	TTBN/U...-26	
TGBL 26-3-D50R ⁽²⁾	3	26	21.4	110	33.7	2.4	8	3.6	18	50	TTBN/U...-26	
26-3-D50L ⁽¹⁾	3	26	21.4	110	33.7	2.4	8	3.6	18	50	TTBN/U...-26	
TGBR 32-2-D50R ⁽³⁾	2	32	24.9	120	33.7	1.8	8	-	18	50	TTBN/U...-32	
32-2-D50L ⁽²⁾	2	32	24.9	120	33.7	1.8	8	-	18	50	TTBN/U...-32	
TGBL 32-2-D50R ⁽²⁾	2	32	24.9	120	33.7	1.8	8	-	18	50	TTBN/U...-32	B49-B50
32-2-D50L ⁽³⁾	2	32	24.9	120	33.7	1.8	8	-	18	50	TTBN/U...-32	
TGBR 32-3-D50R ⁽³⁾	3	32	24.9	120	33.7	2.4	8	-	18	50	TTBN/U...-32	
32-3-D50L ⁽²⁾	3	32	24.9	120	33.7	2.4	8	-	18	50	TTBN/U...-32	
TGBL 32-3-D50R ⁽²⁾	3	32	24.9	120	33.7	2.4	8	-	18	50	TTBN/U...-32	
32-3-D50L ⁽³⁾	3	32	24.9	120	33.7	2.4	8	-	18	50	TTBN/U...-32	

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

▶ ⁽²⁾ for Tornos Bechler, model Emco 2000/20, 2000/26

▶ ⁽³⁾ for Traub machines, model TNC 42/65, TNM 42/65, TNS 42/60/65, TNA 300/400

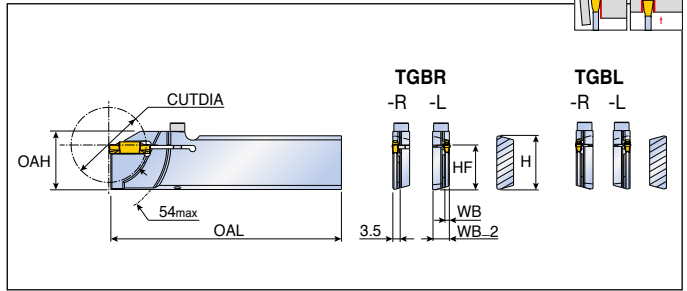
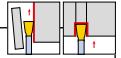
Spare parts

Designation	Screw	Wrench		
TGBR/L -DR/L	SH M4x0.7x16	L-W 3		

TGBR/L -TI-D..R/L



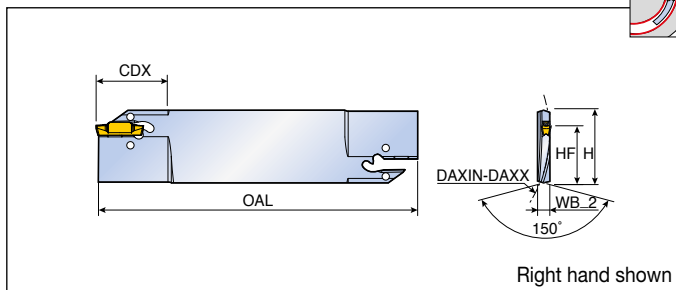
Reinforced blades with screw clamping for traub and index machines

[illegible]

Spare parts

Designation	Screw	Wrench		
				
TGBR/L -TI-DR/L	SH M4x0.7x16	L-W 3		

Blades for face grooving



Designation	Insert seat size	Dimension (mm)								Block	Insert
		H	HF	OAL	WB_2	CDX	DAXIN	DAXX			
TGBFR/L 32T20-40-60-3	3	32	24.9	150	5.2	20	40	60		TTBN/U..-32 B49-B50	TDC/J/T
32T20-54-80-3	3	32	24.9	150	5.2	20	54	80			TDCT/XU/XT/XY
32T25-74-120-3	3	32	24.9	150	5.2	25	74	120			TDFT
32T25-114-180-3	3	32	24.9	150	5.2	25	114	180			TSC/J
32T25-40-60-4	4	32	24.9	150	5.2	25	40	60			TDUF/TDV
32T25-50-80-4	4	32	24.9	150	5.2	25	50	80			B129-B141
32T30-70-130-4	4	32	24.9	150	5.2	30	70	130			
32T30-120-200-4	4	32	24.9	150	5.2	30	120	200			
32T30-200-4	4	32	24.9	150	5.2	30	200	N.L.			
32T32-60-95-5	5	32	24.9	150	5.2	32	60	95			
32T35-85-140-5	5	32	24.9	150	5.2	35	85	140			
32T35-130-250-5	5	32	24.9	150	5.2	35	130	250			
32T35-250-5	5	32	24.9	150	5.2	35	250	N.L.			
32T32-80-180-6	6	32	24.9	150	5.2	32	80	180			
32T38-168-300-6	6	32	24.9	150	5.2	38	168	300			
32T38-300-6	6	32	24.9	150	5.2	38	300	N.L.			

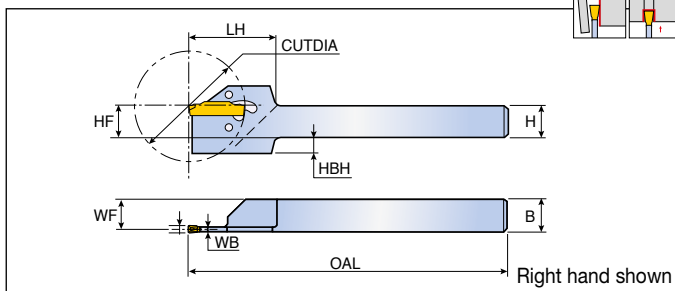
► Please check insert min. dia for face grooving B83 page

► N.L.: No limit

Spare parts

Designation	Extractor			
				
TGBFR/L	EDG 33B			

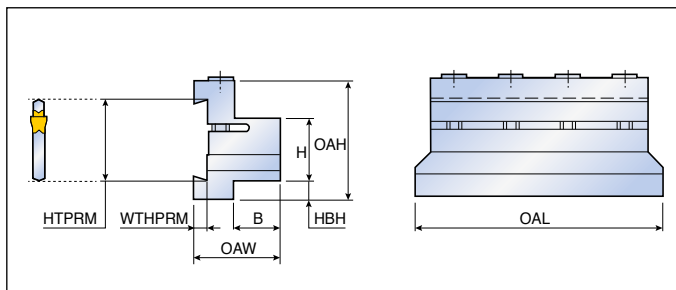
► Extractor should be ordered separately

[illegible]

Spare parts

Designation	Extractor			
				
TGER/L.....-1.4T10	EDG 23B			
TGER/L.....-2	EDG 33B			
TGER/L.....-3	EDG 33B			
TGER/L.....-4	EDG 33B			

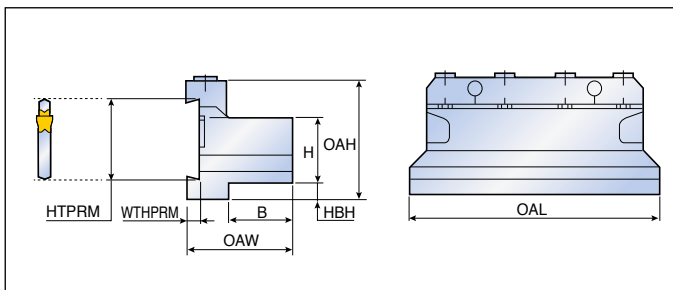
- ▶ Extractor should be ordered separately

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Spare parts

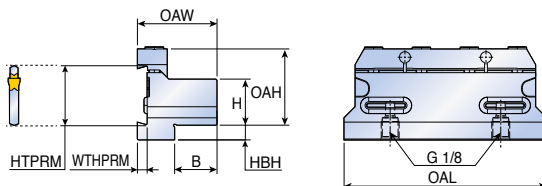
Designation	Screw	Wrench		
				
TTBN...26	SH M6x1x25	L-W 5		
TTBN...32	SH M6x1x30	L-W 5		
TTBN...45	SH M6x1x40	L-W 5		
TTBN...52	SH M8x1.25x45	L-W 6		



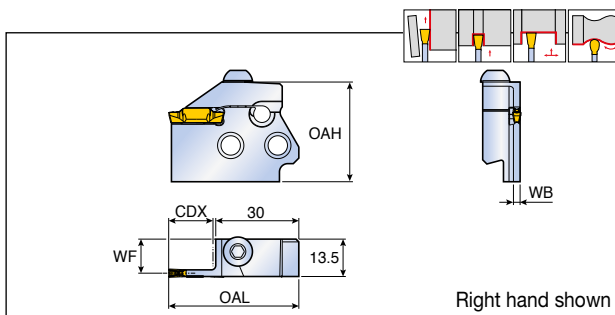
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Designation	Screw	Clamp	Wrench	
				
TTBU 20-26	SR M6X30 DIN912	BKU 86	L-W 5	
TTBU 25-26	SR M6X30 DIN912	BKU 105	L-W 5	
TTBU 20-32	SR M6X25 DIN912	BKU 100	L-W 5	
TTBU 25-32	SR M6X25 DIN912	BKU 110	L-W 5	
TTBU 32-32	SR M6X30 DIN912	BKU 110	L-W 5	
TTBU 25/32-45	SR M6X30 DIN912	BKU 110	L-W 5	





B43



Designation	Insert seat size	Dimension (mm)					Holder	Insert
		OAL	WF	WB	OAH	CDX		
TCAER/L 1.4T12	1*	47	13.0	1.0	36	12	TCAHR/L TCAHPL/R C..-TCAHN C..-TCAHPN B57-B60	TDJ 1.4
2T16	2	47	12.6	1.8	36	16		TDC/J/V/UF
2T22	2	53	12.6	1.8	36	22		TSC/J
3T16	3	47	12.3	2.4	36	16		TDCT/XU/XY/XT/T
3T22	3	53	12.3	2.4	36	22		B129-B140
4T16	4	47	12.0	3.0	36	16		
4T22	4	53	12.0	3.0	36	22		
5T20	5	51.5	11.6	3.9	36	20		
5T25	5	56	11.6	3.9	36	25		
6T20	6	51.5	11.1	4.9	36	20		
6T25	6	56	11.1	4.9	36	25		

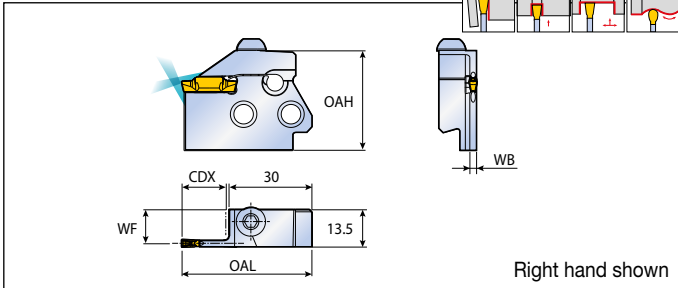
► *: TDJ 1.4 insert only

Spare parts

Designation	Screw 	Wrench 		
TCAER/L	BH M6x1x16	L-W 4		

TCAER/L-TB

Cartridges for external grooving with high pressure coolant



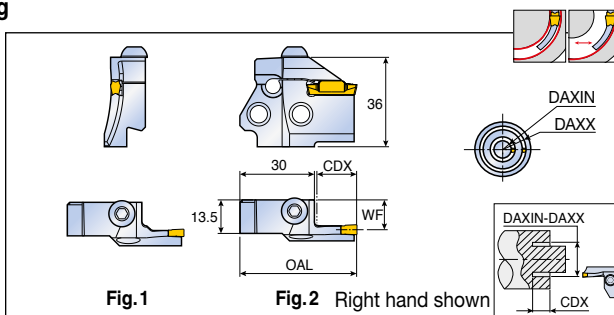
Right hand shown

Designation		Insert seat size	Dimension (mm)					Holder	Insert
			OAL	WF	WB	OAH	CDX		
TCAER/L	2T16-TB	2	47	12.6	1.8	36	16	TCAHR/L-TB TCAHPL/R-TB C...TCAHN-TB C...TCAHPN-TB B57-B61	TDC/J/V/UF
	3T16-TB	3	47	12.3	2.4	36	16		TSC/J
	4T16-TB	4	47	12.0	3.0	36	16		TDCT/XU/XY/XT/T
	5T20-TB	5	51	11.5	3.9	36	20		B129-B140

Spare parts

Designation	Screw	Wrench		
TCAER/L-TB	BH M6X1X16	L-W 4		

Cartridges for external face grooving



Designation	Insert seat size	Dimension (mm)					Fig.	Holder	Insert
		OAL	WF	CDX	DAXIN	DAXX			
TCAFR/L 3T10-29-40 RN	3	40	12.4	10	29	40	1	TCAHL/R TCAHPR/L C...TCAHN C...TCAHPN B57-B60	TDC/J/V/UF TSC/J TDCT/XU/XY/XT/T TDFT B129-B141
3T12-40-55 RN	3	47	12.4	12	40	55	1		
3T12-55-75 RN	3	47	12.4	12	55	75	1		
3T12-75-100 RN	3	47	12.4	12	75	100	1		
3T12-100-140 RN	3	47	12.4	12	100	140	1		
3T12-140-200 RN	3	47	12.4	12	140	200	1		
4T16-34-50 RN	4	47	12.0	16	34	50	2		
4T16-50-70 RN	4	47	12.0	16	50	70	2		
4T16-70-100 RN	4	47	12.0	16	70	100	2		
4T16-100-150 RN	4	47	12.0	16	100	150	2		
4T16-150-250 RN	4	47	12.0	16	150	250	2		
4T16-250 RN	4	47	12.0	16	250	N.L.	2		
5T20-55-80 RN	5	51.5	11.5	20	55	80	2		
5T20-80-120 RN	5	51.5	11.5	20	80	120	2		
5T20-120-180 RN	5	51.5	11.5	20	120	180	2		
5T20-180-300 RN	5	51.5	11.5	20	180	300	2		
5T20-300 RN	5	51.5	11.5	20	300	N.L.	2		
6T25-60-90 RN	6	56	11.0	25	60	90	2		
6T25-90-150 RN	6	56	11.0	25	90	150	2		
6T25-150-250 RN	6	56	11.0	25	150	250	2		
6T25-250-400 RN	6	56	11.0	25	250	400	2		
6T25-400 RN	6	56	11.0	25	400	N.L.	2		

► Please check insert min. dia for face grooving B83 page

► N.L.: No limit

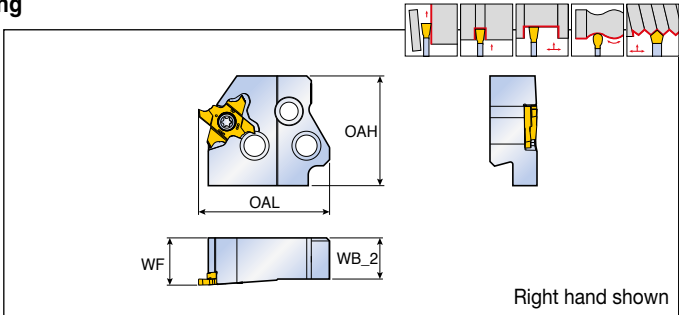
Spare parts

Designation	Screw	Wrench		
TCAFR/L	BH M6x1x16	L-W 4		

TCAQR/L 20



Cartridges for external grooving



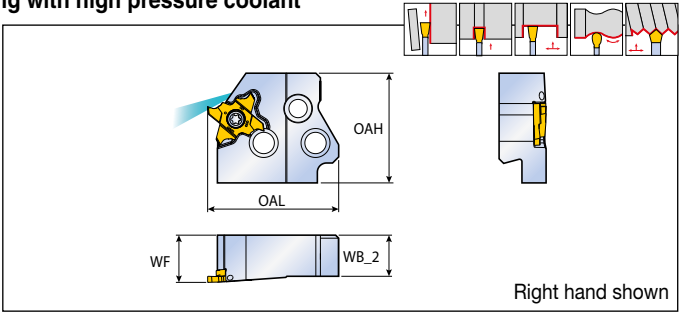
Designation	Dimension (mm)				Holder	Insert
	OAL	WF	WB_2	OAH		
TCAQR/L 20	43	15.5	13.5	36	TCAHR/L, TCAHPL/R C...TCAHN, C...TCAHPN B57-B60	TQ...20 B149-B150

► CDX: Refer to insert dimension

TCAQR/L 20-TB



Cartridges for external grooving with high pressure coolant



Designation	Dimension (mm)				Holder	Insert
	OAL	WF	WB_2	OAH		
TCAQR/L 20-TB	43	15.5	13.5	36	TCAHR/L-TB, TCAHPL/R-TB C...TCAHN-TB, C...TCAHPN-TB B57-B61	TQ...20 B149-B150

► CDX: Refer to insert dimension

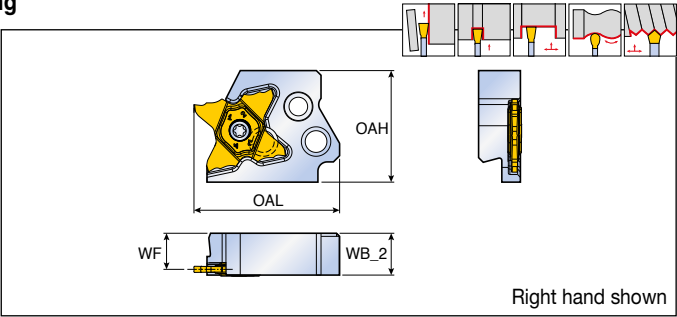
Spare parts

Designation	Screw	Wrench		
TCAQR 20(-TB)	TS 40A100L	T-1508/5		
TCAQL 20(-TB)	TS 40A100	T-1508/5		

TCAQR/L 27/34



Cartridges for external grooving



Right hand shown

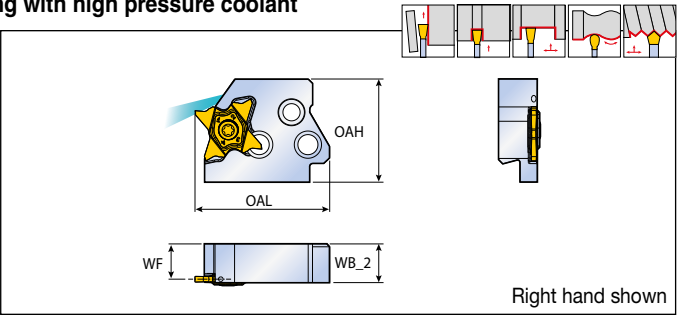
Designation	Dimension (mm)				Holder	Insert
	OAL	WF	WB_2	OAH		
TCAQR/L 27	47	12.3	13.5	36	TCAHR/L, TCAHPL/R C...TCAHN, C...TCAHPN B57-B60	TQ... 27
34	47	11.7	13.5	36		TQ... 34 B151-B161

► CDX: Refer to insert dimension

TCAQR/L 27-TB



Cartridges for external grooving with high pressure coolant



Right hand shown

Designation	Dimension (mm)				Holder	Insert
	OAL	WF	WB_2	OAH		
TCAQR/L 27-TB	47	12.3	13.5	36	TCAHR/L-TB, TCAHPL/R-TB C...TCAHN-TB, C...TCAHPN-TB B57-B61	TQ...27 B151-B159

► CDX: Refer to insert dimension

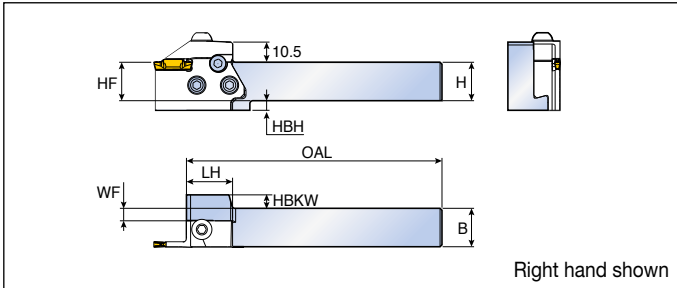
Spare parts

Designation	Screw	Wrench		
TCAQR 27/34(-TB)	TS 50125IL	T 10/20		
TCAQL 27/34(-TB)	TS 50125I	T 10/20		

TCAHR/L



Parallel type holders for cartridge



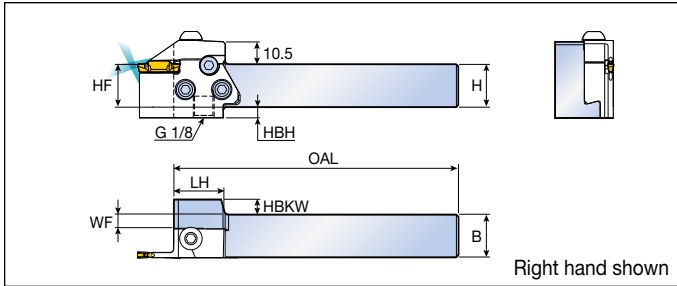
Designation	Dimension (mm)								Cartridge
	H	HF	B	OAL	WF	HBH	HBKW	LH	
TCAHR/L 2020	20	20	20	133	6.5	5	7	24	TCAER/L, TCAFL/R TCAQR/L  B52-B56
2525	25	25	25	133	11.5	-	2	24	
3232	32	32	32	153	18.5	-	-	24	

► Cartridge should be ordered separately

TCAHR/L-TB



Parallel type holders for cartridge with high pressure coolant



Designation	Dimension (mm)								Cartridge
	H	HF	B	OAL	WF	HBH	HBKW	LH	
TCAHR/L 2020-TB	20	20	20	133	6.5	5	7	24	TCAER/L-TB TCAQR/L-TB  B53-B56
2525-TB	25	25	25	133	11.5	-	2	24	

- Cartridge should be ordered separately
- Please refer to **B122** page for COOL-BURST accessories

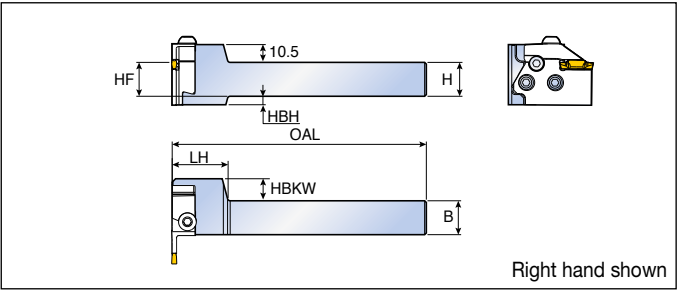
Spare parts

Designation	Screw	Security Screw	Sealing Screw	O-Ring	Wrench	
						
TCAHR/L	TS 60190I	SH M5X0.8X16	-	-	L-W 4	-
TCAHR/L-TB	TS 60190I	SH M5X0.8X16	SS M4X0.7X4-NL	O-RING ID5X1T	L-W 4	L-W 2

TCAHPR/L



Perpendicular type holders for cartridge



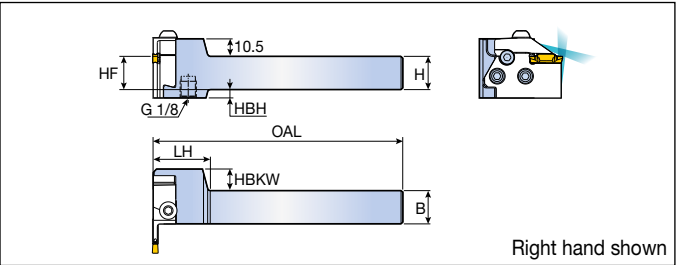
Designation	Dimension (mm)							Cartridge
	H	HF	B	OAL	HBH	HBKW	LH	
TCAHPR/L 2020	20	20	20	150	5	13	33	TCAEL/R, TCAFR/L TCAQL/R B52-B56
2525	25	25	25	150	-	8	33	
3232	32	32	32	170	-	1	33	

► Cartridge should be ordered separately

TCAHPR/L-TB



Perpendicular type holders for cartridge with high pressure coolant



Designation	Dimension (mm)							Cartridge
	H	HF	B	OAL	HBH	HBKW	LH	
TCAHPR/L 2020-TB	20	20	20	150	5	13	33	TCAEL/R-TB TCAQL/R-TB B53-B56
2525-TB	25	25	25	150	-	8	33	

- Cartridge should be ordered separately
- Please refer to B122 page for COOL-BURST accessories

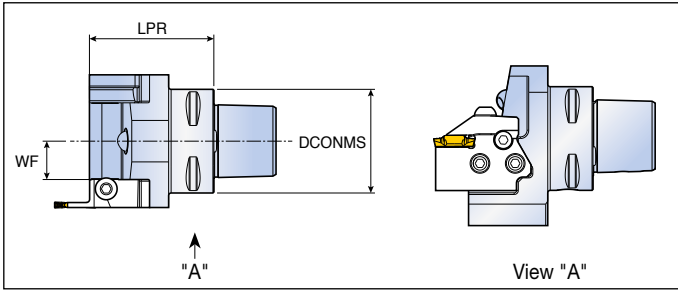
Spare parts

Designation	Screw	Security Screw	Sealing Screw	O-Ring	Wrench	
TCAHPR/L	TS 60190I	SH M5X0.8X16	-	-	L-W 4	-
TCAHPR/L-TB	TS 60190I	SH M5X0.8X16	SS M4X0.7X4-NL	O-RING ID5X1T	L-W 4	L-W 2

C-TCAHN



Parallel type C-Adapters



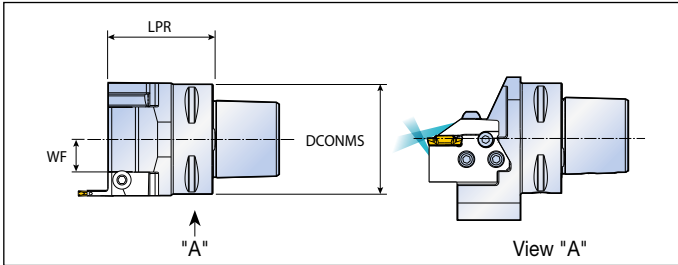
Designation	Dimension (mm)			Cartridge
	DCONMS	LPR	WF	
C4-TCAHN	40	60	18.7	TCAER/L, TCAFR/L
C5-TCAHN	50	60	18.5	TCAQR/L
C6-TCAHN	63	60	19	B52-B56

► Cartridge should be ordered separately

C-TCAHN-TB



Parallel type C-Adapters with high pressure coolant



Designation	Dimension (mm)			Cartridge
	DCONMS	LPR	WF	
C4-TCAHN-TB	40	55	11.5	TCAER/L-TB
C5-TCAHN-TB	50	58	13.7	TCAQR/L-TB
C6-TCAHN-TB	63	60	18.7	B53-B56

► Cartridge should be ordered separately

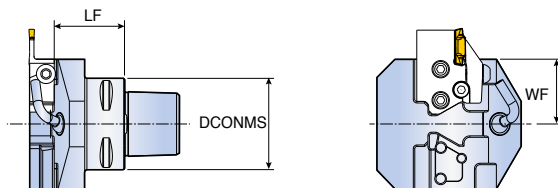
Spare parts

Designation	Screw	Security Screw	Sealing Screw	Nozzle	O-Ring	Wrench
C-TCAHN	TS 60190I	SH M5X0.8X16	-	NZ 125	-	L-W 4
C-TCAHN-TB	TS 60190I	SH M5X0.8X16	SS M4X0.7X4-NL	-	O-RING ID5X1T	L-W 4 / L-W 2

C-TCAHPN



Perpendicular type C-Adapters

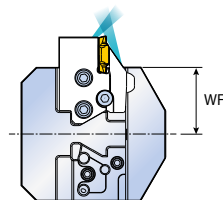
[illegible]

- ▶ Cartridge should be ordered separately

Spare parts

Designation	Screw	Security Screw	Nozzle	Pipe	Wrench
					
C-TCAHPN	TS 60190I	SH M5X0.8X16	NZ 125	NZP 5	L-W 4

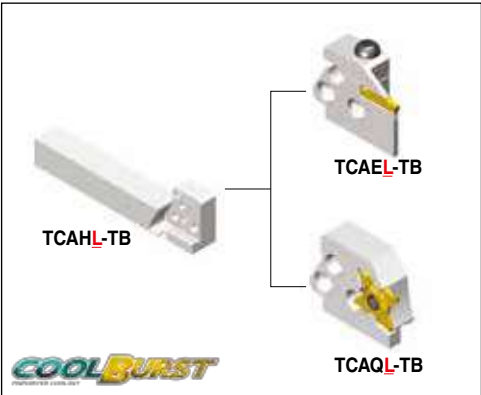
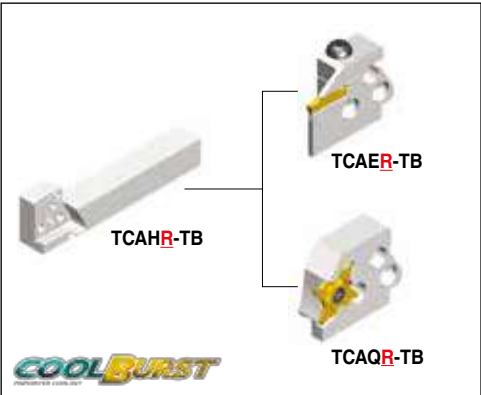
9780714655559 9780714655559 9780714655559



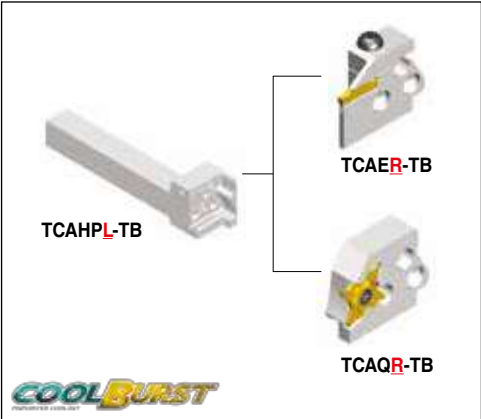
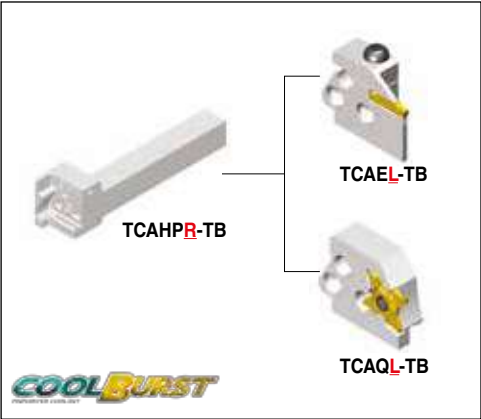
- ▶ Cartridge should be ordered separately

Designation	Screw	Security Screw	Sealing Screw	O-Ring	Wrench
C-TCAHPN-TB	TS 60190I	SH M5X0.8X16	SS M4X0.7X4-NL	O-RING ID5X1T	L-W 4 / L-W 2

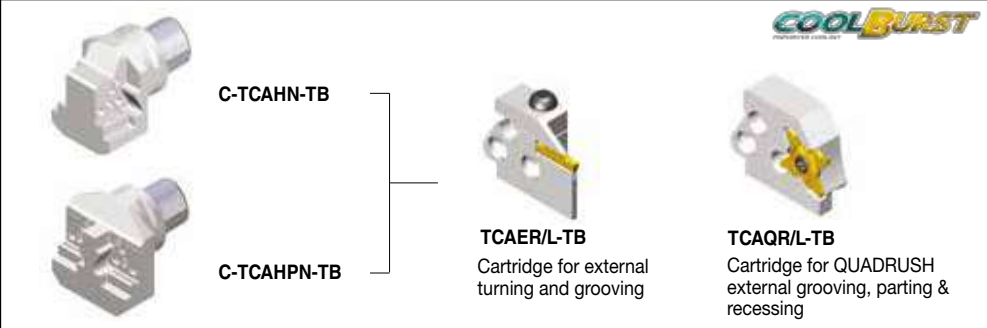
Parallel type with high pressure coolant



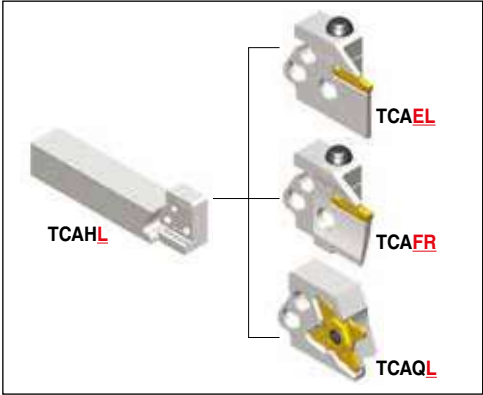
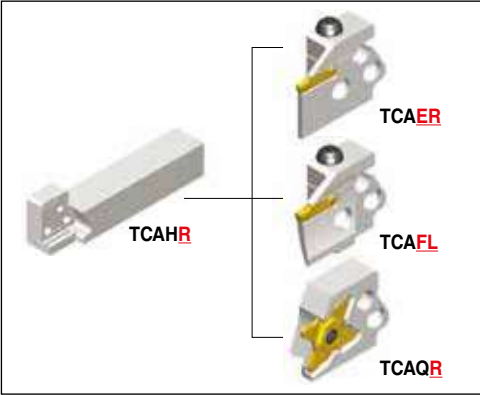
Perpendicular type with high pressure coolant



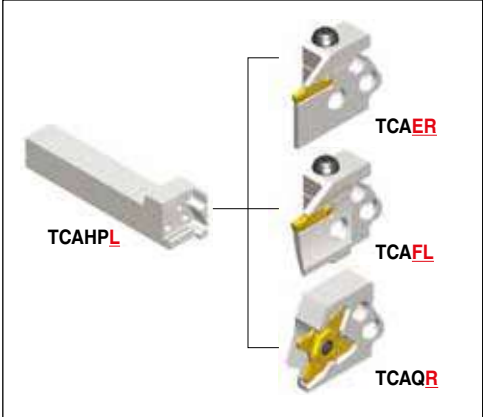
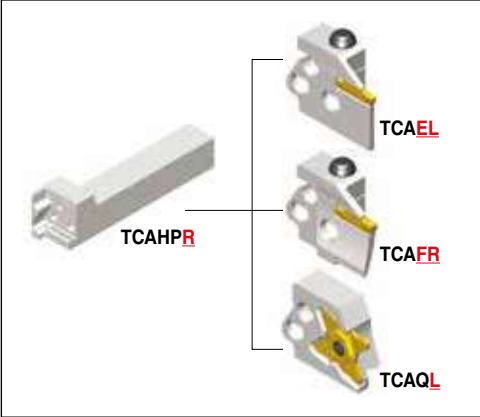
C-ADAPTER with high pressure coolant



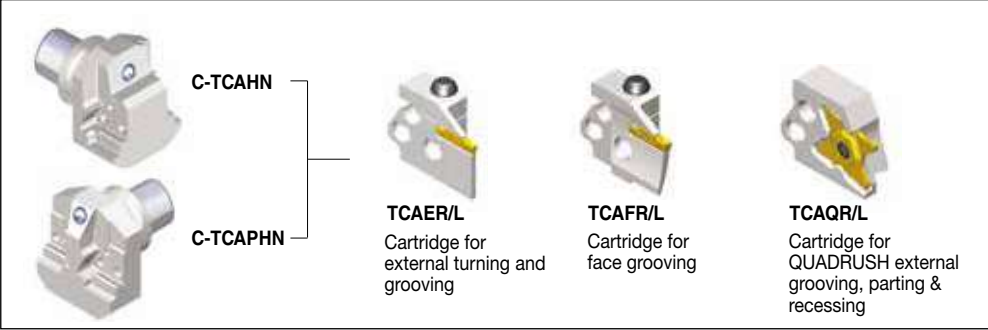
Parallel type



Perpendicular type



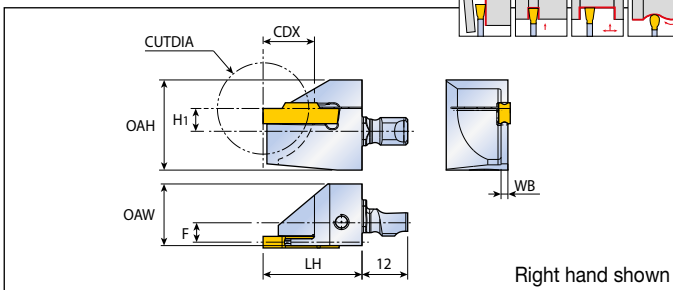
C-ADAPTER



QE1 TTER

WINSWISS

Modular heads for external turning and grooving



Designation	Insert seat size	Dimension (mm)								Shank	Insert	
		OAH	LH	OAW	WB	CDX	CUTDIA	H ₁	F			
QE1 TTER 2-12-24	2	23.7	26.0	16.2	1.8	12.0	24.0	6.0	6.1	QE1 S12N-TB	TDC/J/V/UF	
	2-16-32	2	23.7	26.0	16.2	1.8	16.0	32.0	6.0	QE1 S16R-TB	TSC/J	
	3-12-24	3	23.7	26.0	16.2	2.4	12.0	24.0	6.0	5.8	B68	TDCT/XU/XY/XT/T
	3-16-32	3	23.7	26.0	16.2	2.4	16.0	32.0	6.0	5.8		B129-B140

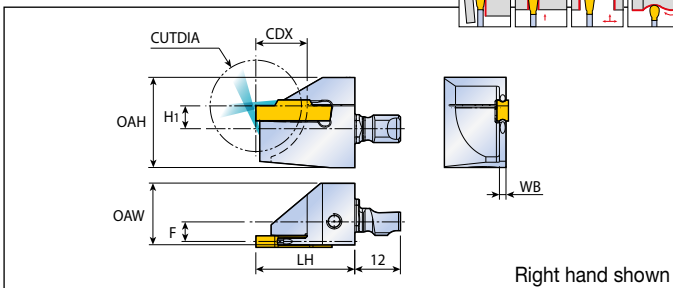
QE1 TTER-TB

WINSWISS

Modular heads for external turning and grooving with high pressure coolant



COOLBlast



Designation	Insert seat size	Dimension (mm)								Shank	Insert
		OAH	LH	OAW	WB	CDX	CUTDIA	H1	F		
QE1 TTER 2-12-24-TB	2	23.7	26.0	16.2	1.8	12.0	24.0	6.0	6.1	QE1 S12N-TB	TDC/J/V/UF
2-16-32-TB	2	23.7	26.0	16.2	1.8	16.0	32.0	6.0	6.1	QE1 S16R-TB	TSC/J
3-12-24-TB	3	23.7	26.0	16.2	2.4	12.0	24.0	6.0	5.8	 B68	TDCT/XU/XY/XT/T
3-16-32-TB	3	23.7	26.0	16.2	2.4	16.0	32.0	6.0	5.8		 B129-B140

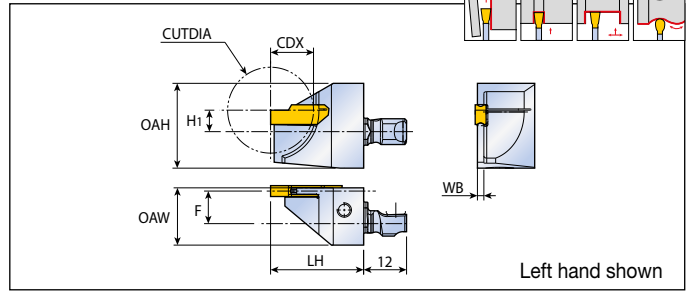
Spare parts

Designation	Screw	Wrench		
QE1 TTER	SH M4X0.7X16	L-W 3		
QE1 TTER-TB	SH M4X0.7X16	L-W 3		

QE1 TTEL



Modular heads for external turning and grooving

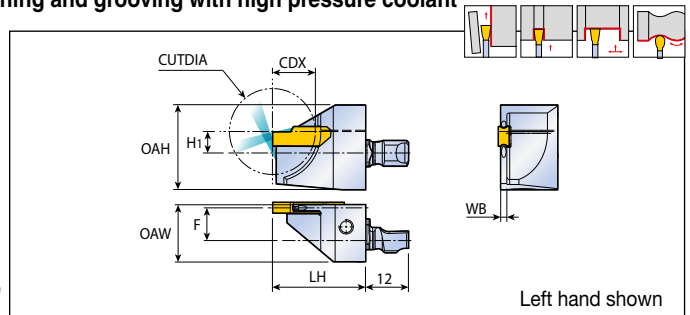


Designation	Insert seat size	Dimension (mm)								Shank	Insert
		OAH	LH	OAW	WB	CDX	CUTDIA	H1	F		
QE1 TTEL 2-12-24	2	23.7	26.0	16.0	1.8	12.0	24.0	6.0	8.1	QE1 S12N-TB	TDC/J/N/UF
2-16-32	2	23.7	26.0	16.0	1.8	16.0	32.0	6.0	8.1	QE1 S16R-TB	TSC/J
3-12-24	3	23.7	26.0	16.0	2.4	12.0	24.0	6.0	7.8	B68	TDCT/XU/XY/XT/T
3-16-32	3	23.7	26.0	16.0	2.4	16.0	32.0	6.0	7.8		B129-B140

QE1 TTEL-TB



Modular heads for external turning and grooving with high pressure coolant



Designation	Insert seat size	Dimension (mm)								Shank	Insert
		OAH	LH	OAW	WB	CDX	CUTDIA	H1	F		
QE1 TTEL 2-12-24-TB	2	23.7	26.0	16.0	1.8	12.0	24.0	6.0	8.1	QE1 S12N-TB	TDC/J/N/UF
2-16-32-TB	2	23.7	26.0	16.0	1.8	16.0	32.0	6.0	8.1	QE1 S16R-TB	TSC/J
3-12-24-TB	3	23.7	26.0	16.0	2.4	12.0	24.0	6.0	7.8	B68	TDCT/XU/XY/XT/T
3-16-32-TB	3	23.7	26.0	16.0	2.4	16.0	32.0	6.0	7.8		B129-B140

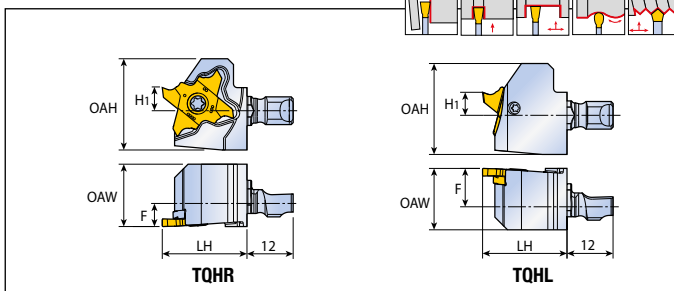
Spare parts

Designation	Screw	Wrench		
QE1 TTEL	SH M4X0.7X16	L-W 3		
QE1 TTEL-TB	SH M4X0.7X16	L-W 3		

QE1 TQHR/L



Modular head for parting and grooving on Swiss machines



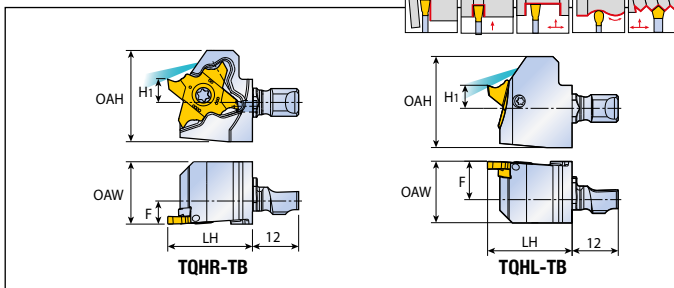
Designation	Dimension (mm)					Shank	Insert
	OAH	LH	OAW	H1	F		
QE1 TQHR 20	23.7	22.0	16.2	6.0	7.0	QE1 S12N-TB	TQ...20
TQHL 20	23.7	22.0	16.0	6.0	9.0	QE1 S16R-TB B68	B149-B150

► CDX: Refer to insert dimension

QE1 TQHR/L-TB



Modular head for parting and grooving with high-pressure coolant on Swiss machines



Designation	Dimension (mm)					Shank	Insert
	OAH	LH	OAW	H1	F		
QE1 TQHR 20-TB	23.7	22.0	16.2	6.0	7.0	QE1 S12N-TB	TQ...20
TQHL 20-TB	23.7	22.0	16.0	6.0	9.0	QE1 S16R-TB B68	B149-B150

► CDX: Refer to insert dimension

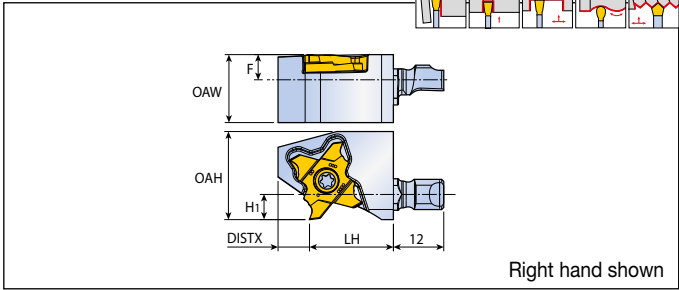
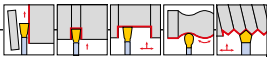
Spare parts

Designation	Screw	Wrench		
QE1 TQHR(-TB)	TS 40A100L	T-1508/5		
QE1 TQHL(-TB)	TS 40A100	T-1508/5		

QE1Y TQHR



Modular head for Y-axis parting and grooving on Swiss machines



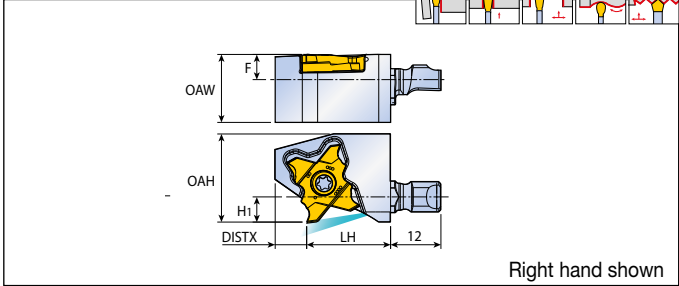
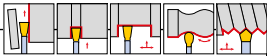
Designation	Dimensions (mm)						Shank	Insert
	OAH	LH	OAW	H1	F	DISTX		
QE1Y TQHR 20	21.0	20.0	16.2	6.0	7.0	7.5	QE1 S12N-TB QE1 S16L-TB B68	TQ... 20 B149-B150

► CDX: Refer to insert dimension

QE1Y TQHR-TB



Modular head for Y-axis parting and grooving with high-pressure coolant on Swiss machines



Designation	Dimensions (mm)						Shank	Insert
	OAH	ALH	OAW	H1	F	DISTX		
QE1Y TQHR 20-TB	21.0	20.0	16.2	6.0	7.0	7.5	QE1 S12N-TB QE1 S16L-TB B68	TQ... 20 B149-B150

► CDX: Refer to insert dimension

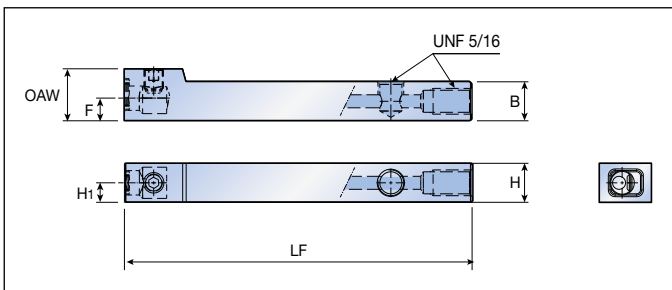
Spare parts

Designation	Screw 	Wrench 		
QE1Y TQHR 20(-TB)	TS 40A100L	T-1508/5		

QE1 S12N-TB



High pressure coolant shanks for WIN-SWISS modular head



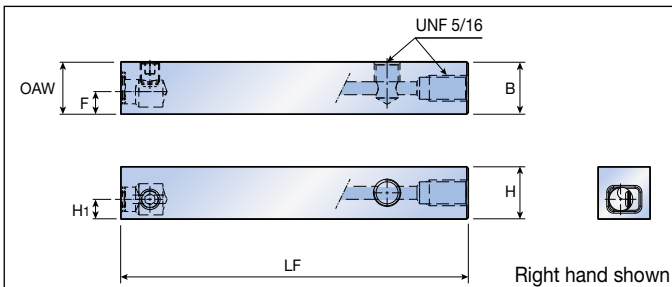
Designation	Dimension (mm)						Modular head
	H	H1	B	LF	OAW	F	
QE1 S12N-TB	12	6	12	107	16	7	QE1...R/L(-TB) B64-B67

► Please refer to B122 page for COOL-BURST accessories

QE1 S16R/L-TB



High pressure coolant shanks for WIN-SWISS modular head



Designation	Dimension (mm)						Modular head
	H	H1	B	LF	OAW	F	
QE1 S16R/L-TB	16	6	16	107	16	7	QE1...R/L(-TB) B64-B67

► Please refer to B122 page for COOL-BURST accessories

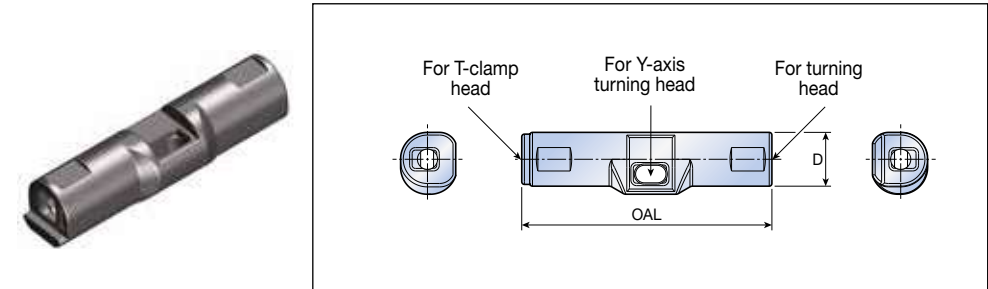
Spare parts

Designation	Screw	Plug	Wrench	
QE1 ...-TB	SS M6F-7	PLG 5/16 UNF	L-W 3	L-W 5/32

QE1 FIX-20100



Insert replacement fixture



Designation	Dimensions (mm)	
	OAL	D
QE1 FIX-20100	93.0	20.0

► Fixture ordered seperately

Insert replacement

► Due to the WIN-SWISS' small head sizes, replacing the inserts could be difficult.
Please use the fixture to facilitate insert replacement.

► Y-axis turning head



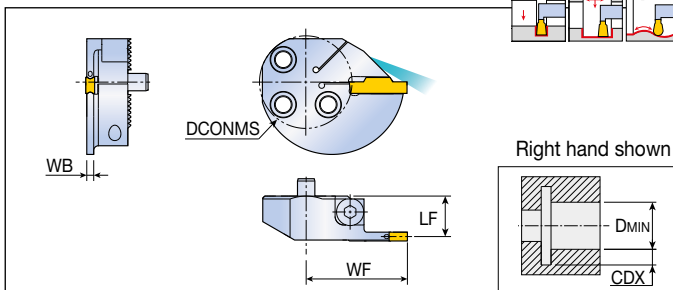
► T-clamp head



► Turning head



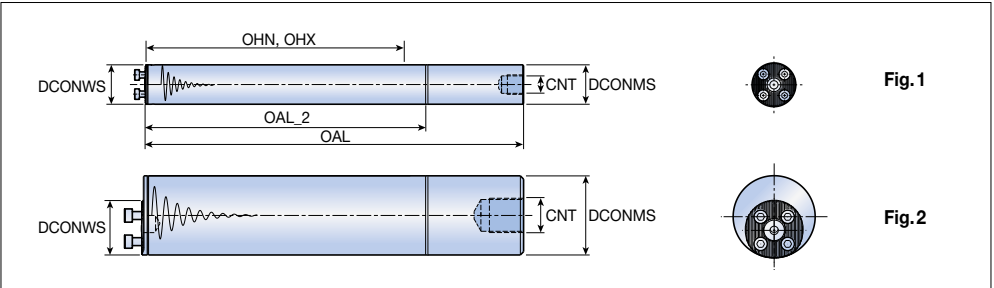
HUSHBORE
ALFV. SUBSTANTIUM BAR



► *: When applying Ø50 mm shanks, add +10 mm to the D_{MIN}. When applying Ø60 mm shanks, add +20 mm to the D_{MIN}.

Designation	Screw	Wrench		
QH-TTIR/L-TB	SH M5X0.8X16	L-W 4		

Anti-vibration shanks for boring



Designation	Dimension (mm)							Coolant hole	Fig.
	DCONMS	DCONWS	OAL	OAL_2	OHN	OHX	CNT		
QS25A-7D	25	25	257.5	155	88	155	G 1/4	●	1
QS25A-10D	25	25	332.5	255	155	230	G 1/4	●	1
QS25E-12D⁽¹⁾	25	25	380.0	-	230	280	G 1/8	●	1
QS25E-14D⁽¹⁾	25	25	430.0	-	280	330	G 1/8	●	1
QS32A-7D	32	32	323.0	190	120	192	G 3/8	●	1
QS32A-10D	32	32	419.0	320	192	288	G 3/8	●	1
QS32E-12D⁽¹⁾	32	32	480.0	-	288	352	G 1/4	●	1
QS32E-14D⁽¹⁾	32	32	544.0	-	352	416	G 1/4	●	1
QS40A-7D	40	40	411.0	240	128	251	G 1/2	●	1
QS40A-10D	40	40	531.0	410	248	368	G 1/2	●	1
QS40E-12D⁽¹⁾	40	40	608.0	-	368	448	G 3/8	●	1
QS40E-14D⁽¹⁾	40	40	688.0	-	448	528	G 3/8	●	1
QS50A-7D	50	40	523.0	305	168	318	G 1/2	●	2
QS50A-10D	50	40	673.0	520	318	468	G 1/2	●	2
QS50E-12D⁽¹⁾	50	40	768.0	-	468	568	G 1/2	●	2
QS50E-14D⁽¹⁾	50	40	868.0	-	568	668	G 1/2	●	2
QS60A-7D	60	40	633.0	380	208	388	G 3/4	●	2
QS60A-10D	60	40	813.0	630	388	568	G 3/4	●	2
QS60E-12D⁽¹⁾	60	40	920.0	-	588	688	G 3/4	●	2
QS60E-14D⁽¹⁾	60	40	1040.0	-	688	808	G 3/4	●	2

- ⁽¹⁾ Carbide shank
- OHN: Minimum overhang
- OHX: Maximum overhang
- OAL_2: Minimum length after shortening(only steel bar can be shortened)
- Refer to A221 page for C-Adapter connection

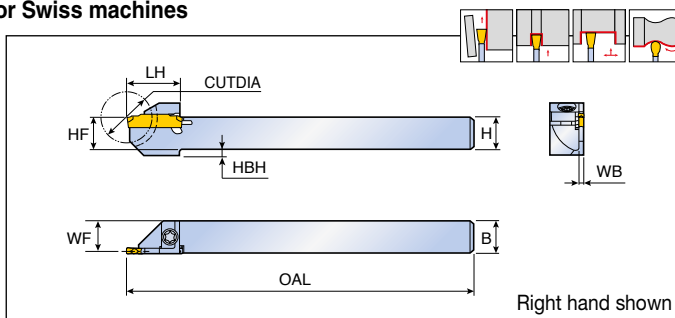
Spare parts

Designation	Screw	Wrench		
				
QS16	SH M3x0.5X10	L-W 2.5		
QS20	SH M3.5x0.6X10	L-W 2.5		
QS25	SH M4x0.7X12	L-W 3		
QS32	SH M5x0.8X12	L-W 4		
QS40/50/60	SH M6x1X16	L-W 5		

TTER/L-SH



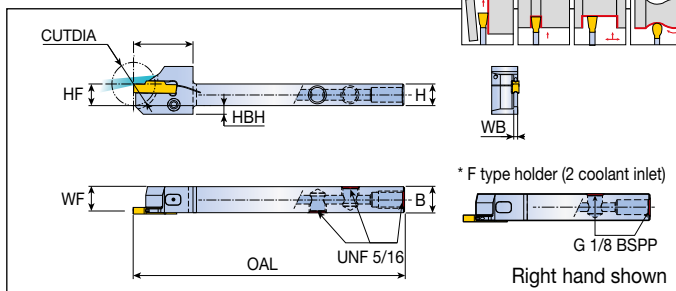
Parting and grooving holder for Swiss machines

[illegible]

► *: TDJ 1.4 insert only

Spare parts

Designation	Screw	Wrench		
				
TTER/L- SH	TS 40A115I	T 15		

[illegible]

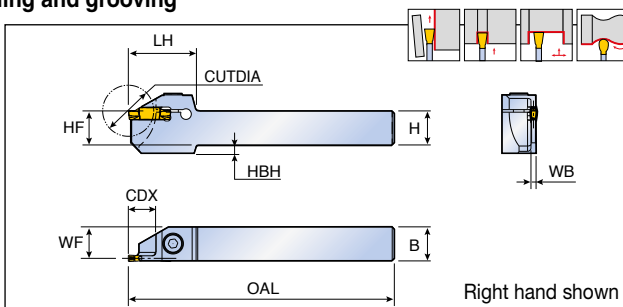
Spare parts

Designation	Pin	Clamping screw	Pin plug	Inlet plug	Wrench	
						
TTER/L...SH-TB	PIN-SH-TB-L21	SS M5-24145	SS M5x3.5 ULTEM 2300	PLG 5/16 UNF	L-W 2.5F	L-W 5/32

TTER/L-D



Reinforced holders for external turning and grooving

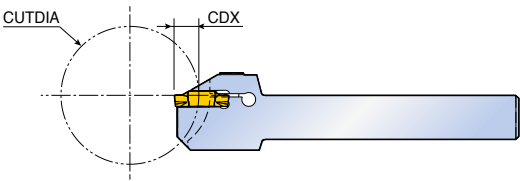
[illegible]

► *: TDJ 1.4 insert only

Spare parts

Designation	Screw	Wrench		
				
TTER/L-D	SH M5x0.8x16	L-W 4		

Machining depth for diameter of workpiece

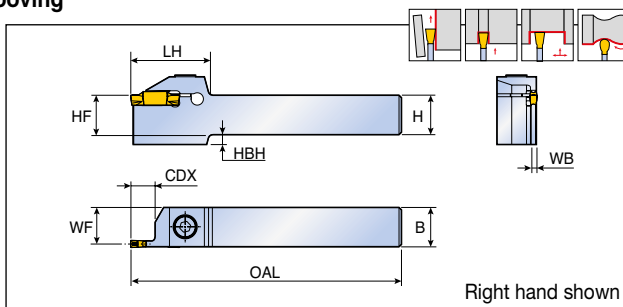


Designation		CDX												
		1	2	3	4	5	6	7	8	9	10	11	12	13
TTER/L 1010-1.4T15-D40	CUTDIA	N.L.										269	120	79
1212-1.4T15-D40		N.L.										269	120	79
1616-1.4T20-D45		N.L.												432
2020-1.4T20-D45		N.L.												432
1010-2T15-D40		N.L.										269	120	79
1212-2T15-D40		N.L.										269	120	79
1616-2T20-D45		N.L.												432
2020-2T20-D45		N.L.												432
2525-2T20-D45		N.L.									1468	339	193	136
1212-3T15-D40		N.L.										269	120	79
1616-3T20-D45		N.L.												432
2020-3T20-D45		N.L.												432
2525-3T20-D45		N.L.									1468	339	193	136
2525-3T25-D60		N.L.												

► N.L.: No limit

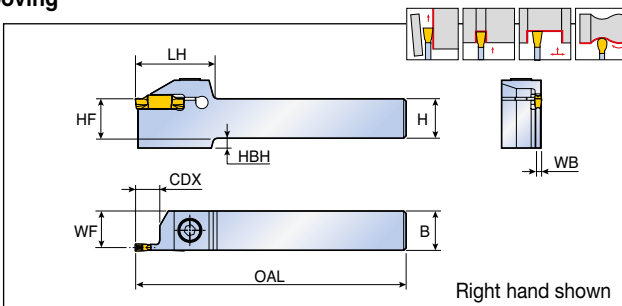
Designation		CDX													
		14	15	16	17	18	19	20	21	22	23	24	25		
TTER/L 1010-1.4T15-D40 1212-1.4T15-D40 1616-1.4T20-D45 2020-1.4T20-D45 1010-2T15-D40 1212-2T15-D40 1616-2T20-D45 2020-2T20-D45 2525-2T20-D45 1212-3T15-D40 1616-3T20-D45 2020-3T20-D45 2525-3T20-D45 2525-3T25-D60	CUTDIA	59	40												
		59	40												
		193	125	94	76	64	57	45							
		193	125	94	76	64	57	45							
		59	40												
		59	40												
		193	125	94	76	64	57	45							
		193	125	94	76	64	57	45							
		87	75	67	60	56	52	45							
		59	40												
		193	125	94	76	64	57	45							
		193	125	94	76	64	57	45							
		87	75	67	60	56	52	45							
					1810	418	237	167	130	107	91	81	73	60	

Holders for external turning and grooving



Designation	Insert seat size	Dimension (mm)								Insert
		H(HF)	B	OAL	LH	WF	WB	HBH	CDX	
TTER/L 1616-2T08	2	16	16	110	30.0	15.1	1.8	4	8	TDC/J/V/UF
2020-2T08	2	20	20	125	30.0	19.1	1.8	-	8	TSC/J
2525-2T08	2	25	25	150	30.0	24.1	1.8	-	8	TDCT/XU/XY/XT/T
1616-2	2	16	16	110	32.0	15.1	1.8	4	12	 B129-B140
2020-2	2	20	20	125	32.0	19.1	1.8	-	12	
2525-2	2	25	25	150	32.0	24.1	1.8	-	12	
1616-2T17	2	16	16	110	37.0	15.1	1.8	4	17	
2020-2T17	2	20	20	125	37.0	19.1	1.8	-	17	
2525-2T17	2	25	25	150	37.0	24.1	1.8	-	17	
TTER/L 1616-3T09	3	16	16	110	30.0	14.8	2.4	4	9	
2020-3T09	3	20	20	125	30.0	18.8	2.4	-	9	
2525-3T09	3	25	25	150	30.0	23.8	2.4	-	9	
1616-3	3	16	16	110	32.0	14.8	2.4	4	12	
2020-3	3	20	20	125	32.0	18.8	2.4	-	12	
2525-3	3	25	25	150	32.0	23.8	2.4	-	12	
1616-3T20	3	16	16	110	38.5	14.8	2.4	-	20	
2020-3T20	3	20	20	125	38.5	18.8	2.4	-	20	
2525-3T20	3	25	25	150	38.5	23.8	2.4	-	20	
2525-3T25	3	25	25	150	44.5	23.8	2.4	-	25	
3232-3T20	3	32	32	170	38.5	30.8	2.4	-	20	
TTER/L 1616-4T10	4	16	16	110	32.0	14.5	3.0	4	10	
2020-4T10	4	20	20	125	32.0	18.5	3.0	-	10	
2525-4T10	4	25	25	150	32.0	23.5	3.0	-	10	
1616-4	4	16	16	110	33.0	14.5	3.0	4	15	
2020-4	4	20	20	125	33.0	18.5	3.0	-	15	
2525-4	4	25	25	150	33.0	23.5	3.0	-	15	
1616-4T25	4	16	16	110	45.0	14.5	3.0	-	25	
2020-4T25	4	20	20	125	45.0	18.5	3.0	-	25	
2525-4T25	4	25	25	150	45.0	23.5	3.0	-	25	
2525-4T30	4	25	25	150	51.0	23.5	3.0	-	30	
3232-4T25	4	32	32	170	45.0	30.5	3.0	-	25	
TTER/L 2020-5T12	5	20	20	125	35.0	18.1	3.9	-	12	
2525-5T12	5	25	25	150	35.0	23.1	3.9	-	12	
2020-5	5	20	20	125	37.0	18.1	3.9	-	20	
2525-5	5	25	25	150	37.0	23.1	3.9	-	20	
2525-5T32	5	25	25	150	56.0	23.0	3.9	-	32	
3232-5T20	5	32	32	170	39.0	30.0	3.9	-	20	
3232-5T32	5	32	32	170	56.0	30.0	3.9	-	32	

Holders for external turning and grooving



Designation	Insert seat size	Dimension (mm)								Insert
		H(HF)	B	OAL	LH	WF	WB	HBH	CDX	
TTER/L 2020-6T12	6	20	20	125	37	17.6	4.9	-	12	TDC/J/V/UF
2525-6T12	6	25	25	150	37	22.6	4.9	7	12	TSC/J
2020-6	6	20	20	125	41	17.6	4.9	-	20	TDCT/XU/XY/XT/T
2525-6	6	25	25	150	41	22.6	4.9	7	20	B129-B140
2525-6T32	6	25	25	150	56	22.5	4.9	7	32	
3232-6T20	6	32	32	170	41	29.5	4.9	-	20	
3232-6T25	6	32	32	170	46	29.5	4.9	-	25	
3232-6T32	6	32	32	170	56	29.5	4.9	-	32	
TTER/L 2525-8T16	8	25	25	150	40	22.1	5.9	7	16	
2525-8	8	25	25	150	47	22.1	5.9	7	25	
3232-8	8	32	32	170	47	29.1	5.9	-	25	
2525-8T36	8	25	25	150	60	22.1	5.9	7	36	
3232-8T36	8	32	32	170	60	29.1	5.9	-	36	
TTER/L 2525-10T25	10	25	25	150	50	21.1	7.9	7	25	
3232-10T25	10	32	32	170	50	28.1	7.9	-	25	
4040-10T25	10	40	40	200	50	36.1	7.9	-	25	

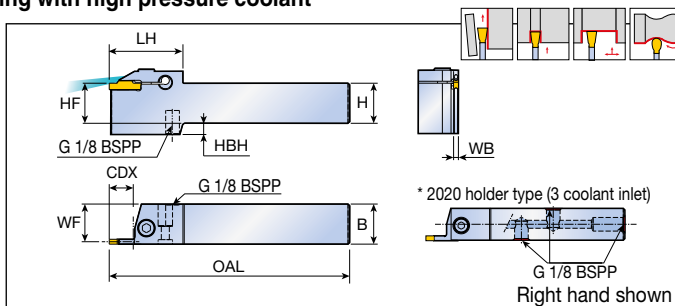
Spare parts

Designation	Screw	Wrench		
				
TTER/L 1616-2/3	SH M5x0.8x16	L-W 4		
TTER/L 2020-2/3	SH M5x0.8x20	L-W 4		
TTER/L 2525-2/3	SH M5x0.8x25	L-W 4		
TTER/L 3232-3	SH M5x0.8x25	L-W 4		
TTER/L 1616-4/5	SH M6x1x16	L-W 5		
TTER/L 2020-4/5	SH M6x1x20	L-W 5		
TTER/L 2525-4/5	SH M6x1x25	L-W 5		
TTER/L 3232-4/5	SH M6x1x25	L-W 5		
TTER/L 2020-6	SH M8x1.25x20	L-W 6		
TTER/L 2525-6/8	SH M8x1.25x25	L-W 6		
TTER/L 3232-6/8/10	SH M8x1.25x25	L-W 6		
TTER/L 4040-10	SH M8x1.25x25	L-W 6		

TTER/L-TB



Holders for turning and grooving with high pressure coolant

[illegible]

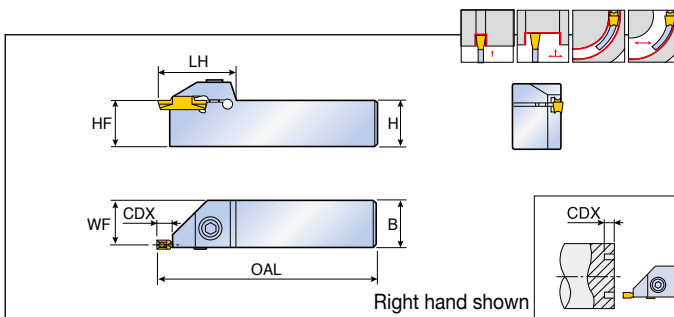
► Please refer to B122 page for COOL-BURST accessories

Spare parts

Designation	Screw	Plug		Wrench
				
TTER/L 2020-2/3-TB	SH M5x0.8x20	PLG G1/8-L6.5	-	L-W 4, L-W 5
TTER/L 2020-4-TB	SH M6x1.0x20	PLG G1/8-L6.5	-	L-W 5
TTER/L 2525-2/3-TB	SH M5x0.8x20	-	PLG G1/8-T8.0-L12.3	L-W 4, L-W 5
TTER/L 2525-4/5-TB	SH M6x1.0x20	-	PLG G1/8-T8.0-L12.3	L-W 5
TTER/L 2525-6/8-TB	SH M8x1.25x20	-	PLG G1/8-T8.0-L12.3	L-W 5, L-W 6



Designation	Screw	Wrench		
TTSER/L	TS 40097I	T 15		

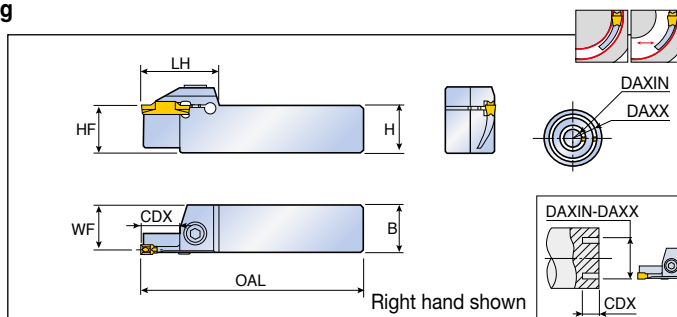
[illegible]

- ▶ External turning & grooving is available depending on the insert type
- ▶ Please check insert min. dia for face grooving **B83** page

Spare parts

Designation	Screw	Wrench		
				
TGFR/L 1616	SH M6x1x16	L-W 5		
TGFR/L 2020	SH M6x1x20	L-W 5		
TGFR/L 2525	SH M6x1x25	L-W 5		

Holders for deep face grooving



Designation	Insert seat size	Dimension (mm)								Insert
		H(HF)	B	OAL	LH	WF	CDX	DAXIN	DAXX	
TTFR/L 25-30-3	3	25	25	150	32	24.0	10	24	35	TDC/J/V/UF
25-35-3	3	25	25	150	32	24.0	10	29	40	TSC/J
25-40-3	3	25	25	150	32	24.0	10	34	50	TDCT/XU/XY/XT/T
25-50-3	3	25	25	150	32	24.0	15	44	60	TDFT
25-60-3	3	25	25	150	32	24.0	15	54	85	B129-B141
25-30-4	4	25	25	150	33	23.6	12	22	40	
25-40-4	4	25	25	150	33	23.6	15	32	50	
25-50-4	4	25	25	150	33	23.6	15	42	60	
25-60-4	4	25	25	150	33	23.6	15	52	85	
25-60-5	5	25	25	150	41	23.1	20	50	80	
25-80-5	5	25	25	150	41	23.1	20	70	110	
25-110-5	5	25	25	150	41	23.1	20	110	150	
25-150-5	5	25	25	150	41	23.1	20	140	200	
25-60-6	6	25	25	150	41	22.6	20	48	85	
25-85-6	6	25	25	150	41	22.6	20	73	150	
25-150-6	6	25	25	150	41	22.6	20	138	250	
25-250-6	6	25	25	150	41	22.6	20	250	N.L.	

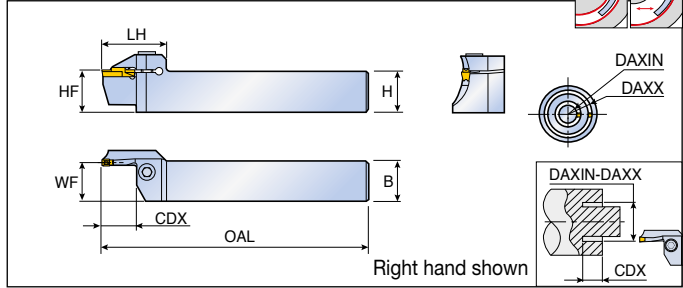
► Please check insert min. dia for face grooving B83 page

► N.L.: No limit

Spare parts

Designation	Screw	Wrench		
TTFR/L...-3	SH M5x0.8x25	L-W 4		
TTFR/L...-4	SH M6x1x25	L-W 5		
TTFR/L...-5	SH M8X1.25X25	L-W 5		
TTFR/L...-6	SH M8X1.25X25	L-W 5		

Holders for deep face grooving along shaft

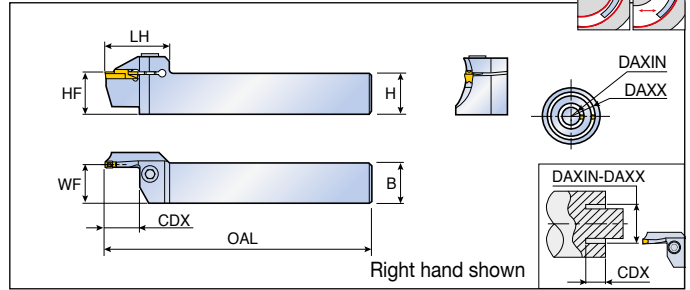


Designation	Insert seat size	Dimension (mm)								Insert
		H(HF)	B	OAL	LH	WF	CDX	DAXIN	DAXX	
TTFR/L 20-21-30-3T10 RN	3	20	20	140	31	19.0	10	21	30	TDC/J/V/UF
20-24-35-3T10 RN	3	20	20	140	31	19.0	10	24	35	TSC/J
20-29-40-3T10 RN	3	20	20	140	31	19.0	10	29	40	TDCT/XU/XY/XT/T
20-34-50-3T10 RN	3	20	20	140	31	19.0	10	34	50	TDFT
20-44-70-3T15 RN	3	20	20	140	35	19.0	15	44	70	B129-B141
20-64-100-3T15 RN	3	20	20	140	35	19.0	15	64	100	
25-30-3 RN	3	25	25	150	35	24.0	10	24	35	
25-35-3 RN	3	25	25	150	35	24.0	10	29	40	
25-40-3 RN	3	25	25	150	35	24.0	10	34	50	
25-50-3 RN	3	25	25	150	35	24.0	15	44	70	
25-70-3 RN	3	25	25	150	35	24.0	15	64	100	
20-19-30-4T10 RN	4	20	20	140	31	18.6	10	19	30	
20-22-36-4T10 RN	4	20	20	140	31	18.6	10	22	36	
20-28-42-4T16 RN	4	20	20	140	36	18.6	16	28	42	
20-34-50-4T16 RN	4	20	20	140	36	18.6	16	34	50	
20-42-70-4T16 RN	4	20	20	140	36	18.6	16	42	70	
20-62-120-4T16 RN	4	20	20	140	36	18.6	16	62	120	
20-112-200-4T16 RN	4	20	20	140	36	18.6	16	112	200	
25-30-4 RN	4	25	25	150	35	23.6	10	22	36	
25-36-4 RN	4	25	25	150	39	23.6	20	28	42	
25-42-4 RN	4	25	25	150	39	23.6	20	34	50	
25-50-4 RN	4	25	25	150	39	23.6	20	42	70	
25-70-4 RN	4	25	25	150	39	23.6	20	62	120	
25-120-4 RN	4	25	25	150	39	23.6	20	112	200	
25-200-4 RN	4	25	25	150	39	23.6	20	200	N.L.	
25-60-5T15 RN	5	25	25	150	41	23.1	15	50	80	
25-60-5 RN	5	25	25	150	49	23.1	25	50	80	
25-80-5T15 RN	5	25	25	150	41	23.1	15	70	110	
25-80-5 RN	5	25	25	150	49	23.1	25	70	110	
25-110-5 RN	5	25	25	150	49	23.1	25	100	150	
25-150-5 RN	5	25	25	150	49	23.1	25	140	200	
25-200-5 RN	5	25	25	150	49	23.1	25	200	N.L.	

► Please check insert min. dia for face grooving B83 page
 ► N.L.: No limit

TTFR/L-RN

Holders for deep face grooving along shaft



Designation	Insert seat size	Dimension (mm)								Insert
		H(HF)	B	OAL	LH	WF	CDX	DAXIN	DAXX	
TTFR/L 25-60-6 RN	6	25	25	150	49	22.6	25	48	70	TDC/J/V/UF
25-70-6 RN	6	25	25	150	49	22.6	25	58	100	TSC/J
25-100-6 RN	6	25	25	150	49	22.6	25	88	180	TDCT/XU/XY/XT/T
25-180-6 RN	6	25	25	150	49	22.6	25	168	400	TDFT
25-400-6 RN	6	25	25	150	49	22.6	25	400	N.L.	B129-B141

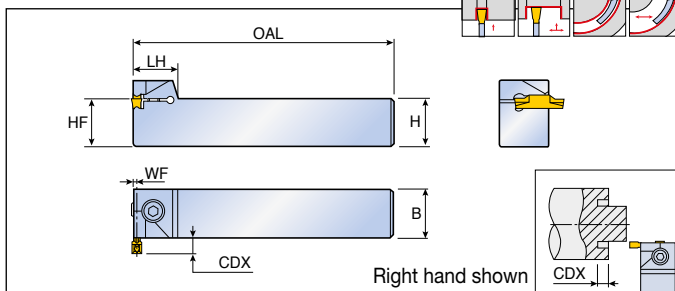
- Please check insert min. dia for face grooving B83 page
- N.L.: No limit

Insert initial min.Dia (Dmin) for face grooving

Machining	Insert	Size (mm)	Min. dia. (mm)	Insert	Size (mm)	Min. dia. (mm)
Facing Min. dia. of face machining 	TDJ/C TDUF / TDV	3	54	TDT RU TDT RS	3	41
		4	34		4	36
		5	49		5	54
		6	46		6	54
	TDT	3	44	TDCT TDXU TDXT TDXY TDFT	3	18
		4	42		4	18
		5	50		5	20
		6	48		6	18

Spare parts

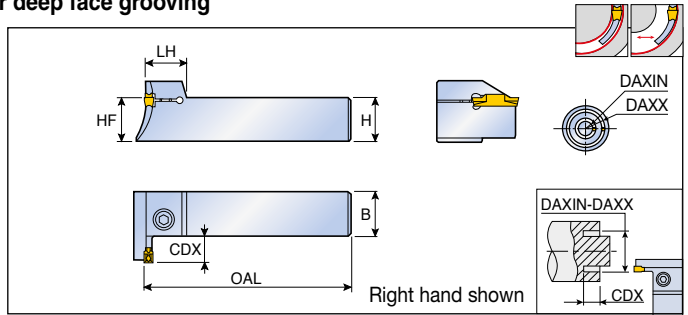
Designation	Screw	Wrench		
TTFR/L 20...RN	SH M6x1x20	L-W 5		
TTFR/L 25...3/4 RN	SH M6x1x25	L-W 5		
TTFR/L 25...5/6 RN	SH M8x1.25x25	L-W 6		



- ▶ External Turning & Grooving is available depending on the insert
- ▶ Please check insert min. dia for face grooving **B83** page

Designation	Screw	Wrench		
TGFPR/L 2020	SH M6x1x20	L-W 5		
TGFPR/L 2525	SH M6x1x25	L-W 5		
TGFPR/L 2525	SH M6x1x25	L-W 5		

Perpendicular type holders for deep face grooving



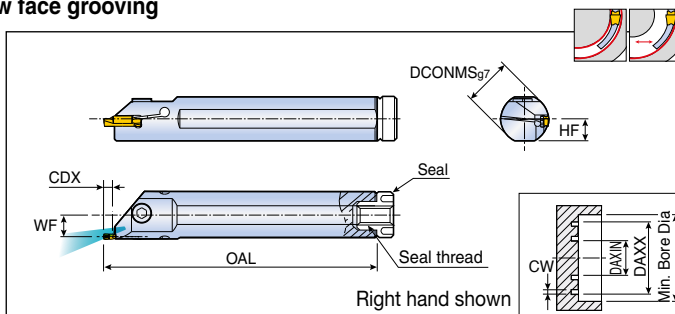
Designation	Insert seat size	Dimension (mm)							Insert
		H(HF)	B	OAL	LH	CDX	DAXIN	DAXX	
TTFPR/L 25-30-3	3	25	25	150	18.0	10	24	35	TDC/J/V/UF
25-35-3	3	25	25	150	18.0	10	29	40	TSC/J
25-40-3	3	25	25	150	18.0	10	34	50	TDCT/XU/XY/XT/T
25-50-3	3	25	25	150	18.0	15	44	60	TDFT
25-60-3	3	25	25	150	18.0	15	54	85	B129-B141
25-30-4	4	25	25	150	18.5	12	22	40	
25-40-4	4	25	25	150	18.5	15	32	50	
25-50-4	4	25	25	150	18.5	15	42	60	
25-60-4	4	25	25	150	18.5	15	52	85	
25-60-5	5	25	25	150	22.0	20	50	80	
25-80-5	5	25	25	150	22.0	20	70	110	
25-110-5	5	25	25	150	22.0	20	100	150	
25-150-5	5	25	25	150	22.0	20	140	200	
25-200-5	5	25	25	150	22.0	20	200	N.L.	
25-60-6	6	25	25	150	22.0	20	48	85	
25-85-6	6	25	25	150	22.0	20	73	150	
25-150-6	6	25	25	150	22.0	20	138	250	
25-250-6	6	25	25	150	22.0	20	250	N.L.	

- ▶ Please check insert min. dia for face grooving B83 page
- ▶ N.L.: No limit

Spare parts

Designation	Screw	Wrench		
TTFPR/L...-3	SH M5x0.8x25	L-W 4		
TTFPR/L...-4	SH M6x1x25	L-W 5		
TTFPR/L...-5	SH M8x1.25x25	L-W 6		
TTFPR/L...-6	SH M8x1.25x25	L-W 6		

Internal boring bars for shallow face grooving

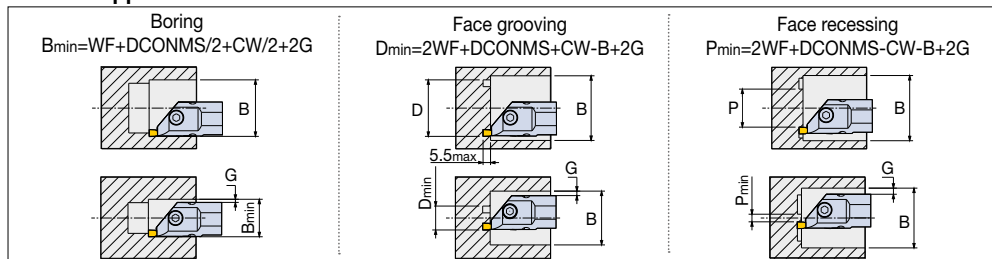


Designation	Insert seat size	Dimension (mm)					Insert
		DCONMS	OAL	WF	HF	CDX	
TGIFR/L 25-4C-T5.5	3, 4	25	200	11.3	11.5	5.5	TDC/J/V/UF
32-4C-T5.5	3, 4	32	250	14.8	15.0	5.5	TSC/J
25-6C-T5.5	5, 6	25	200	10.3	11.5	5.5	TDCT/XU/XY/XT/T
32-6C-T5.5	5, 6	32	250	13.8	15.0	5.5	TDFT
							B129-B141

► Please check insert min. dia for face grooving B83 page

CW	Min. Bore Dia		DAXIN				DAXX
	DCONMS ø25	DCONMS ø32	TDC/J/UF/V	TDFT / TDUX / TDXT	TD	TD-RU/RS	
3	26.3	33.3	54	18	44	41	No limit
4	26.8	33.8	34	18	42	36	
5	26.3	33.3	49	20	50	54	
6	26.8	33.8	46	18	48	54	

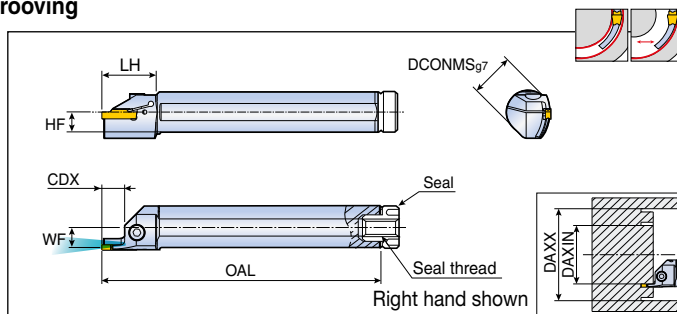
TGIFR/L Application



Spare parts

Designation	Screw	Wrench	Seal	
TGIFR/L 25	SH M6x1x16	L-W 5	PL 25 (R1/8)	
TGIFR/L 32	SH M6x1x16	L-W 5	PL 32 (R1/8)	

Internal boring bars for face grooving

[illegible]

► Please check insert min. dia for face grooving B83 page

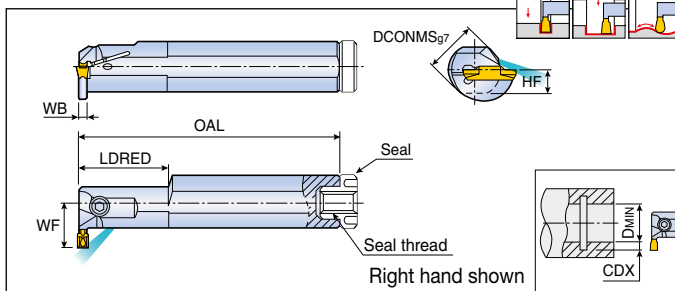
Spare parts

Designation	Screw	Wrench	Seal	
				
TTFIR/L 25	SH M5x0.8x16	L-W 4	PL 25 (R1/8)	
TTFIR/L 32	SH M5x0.8x16	L-W 4	PL 32 (R1/8)	

TTIR/L-C

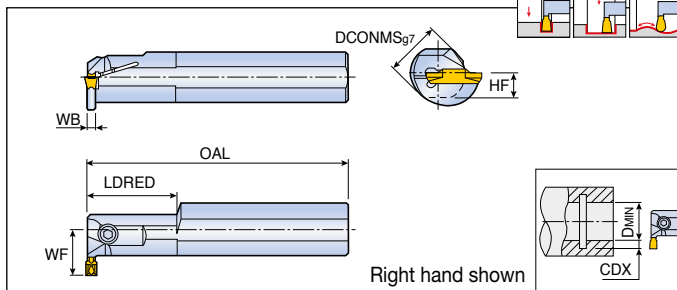


Internal boring bars for turning and grooving with coolant hole

[illegible]

► Please check insert min. dia for internal grooving B89 page

Internal boring bars for turning and grooving



Designation	Insert seat size	Dimension (mm)								Insert
		DCONMS	OAL	LDRED	WF	HF	WB	CDX	DMIN	
TTIR/L 16-2	2	16	125	-	16.5	7.5	1.8	8.5	25	TDC/J/V/UF
20-2	2	20	160	40	15.8	9.0	1.6	6.0	25	TSC/J
25-2	2	25	200	40	17.5	11.5	1.6	5.0	25	TDCT/XU/XY/XT/T
32-2	2	32	250	60	20.8	14.0	1.5	4.7	31	TDIT
20-3	3	20	160	40	15.8	9.0	2.1	6.0	25	B129-B142
25-3	3	25	200	40	17.5	11.5	2.1	5.1	25	
32-3	3	32	250	60	20.8	14.0	2.1	4.7	31	
20-4	4	20	160	40	15.8	9.0	2.9	6.0	25	
25-4	4	25	200	40	17.5	11.5	2.9	5.2	25	
32-4	4	32	250	60	20.8	14.0	2.9	4.7	31	

► Without "C" on the description: non-coolant hole type

► Please check insert min. dia for internal grooving B89 page

Machining	TDJ/C/UF/V		TDT		TDT RU/RS		TDCT/TDXU/TDIT/TDXT/TDXV	
	Size (mm)	Min. dia. (mm)	Size (mm)	Min. dia. (mm)	Size (mm)	Min. dia. (mm)	Size (mm)	Min. dia. (mm)
Internal grooving Min. dia. of internal machining	2	40	3	40	2	41	2	24
	3	50	4	40	3	38	3	24
	4	50	5	50	4	38	4	21
	5	60	6	50	5	43	5	30
	6	60	8	62	6	46	6	31
	8	70			8	56	8	33

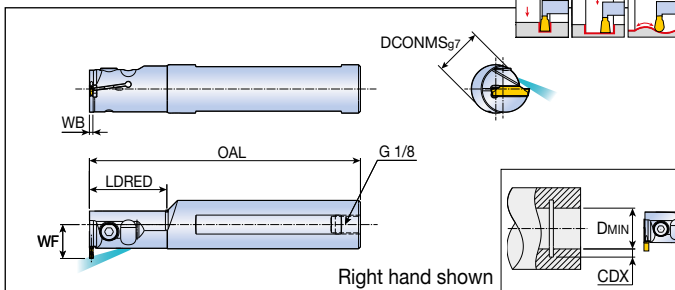
Spare parts

Designation	Screw	Wrench	Seal*	
				
TTIR/L 16-2	SH M5x0.8x10	L-W 4	PL 16 (M6)	
TTIR/L 20-2/3/4	SH M5x0.8x12	L-W 4	PL 20 (M6)	
TTIR/L 25-2/3/4	SH M5x0.8x16	L-W 4	PL 25 (R1/8)	
TTIR/L 32-2/3/4	SH M5x0.8x16	L-W 4	PL 32 (R1/8)	
TTIR/L 40-3/4	SH M5x0.8x16	L-W 4	PL 40 (R1/8)	
TTIR/L 50-4	SH M5x0.8x20	L-W 4	PL 40 (R1/8)	
TTIR/L 25-5/6	SH M6x1x16	L-W 5	PL 25 (R1/8)	
TTIR/L 32-5/6	SH M6x1x20	L-W 5	PL 32 (R1/8)	
TTIR/L 40/50-5/6	SH M6x1x25	L-W 5	PL 40 (R1/8)	

► *: For through coolant type only

TTIR/L-TB

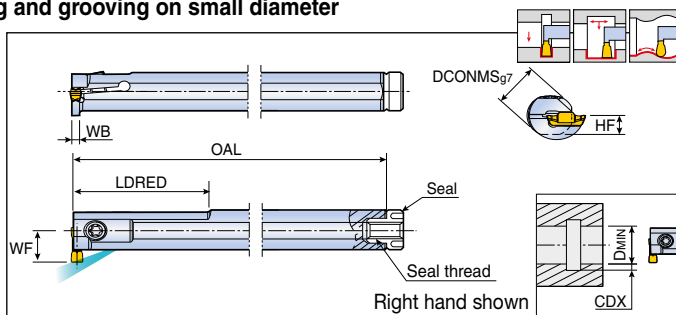
Internal boring bars for turning and grooving with high pressure coolant

[illegible]

- ▶ Please refer to B122 page for COOL-BURST accessories
- ▶ Please check insert min. dia for internal grooving B89 page

Spare parts

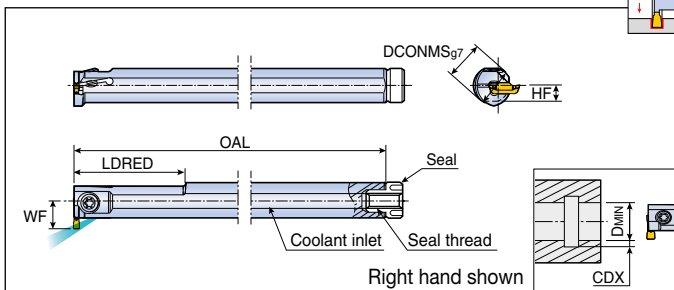
Designation	Screw	Wrench		
				
TTIR/L-20-TB	SH M5X0.8X12	L-W 4		
TTIR/L-25/32-TB	SH M5X0.8X16	L-W 4		

A close-up photograph of a metal tool, possibly a probe or a stylus, with a yellow tip. The tool is oriented diagonally from the bottom left towards the top right. The metal part is silver-colored and has a smooth, polished finish. The yellow tip is small and rectangular. The background is a plain, light gray.

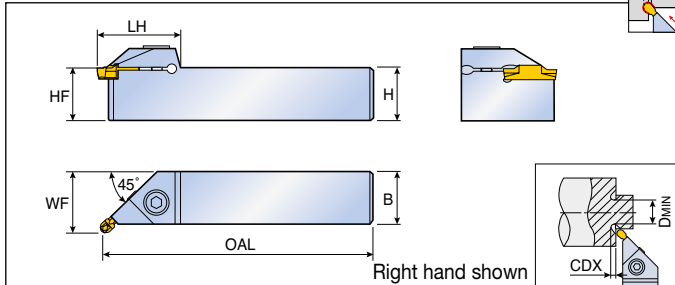
Spare parts



TaeguTec
Member IMC Group

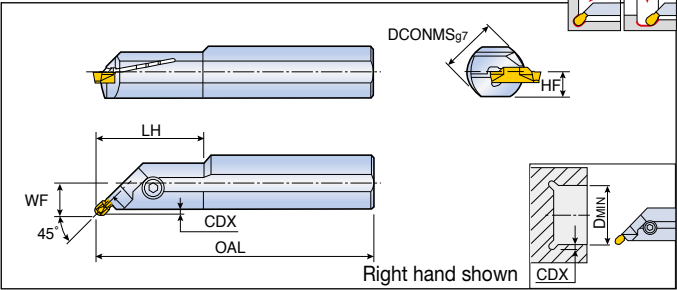
[illegible]

Designation	Screw	Wrench	Seal	
TGSIR/L 10/12	TS 40093I	T 15	-	
TGSIR/L 16	TS 40093I	T 15	PL 16 (M6)	

[illegible]

Designation	Screw	Wrench		
				
TGEUR/L 1616-3	SH M5x0.8x16	L-W 4		
TGEUR/L 2020-3	SH M5x0.8x20	L-W 4		
TGEUR/L 2525-3	SH M5x0.8x25	L-W 4		
TGEUR/L 1616-4	SH M6x1x16	L-W 5		
TGEUR/L 2020-4	SH M6x1x20	L-W 5		
TGEUR/L 2525-4/6	SH M6x1x25	L-W 5		

Internal boring bars for undercutting



Designation	Insert seat size	Dimension (mm)							Insert
		DCONMS	OAL	LH	WF	HF	CDX	DMIN	
TGIUR/L 20-3	3	20	160	-	12.8	9.5	2.8	38	TDT(Full R)
25-3	3	25	200	40	14.8	11.5	2.8	38	TDIT(Full R)
20-4	4	20	160	-	12.9	9.5	2.8	38	TDT-RU/RS
25-4	4	25	200	40	14.9	11.5	2.8	38	 B139-B140
25-6	5, 6	25	200	-	15.2	11.5	2.8	46	

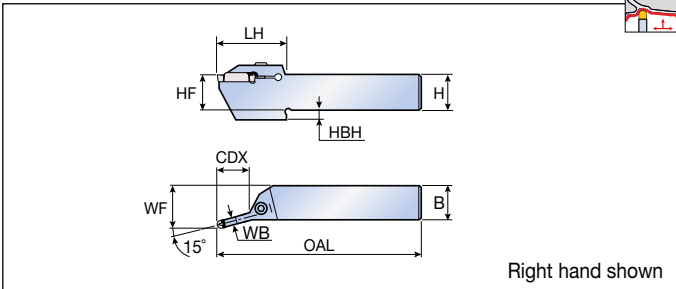
Spare parts

Designation	Screw	Wrench		
				
TGIUR/L 20-3	SH M5x0.8x12	L-W 4		
TGIUR/L 20-4	SH M5x0.8x16	L-W 4		
TGIUR/L 25-3/4	SH M5x0.8x16	L-W 4		
TGIUR/L 25-6	SH M6x1x16	L-W 5		

TTER/L-15A



Holders for external aluminum wheel machining



Designation	Insert seat size	Dimension (mm)									Insert
		H	HF	B	OAL	LH	WF	WB	HBH	CDX	
TTER/L 2525-6-15A	6	25	25	25	150	51	30	4.90	7	25.0	TDA/TSA  B145
2525-8-15A	8	25	25	25	150	55	30	5.90	7	30.0	

Spare parts

Designation	Screw	Wrench		
				
TTER/L	SH M6x1x25	L-W 5		

TGIUR/L-15A



Internal boring bars for aluminum wheel machining

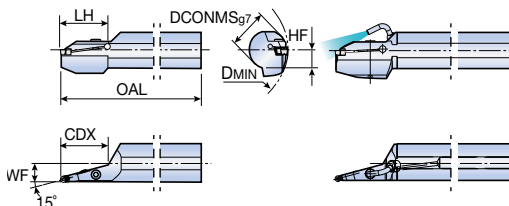


Fig. 1

Fig.2

Right hand shown

[illegible]

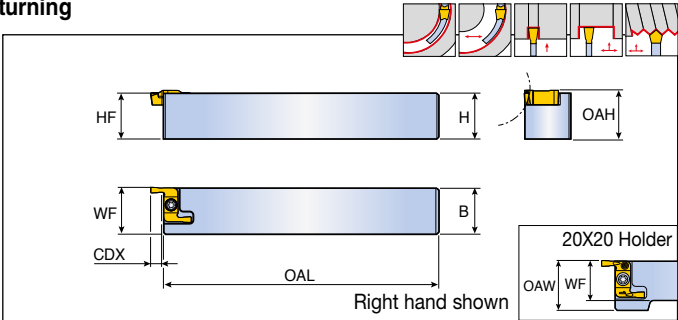
Spare parts

Designation	Screw	Wrench	Seal	Pipe	Nozzle
					
TGIUR/L	SH M6x1x25	L-W 5	PL 40 (R1/8)	NZP 5	NZ 125

TXFR/L



Holders for face grooving and turning



Designation	Dimension (mm)								Insert
	H	HF	B	OAL	OAH	WF	CDX	OAW	
TXFR/L 2020	20	20	20	125	21.5	20.5	6	25.5	TDF(G)X ... B146
2525	25	25	25	150	26.5	25.5	6	25.5	

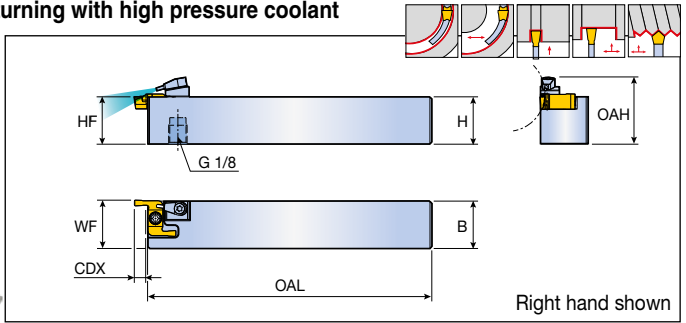
Spare parts

Designation	Screw	Wrench		
TXFR	TS 40E113I/HG	L-T15		
TXFL	TS 40E113IL/HG	L-T15		

TXFR/L-TB



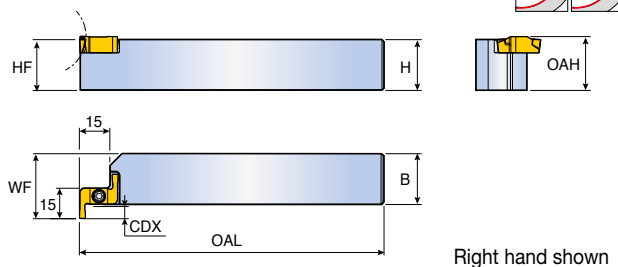
Holders for face grooving and turning with high pressure coolant

[illegible]

► Please refer to B122 page for COOL-BURST accessories

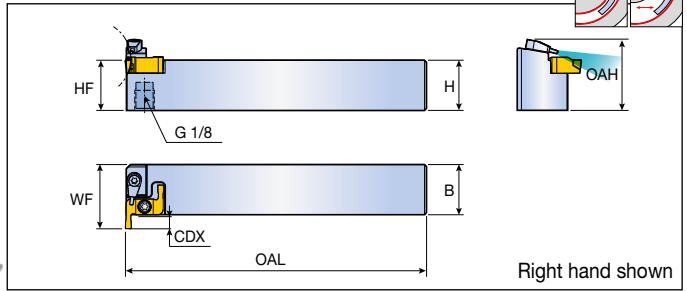
Spare parts

Designation	Screw	Wrench	Cooling unit	
				
TXFR-TB	TS 40E113I/HG	L-T15	S-CU-TB	
TXFL-TB	TS 40E113IL/HG	L-T15	S-CU-TB	

[illegible]

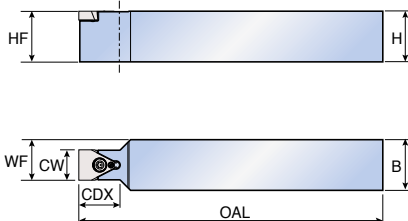
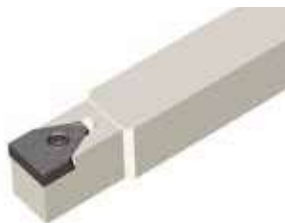
Designation	Screw	Wrench		
TXFPR	TS 40E113I/HG	L-T15		
TXFPL	TS 40E113IL/HG	L-T15		

FACE RUSH



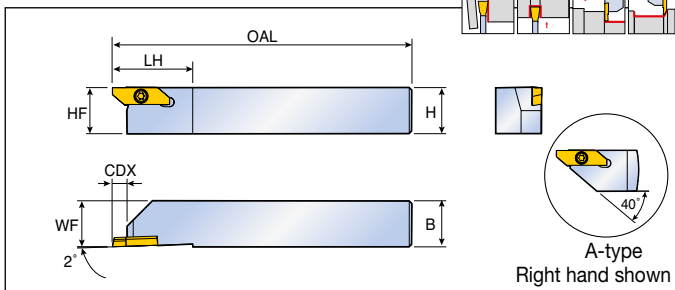
► Please refer to B122 page for COOL-BURST accessories

Designation	Screw	Wrench	Cooling unit	
TXFPR-TB	TS 40E113/HG	L-T15	S-CU-TB	
TXFPL-TB	TS 40E113IL/HG	L-T15	S-CU-TB	

[illegible]

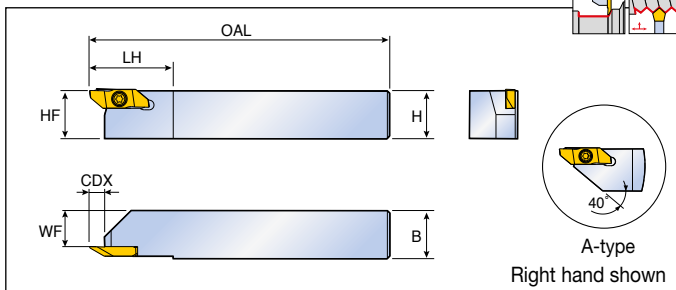
Spare parts

Designation	Screw	Wrench		
				
TTLEN ...K10/K15/M10/M15	TS 40B100I	T 15		
TTLEN ...K20/M20/P20	TS 45120I	T 20		
TTLEN ...K25/M25/P25	TS 45120I	T 20		

[illegible]

Spare parts

Designation	Screw	Wrench		
				
TTVER/L	CSTB-4SD	T 8		

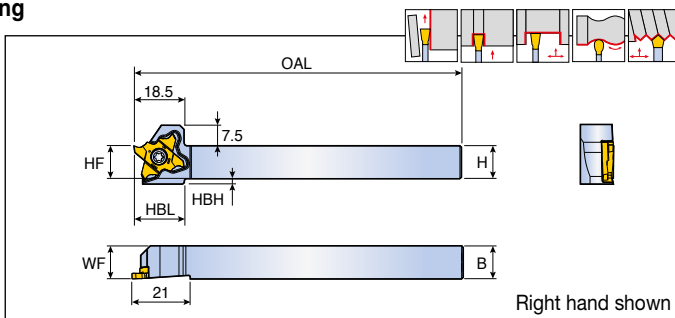
[illegible]

Spare parts

Designation	Screw	Wrench		
				
TTVBR/L	CSTB-4SD	T 8		

TQHR/L-20

Holders for parting and grooving

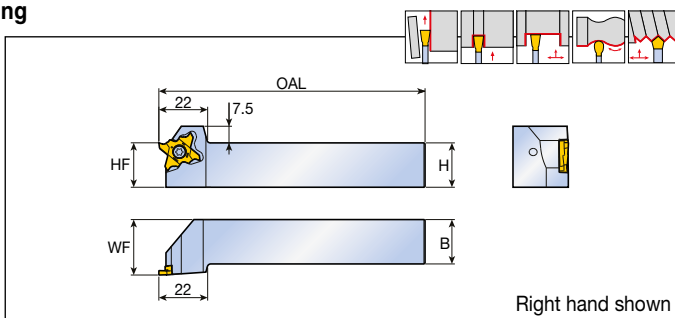


Designation	Dimension (mm)							Insert
	H	HF	B	WF	OAL	HL	HBH	
TQHR/L 10-20	10	10	10	10	120	18.5	4	TQ... 20
12-20	12	12	12	12	120	18.5	2	B149-B150
16-20	16	16	16	16	120	-	-	
20-20	20	20	20	20	120	-	-	
25-20	25	25	25	25.3	135	-	-	

► CDX: Refer to insert dimension

TQHR/L-20-Q

Holders for parting and grooving



Designation	Dimension (mm)					Insert
	H	HF	B	OAL	WF	
TQHR/L 20-20-Q	20	20	20	120	25	TQ... 20
25-20-Q	25	25	25	135	30.3	B149-B150

► CDX: Refer to insert dimension

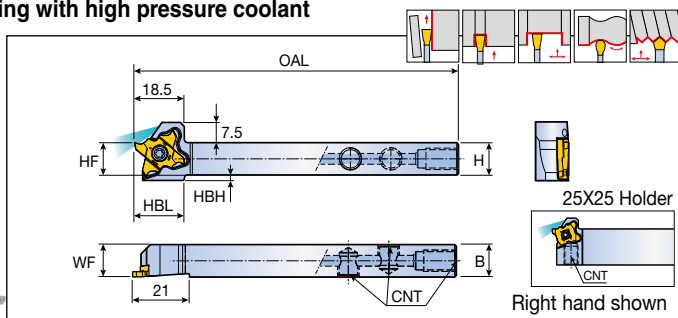
Spare parts

Designation	Screw	Wrench		
TQHR...	TS 40A100L	T-1508/5		
TQHL...	TS 40A100	T-1508/5		

TQHR/L-20-TB



Holders for parting and grooving with high pressure coolant



Designation	Dimension (mm)							CNT	Insert
	H	HF	B	WF	OAL	HBL	HBH		
TQHR/L 12-20-TB	12	12	12	12	120	18.5	2	UNF 5/16	TQ... 20
16-20-TB	16	16	16	16	120	-	-	UNF 5/16	 B149-B150
20-20-TB	20	20	20	20	120	-	-	G 1/8	
25-20-TB	25	25	25	25.3	135	-	-	G 1/8	

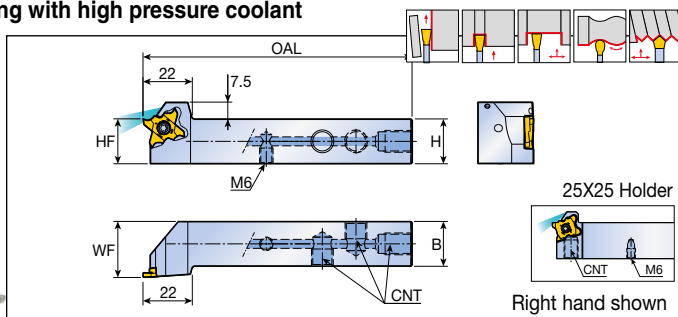
► Please refer to B122 page for COOL-BURST accessories

► CDX: Refer to insert dimension

TQHR/L-20-TB-Q



Holders for parting and grooving with high pressure coolant



Designation	Dimension (mm)						CNT	Insert
	H	HF	B	OAL	WF			
TQHR/L 20-20-TB-Q	20	20	20	120	25		G 1/8	TQ... 20
25-20-TB-Q	25	25	25	135	30.3		G 1/8	B149-B150

► Please refer to B122 page for COOL-BURST accessories

► CDX: Refer to insert dimension

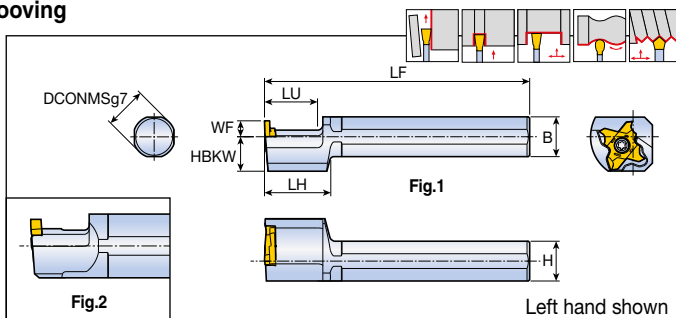
Spare parts

Designation	Screw	Plug 1	Plug 2	Wrench		
TQHR/L 12/16-20-TB						
TQHR/L 20-20-TB	TS 40A100L ⁽¹⁾	PLG 5/16 UNF	-	T-1508/5	L-W 5/32	-
TQHR/L 25-20-TB		PLG G1/8-L6.5	-	T-1508/5	L-W 5	-
TQHR/L-TB-Q	TS 40A100 ⁽²⁾	-	-	T-1508/5	-	-
		PLG G1/8-L6.5	SS M6X1X6-NL	T-1508/5	L-W 5	L-W 3

► ⁽¹⁾ For right holder

► ⁽²⁾ For left holder

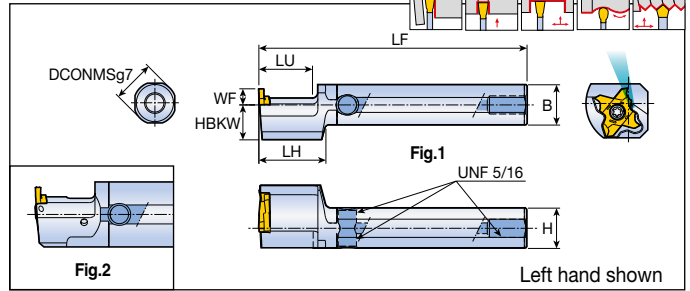
A close-up photograph of a white cable with a metal connector. The connector is silver-colored and has a rectangular shape with a circular opening in the center. The cable is white and appears to be made of a flexible material. The background is a plain, light-colored surface.

[illegible]

- ▶ TQ... 20-R insert for L-hand toolholder
- ▶ CDX: Refer to insert dimension

Designation	Screw	Wrench		
TMS-TQHL	TS 40A100L	T-1508/5		

QUAD RUSH
PARTING & GROUPING



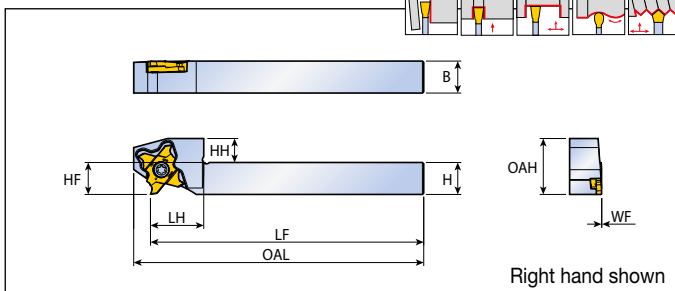
TQ... 20-R

 B149-B150

- CDX: Refer to insert dimension

Designation				
TMS-TQHL-TB	TS 40A100L	T-1508/5	L-W 5/32	PLG 5/16 UNF

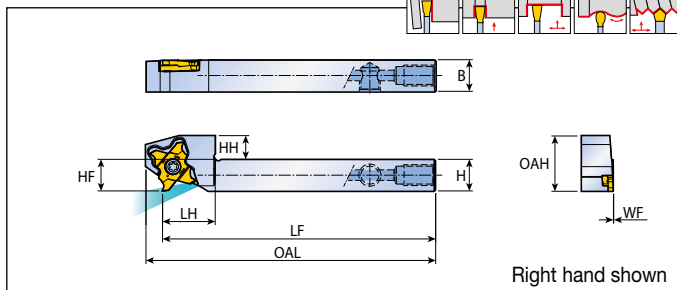
QUAD RUSH



► CDX: Refer to insert dimension

Designation	Screw	Wrench		
TMY-TQHR	TS 40A100L	T-1508/5		

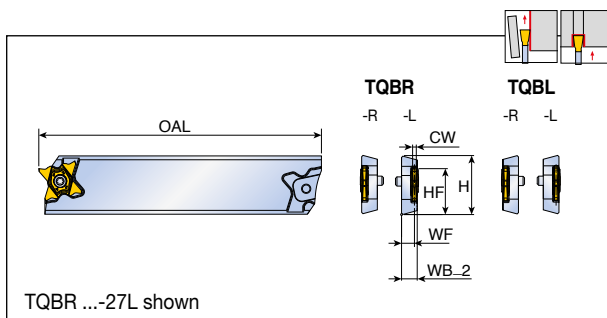
QUAD RUSH



- ▶ Please refer to B122 page for COOL-BURST accessories
- ▶ CDX: Refer to insert dimension

Designation	Screw	Wrench		Plug
TMY-TQHR-TB	TS 40A100L	T-1508/5	L-W 5/32	PLG 5/16 UNF

Blades for parting and grooving

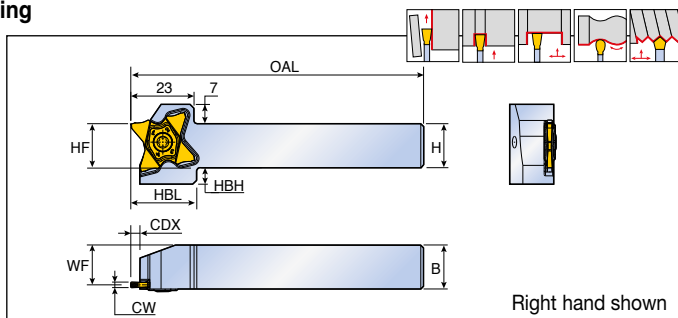
[illegible]

- ▶ *: To the center of inserts up to 3.2mm width
- ▶ CDX: Refer to insert dimension

Spare parts

Designation	Screw	Wrench		
				
TQBR/L 26-27R	TS 50125I	T 10/20		
TQBR/L 26-27L	TS 50125IL	T 10/20		
TQBR/L 32-27R	TS 50125I	T 10/20		
TQBR/L 32-27L	TS 50125IL	T 10/20		

QUAD RUSH
PARTING & SHOPPING

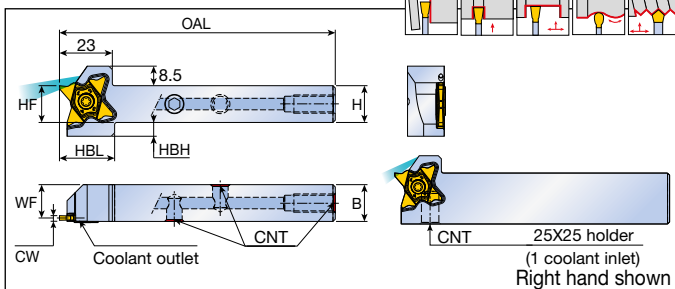


▶ ⁽¹⁾ Only for TQS wider inserts from 5.3mm-8.2mm width
▶ CDX: Refer to insert dimension

Designation	Screw	Wrench		
TQHR/L 10/12/16/20/25	TS 50125I ⁽¹⁾	T 10/20		
	TS 50125IL ⁽²⁾	T 10/20		
TQHR/L 16/20/25-27-8	TS 50170I-IC ⁽¹⁾	T 15		
	TS 50170IL-IC ⁽²⁾	T 15		



QUAD RUSH
PARTIAL & COMPLETE

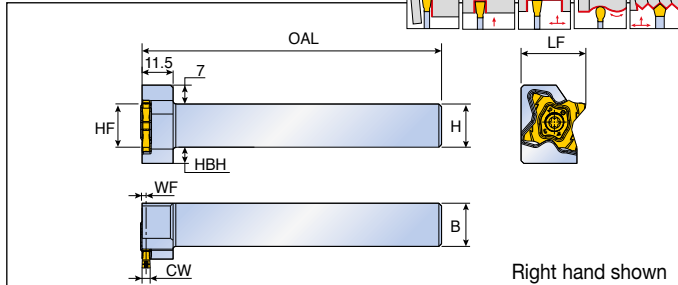


- ▶ Please refer to B122 page for COOL-BURST accessories
- ▶ CDX: Refer to insert dimension

Designation	Screw	Plug	Wrench	
TQHR/L 12-27-TB	TS 50125I ⁽¹⁾ TS 50125IL ⁽²⁾	PLG 5/16 UNF	T 10/20	L-W 5/32
TQHR/L 16-27-TB		PLG 5/16 UNF	T 10/20	L-W 5/32
TQHR/L 20-27-TB		PLG G1/8-L6.5	T 10/20	L-W 5
TQHR/L 25-27-TB		-	T 10/20	-

ADVANCECUTTING
TaeguTec

QUAD RUSH

[illegible]

► ⁽¹⁾ Only for TQS wider inserts from 5.3mm-8.2mm width

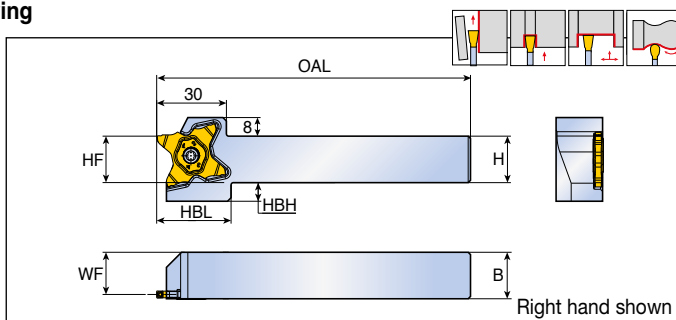
Designation	Screw	Wrench		
TQHPR/L 16/20/25	TS 50125I ⁽¹⁾	T 20		
	TS 50125IL ⁽²⁾	T 20		
TQHPR/L 16/20/25-8	TS 50170I-IC ⁽¹⁾	T 15		
	TS 50170IL-IC ⁽²⁾	T 15		

► ⁽¹⁾ For right holder ► ⁽²⁾ For left holder

TQHR/L-34



Holders for parting and grooving

[illegible]

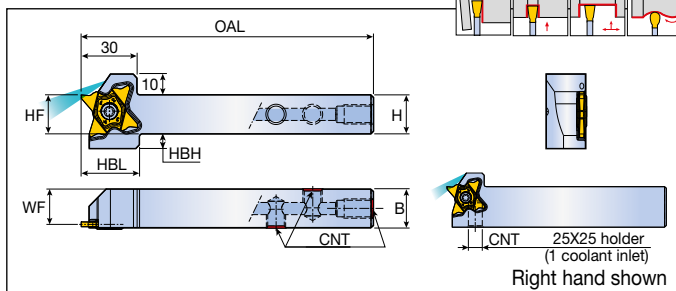
- ▶ CDX: Refer to insert dimension

Spare parts

Designation	Screw	Wrench		
				
TQHR/L-34	TS 50125I ⁽¹⁾ TS 50125IL ⁽²⁾	T 10/20		

► ⁽¹⁾ For left holder ► ⁽²⁾ For right holder

QUAD RUSH
PARTING & SHOPPING



- ▶ Please refer to B122 page for COOL-BURST accessories
- ▶ CDX: Refer to insert dimension

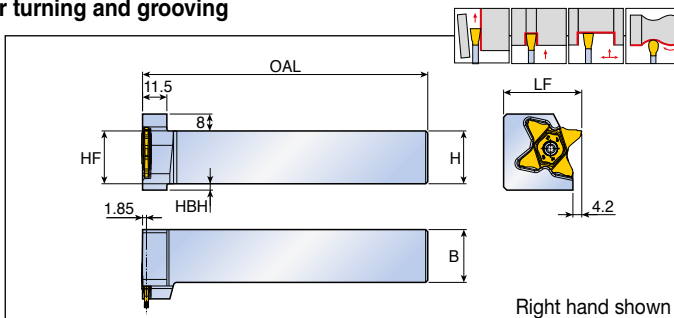
Designation	Screw	Plug	Wrench	
TQHR/L 16-34-TB	TS 50125I ⁽¹⁾ TS 50125IL ⁽²⁾	PLG 5/16 UNF	T 10/20	L-W 5/32
TQHR/L 20-34-TB		PLG G1/8-L6.5	T 10/20	L-W 5
TQHR/L 25-34-TB		-	T 10/20	-

► ⁽¹⁾ For left holder ► ⁽²⁾ For right holder

TQHPR/L-34



Perpendicular type holders for turning and grooving

[illegible]

► CDX: Refer to insert dimension

Spare parts

Designation	Screw	Wrench		
				
TQHPR/L-34	TS 50125I ⁽¹⁾ TS 50125IL ⁽²⁾	T 10/20		

► ⁽¹⁾ For right holder ► ⁽²⁾ For left holder

QUAD RUSH
PARTIAL & COMPLETE

A diagram of a multi-story building with a red zigzag line indicating a fire path. The fire starts on the ground floor and spreads upwards through the building.

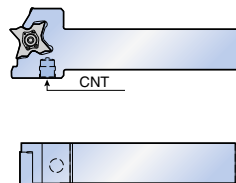
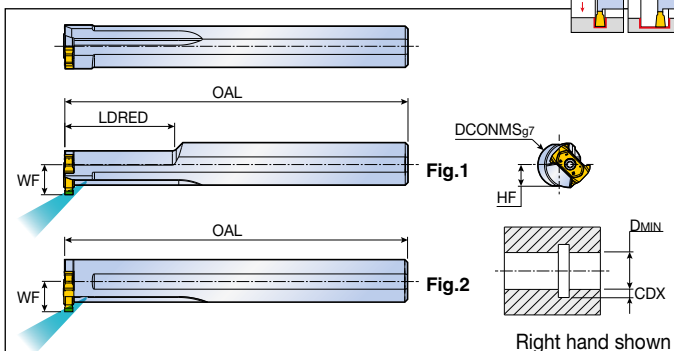


Fig.2

 B159

Spare parts

Designation	Clamping Pin	Pin Screw	Side screw	Plug	Wrench		
							
TQHR/L 20...10EW-TB	PIN-TQ-W-T	TS 40F120A	BH M4X0.7X16-D7	PLG G1/8-L6.5	T 15	L-W 2.5	L-W 5
TQHR/L 20...15EW-TB	PIN-TQ-W-T	TS 40F120A	BH M4X0.7X20-D7	PLG G1/8-L6.5	T 15	L-W 2.5	L-W 5
TQHR/L 20...20EW-TB	PIN-TQ-W-T	TS 40F120A	BH M4X0.7X23-D7	PLG G1/8-L6.5	T 15	L-W 2.5	L-W 5
TQHR/L 25...10EW-TB	PIN-TQ-W-T	TS 40F120A	BH M4X0.7X16-D7	-	T 15	L-W 2.5	-
TQHR/L 25...15EW-TB	PIN-TQ-W-T	TS 40F120A	BH M4X0.7X20-D7	-	T 15	L-W 2.5	-
TQHR/L 25...20EW-TB	PIN-TQ-W-T	TS 40F120A	BH M4X0.7X23-D7	-	T 15	L-W 2.5	-



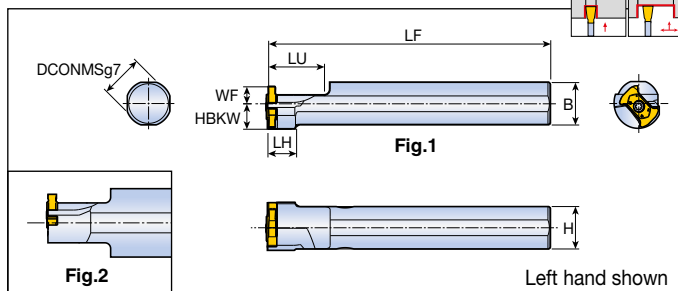
► CDX: Refer to insert dimension

Spare parts

Designation	Screw	Wrench	Seal	
				
TQHIR/L 16	TS 25075I/HG	T 8	PL 16 (M6)	
TQHIR/L 20	TS 25075I/HG	T 8	PL 20 (M6)	
TQHIR/L 25	TS 25075I/HG	T 8	PL 25 (R1/8)	
TQHIR/L 32	TS 25075I/HG	T 8	PL 32 (R1/8)	

TMS-TQHIL

Sleeve holders for external grooving

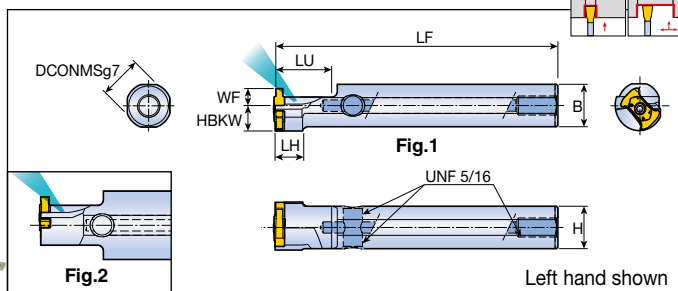


Designation	Dimension (mm)							Fig.	Insert
	DCONMS	H=B	LF	LU	LH	WF	HBKW		
TMS-TQHIL 16-14	16	15	100	20	10	6	9	1	TQIS 14 B162
19.05-14	19.05	18	100	20	-	6	9	1	
20-14	20	19	100	20	20	6	9	2	
22-14	22	21	100	20	22	10	7	2	
25-14	25	24	100	20	22	10	7	2	
25.4-14	25.4	24.4	100	20	22	10	7	2	

► CDX: Refer to insert dimension

TMS-TQHIL-TB

Sleeve holders for external grooving with high pressure coolant



Designation	Dimension (mm)							Fig.	Insert
	DCONMS	H=B	LF	LU	LH	WF	HBKW		
TMS-TQHIL 16-14-TB	16	15	100	20	10	6	9	1	TQIS 14 B162
25-14-TB	25	24	100	20	22	10	5	2	

► Please refer to B122 page for COOL-BURST accessories

► CDX: Refer to insert dimension

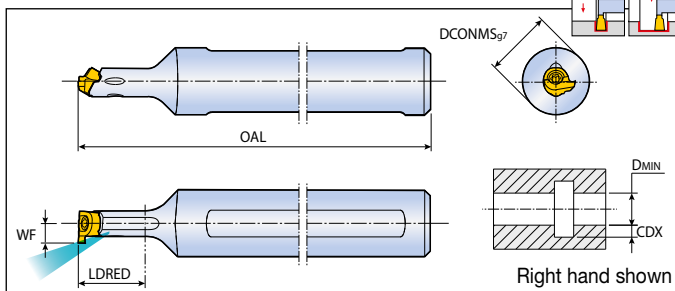
Spare parts

Designation	Screw	Wrench		Plug
TMS-TQHIL	TS 25075I/HG	T 8	-	-
TMS-TQHIL-TB	TS 25075I/HG	T 8	L-W 5/32	PLG 5/16 UNF

TMIHR/L



Internal boring bars for shallow grooving with coolant hole on small diameter



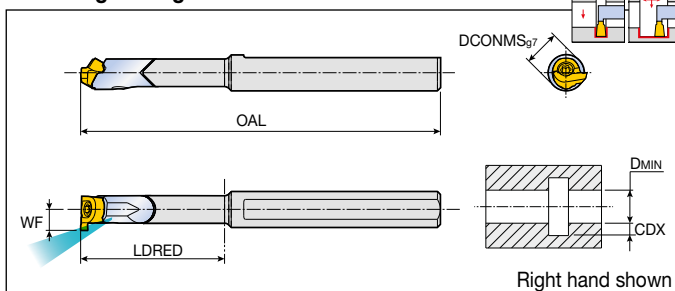
Designation	Dimension (mm)					Insert
	DCONMS	OAL	LDRED	WF	DMIN	
TMIHR/L 12-12-6	12	80	12	3.5	6.0	TMIR/L 6
12-16-8	12	80	16	4.7	8.0	TMIR/L 8

► CDX: Refer to insert dimension

TMIHR/L-C



Internal carbide boring bars for shallow grooving with coolant hole on small diameter



Designation	Dimension (mm)					Insert
	DCONMS	OAL	LDRED	WF	DMIN	
TMIHR/L 06C-18-6	6	54	18	3.5	6.0	TMIR/L 6
06C-24-6	6	60	24	3.5	6.0	TMIR/L 6
12C-24-8	12	92	24	4.7	8.0	TMIR/L 8
12C-32-8	12	100	32	4.7	8.0	TMIR/L 8

► CDX: Refer to insert dimension

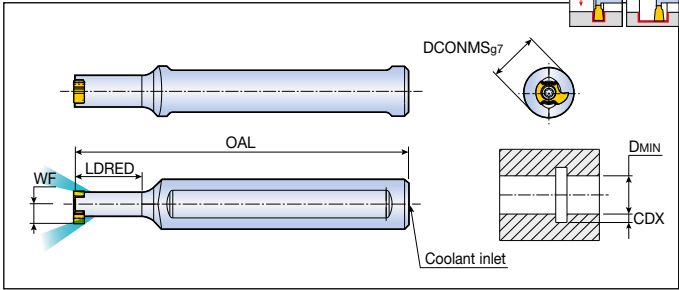
Spare parts

Designation	Screw	Wrench		
TMIHR/L 12-12-6	TS 18049/HG-P	T 6P		
TMIHR/L 12-16-8	TS 20055I	T 6		
TMIHR/L 06C	TS 18049/HG-P	T 6P		
TMIHR/L 12C	TS 20055I	T 6		

TMIHN



Internal boring bars for shallow grooving with coolant hole on small diameter



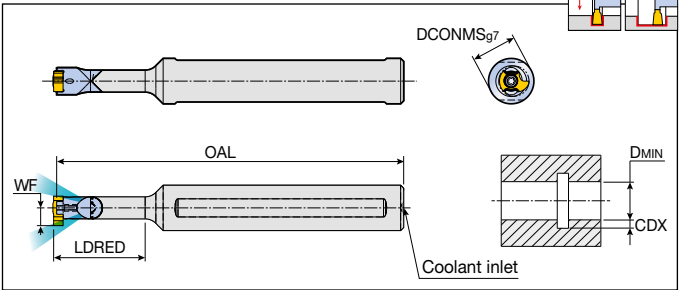
Designation	Dimension (mm)					Coolant inlet	Insert
	DCONMS	OAL	LDRED	WF	DMIN		
TMIHN 12-16-8	12	80	16	4.7	10	Ø3	TMIS 8 B163

► CDX: Refer to insert dimension

TMIHN-C



Internal carbide boring bars for shallow grooving with coolant hole on small diameter



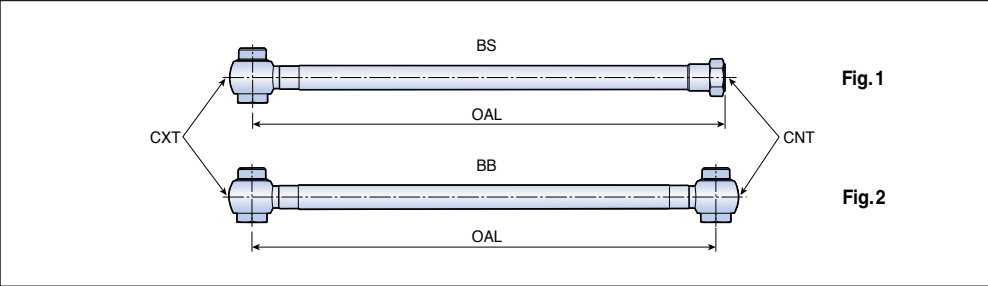
Designation	Dimension (mm)					Coolant inlet	Insert
	DCONMS	OAL	LDRED	WF	DMIN		
TMIHN 12C-24-8	12	92	24	4.7	10	Ø2	TMIS 8
12C-32-8	12	100	32	4.7	10	Ø2	B163

► CDX: Refer to insert dimension

Spare parts

Designation	Screw	Wrench		
TMIHN	TS 22052I/HG	T 7		
TMIHN -C	TS 22052I/HG	T 7		

Hose



Designation	Dimension				Fig.
	OAL (mm)	CXT	CNT	Max.pressure (Bar)	
TB HOSE G1/8-7/16-200BS	200	G1/8-28 BSPP	7/16-20 UNF (Flare 37°)	260	1
G1/8-7/16-250BS	250	G1/8-28 BSPP	7/16-20 UNF (Flare 37°)	260	1
G1/8-G1/8-200BB	200	G1/8-28 BSPP	G1/8-28 BSPP	260	2
G1/8-G1/8-250BB	250	G1/8-28 BSPP	G1/8-28 BSPP	260	2
5/16-7/16-200BS	200	5/16-24 UNF	7/16-20 UNF (Flare 37°)	200	1
5/16-G1/8-200BS	200	5/16-24 UNF	G1/8-28 BSPP	200	1

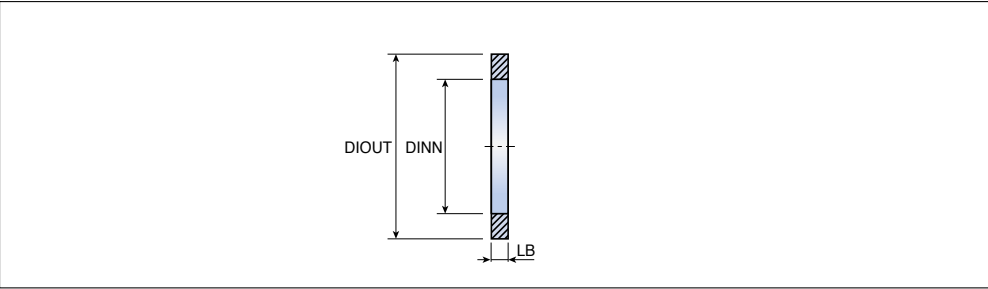
► Hose is ordered separately

Spare parts

Designation	Bolt	Seal washer	
			
TB HOSE 5/16-7/16-200BS	TB BANJO BOLT 5/16" UNF	TB COPPER SEAL 5/16"	
TB HOSE G1/8-G1/8-200BB	TB BANJO BOLT G1/8"	TB COPPER SEAL 1/8"	
TB HOSE G1/8-G1/8-250BB	TB BANJO BOLT G1/8"	TB COPPER SEAL 1/8"	

► Bolt and Seal washer are ordered separately

Seal washer



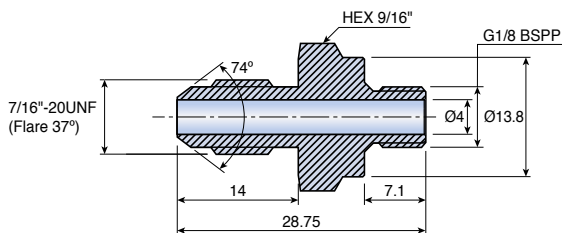
Designation	Dimension (mm)					
	DIOUT	DINN	LB			
TB COPPER SEAL 1/8"	15	10	1			
SEAL 5/16"	12	8	1			

► Seal washer is ordered separately

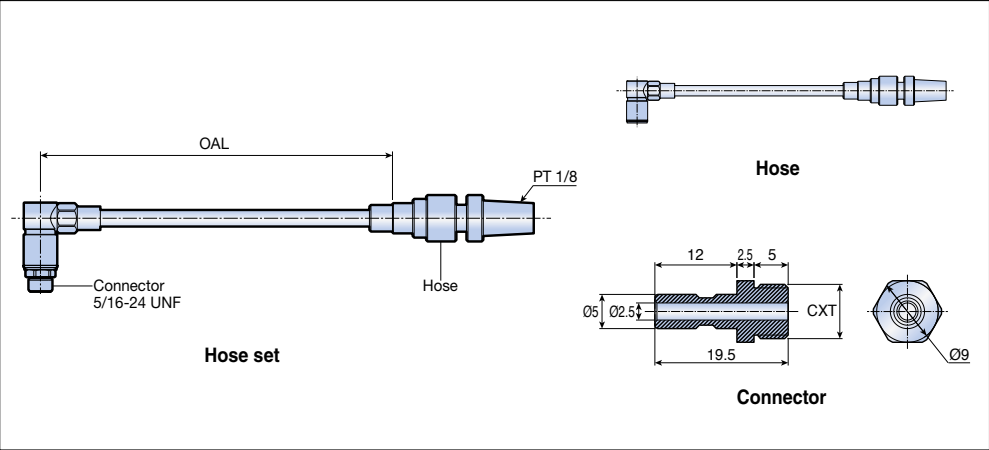
COOLBURST
www.coolburst.com

[illegible]

Adapter

[illegible]

Coupling system



Components	Designation		Dimension		
			OAL (mm)	CXT	Maximum pressure (Bar)
Hose set	S-TB HOSE	R1/8-COUPLE-100	100	-	140
		R1/8-COUPLE-200	200	-	140
		R1/8-COUPLE-300	300	-	140
Hose	TB HOSE	R1/8-COUPLE-200	200	-	140
		R1/8-COUPLE-300	300	-	140
Connector	TB CONECTOR	5/16-COUPLE	-	5/16-24 UNF	-
		G1/8-COUPLE	-	G1/8-28 BSPP	-
		R1/8-COUPLE	-	PT 1/8	-

► Hose set, hose and connector are ordered separately

Parting & Grooving Inserts and Solid Bars



Insert Designation System



Parting and grooving



1 TaeguTec

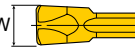
2 Cutting edge type

 S	 D
Single-ended insert	Double-ended insert

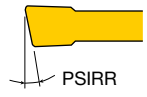
3 Chip breaker type

C 	J 
V 	UF 
For medium	For light

4 Width of insert

	2 = 2.0 mm 3 = 3.0 mm 4 = 4.0 mm 5 = 5.0 mm 6 = 6.0 mm
---	--

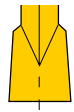
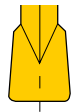
5 Lead angle

	Right hand shown
---	-------------------------

6 Hand of insert

 L	 R
Left hand	Right hand

7 Corner type

 S	
Sharp corner	Standard corner radius

Insert Designation System



Turning, grooving and face machining

T D (F) T 3.00 E - 0.40 R
1 2 3 4 5 6 7 8

1 TaeguTec

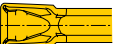
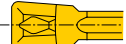
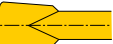
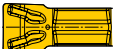
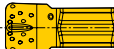
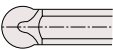
2 Cutting edge type

S 	D 
Single-ended insert	Double-ended insert

3 Application type

F	Face turning and grooving
I	Internal turning and grooving
X	Universal

4 Chip breaker type

XU 	XY 	CT 	T 	G 
Universal chip breaker (General)	Universal chip breaker (Roughing)	Universal chip breaker (Negative land)	For steel, high-temp. alloy and cast iron	Without chip breaker
M 	P 	RU 	RS 	A 
Pressed for small diameter	Ground for small diameter	General profiling	Precision profiling	For aluminum

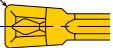
5 Width of insert (mm)

CW 	☐ ☐ ☐ Precision insert
	☐ Pressed insert

6 Application type

E	For turning and grooving
No designation	For precision grooving

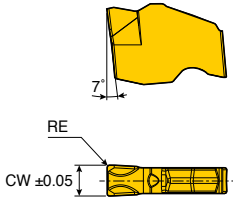
7 Corner radius (mm)

RE 	☐ ☐ ☐ Precision insert
	☐ ☐ Pressed insert

8 Hand of insert - For face machining

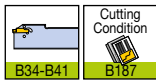
L 	R 
Left hand insert on left hand holder	Right hand insert on right hand holder

Single-ended inserts for parting and deep grooving with C-Type chip breaker



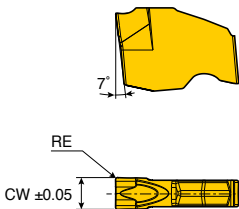
Size	Dimension (mm)			
	CW	RE		
1.6	1.6	0.2		
2	2.0	0.2		
3	3.0	0.2		

Insert	Designation	Insert seat size	Feed (mm/rev)	Cermet		Coated						Uncoated	
				CT3000		TT7505	TT6080	TT5100	TT9080	TT7220	TT8020	K10	
	SFC 1.6	1	0.05-0.15						•		•		
	2	2	0.08-0.20						•		•	•	
	3	3	0.10-0.25						•		•	•	



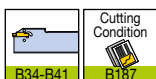
●: Standard items

Single-ended inserts for parting and deep grooving with J-Type chip breaker



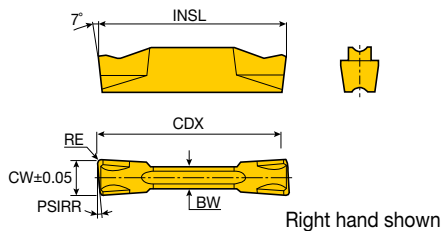
Size	Dimension (mm)			
	CW	RE		
2	2.0	0.2		
3	3.0	0.2		

Insert	Designation	Insert seat size	Feed (mm/rev)	Cermet		Coated						Uncoated	
				CT3000		TT7505	TT6080	TT5100	TT9080	TT7220	TT8020	K10	
	SFJ 2	2	0.05-0.15						•		•	•	
	3	3	0.08-0.20						•		•	•	



●: Standard items

Double-ended inserts for parting and grooving with C-Type chip breaker



Size	Dimension (mm)					
	CW	RE	BW	INSL	PSIRR/L	CDX
2 (.R/L)	2.0	0.20	1.7	20.0	0°-15°	19
2 RS/LS	2.0	0.02	1.7	19.6	15°	19
3 (.R/L)	3.0	0.20	2.4	20.0	0°-15°	19
3 RS/LS	3.0	0.02	2.4	19.6	6°-15°	19
3.18	3.18	0.20	2.4	20.0	-	19
4 (.R/L)	4.0	0.30	3.0	20.0	0°-15°	19
5 (.R/L)	5.0	0.30	4.0	25.0	0°-4°	24
6	6.0	0.30	5.0	25.0	-	24
8	8.0	0.40	6.0	30.0	-	29

[illegible]

●: Standard items



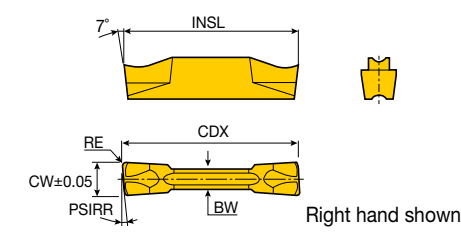
Right hand shown

Size	Dimension (mm)				
	CW	RE	BW	INSL	PSIRR/L
2 (..R/L)	2.0	0.20	1.7	19.7	0°-15°
2 RS/LS	2.0	0.02	1.7	19.5	15°
3 (..R/L)	3.0	0.20	2.4	19.6	0°-15°
3 RS/LS	3.0	0.02	2.4	19.4	15°
4 (..R/L)	4.0	0.30	3.0	19.7	0°-15°
5 (..R/L)	5.0	0.30	4.0	24.6	0°-4°
6	6.0	0.30	5.0	24.7	-
8	8.0	0.40	6.0	30.1	-

[illegible]

●: Standard items

Double-ended inserts for parting and grooving with J-Type chip breaker



Size	Dimension (mm)					
	CW	RE	BW	INSL	PSIRR/L	CDX
1.4	1.4	0.16	1.0	16.0	-	15
2 (.R/L)	2.0	0.20	1.7	20.0	0°-15°	19
2 RS/LS	2.0	0.02	1.7	19.6	6°-15°	19
3 (.R/L)	3.0	0.20	2.4	20.0	0°-15°	19
3 RS/LS	3.0	0.02	2.4	19.6	6°-15°	19
3.18	3.18	0.20	2.4	20.0	-	19
4 (.R/L)	4.0	0.30	3.0	20.0	0°-15°	19
5 (.R/L)	5.0	0.30	4.0	25.0	0°-4°	24
6	6.0	0.30	5.0	25.0	-	24

Insert	Designation	Insert seat size	Feed (mm/rev)	Cermet		Coated						Uncoated	
				CT3000		TT7505	TT6080	TT5100	TT9080	TT7220	TT8020	K10	
	TDJ 1.4	1	0.02-0.10						●		●		
	2	2	0.04-0.12						●	●	●	●	
	2-6R/L	2	0.03-0.08						●	●	●	●	
	2-6RS/LS	2	0.03-0.07						●	●	●		
	2-8R/L	2	0.03-0.08						●	●	●		
	2-15R/L	2	0.03-0.08						●	●	●		
	2-15RS/LS	2	0.03-0.07						●	●	●		
	3	3	0.04-0.16						●	●	●	●	
	3-6R/L	3	0.03-0.12						●	●	●	●	
	3-6RS/LS	3	0.03-0.10							●			
	3-15R/L	3	0.03-0.12						●	●	●		
	3-15RS/LS	3	0.03-0.10							●	●		
	3.18	3	0.04-0.16						●		●	●	
	4	4	0.05-0.18						●	●	●	●	
	4-4R/L	4	0.05-0.14						●	●	●	●	
	4-15R/L	4	0.05-0.12							●	●	●	
	5	5	0.05-0.20						●	●	●	●	
	5-4R/L	5	0.05-0.16							●	●	●	
	6	6	0.05-0.22						●	●	●	●	



●: Standard items

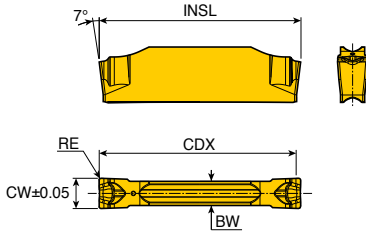
Size	Dimension (mm)				
	CW	RE	BW	INSL	PSIRR/L
2 (..R/L)	2.0	0.20	1.7	19.8	0°-15°
2 RS/LS	2.0	0.02	1.7	19.6	15°
3 (..R/L)	3.0	0.20	2.4	19.6	0°-15°
3 RS/LS	3.0	0.02	2.4	19.4	6°-15°
4 (..R/L)	4.0	0.30	3.0	19.7	0°-15°
5 (..R/L)	5.0	0.30	4.0	24.6	-
6	6.0	0.30	5.0	24.5	-



TDUF



Double-ended inserts for parting and grooving with UF-Type chip breaker



Size	Dimension (mm)				
	CW	RE	BW	INSL	CDX
2	2.0	0.2	1.5	20	19
3	3.0	0.2	2.4	20	19

Insert	Designation	Insert seat size	Feed (mm/rev)	Cermet	Coated						Uncoated		
				CT3000	TT7505	TT6080	TT5100	TT9080	TT7220	TT8020	K10		
	TDUF 2	2	0.03-0.11					●					
	3	3	0.04-0.13					●					

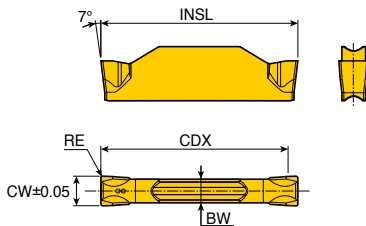


●: Standard items

TDV



Double-ended inserts for parting and grooving with V-Type chip breaker



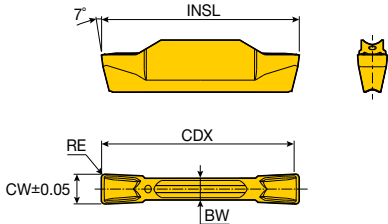
Size	Dimension (mm)				
	CW	RE	BW	INSL	CDX
2	2.0	0.2	1.7	20	19
3	3.0	0.2	2.4	20	19
4	4.0	0.3	3.0	20	19

Insert	Designation	Insert seat size	Feed (mm/rev)	Cermet	Coated						Uncoated		
				CT3000	TT7505	TT6080	TT5100	TT9080	TT7220	TT8020	K10		
	TDV 2	2	0.04-0.12						●	●			
	3	3	0.06-0.18						●	●			
	4	4	0.08-0.20						●	●			



●: Standard items

Double-ended inserts for turning and grooving



Size	Dimension (mm)				
	CW	RE	BW	INSL	CDX
2	2.0	0.30	1.7	20	19
3	3.0	0.30	2.2	20	19
4	4.0	0.40	3.0	20	19
5	5.0	0.40	4.0	25	24
6	6.0	0.40	5.0	25	24

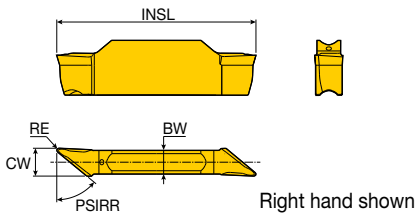
Insert	Designation	Insert seat size	Turning		Grooving	Cermetal CT3000	Coated					Uncoated	
			ap (mm)	Feed (mm/rev)	Feed (mm/rev)		TT7505	TT6080	TT5100	TT9080	TT7220	TT8020	K10
	TDCT 2E-0.3	2	0.4-1.2	0.12-0.18	0.05-0.18				●	●		●	●
	3E-0.3	3	0.4-1.8	0.15-0.19	0.07-0.25				●	●		●	●
	4E-0.4	4	0.5-2.4	0.18-0.24	0.08-0.30				●	●		●	●
	5E-0.4	5	0.5-3.0	0.20-0.30	0.09-0.35				●	●		●	●
	6E-0.4	6	0.5-3.6	0.22-0.36	0.12-0.40				●	●		●	●



●: Standard items

TDMV

Double-ended inserts for turning and grooving with V-type shape



Size	Dimension (mm)				
	CW	RE	PSIRR/L	BW	INSL
2.8E-0.2	2.8	0.2	50	2.4	20
2.8E-0.4	2.8	0.4	50	2.4	20

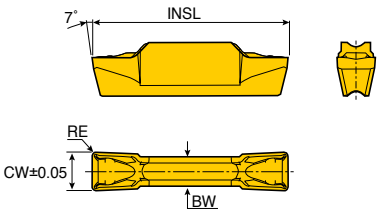
Insert	Designation	Insert Seat Size	BWT ⁽¹⁾		FWT ⁽²⁾		Grade TT9080
			ap (mm)	Feed (mm/rev)	ap (mm)	Feed (mm/rev)	
	TDMV 2.8E-0.2-R/L	3	0.2-2.5	0.05-0.18	0.3-1.5	0.03-0.15	●
	2.8E-0.4-R/L	3	0.4-2.5	0.08-0.25	0.4-1.5	0.05-0.18	●



- ▶ Recommended to use with TGFR/L type holder
- ▶ Lower supporter must be modified when using external grooving holder, for example TTER/L type
- ▶ ⁽¹⁾ BWT: Backward turning
- ▶ ⁽²⁾ FWT: Forward turning

●: Standard items

Double-ended inserts for grooving, turning, face grooving and parting



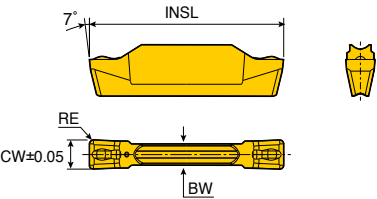
Size	Dimension (mm)			
	CW	RE	BW	INSL
2E-0.3	2.0	0.3	1.7	20.0
3E-0.3	3.0	0.3	2.2	20.0
4E-0.4	4.0	0.4	3.0	20.0
4E-0.8	4.0	0.8	3.0	20.0
5E-0.4	5.0	0.4	4.0	25.0
5E-0.8	5.0	0.8	4.0	25.0
6E-0.4	6.0	0.4	5.0	25.0
6E-0.8	6.0	0.8	5.0	25.0
8E-0.8	8.0	0.8	6.0	30.0

Insert	Designation	Insert seat size	Turning		Grooving	Cermet	Coated							Uncoated
			ap (mm)	Feed (mm/rev)	Feed (mm/rev)		TT7505	TT6080	TT3010	TT5100	TT9080	TT7220	TT8020	
	TDXU 2E-0.3	2	0.4-1.2	0.12-0.18	0.03-0.20	CT3000	●	●	●	●	●		●	●
	3E-0.3	3	0.4-1.8	0.15-0.19	0.07-0.22	●	●	●	●	●	●	●	●	●
	4E-0.4	4	0.5-2.4	0.18-0.24	0.08-0.27	●	●	●	●	●	●	●	●	●
	4E-0.8	4	1.0-2.4	0.18-0.24	0.08-0.27	●	●	●	●	●	●	●	●	●
	5E-0.4	5	0.5-3.0	0.20-0.30	0.10-0.30	●	●	●	●	●	●	●	●	●
	5E-0.8	5	1.0-3.0	0.23-0.35	0.10-0.30	●	●	●	●	●	●	●	●	●
	6E-0.4	6	0.5-3.6	0.22-0.36	0.13-0.40		●	●	●	●	●	●	●	●
	6E-0.8	6	1.0-3.6	0.24-0.42	0.13-0.40		●	●	●	●	●	●	●	●
	8E-0.8	8	1.0-4.8	0.30-0.56	0.14-0.50		●	●		●	●	●	●	●



●: Standard items

Double-ended inserts for grooving, turning and face grooving



Size	Dimension (mm)			
	CW	RE	BW	INSL
3E-0.4	3.0	0.4	2.2	20.0
4E-0.4	4.0	0.4	3.0	20.0
5E-0.4	5.0	0.4	4.0	25.0
6E-0.8	6.0	0.8	5.0	25.0
8E-0.8	8.0	0.8	6.0	30.0

Insert	Designation	Insert seat size	Turning		Grooving	Cermet	Coated							Uncoated
			ap (mm)	Feed (mm/rev)	Feed (mm/rev)		TT7505	TT6080	TT5100	TT9080	TT7220	TT8020	K10	
	TDXT 3E-0.4	3	0.5-1.8	0.15-0.22	0.06-0.15	●	●	●	●	●	●		●	●
	4E-0.4	4	0.5-2.4	0.18-0.30	0.07-0.20	●	●	●	●	●	●		●	●
	5E-0.4	5	0.5-3.0	0.20-0.35	0.08-0.23	●	●	●	●	●	●		●	●
	6E-0.8	6	1.0-3.6	0.24-0.42	0.12-0.30		●	●	●	●	●		●	●
	8E-0.8	8	1.0-4.8	0.30-0.56	0.15-0.35		●	●	●	●	●		●	●



► Non-standard grade production available at the customer's request

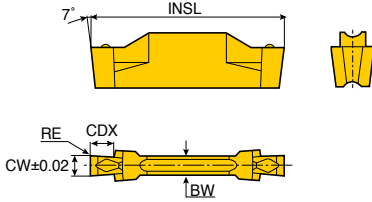
●: Standard items

Size	Dimension (mm)				
	CW	RE	BW	INSL	
3E-0.4	3.0	0.40	2.2	20	
4E-0.4	4.0	0.40	3.0	20	
4E-0.8	4.0	0.80	3.0	20	
5E-0.4	5.0	0.40	4.0	25	
5E-0.8	5.0	0.80	4.0	25	
6E-0.4	6.0	0.40	5.0	25	
6E-0.8	6.0	0.80	5.0	25	

[illegible]

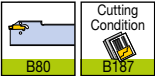
●: Standard items

Precision double-ended inserts for external grooving only



Size	Dimension (mm)				
	CW	RE	BW	INSL	CDX
1.00	1.00	0.00	2.2	20.0	2.5
1.25	1.25	0.20	2.25	20.0	2.5
1.30	1.30	0.00	2.2	20.0	2.5
1.50	1.50	0.20	2.25	20.0	2.5
1.60	1.60	0.10	2.2	20.0	2.5
1.85	1.85	0.10	2.2	20.0	3.5
2.00	2.00	0.20	2.25	20.0	3.5
2.15	2.15	0.15	2.2	20.0	3.5

Insert	Designation	Insert seat size	Grooving	Cermet		Coated					Uncoated	
			Feed (mm/rev)	CT3000		TT7505	TT6080	TT5100	TT9080	TT7220	TT8020	K10
	TDT 1.00-0.00*	2	0.02-0.04						•	•		•
	1.25-0.20*	2	0.02-0.05	•								
	1.30-0.00*	2	0.02-0.05						•	•		•
	1.50-0.20*	2	0.03-0.07	•								
	1.60-0.10*	2	0.03-0.07						•	•		•
	1.85-0.10*	2	0.03-0.09						•	•		•
	2.00-0.20	2	0.03-0.09	•								
	2.15-0.15	2	0.03-0.10						•	•		•

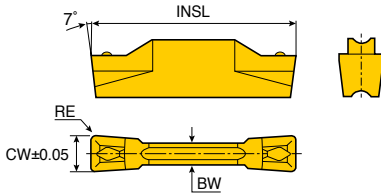


► *: Only for grooving. Please use TGR/L ...-4 holder

•: Standard items

TDT-E

Double-ended inserts for turning and grooving



Size	Dimension (mm)			
	CW	RE	BW	INSL
3	3.0	0.4	2.2	20.0
4	4.0	0.4	3.0	20.0
6	6.0	0.8	5.0	25.0

Insert	Designation	Insert seat size	Turning		Grooving	Cermet		Ceramic		Coated					Uncoated
			ap (mm)	Feed (mm/rev)	Feed (mm/rev)	CT3000		AB30		TT7505	TT6080	TT5100	TT9080	TT7220	TT8020
	TDT 3E-0.4	3	0.5-1.8	0.15-0.22	0.07-0.15	•				•	•	•	•	•	•
	4E-0.4	4	0.5-2.4	0.18-0.30	0.09-0.18	•				•	•	•	•	•	•
	4E-0.4T CE⁽¹⁾	4	0.5-2.4	0.18-0.30	0.09-0.35		•								
	6E-0.8T CE⁽¹⁾	6	1.0-3.6	0.24-0.42	0.13-0.40		•								

CE type



► ⁽¹⁾ This insert is a pressed ceramic insert

•: Standard items

Size	Dimension (mm)			
	CW	RE	BW	INSL
2.5 / 2.65 / 3.00 / 3.15	2.50-3.15	0.15-0.40	2.2	20.0
4.00 / 4.15	4.00-4.15	0.15-0.80	3.0	20.0
4.78 / 5.00 / 5.15	4.78-5.15	0.15-0.80	4.0	25.0
6.00	6.00	0.80-1.20	5.0	25.0
8.00	8.00	0.80-1.20	6.0	30.0
10.00	10.00	0.80-2.00	8.0	30.0

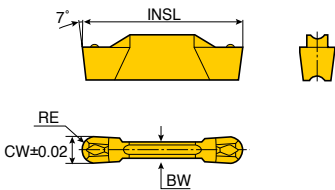
[illegible]

●: Standard items

TDT-E (Full-Radius)



Precision double-ended inserts for external turning, grooving and profiling



Size	Dimension (mm)			
	CW	RE	BW	INSL
3	3.00	1.50	2.2	20.0
4	4.00	2.00	3.0	20.0
4.78	4.78	2.39	4.0	25.0
5	5.00	2.50	4.0	25.0
6	6.00	3.00	5.0	25.0
8	8.00	4.00	6.0	30.0
10	10.00	5.00	8.0	30.0



Designation	Insert seat size	Turning		Grooving	Cermet	Coated					Uncoated		
		ap (mm)	Feed (mm/rev)	Feed (mm/rev)	CT3000	TT7505	TT6080	TT5100	TT9080	TT7220	TT8020	K10	
	TDT 3.00E-1.50	3	0.0-1.5	0.15-0.28	0.08-0.18				●	●	●	●	
	4.00E-2.00	4	0.0-2.0	0.18-0.35	0.10-0.20				●	●	●	●	
	4.78E-2.39	5	0.0-2.4	0.20-0.42	0.12-0.23				●	●	●		
	5.00E-2.50	5	0.0-2.5	0.20-0.42	0.12-0.23				●	●	●	●	
	6.00E-3.00	6	0.0-3.0	0.25-0.54	0.15-0.27				●	●	●	●	
	8.00E-4.00	8	0.0-4.0	0.30-0.67	0.18-0.35				●	●	●		
	10.00E-5.00	10	0.0-5.0	0.35-0.80	0.22-0.40				●	●			

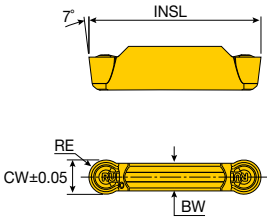


●: Standard items

TDT-RU (Full-Radius)



Double-ended inserts for external turning, grooving and profiling



Size	Dimension (mm)			
	CW	RE	BW	INSL
2	2.0	1.0	1.7	20.0
3	3.0	1.5	2.2	20.0
4	4.0	2.0	3.0	20.0
5	5.0	2.5	4.0	25.0
6	6.0	3.0	5.0	25.0
8	8.0	4.0	6.0	30.0

Insert	Designation	Insert seat size	Turning		Grooving	Cermet	Coated						Uncoated
			ap (mm)	Feed (mm/rev)	Feed (mm/rev)	CT3000	TT7505	TT6080	TT5100	TT3010	TT9080	TT7220	TT8020
	TDT 2E-1.0-RU	2	0.0-1.0	0.10-0.25	0.05-0.15		●	●	●	●	●	●	●
	3E-1.5-RU	3	0.0-1.5	0.15-0.28	0.08-0.18	●	●	●	●	●	●	●	●
	4E-2.0-RU	4	0.0-2.0	0.18-0.35	0.10-0.20	●	●	●	●	●	●	●	●
	5E-2.5-RU	5	0.0-2.5	0.20-0.42	0.12-0.23	●	●	●	●	●	●	●	●
	6E-3.0-RU	6	0.0-3.0	0.25-0.54	0.15-0.27	●	●	●	●	●	●	●	●
	8E-4.0-RU	8	0.0-4.0	0.30-0.67	0.18-0.35		●	●	●		●	●	●

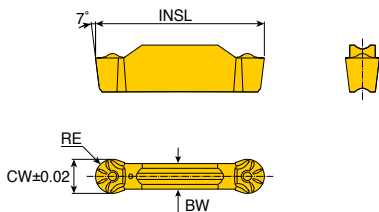


●: Standard items

TDT-RS (Full-Radius)



Precision double-ended inserts for external turning, grooving and profiling



Size	Dimension (mm)			
	CW	RE	BW	INSL
2	2.0	1.0	1.7	20.0
3	3.0	1.5	2.4	20.0
4	4.0	2.0	3.0	20.0
5	5.0	2.5	4.0	25.0
6	6.0	3.0	5.0	25.0

Insert	Designation	Insert seat size	Turning		Grooving	Cermet	Coated					Uncoated	
			ap (mm)	Feed (mm/rev)	Feed (mm/rev)	CT3000	TT7505	TT6080	TT5100	TT3010	TT9080	TT7220	TT8020
	TDT 2.00E-1.00-RS	2	0.0-1.0	0.10-0.22	0.08-0.15					●	●		●
	3.00E-1.50-RS	3	0.0-1.5	0.15-0.28	0.09-0.18					●	●		●
	4.00E-2.00-RS	4	0.0-2.0	0.18-0.35	0.10-0.20					●	●		●
	5.00E-2.50-RS	5	0.0-2.5	0.25-0.54	0.13-0.23					●	●		●
	6.00E-3.00-RS	6	0.0-3.0	0.30-0.67	0.15-0.27					●	●		●

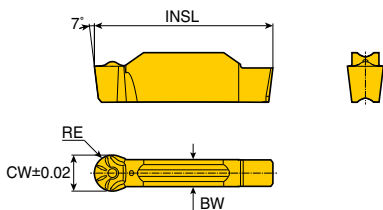


• Standard items

TST-RS (Full-Radius)



Precision single-ended inserts for external turning, grooving and profiling



Size	Dimension (mm)			
	CW	RE	BW	INSL
3	3.00	1.50	2.4	19.8
4	4.00	2.00	3.0	19.8
5	5.00	2.50	4.0	25.0
6	6.00	3.00	5.0	25.0

Insert	Designation	Insert seat size	Turning		Grooving	Cermet		Coated					Uncoated		
			ap (mm)	Feed (mm/rev)	Feed (mm/rev)	CT3000		TT7505	TT6080	TT5100	TT3010	TT9080	TT7220	TT8020	K10
	TST 3.00E-1.50-RS	3	0.0-1.5	0.15-0.28	0.09-0.18						●	●			
	4.00E-2.00-RS	4	0.0-2.0	0.18-0.35	0.10-0.20						●	●			
	5.00E-2.50-RS	5	0.0-2.5	0.25-0.54	0.13-0.23						●	●			
	6.00E-3.00-RS	6	0.0-3.0	0.30-0.67	0.15-0.27						●	●			



• Standard items

7°

INSL

16mm

4°

12°

RE

CW±0.05

BW

Right hand shown

Size	Dimension (mm)			
	CW	RE	BW	INSL
3E	3.0	0.40	2.2	20.0
4E	4.0	0.40	3.0	20.0

[illegible]

●: Standard items

Technical drawing of a mechanical part. The top view shows a trapezoidal shape with a top width of 14" and a length of INSL. The side view shows a cylindrical shape with a diameter of CW ± 0.02 and a length of RE. The cross-sectional view shows a trapezoidal shape with a central hole of diameter BW.

Size	Dimension (mm)			
	CW	RE	BW	INSL
3	3.00	0.40	2.2	20.0
4	4.00	0.40-0.80	3.0	20.0
5	5.00	0.40-0.80	4.0	25.0
6	6.00	0.80-1.20	5.0	25.0
8	8.00	1.20	6.0	30.0

Insert	Designation	Insert seat size	Turning		Grooving	Cermet	Coated					Uncoated
			ap (mm)	Feed (mm/rev)	Feed (mm/rev)	CT3000	TT7505	TT6080	TT5100	TT9080	TT7220	TT8020
	TDIT 3.00E-0.40	3	0.5-1.8	0.15-0.22	0.07-0.15				●	●	●	
	4.00E-0.40	4	0.5-2.4	0.18-0.30	0.09-0.18				●	●	●	
	4.00E-0.80	4	1.0-2.4	0.18-0.30	0.09-0.18				●	●	●	
	5.00E-0.40	5	0.5-2.3	0.20-0.35	0.11-0.20				●	●	●	
	5.00E-0.80	5	1.0-3.0	0.23-0.35	0.11-0.21				●	●	●	
	6.00E-0.80	6	1.0-3.6	0.24-0.42	0.13-0.30				●	●	●	
	6.00E-1.20	6	1.3-3.6	0.24-0.42	0.13-0.30				●	●	●	
	8.00E-0.80	8	1.0-4.8	0.30-0.56	0.15-0.40				●	●	●	
	8.00E-1.20	8	1.3-4.8	0.30-0.56	0.15-0.40				●	●	●	

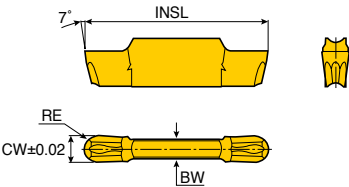


●: Standard items

TDIT-E (Full-Radius)



Precision double-ended inserts for internal turning, grooving, profiling and undercutting



Size	Dimension (mm)			
	CW	RE	BW	INSL
3	3.00	1.50	2.2	20.0
4	4.00	2.00	3.0	20.0
5	5.00	2.50	4.0	25.0
6	6.00	3.00	5.0	25.0

Insert	Designation	Insert seat size	Turning		Grooving	Cermet	Coated					Uncoated	
			ap (mm)	Feed (mm/rev)	Feed (mm/rev)	CT3000		TT7505	TT6080	TT5100	TT9080	TT7220	TT8020
	TDIT 3.00E-1.50	3	0.0-1.5	0.15-0.28	0.08-0.18				●	●	●		
	4.00E-2.00	4	0.0-2.0	0.18-0.35	0.10-0.20				●	●	●		
	5.00E-2.50	5	0.0-2.5	0.20-0.42	0.12-0.23				●	●	●		
	6.00E-3.00	6	0.0-3.0	0.25-0.54	0.15-0.27				●	●	●		

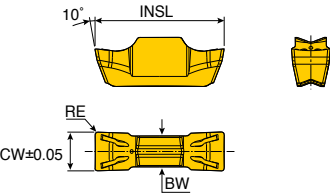


●: Standard items

TDIM



Double-ended inserts for internal turning and grooving on small diameter



Size	Dimension (mm)			
	CW	RE	BW	INSL
2	2.0	0.15	1.6	10
3	3.0	0.20	2.4	10

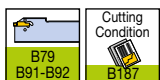
Insert	Designation	Insert seat size	Turning		Grooving	Cermet	Coated					Uncoated	
			ap (mm)	Feed (mm/rev)	Feed (mm/rev)	CT3000	TT7505	TT6080	TT5100	TT9080	TT7220	TT8020	K10
	TDIM 2E-0.15	2	0.2-0.6	0.05-0.08	0.03-0.05					●			
	3E-0.2	3	0.3-1.3	0.10-0.14	0.05-0.09					●			



► Used holder TTSER/L, TTSIR/L, TGSIR/L

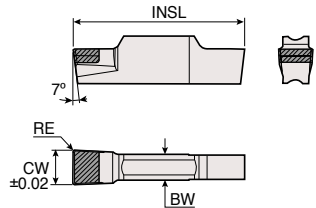
●: Standard items

Size	Dimension (mm)				
	CW	RE	BW	INSL	CDX
1.00	1.00	0.10-0.50	1.6	10	1.6
1.20	1.20	0.00	1.6	10	1.8
1.40	1.40	0.00	1.6	10	2.0
1.50	1.50	0.10	1.6	10	2.0
2.00	2.00	0.10-1.00	1.6	10	-
2.15	2.15	0.15	1.6	10	-
2.50	2.50	0.20	2.4	10	-
3.00	3.00	0.20-1.50	2.4	10	-

[illegible]

●: Standard items

Single-ended CBN inserts for turning and grooving



Size	Dimension (mm)				
	CW	RE	BW	INSL	
3	3.0	0.2	2.25	20.0	
4	4.0	0.2	3.0	30.0	
5	5.0	0.4	4.0	25.0	
6	6.0	0.4	5.0	25.0	
8	8.0	0.4	6.0	30.0	

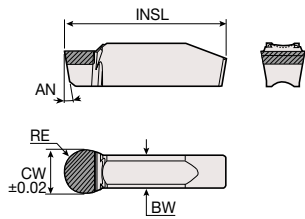
Insert	Designation	Insert seat size	Turning		Grooving	CBN					PCD		
			ap (mm)	Feed (mm/rev)	Feed (mm/rev)	TB610	TB650	TB670	TB2015	TB7015	TB7020	TD1010	TD1020
	TSG 3.00H-0.20	3	0.0-0.3	0.02-0.07	0.02-0.05				●				
	4.00H-0.20	4	0.0-0.4	0.03-0.09	0.02-0.07				●				
	5.00H-0.40	5	0.0-0.5	0.05-0.13	0.03-0.10				●				
	6.00H-0.40	6	0.0-0.6	0.05-0.15	0.04-0.12				●				
	8.00H-0.40	8	0.0-0.8	0.07-0.20	0.05-0.16				●				



●: Standard items

TSG (Full-Radius)

Single-ended CBN inserts for turning and grooving



Size	Dimension (mm)					
	CW	RE	BW	INSL	AN	
3	3.0	1.5	2.4	20.0	7	
4	4.0	2.0	3.0	20.0	7	
5	5.0	2.5	4.0	25.0	7	
6	6.0	3.0	5.0	25.0	7	
8	8.0	4.0	6.0	30.0	10	

Insert	Designation	Insert seat size	Turning		Grooving	CBN					PCD				
			ap (mm)	Feed (mm/rev)	Feed (mm/rev)	TB610	TB650	TB670	TB2015	TB7015	TB7020	TD1010	TD1020	TD1030	
	TSG 3.00H-1.50	3	0.0-0.3	0.03-0.10	0.02-0.06				●						
	4.00H-2.00	4	0.0-0.4	0.04-0.14	0.02-0.09				●						
	5.00H-2.50	5	0.0-0.5	0.05-0.18	0.03-0.11				●						
	6.00H-3.00	6	0.0-0.6	0.06-0.22	0.04-0.13				●						
	8.00H-4.00	8	0.0-0.8	0.08-0.29	0.05-0.17				●						

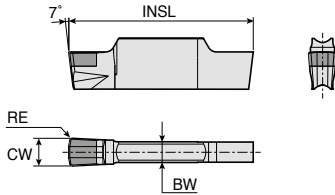


●: Standard items

TSG-HF



Single-ended CBN inserts for high feed turning



Size	Dimension (mm)					
	CW	RE	BW	INSL		
3	3.0	0.3	2.2	20		
5	5.0	0.3	4.0	25		

Insert	Designation	Insert seat size	Turning		CBN					PCD		
			ap (mm)	Feed (mm/rev)	TB610	TB650	TB670	TB2015	TB7015	TB7020	TD1010	TD1020
	TSG 3.0-0.3-HF	3	0.08-0.12	0.40-0.80				●				
	5.0-0.3-HF	5	0.08-0.12	0.40-1.20				●				

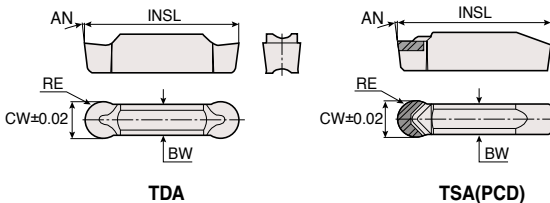


●: Standard items

TDA/TSA



Inserts for aluminum wheel machining



Size	Dimension (mm)					
	CW	RE	BW	INSL	AN	
3	3.00	1.5	2.4	20.0	7	
4	4.00	2.0	3.0	20.0	7	
5	5.00	2.5	4.0	25.0	7	
6	6.00	3.0	5.0	25.0	7	
8	8.00	4.0	6.0	30.0	10	

Insert	Designation	Insert seat size	Turning		Grooving	PCD		Coated					Uncoated			
			ap (mm)	Feed (mm/rev)	Feed (mm/rev)	TD1020		TT7505	TT6080	TT5100	TT9080	TT7220	TT8020	K10		
 TDA	TDA 3.00-1.50	3	0.0-1.5	0.15-0.30	0.08-0.16											●
	4.00-2.00	4	0.0-2.0	0.20-0.43	0.10-0.22											●
	5.00-2.50	5	0.0-2.5	0.20-0.48	0.10-0.25											●
	6.00-3.00	6	0.0-3.0	0.21-0.58	0.11-0.29											●
	8.00-4.00	8	0.0-4.0	0.24-0.67	0.14-0.38											●
 TSA	TSA 6.00-3.00	6	0.0-3.0	0.26-0.72	0.13-0.36	●										
	8.00-4.00	8	0.0-4.0	0.24-0.67	0.14-0.38	●										

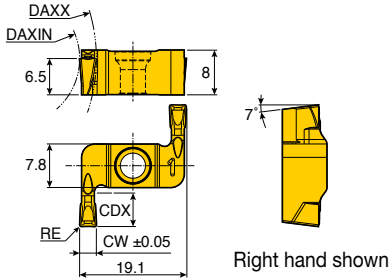


●: Standard items

TDFX

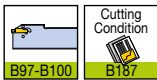


Double-ended inserts for face grooving and turning



Size	Dimension (mm)				
	CW	RE	CDX	DAXIN	DAXX
2	2	0.3	6	25	N.L.
3	3	0.3	6	24	N.L.
4	4	0.4	6	32	N.L.

Insert	Designation	Turning		Grooving	Cermet		Coated				Uncoated	
		ap (mm)	Feed (mm/rev)	Feed (mm/rev)	CT3000		TT7505	TT6080	TT5100	TT9080	TT7220	TT8020
	TDFX 2E-0.3-D25R/L	0.4-1.2	0.12-0.18	0.03-0.20						●		
	3E-0.3-D24R/L	0.4-1.8	0.15-0.20	0.07-0.20						●		
	4E-0.4-D32R/L	0.5-2.4	0.15-0.24	0.09-0.25						●		



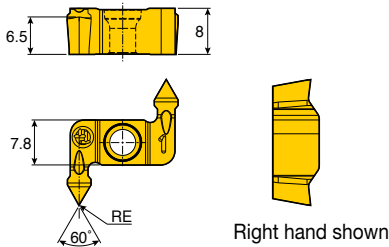
► N.L.: No limit

●: Standard items

TDGX



Double-ended threading inserts with 60° partial profile



Size	Dimension (mm)				
	RE	TPN	TPX	TPIX	TPIN
4	0.05	0.45	3.5	56	8

Insert	Designation	Cermet		Coated				Uncoated			
		CT3000		TT7505	TT6080	TT5100	TT9080	TT7220	TT8020	K10	
	TDXG 4MT-0.05-R/L						●				

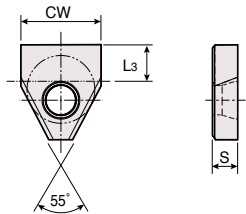


► TPN: Thread pitch minimum (mm)
► TPX: Thread pitch maximum (mm)

► TPIX: Thread per inch maximum
► TPIN: Thread per inch minimum

●: Standard items

Semi finished blanks for wide grooving and profiling



Size	Dimension (mm)		
	CW	S	L3
10	10.2	4.76	5.85
15	15.2	4.76	5.85
20	20.2	6.35	9.35
25	25.2	6.35	9.25

Insert	Designation	Cermet		Coated						Uncoated				
		CT3000			TT7505	TT6080	TT5100	TT9080	TT7220	TT8020		K10	P40	UF10
	TGUX 1004											●	●	●
	1504											●	●	●
	2006											●	●	●
	2506											●	●	●



●: Standard items

T **Q** **J** - **27** - **3** - **0.2** - **6** - **R**

1 2 3 4 5 6 7 8

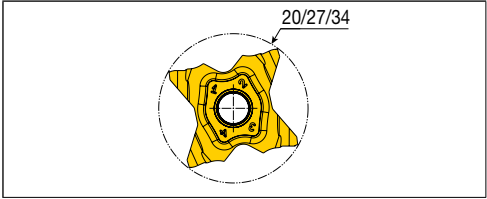
1 TaeguTec

2 QUAD-RUSH

3 Chip breaker type

		
C	J	S
For medium	For light	For light & tailor made

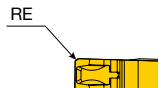
4 Circular circumference of the insert



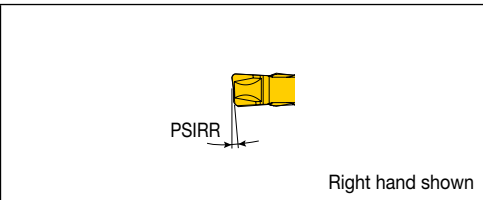
5 Width of insert

	1.00 = 1.0 mm 1.50 = 1.5 mm 2.53 = 2.53 mm 3.18 = 3.18 mm
--	--

6 Corner radius

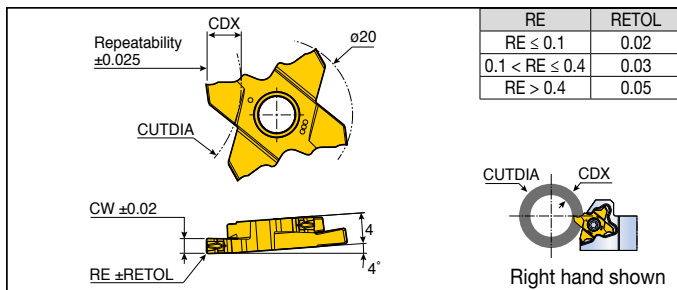
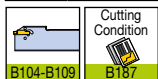
	0.10 = 0.1 mm 0.20 = 0.2 mm 0.30 = 0.3 mm 0.40 = 0.4 mm
--	--

7 Lead angle



8 Hand of insert

	
L	R
Left-hand	Right-hand

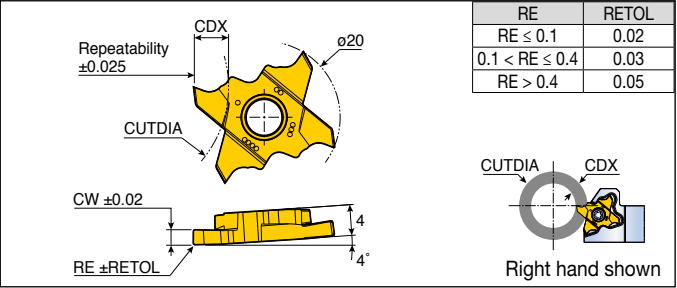
[illegible]

●: Standard items

TQS 20

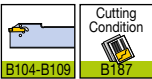


Precision grooving and parting inserts with ground chip breaker



RE	RETOL
RE ≤ 0.1	0.02
0.1 < RE ≤ 0.4	0.03
RE > 0.4	0.05

Designation	Feed (mm/rev)	CW	RE	CDX	CUTDIA						Grade
					CDX ≤ 2.2	≤ 2.7	≤ 3.5	≤ 4.0	≤ 4.5	≤ 5.0	
TQS 20-0.50-0.05-R/L	0.03-0.07	0.50	0.05	2.2	N.L.	-	-	-	-	-	●
20-0.75-0.10-R/L	0.03-0.07	0.75	0.10	2.2	N.L.	-	-	-	-	-	●
20-0.95-0.10-R/L	0.03-0.07	0.95	0.10	2.2	N.L.	-	-	-	-	-	●
20-1.00-0.05-R/L	0.03-0.07	1.00	0.05	2.7	N.L.	N.L.	-	-	-	-	●
20-1.00-0.10-R/L	0.03-0.07	1.00	0.10	2.7	N.L.	N.L.	-	-	-	-	●
20-1.50-0.10-R/L	0.03-0.10	1.50	0.10	5.0	N.L.	N.L.	70	50	30	16	●
20-2.00-0.10-R/L	0.04-0.12	2.00	0.10	5.0	N.L.	N.L.	70	50	30	16	●
20-2.00-0.20-R/L	0.04-0.12	2.00	0.20	5.0	N.L.	N.L.	70	50	30	16	●
20-2.00-1.00-R/L*	0.05-0.13	2.00	1.00	5.0	N.L.	N.L.	70	50	30	16	●
20-2.50-0.10-R/L	0.04-0.15	2.50	0.10	5.0	N.L.	N.L.	70	50	30	16	●
20-3.00-0.10-R/L	0.04-0.16	3.00	0.10	5.0	N.L.	N.L.	70	50	30	16	●
20-3.00-1.50-R/L*	0.04-0.16	3.00	1.50	5.0	N.L.	N.L.	70	50	30	16	●



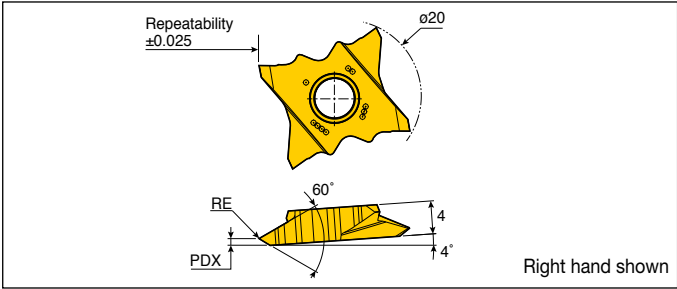
- ▶ N.L.: No limit
- ▶ *: Full radius insert

●: Standard items

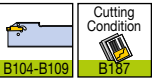
TQS 20-MT



Partial profile 60° threading inserts



Designation	Dimension (mm)						Grade
	TPN	TPX	TPIX	TPIN	RE	PDX	
TQS 20-MT-0.05-R/L	0.30	1.75	48	14	0.05	0.8	●



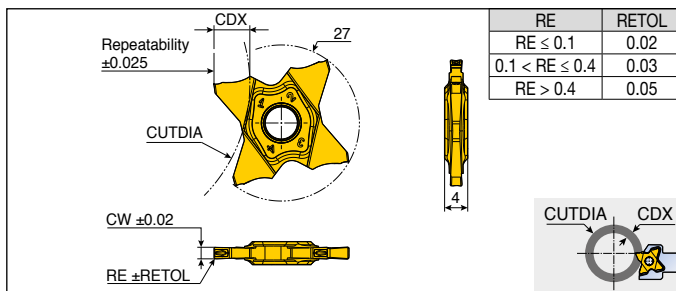
- ▶ TPN: Thread pitch minimum (mm)
- ▶ TPX: Thread pitch maximum (mm)
- ▶ TPIN: Thread per inch minimum
- ▶ TPIX: Thread per inch maximum

●: Standard items

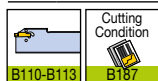
TQJ 27



Precision grooving and parting inserts



Designation	Feed (mm/rev)	CW	RE	CDX	CUTDIA											Grade
					CDX ≤ 3.0	≤ 3.5	≤ 4.0	≤ 4.5	≤ 5.0	≤ 5.5	≤ 5.7	≤ 6.0	≤ 6.2	≤ 6.4	TT9080	
TQJ 27-0.50-0.00	0.02-0.04	0.50	0.00	1.0	-	-	-	-	-	-	-	-	-	-	●	
27-0.50-0.04	0.02-0.04	0.50	0.04	2.5	-	-	-	-	-	-	-	-	-	-	●	
27-0.75-0.10	0.02-0.05	0.75	0.10	2.5	-	-	-	-	-	-	-	-	-	-	●	
27-0.80-0.00	0.02-0.05	0.80	0.00	1.6	-	-	-	-	-	-	-	-	-	-	●	
27-1.00-0.06	0.03-0.07	1.00	0.06	3.5	N.L.	600	-	-	-	-	-	-	-	-	●	
27-1.00-0.10	0.03-0.07	1.00	0.10	3.5	N.L.	600	-	-	-	-	-	-	-	-	●	
27-1.04-0.00	0.03-0.07	1.04	0.00	2.0	-	-	-	-	-	-	-	-	-	-	●	
27-1.20-0.00	0.03-0.07	1.20	0.00	2.0	-	-	-	-	-	-	-	-	-	-	●	
27-1.25-0.10	0.03-0.07	1.25	0.10	3.5	N.L.	600	-	-	-	-	-	-	-	-	●	
27-1.25-0.20	0.03-0.07	1.25	0.20	3.5	N.L.	600	-	-	-	-	-	-	-	-	●	
27-1.40-0.00	0.03-0.08	1.40	0.00	2.0	-	-	-	-	-	-	-	-	-	-	●	
27-1.47-0.00	0.03-0.08	1.47	0.00	2.5	-	-	-	-	-	-	-	-	-	-	●	
27-1.50-0.10	0.03-0.08	1.50	0.10	5.7	N.L.	600	280	180	130	50	35	-	-	-	●	
27-1.50-0.20	0.03-0.08	1.50	0.20	5.7	N.L.	600	280	180	130	50	35	-	-	-	●	
27-1.57-0.10	0.03-0.08	1.57	0.10	3.0	N.L.	-	-	-	-	-	-	-	-	-	●	
27-1.57-0.15	0.03-0.08	1.57	0.15	3.0	N.L.	-	-	-	-	-	-	-	-	-	●	
27-1.70-0.10	0.03-0.08	1.70	0.10	3.0	N.L.	-	-	-	-	-	-	-	-	-	●	
27-1.75-0.10	0.03-0.08	1.75	0.10	3.0	N.L.	-	-	-	-	-	-	-	-	-	●	
27-1.75-0.20	0.03-0.08	1.75	0.20	3.0	N.L.	-	-	-	-	-	-	-	-	-	●	
27-1.78-0.18	0.04-0.10	1.78	0.18	3.0	N.L.	-	-	-	-	-	-	-	-	-	●	
27-1.85-0.20	0.04-0.10	1.85	0.20	3.0	N.L.	-	-	-	-	-	-	-	-	-	●	
27-1.96-0.15	0.04-0.10	1.96	0.15	3.0	N.L.	-	-	-	-	-	-	-	-	-	●	
27-2.00-0.10	0.04-0.10	2.00	0.10	6.4	N.L.	600	280	180	130	105	85	60	50	30	●	
27-2.00-0.20	0.04-0.10	2.00	0.20	6.4	N.L.	600	280	180	130	105	85	60	50	30	●	
27-2.22-0.15	0.04-0.10	2.22	0.15	3.5	N.L.	600	-	-	-	-	-	-	-	-	●	
27-2.30-0.20	0.04-0.10	2.30	0.20	3.5	N.L.	600	-	-	-	-	-	-	-	-	●	
27-2.39-0.15	0.04-0.10	2.39	0.15	5.7	N.L.	600	280	180	130	50	35	-	-	-	●	
27-2.47-0.20	0.04-0.10	2.47	0.20	5.7	N.L.	600	280	180	130	50	35	-	-	-	●	
27-2.50-0.10	0.04-0.10	2.50	0.10	5.7	N.L.	600	280	180	130	50	35	-	-	-	●	
27-2.50-0.30	0.05-0.12	2.50	0.30	5.7	N.L.	600	280	180	130	50	35	-	-	-	●	
27-2.70-0.10	0.05-0.12	2.70	0.10	6.2	N.L.	600	280	180	135	105	95	85	78	-	●	
27-2.87-0.20	0.05-0.12	2.87	0.20	6.2	N.L.	600	280	180	135	105	95	85	78	-	●	



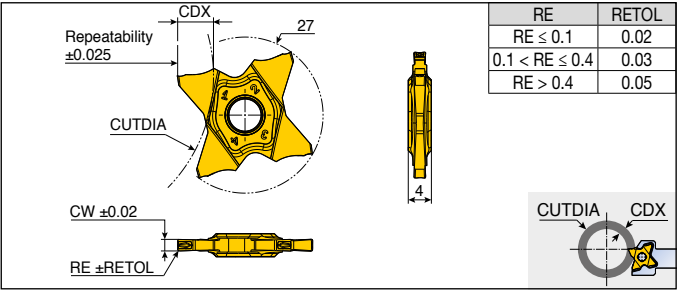
► N.L.: No limit

●: Standard items

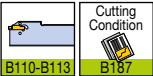
TQJ 27



Precision grooving and parting inserts



Designation	Feed (mm/rev)	CW	RE	CDX	CUTDIA										Grade
					CDX ≤ 3.0	≤ 3.5	≤ 4.0	≤ 4.5	≤ 5.0	≤ 5.5	≤ 5.7	≤ 6.0	≤ 6.2	≤ 6.4	
TQJ 27-3.00-0.00	0.05-0.12	3.00	0.00	6.4	N.L.	600	280	180	135	105	95	85	78	55	●
27-3.00-0.20	0.05-0.12	3.00	0.20	6.4	N.L.	600	280	180	135	105	95	85	78	55	●
27-3.00-0.30	0.05-0.12	3.00	0.30	6.4	N.L.	600	280	180	135	105	95	85	78	55	●
27-3.00-0.40	0.05-0.12	3.00	0.40	6.4	N.L.	600	280	180	135	105	95	85	78	55	●
27-3.15-0.15	0.05-0.12	3.15	0.15	6.4	N.L.	600	280	180	135	105	95	85	78	68	●
27-3.18-0.20	0.05-0.12	3.18	0.20	6.4	N.L.	600	280	180	135	105	95	85	78	68	●



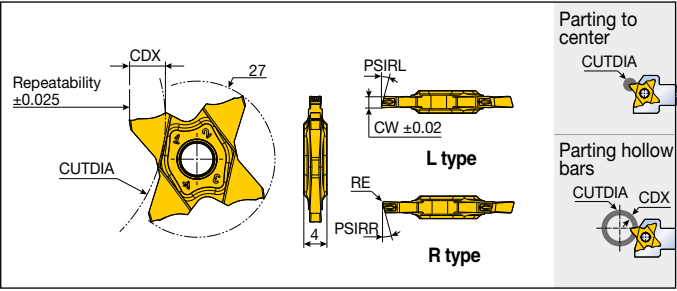
► N.L.: No limit

●: Standard items

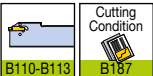
TQJ 27



Parting inserts



Designation	Feed (mm/rev)	CW	RE	PSIRR/L	Parting to center	Parting hollow bars		Grade
					CUTDIA	CDX	CUTDIA	
TQJ 27-1.00-15R/L	0.02-0.06	1.00	0.06	15°	7.0	3.5	600	●
27-1.50-6R/L	0.02-0.06	1.50	0.06	6°	12.0	5.7	35	●
27-1.50-15R/L	0.02-0.06	1.50	0.06	15°	12.0	5.7	35	●
27-2.00-6R/L	0.03-0.08	2.00	0.10	6°	13.0	6.4	30	●
27-2.00-15R/L	0.03-0.08	2.00	0.10	15°	13.0	6.4	30	●

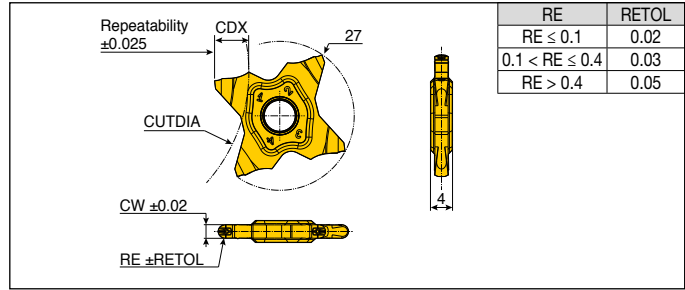


●: Standard items

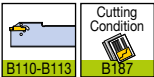
TQJ 27



Full radius inserts



Designation	Feed (mm/rev)	CW	RE	CDX	CUTDIA										Grade
					CDX ≤ 3.0	≤ 3.5	≤ 4.0	≤ 4.5	≤ 5.0	≤ 5.5	≤ 5.7	≤ 6.0	≤ 6.2	≤ 6.4	
TQJ 27-1.57-0.79	0.05-0.08	1.57	0.79	3.0	N.L.	-	-	-	-	-	-	-	-	-	●
27-2.00-1.00	0.05-0.11	2.00	1.00	3.5	N.L.	600	-	-	-	-	-	-	-	-	●
27-2.39-1.20	0.05-0.11	2.39	1.20	5.7	N.L.	600	280	180	130	50	35	-	-	-	●
27-3.00-1.50	0.06-0.12	3.00	1.50	6.4	N.L.	600	280	180	135	105	95	85	78	55	●



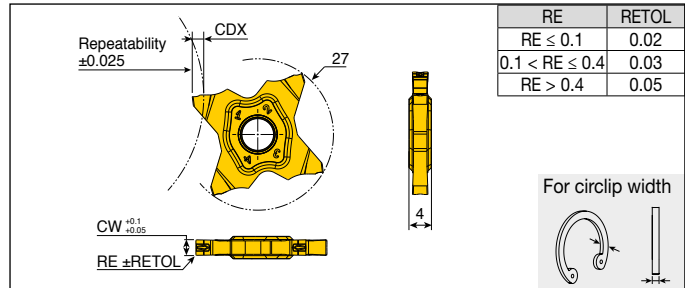
► N.L.: No limit

●: Standard items

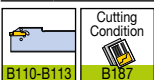
TQJ 27



DIN 471 circlip grooving and shallow grooving inserts



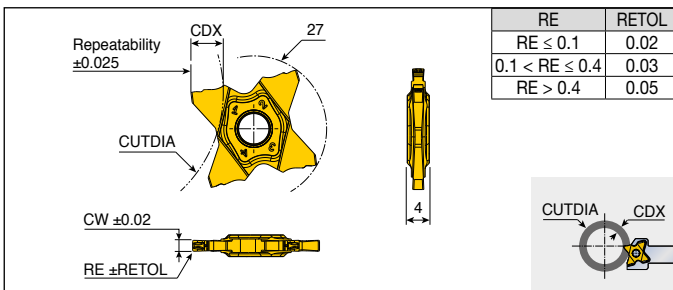
Designation	Feed (mm/rev)	CW	RE	CDX	For circlip width	Grade
						TT9080
TQJ 27-1.10-0.08-CG	0.03-0.07	1.10	0.08	1.50	1.10	●
27-1.30-0.08-CG	0.03-0.07	1.30	0.08	1.50	1.30	●
27-1.60-0.08-CG	0.03-0.08	1.60	0.08	2.00	1.60	●
27-1.85-0.08-CG	0.03-0.08	1.85	0.08	2.00	1.85	●
27-2.15-0.08-CG	0.04-0.10	2.15	0.08	2.50	2.15	●
27-2.65-0.15-CG	0.05-0.12	2.65	0.15	2.50	2.65	●



► When selecting insert, please keep in your mind insert tolerance

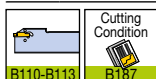
●: Standard items

Precision grooving and parting inserts



RE	RETOL
RE ≤ 0.1	0.02
0.1 < RE ≤ 0.4	0.03
RE > 0.4	0.05

Designation	Feed (mm/rev)	CW	RE	CDX	CUTDIA													Grade
					CDX ≤ 3.0	≤ 3.5	≤ 4.0	≤ 4.5	≤ 5.0	≤ 5.5	≤ 5.7	≤ 6.0	≤ 6.2	≤ 6.4	≤ 6.5	TT9080		
TQC 27-1.50-0.10	0.05-0.08	1.50	0.10	5.7	N.L.	600	280	180	130	50	35	-	-	-	-	●		
27-1.50-0.20	0.05-0.06	1.50	0.20	5.7	N.L.	600	280	180	130	50	35	-	-	-	-	●		
27-1.57-0.15	0.05-0.08	1.57	0.15	3.0	N.L.	-	-	-	-	-	-	-	-	-	-	●		
27-1.70-0.10	0.05-0.09	1.70	0.10	3.0	N.L.	-	-	-	-	-	-	-	-	-	-	●		
27-1.75-0.10	0.05-0.10	1.75	0.10	3.0	N.L.	-	-	-	-	-	-	-	-	-	-	●		
27-1.75-0.20	0.05-0.09	1.75	0.20	3.0	N.L.	-	-	-	-	-	-	-	-	-	-	●		
27-1.78-0.18	0.05-0.11	1.78	0.18	3.0	N.L.	-	-	-	-	-	-	-	-	-	-	●		
27-1.85-0.20	0.05-0.11	1.85	0.20	3.0	N.L.	-	-	-	-	-	-	-	-	-	-	●		
27-1.96-0.15	0.05-0.11	1.96	0.15	3.0	N.L.	-	-	-	-	-	-	-	-	-	-	●		
27-2.00-0.10	0.05-0.17	2.00	0.10	6.4	N.L.	600	280	180	130	105	85	60	50	30	-	●		
27-2.00-0.20	0.05-0.15	2.00	0.20	6.4	N.L.	600	280	180	130	105	85	60	50	30	-	●		
27-2.22-0.15	0.05-0.15	2.22	0.15	3.5	N.L.	600	-	-	-	-	-	-	-	-	-	●		
27-2.30-0.20	0.05-0.16	2.30	0.20	3.5	N.L.	600	-	-	-	-	-	-	-	-	-	●		
27-2.39-0.15	0.05-0.16	2.39	0.15	5.7	N.L.	600	280	180	130	50	35	-	-	-	-	●		
27-2.47-0.20	0.05-0.19	2.47	0.20	5.7	N.L.	600	280	180	130	50	35	-	-	-	-	●		
27-2.50-0.10	0.05-0.20	2.50	0.10	5.7	N.L.	600	280	180	130	50	35	-	-	-	-	●		
27-2.50-0.30	0.05-0.17	2.50	0.30	5.7	N.L.	600	280	180	130	50	35	-	-	-	-	●		
27-2.70-0.10	0.05-0.19	2.70	0.10	6.2	N.L.	600	280	180	135	105	95	85	78	-	-	●		
27-2.87-0.20	0.05-0.19	2.87	0.20	6.2	N.L.	600	280	180	135	105	95	85	78	-	-	●		
27-3.00-0.00	0.05-0.11	3.00	0	6.4	N.L.	600	280	180	135	105	95	85	78	55	-	●		
27-3.00-0.20	0.06-0.23	3.00	0.20	6.4	N.L.	600	280	180	135	105	95	85	78	55	-	●		
27-3.00-0.30	0.06-0.25	3.00	0.30	6.4	N.L.	600	280	180	135	105	95	85	78	55	-	●		
27-3.00-0.40	0.06-0.25	3.00	0.40	6.4	N.L.	600	280	180	135	105	95	85	78	55	-	●		
27-3.15-0.15	0.06-0.21	3.15	0.15	6.4	N.L.	600	280	180	135	105	95	85	78	68	-	●		
27-3.18-0.20	0.06-0.23	3.18	0.20	6.4	N.L.	600	280	180	135	105	95	85	78	68	-	●		
27-3.30-0.10	0.06-0.23	3.30	0.10	6.5	N.L.	600	280	180	135	105	85	65	50	40	35	●		
27-3.48-0.20	0.06-0.23	3.48	0.20	6.5	N.L.	600	280	180	135	105	85	65	50	40	35	●		
27-3.56-0.20	0.06-0.23	3.56	0.20	6.5	N.L.	600	280	180	135	105	85	65	55	40	35	●		
27-3.74-0.20	0.06-0.23	3.74	0.20	6.5	N.L.	600	280	180	135	105	85	65	55	40	35	●		
27-3.98-0.20	0.07-0.30	3.98	0.20	6.5	N.L.	600	280	180	135	105	95	85	78	40	45	●		
27-4.00-0.30	0.07-0.30	4.00	0.30	6.5	N.L.	600	280	180	135	105	95	85	78	40	45	●		
27-4.00-0.40	0.07-0.30	4.00	0.40	6.5	N.L.	600	280	180	135	105	95	85	78	40	45	●		
27-4.00-0.80	0.07-0.30	4.00	0.80	6.5	N.L.	600	280	180	135	105	95	85	78	40	45	●		
27-4.15-0.15	0.07-0.30	4.15	0.15	6.5	N.L.	600	280	180	135	105	95	85	78	40	45	●		
27-4.23-0.10	0.07-0.30	4.23	0.10	6.5	N.L.	600	280	180	135	105	95	85	78	55	65	●		

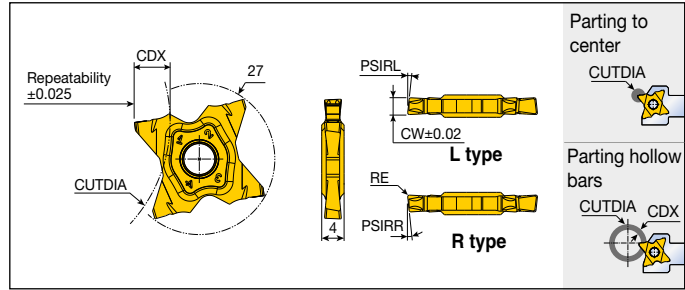


► N.L.: No limit

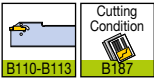
●: Standard items

TQC 27

Parting inserts



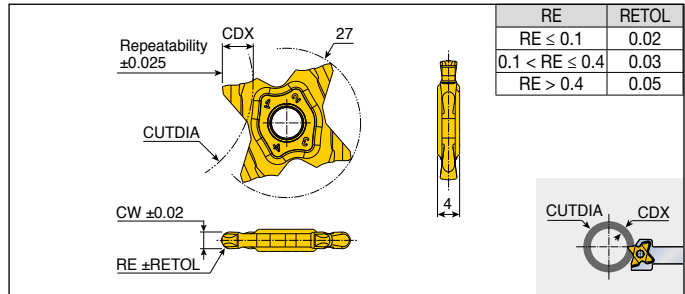
Designation	Feed (mm/rev)	CW	RE	PSIRR/L	Parting to center	Parting hollow bars		Grade
					CUTDIA	CDX	CUTDIA	
TQC 27-1.50-6R/L	0.03-0.07	1.50	0.06	6°	12.0	5.7	35	●
27-1.50-15R/L	0.03-0.07	1.50	0.06	15°	12.0	5.7	35	●
27-2.00-6R/L	0.04-0.14	2.00	0.10	6°	13.0	6.4	30	●
27-2.00-15R/L	0.04-0.14	2.00	0.10	15°	13.0	6.4	30	●



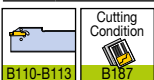
●: Standard items

TQC 27

Full radius inserts

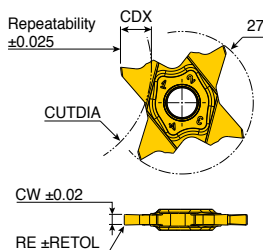


Designation	Feed (mm/rev)	CW	RE	CDX	CUTDIA										Grade
					CDX ≤ 3.0	≤ 3.5	≤ 4.0	≤ 4.5	≤ 5.0	≤ 5.5	≤ 5.7	≤ 6.0	≤ 6.2	≤ 6.4	
TQC 27-1.57-0.79	0.05-0.09	1.57	0.79	3.0	N.L.	-	-	-	-	-	-	-	-	-	●
27-2.00-1.00	0.05-0.13	2.00	1.00	3.5	N.L.	600	-	-	-	-	-	-	-	-	●
27-2.39-1.20	0.06-0.17	2.39	1.20	5.7	N.L.	600	280	180	130	50	35	-	-	-	●
27-3.00-1.50	0.06-0.20	3.00	1.50	6.4	N.L.	600	280	180	135	105	95	85	78	55	●

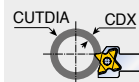


► N.L.: No limit

●: Standard items



RE	RETOL
$RE \leq 0.1$	0.02
$0.1 < RE \leq 0.4$	0.03
$RE > 0.4$	0.05



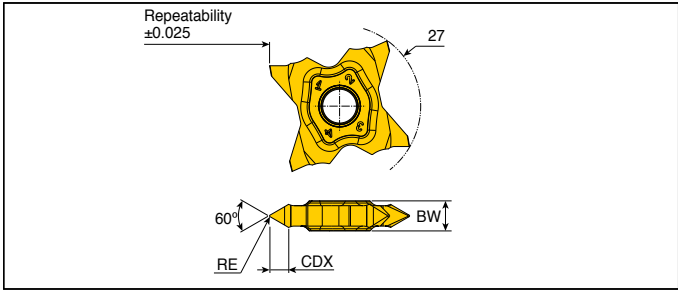
	Cutting Condition 
B110-B113	B187

► ⁽¹⁾ Other size of width from 0.5mm up to 8.2mm can be supplied as special ●: Standard items
► N.L.: No limit

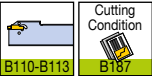
TQS 27-MT



Partial profile 60° threading inserts



Designation	Dimension (mm)							Grade
	TPN	TPX	TPIX	TPIN	RE	BW	CDX	TT9080
TQS 27-4MT-0.05	0.45	3	48	8	0.05	4	2.8	●
27-4MT-0.14	1.11	3	23	8	0.14	4	2.7	●
27-5MT-0.15	1.25	3	20	8	0.15	5	3.1	●
27-5MT-0.20	1.63	3	16	8	0.20	5	3.1	●
27-6MT-0.25	1.94	3	13	8	0.25	6	3.6	●

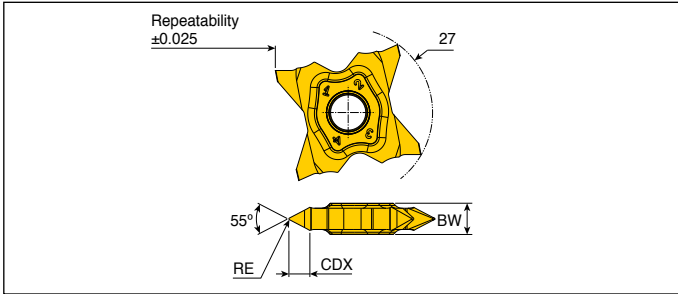


- ▶ TPN: Thread pitch minimum (mm)
- ▶ TPX: Thread pitch maximum (mm)
- ▶ TPIX: Thread per inch maximum
- ▶ TPIN: Thread per inch minimum
- : Standard items

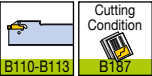
TQS 27-WT



Partial profile 55° threading inserts



Designation	Dimension (mm)					Grade
	TPIX	TPIN	RE	BW	CDX	TT9080
TQS 27-4WT-0.05	54	10	0.05	4	2.9	●
27-5WT-0.15	19	10	0.15	5	3.3	●
27-6WT-0.25	12	9	0.25	6	3.9	●

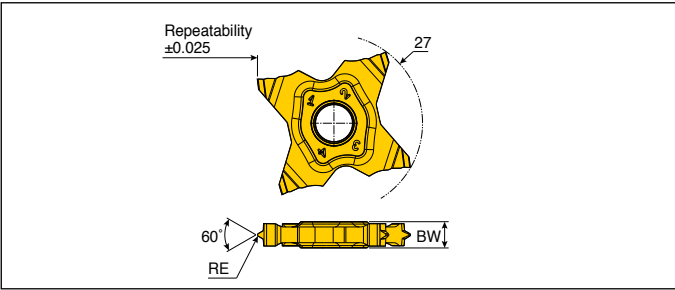


- ▶ TPIX: Thread per inch maximum
- ▶ TPIN: Thread per inch minimum
- : Standard items

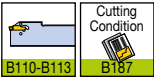
TQS 27-ISO



ISO metric full profile, external threading inserts



Designation	Dimension (mm)			Grade
	TP	RE	BW	TT9080
TQS 27-0.5-ISO	0.50	0.08	4	●
27-0.75-ISO	0.75	0.11	4	●
27-0.8-ISO	0.80	0.12	4	●
27-1.0-ISO	1.00	0.14	4	●
27-1.25-ISO	1.25	0.18	4	●
27-1.5-ISO	1.50	0.22	4	●
27-1.75-ISO	1.75	0.25	4	●
27-2.0-ISO	2.00	0.28	4	●



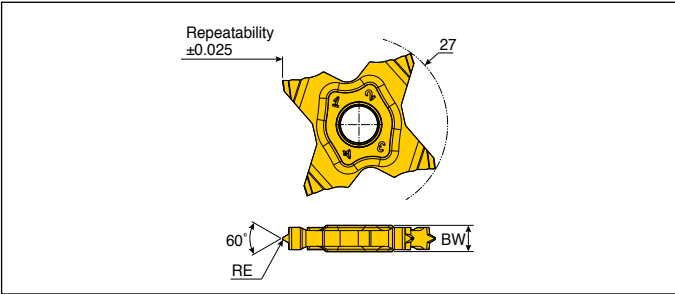
▶ TP: Thread pitch (mm)

●: Standard items

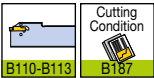
TQS 27-UN



American UN (UNC, UNF, UNEF) full profile, external threading inserts



Designation	Dimension (mm)			Grade
	TPI	RE	BW	TT9080
TQS 27-24-UN	24	0.13	4	●
27-20-UN	20	0.16	4	●
27-18-UN	18	0.16	4	●
27-16-UN	16	0.21	4	●
27-14-UN	14	0.23	4	●
27-12-UN	12	0.27	4	●



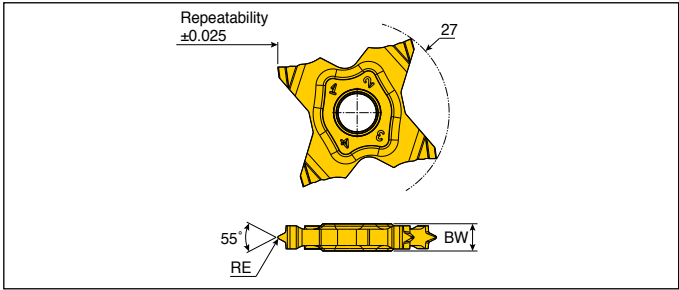
▶ TPI: Thread per inch

●: Standard items

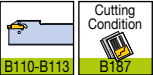
TQS 27-W



Whitworth (BSW, BSF, BSP) full profile, external threading inserts



Designation	Dimension (mm)			Grade
	TPI	RE	BW	
TQS 27-28-W	28	0.09	4	●
27-19-W	19	0.15	4	●
27-18-W	18	0.16	4	●
27-16-W	16	0.19	4	●
27-14-W	14	0.21	4	●
27-12-W	12	0.25	4	●



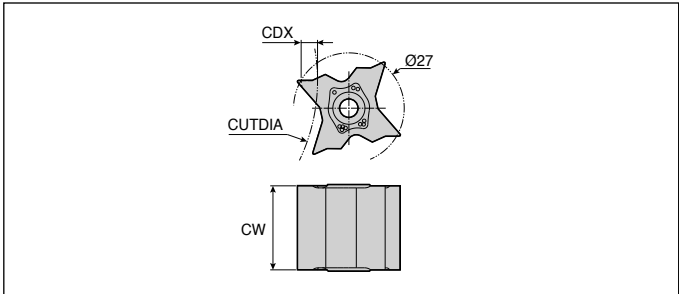
► TPI: Thread per inch

●: Standard items

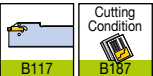
TQBS 27



4 cutting edges with semi-finished blanks for wide grooving and profiling



Designation	Dimension (mm)		CUTDIA										Grade
	CW	BW	CDX≤3.0	≤3.5	≤4.0	≤4.5	≤5.0	≤5.5	≤5.7	≤6.0	≤6.2	≤6.4	
TQBS 27-10EW	10.5	11.1	N.L.	600	280	180	135	105	95	85	78	55	●
27-15EW	15.5	16.1	N.L.	600	280	180	135	105	95	85	78	55	●
27-20EW	20.5	21.1	N.L.	600	280	180	135	105	95	85	78	55	●



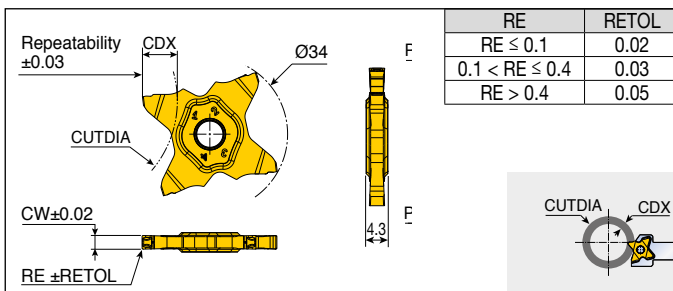
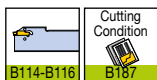
► N.L.: No limit

●: Standard items

TQC 34



Deep grooving and parting inserts

[illegible]

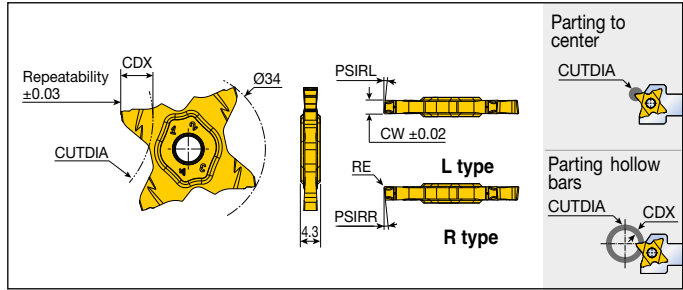
► N.L.: No limit

●: Standard items

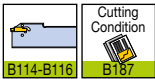
TQC 34



Parting inserts



Designation	Feed (mm/rev)	CW	RE	PSIRR/L	Parting to center		Parting hollow bars		Grade
					CUTDIA		CDX	CUTDIA	
TQC 34-1.50-8R/L	0.03-0.10	1.50	0.07	8°	18.5		9	40	●
34-2.00-6R/L	0.03-0.15	2.00	0.10	6°	18.5		9	40	●
34-2.00-15R/L	0.03-0.15	2.00	0.10	15°	18.5		9	40	●
34-3.00-6R/L	0.03-0.18	3.00	0.20	6°	20.0		10	20	●

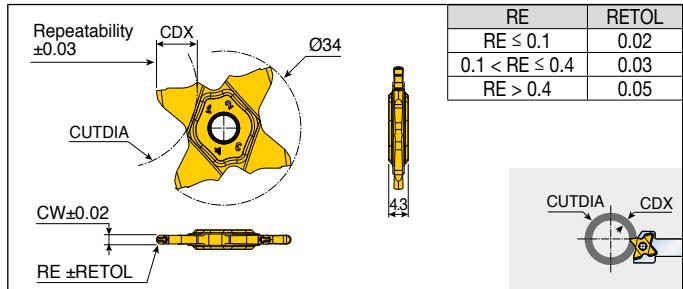


●: Standard items

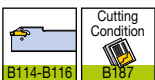
TQC 34



Full radius inserts



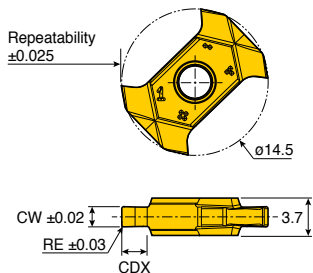
Designation	Feed (mm/rev)	CW	RE	CDX	CUTDIA							Grade
					CDX≤4.0	≤5.0	≤6.0	≤7.0	≤8.0	≤9.0	≤10.0	
TQC 34-2.00-1.00	0.05-0.11	2.00	1.00	9.0	N.L.	400	190	125	90	40	-	●
34-2.39-1.20	0.05-0.11	2.39	1.20	10.0	N.L.	400	190	125	90	45	20	●
34-3.00-1.50	0.06-0.12	3.00	1.50	10.0	N.L.	400	190	125	90	50	20	●



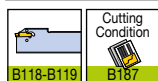
► N.L.: No limit

●: Standard items

4 cutting edge inserts for internal shallow grooving

[illegible]

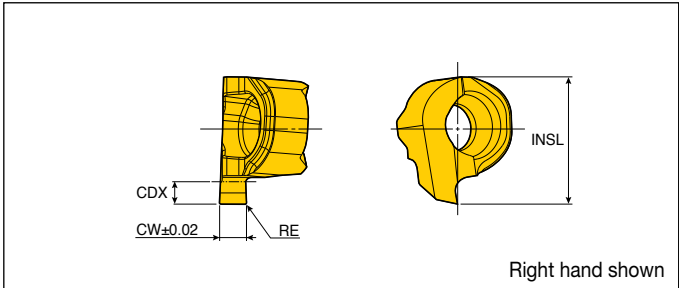
●: Standard items



TMIR/L

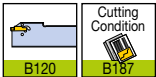


Precise inserts for internal shallow grooving on small diameter



Designation	Feed (mm/rev)	Dimension (mm)				Grade	
		CW	RE	CDX	INSL	TT4430	TT8020
TMIR/L 6-0.50-0.00	0.01-0.03	0.50	0.00	0.5	5.7	●	●
6-1.00-0.00	0.01-0.03	1.00	0.00	1.0	5.7	●	●
6-1.20-0.05	0.01-0.03	1.20	0.05	1.0	5.7	●	●
8-0.50-0.00	0.01-0.03	0.50	0.00	0.7	7.4	●	●
8-1.00-0.00	0.01-0.03	1.00	0.00	1.5	7.4	●	●
8-1.50-0.05	0.01-0.03	1.50	0.05	1.5	7.4	●	●
8-2.00-0.10	0.01-0.03	2.00	0.10	1.5	7.4	●	●

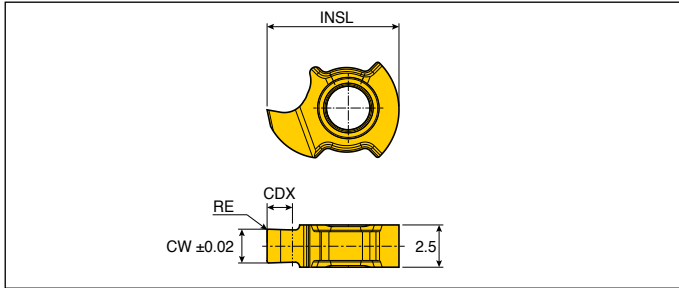
●: Standard items



TMIS 8

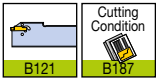


Precise inserts for internal shallow grooving on small diameter



Designation	Feed (mm/rev)	Dimension (mm)				Grade	
		CW	RE	CDX	INSL	TT4430	TT8020
TMIS 8-0.50-0.00	0.01-0.03	0.50	0.00	0.70	7.8	●	●
8-1.00-0.00	0.01-0.03	1.00	0.00	1.50	7.8	●	●
8-1.50-0.05	0.01-0.03	1.50	0.05	1.50	7.8	●	●
8-2.00-0.10	0.01-0.03	2.00	0.10	1.50	7.8	●	●

●: Standard items



TV	E	R	4	07	010	45
1	2	3	4	5	6	7

1 TaeguTec TOP-CUT series

2 Application type

E External turning
R Reverse turning
B Back turning
T Threading
P Parting

3 Hand of tool

R Right-hand
L Left-hand

4 Insert thickness

4 3.97mm

5 Width of insert

07 0.7mm
10 1.0mm
12 1.2mm
15 1.5mm
18 1.8mm
20 2.0mm

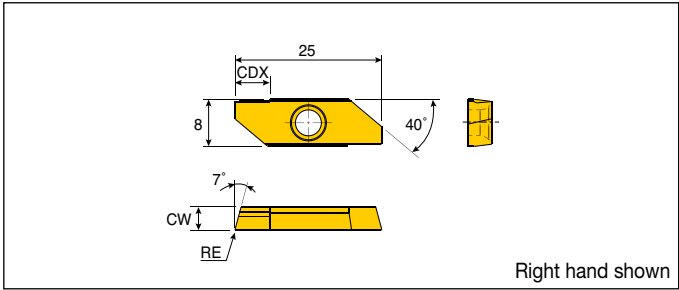
6 Corner radius

000 0mm
003 0.03mm
005 0.05mm
010 0.10mm
015 0.15mm

7 CDX (TVPR/L only)

45 4.5mm
50 5.0mm
60 6.0mm

General turning inserts



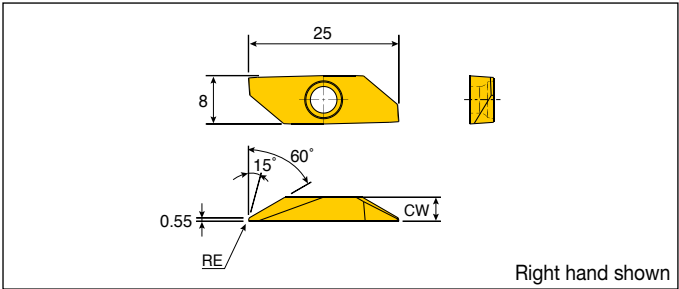
Designation	ap (mm)	Feed (mm/rev)	Dimension (mm)			Grade (TT9010)	
			CW	RE	CDX	R	L
TVER/L 40003	0.1-5.5	0.01-0.15	3.97	0.03	5.5	●	
40010	0.1-5.5	0.01-0.15	3.97	0.10	5.5	●	



●: Standard items

TVRR/L

Reverse turning inserts



Designation	ap (mm)	Feed (mm/rev)	Dimension (mm)			Grade (TT9010)	
			CW	RE	CDX	R	L
TVRR/L 40003-60	0.1-5.5	0.01-0.15	3.97	0.03	5.5	●	
40010-60	0.1-5.5	0.01-0.15	3.97	0.10	5.5	●	

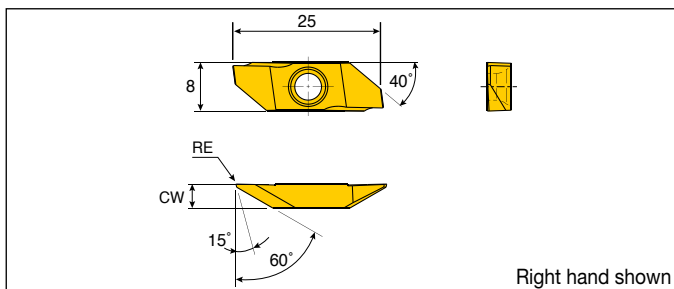


●: Standard items

TVBR/L



Back turning inserts



Designation	ap (mm)	Feed (mm/rev)	Dimension (mm)			Grade (TT9010)	
			CW	RE	CDX	R	L
TVBR/L 40003	0.1-5.5	0.01-0.15	3.97	0.03	5.5	●	●
40005	0.1-5.5	0.01-0.15	3.97	0.05	5.5	●	●
40010	0.1-5.5	0.01-0.15	3.97	0.10	5.5	●	●
40015	0.1-5.5	0.01-0.15	3.97	0.15	5.5	●	●
40005-H⁽¹⁾	0.1-5.5	0.01-0.15	3.97	0.05	5.5	●	●
40015-H⁽¹⁾	0.1-5.5	0.01-0.15	3.97	0.15	5.5	●	●



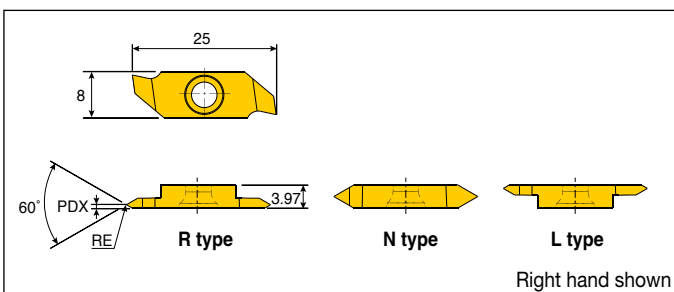
► ⁽¹⁾ With honed edges

●: Standard items

TVTR/L



Threading inserts



Designation	Dimension (mm)				Grade (TT9010)	
	TPN	TPX	PDX	RE	R	L
TVTR/L 41203-R	0.5	1.0	0.6	0.03	●	
40003-N	0.5	2.0	2.1	0.03	●	●
41203-L	0.5	1.0	0.6	0.03		●

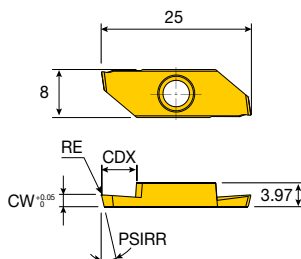


► TVTR 41203-R/L → pitch range: 0.5 - 1.0mm

► TVTR 40003-N → pitch range: 0.5 - 2.0mm

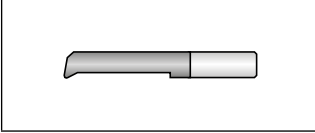
► TPN: Thread pitch minimum (mm), TPX: Thread pitch maximum (mm)

●: Standard items

[illegible]

MIN	T	R	04	040	005	D010
1	7	2	3	4	5	6

1 TOP-MICRO series



2 Hand of tool

R Right-hand
L Left-hand

3 Shank dia.

04 4.0mm
07 7.0mm

4 Max. depth

050 5.0mm
140 14.0mm

5 Corner radius

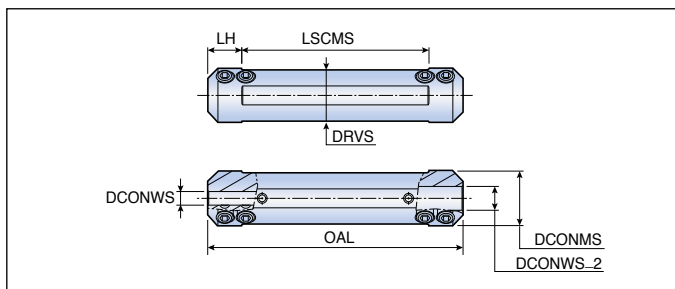
010 0.10mm
020 0.20mm

6 Min. bore dia.

D010 1.0mm

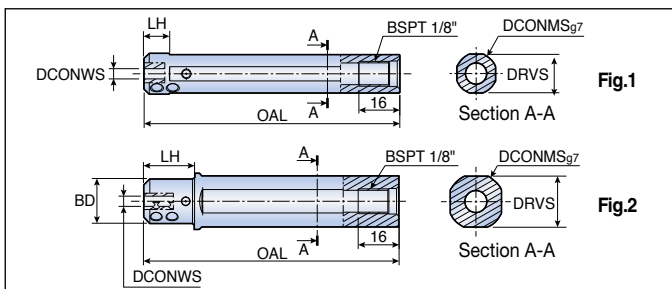
7 Application type

T Turning and chamfering
B Back turning
P Turning and profiling
U Undercutting and chamfering
C Turning and 45° chamfering
G Grooving and turning
S Grooving along shaft
F Face grooving
R Full radius for internal boring and profiling
I ISO full profile internal threading
SL Sleeve for MINS

[illegible]

Spare parts

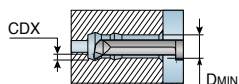
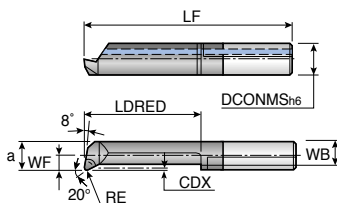
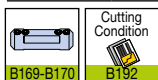
Designation	Set screw	Wrench		
				
MINSL 12	SS M5x0.8x4-MG	L-W 2.5		
MINSL 14/16/19/20/22/25	SS M5x0.8x6-MG	L-W 2.5		

[illegible]

► All sleeves applicable for Citizen Swiss type machine

Spare parts

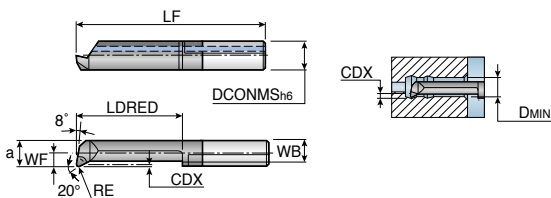
Designation	Set screw	Wrench		
				
MINS ...-L100C	SS M5x0.8x6-MG	L-W 2.5		

[illegible]

► *: Max D.O.C: 0.01 - 0.03, max feed 0.01mm/rev

●: Standard items

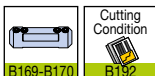
Mini carbide bars for internal turning and chamfering



Right hand shown

Designation	Dimension (mm)									R/L	Grade
	DCONMS	WF	a	WB	LF	LDRED	RE	CDX	DMIN		TT9030
MINTR07-090015D050	7.00	0.90	4.40	3.65	25.00	10.00	0.15	0.50	5.00	R	●
140015D050	7.00	0.90	4.40	3.65	30.00	15.00	0.15	0.50	5.00	R	●
190015D050	7.00	0.90	4.40	3.65	35.00	20.00	0.15	0.50	5.00	R	●
240015D050	7.00	0.90	4.40	3.65	40.00	25.00	0.15	0.50	5.00	R	●
290015D050	7.00	0.90	4.40	3.65	45.00	30.00	0.15	0.50	5.00	R	●
340015D050	7.00	0.90	4.40	3.65	50.00	35.00	0.15	0.50	5.00	R	●
140015D060	7.00	1.80	5.30	4.40	30.00	15.00	0.15	0.50	6.00	R	●
210015D060	7.00	1.80	5.30	4.40	37.00	22.00	0.15	0.50	6.00	R	●
240015D060	7.00	1.80	5.30	4.40	40.00	25.00	0.15	0.50	6.00	R	●
290015D060	7.00	1.80	5.30	4.40	45.00	30.00	0.15	0.50	6.00	R	●
340015D060	7.00	1.80	5.30	4.40	50.00	35.00	0.15	0.50	6.00	R	●
410015D060	7.00	1.80	5.30	4.40	57.00	42.00	0.15	0.50	6.00	R	●
190015D068	7.00	2.80	6.30	5.40	35.00	20.00	0.15	0.60	6.80	R	●
240015D068	7.00	2.80	6.30	5.40	40.00	25.00	0.15	0.60	6.80	R	●
290015D068	7.00	2.80	6.30	5.40	45.00	30.00	0.15	0.60	6.80	R	●
340015D070	7.00	2.80	6.30	5.40	50.00	35.00	0.15	0.60	7.00	R	●
390015D070	7.00	2.80	6.30	5.40	55.00	40.00	0.15	0.60	7.00	R	●
440015D070	7.00	2.80	6.30	5.40	60.00	45.00	0.15	0.60	7.00	R	●
490015D070	7.00	2.80	6.30	5.40	65.00	50.00	0.15	0.60	7.00	R	●
MINTL07-090015D050	7.00	0.90	4.40	3.65	25.00	10.00	0.15	0.50	5.00	L	●
140015D050	7.00	0.90	4.40	3.65	30.00	15.00	0.15	0.50	5.00	L	●
190015D050	7.00	0.90	4.40	3.65	35.00	20.00	0.15	0.50	5.00	L	●
240015D050	7.00	0.90	4.40	3.65	40.00	25.00	0.15	0.50	5.00	L	●
290015D050	7.00	0.90	4.40	3.65	45.00	30.00	0.15	0.50	5.00	L	●
140015D060	7.00	1.80	5.30	4.40	30.00	15.00	0.15	0.50	6.00	L	●
210015D060	7.00	1.80	5.30	4.40	37.00	22.00	0.15	0.50	6.00	L	●
240015D060	7.00	1.80	5.30	4.40	40.00	25.00	0.15	0.50	6.00	L	●
290015D060	7.00	1.80	5.30	4.40	45.00	30.00	0.15	0.50	6.00	L	●
190015D068	7.00	2.80	6.30	5.40	35.00	20.00	0.15	0.60	6.80	L	●
290015D068	7.00	2.80	6.30	5.40	45.00	30.00	0.15	0.60	6.80	L	●
340015D070	7.00	2.80	6.30	5.40	50.00	35.00	0.15	0.60	7.00	L	●

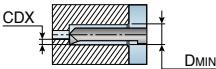
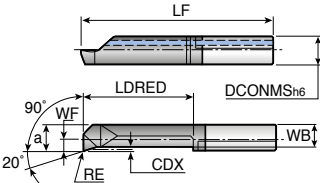
●: Standard items



MINP R 04/07



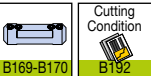
Mini carbide bars for internal turning and profiling



Right hand shown

Designation	Dimension (mm)									R/L	Grade
	DCONMS	WF	a	WB	LF	LDRED	RE	CDX	DMIN		TT9030
MINPR04- 090010D028	4.00	0.90	2.60	2.20	25.50	10.50	0.10	0.20	2.80	R	●
150010D028	4.00	0.90	2.60	2.20	31.50	16.50	0.10	0.20	2.80	R	●
090010D040	4.00	1.50	3.50	2.90	25.50	10.50	0.10	0.30	4.00	R	●
150010D040	4.00	1.50	3.50	2.90	31.50	16.50	0.10	0.30	4.00	R	●
MINPR07- 140015D050	7.00	0.90	4.40	3.65	30.00	15.00	0.15	0.50	5.00	R	●
190015D050	7.00	0.90	4.40	3.65	35.00	20.00	0.15	0.50	5.00	R	●

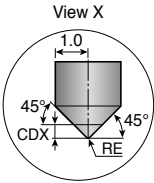
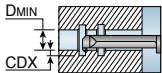
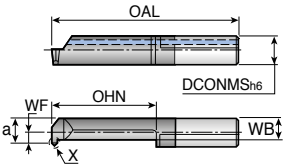
●: Standard items



MINC R 07



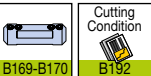
Mini carbide bars for internal turning and 45° chamfering



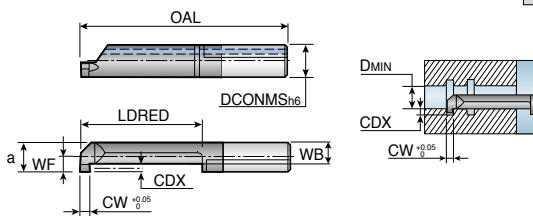
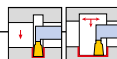
Right hand shown

Designation	Dimension (mm)									R/L	Grade
	DCONMS	WF	a	WB	OAL	OHN	RE	CDX	DMIN		TT9030
MINCR07- 140020D050	7.00	0.90	4.40	3.20	30.00	15.00	0.20	0.70	5.00	R	●
190020D050	7.00	0.90	4.40	3.20	35.00	20.00	0.20	0.70	5.00	R	●
190020D068	7.00	2.80	6.30	3.80	35.00	20.00	0.20	0.70	6.80	R	●

●: Standard items



Mini carbide bars for grooving and turning



Right hand shown

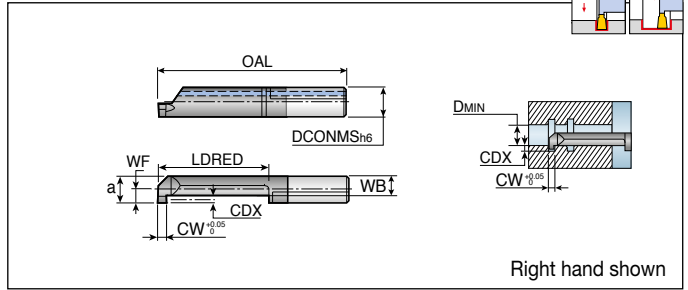
 B169-B170	Cutting Condition  B192
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- ▶ The corner radius is less than 0.1mm

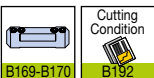
●: Standard items

MING R/L 07

Mini carbide bars for grooving and turning



Designation	Dimension (mm)									R/L	Grade TT9030
	DCONMS	CW	WF	a	WB	OAL	LDRED	CDX	DMIN		
MINGR07- 090100D050	7.00	1.00	0.90	4.40	3.00	25.00	10.00	1.00	5.00	R	●
140100D050	7.00	1.00	0.90	4.40	3.00	30.00	15.00	1.00	5.00	R	●
090150D050	7.00	1.50	0.90	4.40	3.00	25.00	10.00	1.00	5.00	R	●
140150D050	7.00	1.50	0.90	4.40	3.00	30.00	15.00	1.00	5.00	R	●
090200D050	7.00	2.00	0.90	4.40	3.00	25.00	10.00	1.00	5.00	R	●
190200D050	7.00	2.00	0.90	4.40	3.00	35.00	20.00	1.00	5.00	R	●
090100D060	7.00	1.00	1.80	5.30	3.10	25.00	10.00	1.80	6.00	R	●
140100D060	7.00	1.00	1.80	5.30	3.10	30.00	15.00	1.80	6.00	R	●
210100D060	7.00	1.00	1.80	5.30	3.10	37.00	22.00	1.80	6.00	R	●
290100D060	7.00	1.00	1.80	5.30	3.10	45.00	30.00	1.80	6.00	R	●
090150D060	7.00	1.50	1.80	5.30	3.10	25.00	10.00	1.80	6.00	R	●
140150D060	7.00	1.50	1.80	5.30	3.10	30.00	15.00	1.80	6.00	R	●
210150D060	7.00	1.50	1.80	5.30	3.10	37.00	22.00	1.80	6.00	R	●
240150D060	7.00	1.50	1.80	5.30	3.10	40.00	25.00	1.80	6.00	R	●
290150D060	7.00	1.50	1.80	5.30	3.10	45.00	30.00	1.80	6.00	R	●
090200D060	7.00	2.00	1.80	5.30	3.10	25.00	10.00	1.80	6.00	R	●
140200D060	7.00	2.00	1.80	5.30	3.10	30.00	15.00	1.80	6.00	R	●
210200D060	7.00	2.00	1.80	5.30	3.10	37.00	22.00	1.80	6.00	R	●
240200D060	7.00	2.00	1.80	5.30	3.10	40.00	25.00	1.80	6.00	R	●
290200D060	7.00	2.00	1.80	5.30	3.10	45.00	30.00	1.80	6.00	R	●
090100D068	7.00	1.00	2.70	6.20	3.30	25.00	10.00	2.50	6.80	R	●
140100D068	7.00	1.00	2.70	6.20	3.30	30.00	15.00	2.50	6.80	R	●
210100D068	7.00	1.00	2.70	6.20	3.30	37.00	22.00	2.50	6.80	R	●
090150D068	7.00	1.50	2.70	6.20	3.30	25.00	10.00	2.50	6.80	R	●
140150D068	7.00	1.50	2.70	6.20	3.30	30.00	15.00	2.50	6.80	R	●
210150D068	7.00	1.50	2.70	6.20	3.30	37.00	22.00	2.50	6.80	R	●
290150D068	7.00	1.50	2.70	6.20	3.30	45.00	30.00	2.50	6.80	R	●
090200D068	7.00	2.00	2.70	6.20	3.30	25.00	10.00	2.50	6.80	R	●
140200D068	7.00	2.00	2.70	6.20	3.30	30.00	15.00	2.50	6.80	R	●
210200D068	7.00	2.00	2.70	6.20	3.30	37.00	22.00	2.50	6.80	R	●
290200D068	7.00	2.00	2.70	6.20	3.30	45.00	29.00	2.50	6.80	R	●
MINGL07- 090100D060	7.00	1.00	1.80	5.30	3.10	25.00	10.00	1.80	6.00	L	●
090150D060	7.00	1.50	1.80	5.30	3.10	25.00	10.00	1.80	6.00	L	●
140200D068	7.00	2.00	2.70	6.20	3.30	30.00	15.00	2.50	6.80	L	●



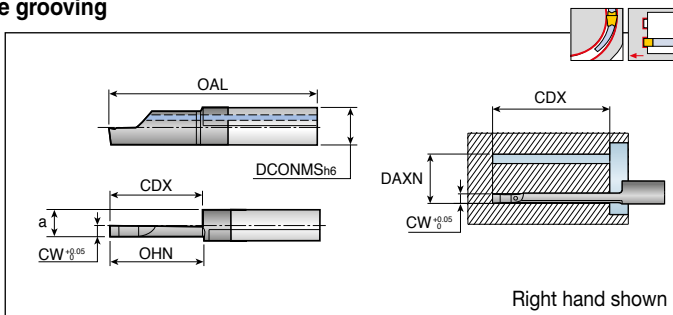
► The corner radius is less than 0.1mm

●: Standard items

MINF R 07

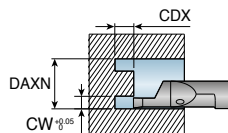
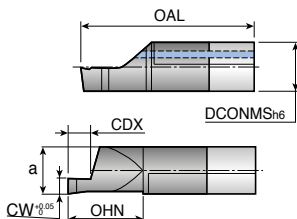


Mini carbide bars for deep face grooving

[illegible]

- ▶ The corner radius is less than 0.1mm

●: Standard items



Right hand shown

	
B169-B170	B192

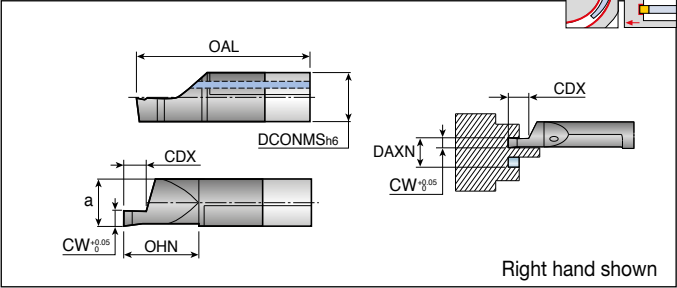
- ▶ The corner radius is less than 0.1mm

●: Standard items

MINS R 07



Mini carbide bars for grooving along shaft



Right hand shown

Designation	Dimension (mm)							R/L	Grade TT9030
	DCONMS	CW	a	OAL	OHN	CDX	DAXN		
MINSR07 -200200D060	7.00	2.00	5.20	36.00	21.00	4.00	6.00	R	●



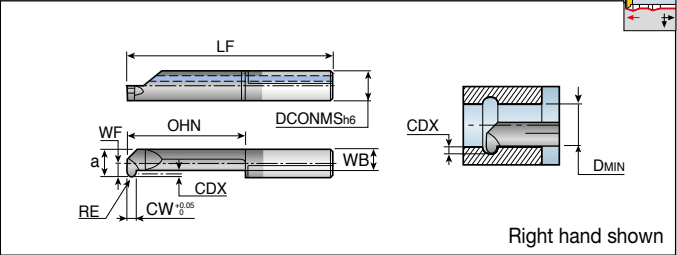
► The corner radius is less than 0.1mm

●: Standard items

MINR R 07



Mini carbide bars, full radius for internal turning and profiling

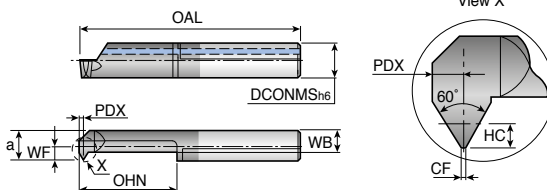


Right hand shown

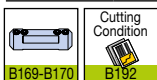
Designation	Dimension (mm)										R/L	Grade TT9030
	DCONMS	CW	WF	a	WB	RE	LF	OHN	CDX	DMIN		
MINRR07-190050D050	7.00	1.00	0.90	4.40	3.10	0.50	35.00	20.00	1.00	5.00	R	●
240050D060	7.00	1.00	1.80	5.30	3.20	0.50	40.00	25.00	1.80	6.00	R	●
290050D068	7.00	1.00	2.80	6.30	3.55	0.50	45.00	30.00	2.50	6.80	R	●



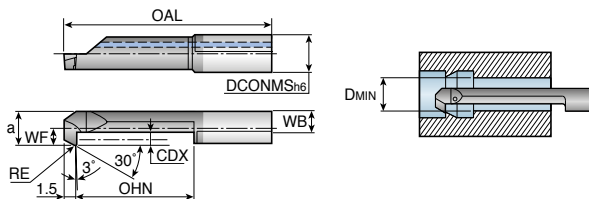
●: Standard items



Right hand shown

[illegible]

●: Standard items



Right hand shown

 B169-B170	Cutting Condition  B192
--	--

●: Standard items

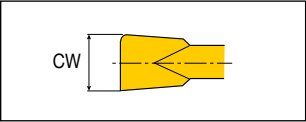
TDIT **3.20** - **0.00** - **0.25** - - **TT8020**

1 **2** **3** **4** **5** **6**

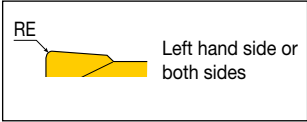
1 Main style of insert

T type: Chip breaker
G type: Non-chip breaker

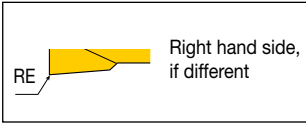
2 Insert width



3 Corner radius



4 Corner radius



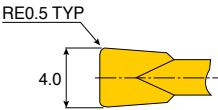
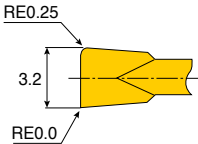
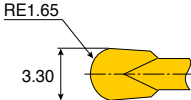
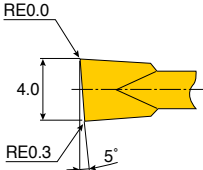
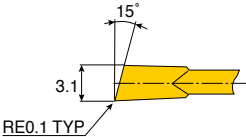
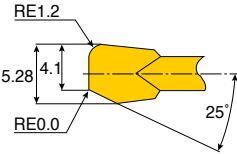
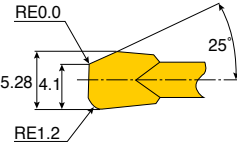
5 Additional codes

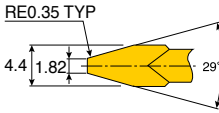
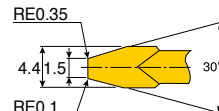
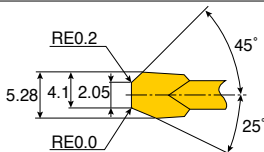
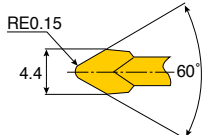
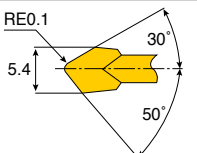
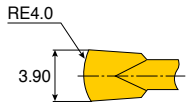
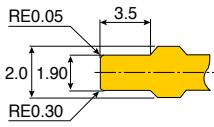
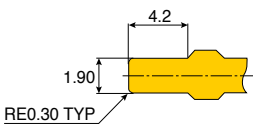
6 Grades

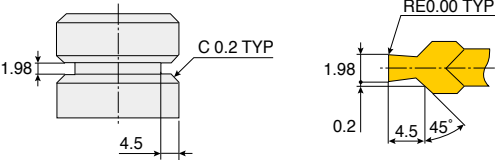
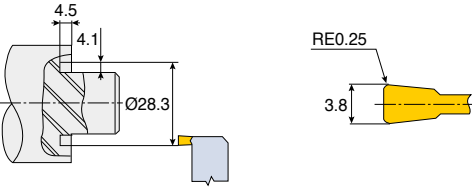
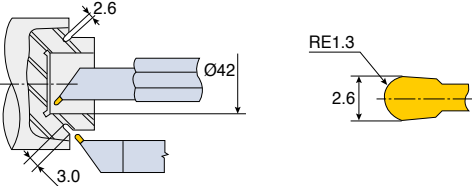
Special profile inserts



Tailor-made inserts are available upon request

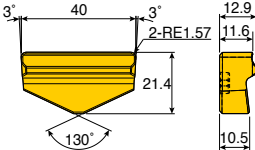
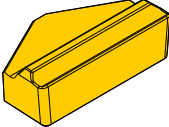
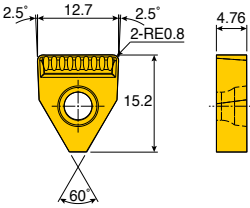
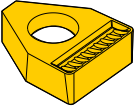
Shape	Designation	Remarks
	TDT 4.00-0.50	Symmetrical type
	TDIT 3.20-0.00-0.25	Non-symmetrical type
	TDT 3.30-1.65	Full-R type
	TDT 4.00-0.30-5RA	L: Chamfer on left hand side R: Chamfer on right hand side
	TDT 3.10-0.10-15LA	
	TDG 5.28-1.20-R25A	
	TDT 5.28-1.20-L25A	

Shape	Designation	Remarks
	TDG 4.40-1.82-29A	L: Chamfer on left hand side R: Chamfer on right hand side
	TDT 4.40-1.50-30A	
	TDT 5.28-2.05-45R25L	
	TDG 4.40-0.15-60A	
	TDG 5.40-0.10-30R50L	
	TDT 3.90-4.00	
	TDT 1.90-T3.5C	
	TDT 1.90-0.30-4.20T	

Shape	Designation
	TDG 1.98-T4.5C
	TDFT 3.80E-0.25
	TDIT 2.60-1.30
The others	Available upon customer's request

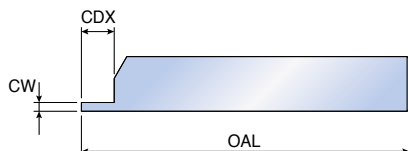
Heavy Industry

Tailor-made

Designation	Dimension (mm)	Remarks
XNMR 401416-HD		
XNGT 332-GV		

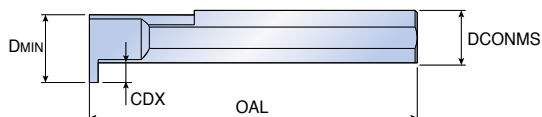
► Specific dimensions

External holder



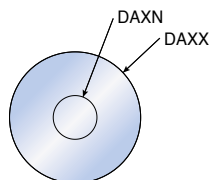
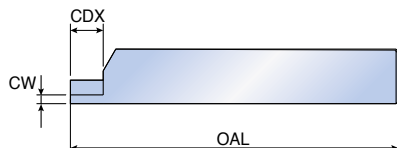
Right handed shown

Internal holder



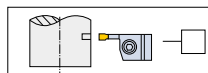
Right handed shown

Facing holder

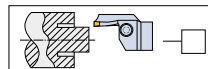
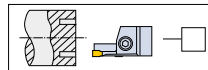


Right handed shown

External holder

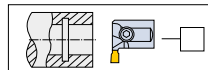


Facing holder



RN type

Internal holder



Holder handed

- Right handed ☐
- Light handed ☐

Insert

- Grade: _____
- Chip breaker type: _____

Quantity

• _____ pcs

Comment

Workpieces

- Part: _____
- Material: _____
- Hardness: _____

■ Customer: _____

■ Contact: _____

■ Address : _____

■ Telephone : _____

■ Fax : _____

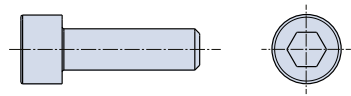
■ E-mail : _____

Technical Data

► Screw torque

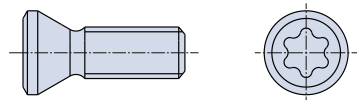
SH type

Designation	Thread	Length	Torx / Hexa	Tightening Torque
SH M4x0.7x16	M4	20	Hexa 3mm	3.5 Nm
SH M4x0.7x20-MO	M4	23.9	Hexa 3 mm	3.5 Nm
SH M5x0.8x10	M5	15	Hexa 4 mm	5.5 Nm
SH M5x0.8x12	M5	17	Hexa 4 mm	5.5 Nm
SH M5x0.8x16	M5	21	Hexa 4 mm	5.5 Nm
SH M5x0.8x20	M5	25	Hexa 4 mm	5.5 Nm
SH M5x0.8x25	M5	30	Hexa 4 mm	5.5 Nm
SH M6x1.0x16	M6	22	Hexa 5 mm	8.0 Nm
SH M6x1.0x20	M6	26	Hexa 5 mm	8.0 Nm
SH M6x1.0x25	M6	31	Hexa 5 mm	8.0 Nm
SH M6x1.0x30	M6	36	Hexa 5mm	8.0 Nm
SH M6x1.0x40	M6	46	Hexa 5 mm	8.0 Nm
SH M8x1.25x20	M8	28	Hexa 6 mm	12.0 Nm
SH M8x1.25x25	M8	33	Hexa 6 mm	12.0 Nm



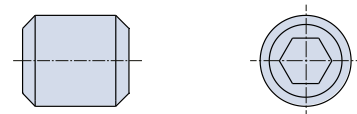
TS type

Designation	Thread	Length	Torx / Hexa	Tightening Torque
TS 22052I/HG	M2.2	5.2	Torx 7	0.9 Nm
TS 25075I/HG	M2.5	7.5	Torx 8	1.2 Nm
TS 35110I	M3.5	11	Torx 15	3.0 Nm
TS 35110IL	M3.5	11	Torx 15	3.0 Nm
TS 40093I	M4	9	Torx 15	3.5 Nm
TS 40097I	M4	9.7	Torx 15	3.5 Nm
TS 40A100	M4	10	Torx 15	3.5 Nm
TS 40A100L	M4	10	Torx 15	3.5 Nm
TS 40A115I	M4	11.5	Torx 15	3.5 Nm
TS 40B100I	M4	10	Torx 15	3.5 Nm
TS 45120I	M4.5	12	Torx 20	5.0 Nm
TS 50125I	M5	12.5	Torx 10/20	5.5 Nm
TS 50125IL	M5	12.5	Torx 10/20	5.5 Nm
TS 50170I-IC	M5	17	Torx 15	3.5 Nm
TS 50170IL-IC	M5	17	Torx 15	3.5 Nm
TS 60190I	M6	19	Hexa 4 mm	6.0 Nm
CSTB-4SD	M4	8	Torx 8	3.5 Nm



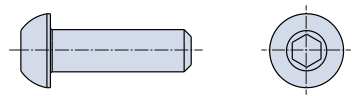
SS type

Designation	Thread	Length	Torx / Hexa	Tightening Torque
SS M5-24145	M5	5.1	Hexa 2.5mm	2.5 Nm



BH type

Designation	Thread	Length	Torx / Hexa	Tightening Torque
BH M6X1X16	M6	24.2	Hexa 4.0mm	5.5 Nm



Recommended Cutting Conditions

Parting

ISO	Material	Condition	Tensile strength (N/mm²)	Hardness HB	Material No.	Cutting speed Vc(m/min)			
						TT9080	TT4430	TT7220 TT8020	K10
P	Non-alloy steel, cast steel, free cutting steel	<0.25%C Annealed	420	125	1	140-250	120-220	80-120	
		>=0.25%C Annealed	650	190	2	130-220	100-190	80-110	
		<0.55%C Quenched and tempered	850	250	3	90-200	80-170	70-90	
		>=0.55%C Annealed	750	220	4	100-220	80-190	70-100	
		Quenched and tempered	1000	300	5	70-170	70-140	40-70	
	Low alloy steel and cast steel (Less than 5% of alloying elements)	Annealed	600	200	6	90-120	80-110	70-100	
			930	275	7	80-170	80-140	50-70	
		Quenched and tempered	1000	300	8	70-130	70-110	40-60	
			1200	350	9	50-120	50-100	30-50	
	High alloy steel, cast steel and tool steel	Annealed	680	200	10	60-140	60-120	50-80	
		Quenched and tempered	1100	325	11	50-70	40-60	30-60	
M	Stainless steel and cast steel	Ferritic / martensitic	680	200	12	70-170	60-150	60-120	
		Martensitic	820	240	13	60-150	60-120	60-90	
		Austenitic	600	180	14	90-180	80-150	60-90	
K	Gray cast iron (GG)	Ferritic		160	15	150-260			60-80
		Pearlitic		250	16	130-190			50-70
	Cast iron nodular (GGG)	Ferritic		180	17	140-230			70-100
		Pearlitic		260	18	110-180			70-90
	Malleable cast iron	Ferritic		130	19	170-270			60-85
		Pearlitic		230	20	140-230			45-75
N	Aluminum - Wrought alloy	Not cureable		60	21				
		Cured		100	22				
	Aluminum- cast, alloyed	<=12% Si Not cureable		75	23				
		Cured		90	24				
		>12% Si High temp.		130	25				
	Copper alloys	>1% Pb Free cutting		110	26				
		Brass		90	27				
		Electrolitic copper		100	28				
	Non-metallic	Duroplastics, fiber plastics		70 Shore D	29				
		Hard rubber		55 Shore D	30				
S	High temp. alloys	Fe based	Annealed		200	31	40-70		35-50
			Cured		280	32	30-50		25-40
		Ni or Co based	Annealed		250	33	30-40		20-30
			Cured		350	34	15-25		15-20
			Cast		320	35	15-30		15-20
	Titanium, Ti alloys	Pure	Rm 400	190	36	90-190			150-200
		Alpha+beta alloys cured	Rm 1050	310	37	30-60			50-80
H	Hardened steel	Hardened		55HRC	38				
		Hardened		60HRC	39				
	Chilled cast iron	Cast		400	40				
	Cast iron nodular	Hardened		55HRC	41				

► For more information of material groups, see the materials & grades "material conversion table"

Steel Stainless steel Cast iron Nonferrous High temp. alloys Hardened steel

Recommended Cutting Conditions

Grooving and Turning

ISO	Material		Condition	Tensile strength (N/mm ²)	Hardness HB	Material No.	Cutting speed Vc(m/min)
							TD1020
P	Non-alloy steel, 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	
				930	275	7	
		Quenched and tempered		1000	300	8	
				1200	350	9	
	High alloy 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	
		Austenitic		600	180	14	
K	Gray cast iron (GG)	Ferritic			160	15	
		Pearlitic			250	16	
	Cast iron nodular (GGG)	Ferritic			180	17	
		Pearlitic			260	18	
	Malleable cast iron	Ferritic			130	19	
		Pearlitic			230	20	
N	Aluminum - Wrought alloy	Not cureable			60	21	150-2500
		Cured			100	22	150-2500
	Aluminum-cast, alloyed	<=12% Si	Not cureable		75	23	150-2500
			Cured		90	24	150-2500
		>12% Si	High temp.		130	25	330-800
	Copper alloys	>1% Pb	Free cutting		110	26	
			Brass		90	27	330-800
			Electrolitic copper		100	28	190-400
	Non-metallic	Duroplastics, fiber plastics			70 Shore D	29	
		Hard rubber			55 Shore D	30	
S	High temp. alloys	Fe based	Annealed		200	31	
			Cured		280	32	
		Ni or Co based	Annealed		250	33	
			Cured		350	34	
			Cast		320	35	
	Titanium, Ti alloys	Pure		Rm 400	190	36	
		Alpha+beta alloys cured		Rm 1050	310	37	
H	Hardened steel	Hardened			55HRC	38	
		Hardened			60HRC	39	
	Chilled cast iron	Cast			400	40	
	Cast iron nodular	Hardened			55HRC	41	

► For more information of material groups, see the materials & grades "material conversion table"

■ Steel
 ■ Stainless steel
 ■ Cast iron
 ■ Nonferrous
 ■ High temp. alloys
 ■ Hardened steel

Recommended Cutting Conditions

Grooving and Turning

Cutting speed Vc(m/min)									
TB2015	CT3000	TT7505	TT6080	TT3010	TT5100	TT9080	TT4430	TT7220 TT8020	K10
	100-210				110-220	100-200	90-180	80-150	
	100-200				110-200	100-180	90-160	100-150	
	80-180				90-180	80-160	80-140	70-130	
	80-180				90-180	80-160	80-140	70-120	
	70-150				80-150	70-130	70-110	60-100	
	100-180				110-180	100-160	90-140	80-120	
	90-180				90-180	80-160	80-150	70-130	
	80-170				90-170	80-150	80-130	70-110	
	80-150				90-150	80-130	80-120	60-100	
	90-130				100-150	90-130	90-120	80-110	
	50-80				60-90	50-80	50-70	40-60	
	80-170				90-190	80-170	80-150	70-130	
	80-150				90-170	80-150	80-130	70-110	
	80-170				90-190	80-170	80-150	70-130	
		150-270	110-250						70-100
		120-170	90-140						50-90
		150-250	120-230						70-100
		120-200	90-180						60-90
		120-200	90-180						60-120
		100-180	80-150						50-80
									300-800
									230-310
									280-830
									200-510
									130-300
									120-200
									90-150
				40-60	40-60	30-50	30-40	20-30	30-40
				30-50	25-45	20-40	20-30	15-20	20-40
				30-40	25-35	20-30	15-25	15-20	20-30
				25-35	20-25	15-20	15-20	15-20	15-20
				25-35	20-25	15-20	15-20	15-20	15-20
				140-180	150-190	130-170	100-150	80-100	100-130
				40-80	50-80	40-70	40-60	15-30	20-50
90-110		30-50	25-45						20-40
80-100		30-50	25-35						20-30
180-200		30-50	25-45						20-50
90-110		30-50	25-45						20-40

Recommended Cutting Conditions

Face grooving and Internal grooving

ISO	Material		Condition	Tensile strength (N/mm ²)	Hardness HB	Material No.	Cutting speed Vc(m/min)
							TT7505
P	Non-alloy steel, 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	
				930	275	7	
		Quenched and tempered		1000	300	8	
				1200	350	9	
	High alloy 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	
			Austenitic	600	180	14	
K	Gray cast iron (GG)		Ferritic		160	15	90-140
			Pearlitic		250	16	80-120
	Cast iron nodular (GGG)		Ferritic		180	17	90-130
			Pearlitic		260	18	80-110
	Malleable cast iron		Ferritic		130	19	80-130
			Pearlitic		230	20	60-100
N	Aluminum - Wrought alloy		Not cureable		60	21	
			Cured		100	22	
	Aluminum- cast, alloyed	<=12% Si	Not cureable		75	23	
			Cured		90	24	
		>12% Si	High temp.		130	25	
	Copper alloys	>1% Pb	Free cutting		110	26	
			Brass		90	27	
			Electrolitic copper		100	28	
	Non-metallic		Duroplastics, fiber plastics		70 Shore D	29	
			Hard rubber		55 Shore D	30	
S	High temp. alloys	Fe based	Annealed		200	31	
			Cured		280	32	
		Ni or Co based	Annealed		250	33	
			Cured		350	34	
			Cast		320	35	
	Titanium, Ti alloys		Pure	Rm 400	190	36	
			Alpha+beta alloys cured	Rm 1050	310	37	
H	Hardened steel		Hardened		55HRC	38	15-25
			Hardened		60HRC	39	15-25
	Chilled cast iron		Cast		400	40	15-25
	Cast iron nodular		Hardened		55HRC	41	15-25

► For more information of material groups, see the materials & grades "material conversion table"

■ Steel ■ Stainless steel ■ Cast iron ■ Nonferrous ■ High temp. alloys ■ Hardened steel

Recommended Cutting Conditions

Face grooving and Internal grooving

Cutting speed Vc(m/min)								
TT6080	TT3010	TT5100	TT9080	TT4430	TT7220 TT8020	K10		
		110-160	100-150	100-130	80-110			
		70-110	60-100	60-90	50-80			
		70-120	60-110	60-100	50-90			
		70-120	60-110	60-100	40-70			
		80-120	70-110	70-100	40-60			
		70-100	60-90	60-80	30-50			
		70-100	60-90	60-80	30-50			
		60-90	50-80	50-70	30-40			
		60-140	50-130	50-110	40-80			
		50-140	40-130	40-110	30-80			
70-120						40-60		
60-100						40-60		
70-110						40-60		
60-90						30-50		
60-110						20-40		
50-90						20-40		
						100-300		
						100-300		
						100-300		
						100-300		
						80-200		
						80-150		
						60-100		
	30-50	30-50	20-40	20-30	15-25			
	25-40	20-40	15-30	15-25	10-15			
	25-35	20-30	15-20	15-20	10-15			
	20-30	20-30	15-20	15-20	10-15			
	20-30	20-30	15-20	15-20	10-15			
	100-130	100-130	90-120	80-100	60-80			
	30-60	30-60	20-50	20-40	15-30			
15-20						15-20		
15-20						15-20		
15-25						15-25		
15-25						15-25		

Recommended Cutting Conditions

T-CLAMP ceramic insert

Material			Grooving	Turning
P	High hardened steel	Vc (m/min)	Not recommended	250-350
		F (mm/rev)		0.08-0.20
K	Cast iron	Vc (m/min)	600-800	600-800
		F (mm/rev)	0.1-0.2	0.1-0.24

► Above condition is adapted to TDT 4E-0.4T CE AB30

TOP-MICRO carbide bars

Cutting speed Vc(m/min)		Feed (mm/rev)		
		Turning / Back turning	Grooving	Face grooving
P	30-150	0.01-0.08	0.01-0.05	0.01-0.04
M	30-130			
K	30-150			
N	50-200			
S	10-50			