

NPN

New Product News



WIN SWISS

New Modular Head and Holder for Swiss Machines



KEY POINT

TaeguTec introduces the new modular heads and holders WIN-SWISS line for Swiss machines.





















The need to remove the holders from the tool makes changing inserts on Swiss machines time-consuming. With TaeguTec's WIN-SWISS line, inserts can be replaced outside the machine by only removing the modular head, and with the shank mounted to the tool post, tooling downtime is drastically reduced, improving productivity. The WIN-SWISS series is also easier to use since, unlike integrated holders, there is no chance of dropping and therefore losing the holder's spare components and inserts while replacing inserts.

Features







- Modular head type holders for Swiss machines
- Easy replacement of modular heads and inserts
- Improved productivity due to reduced set-up time
- Rigid clamping between shanks and heads, and good repeatability
- Reduced inventory due to the ability to mount multiple heads on one shank
- A variety of modular heads are available for turning, grooving and parting applications
- COOL-BURST system improves chip control and tool life (-TB holders)
- Minimized risk of losing holder's spare parts and inserts
- An error proof modular head and shank assembly system



Modular head and shank assembly for external machining applications

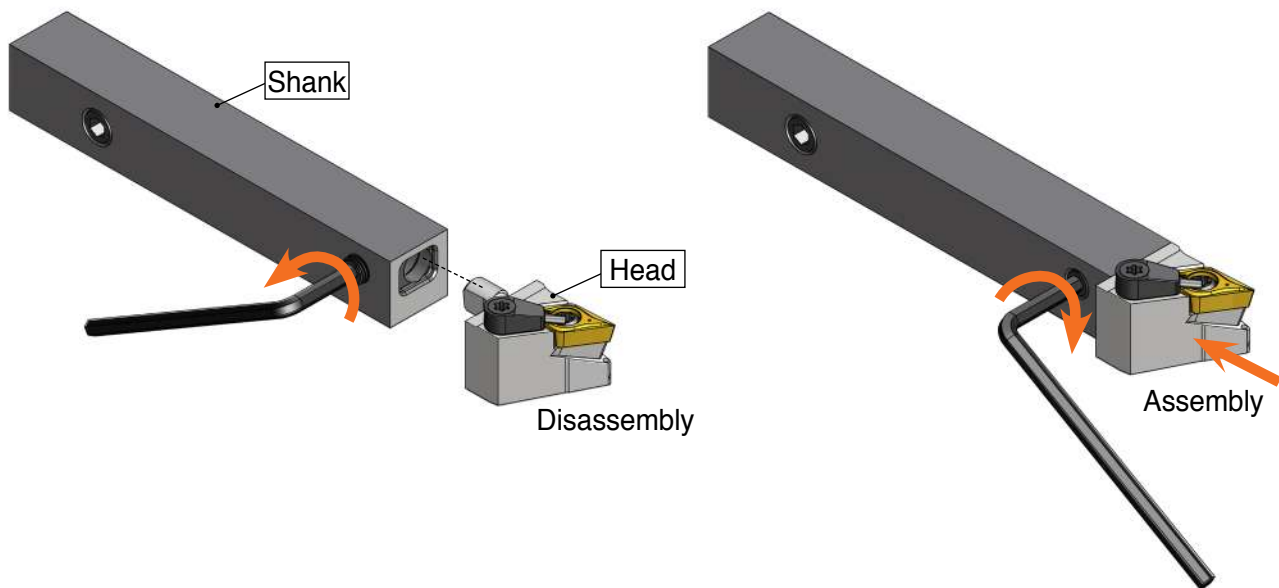
External coolant supply					 QE1 S12N-TB (Neutral type, 12x12)
 TOPMINI QE1 SDJCR	 TOPMINI QE1 SVJB(C)R	 RHINOMTURN QE1 SDJNR	 RHINOTURN QE1 SDJNR		
 TOPMINI QE1B SVXCR	 T-CLAMP QE1 TTER	 T-CLAMP QE1 TTEL	 QUADRUSH QE1 TQHR	 QUADRUSH QE1 TQHL	
COOLBURST High-pressure internal coolant supply					 QE1 S16R-TB (Right hand type, 16x16)
 TOPMINI QE1 SDJCR-TB	 TOPMINI QE1 SVJB(C)R-TB	 RHINOMTURN QE1 SDJNR-TB	 RHINOTURN QE1 SDJNR-TB		
 TOPMINI QE1B SVXCR-TB	 T-CLAMP QE1 TTER-TB	 T-CLAMP QE1 TTEL-TB	 QUADRUSH QE1 TQHR-TB	 QUADRUSH QE1 TQHL-TB	

Right hand head and shank assembly for Y-axis machining

External coolant supply		 QE1 S12N-TB (Neutral type, 12x12)
 TOPMINI QE1Y SDJCR	 QUADRUSH QE1Y TQHR	
COOLBURST High-pressure internal coolant supply		 QE1 S16L-TB (Left hand type, 16x16)
 TOPMINI QE1Y SDJCR-TB	 QUADRUSH QE1Y TQHR-TB	

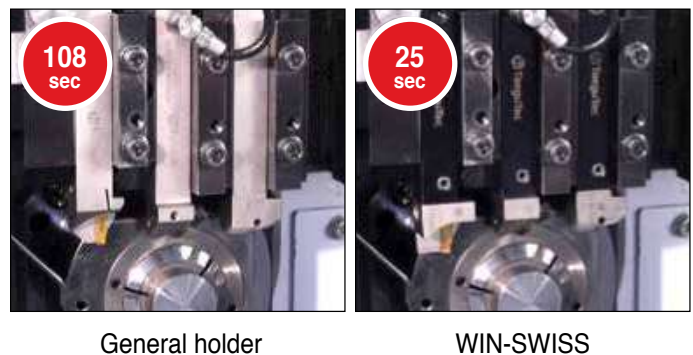
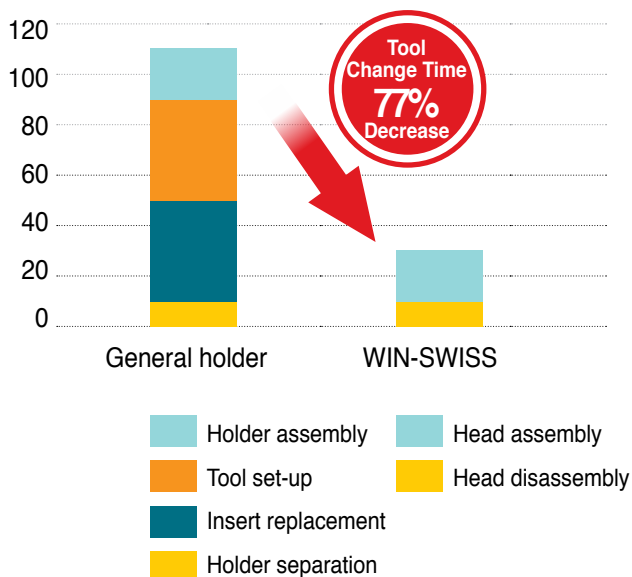
Easy modular head replacement

- The shanks remain in the tool post
- Disassemble the head from the shank with one rotation of the screw
- Right-hand modular heads for turning can be assembled with neutral and right-hand shanks
- Right-hand modular heads for Y-axis machining can be assembled with neutral and left-hand shanks
- Modular heads for grooving can be assembled with neutral and right-hand shanks



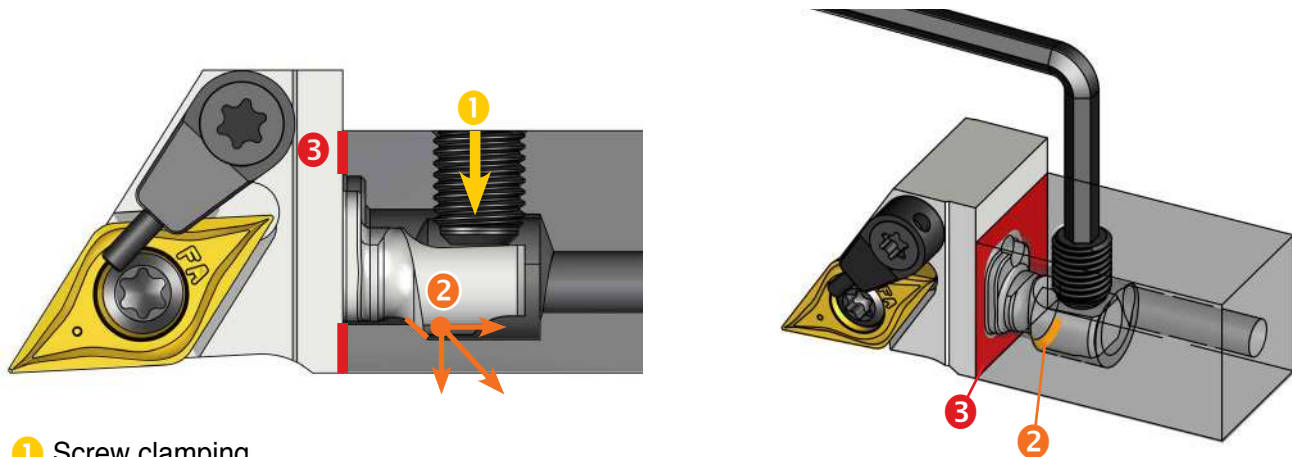
Reduced downtime: Changing only the head means no tool reset is necessary

Tool change time (sec)



Rigid clamping and good repeatability

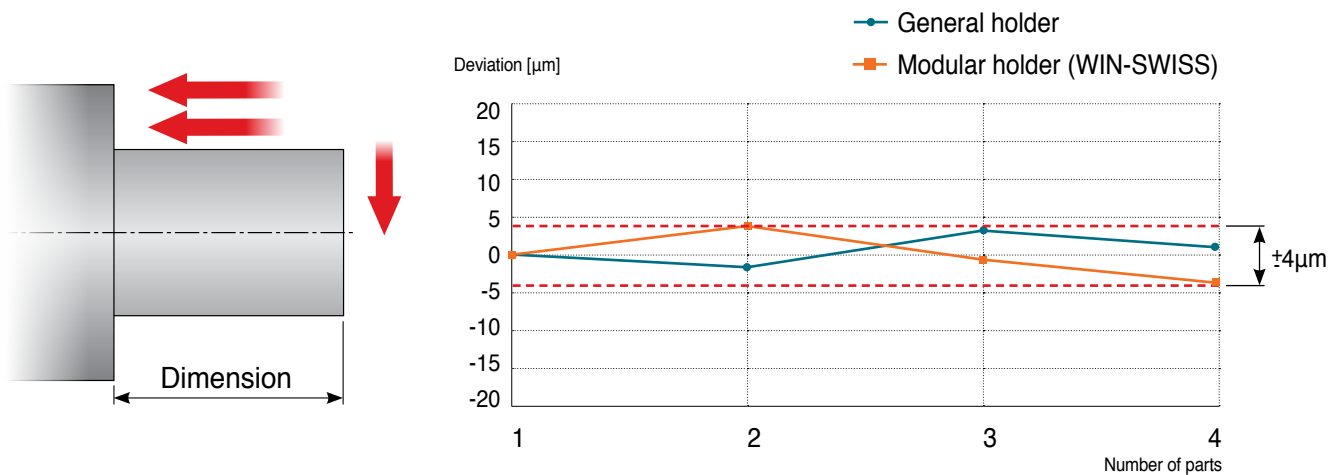
■ TaeguTec's unique assembly mechanism provides higher rigidity than the competitors' products. Combining the taper with the lever principle ensures a rigid assembly.



- 1 Screw clamping
- 2 Tapered face contact
- 3 Rigid clamping between the shanks and the heads

Equivalent machining stability of a conventional holder

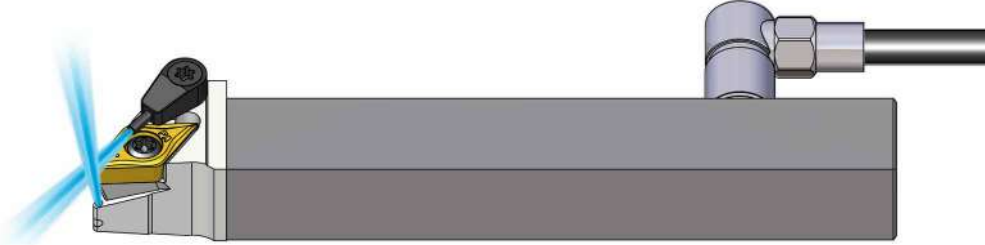
■ TaeguTec's WIN-SWISS unique and robust fastening structure ensures a level of machining displacement equivalent to that of a conventional holder



	Holder	Insert	Cutting speed (m/min)	Feed (mm/rev)	Testing Procedure
General holder	SDJCR 1616 K11-SH	DCGT 11T302M SH-F TT4430	120	0.05	Machining
Modular holder (WIN-SWISS)	QE1 SDJCR 11-TB + QE1 S16R-TB	DCGT 11T302M SH-F TT4430			① Head disassembly ② Head assembly ③ Machining

COOLBURST High-pressure coolant system

- Improved chip control and tool life due to the focused high coolant pressure on the insert's cutting edge



Designation system

- Modular head

Q E 1 (Y) S D J C R 11 - (T B)

- 1 Quick change system
- 2 External holder
- 3 Holder type (1: Swiss machines / 2: ISO type)
- 4 Option (Y: Y-axis machining / B: Back turning)
- 5 Head type (Identical to holder designation system)
- 6 Cutting edge length
- 7 Option (TB: High-pressure coolant)

- Shank dimension

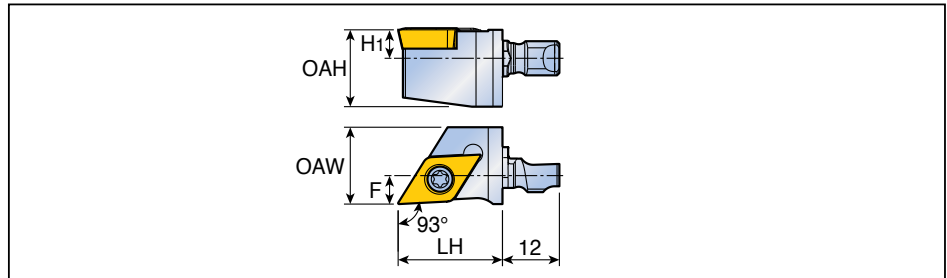
Q E 1 S 16 R - (T B)

- 1 Quick change system
- 2 External holder
- 3 Holder type (1: Swiss machines / 2: ISO type)
- 4 Shank size (12: 12x12 / 16: 16x16)
- 5 Hand type (R: right hand / L: left hand / N: Neutral)
- 6 Option (TB: High-pressure coolant)

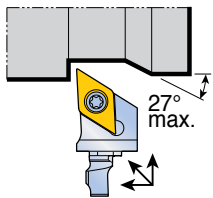


QE1 SDJCR

Modular head for external turning on Swiss machines



Approach angle	Designation	Dimensions (mm)					Shank	Insert
		OAH	LH	OAW	H1	F		
93°	QE1 SDJCR 11	16.2	22.0	16.2	6.0	7.0	QE1 S12N-TB QE1 S16R-TB	DC... 11T3...

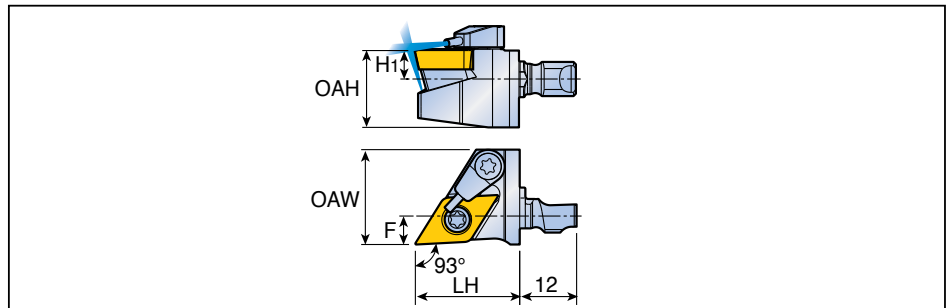


QE1 SDJCR-TB

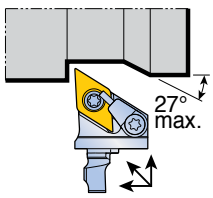
Modular head for external turning with high-pressure coolant on Swiss machines



COOLBURST



Approach angle	Designation	Dimensions (mm)					Shank	Insert
		OAH	LH	OAW	H1	F		
93°	QE1 SDJCR 11-TB	16.2	22.0	20.0	6.0	7.0	QE1 S12N-TB QE1 S16R-TB	DC... 11T3...



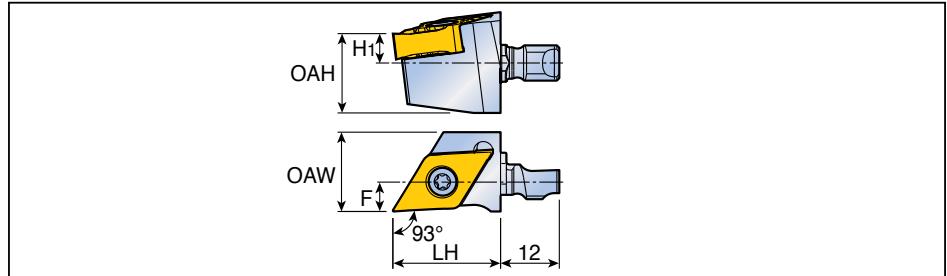
Spare parts

Designation	Screw	Cooling unit	Wrench	
QE1 SDJCR	SO 350801	-	T15	
QE1 SDJCR-TB	SO 350801	S-CU-TB	T15	

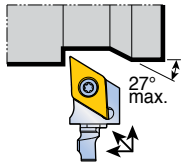


QE1 SDJNR

Modular head for external turning on Swiss machines

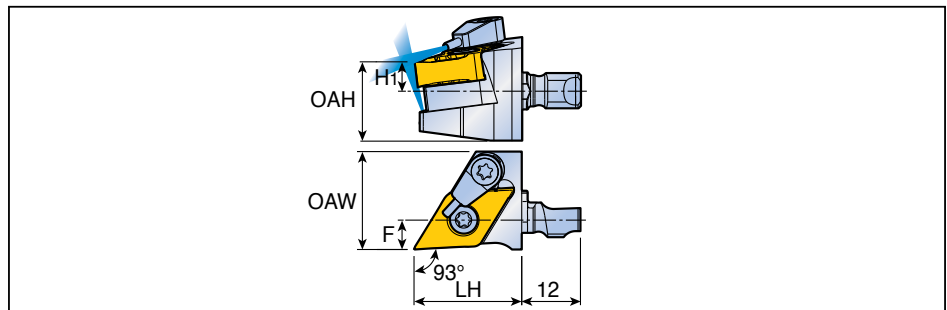


Approach angle	Designation	Dimensions (mm)					Shank	Insert
		OAH	LH	OAW	H1	F		
93°	QE1 SDJNR 0803	16.2	22.0	16.2	6.0	7.0	QE1 S12N-TB QE1 S16R-TB	DN... 0803... <i>RHINO TURN</i>
	SDJNR 1305	16.2	22.0	16.2	6.0	7.0	QE1 S12N-TB QE1 S16R-TB	DN... 1305... <i>RHINO TURN</i>

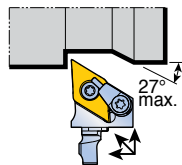


QE1 SDJNR-TB

Modular head for external turning with high-pressure coolant on Swiss machines



Approach angle	Designation	Dimensions (mm)					Shank	Insert
		OAH	LH	OAW	H1	F		
93°	QE1 SDJNR 0803-TB	16.2	22.0	16.2	6.0	7.0	QE1 S12N-TB QE1 S16R-TB	DN... 0803... <i>RHINO TURN</i>
	SDJNR 1305-TB	16.2	22.0	20.0	6.0	7.0	QE1 S12N-TB QE1 S16R-TB	DN... 1305... <i>RHINO TURN</i>



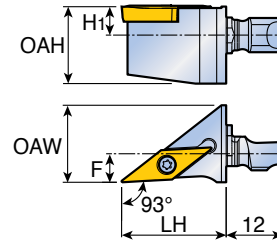
Spare parts

Designation	Screw	Cooling unit	Wrench	
QE1 SDJNR 0803	TS 25D060/HG-P	-	T 7P	
QE1 SDJNR 0803-TB	TS 25D060/HG-P	S-CU-TB	T 7P	
QE1 SDJNR 1305	TS 40G110I	-	T15	
QE1 SDJNR 1305-TB	TS 40G110I	S-CU-TB	T15	



QE1 SVJBR

Modular head for external turning on Swiss machines



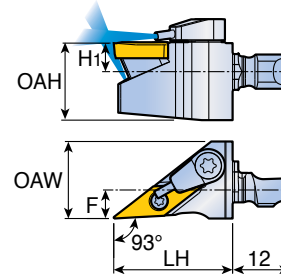
Approach angle	Designation	Dimensions (mm)					Shank	Insert
		OAH	LH	OAW	H1	F		
93°	QE1 SVJBR 11	16.2	22.0	16.2	6.0	7.0	QE1 S12N-TB QE1 S16R-TB	VB... 1103..

QE1 SVJBR-TB

Modular head for external turning with high-pressure coolant on Swiss machines



COOLBURST



Approach angle	Designation	Dimensions (mm)					Shank	Insert
		OAH	LH	OAW	H1	F		
93°	QE1 SVJBR 11-TB	16.2	25.0	16.2	6.0	7.0	QE1 S12N-TB QE1 S16R-TB	VB... 1103..

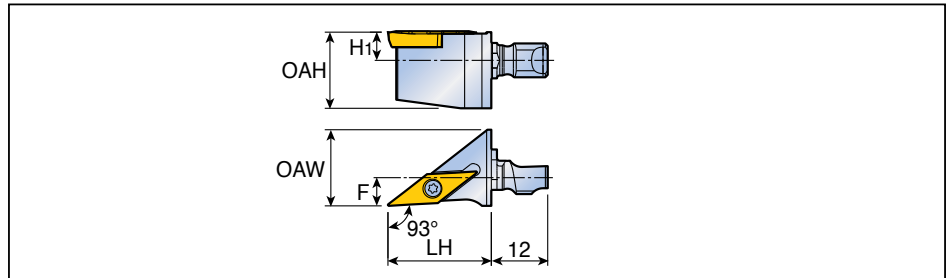
Spare parts

Designation	Screw	Cooling unit	Wrench	
QE1 SVJBR 11	SO 25065I	-	T 7	
QE1 SVJBR 11-TB	SO 25065I	S-CU-TB	T 7	



QE1 SVJCR

Modular head for external turning on Swiss machines



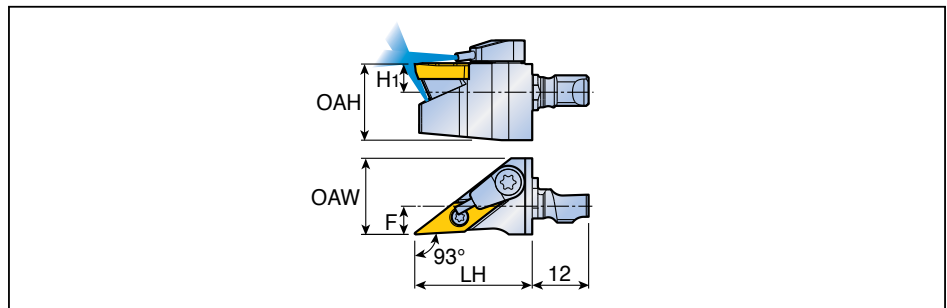
Approach angle	Designation	Dimensions (mm)					Shank	Insert
		OAH	LH	OAW	H1	F		
93°	QE1 SVJCR 11	16.2	22.0	16.2	6.0	7.0	QE1 S12N-TB QE1 S16R-TB	VC... 1103...

QE1 SVJCR-TB

Modular head for external turning with high-pressure coolant on Swiss machines



COOLBURST



Approach angle	Designation	Dimensions (mm)					Shank	Insert
		OAH	LH	OAW	H1	F		
93°	QE1 SVJCR 11-TB	16.2	25.0	16.2	6.0	7.0	QE1 S12N-TB QE1 S16R-TB	VC... 1103...

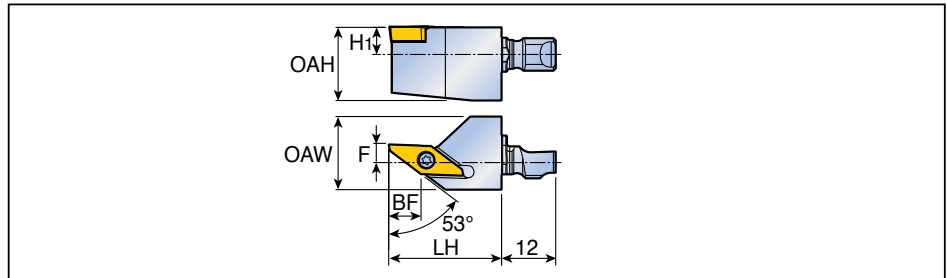
Spare parts

Designation	Screw	Cooling unit	Wrench	
QE1 SVJCR 11	SO 25065I	-	T 7	
QE1 SVJCR 11-TB	SO 25065I	S-CU-TB	T 7	

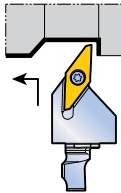


QE1B SVXCR

Modular head for external back turning on Swiss machines



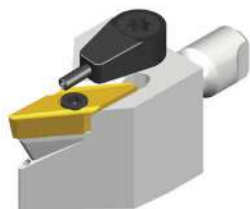
Approach angle	Designation	Dimensions (mm)						Shank	Insert
		OAH	LH	OAW	BF	H1	F		
53°	QE1B SVXCR 11	16.2	25.0	16.2	7.2	6.0	3.0	QE1 S12N-TB QE1 S16R-TB	BTVC 1103... TOPMINI



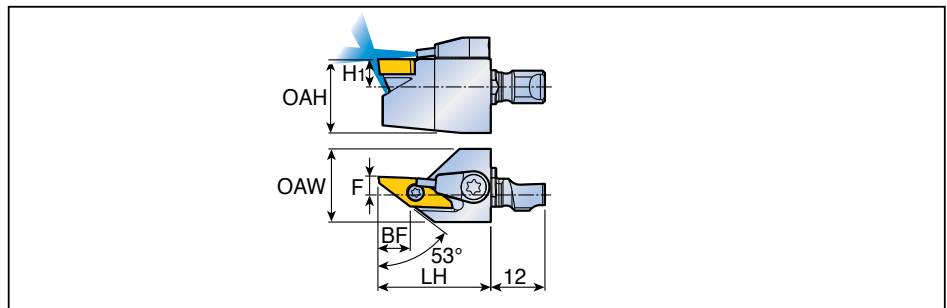
QE1B SVXCR-TB



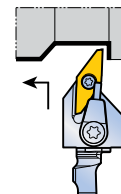
Modular head for external back turning with high-pressure coolant on Swiss machines



COOLBURST



Approach angle	Designation	Dimensions (mm)						Shank	Insert
		OAH	LH	OAW	BF	H1	F		
53°	QE1B SVXCR 11-TB	16.2	25.0	16.2	7.2	6.0	3.0	QE1 S12N-TB QE1 S16R-TB	BTVC 1103... TOPMINI



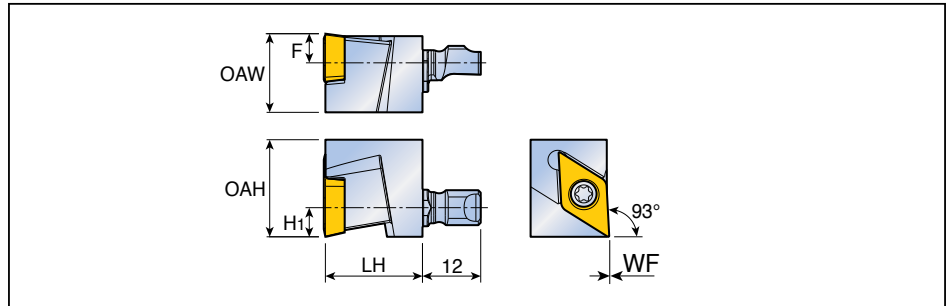
Spare parts

Designation	Screw	Cooling unit	Wrench	
QE1B SVXCR	SO 25065I 	- 	T 7 	
QE1B SVXCR-TB	SO 25065I	S-CU-TB	T 7	

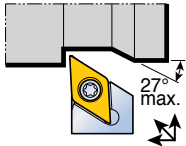


QE1Y SDJCR

Modular head for Y-axis turning on Swiss machines



Approach angle	Designation	Dimensions (mm)						Shank	Insert
		OAW	OAH	LH	WF	H1	F		
93°	QE1Y SDJCR 11	16.2	20.0	20.0	0.0	6.0	7.0	QE1 S12N-TB QE1 S16L-TB	DC... 11T3...



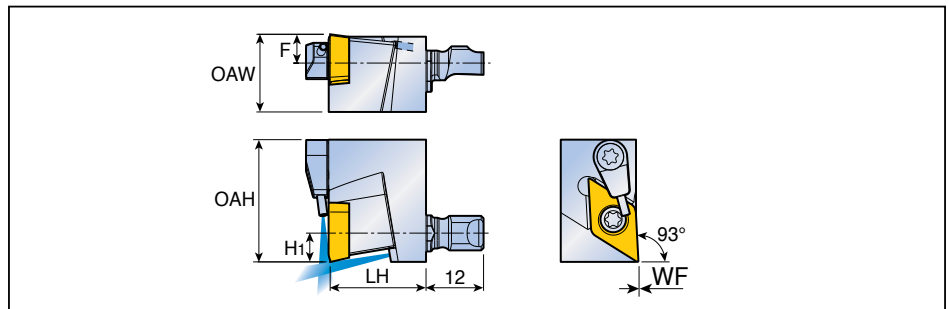
QE1Y SDJCR-TB



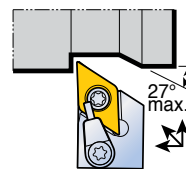
Modular head for Y-axis turning with high-pressure coolant on Swiss machines



COOLBURST



Approach angle	Designation	Dimensions (mm)						Shank	Insert
		OAW	OAH	LH	WF	H1	F		
93°	QE1Y SDJCR 11-TB	16.2	25.5	20.0	0.0	6.0	7.0	QE1 S12N-TB QE1 S16L-TB	DC... 11T3...



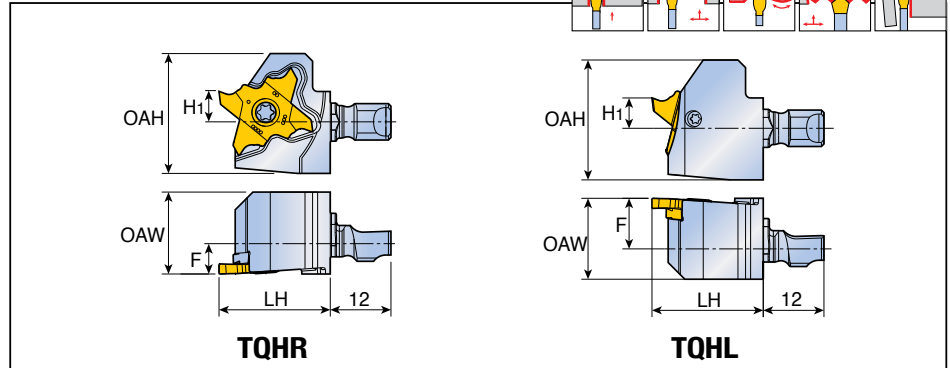
Spare parts

Designation	Screw	Cooling unit	Wrench	
QE1Y SDJCR 11	SO 35080I	-	T 15	
QE1Y SDJCR 11-TB	SO 35080I	S-CU-TB	T 15	



QE1 TQHR/L

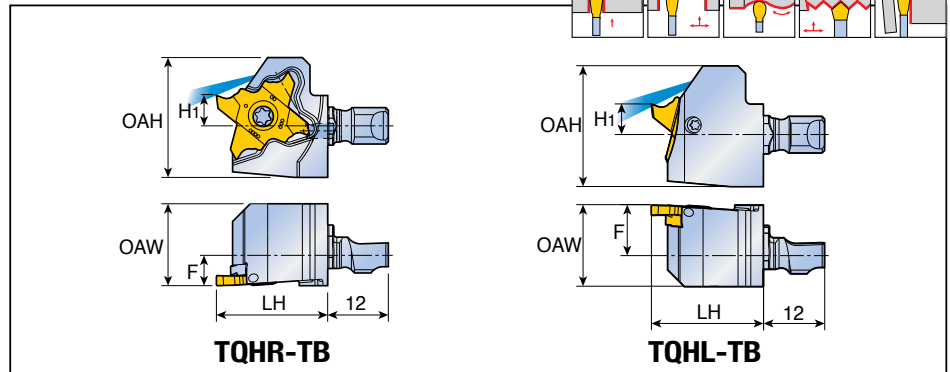
Modular head for parting and grooving on Swiss machines



Designation	Dimensions (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	

QE1 TQHR/L-TB

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



Designation	Dimensions (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	

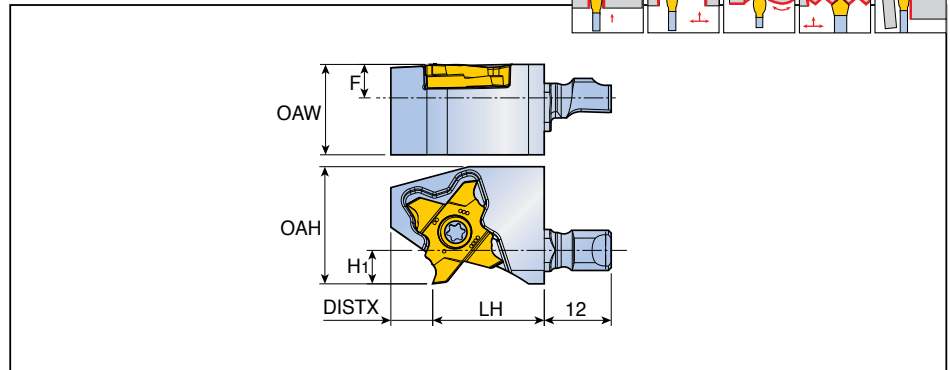
Spare parts

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



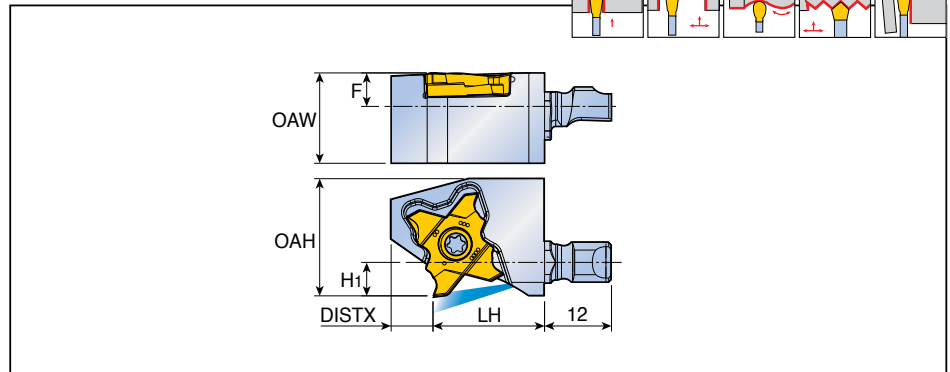
Designation	Dimensions (mm)						Shank	Insert
	OAH	LH	OAW	H1	F	DISTX		
QE1Y TQHR 20	21.0	20.0	16.2	6.0	7.0	7.5	QE1 S12N-TB QE1 S16L-TB	TQ... 20

QE1Y TQHR-TB

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



COOLBURST
HIGH-PRESSURE COOLANT



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	TQ... 20

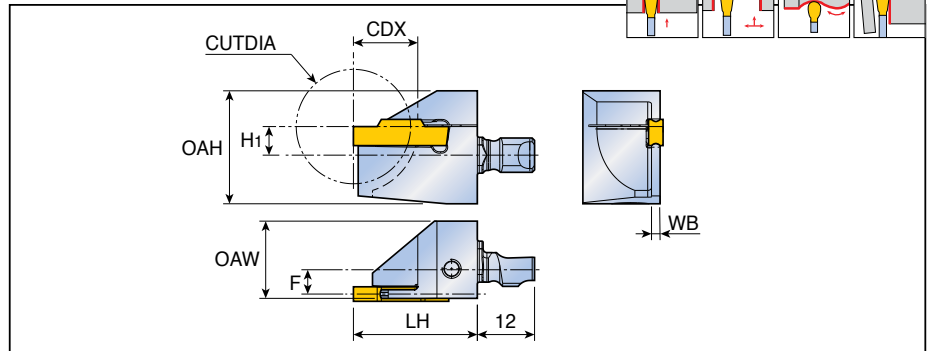
Spare parts

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



QE1 TTER

Modular head for external turning and grooving



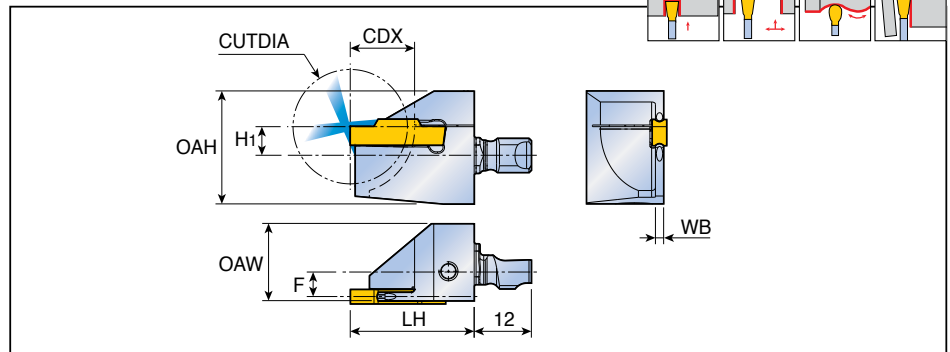
Designation	Insert seat size	Dimensions (mm)								Shank	Insert
		OAH	LH	OAW	WB	CDX	CUTDIA	H ₁	F		
QE1 TTER 2-12-24	2	23.7	26.0	16.2	1.8	12.0	24.0	6.0	6.1	QE1 S12N-TB	TDC/J/T/A
	2	23.7	26.0	16.2	1.8	16.0	32.0	6.0	6.1	QE1 S16R-TB	TDXU/XT/XY/CT
3-12-24	3	23.7	26.0	16.2	2.4	12.0	24.0	6.0	5.8		TSC/J/A
3-16-32	3	23.7	26.0	16.2	2.4	16.0	32.0	6.0	5.8		TDFU/TDV

QE1 TTER-TB

Modular head for external turning and grooving with high-pressure coolant



COOLBURST
PROTECTED COOLANT



Designation	Insert seat size	Dimensions (mm)								Shank	Insert
		OAH	LH	OAW	WB	CDX	CUTDIA	H ₁	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/T/A
	2	23.7	26.0	16.2	1.8	16.0	32.0	6.0	6.1	QE1 S16R-TB	TDXU/XT/XY/CT
3-12-24-TB	3	23.7	26.0	16.2	2.4	12.0	24.0	6.0	5.8		TSC/J/A
3-16-32-TB	3	23.7	26.0	16.2	2.4	16.0	32.0	6.0	5.8		TDFU/TDV

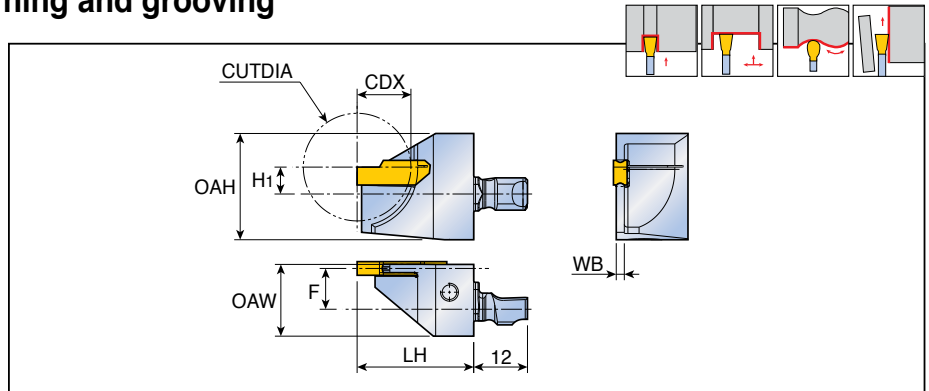
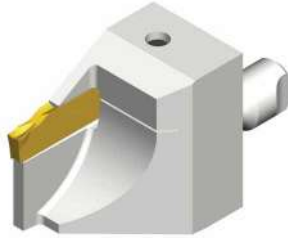
Spare parts

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



QE1 TTEL

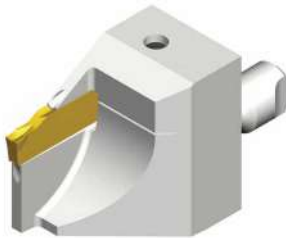
Modular head for external turning and grooving



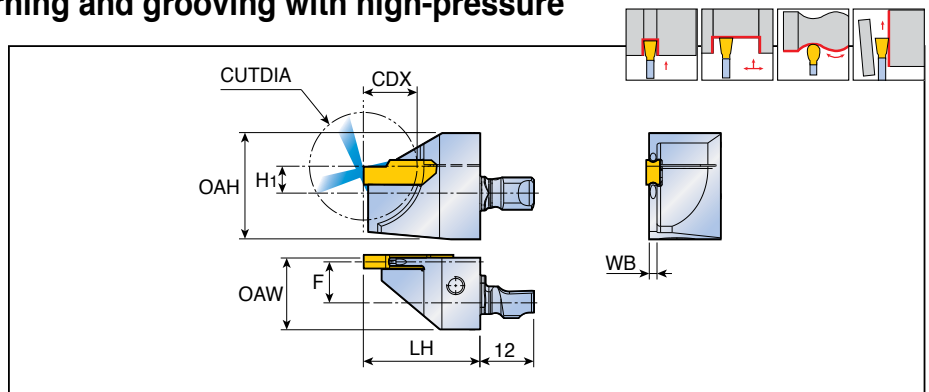
Designation	Insert seat size	Dimensions (mm)								Shank	Insert
		OAH	LH	OAW	WB	CDX	CUTDIA	H1	F		
QE1 TTEL 2-12-24	2	23.7	26.0	16.0	1.8	12.0	24.0	6.0	8.1	QE1 S12N-TB QE1 S16R-TB	TDC/J/T/A
	2-16-32	2	23.7	26.0	16.0	1.8	16.0	32.0	6.0		8.1
3-12-24	3	23.7	26.0	16.0	2.4	12.0	24.0	6.0	7.8		TSC/J/A
3-16-32	3	23.7	26.0	16.0	2.4	16.0	32.0	6.0	7.8		TDFU/TDV

QE1 TTEL-TB

Modular head for external turning and grooving with high-pressure coolant



COOLBURST



Designation	Insert seat size	Dimensions (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 QE1 S16R-TB	TDC/J/T/A
	2-16-32-TB	2	23.7	26.0	16.0	1.8	16.0	32.0	6.0		8.1
3-12-24-TB	3	23.7	26.0	16.0	2.4	12.0	24.0	6.0	7.8		TSC/J/A
3-16-32-TB	3	23.7	26.0	16.0	2.4	16.0	32.0	6.0	7.8		TDFU/TDV

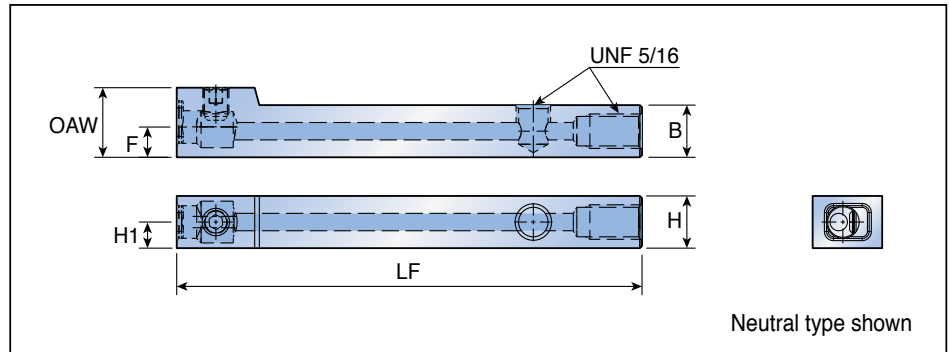
Spare parts

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



QE1 S12N-TB

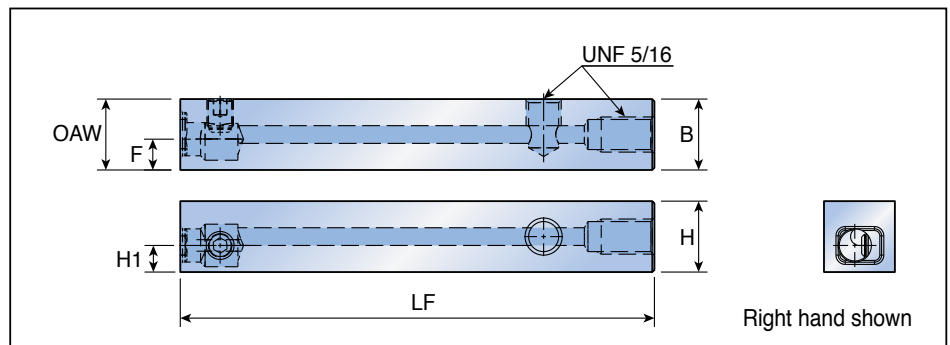
Shank for high-pressure coolant type Swiss machines



Designation	Dimensions (mm)					
	H1	F	H	B	LF	OAW
QE1 S12N-TB	6.0	7.0	12.0	12.0	107.0	16.0

QE1 S16R/L-TB

Shank for high-pressure coolant type Swiss machines

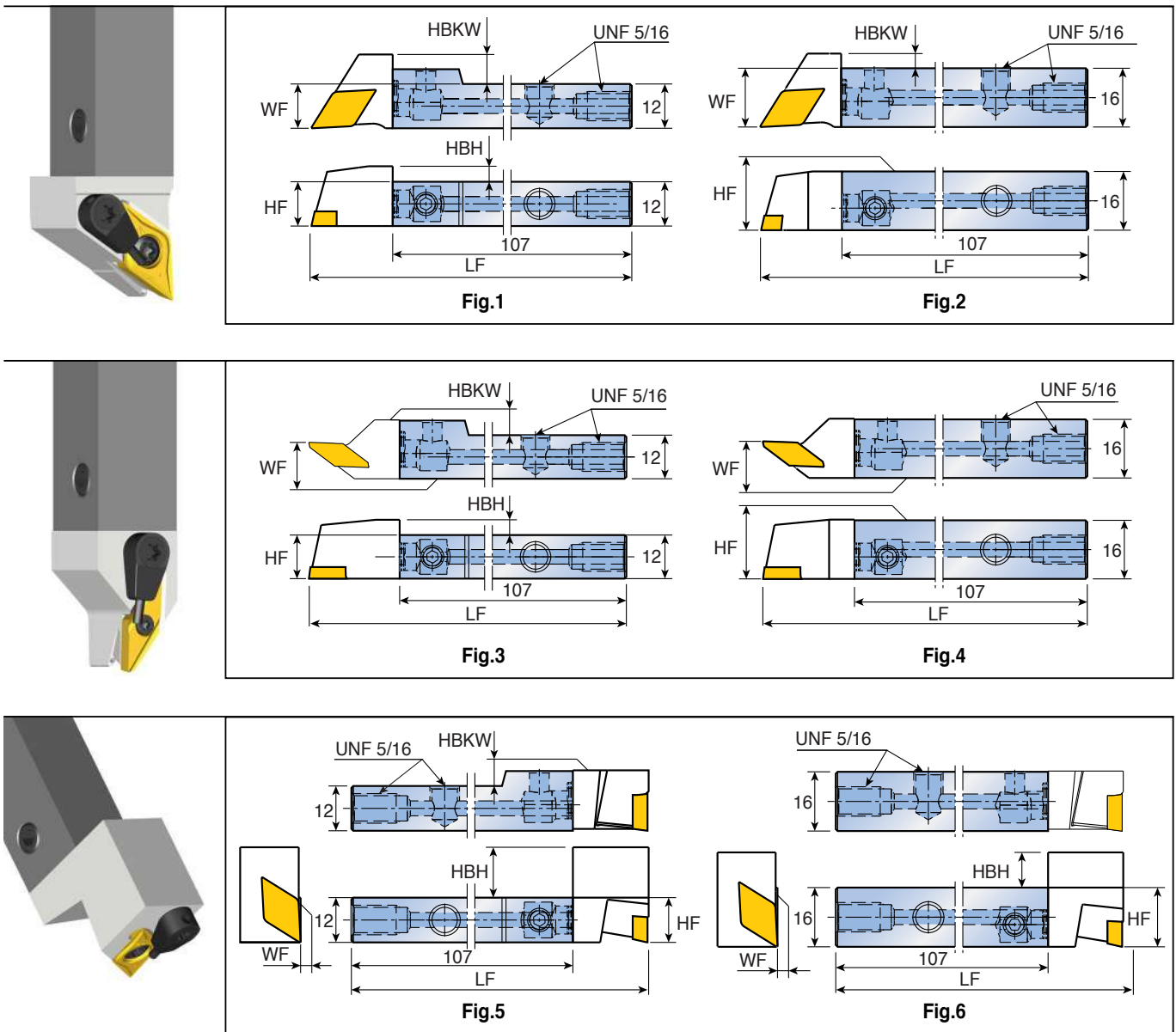


Designation	Dimensions (mm)					
	H1	F	H	B	LF	OAW
QE1 S16R/L-TB	6.0	7.0	16.0	16.0	107.0	16.0

Spare parts

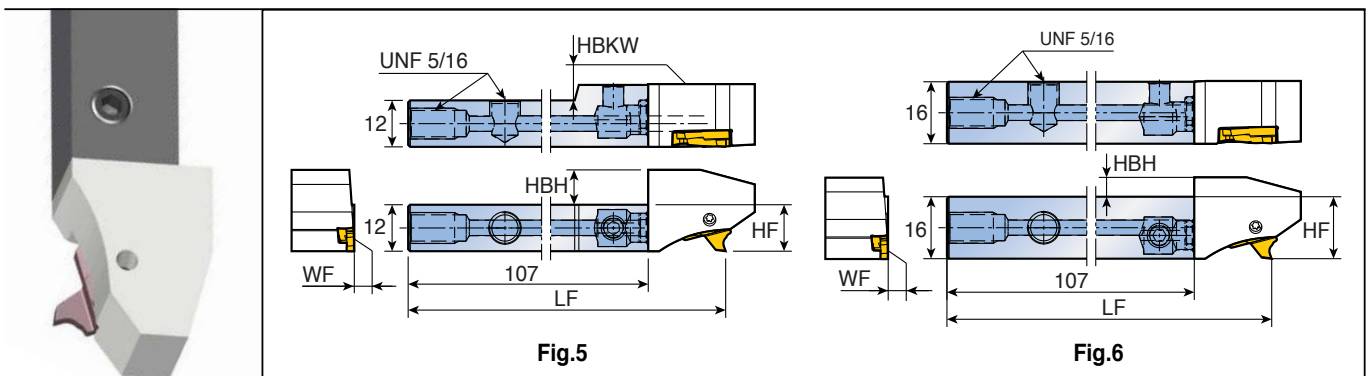
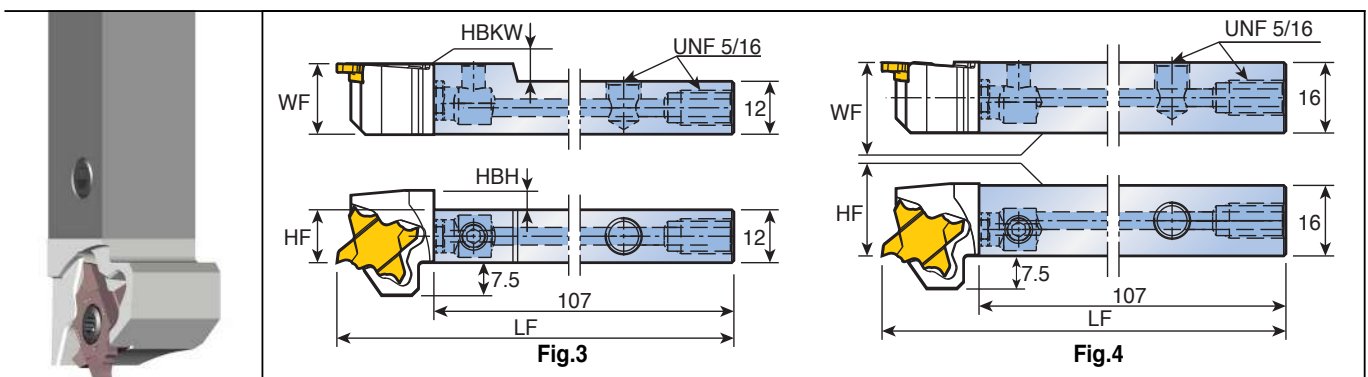
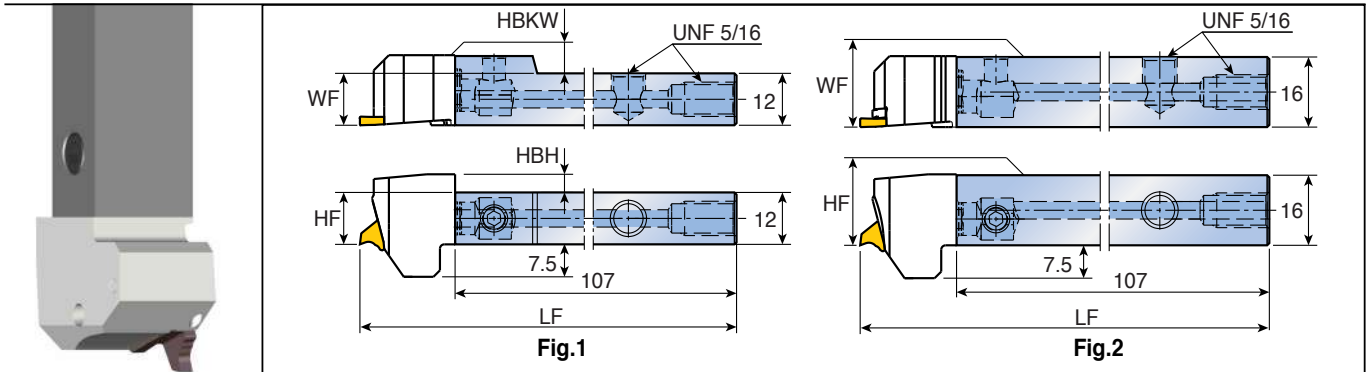
Designation	Screw	Plug	Wrench	
	QE1 ...-TB	SS M6F-7	PLG 5/16 UNF	L-W 3

WIN-SWISS assembly dimensions (External turning)



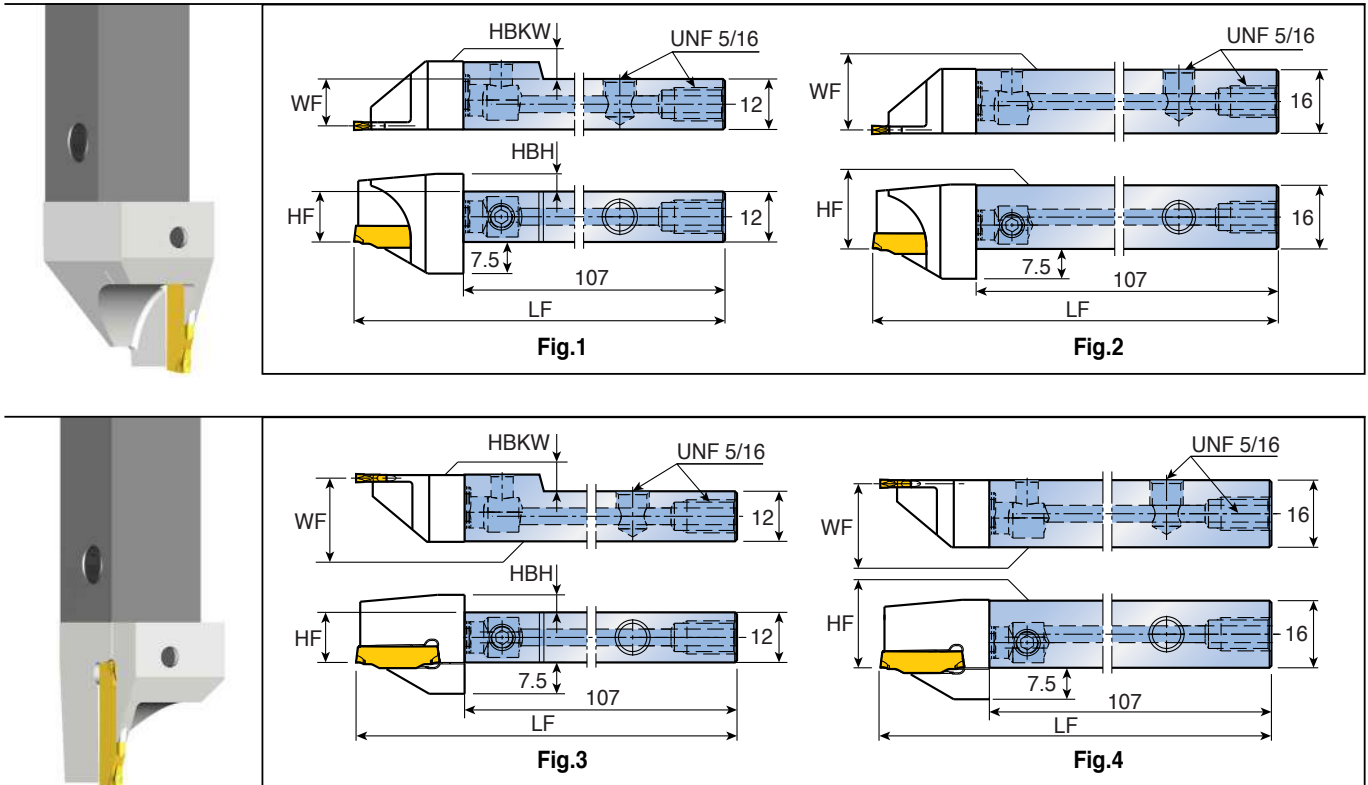
Shank	Head	Dimensions (mm)					Fig.
		HF	HBH	LF	WF	HBKW	
QE1 S12N-TB	QE1 SD...11-TB / QE1 SD...1305-TB	12	4.2	129	12	8.0	1
	QE1 SD...0803 (-TB) / QE1 SD...11 / QE1 SD...1305	12	4.2	129	12	4.2	1
	QE1 SV...11(-TB)	12	4.2	132	12	4.2	1
	QE1B...11(-TB)	12	4.2	132	10	4.2	3
	QE1Y...11	12	8.0	127	-	4.2	5
	QE1Y...11-TB	12	13.5	127	-	4.2	5
QE1 S16R-TB	QE1 SD...11-TB / QE1 SD...1305-TB	16	-	129	16	4.0	2
	QE1 SD...0803 (-TB) / QE1 SD...11 / QE1 SD...1305	16	-	129	16	-	2
	QE1 SV...11(-TB)	16	-	132	16	-	2
	QE1B...11(-TB)	16	-	132	10	-	4
QE1 S16L-TB	QE1Y...11	16	4.0	127	-	-	6
	QE1Y...11-TB	16	9.5	127	-	-	6

WIN-SWISS assembly dimensions (Parting and grooving)



Shank	Head	Dimensions (mm)					Fig.
		HF	HBH	LF	WF	HBKW	
QE1 S12N-TB	QE1 TQHR	12	4.2	129	16	4.2	1
	QE1 TQHL	12	4.2	129	16	4.0	3
	QE1Y TQHR	12	9.0	127	-	4.2	5
QE1 S16R-TB	QE1 TQHR(-TB)	16	-	129	16	-	2
	QE1 TQHL(-TB)	16	-	129	16	-	4
QE1 S16L-TB	QE1Y TQHR(-TB)	16	5.0	127	-	-	6

WIN-SWISS assembly dimensions (Parting and grooving)

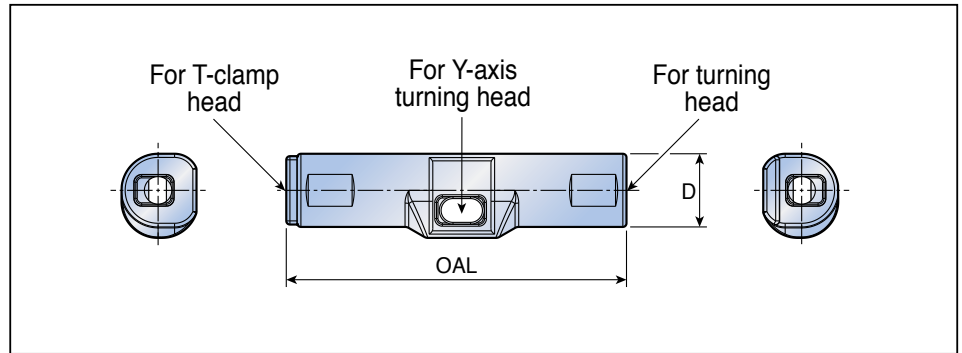


Shank	Head	Dimensions (mm)					Fig.
		HF	HBH	LF	WF	HBKW	
QE1 S12N-TB	QE1 TTER 2...	12.0	4.2	133.0	11.1	4.2	1
	QE1 TTER 3...	12.0	4.2	133.0	10.8	4.2	1
	QE1 TTEL 2...	12.0	4.2	133.0	15.1	4.0	3
	QE1 TTEL 3...	12.0	4.2	133.0	14.8	4.0	3
QE1 S16R-TB	QE1 TTER 2...	16.0	-	133.0	15.1	-	2
	QE1 TTER 3...	16.0	-	133.0	14.8	-	2
	QE1 TTEL 2...	16.0	-	133.0	15.1	-	4
	QE1 TTEL 3...	16.0	-	133.0	14.8	-	4

QE1 FIX-20100



Insert replacement fixture



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

► Fixture ordered separately

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

