

# NPN

New Product News



## **FLEXTURN** MODULAR HOLDER

### New Modular Head Type Holders for Swiss Machines



## KEY POINT

**TaeguTec has introduced the FLEX-TURN family of modular heads and holders for Swiss machines.**

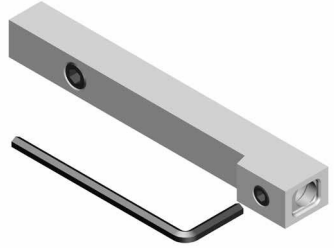



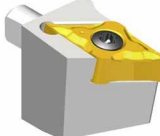









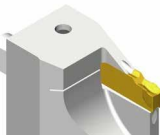


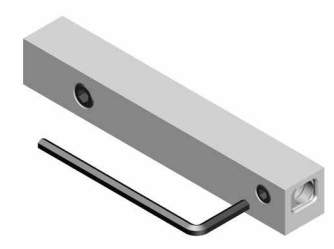
It is usually time consuming to remove holders from the tool post when changing inserts on Swiss machines. With the ingenious FLEX-TURN family, inserts can be replaced outside of the machine by removing only the modular head, with the shank mounted to the tool post, reducing insert changing time and increasing productivity. Additionally, unlike the integrated holders, there is no risk of losing the holder's spare parts and inserts by dropping them in the machine when replacing inserts, making the FLEX-TURN family more convenient to use.

### Features

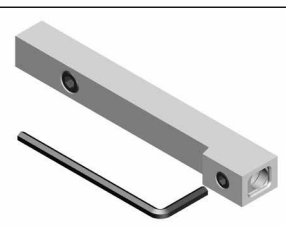
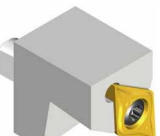


- Modular head type holders for swiss machines
- Easy replacement of modular heads and inserts
- Improved productivity owing to reduced set-up time
- Rigid clamping between shanks and heads, and good repeatability
- Reduced inventory due to the ability to mount multiple heads on one shank
- A variety 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

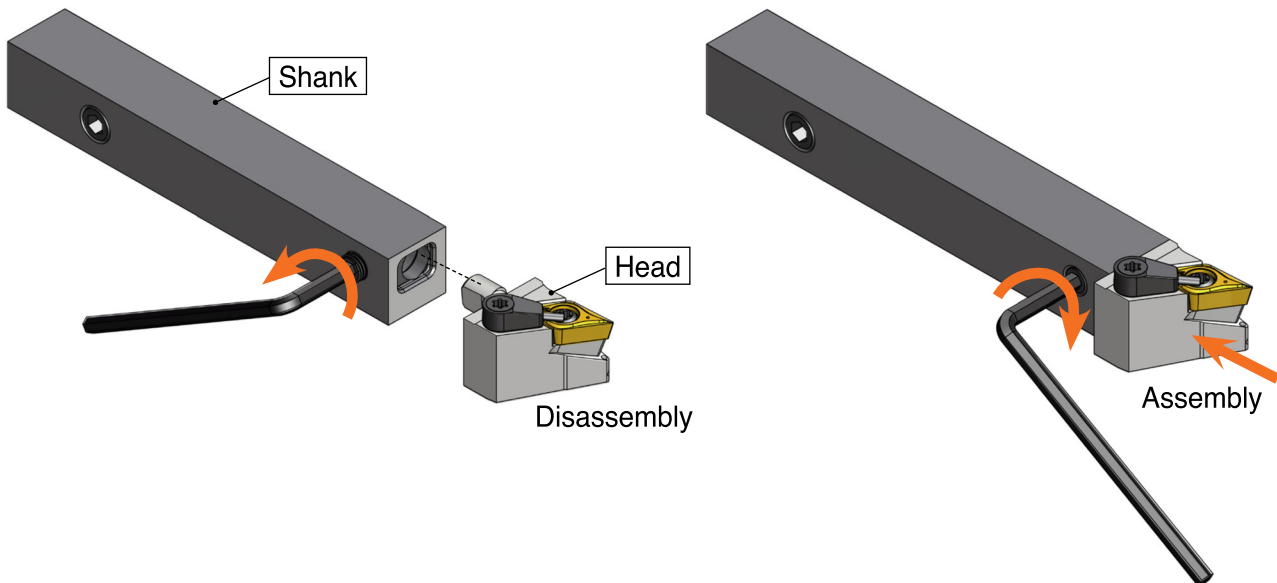
External coolant supply				 <b>QE1 S12N-TB</b> (Neutral type, 12x12)
 <b>TOPMINI</b> QE1 SDJCR	 <b>TOPMINI</b> QE1 SVJB(C)R	 <b>RHINOMTURN</b> QE1 SDJNR	 <b>RHINOTURN</b> QE1 SDJNR	
 <b>TOPMINI</b> QE1B SVXCR	 <b>T-CLAMP</b> QE1 TTER	 <b>T-CLAMP</b> QE1 TTEL	 <b>QUADRUSH</b> QE1 TQHR	
COOLBURST High-pressure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

## Right hand head and shank assembly for Y-axis machining

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

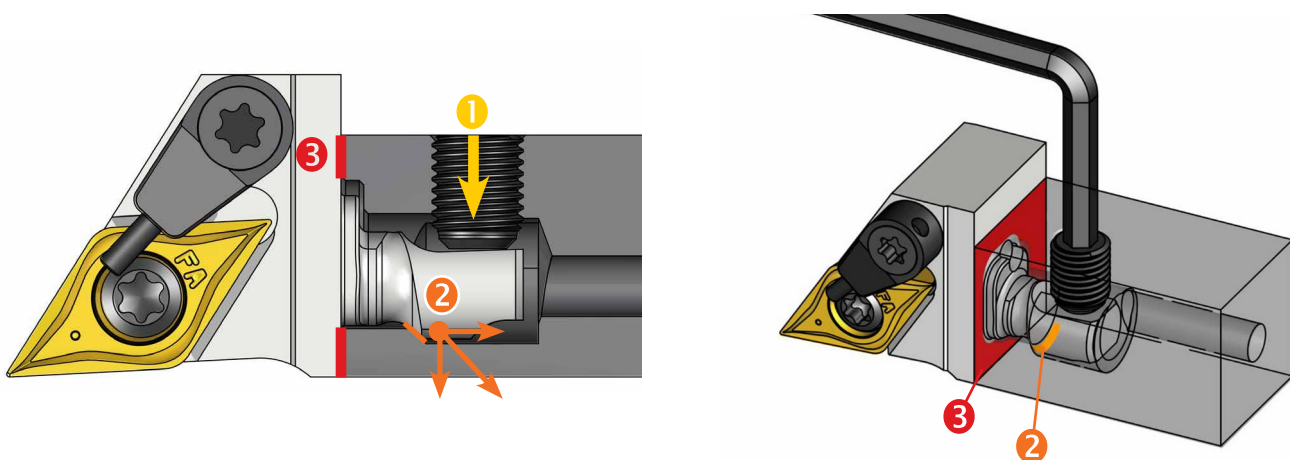
## Easy modular head replacement

- 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



## 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

## COOLBURST High-pressure coolant system

- Chip control and tool life are improved due to the coolant channels directed to insert's cutting edge



## Designation system

### Modular head

**Q E 1 (Y) SDJCR 11-(TB)**

1 2 3 4 5 6 7

- 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, Non- external coolant)

### Shank dimension

**Q E 1 S16 R-(TB)**

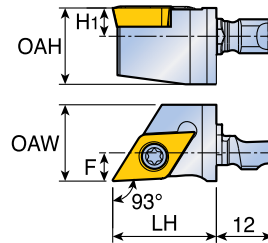
1 2 3 4 5 6

- 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



Right hand shown

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

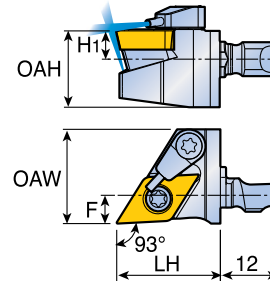
## QE1 SDJCR-TB



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



COOLBURST



Right hand shown

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

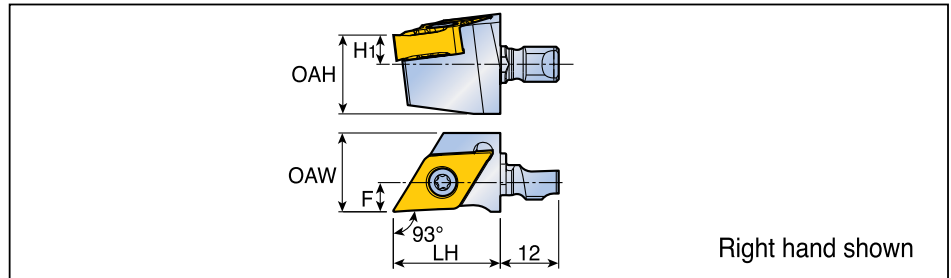
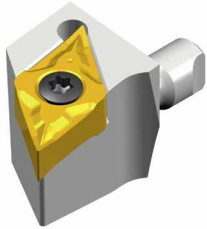
### Spare parts

Designation	Screw	Cooling unit	Wrench	
QE1 SDJCR	SO 35080I	-	T15	
QE1 SDJCR-TB	SO 35080I	S-CU-TB	T15	

## QE1 SDJNR



Modular head for external turning on Swiss machines

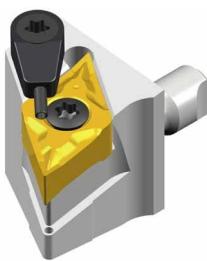


Approach angle	Designation	Dimensions (mm)					Shank	Insert
		OAH	LH	OAW	H1	F		
<b>93°</b> 	<b>QE1 SDJNR 0803</b>	16.2	22.0	16.2	6.0	7.0	QE1 S12N-TB QE1 S16R-TB	DN...X 0803... <b>RHINO TURN</b>
	<b>QE1 SDJNR 1305</b>	16.2	22.0	16.2	6.0	7.0	QE1 S12N-TB QE1 S16R-TB	DN...G 1305... <b>RHINO TURN</b>

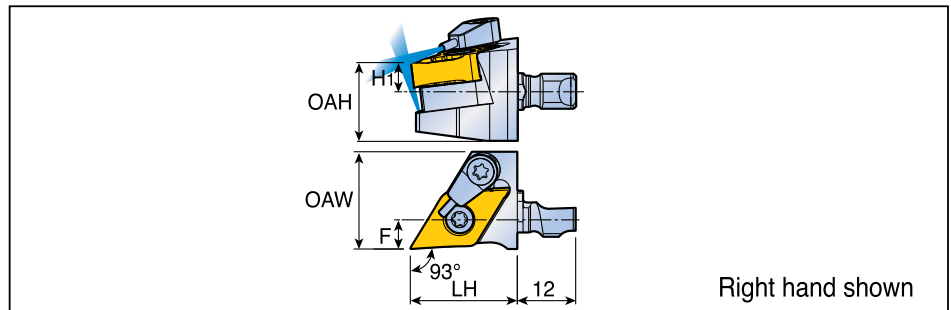
## QE1 SDJNR-TB



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



**COOLBURST**  
IMPROVED COOLANT



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

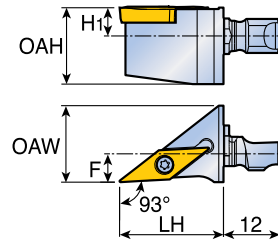
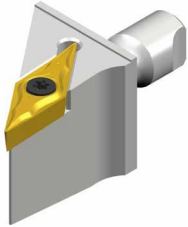
### Spare parts

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

## QE1 SVJBR



Modular head for external turning on Swiss machines



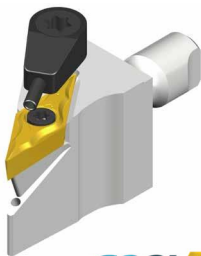
Right hand shown

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

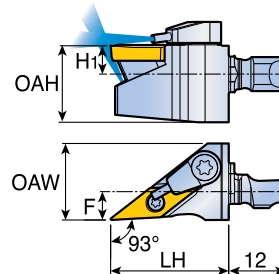
## QE1 SVJBR-TB



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



**COOLBURST**  
PRODUCTION TECHNOLOGY



Right hand shown

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

### Spare parts

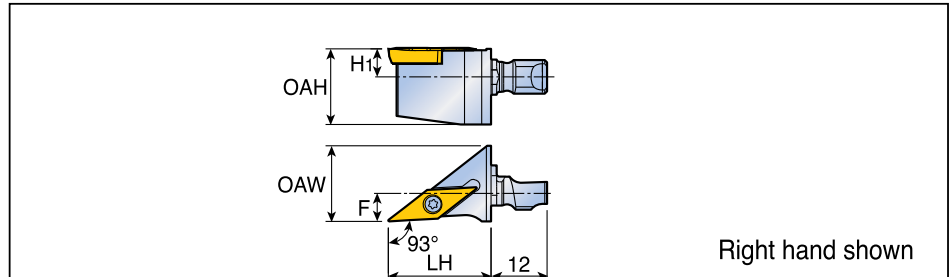
Designation	Screw	Cooling unit	Wrench	
<b>QE1 SVJBR 11</b>	SO 250651	-	T 7	
<b>QE1 SVJBR 11-TB</b>	SO 250651	S-CU-TB	T 7	



## QE1 SVJCR



Modular head for external turning on Swiss machines

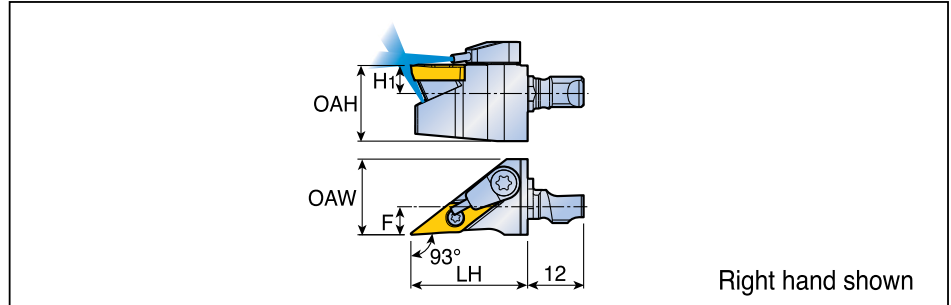
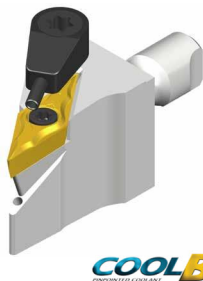


Approach angle	Designation	Dimensions (mm)					Shank	Insert
		OAH	LH	OAW	H1	F		
93°	QE1 SVJCR 11	16.2	25.0	16.2	6.0	7.0	QE1 S12N-TB QE1 S16R-TB	VC... 1103...

## QE1 SVJCR-TB



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



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...

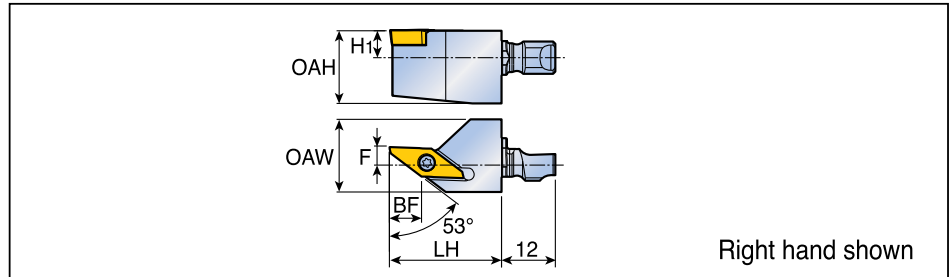
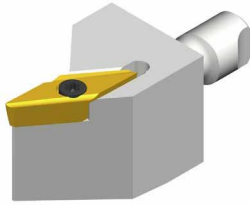
### Spare parts

Designation	Screw	Cooling unit	Wrench	
QE1 SVJCR 11	SO 250651	-	T 7	
QE1 SVJCR 11-TB	SO 250651	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		
93°	<b>QE1B SVXCR 11</b>	16.2	25.0	16.2	7.2	6.0	3.0	QE1 S12N-TB QE1 S16R-TB	BTVC 1103... <b>TOPMINI</b>

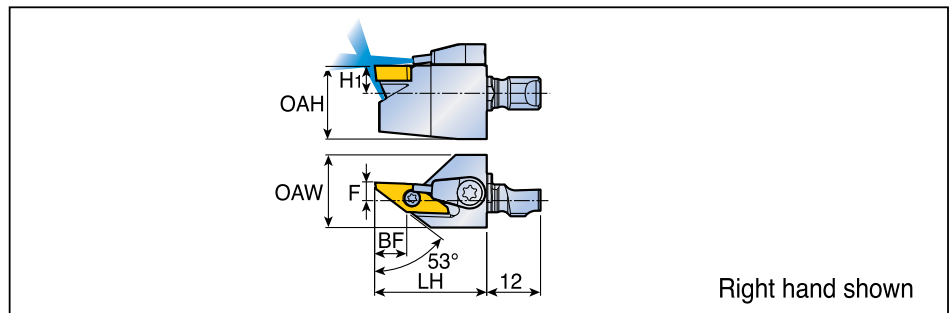
## QE1B SVXCR-TB



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		
93°	<b>QE1B SVXCR 11-TB</b>	16.2	25.0	16.2	7.2	6.0	3.0	QE1 S12N-TB QE1 S16R-TB	BTVC 1103... <b>TOPMINI</b>

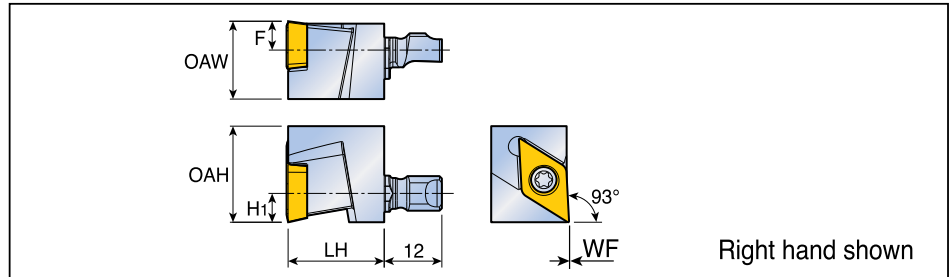
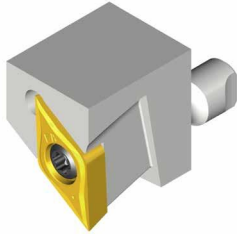
### Spare parts

Designation	Screw	Cooling unit	Wrench	
<b>QE1B SVXCR</b>	SO 250651	-	T 7	
<b>QE1B SVXCR-TB</b>	SO 250651	S-CU-TB	T 7	

## QE1Y SDJCR



Modular head for Y-axis turning on Swiss machines

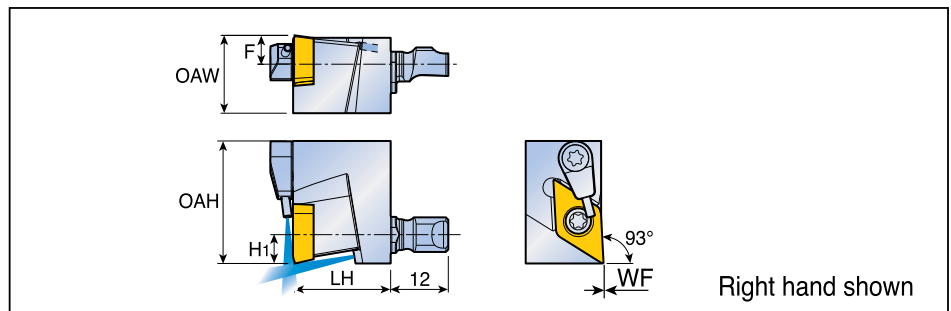


Approach angle	Designation	Dimensions (mm)						Shank	Insert
		OAW	OAH	LH	WF	H1	F		
<b>93°</b>	<b>QE1Y SDJCR 11</b>	16.2	20.0	20.0	0.0	6.0	7.0	QE1 S12N-TB QE1 S16L-TB	DC... 11T3...

## QE1Y SDJCR-TB



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



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

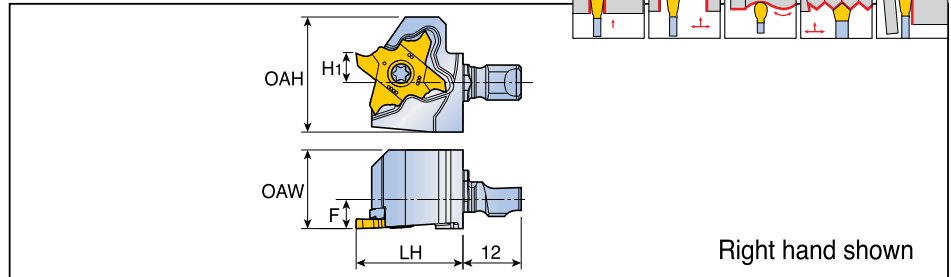
### Spare parts

Designation	Screw	Cooling unit	Wrench	
<b>QE1Y SDJCR 11</b>	SO 350801	-	T 15	
<b>QE1Y SDJCR 11-TB</b>	SO 350801	S-CU-TB	T 15	



## QE1 TQHR

Modular head for parting and grooving on Swiss machines



Right hand shown

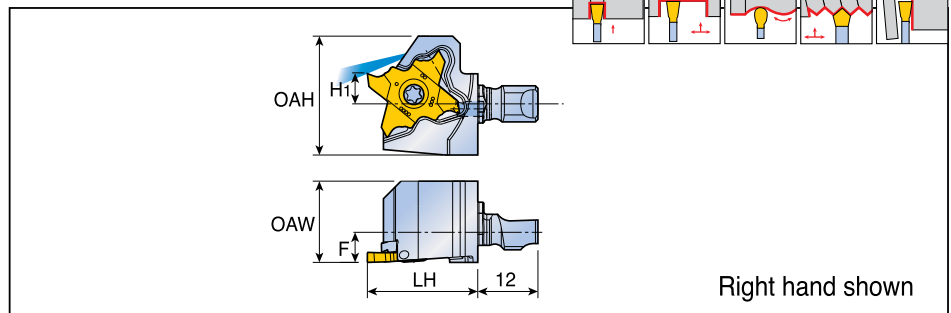
Designation	Dimensions (mm)					Shank	Insert
	OAH	LH	OAW	H1	F		
<b>QE1 TQHR 20</b>	23.7	22.0	16.2	6.0	7.0	QE1 S12N-TB QE1 S16R-TB	TQ... 20

## QE1 TQHR-TB

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





COOLBURST



Right hand shown

Designation	Dimensions (mm)					Shank	Insert
	OAH	LH	OAW	H1	F		
<b>QE1 TQHR 20-TB</b>	23.7	22.0	16.2	6.0	7.0	QE1 S12N-TB QE1 S16R-TB	TQ... 20

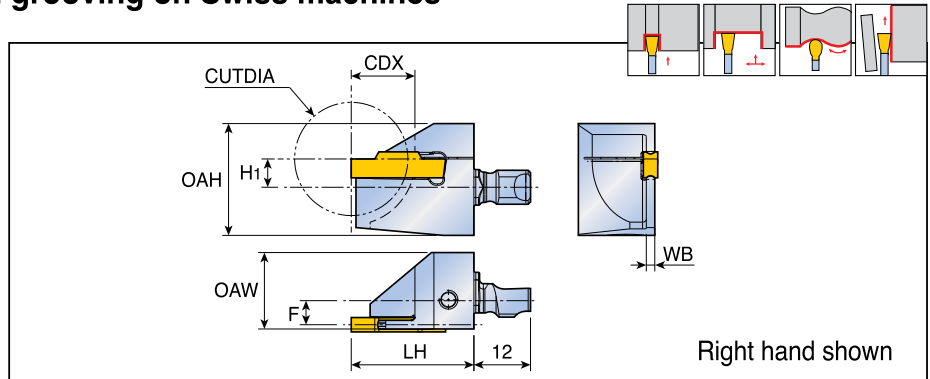
### Spare parts

Designation	Screw	Wrench		
<b>QE1 TQHR(-TB)</b>	 TS 40A100L	 T-1508/5		



## QE1 TTER

Modular head for parting and grooving on Swiss machines



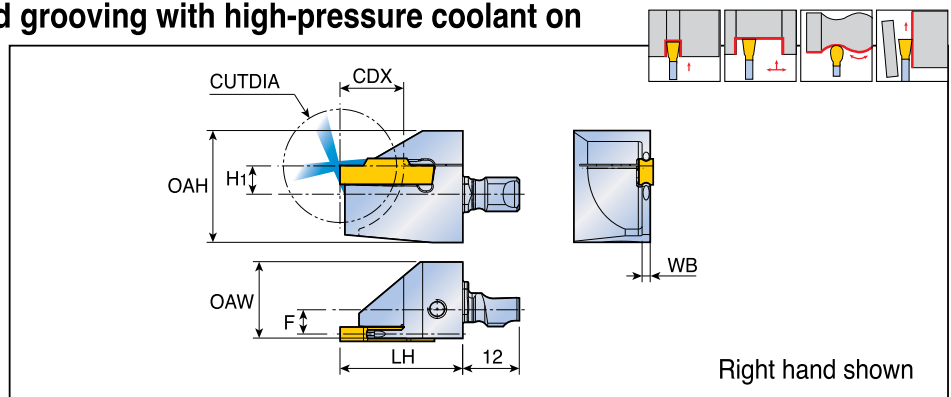
Designation	Insert seat size	Dimensions (mm)								Shank	Insert
		OAH	LH	OAW	WB	CDX	CUTDIA	H1	F		
QE1 TTER 2-16-32	2	23.7	26.0	16.2	1.8	16.0	32.0	6.0	6.1	QE1 S12N-TB	TDC/J/T
	2	23.7	26.0	16.2	1.8	12.0	24.0	6.0	6.1	QE1 S16R-TB	TDXU/XT/XY
3-16-32	3	23.7	26.0	16.2	2.4	16.0	32.0	6.0	5.8		TSC/J
3-12-24	3	23.7	26.0	16.2	2.4	12.0	24.0	6.0	5.8		TDFU/TDV

## QE1 TTER-TB

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





COOLBURST



Designation	Insert seat size	Dimensions (mm)								Shank	Insert
		OAH	LH	OAW	WB	CDX	CUTDIA	H1	F		
QE1 TTER 2-16-32-TB	2	23.7	26.0	16.2	1.8	16.0	32.0	6.0	6.1	QE1 S12N-TB	TDC/J/T
	2	23.7	26.0	16.2	1.8	12.0	24.0	6.0	6.1	QE1 S16R-TB	TDXU/XT/XY
3-16-32-TB	3	23.7	26.0	16.2	2.4	16.0	32.0	6.0	5.8		TSC/J
3-12-24-TB	3	23.7	26.0	16.2	2.4	12.0	24.0	6.0	5.8		TDFU/TDV

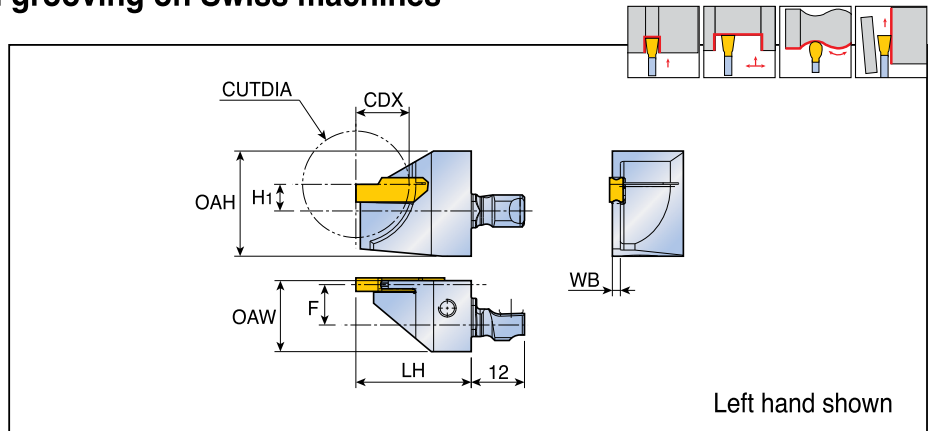
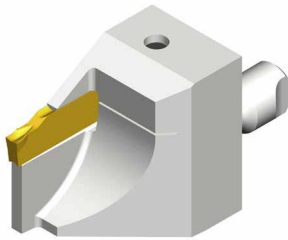
### Spare parts

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



## QE1 TTEL

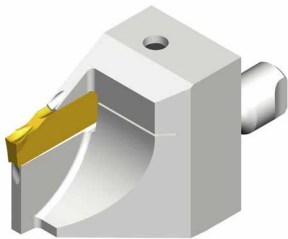
Modular head for parting and grooving on Swiss machines



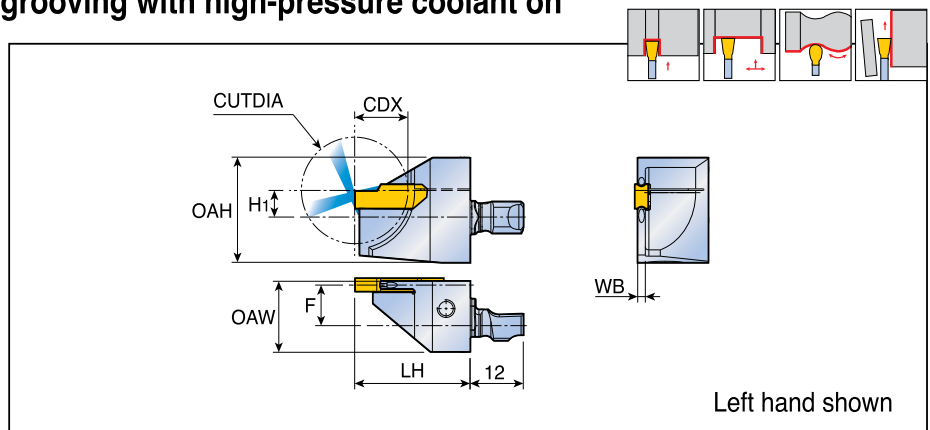
Designation	Insert seat size	Dimensions (mm)								Shank	Insert	
		OAH	LH	OAW	WB	CDX	CUTDIA	H1	F			
<b>QE1 TTEL</b>	<b>2-16-32</b>	2	23.7	26.0	16.0	1.8	16.0	32.0	6.0	8.1	QE1 S12N-TB	TDC/J/T
	<b>2-12-24</b>	2	23.7	26.0	16.0	1.8	12.0	24.0	6.0	8.1	QE1 S16R-TB	TDXU/XT/XY
	<b>3-16-32</b>	3	23.7	26.0	16.0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

## QE1 TTEL-TB

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



**COOLBURST**



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

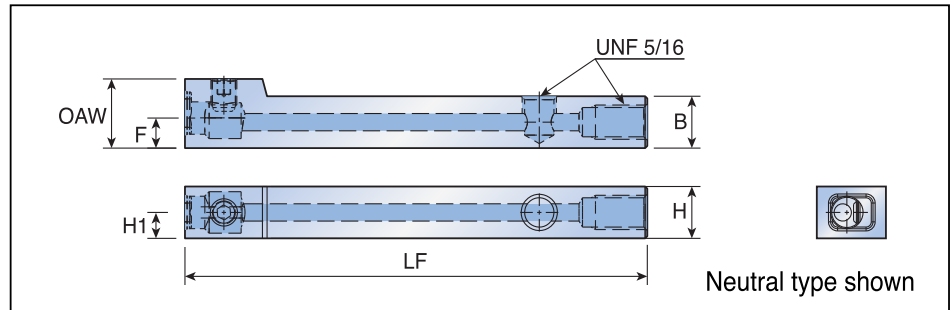
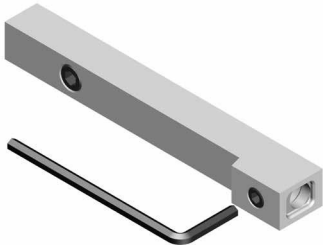
### Spare parts

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

## QE1 S12N-TB



Shank for high-pressure coolant type Swiss machines



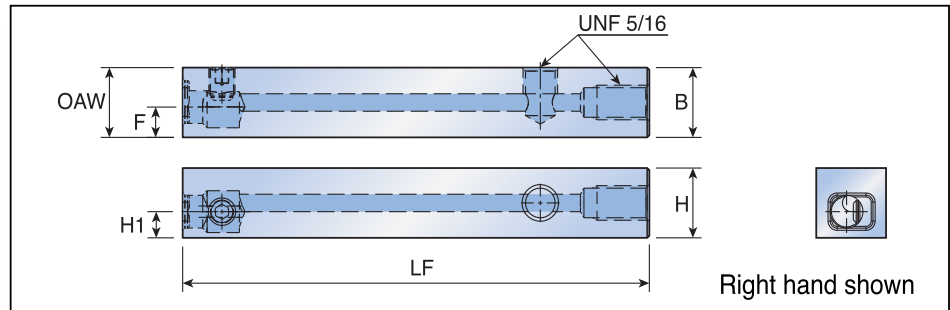
Designation	Dimensions (mm)					
	H1	F	H	B	LF	OAW
<b>QE1 S12N-TB</b>	6.0	7.0	12.0	12.0	107.0	16.0

• For head and shank assembly dimensions, please see page 16 (external turning) and page 17 (Parting and grooving)

## QE1 S16R/L-TB



Shank for high-pressure coolant type Swiss machines



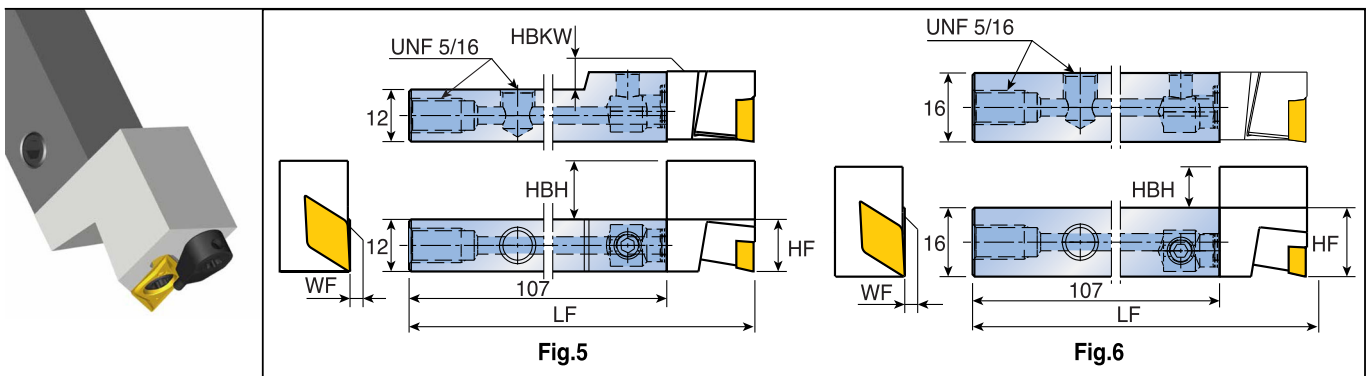
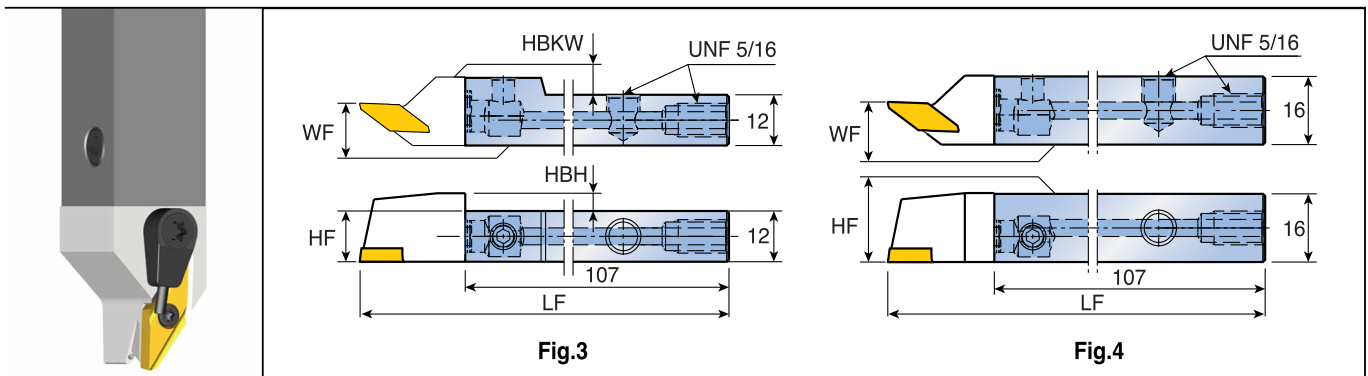
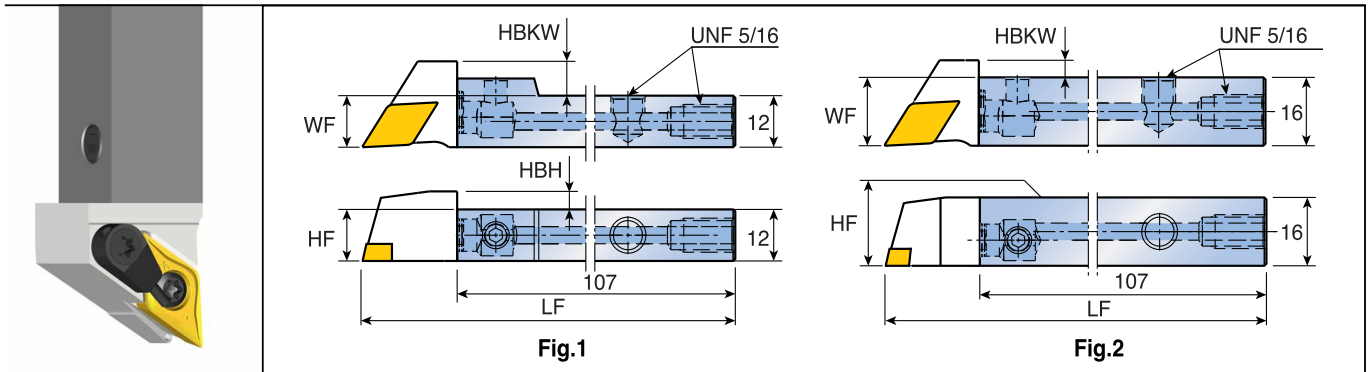
Designation	Dimensions (mm)					
	H1	F	H	B	LF	OAW
<b>QE1 S16R/L-TB</b>	6.0	7.0	16.0	16.0	107.0	16.0

• For head and shank assembly dimensions, please see page 16 (external turning) and page 17 (Parting and grooving)

### Spare parts

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

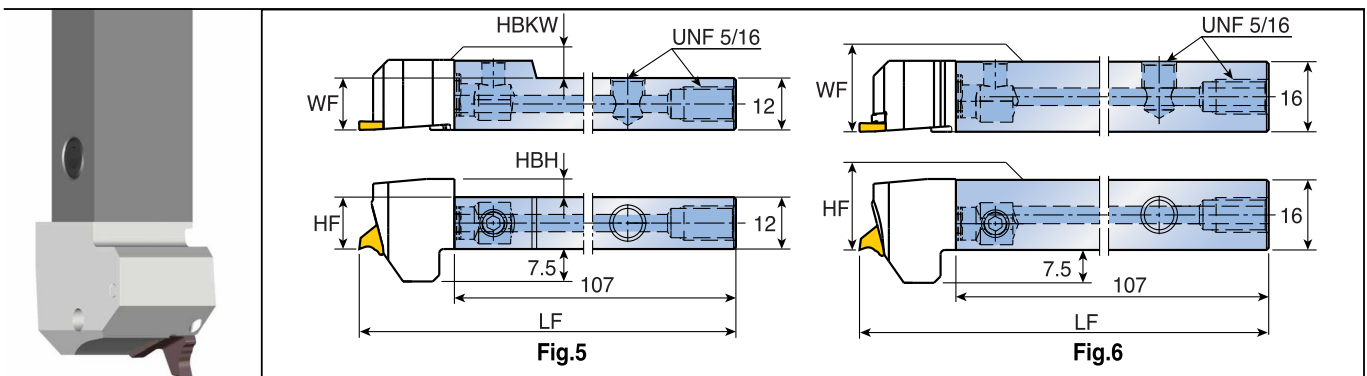
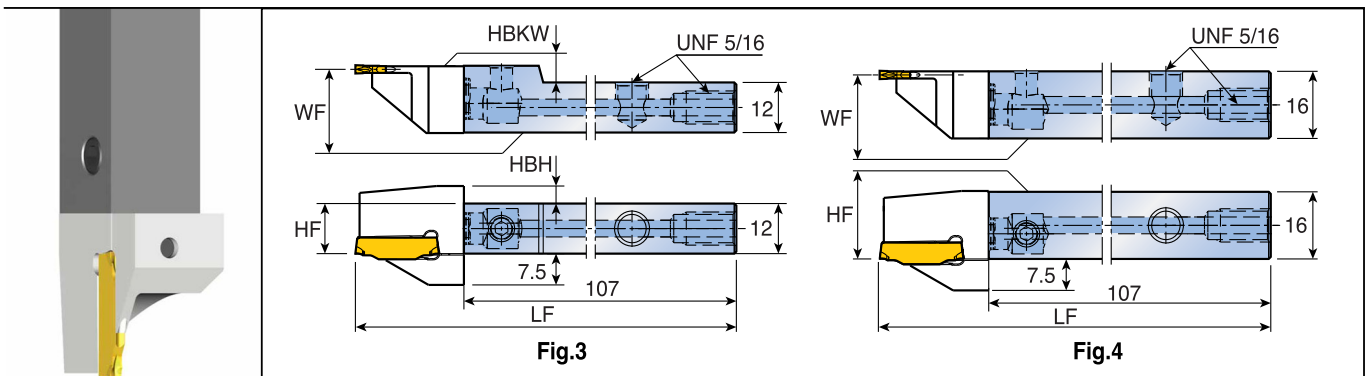
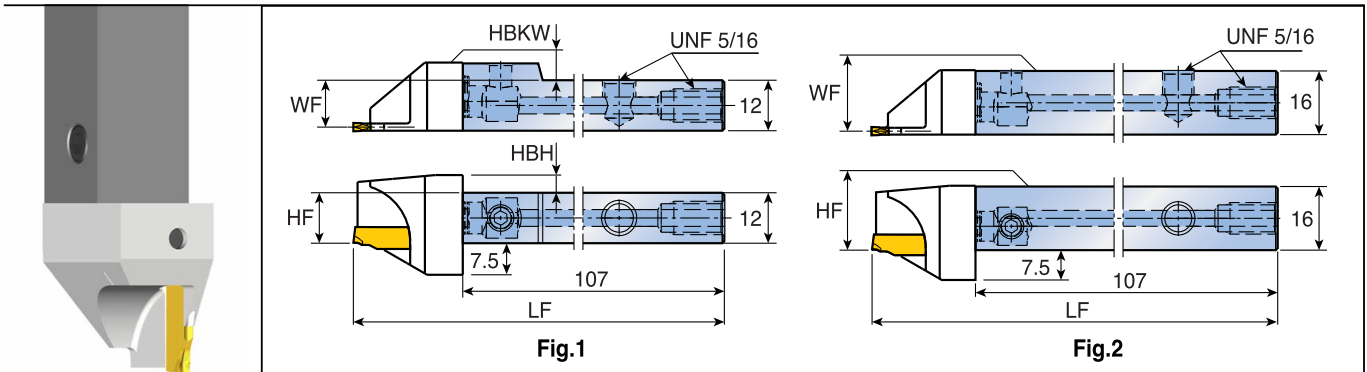
## FLEX-TURN assembly dimensions (external turning)



Shank	Head	Dimensions (mm)					Fig.
		HF	HBH	LF	WF	HBKW	
<b>QE1 S12N-TB</b>	QE1 SD...11-TB / QE1 SD...1305-TB	12.0	4.2	129.0	12.0	8.0	1
	QE1 SD...0803 (-TB) / QE1 SD...11 / QE1 SD...1305	12.0	4.2	129.0	12.0	4.2	1
	QE1 SV...11(-TB)	12.0	4.2	132.0	12.0	4.2	1
	QE1B...11(-TB)	12.0	4.2	132.0	10.0	4.2	3
	QE1Y...11	12.0	8.0	127.0	0.0	4.2	5
	QE1Y...11-TB	12.0	13.5	127.0	0.0	4.2	5
<b>QE1 S16R-TB</b>	QE1 SD...11-TB / QE1 SD...1305-TB	16.0	-	129.0	16.0	4.0	2
	QE1 SD...0803 (-TB) / QE1 SD...11 / QE1 SD...1305	16.0	-	129.0	16.0	-	2
	QE1 SV...11(-TB)	16.0	-	132.0	16.0	-	2
	QE1B...11(-TB)	16.0	-	132.0	10.0	-	4
<b>QE1 S16L-TB</b>	QE1Y...11	16.0	4.0	127.0	0.0	-	6
	QE1Y...11-TB	16.0	9.5	127.0	0.0	-	6



## FLEX-TURN assembly dimensions (Parting and grooving)

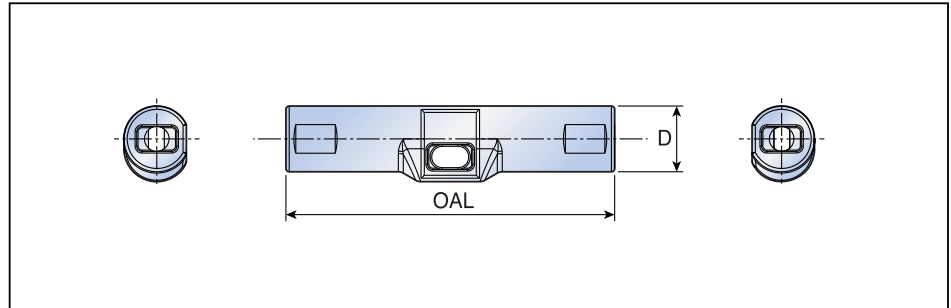


Shank	Head	Dimensions (mm)					Fig.
		HF	HBH	LF	WF	HBKW	
<b>QE1 S12N-TB</b>	QE1 TTER 2...	12.0	4.2	133.0	11.1	4.2	1
	QE1 TTER 3...	12.0	4.2	133.0	10.8	4.2	1
	QE1 TTEL 2...	12.0	4.2	133.0	15.1	4.0	3
	QE1 TTEL 3...	12.0	4.2	133.0	14.8	4.0	3
	QE1 TQHR	12.0	4.2	129.0	16.0	4.2	5
<b>QE1 S16R-TB</b>	QE1 TTER 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 TQHR	16.0	-	129.0	16.0	-	6

## QE1 FIX-20100



### Insert replacement fixture



Designation	Dimensions (mm)	
	OAL	D
<b>QE1 FIX-20100</b>	100.0	20.0

· Fixture ordered separately

## Insert replacement

- Due to the FLEX-TURN's small head sizes, replacing the inserts could be difficult. Please use the fixture to facilitate insert replacement.
- Modular heads for Y-axis (QE1Y...)
- Other modular heads

