

Mounting instructions

Version 1.0.2

Quick change tool holder

SWH AA/ SWH 1-A/ SWH 3-E/ SWH 5-B/ SWH 7-C

To be mounted on the lathes

D180/ D210/ D240/ D250/ D280/ D320/ D330/ D360/ D420/ D460/ D560

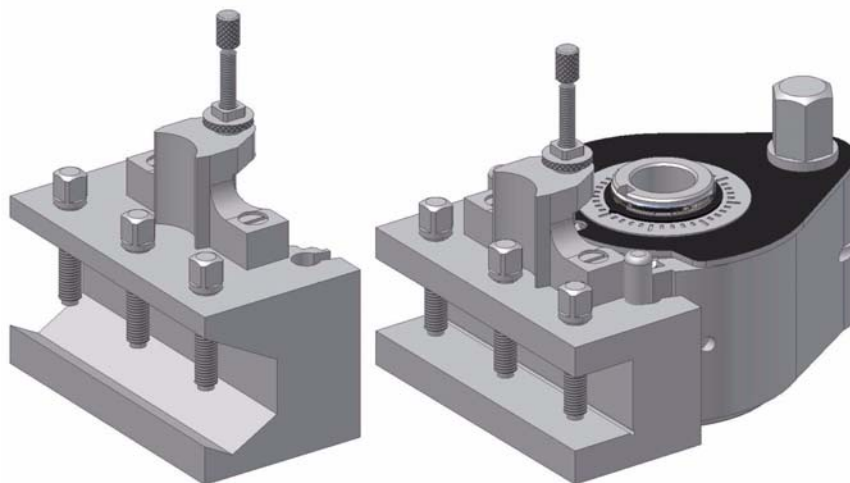


Abb.0-1: SWH 3-E

Keep for future reference!

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1 Quick change tool holder

1.1 Introduction

Quick action tool holders are different due to the large variety in the application of the tool. The solid which is manufactured from high-quality tempering steel with form-ground seat toothing is fixed to the top slide. The tool holder cams into the toothing of the solid, by which a repeating accuracy of 0.01 mm is being achieved. The toothing permits 40 different adjustments of the tool holder.

1.2 Proper use

The quick action tool holder SWH AA, SWH 1-A, SWH 3-E, SWH 5-B and SWH 7-C can be used with the following machines:

- OPTIMUM - lathe D180 (SWH AA)
- quantum - lathe D210/ D250 (SWH 1-A)
- OPTIMUM - lathe D240/ D280 (SWH 1-A)
- OPTIMUM - lathe D320/ D330/ D360 (SWH 3-E)
- OPTIMUM - lathe D420/ D460 (SWH 5-B)
- OPTIMUM - lathe D560 (SWH 7-C)

1.3 Technical data

Head of the quick action tool holder		AA	1-A	3-E	5-B	7-C
Height of centers	[mm]	120-220	150-300	200-400	300-500	400-700
Motor output lathe max.	[kW]	1	2,2	4,4	6,6	13
Width of saddle max.	[mm]	80	100	120	150	180
Support width for tool	[mm]	10	14	15	20	20/ 30
Depth of bore hole max.	[mm]	30	35	35	45	90

1.4 Accessories

Replacement tool holder	Item No
SWH AA (13 x 50) type D for square tool	338 4312
Replacement tool holder SWH - AA (12 x 50) type H for round tool	338 4320
SWH 1-A (20 x 90) type D for square tool	338 4302
Replacement tool holder SWH 1-A (20 x 85) type H for round tool	338 4321
SWH 3-E (20 x 100) type D for square tool	338 4304
Replacement tool holder SWH 3-E (30 x 100) type H for round tool	338 4322
SWH 5-B (25 x 120) type D for square tool	338 4306
Replacement tool holder SWH 5-B (32 x 130) type H for round tool	338 4324
SWH 7-C (32 x 150) type D for square tool	338 4308
Replacement tool holder SWH 7-C (40 x 160) type H for round tool	338 4326

1.5 Abmessungen SWH AA - Dimensions SWH AA

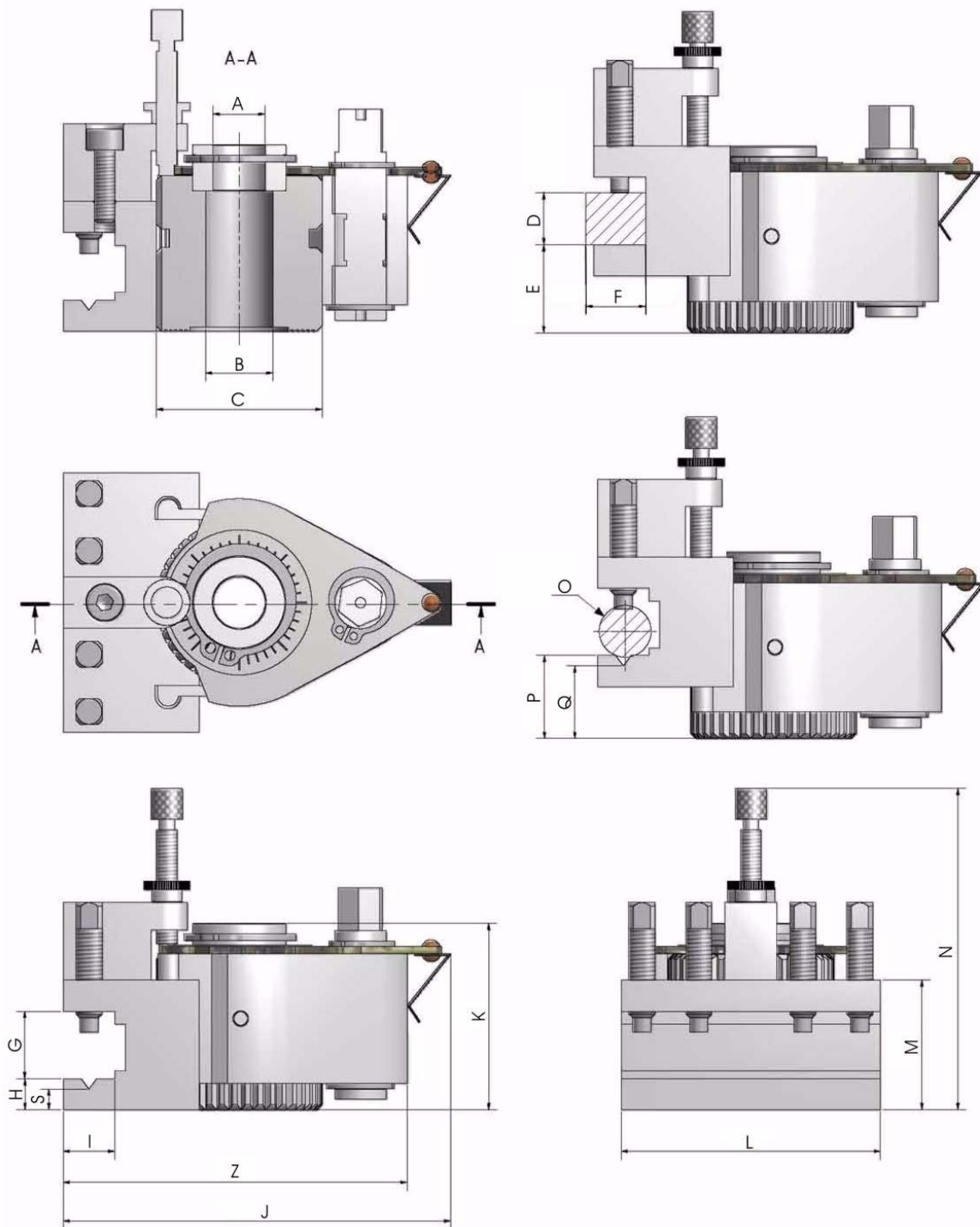


Abb.1-1: Stahlhalter für Vierkantmeißel/ Rundmeißel - Tool holder for square tool/ round tool

1.6 Abmessungen SWH 1-A/ 3-E/ 5-B/ 7-C - Dimensions SWH 1-A/ 3-E/ 5-B/ 7-C

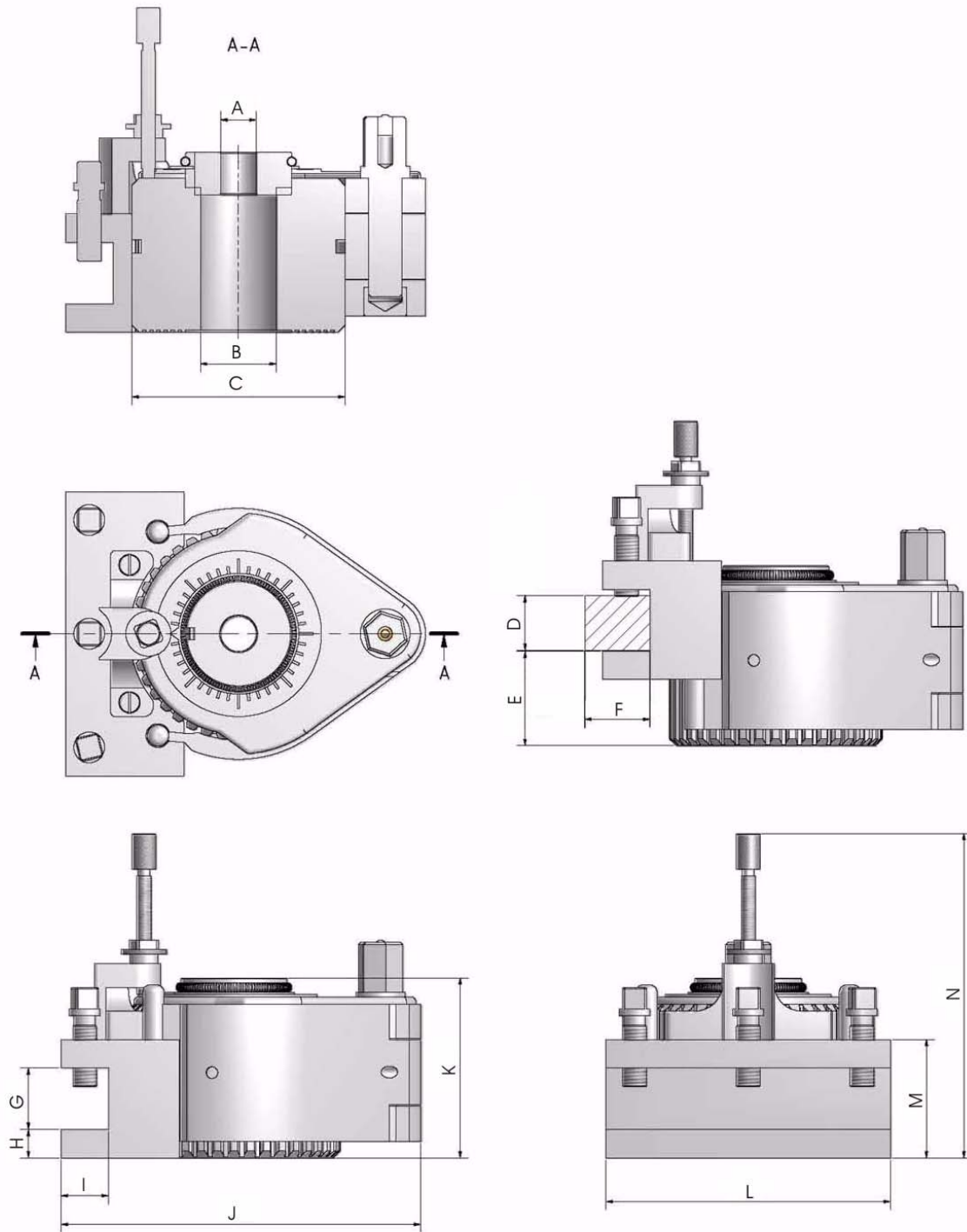


Abb. 1-2: Stahlhalter für Vierkantmeißel - Tool holder for square tool

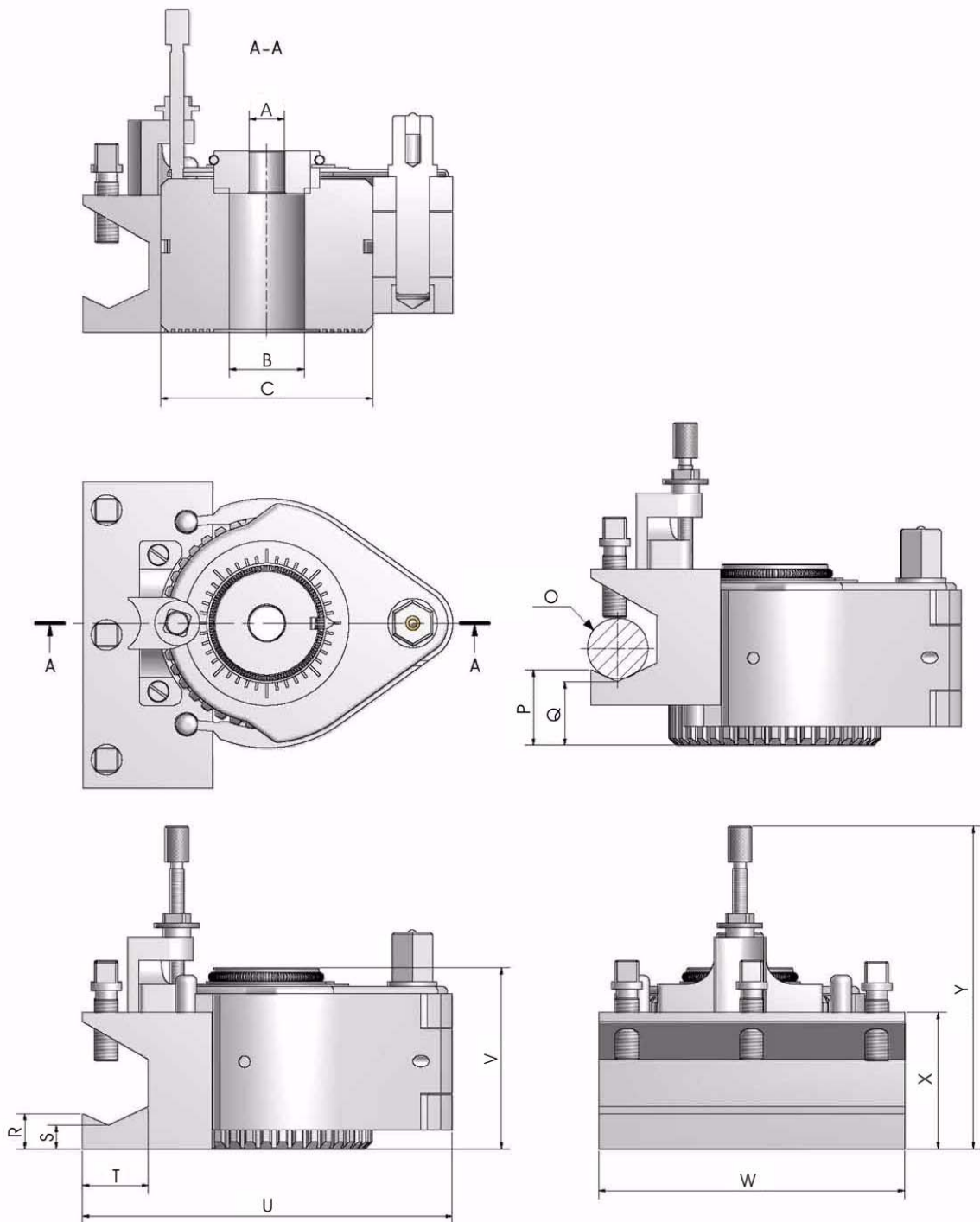


Abb.1-3: Stahlhalter für Rundmeißel - Tool holder for round tool

1.6.1 Tabelle Abmessungen SWH - Table dimensions SWH

Position	Einheit/ Unit	Kopf des Schnellwechselstahlhalters/ Head of the quick change tool holder				
		AA	1-A	3-E	5-B	7-C
A	[mm]	∅10	∅10,5	∅10	∅15	∅16,5
B		∅12	∅20	∅20	∅32	∅40
C		∅32	∅60	∅60	∅90	∅120
D		max. 10	max. 12	max. 16	max. 20	max. 20
E		max. 17	max. 22	max. 30	max. 42	max. 62
F		von 8 bis 12	von 12 bis 20	von 16 bis 22	von 15 bis 27	von 15 bis 27
G		12	20	20	25	32
H		6	8	10	12	16
I		10	14	15	20	20
J		74	106	132	150	202
K		37	55	68	78	110
L		50	90	100	120	150
M		25	38	45	50	63
N		62	90	120	137	190
O		max. ∅10	max. ∅20	max. ∅20	max. ∅32	max. ∅35
P		max. 17	max. 24	max. 24	max. 38	max. 58
Q		max. 15	max. 20	max. 19	max. 33	max. 50
R		-	10	12	15	18
S		4	7	7	10	10
T		-	19	26	28	37
U	-	106	142	155	210	
V	-	55	68	78	110	
W	-	85	100	130	160	
X	-	38	55	58	71	
Y	-	90	120	137	190	
Z	67	-	-	-	-	

2 Ersatzteilzeichnungen - Drawings spare parts

2.1 Ersatzteilzeichnung SWH AA - Drawing spare parts SWH AA

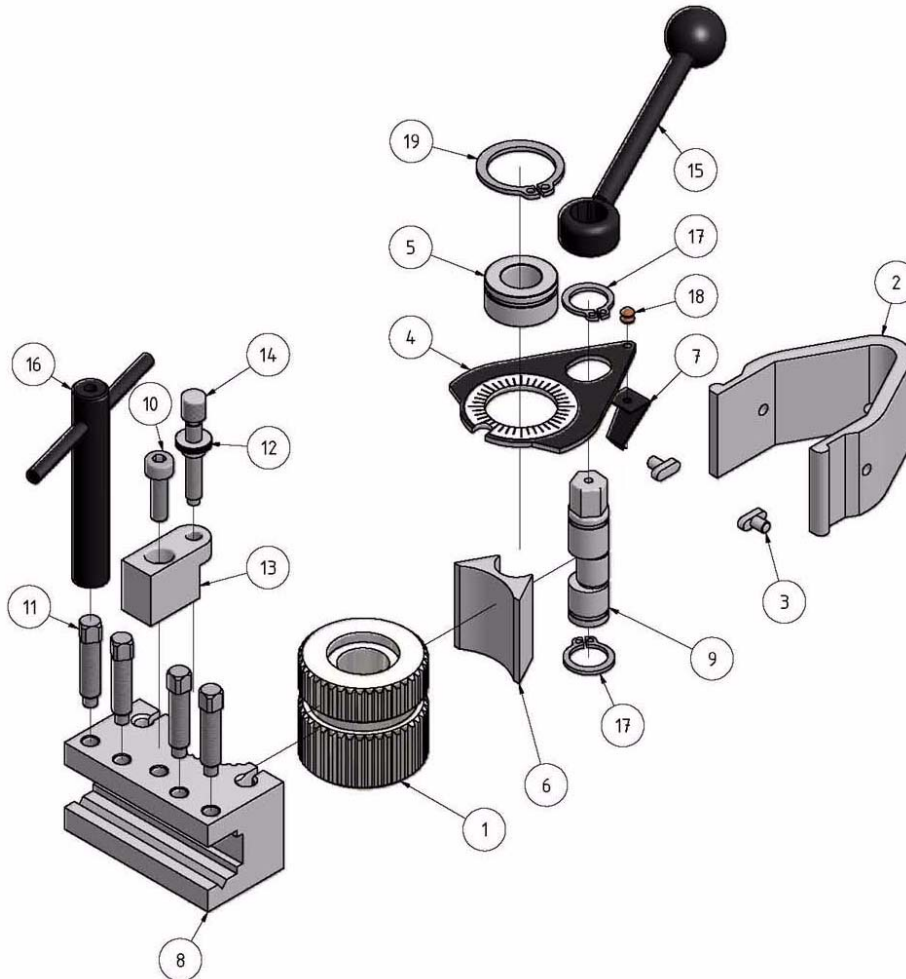


Abb.2-1: Ersatzteilzeichnung SWH AA - Drawing spare parts SWH AA

2.1.1 Ersatzteilliste SWH AA - Spare parts list SWH AA

Pos.	Bezeichnung	Designation	Menge	Größe	Artikelnummer
			Qty.	Size	Item no.
1	Zahnkranz	Crown gear	1		0338431101
2	Schnellwechsellaufnahme	Quick-action collet	1		0338431102
3	Nutenstein	Slot nut	2		0338431103
4	Anzeigeskala	Indicator scale	1		0338431104
5	Zentrierscheibe	Centering washer	1		0338431105
6	Führungsstück	Guide piece	1		0338431106
7	Federblech	Spring	1		0338431107
8	Stahlhalter Rundmeißel, Typ H	Holder round tool, Typ H	1		3384320
8	Stahlhalter Vierkantmeißel, typ D	Holder square tool, Typ D	1		3384312
9	Exzenter	Eccentric	1		0338431109
10	Innensechskantschraube	Head cap screw	1	GB 70-85/ M4x14	
11	Klemmschraube	Locking screw	4	M5 x 18	0338431111
12	Kontermutter	Counter nut	1		0338431112
13	Oberteil Höhenverstellung	Top adjustment of height	1		0338431113
14	Höhenverstellungsschraube	Screw adjustment of height	1		0338431114
15	Klemmhebel	Lever	1		0338431115
16	Vierkantschlüssel	Square socket key	1		0338431116
17	Sicherungsring	Retaining ring	2	DIN 471/ 10x1	
18	Niet	Rivet	1		0338431118
19	Sicherungsring	Retaining ring	1	DIN 471/ 18 x 1,2	

2.2 Ersatzteilzeichnung SWH 1-A/ 3-E - Drawing spare parts SWH 1-A/ 3-E

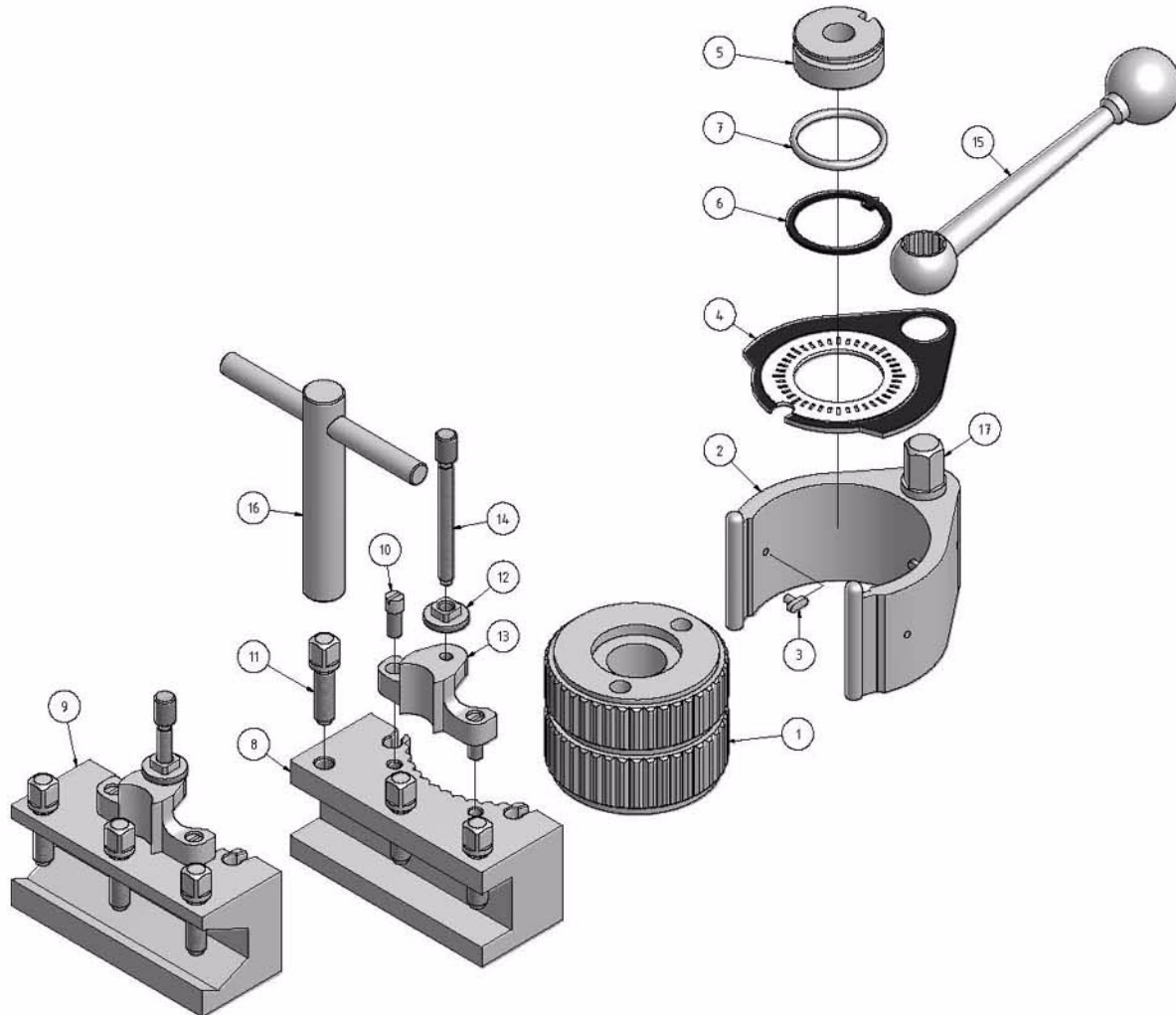


Abb.2-2: Ersatzteilzeichnung SWH 1-A/ 3-E - Drawing spare parts SWH 1-A/ 3-E

2.2.1 Ersatzteilliste SWH 1-A/ 3-E - Spare parts list SWH 1-A/ 3-E

Pos.	Bezeichnung	Designation	Menge Qty.	Größe Size		Artikelnummer Item no.	
				SWH 1-A	SWH 3-E	SWH 1-A	SWH 3-E
			1	Zahnkranz	Crown gear	1	
2	Schnellwechsellafnahme	Quick-action collet	1			0338430102	0338430302
3	Nutenstein	Slot nut	3			0338430103	0338430303
4	Anzeige-Skala	Indicator scale	1			0338430104	0338430304
5	Zentrierscheibe	Centering washer	1			0338430105	0338430105
6	Anzeige	Guide piece	1			0338430106	0338430106
7	Feder	Spring	1			0338430107	0338430107
8	Werkzeughalter Vierkantmeißel Typ D	Holder square tool, Typ D	1			3384302	3384304
9	Werkzeughalter Rundmeißel Typ H	Holder round tool, Typ H	1			3384321	3384322
10	Zylinderschraube	Head cap screw	4	32G-5/32		0338430110	0338430310
11	Klemmschraube	Locking screw	6	M7x30	M7x24	0338430211	0338430411
12	Kontermutter	Counter nut	2	32G-5/32		0338430112	0338430312
13	Oberteil-Höhenverstellung	Top adjustment of height	2			0338430113	0338430313
14	Höhenverstellungsschraube	Screw adjustment of height	3	32G-5/32 new type		0338430114	0338430314 0338430314-1
15	Ringschlüssel	Ring spanner	1			0338430115	0338430315
16	Vierkantschlüssel	Square socket key	1			0338430116	0338430316
17	Exzenter	Eccentric	1			0338430117	0338430317

2.3 Ersatzteilzeichnung SWH 5-B/ 7-C - Drawing spare parts SWH 5-B/ 7-C

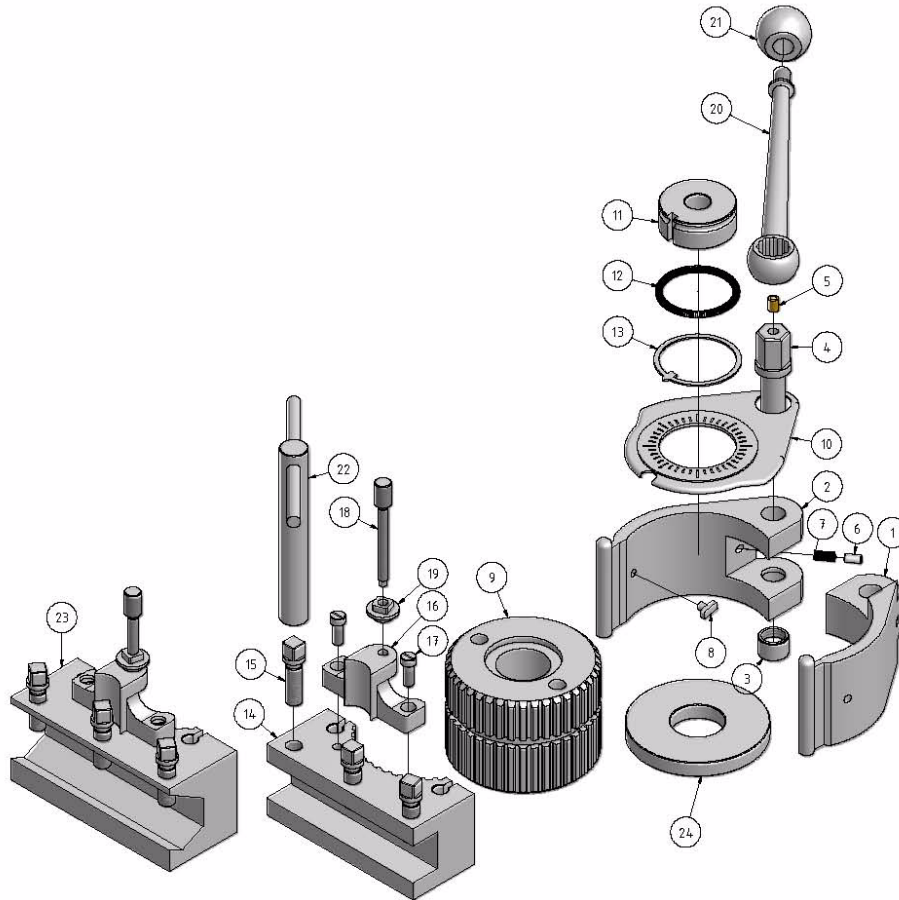


Abb.2-3: Ersatzteilzeichnung SWH 5-B/ 7-C - Drawing spare parts SWH 5-B/ 7-C

2.3.1 Ersatzteilliste SWH 5-B/ 7-C - Spare parts list SWH 5-B/ 7-C

Pos.	Bezeichnung	Designation	Menge/ Qty.	Größe Size		Artikelnummer Item no.	
				SWH 5-B	SWH 7-C	SWH 5-B	SWH 7-C
				1	Schnellwechselaufnahme A	Quick- action collet A	1
2	Schnellwechselaufnahme B	Quick- action collet B	1			0338430502	0338430702
3	Gewindebuchse	Threaded bushing	1			0338430503	0338430703
4	Spannschraube	Clamp screw	1			0338430504	0338430704
5	Schmiernippel	Lubrication cup	1			0338430505	0338430705
6	Bolzen	Bolt	1			0338430506	0338430706
7	Feder	Spring	1			0338430507	0338430707
8	Nutenstein	Slot nut	3			0338430508	0338430708
9	Zahnkranz	Crown gear	1			0338430509	0338430709
10	Anzeigeskala	Indicator scale	1			0338430510	0338430710
11	Zentrierscheibe	Centering washer	1			0338430511	0338430711
12	Ring	Ring	1			0338430512	0338430712
13	Zeiger	Indicator	1			0338430513	0338430713
14	Stahlhalter Vierkantmeißel, Typ D	Holder square tool, Typ D	1			3384306	3384308
15	Klemmschraube	Locking screw	3	M11x30	M14x40	0338430515	0338430715
16	Oberteil Höhenverstellung	Top adjustment of height	1			0338430516	0338430716
17	Schraube	Screw	2			0338430517	0338430717
18	Höhenverstellungsschraube	Screw adjustment of height	1			0338430518	0338430718
19	Kontermutter	Counter nut	1			0338430519	0338430719
20	Hebel	Lever	1			0338430520	0338430720
21	Kugelknopf	Ball knob	1			0338430521	0338430721
22	Schlüssel	Key	1			0338430522	0338430722
23	Stahlhalter Rundmeißel, Typ H	Holder round tool, Typ H	1			3384324	3384326
24	Unterlegscheibe für Montage von SWH5-B an Drehmaschine OPTI D460	Washer for mounting SWH5-B lathe OPTI D460	1			0338430523	-

3 Mounting instruction for quick change tool holder SWH - AA

3.1 Mount the SWH - AA to the lathe D180

Please proceed as follows.

- Turn-out the hole of the crown gear (pos. 1) according to the adjoining drawing.

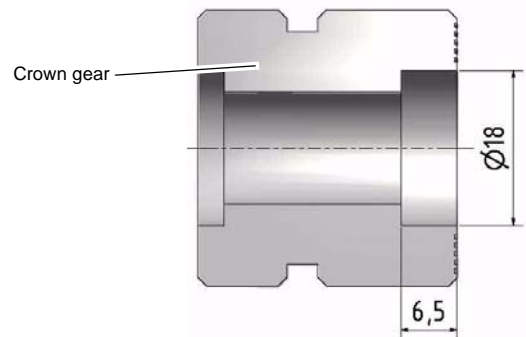


Fig.3-1: Crown gear

- Disassemble the quadruple tool holder, the stop bolt and the spring.

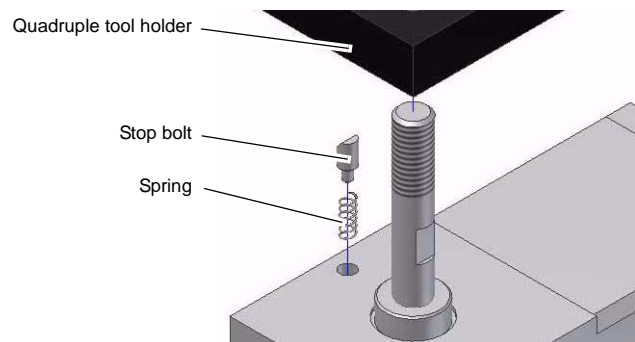


Fig.3-2: Quadruple tool holder, disassembly

- Put the quick action tool holder on the locating bolt.
- In doing so, offset the quick action tool holder offset by 90°. Due to an alignment parallel to the spindle axis, the subsequent measuring process will be facilitated.
- Then hand-fasten the hexagon nut.

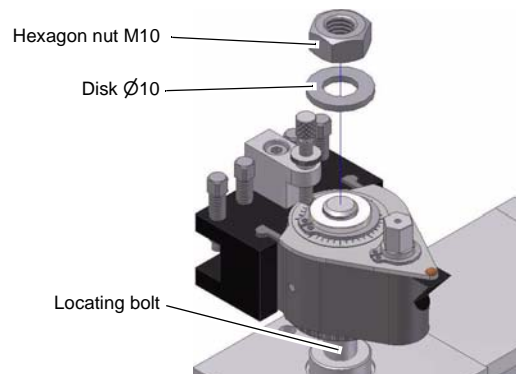


Fig.3-3: Quick action tool holder, assembly

- Put a dial gauge with magnetic stand on the compound slide. Measure if the tool holder is rectangle by traveling the top slide.

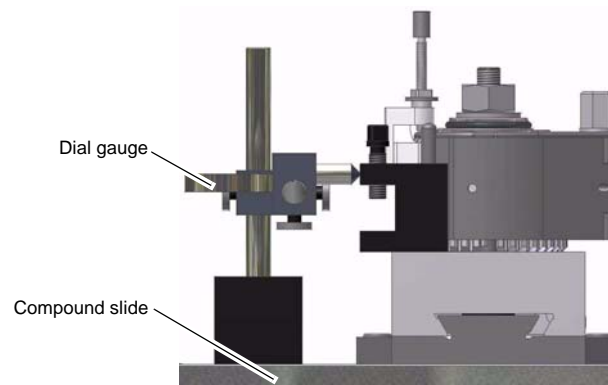


Fig.3-4: Check for rectangularity

- If required, adjust the rectangularity by leading out the tool holder using a measuring tool.
- Then fasten the hexagon nut on the aligned quick action tool holder.

Make sure that the tool holder is not twisted again.

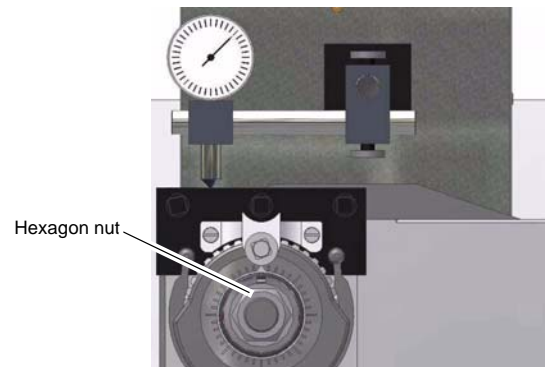


Fig.3-5: Adjust rectangularity

- Screw the cap nut on the remaining thread in order to avoid the risk of accidents.

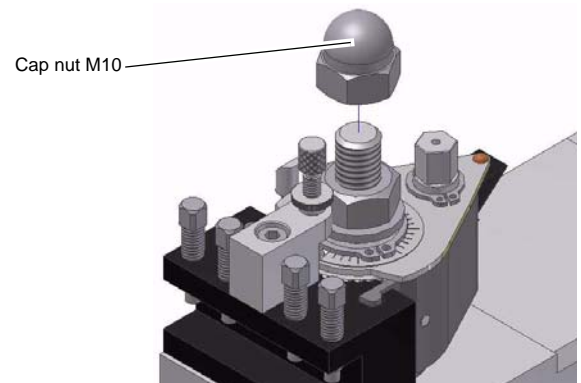


Fig.3-6: Quick action tool holder, assembly

- Turn the quick action tool holder back by 90° to the standard position of use.

INFORMATION



When fastening the hexagon nut it is possible that the crown gear twist again on the top slide. In order to secure the aligned position when fastening, it may be required to use a disk made of slip resistant material (sealing paper etc.).

4 Mounting instruction for quick change tool holder SWH 1-A

4.1 Mounting of the SWH 1-A to the lathe D210/ D250, D240/ D280

Please proceed as follows.

- Turn-out the hole of the centering washer (pos. 5) according to the adjoining drawing (only for quantum D210/ D250).

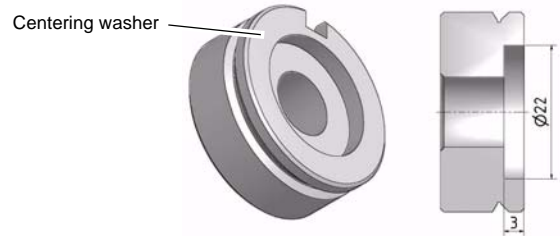


Fig.4-1: Centering washer

- Turn the hole of the crown gear (pos. 1) according to the adjoining drawing (only for OPTIMUM D280).

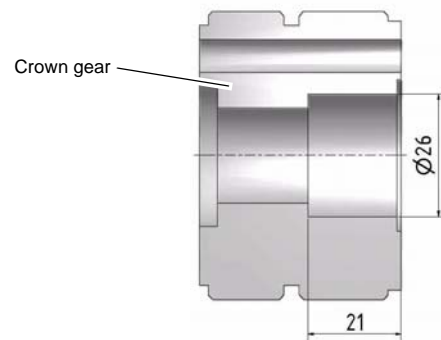


Fig.4-2: Crown gear

- Disassemble the quadruple tool holder, the stop bolt and the spring.

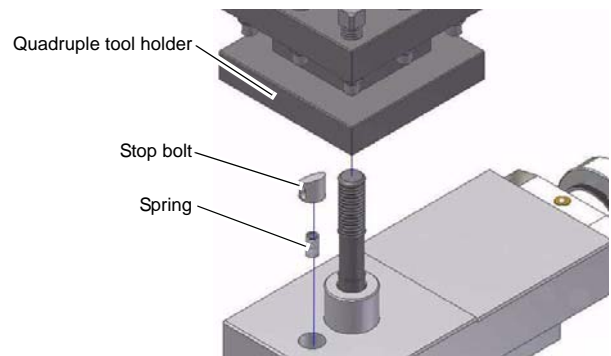


Fig.4-3: Quadruple tool holder, disassembly

- Put the quick action tool holder without indicator scale on the locating bolt.
- In doing so, offset the quick action tool holder by 90°. Due to an alignment parallel to the spindle axis, the subsequent measuring process will be facilitated.
- Then hand-fasten the hexagon nut.

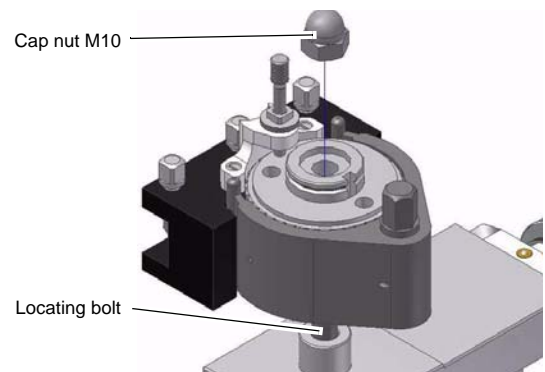


Fig.4-4: Quick action tool holder, assembly

- Put a dial gauge with magnetic stand on the compound slide. Measure if the tool holder is rectangle by traveling the top slide.

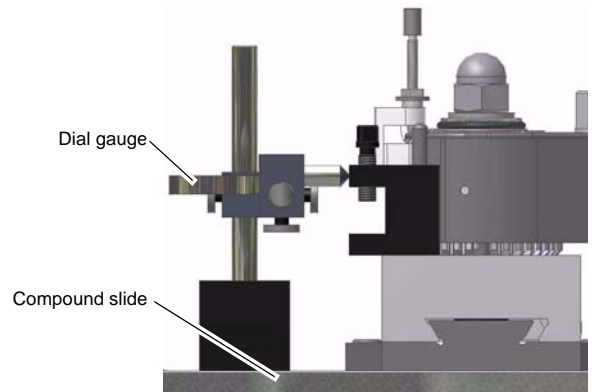


Fig.4-5: Check for rectangularity

- If required, adjust the rectangularity by leading out the tool holder using a measuring tool.
- Then fasten the hexagon nut on the aligned quick action tool holder.

Make sure that the tool holder is not twisted again.

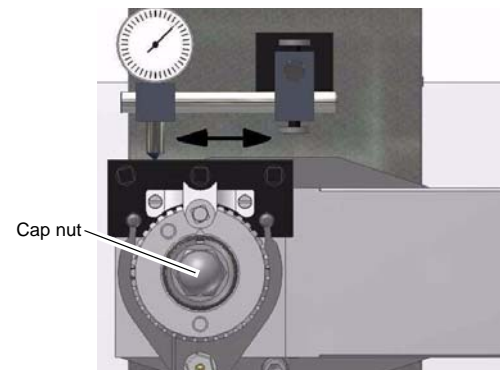


Fig.4-6: Adjust rectangularity

- Drill 2 holes through the crown gear using the bit $\varnothing 5.8$ mm. The drilling depth at the top slide should amount to about 10 mm.

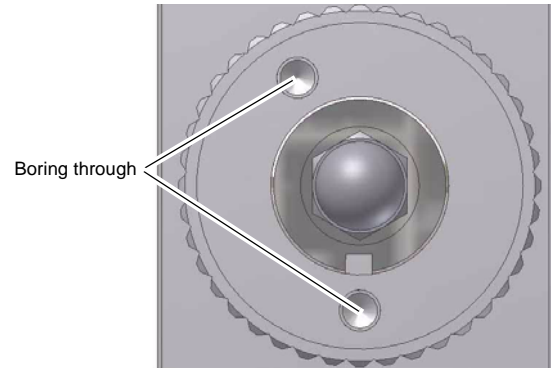


Fig.4-7: Boring through

- Ream the holes at the top slide to the size 6H7.

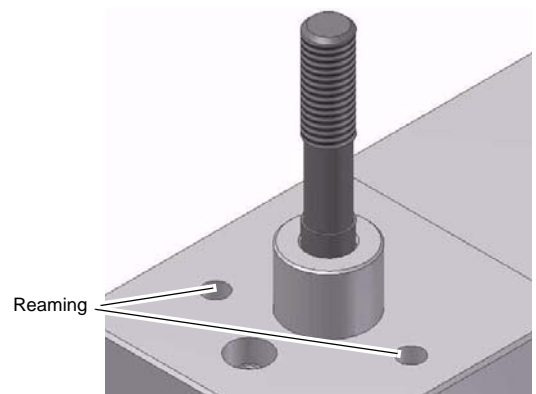


Fig.4-8: Reaming

- Insert the 2 straight pins
ISO 2338 - 6x24 into the holes.

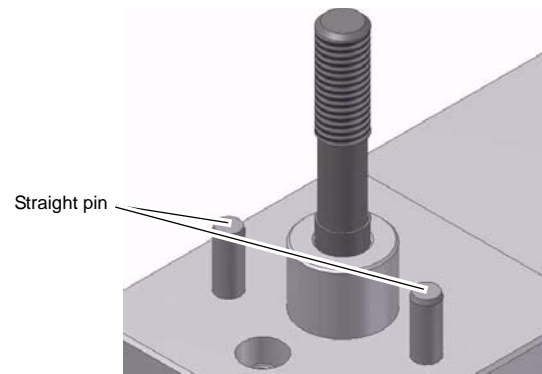


Fig.4-9: Insert cylinder pins

- Place the quick action tool holder on
the straight pins into the 2
positioning holes.

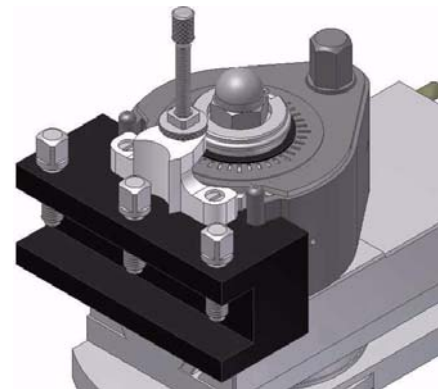


Fig.4-10: Quick action tool holder, assembly

- Turn the quick action tool holder back
by 90° to the standard position of use.

5 Mounting instruction for the quick change tool holder SWH 3-E

5.1 Mount the SWH 3-E to the lathe D320

Please proceed as follows.

- Turn the hole of the centering washer (pos. 5) to $\text{Ø}16$ mm.

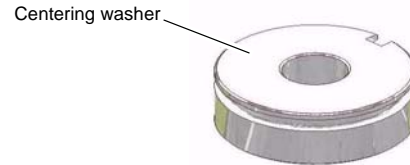


Fig.5-1: Centering washer

- Turn-out the hole of the crown gear (pos. 1) according to the adjoining drawing.

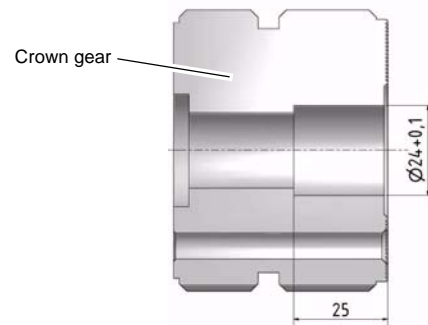


Fig.5-2: Crown gear

- Disassemble the quadruple tool holder, the stop bolt and the spring.

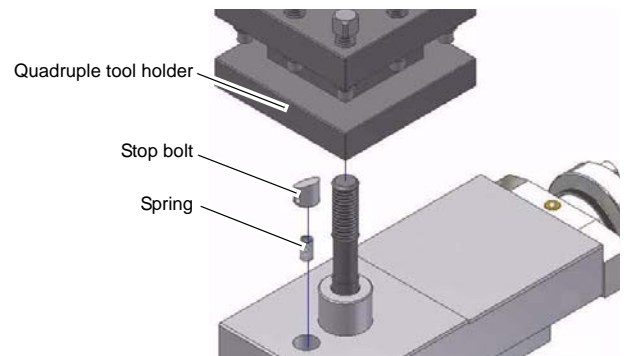


Fig.5-3: Quadruple tool holder, disassembly

- Put the quick action tool holder without indicator scale on the locating bolt.
- In doing so, offset the quick action tool holder by 90° . Due to an alignment parallel to the spindle axis, the subsequent measuring process will be facilitated.
- Then hand-fasten the hexagon nut.

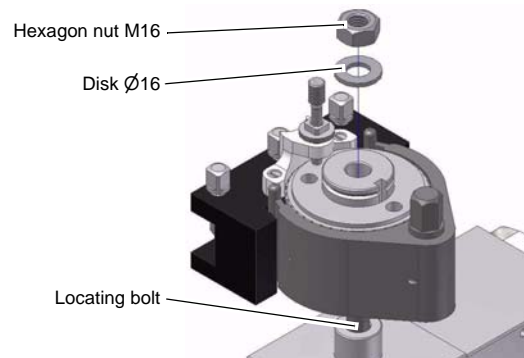


Fig.5-4: Quick action tool holder, assembly

- Put a dial gauge with magnetic stand on the compound slide. Measure if the tool holder is rectangle by traveling the top slide.

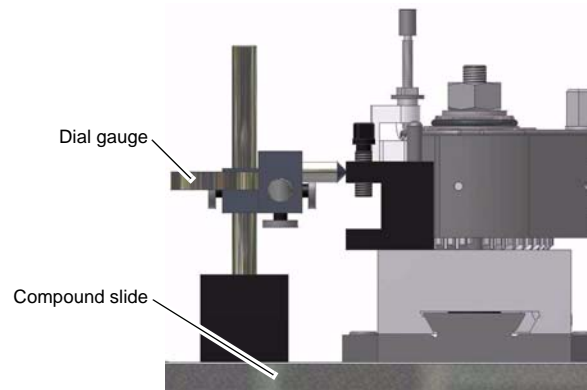


Fig.5-5: Check for rectangularity

- If required, adjust the rectangularity by leading out the tool holder using a measuring tool.
- Then fasten the hexagon nut on the aligned quick action tool holder.

Make sure that the tool holder is not twisted again.

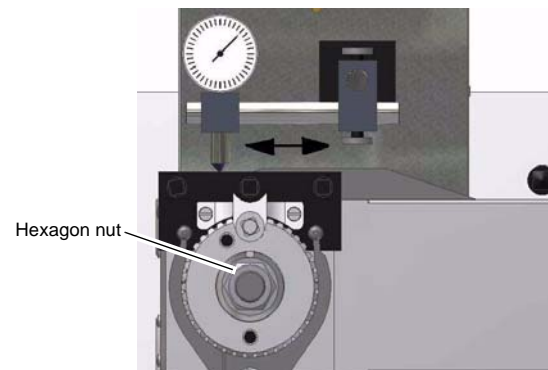


Fig.5-6: Adjust rectangularity

- Drill 2 holes through the crown gear using the bit $\varnothing 5.8$ mm. The drilling depth at the top slide should amount to about 10 mm.

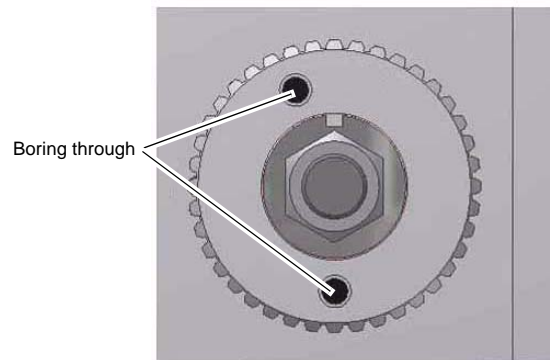


Fig.5-7: Boring through

- Ream the holes at the top slide to the size 6H7.

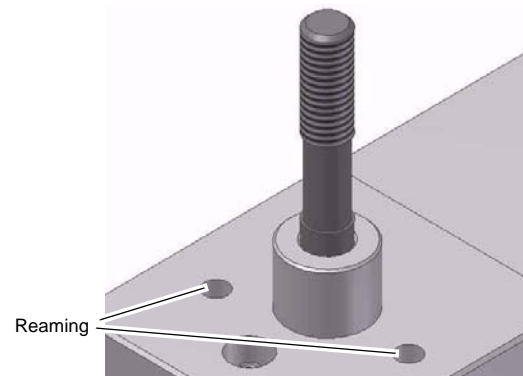


Fig.5-8: Reaming

- Insert 2 straight pins ISO 2338 - 6x24 into the holes.

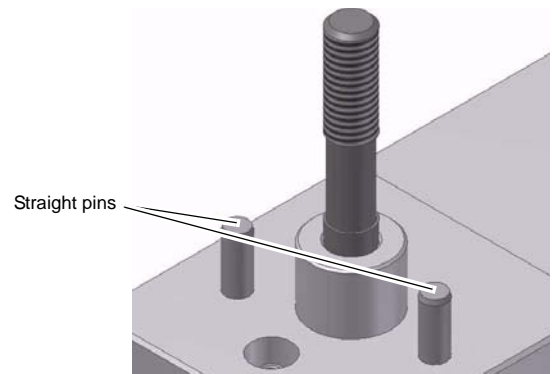


Fig.5-9: Insert straight pins

- Place the quick action tool holder on the straight pins into the 2 positioning holes.

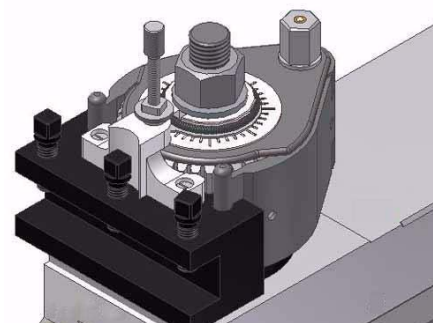


Fig.5-10: Quick action tool holder, assembly

- Screw the cap nut on the remaining thread in order to avoid the risk of accidents.

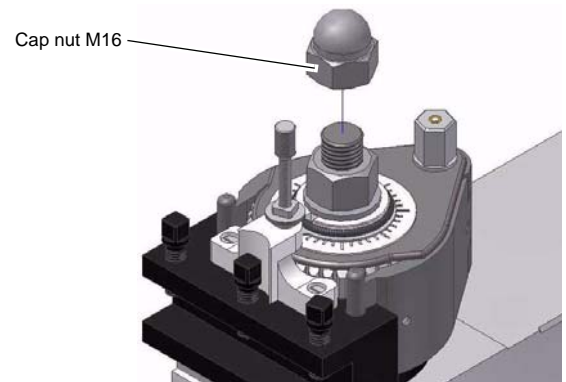


Fig.5-11: Cap nut

- Turn the quick action tool holder back by 90° to the standard position of use.

5.2 Mounting of the SWH 3-E to the lathe D330/ D360

Please proceed as follows.

- Turn the hole of the centering washer (pos. 5) to $\text{Ø}16$ mm.

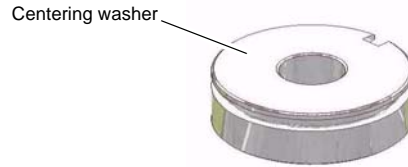


Fig. 5-12: Centering washer

- Turn-out the hole of the crown gear (pos. 1) according to the adjoining drawing.

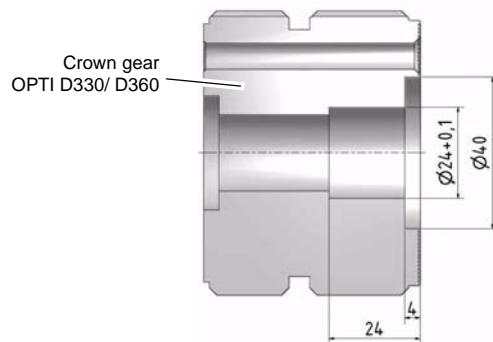


Fig. 5-13: Crown gear

- Disassemble the quadruple tool holder, the stop bolt and the spring.

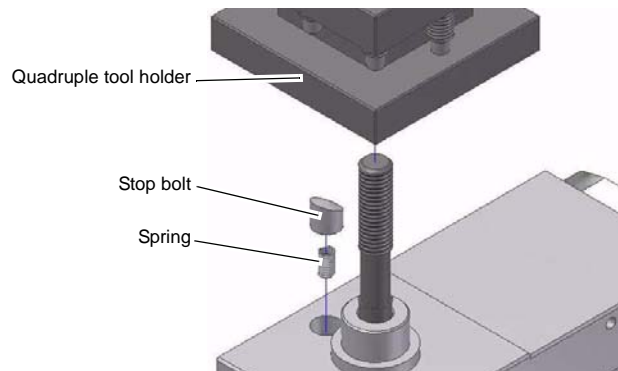


Fig. 5-14: Quadruple tool holder, disassembly

- Put the quick action tool holder without indicator scale on the locating bolt.
- In doing so, offset the quick action tool holder by 90° . Due to an alignment parallel to the spindle axis, the subsequent measuring process will be facilitated.
- Then hand-fasten the hexagon nut using a fork spanner.

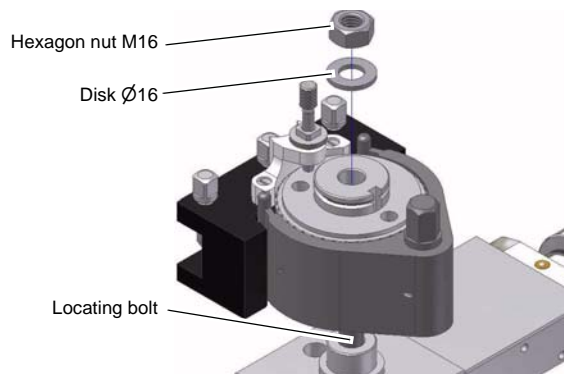


Fig. 5-15: Quick action tool holder, assembly

- Put a dial gauge with magnetic stand on the compound slide. Measure if the tool holder is rectangle by traveling the top slide.

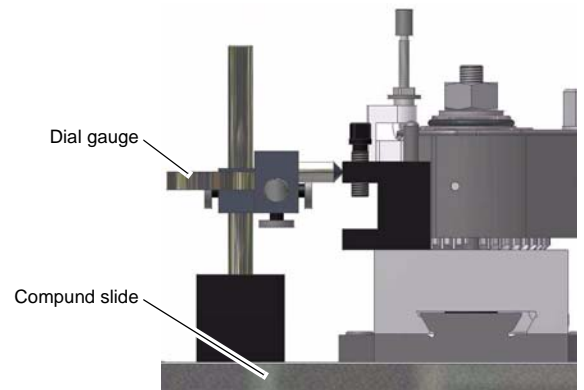


Fig.5-16: Check for rectangularity

- If required, adjust the rectangularity by leading out the tool holder using a measuring tool.
- Then fasten the hexagon nut on the aligned quick action tool holder.

Make sure that the tool holder is not twisted again.

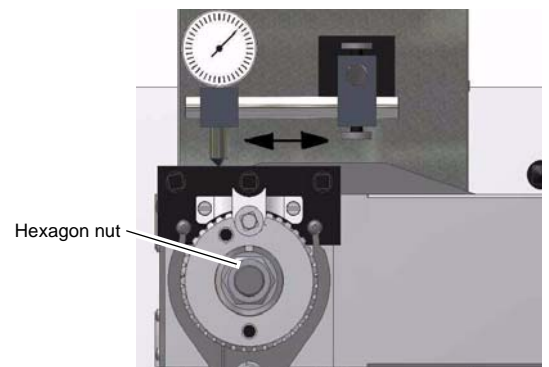


Fig.5-17: Adjust rectangularity

- Drill 2 holes through the crown gear using the bit $\varnothing 5.8$ mm. The drilling depth at the top slide should amount to about 10 mm.

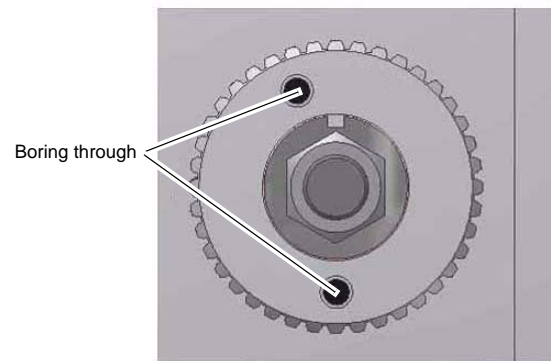


Fig.5-18: Boring through

- Ream the holes at the top slide to the size 6H7.

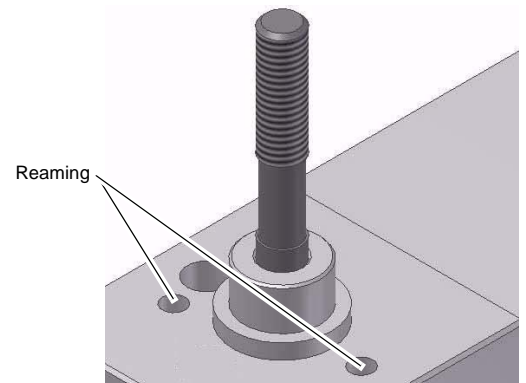


Fig.5-19: Reaming

- Insert the 2 straight pins
ISO 2338 - 6x24 into the holes.

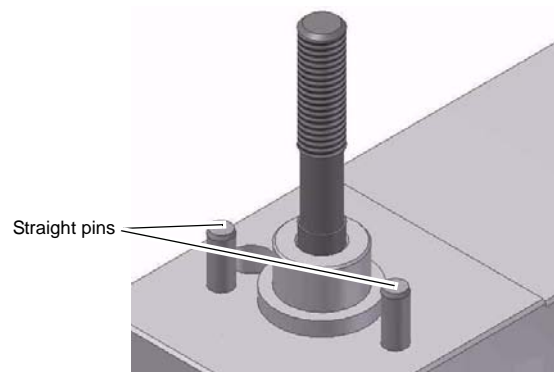


Fig.5-20: Insert straight pins

- Place the quick action tool holder on
the straight pins into the 2
positioning holes.

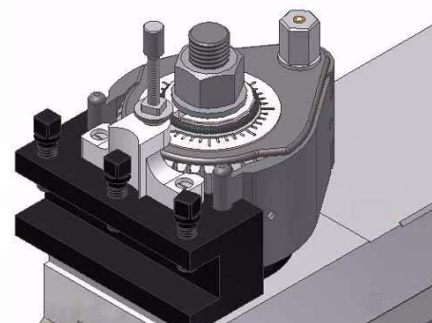


Fig.5-21: Quick action tool holder, assembly

- Screw the cap nut on the remaining
thread in order to avoid the risk of
accidents.

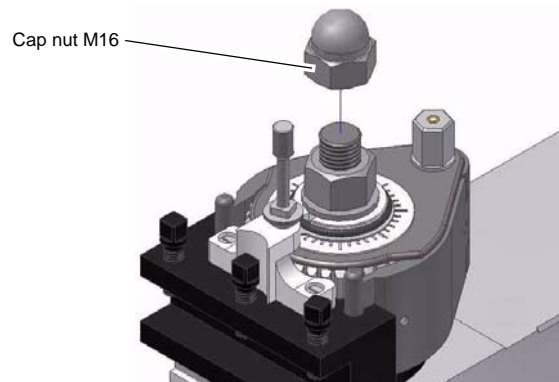


Fig.5-22: Cap nut

- Turn the quick action tool holder back
by 90° to the standard position of use.

6 Mounting instruction for quick change tool holder SWH 5-B

6.1 Mount the SWH 5-B to the lathe D420

Please proceed as follows.

- Turn the hole of the centering washer (pos. 11) to $\varnothing 16$ mm.

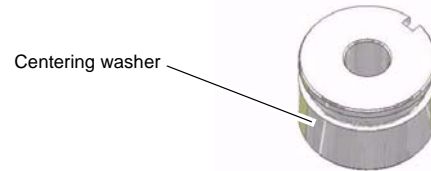


Fig. 6-1: Centering washer

- Disassemble the quadruple tool holder, the stop bolt, the spring and the bushing.

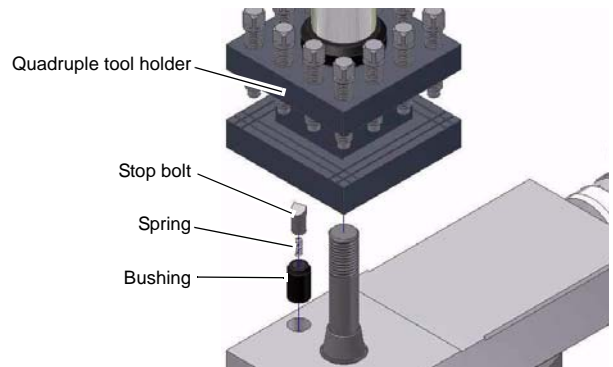


Fig. 6-2: Quadruple tool holder, disassembly

- Put the quick action tool holder without indicator scale on the locating bolt.
- In doing so, offset the quick action tool holder by 90° . Due to an alignment parallel to the spindle axis, the subsequent measuring process will be facilitated.
- Then hand-fasten the hexagon nut.

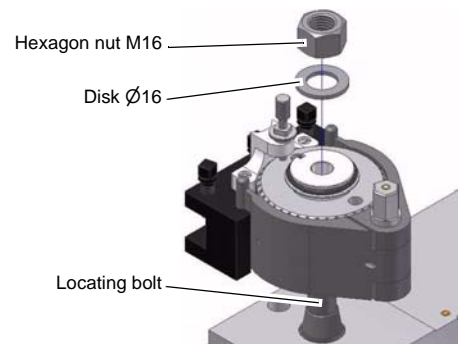


Fig. 6-3: Quick action tool holder, assembly

- Put a dial gauge with magnetic stand on the compound slide. Measure if the tool holder is rectangle by traveling the top slide.

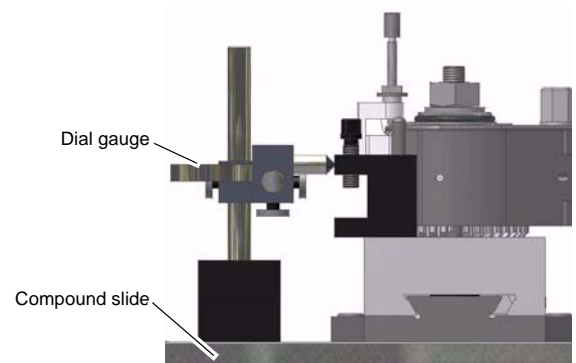


Fig. 6-4: Check for rectangularity

- If required, adjust the rectangularity by leading out the tool holder using a measuring tool.
- Then fasten the hexagon nut on the aligned quick action tool holder.

Make sure that the tool holder is not twisted again.

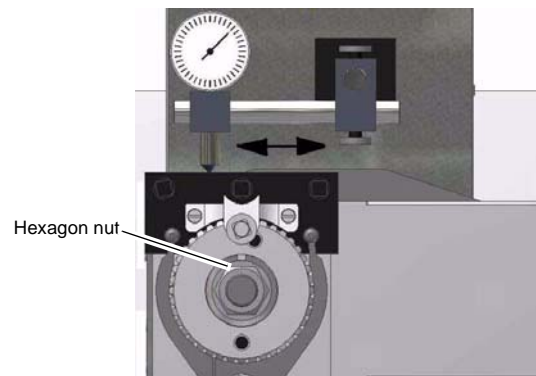


Fig.6-5: Adjust rectangularity

- Drill 2 holes through the crown gear using the bit $\varnothing 7.8$ mm. The drilling depth at the top slide should amount to about 10 mm.

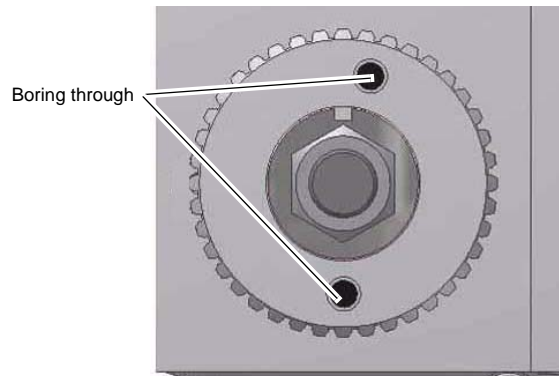


Fig.6-6: Boring through

- Ream the holes at the top slide to the size 8H7.

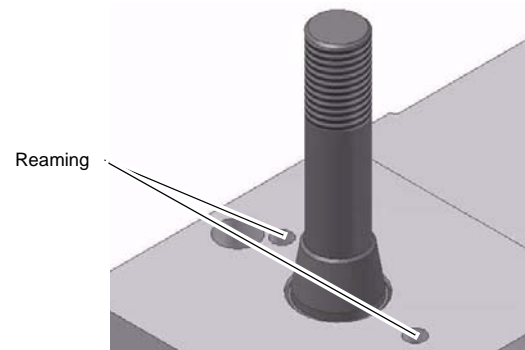


Fig.6-7: Reaming

- Insert 2 straight pins ISO 2338 - 8x30 into the holes.

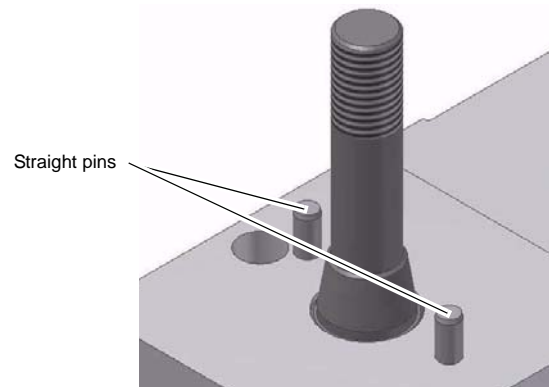


Fig.6-8: Insert straight pins

- Place the quick action tool holder on the straight pins into the 2 positioning holes.

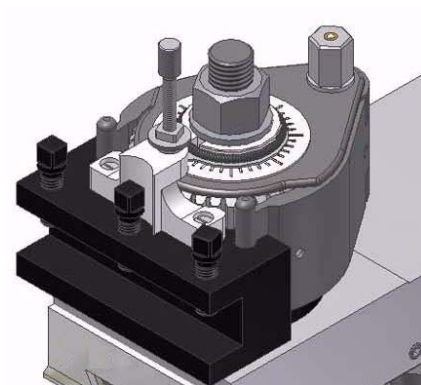


Fig.6-9: Quick action tool holder, assembly

- Screw the cap nut on the remaining thread in order to avoid the risk of accidents.

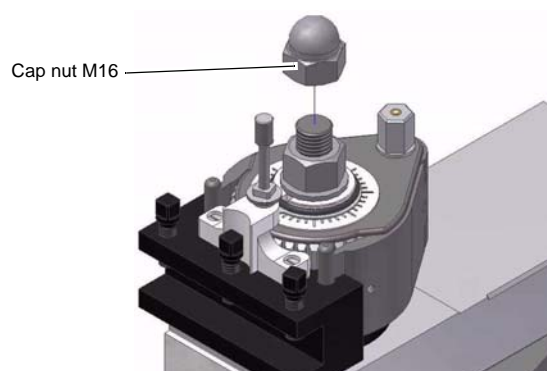


Fig.6-10: Cap nut

- Turn the quick action tool holder back by 90° to the standard position of use.

6.2 Mount the quick change tool holder SWH 5-B to the lathe D460

Please proceed as follows.

- Turn the hole of the centering washer (pos. 11) to $\text{Ø}20$ mm.

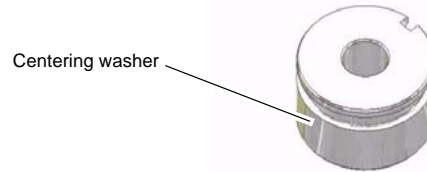


Fig. 6-11: Centering washer

- Disassemble the quadruple tool holder, the stop bolt, the spring and the bushing.

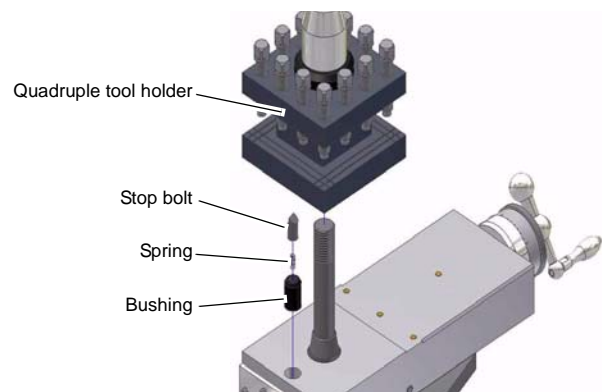


Fig. 6-12: Quadruple tool holder, disassembly

- Place the washer and the quick action tool holder without indicator scale on the locating bolt.
- In doing so, offset the quick action tool holder by 90° . Due to an alignment parallel to the spindle axis, the subsequent measuring process will be facilitated.
- Then hand-fasten the hexagon nut.

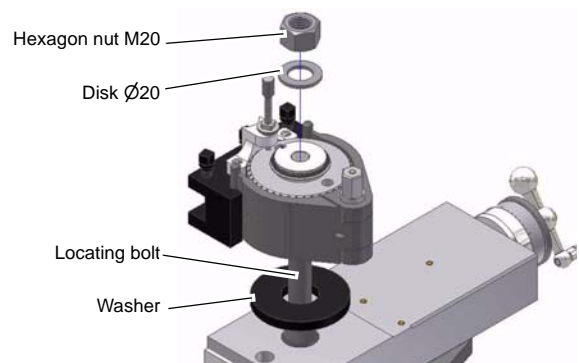


Fig. 6-13: Quick action tool holder, assembly

- Put a dial gauge with magnetic stand on the compound slide. Measure if the tool holder is rectangle by traveling the top slide.

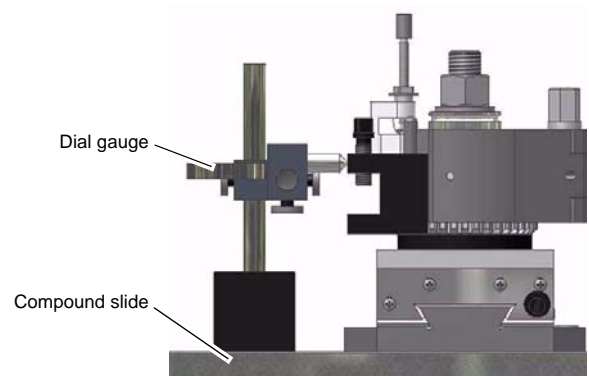


Fig. 6-14: Check for rectangarity

- If required, adjust the rectangularity by leading out the tool holder using a measuring tool.
- Then fasten the hexagon nut on the aligned quick action tool holder.

Make sure that the tool holder is not twisted again.

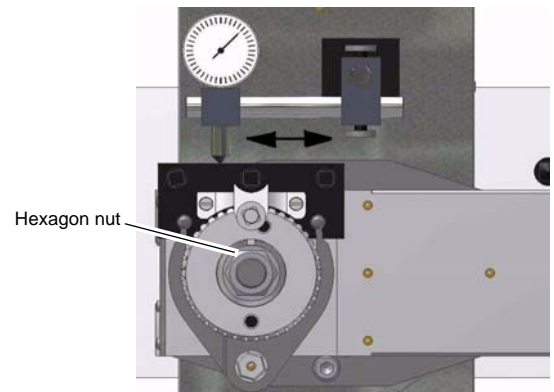


Fig. 6-15: Adjust rectangularity

- Drill 2 holes through the crown gear and through the washer using the bit $\varnothing 7.8$ mm. The drilling depth at the top slide should amount to about 10 mm.

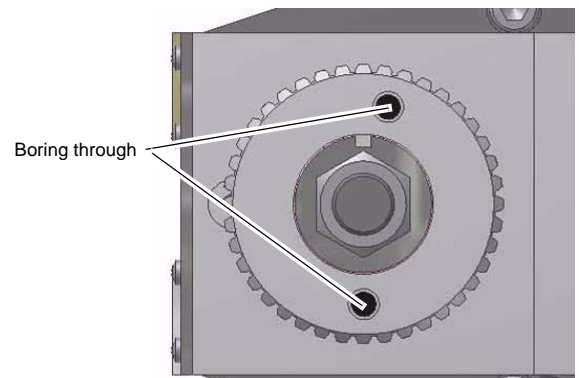


Fig. 6-16: Boring through

- Ream the holes in the washer and in the top slide to the size 8H7.

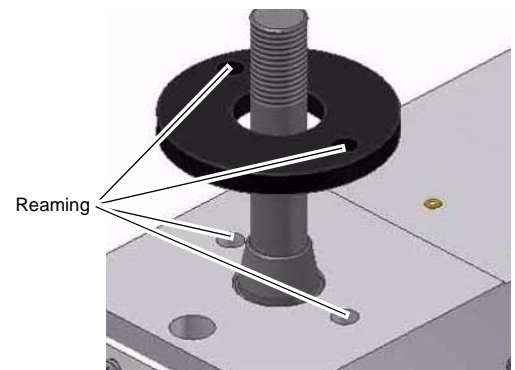


Fig. 6-17: Reaming

- Insert 2 straight pins ISO 2338 - 8x30 into the holes.

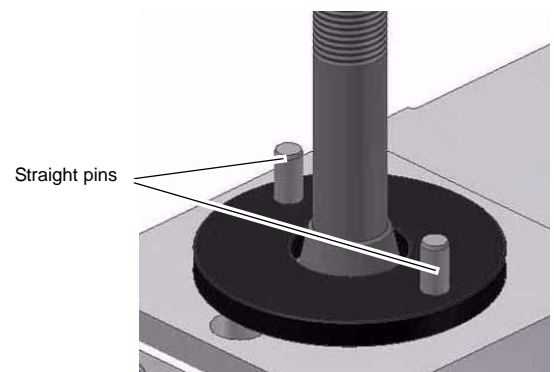


Fig. 6-18: Insert straight pins

- Place the quick action tool holder on the straight pins into the 2 positioning holes.

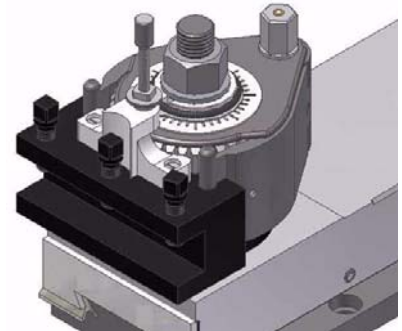


Fig.6-19: Quick action tool holder, assembly

- Screw the cap nut on the remaining thread in order to avoid the risk of accidents.

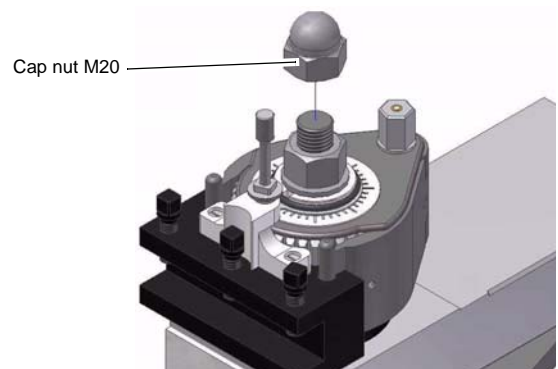


Fig.6-20: Cap nut

- Turn the quick action tool holder back by 90° to the standard position of use.

7 Mounting instruction for change action tool holder SWH 7-C

7.1 Mount the SWH 7-C to the lathe D560

Please proceed as follows.

- Turn the hole of the centering washer (pos. 11) to $\varnothing 20$ mm.

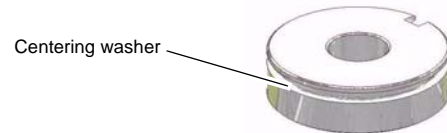


Fig. 7-1: Centering washer

- Disassemble the quadruple tool holder, the stop bolt, the spring and the bushing.

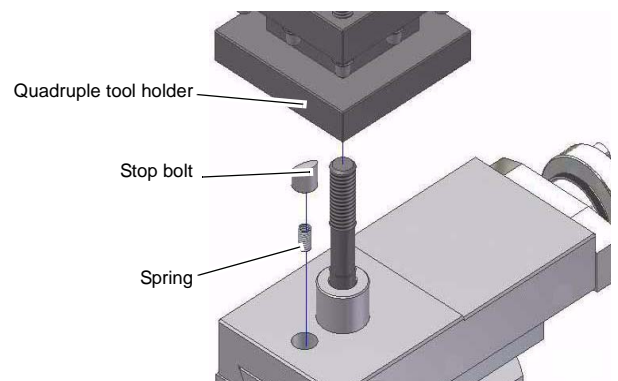


Fig. 7-2: Quadruple tool holder, disassembly

- Place the quick action tool holder without indicator scale on the locating bolt.
- In doing so, offset the quick action tool holder by 90° . Due to an alignment parallel to the spindle axis, the subsequent measuring process will be facilitated.
- Then hand-fasten the hexagon nut.

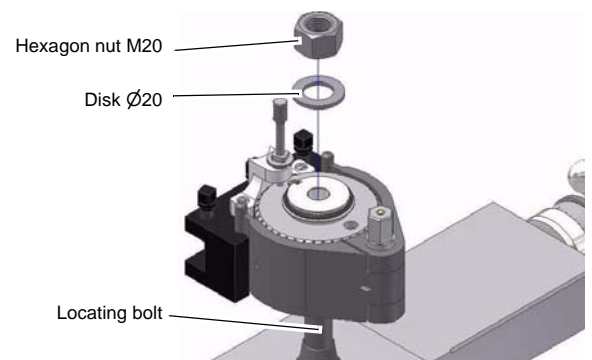


Fig. 7-3: Quick action tool holder, assembly

- Put a dial gauge with magnetic stand on the compound slide. Measure if the tool holder is rectangle by traveling the top slide.

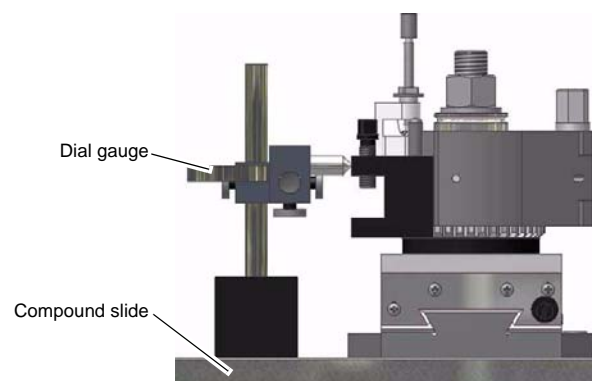


Fig. 7-4: Check for rectangularity

- If required, adjust the rectangularity by leading out the tool holder using a measuring too.
- Then fasten the hexagon nut on the aligned quick action tool holder.

Make sure that the quick action tool holder is not twisted again.

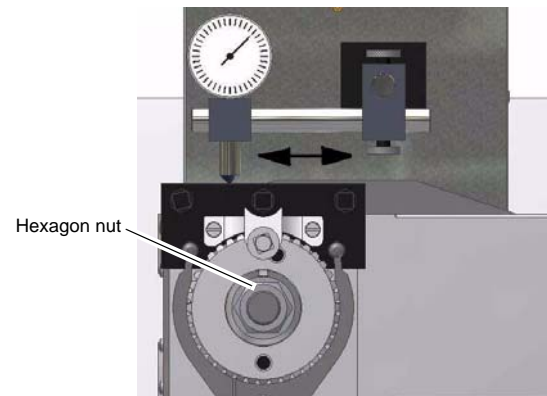


Fig. 7-5: Adjust rectangularity

- Drill 2 holes through the crown gear and through the washer using the bit $\varnothing 9.8$ mm. The drilling depth at the top slide should amount to about 10 mm.

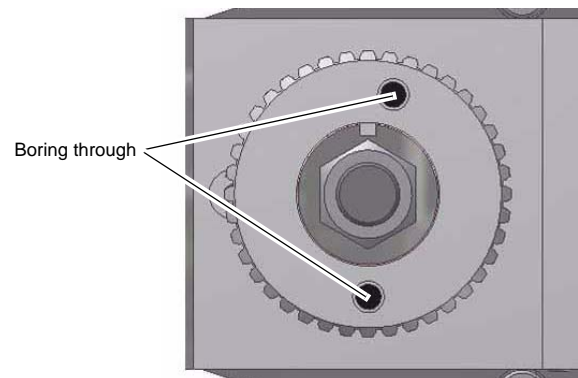


Fig. 7-6: Boring through

- Ream the holes in the washer and in the top slide to the size 10H7.

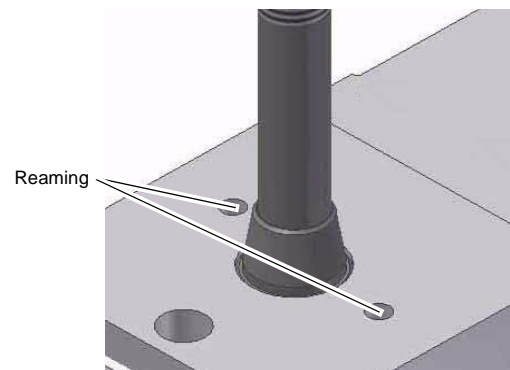


Fig. 7-7: Reaming

- Insert 2 straight pins ISO 2338 - 10x40 into the holes.

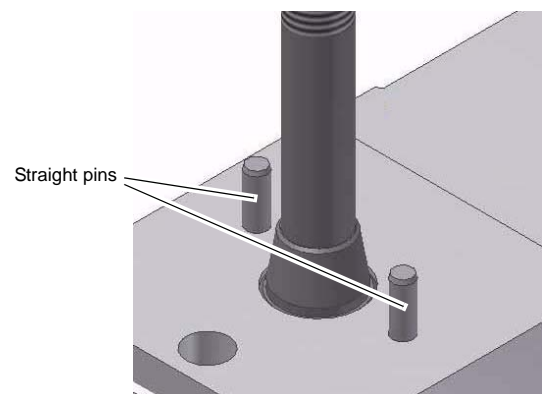


Fig. 7-8: Insert straight pins

- Place the quick action tool holder on the straight pins into the 2 positioning holes.

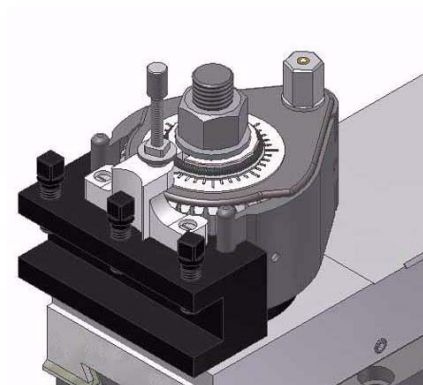


Fig.7-9: Quick action tool holder, assembly

- Screw the cap nut on the remaining thread in order to avoid the risk of accidents.

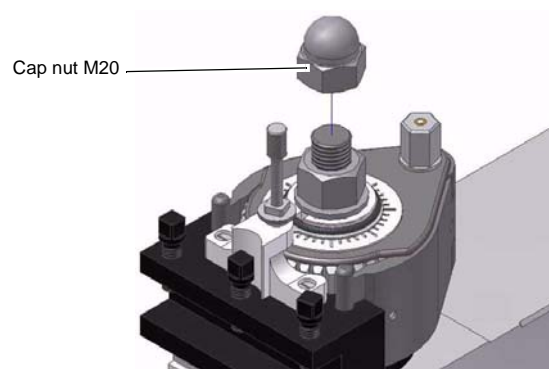


Fig.7-10: Cap nut

- Turn the quick action tool holder back by 90° to the standard position of use.