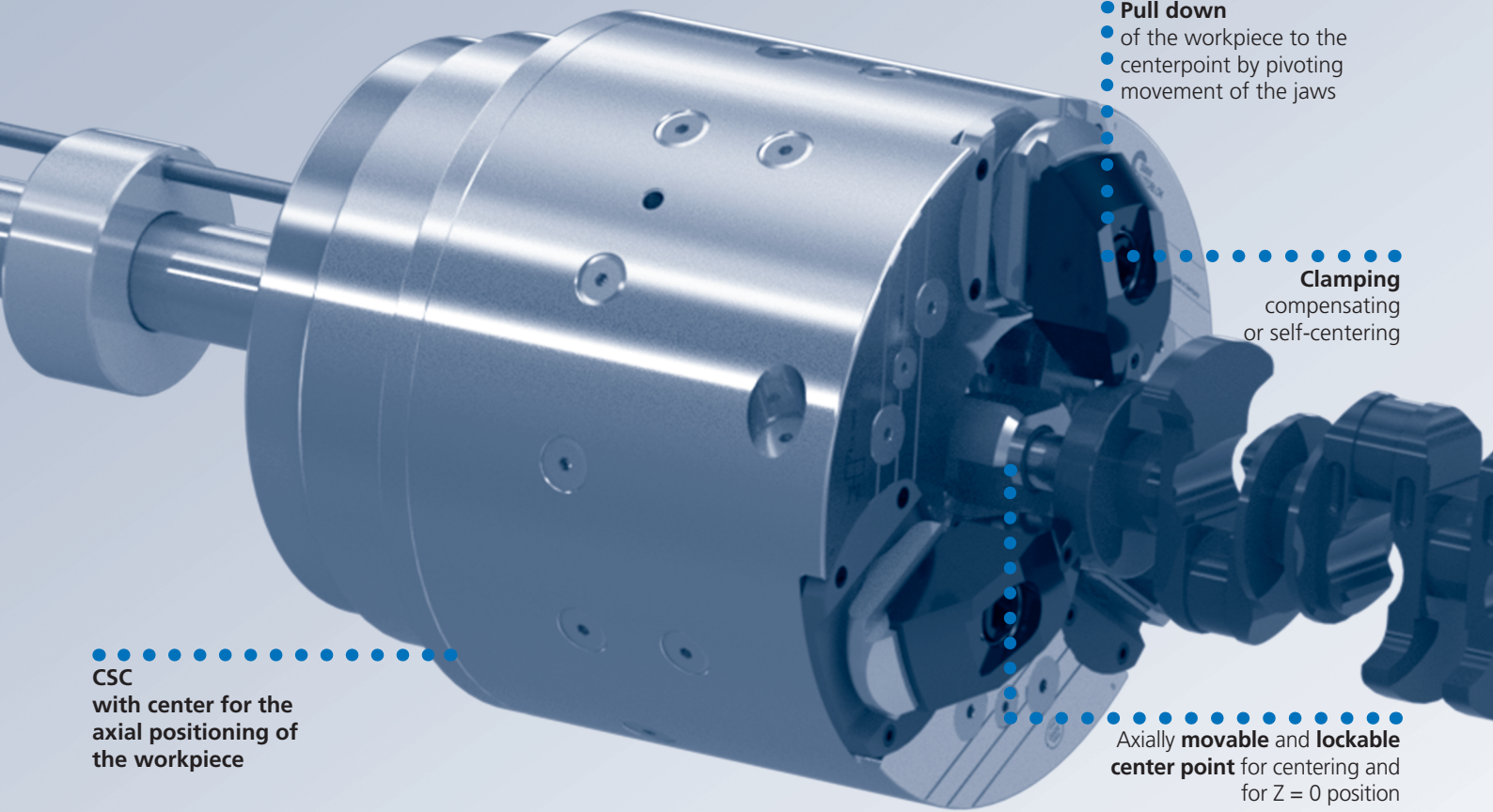


# Crank shaft chuck with retractable jaws

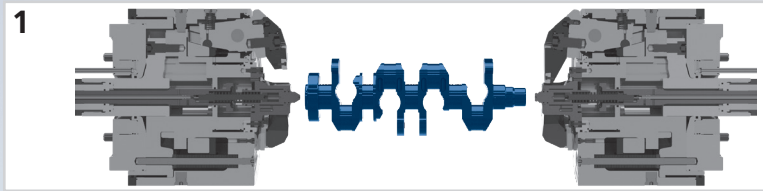


• **Pull down**  
• of the workpiece to the  
• centerpoint by pivoting  
• movement of the jaws

**Clamping**  
compensating  
or self-centering

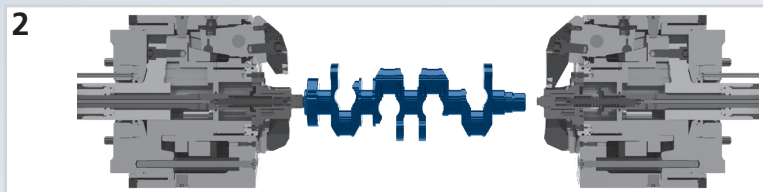
Axially **movable** and **lockable**  
**center point** for centering and  
for Z = 0 position

CSC  
with center for the  
axial positioning of  
the workpiece



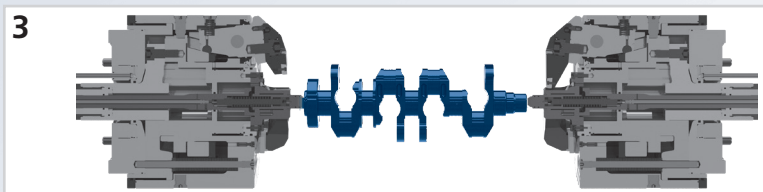
**Step 1, loading of the workpiece:**

- The centers are retracted
- The jaws are retracted and open



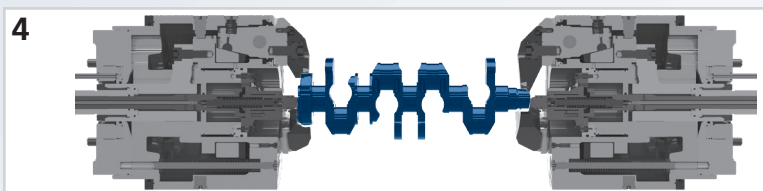
**Step 2, create the Z = 0 position:**

- The left center point moves forward to its end stop to create the Z = 0 position and is locked
- The jaws are retracted and open



**Step 3, centering the workpiece:**

- the right center moves forward to center the workpiece between the 2 centers and is locked



**Step 4, clamping the workpiece:**

- The jaws move forward and clamp the work piece with a pull down effect
- The jaw carrier is locked

# Clamping glossary

**Pull down:** The jaws of the CSC crankshaft chuck clamp inwards by means of a pivoting movement. This generates a **pull-down movement in the Z axis - in the direction of the centering point**. This pull-down movement **prevents the crankshaft from being pushed off the center point** and keeps the crankshaft exactly stable in the center axis. This guarantees **high concentricity accuracies**.

**Sealing:** The CSC crankshaft chuck is completely sealed and **protected against dirt and coolant**. This prevents inaccuracies, malfunctions and increased wear and makes the system **extremely reliable**.

**Low Maintenance:** The CSC crankshaft chuck is equipped with **permanent oil bath lubrication**. This allows **continuous operation of the machine** without regular interruptions for maintenance, which guarantees to **increase machine availability**.

**Clamping:** The centering point and the jaw carrier of the CSC crankshaft chuck are **hydraulically clamped in the clamping position**. This **increases the rigidity** of the clamping system and **reduces vibrations**. This is reflected in **improved workpiece quality** and **reduced tool wear**.

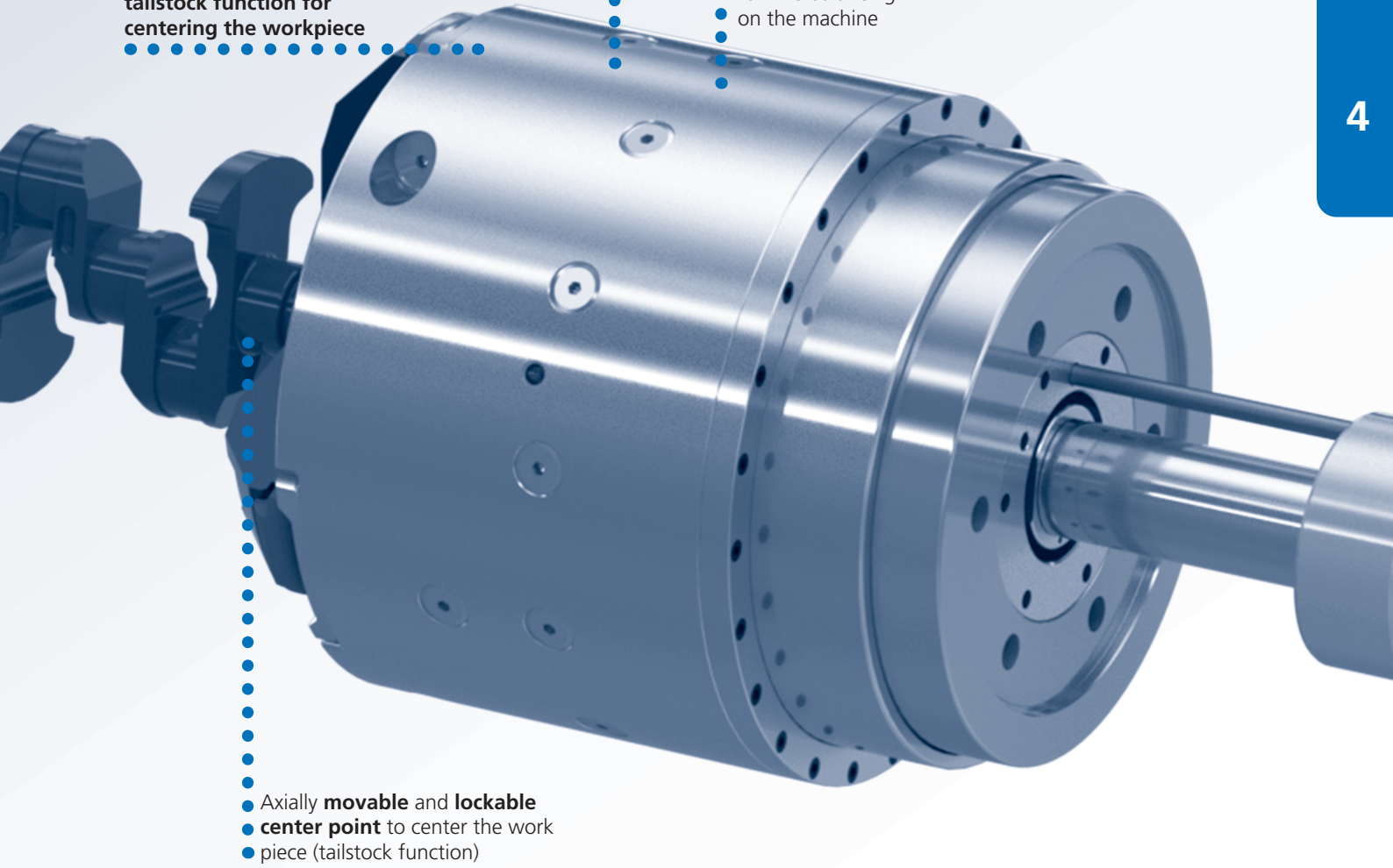
**Balancing chambers:** The CSC crankshaft chuck has radial **balancing chambers** on the outer diameter. By removing inserted balance weights the **system can be easily fine-balanced on the machine**.

CSC  
with center with  
tailstock function for  
centering the workpiece

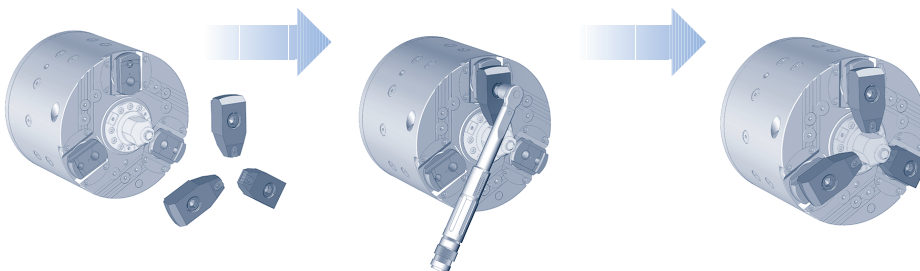
low maintenance  
due oil bath lubrication

Balancing chambers  
for fine balancing  
on the machine

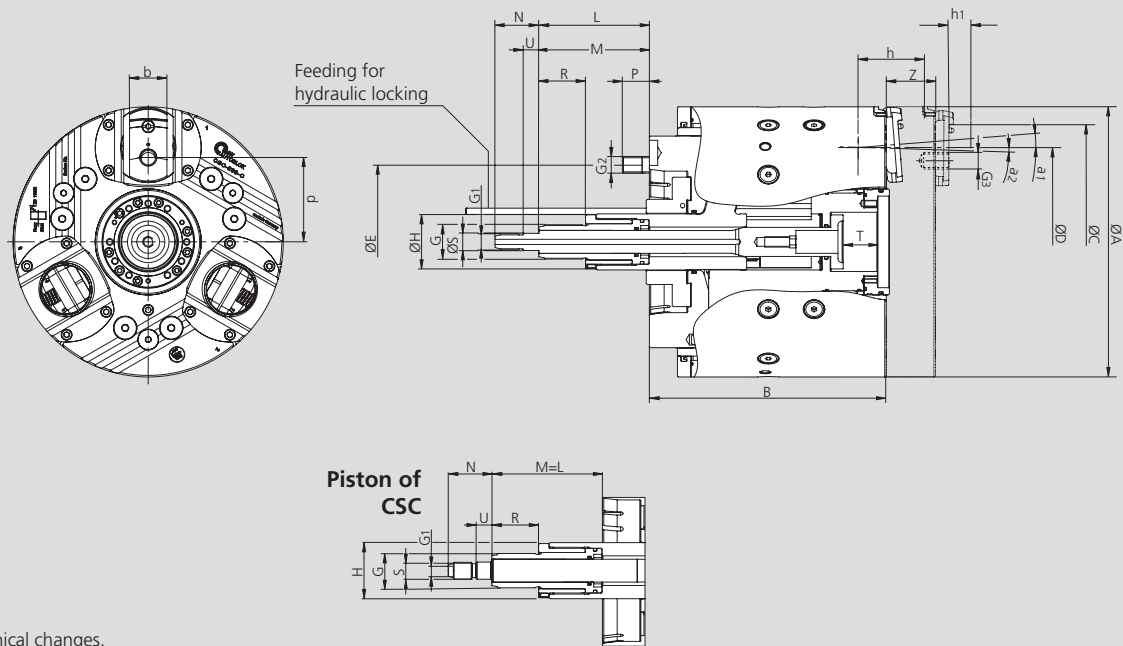
Axially **movable** and **lockable**  
**center point** to center the work  
piece (tailstock function)



## QUICK JAW CHANGE IN LESS THAN 1 MINUTE



• QUICK AND SIMPLE - NO LOOSE PARTS



Subject to technical changes.  
For more detailed information please ask our customer service.

SMW-AUTOBLOK Type		CSC-260	CSC-325
<b>Mounting</b>		<b>A8</b>	<b>A8</b>
Chuck outside dia.	<b>A</b>	260	260
Chuck height	<b>B</b>	228	287
In clamping position (radius)	<b>C</b>	R115	R115
Max. clamping dia.	<b>D</b>	175	175
	<b>E</b>	171.4	133.4
	<b>G</b>	M33 x 1.5	M33 x 1.5
	<b>G1</b>	M16	M16
	<b>G2</b>	M16	M16
	<b>G3</b>	M16 x 24	M16 x 24
	<b>H</b>	54	54
Push rod center point min. / max.	<b>L</b>	106.3 / 66.5	123 / 83
Min. / max.	<b>M</b>	106.5 / 36.4	123 / 43.8
	<b>N</b>	42	42
	<b>P</b>	21	21
	<b>R</b>	45	45
	<b>S<sub>16</sub></b>	16.5	16.5
Check dimension center insert	<b>T</b>	33	33
	<b>U</b>	15	15
Axial movement / jaw carrier	<b>Z</b>	53	53
Piston stroke for jaw clamping	<b>Z1</b>	17	17
Opening / residual stroke angle	<b>a1/a2</b>	4.5° / 1.3°	4.5° / 1.3°
Opening / residual stroke at distance h1	<b>h1</b>	4.5 / 1.3	4.5 / 1.3
Max. jaw stroke at distance h1	mm	5.8	5.8
Max. compensation / chuck (type C)	mm	± 1.0	± 1.0
	<b>b</b>	36	36
	<b>d</b>	78	78
Reference height	<b>h</b>	57	57
Oil volume horizontal use	<b>l</b>	0.50	0.50
Max. speed*	r.p.m.	4000	4000
Max. draw pull*	kN	55	55
Max. gripping force at reference distance h*	kN	110	110
Moment of inertia	kg·m <sup>2</sup>	0.606	0.606
Weight (without top jaws)	kg	70	70

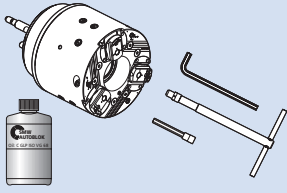
\* With higher top jaws, the actuating force and thus the gripping force must be reduced. The maximum speed is reduced accordingly..

■ Ordering review

Crank shaft chuck with retractable jaws

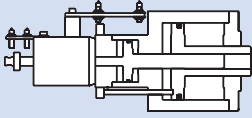
### Supply range:

Compensating clamping (Type C) chuck with mounting bolts and mounting keys, oil



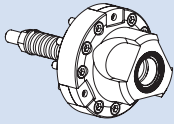
Spindle mounting	Type C	CSC-260	CSC-325
A6		-	-
A8		162600	-
A11		-	-
A15		-	-

### Actuating cylinder



Double piston cylinder	Type	W-215
DCN		125-30 / 87 / 40
Id. No.		046796

### Centering inserts



Centering insert main and subspindle (without custom center point)		
	CSC-260	CSC-325
	209285	5315643

### Oil



Oil for permanent oil bath lubrication	
Oil specification	CGLP ISO VG 68
Contents	1 liter / 1.05 quart (U.S.)
Id. No.	197859