

Tower Workholding Systems SCT

clamping against the fixed jaw, mechanically or hydraulically operated jaw widths 80 and 120 mm, with 3 or 4 clamping sides



Advantages

- 2 sizes for optimum design to the machining centre
- Clamping of 3 or 4 workpieces with standard jaws
- Mechanical or hydraulic build up of the clamping force
- Easy and safe operation
- Large jaw openings and high flexibility due to extensive range of clamping jaws
- Highest stability by design as a monoblock
- Optimum protection against contamination
- Process-safe application of clamping force, also when using grip jaws

Description

Tower workholding systems of the SCT series excel by a very compact design. Thanks to the adjusting spindle arranged in the upper part of the housing, deformation in the base during clamping is reduced.

All essential components are made of steel.

For workholding systems SCT, a wide range of clamping jaws is available (see data sheet WS 4.550Z).

Customised versions

Tower workholding systems SCT can also be delivered as customised versions. For example in other lengths, with individual mounting holes or with holes for a zero point clamping system.

Please contact us.

Consultation

Our experts will be pleased to advise you also on site, and work with you to find the optimum clamping solution.

Extensive information such as drawings and CAD models are available on request.

Technical data

Clamping principle: clamping against the fixed jaw

Operation: mechanical

with a torque wrench

hydraulical with a power unit

SCT 80

Jaw width: 80 mm Clamping force: 25 kN at 60 Nm

Clamping stroke: 59 mm Max. jaw opening: 165 mm

SCT 80 H

Jaw width: 80 mm
Clamping force: 21 kN at 300 bar

Clamping stroke: 4 mm
Max. jaw opening: 165 mm

SCT 120

Jaw width: 120 mm
Clamping force: 40 kN at 100 Nm

Clamping stroke: 70 mm Max. jaw opening: 210 mm

Versions

Mechanically operated

The movable clamping jaw is displaced by a threaded spindle which is also used to build-up the clamping force.

A torque wrench is used for exact and reproducible clamping force adjustment.

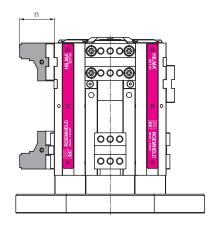
Hydraulically operated

Hydraulically operated versions are single acting. Clamping is effected by hydraulic pressure, unclamping by spring force.

*Important note

The specified clamping forces apply to a clamping height (n) of 30 mm.

For higher clamping heights, the clamping forces are reduced.



Application

SCT tower workholding systems are used on horizontal machining centres, in vertical machining in connection with 4th axis, but also on 5-axis machining centres.

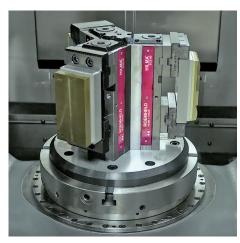
The applications range from manually equipped machines to pallet stations and fully automated systems.

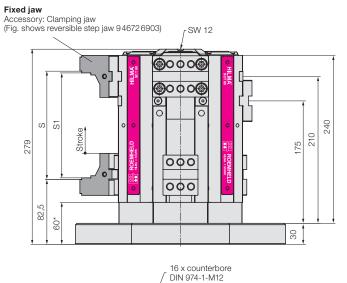
The stability of the clamping systems and the high retention force due to the use of the special grip reversible jaw with hard metal coating make pre-embossing of the workpieces superfluous.

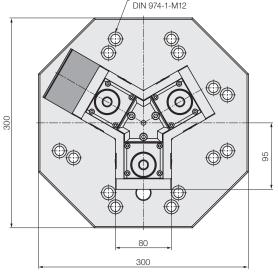
Accessories

 Clamping jaws, accessories for mounting, positioning and operation see data sheet WS 4.450Z

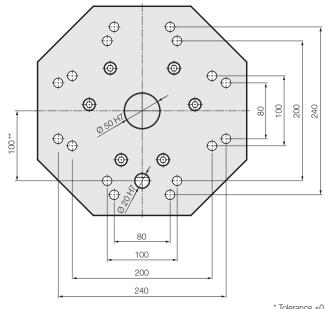
Application example







View from below

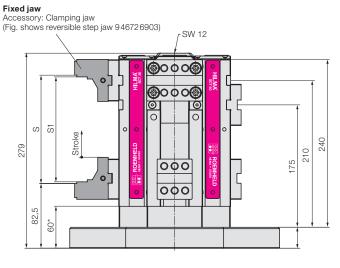


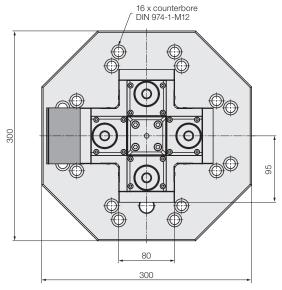
^{*} Tolerance ±0.01 mm ** Tolerance ±0.02 mm Dimensions in [mm]

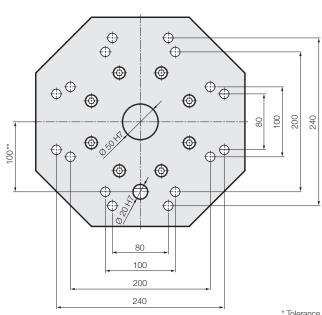
Series		SCT 80/3
Clamping principle		Fixed jaw
Clamping sides		3
Operation		mechanical
Clamping force / torque	[kN/Nm]	25/60
Repetitive clamping accuracy	[mm]	±0.01
Stroke	[mm]	59
Clamping range S ¹⁾	[mm]	6 – 165
Clamping range S1 1)	[mm]	71 – 160
Jaw width B	[mm]	80
Weight without clamping jaws	[kg]	41
Part no. without clamping jaws		955720201

 $^{^{\}mbox{\tiny 1)}}$ depending on the used clamping jaw, see data sheet WS 4.550Z

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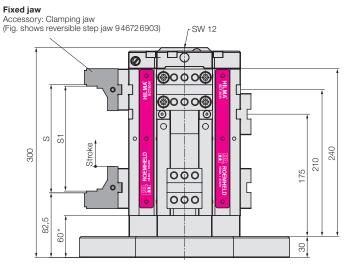


View from below

* Tolerance ±0.01 mm ** Tolerance ±0.02 mm Dimensions in [mm]

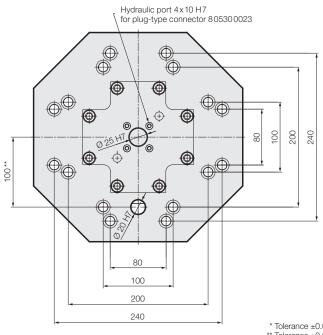
Series		SCT 80/4
Clamping principle		Fixed jaw
Clamping sides		4
Operation		mechanical
Clamping force / torque	[kN/Nm]	25/60
Repetitive clamping accuracy	[mm]	±0.01
Stroke	[mm]	59
Clamping range S ¹⁾	[mm]	6 – 165
Clamping range S1 1)	[mm]	71 – 160
Jaw width B	[mm]	80
Weight without clamping jaws	[kg]	52
Part no. without clamping jaws		955720101

¹⁾ depending on the used clamping jaw, see data sheet WS 4.550Z



16 x counterbore DIN 974-1-M12 (1) 0 92 300

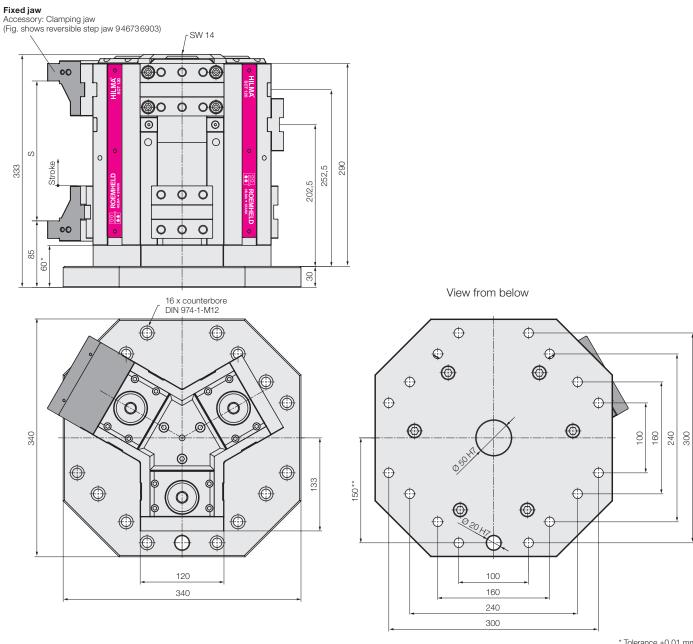
View from below



* Tolerance ±0.01 mm ** Tolerance ±0.02 mm Dimensions in [mm]

Series		SCT 80/4 H
Clamping principle		Fixed jaw
Clamping sides		4
Operation		hydraulic
Clamping force / operating pressure	[kN/bar]	21/300
Clamping stroke, hydraulic	[mm]	4
Repetitive clamping accuracy	[mm]	±0.01
Stroke	[mm]	55
Clamping range S ¹⁾	[mm]	6 – 165
Clamping range S1 1)	[mm]	71 – 160
Jaw width B	[mm]	80
Weight without clamping jaws	[kg]	50
Part no. without clamping jaws		955820101

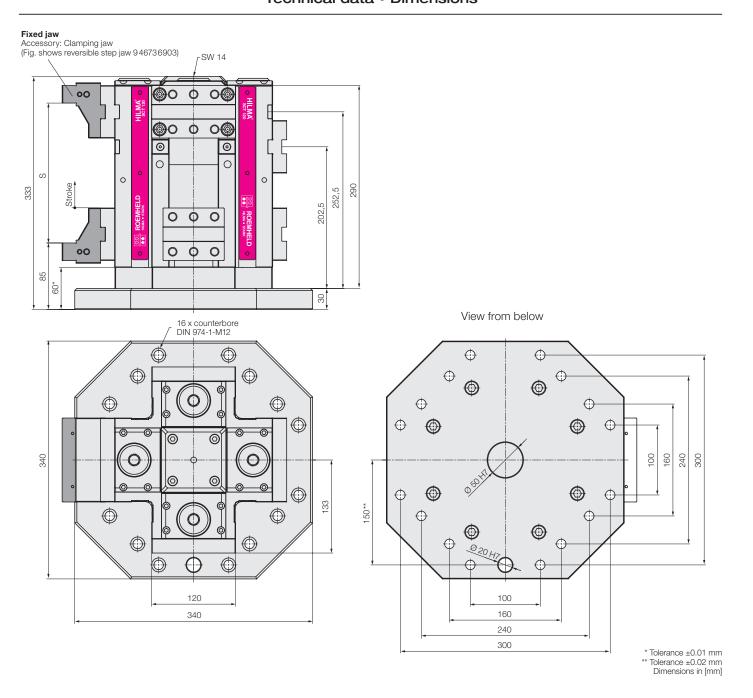
¹⁾ depending on the used clamping jaw, see data sheet WS 4.550Z



* Tolerance ±0.01 mm ** Tolerance ±0.02 mm Dimensions in [mm]

Series		SCT 120/3
Clamping principle		Fixed jaw
Clamping sides		3
Operation		mechanical
Clamping force / torque	[kN/Nm]	40/100
Repetitive clamping accuracy	[mm]	±0.01
Stroke	[mm]	62
Clamping range S ¹⁾	[mm]	9 – 210
Jaw width B	[mm]	120
Weight without clamping jaws	[kg]	100
Part no. without clamping jaws		955730201

 $^{^{1)}}$ depending on the used clamping jaw, see data sheet WS 4.550Z



Series		SCT 120/4
Clamping principle		Fixed jaw
Clamping sides		4
Operation		mechanical
Clamping force / torque	[kN/Nm]	40/100
Repetitive clamping accuracy	[mm]	± 0.01
Stroke	[mm]	62
Clamping range S ¹⁾	[mm]	9 – 210
Jaw width B	[mm]	120
Weight without clamping jaws	[kg]	100
Part no. without clamping jaws		955730101

 $^{^{\}mbox{\tiny 1)}}$ depending on the used clamping jaw, see data sheet WS 4.550Z