

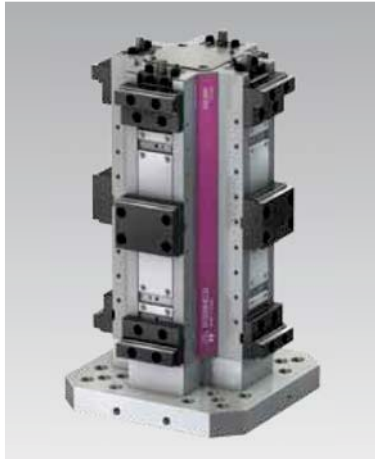


ROEMHELD
HILMA ■ STARK

Issue 3-16 E

WS 4.3301

Tower Workholding Systems TS with 4 clamping sides, mechanically operated jaw widths 100 and 125 mm, clamping force 25 and 40 kN



Advantages

- 2 sizes for optimum design to the machining centre
- Clamping of 4, 8 or 16 workpieces with standard jaws
- Clamping of different workpiece dimensions also on one side
- Purely mechanical 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 and wear through patented guidance and sealing
- Process-safe application of clamping force, also when using grip jaws

Technical data

Clamping sides: 4 - arrangement 4 x 90°
Operation: mechanically with a torque wrench against central jaw or fixed jaw arranged on one side
Clamping:

TS 100

Jaw width: 100 mm
Clamping force: 25 kN at 55 Nm
Max. jaw opening: 1 x 343 mm
2 x 156 mm

TS 125

Jaw width: 125 mm
Clamping force: 40 kN at 115 Nm
Max. jaw opening: 1 x 476 mm
2 x 226 mm
4 x 108 mm

Application

TS 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.

Customised versions

An experienced team of designers is at your disposal to solve your individual clamping task and to develop customised versions. Please contact us.

Application example



Tower workholding system TS 125 with 3rd-hand function

Description

The tower workholding systems TS convince with their durability and precision. The patented guidance and sealing principle works without any delicate sheet metal covers or plastic wipers. The design as a monoblock, without interfaces to individually screwed workholding systems, stands for high stability and high accuracy. The centrally arranged fixed jaw as a central jaw is without load and thus absolutely zero point stable. The workpieces are positioned close to each other, thus reducing the travel paths of the machining centre to a minimum. The purely mechanical operation enables clamping also with low and always reproducible clamping forces. These characteristics turn the tower workholding systems TS into a flexible standard fixture for a wide variety of applications in modern production.

Accessories

The extensive range of clamping jaws see data sheet 4.330-Z.

Handling systems can optionally be used for operation. They increase the user-friendliness and improve the ergonomics. We are pleased to offer you the right system for your machine on request.

Consultation

Extensive information such as drawings and CAD models are available on request. Our experts will be pleased to advise you also on site, and work with you to find the correct clamping solution.

Versions

The optimum adaptation to the machining centre and the machining task is facilitated by 2 versions of the TS workholding systems.

Version with 3rd-hand function

The operation is made with only one spindle per clamping side.

The upper and lower clamping jaw are operated together by means of a spindle and clamp against a fixed central jaw or a fixed jaw arranged on one side.

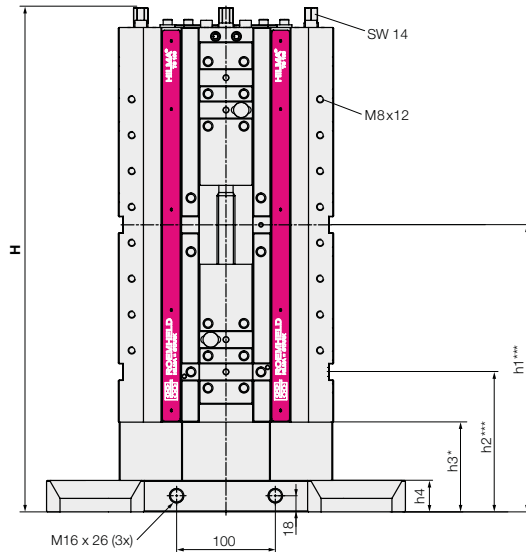
The integrated 3rd-hand function enables to only hold the lower workpiece by operating the spindle. Only after the insertion of the second workpiece above and operating again the spindle, both workpieces are clamped as defined.

Version Vector in 2 variants

Variant 1: central jaw as fixed jaw
Variant 2: 2 x fixed jaw

The operation is made with two spindles per clamping side. The 3rd-hand function is omitted. The Vector versions are particularly suitable for clamping of high workpiece weights (> 15 kg). When used as double workholding system, the upper and lower clamping points can be pressurised with different clamping forces.

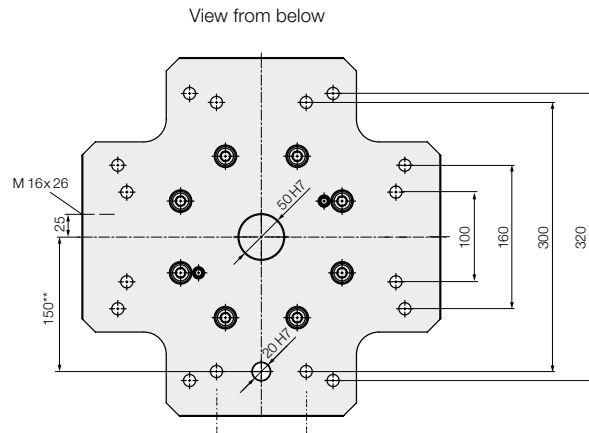
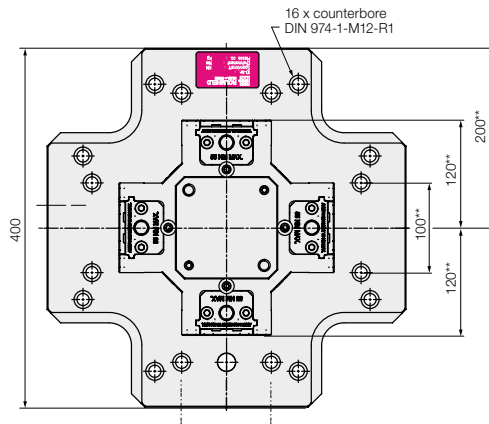
Dimensions TS 100



Series	TS 100
Jaw width	100 mm
Clamping force	25 kN at 55 Nm

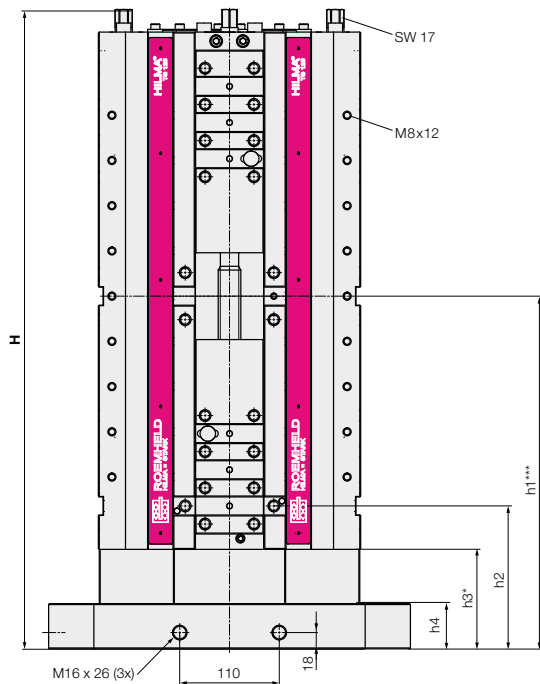
Clamping jaws and the associated jaw openings see data sheet WS 4.330-Z

Dimensions in mm
* Tolerance ±0.01 mm
** Tolerance ±0.02 mm
*** Tolerance ±0.03 mm



Series		TS 100		
Version		3rd-hand	Vector	Vector
Variant		1 x central jaw		2 x fixed jaw
H	[mm]	562	599	599
Stroke	[mm]	2 x 44	2 x 44	2 x 40
h1	[mm]	320	320	360
h2	[mm]	156	156	146
h3	[mm]	100	100	100
h4	[mm]	35	35	35
Weight without clamping jaws	[kg]	109	116	115
Part no. without clamping jaws		9.3365.0202	9.3375.0202	9.3395.0202

Dimensions TS 125

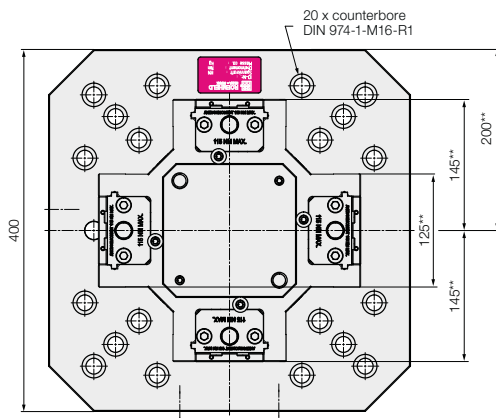


Series	TS 125
Jaw width	125 mm
Clamping force	40 kN at 115 Nm

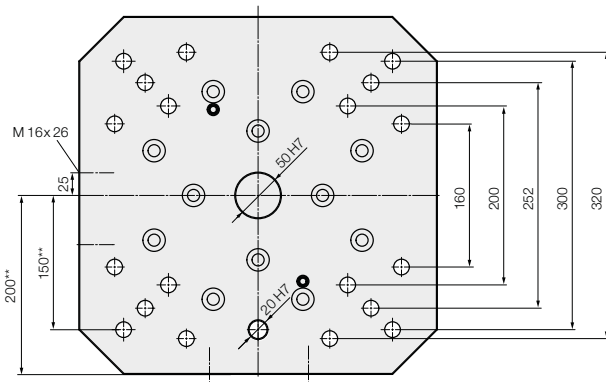
Clamping jaws and the associated jaw openings see data sheet WS 4.330-Z

Dimensions in mm

- * Tolerance ±0.01 mm
- ** Tolerance ±0.02 mm
- *** Tolerance ±0.03 mm



View from below



Series		TS 125		
Version		3rd-hand	Vector	Vector
Variant			1 x central jaw	2 x fixed jaw
H	[mm]	707	750	745
Stroke	[mm]	2 x 48	2 x 47	2 x 47
h1	[mm]	390	390	436
h2	[mm]	158	158	154
h3	[mm]	110	110	110
h4	[mm]	50	50	50
Weight without clamping jaws	[kg]	214	228	224
Part no. without clamping jaws		9.3366.0302	9.3376.0302	9.3396.0302