



Program summary

TOWER WORKHOLDING SYSTEMS TS

highest stability and precision

patented guide and sealing system

with 3 or 4 clamping sides

3 sizes

mechanically operated
max. clamping force from 20 to 40 kN

with 3rd-hand function and one spindle
or as two-spindle system Vector





Program summary Tower workholding systems TS

Tower workholding systems	TS	
Clamping sides	4 clamping sides - arrangement 4 x 90°	
Workpieces	4, 8 or 16 pieces	
Data sheet	WS 4.3301	
Series	TS 100	TS 125
	 <p>Figure with 3rd-hand function and central jaw</p>	 <p>Figure version Vector with 2x fixed jaw</p>
Jaw width	100 mm	125 mm
Clamping force	25 kN at 55 Nm	40 kN at 115 Nm
Jaw openings with 1 x central jaw as fixed jaw	1x 150 to 343 mm 2x 10 to 156 mm	1x 220 to 476 mm 2x 25 to 226 mm 4x 28 to 108 mm
Jaw openings with 2x fixed jaws	1x 120 to 366 mm 2x 10 to 152 mm	1x 128 to 498 mm 2x 10 to 216 mm 4x on request
Versions		
with 3rd-hand function	●	●
Vector with 1 central jaw as fixed jaw	●	●
Vector with 2 fixed jaws	●	●
Characteristics		
Workpiece weight < 15 kg	all versions	all versions
Workpiece weight > 15 kg	Version Vector	Version Vector
Optimised accessibility from the side	—	—
Use in automation	Version Vector	Version Vector
System hydraulically operated	—	System Vector on request

Legend: ● available
— not available / inexistent
■ existing



TS TriStar		
3 clamping sides - arrangement 3 x 120°		
3, 6 or 12 pieces		
WS 4.3302		
TS 80 TriStar	TS 100 TriStar	TS 125 TriStar
		
Figure with 3rd-hand function and central jaw	Figure with 3rd-hand function and central jaw	Figure with 3rd-hand function and central jaw
80 mm	100 mm	125 mm
20 kN at 45 Nm	25 kN at 55 Nm	40 kN at 115 Nm
1x 86 to 198 mm 2x 12 to 87 mm	1x 150 to 343 mm 2x 10 to 156 mm	1x 220 to 476 mm 2x 25 to 226 mm 4x 28 to 108 mm
—	1x 120 to 366 mm 2x 10 to 152 mm	1x 128 to 498 mm 2x 10 to 216 mm 4x on request
●	●	●
—	●	●
—	●	●
all versions	all versions	all versions
●	Version Vector	Version Vector
■	■	■
—	Version Vector	Version Vector
—	—	System Vector on request



Tower workholding systems TS and TS TriStar

The tower workholding systems TS and TS TriStar 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 and TS TriStar into a flexible standard fixture for a wide variety of applications in modern production.

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.

Accessories

You will find the extensive range of clamping jaws in 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.

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.

Service and advice

Extensive information such as drawings and CAD models are available on request, as well as service offers for preventive maintenance or simply to check your workholding systems.

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

**Workholding systems and standard fixtures
for metal cutting and non-cutting manufacturing**

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