**Tower Workholding Systems TS TriStar**

clamping against the fixed jaw, mechanically operated jaw widths 80, 100 and 125 mm, with 3 clamping sides

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### Advantages

- 3 sizes for optimum design to the machining centre
- Clamping of 3, 6 or 12 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
- Optimised accessibility

### Technical data

<table>
<thead>
<tr>
<th>Model</th>
<th>Jaw width:</th>
<th>Clamping force:</th>
<th>Max. jaw opening:</th>
</tr>
</thead>
<tbody>
<tr>
<td>TS 80 TriStar</td>
<td>80 mm</td>
<td>20 kN at 45 Nm</td>
<td>1 x 198 mm, 2 x 87 mm</td>
</tr>
<tr>
<td>TS 100 TriStar</td>
<td>100 mm</td>
<td>25 kN at 55 Nm</td>
<td>1 x 343 mm, 2 x 156 mm</td>
</tr>
<tr>
<td>TS 125 TriStar</td>
<td>125 mm</td>
<td>40 kN at 115 Nm</td>
<td>1 x 476 mm, 2 x 226 mm, 4 x 108 mm</td>
</tr>
</tbody>
</table>

### Description

The tower workholding systems 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 each screwed clamping 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 TriStar into a flexible standard fixture for a wide variety of applications in modern production.

### Application example

Tower workholding system TS 80 TriStar, a workholding system with connection to Matsuura MAM 72

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### Application

TS TriStar 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.

### Accessories

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

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.

### Application

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Subject to modifications

Actual issue see www.roemheld-group.com
### Dimensions of TS 80 TriStar

#### TS 80 TriStar with square base plate

- **Series**: TS 80 TriStar
- **Jaw width**: 80 mm
- **Clamping force**: 20 kN at 45 Nm

**Clamping jaws and the associated jaw openings**

Dimensions in mm

<table>
<thead>
<tr>
<th>Dimension</th>
<th>TS 80 TriStar with square base plate</th>
<th>TS 80 TriStar with round base plate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H</strong></td>
<td>262</td>
<td>248</td>
</tr>
<tr>
<td><strong>Stroke</strong></td>
<td>2 x 30</td>
<td>2 x 30</td>
</tr>
<tr>
<td><strong>h1</strong></td>
<td>148</td>
<td>134</td>
</tr>
<tr>
<td><strong>h2</strong></td>
<td>57</td>
<td>43</td>
</tr>
<tr>
<td><strong>h3</strong></td>
<td>30</td>
<td>-</td>
</tr>
<tr>
<td><strong>h4</strong></td>
<td>18</td>
<td>16</td>
</tr>
<tr>
<td><strong>Weight without clamping jaws [kg]</strong></td>
<td>20</td>
<td>19</td>
</tr>
<tr>
<td><strong>Part no. without clamping jaws</strong></td>
<td>933640131</td>
<td>933640130</td>
</tr>
</tbody>
</table>

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

**View from below**

- 4 x counterbore DIN 974-1-M12-R1

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**Subject to modifications**

WS 4.3302 / 3-16 E

Actual issue see www.roemheld-group.com Hilma-Römheld GmbH
Dimensions
TS 100 TriStar

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

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

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

View from below

Hilma-Römheld GmbH
Actual issue see www.roemheld-group.com

Subject to modifications
**Dimensions**

**TS 125 TriStar**

- **Series**: TS 125 TriStar
- **Jaw width**: 125 mm
- **Clamping force**: 40 kN at 115 Nm

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

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**View from below**

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<table>
<thead>
<tr>
<th>Series</th>
<th>TS 125 TriStar</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Version</strong></td>
<td>3rd-hand</td>
</tr>
<tr>
<td><strong>Variant</strong></td>
<td>1 x central jaw</td>
</tr>
<tr>
<td><strong>H [mm]</strong></td>
<td>707</td>
</tr>
<tr>
<td><strong>Stroke [mm]</strong></td>
<td>2 x 48</td>
</tr>
<tr>
<td><strong>h1 [mm]</strong></td>
<td>390</td>
</tr>
<tr>
<td><strong>h2 [mm]</strong></td>
<td>158</td>
</tr>
<tr>
<td><strong>h3 [mm]</strong></td>
<td>110</td>
</tr>
<tr>
<td><strong>h4 [mm]</strong></td>
<td>50</td>
</tr>
<tr>
<td><strong>Weight without clamping jaws [kg]</strong></td>
<td>174</td>
</tr>
<tr>
<td><strong>Part no. without clamping jaws</strong></td>
<td>933660332</td>
</tr>
</tbody>
</table>

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Subject to modifications

Actual issue see www.roemheld-group.com Hilma-Römheld GmbH