SuperVice solves set-up problems for the most frequently occurring sizes of workpiece (small to medium). The high repetition accuracy not only facilitates presetting and fast set-up, it also provides a solid foundation for rational series production. Springback is minimal and resonance damping is significant. Put all this together and you have a very firm grip on production. SuperVice delivers more than others dare to promise.

- The low profile gives clearance from the upper and lower wire guides
- High clamping force

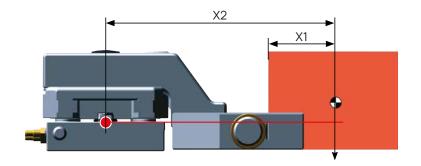


The unique, patented asymmetric design of the locking jaws gives extremely high locking force and, simultaneously, enhances contact between the workpiece and the reference surface.



Article number	X1 Recommended maximum torque	Maximum workpiece weight X1*=50mm	Maximum workpiece weight X1*=100mm	X2 Torque generated in chuck coupling
3R-292.1	1.5 Nm	3 kg	1.5 kg	5.4 Nm
3R-292.2	1.75 Nm	3.5 kg	1.75 kg	6.2 Nm
3R-292.3	4 Nm	8 kg	4 kg	14.3 Nm
3R-292.3D	4 Nm	8 kg	4 kg	14.3 Nm
3R-292.3P	4 Nm	8 kg	4 kg	14.3 Nm
3R-292.31	2.75 Nm	5.5 kg	2.75 kg	10 Nm
3R-292.6HP	10 Nm	20 kg	10 kg	31.5 Nm
3R-292.61HP	6.5 Nm	13 kg	6.5 kg	19.8 Nm
3R-292.6S	4.5 Nm	9 kg	4.5 kg	15.2 Nm
3R-294.1	1.25 Nm	2.5 kg	1.25 kg	4.65 Nm
3R-294.2	2.5 Nm	5 kg	2.5 kg	9.4 Nm
3R-294.3	3 Nm	6 kg	3 kg	10.2 Nm

\*Centre of gravity of the workpiece with X mm overhang.



# Ledger - workpiece holding tools

## Section 1: Horizontal holding

The following vices require an intermediate unit (fixed or levelling head) to fit to a table related interface of reference element 3R-200.xJ-yy, Macro, MacroTwin or MacroWEDM chucks

Product no.	Torque	Thickness	Rectangular workpieces	Round workpieces	Page
3R-292.1	3 Nm	8 mm	0-77 mm	noncpiecee	44
3R-292.2	3 Nm	10 mm	0-100 mm		44
3R-292.3	7 Nm	15 mm	0-100 mm		44
3R-292.3D	7 Nm	15 mm	0-100 mm	Ø3-15 mm	45
3R-292.3P	7 Nm	15 mm	0-100 mm	Ø3-15 mm	45
3R-292.23	5 Nm	15 mm	115x145 mm		47
3R-292.31	7 Nm	15 mm	0-90 mm		45
3R-292.6HP	15 Nm	25 mm	0-150 mm		45
3R-292.6S	10 Nm	25 mm	0-150 mm		46
3R-292.61HP	15 Nm	25 mm	0-150 mm		45
3R-292.66HP*		25 mm	(0-180 mm)	See section 4	49
3R-293.3	7 Nm	25 mm		Ø4-90 mm	46
3R-293.6HP	10 Nm	25 mm		Ø15-155 mm	46
3R-293.33	3 Nm	25 mm	100x100 mm	Ø8-100 mm	46
3R-293.66HP	4 Nm	25 mm	150x150 mm	Ø15-150 mm	47

\*Requires either 3R-239.1 or 3R-239.3. See also section 5 for more information.

# Section 2: Vertical holding

Product no.	Torque	Thickness	Height	Round Workpieces	Page
3R-292.66HP**		25 mm	(1-150 mm)		49
3R-294.1	4 Nm	40 mm	1-17 mm		22, 49
3R-294.2	4 Nm	76 mm	1-50 mm		22, 49
3R-294.3		15 mm	0-120 mm		48
3R-294.6	3 Nm	26 mm		Ø5-13 mm	22, 48
3R-294.7	3 Nm	55 mm		Ø2-20 mm	26

\*\*Requires either 3R-239.2 or 3R-230.1 for extended height. See also section 5 for more information.

# Ledger - workpiece holding tools

#### Section 3: Macro pallets for horizontal loading

The following vices are intended for horizontal loading onto Macro chucks without a tilting function.

Product no.	Torque	Thickness	Rectangular workpieces	Round workpieces	Page
3R-207.6		70 mm	10-52 mm	Ø8-70 mm	59
3R-613.4	3 Nm	8 mm	0-25 mm		58
3R-613.6	15 Nm	35 mm	1-80 mm	Ø5-55 mm***	59

\*\*\*Requires 3R-SP16115

#### Section 4: Macro pallets for vertical loading

In addition to section 2 (vertical loading), the following item does not require an additional fixed or levelling head.

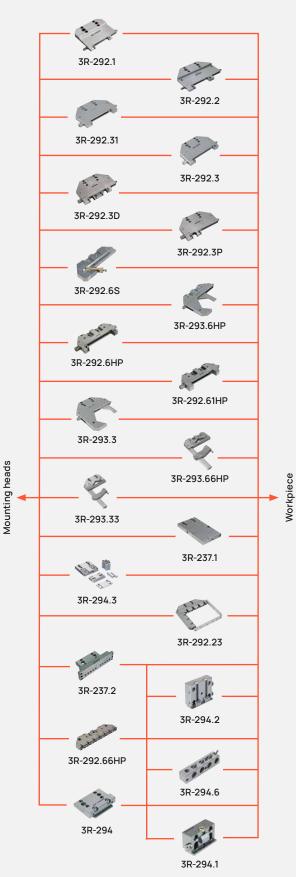
	_		Rectangular	Round	_
Product no.	Torque	Thickness	workpieces	workpieces	Page
3R-208.6		50 mm	(1-150 mm)	Ø25-160 mm	47

### Section 5: Accessories for 3Ruler and EconoRuler

The following workholding devices are attachements onto either 3Ruler or EconoRuler. This is also to include 3R-292.66HP

Product no.	Torque	Thickness	Rectangular workpieces	Round workpieces	Page
3R-209.1	8 Nm	25 mm	5-xxx mm		26
3R-209.3	7 Nm	25.5 mm		Ø20-130 mm	26
3R-292.33	3 Nm	25 mm	0.120 mm	Ø15-110 mm	26
3R-239.1	8 Nm	25 mm	20-xxx mm		18
3R-239.11	8 Nm	25 mm	20-xxx mm		19
3R-239.3	7 Nm	15 mm		Ø25-130 mm	18

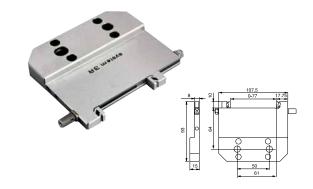
Product no.	Torque	Thickness	Height	Round workpieces	Page
3R-239.2			0-27 mm		18
3R-294.1	4 Nm	40 mm	0-17 mm		22, 49
3R-294.2	3 Nm	76 mm	0-50 mm		22, 49
3R-294.6	3 Nm	26 mm		Ø5-13 mm	22, 48



#### SuperVice, 3R-292.1

For clamping rectangular workpieces up to 77 mm.

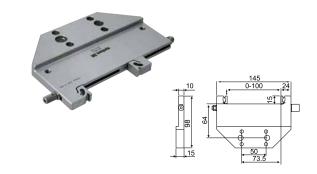
- Tightening torque 3 Nm
- Weight 0.6 kg



#### SuperVice, 3R-292.2

For clamping rectangular workpieces up to 100 mm.

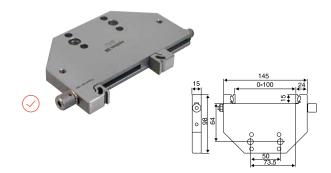
- Tightening torque 3 Nm
- Weight 0.9 kg



#### SuperVice, 3R-292.3

For clamping rectangular workpieces up to 100 mm.

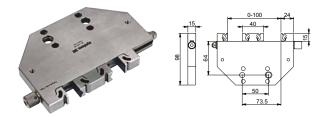
- Tightening torque 7 Nm
- Weight 1.1 kg



#### SuperVice, Double, 3R-292.3D

For collision-free clamping of both rectangular and round workpieces (14-45 mm and Ø3-15 mm respectively). Total clamping range 60 mm (split between two workpieces). Alternatively, dismount the double jaw and use as a regular 3R-292.3 vice for rectangular workpieces (0-100 mm).

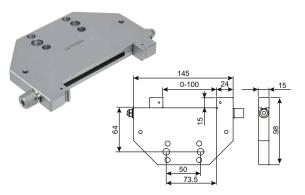
- Tightening torque 7 Nm
- Weight 1.2 kg



#### SuperVice, 3R-292.31

Vice with solid jaws for clamping rectangular workpieces up to 100 mm.

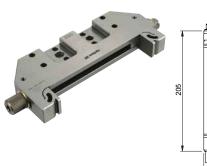
- Tightening torque 8 Nm
- Weight 1.1 kg

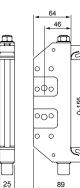


#### SuperVice, Magnum, 3R-292.6HP

Vice for clamping rectangular workpieces up to 155 mm. NOTE: Mounts on HP, Magnum or MacroTwin levelling adapter.

- Tightening torque 15 Nm
- Weight 2.8 kg

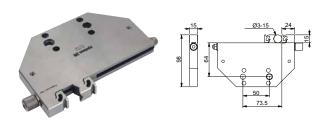


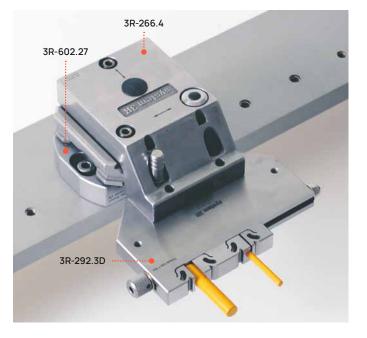


#### SuperVice, Prism, 3R-292.3P

For vertical or horizontal collision-free clamping of round workpieces (Ø3-15 mm). Alternatively, rotate the movable jaw and use as a regular 3R-292.3 vice for rectangular workpieces (0-100 mm).

- Tightening torque 7 Nm
- Weight 1.1 kg



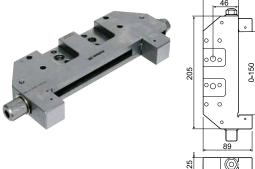


#### SuperVice, Magnum, 3R-292.61HP

Vice with solid jaws for clamping rectangular workpieces up to 150 mm.

NOTE: Mounts on HP, Magnum or MacroTwin levelling adapter.

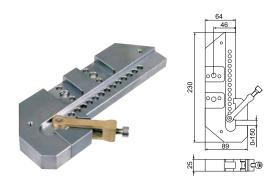
- Tightening torque 15 Nm
- Weight 2.8 kg



#### SuperVice, Magnum, 3R-292.6S

Vice for clamping rectangular workpieces up to 150 mm. NOTE: Mounts on HP, Magnum or MacroTwin levelling adapter.

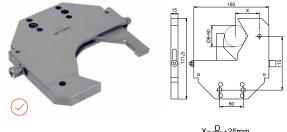
- Tightening torque 10 Nm
- Weight 2.7 kg



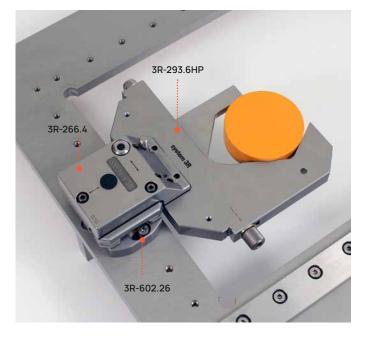
#### SuperVice, 3R-293.3

Vice for clamping round workpieces 8-90 mm.

- Tightening torque 8 Nm
- Recommended maximum workpiece weight 7 kg
- Weight 1.7 kg



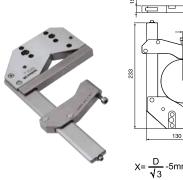
 $X = \frac{D}{\sqrt{3}} + 25 mm$ 

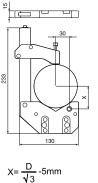


#### Universal holder, 3R-293.33

Holder for round workpieces 8-100 mm, or rectangular workpieces up to 100 mm.

- Tightening torgue 3 Nm
- Recommended maximum workpiece weight 7 kg
- Weight 1.5 kg



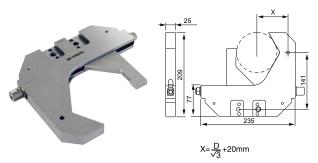


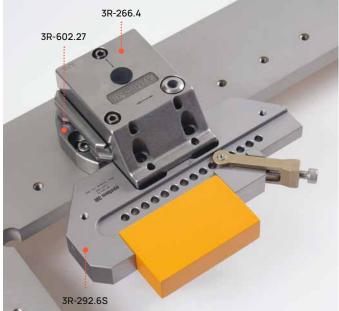
#### SuperVice, Magnum, 3R-293.6HP

Vice for clamping round workpieces 15-155 mm.

NOTE: Mounts on HP, Magnum or MacroTwin levelling adapter.

- Tightening torque 10 Nm
- Recommended maximum workpiece weight 12 kg
- Weight 4.5 kg



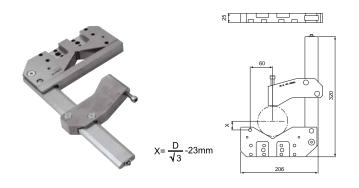


#### Universal holder, Magnum, 3R-293.66HP

For round workpieces 15-150 mm diameter, or rectangular workpieces up to 150 mm.

NOTE: Mounts on HP, Magnum or MacroTwin mounting head.

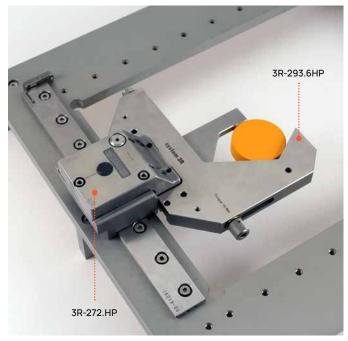
- Tightening torque 6 Nm
- Recommended maximum workpiece weight 12 kg
- Weight 4.2 kg



#### Angled holder, 3R-292.23

For clamping a workpiece or fixture on a mounting head. Can be supplemented with 3Ruler accessories.

• Weight 3 kg

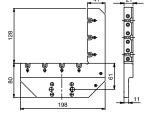


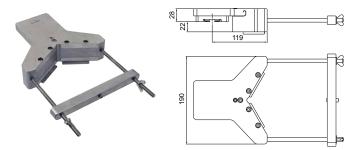
#### V-holder, MacroWEDM, 3R-208.6

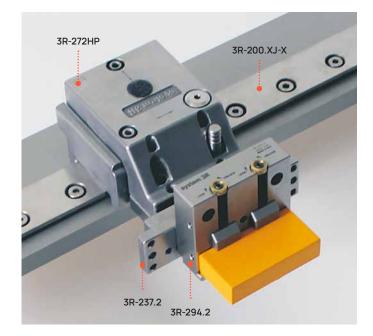
Holder with tilting function. For round workpieces 26-60 mm. To align workpiece prior to machining, can be adjusted in one axis.

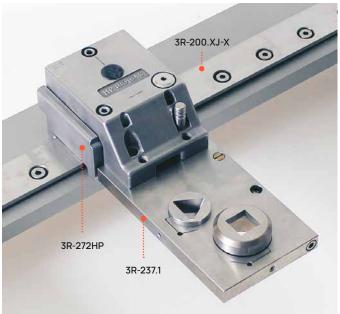
- Recommended maximum load 12 kg
- Weight 5.5 kg

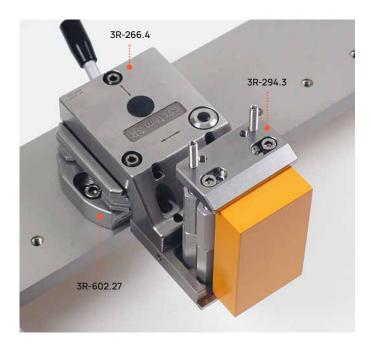








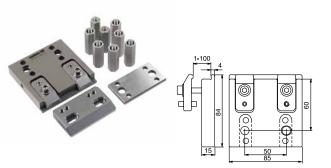


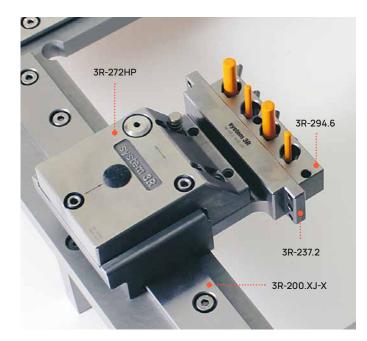


#### Vice, 3R-294.3

For clamping workpieces up to 100 mm.

- Tightening torque 7 Nm
- Weight 0.7 kg

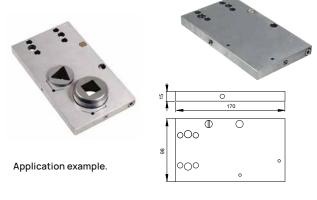




#### Holder, 3R-237.1

Stainless steel, hardened, do-it-yourself holder. With start hole for wire EDM of the required shape for clamping one or more workpieces.

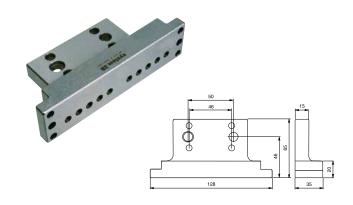
- Recommended maximum weight 7 kg
- Weight 1.2 kg



#### Holder, 3R-237.2

For fixture, workpiece or 3R-239.2, 3R-239.3, 3R-294.1, 3R-294.2, 3R-294.6 and 3R-402.1.

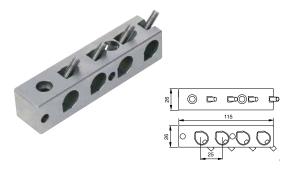
• Weight 0.6 kg



#### Multiple holder, 3R-294.6

For mounting four workpieces Ø5-13 mm at the same time. Mounts on 3R-237.2, 3R-294, 3R-292.66HP or any ruler in the 3Ruler system.

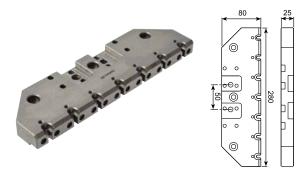
- Tightening torque 3 Nm
- Weight 0.6 kg



#### Holder, Magnum, 3R-292.66HP

Can be supplemented with 3Ruler accessories.

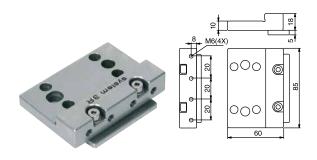
- NOTE: Mounts on an HP mounting head.
- Weight 3 kg



#### Adapter, 3R-294

For mounting 3R-294.1, 3R-294.2 and 3R-294.6 on a levelling adapter.

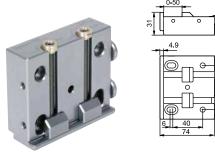
• Weight 0.6 kg



#### Vice, 3R-294.2

For clamping workpieces up to 50 mm. Mounts on 3R-237.2, 3R-294, 3R-292.66HP or a ruler in the 3Ruler system or Macropallet 54x54 mm.

- Tightening torque 3 Nm
- Weight 1.2 kg

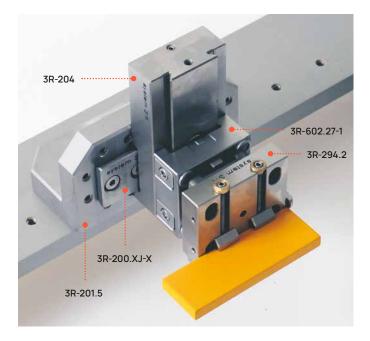


#### Collet chuck, D-30259

For use with a levelling head. Workpiece sizes 2-20 mm.

- For collets ER32
- Weight 1.5 kg





#### Vice, 3R-294.1

For clamping workpieces up to 17 mm. Mounts on 3R-237.2, 3R-294, 3R-292.66HP or rulers in the 3Ruler system.

- Tightening torque 3 Nm
- Weight 0.5 kg



