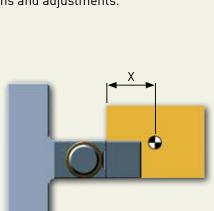
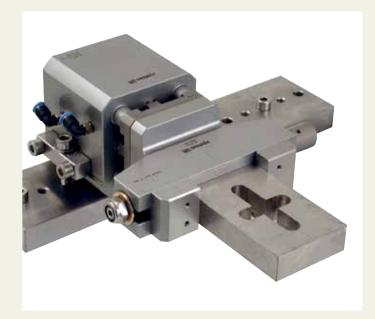
The holders have been adapted for modern machines with high flushing pressure. These holders are mainly intended for clamping small to medium-sized workpieces on the zero line of the machine.

An example is the manufacture of electrodes for diesinking EDM. The electrode is manufactured on its holder in the wire EDM machine. The electrode on its holder is then ready for immediate use in the diesinking EDM machine, without intervening mounting operations and adjustments.





Article number	Recommended maximum torque	Maximum workpiece weight X* = 50 mm	Maximum workpiece weight X* = 100 mm
3R-613.4	3.0 Nm	6 kg	3.0 kg
3R-232.8	12.5 Nm	25 kg	12.5 kg
3R-613.6	12.5 Nm	25 kg	12.5 kg
3R-213.4	3.0 Nm	6 kg	3.0 kg

^{*}Centre of gravity of the workpiece with X mm overhang.

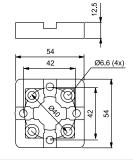
Reference element 54x54 mm, Macro, 3R-651.7E-P

Hardened and precision-cast, with clearance holes for four fixing screws.

Note: Must be mounted on the workpiece/fixture before it is locked in a chuck.

- Parallel-ground top and bottom faces
- Fixed index positions 4x90°
- Supplied in sets of 8
- Weight per set 1.2 kg.





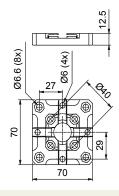
Reference element 70x70 mm, Macro, 3R-601.7E-P

Hardened and precision-cast, with clearance holes for eight fixing screws.

Note: Must be mounted on the workpiece/fixture before it is locked in a chuck.

- Parallel-ground top and bottom faces
- Fixed index positions 4x90°
- Supplied in sets of 5
- Weight per set 3 kg.





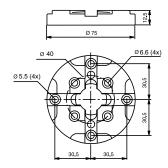
Reference element Ø 75 mm, Macro, 3R-651.75E-P

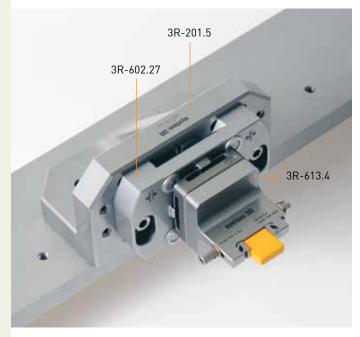
Hardened X, Y & Z-references. Clearance holes for fixing screws.

Note: Must be mounted on the workpiece/fixture before it is

- Parallel-ground top and bottom faces
- Fixed index positions 4x90°
- Supplied in sets of 10
- Weight per set 3.0 kg.





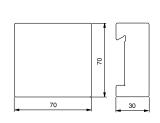


Unhardened holder for mounting in the WEDM system.

- Recommended maximum workpiece weight 7 kg
- Weight 1 kg.



Pallet WEDM, 3R-205.2



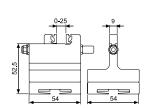


SuperVice, Macro, 3R-613.4

Vice for mounting rectangular workpieces 0-25 mm in the Macro system.

- Tightening torque 3 Nm
- Weight 0.6 kg.



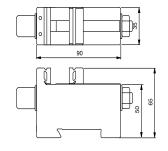


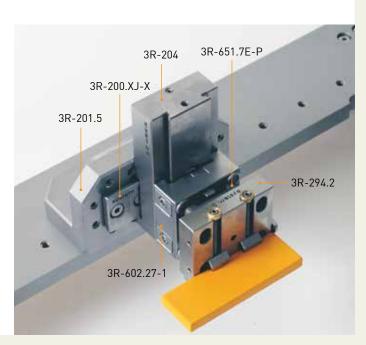
SuperVice WEDM, 3R-232.8

Vice for mounting rectangular (<60 mm) and round (8-45 mm) workpieces in the WEDM system.

- Tightening torque 15 Nm
- Weight 1.5 kg.







Vice, Macro, 3R-613.6

Vice for mounting rectangular workpieces 0-80 mm in the Macro system. Movable jaws for centred mounting. Can be supplemented with insert 16115-00 for mounting round workpieces 15-55 mm.

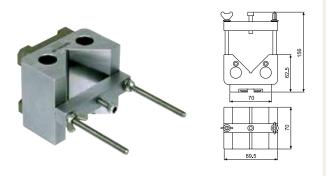
• Tightening torque 15 Nm

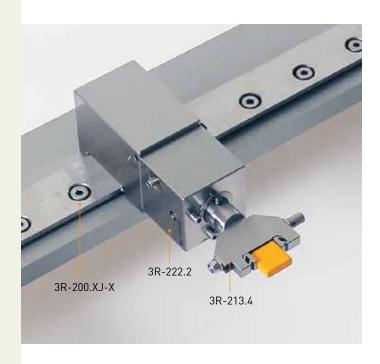


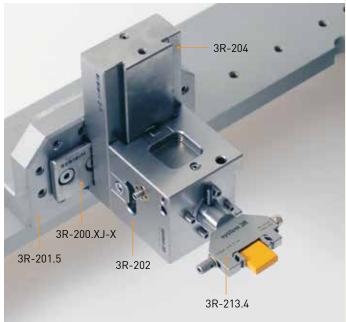
V-holder, Macro, 3R-207.6

For clamping round workpieces 8-70 mm, or rectangular workpieces 10-52 mm in the Macro system.

- Recommended maximum workpiece weight 8 kg
- Weight 2 kg.



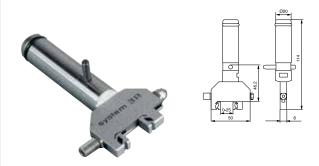




SuperVice, Mini, 3R-213.4

Vice for mounting rectangular workpieces up to 25 mm in the Mini system.

- Tightening torque 3 Nm
- Weight 0.4 kg.



Holder, Mini, 3R-322/50E

Electrode holder for the Mini system with 50 mm long unhardened electrode mounting part.

Note: Not stainless

- Adapted for automatic changing
- Hardened reference part
- Flushing duct
- Supplied in sets of 30
- Weight per set 7.7 kg.





Collet chucks

3R-659.16-P

- For collets ER16
- Workpiece size 0.5-10 mm
- Flushing duct
- Building-in height 62 mm
- Weight 0.8 kg.

3R-659.32-P

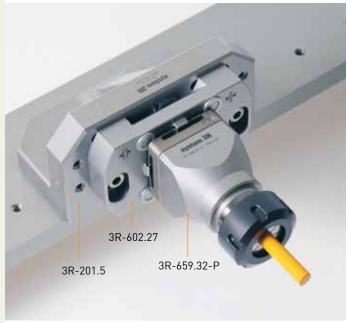
- For collets ER32
- Workpiece size 2-20 mm
- Flushing duct
- Building-in height 94 mm
- Weight 1.2 kg.

3R-659.20-P

- For collets ER20
- Workpiece size 1-13 mm
- Flushing duct
- Building-in height 69 mm
- Weight 1.2 kg.









D-30220-01

Collet chucks

- For collets ER16
- Workpiece size 0.5-10 mm
- Flushing duct
- Building-in height 57 mm
- Weight 1 kg.

D-30220

- For collets ER20
- Workpiece size 1-13 mm
- Flushing duct
- Building-in height 62 mm
- Weight 1.4 kg.

D-30220-02

- For collets ER32
- Workpiece size 2-20 mm
- Flushing duct
- Building-in height 82 mm
- Weight 1.4 kg.



3Ready-to-Run, 3R-494-XXX

Blanks mounted on MacroJunior holders for the manufacture of electrodes. The stock range is matched to local preferences and ways of working. This applies to electrode materials, different grades of graphite and copper, and to dimensions. Contact your local 3R representative for further information.

The Vällingby factory can supply holders with factorymounted copper blanks in sets of ten, as shown in the table.

Article number	Dimensions
3R-494-D10x50	Round blank Ø10x50 mm
3R-494-D12x50	Round blank Ø12x50 mm
3R-494-D16x50	Round blank Ø16x50 mm
3R-494-D22x50	Round blank Ø22x50 mm
3R-494-D26x50	Round blank Ø26x50 mm
3R-494-D32x50	Round blank Ø32x50 mm
3R-494-D40x50	Round blank Ø40x50 mm
3R-494-D50x50	Round blank Ø50x50 mm
3R-494-S12x50	Square blank 12x12x50 mm
3R-494-S22x50	Square blank 22x22x50 mm
3R-494-S26x50	Square blank 26x26x50 mm
3R-494-S32x50	Square blank 32x32x50 mm
3R-494-S40x50	Square blank 40x40x50 mm
3R-494-32x22x50	Square blank 32x22x50 mm
3R-494-40x22x50	Square blank 40x22x50 mm





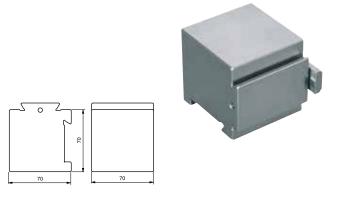
Adapter elements

Adapter elements allow machining of complex geometries, even if the machine is not the very latest model. The range includes products for swivelling or height adjustment, as well as plain spacer elements.

Adapter 90°, WEDM, 3R-201J

Basic element for 3D accessories.

- Fits on all System 3R basic element
- Tightening torque 7 Nm
- Weight 2.7 kg.

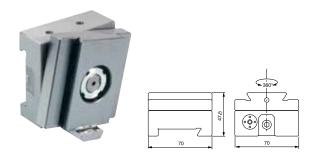


Swivelling element 360°, WEDM, 3R-203

Hydraulic locking of set position.

Note: For angle setting, 3R-216 is recommended.

- Can be monted on 3R-204 or directly on 3R-201J
- Tightening torque 7 Nm
- Weight 1.5 kg.



Height adapter, WEDM, 3R-204

Can be turned upwards or downwards when mounting on 3R-201J.

- Height adjustment ±65 mm
- Tightening torque 7 Nm
- Weight 1.9 kg.

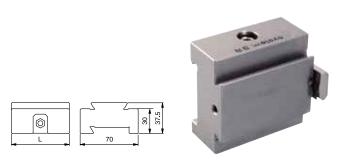


Spacer element 30 mm, WEDM

Used where vertical or horizontal displacement of workpiece or accessory is necessary.

.....

• Tightening torque 7 Nm.

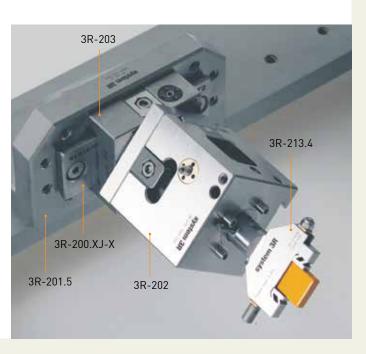


3R-223

· Length 70 mm.

3R-223.3

• Length 140 mm.



Adapter elements

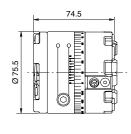
Swivelling element 360°, Macro, 3R-203.66

Swivelling element with manual Macro chuck to be mounted onto a Macro chuck. Mecanical locking of the set position. Vernier scale for quick setting in 0.1-degree steps.

Note: For angle setting sine ruler 3R-216.6 and gauge block are recommended.

- Maximal hanging torque 8 Nm
- Required drawbar 3R-605.2RS
- · Weight 2 kg.





Swivelling element 360° with encoder, D-30232

Swivelling element with manual Macro chuck. Display included.

- Maximal hanging torque 8 Nm
- · Locking of chuck 6 Nm
- · Locking of swivel 6 Nm
- Required drawbar 3R-605.2RS
- Weight 2.2 kg.





Swivelling element 360°, Macro, 90937

Swivelling element with manual Macro chuck to be mounted onto leveling heads. Mecanical locking of the set position. Vernier scale for quick setting in 0.1-degree steps.

Note: For angle setting sine ruler 3R-216.6 and gauge block are recommended.

- Maximal hanging torque 8 Nm
- Required drawbar 3R-605.2RS
- Weight 3.1 kg.

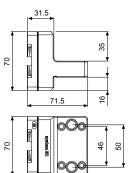


Vertical fixed adapter, Macro, 3R-226.6

For horizontal clamping SuperVice and holders in vertical Macro chucks.

• Weight 1.4 kg.





Vertical levelling adapter, Macro, 3R-262.6

For horizontal mounting of SuperVice and holders in vertical Macro chucks.

- Adjustable in three axes
- Weight 1.5 kg.



