If you want to compete in the global manufacturing industry, you need to study every aspect of efficiency. It’s a matter of extracting the highest possible number of spindle-hours from each machine, every day of the week. And here, the importance of a high-class reference system can never be over-estimated. A reference system which reduces setup times to a few minutes.

Macro is such a reference system. A system that minimises the throughput time, and which, thanks to its accuracy, practically eliminates rejects. A system that increases flexibility and profitability. A system that increases competitiveness and ensures the success of its users.

Among users world wide, the Macro system is a byword for precision. And with good reason, since very single Macro product is thoroughly checked before it is dispatched. But precision can be graded too. The Macro products are therefore “classified” in terms of accuracy, material and life – but always with full compatibility – as Standard, High Performance and Nano. Even so, it’s worth remembering that the accuracy of a system is determined by the product with the lowest classification.

<table>
<thead>
<tr>
<th>+ Repetition accuracy:</th>
<th>MacroNano – within 0.001 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MacroHighPerformance – within 0.0015 mm</td>
</tr>
<tr>
<td></td>
<td>MacroStandard – within 0.002 mm</td>
</tr>
<tr>
<td>+ Locking force – 6000 N</td>
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</tr>
<tr>
<td>+ Fixed index positions 4x90°</td>
<td></td>
</tr>
<tr>
<td>+ Required air pressure, pneumatic chuck – 6±1 bar</td>
<td></td>
</tr>
<tr>
<td>+ Recommended tightening torque, manual chuck – 6 Nm</td>
<td></td>
</tr>
<tr>
<td>+ Recommended max workpiece weight – 50 kg.</td>
<td></td>
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</tbody>
</table>
## Macro – Chucks

### Lathe chucks

<table>
<thead>
<tr>
<th>Article number</th>
<th>Drawbar</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>3R-600.22</td>
<td>3R-605.2</td>
<td>Mounting flange</td>
</tr>
<tr>
<td>3R-600.20</td>
<td>3R-605.1 / 3R-605.4</td>
<td>Carbide references, 4 Nm</td>
</tr>
<tr>
<td>3R-600.1-30</td>
<td>3R-605.1 / 3R-605.4</td>
<td></td>
</tr>
</tbody>
</table>

### Table chucks

<table>
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<tr>
<th>Article number</th>
<th>Drawbar</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>3R-610.21-S</td>
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<td>horizontal and vertical, 6 Nm</td>
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<tr>
<td>3R-600.24-V</td>
<td>3R-605.2</td>
<td>vibration-damped, 6 Nm, Ø75 mm</td>
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<tr>
<td>3R-600.28-S</td>
<td>3R-605.2</td>
<td>low profile, 6 Nm, Ø100 mm</td>
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<tr>
<td>3R-600.24-S</td>
<td>3R-605.2</td>
<td>6 Nm, Ø75 mm</td>
</tr>
<tr>
<td>3R-610.44-30</td>
<td>3R-605.1 / 3R-605.4</td>
<td>horizontal and vertical</td>
</tr>
<tr>
<td>3R-600.10-30</td>
<td>3R-605.1 / 3R-605.4</td>
<td></td>
</tr>
<tr>
<td>3R-600.14-30</td>
<td>3R-605.2</td>
<td>low profile</td>
</tr>
<tr>
<td>3R-600.1-30V</td>
<td>3R-605.1 / 3R-605.4</td>
<td>vibration-damped</td>
</tr>
<tr>
<td>3R-602.81</td>
<td>3R-605.10</td>
<td>low profile</td>
</tr>
<tr>
<td>3R-602.10-1</td>
<td>3R-605.10</td>
<td>rust resistant</td>
</tr>
</tbody>
</table>
Macro – Chucks

Manual chuck, MacroStd, 3R-600.22
Manual lathe chuck with setting screws for centring.
- Tightening torque 6 Nm.
- Required drawbar 3R-605.2
- Fixed index positions 4x90°
- Weight 2.1 kg.

Pneumatic chuck, MacroStd, 3R-600.1-30
Pneumatic chuck for permanent mounting on the machine spindle, onto the machine table or as a lathe chuck.
- Required drawbar 3R-605.1
- Fixed index positions 4x90°
- Turbo locking
- Weight 4 kg.

Manual chuck, MacroStd, 3R-610.21-S
Two ground faces for vertical or horizontal mounting on the machine table.
- Tightening torque 6 Nm.
- Required drawbar 3R-605.2
- Fixed index positions 4x90°
- Flushing duct
- Weight 3.5 kg.

Manual chuck, MacroHP, 3R-600.20
For mounting on the machine spindle with 3R-A3620 or on a lathe taper with centring ring 3R-612.6.
- Required drawbar 3R-605.1 or 3R-605.4
- Carbide XY-references
- Fixed index positions 4x90°
- Tightening torque 4 Nm
- Weight 3.6 kg.

Manual chuck, MacroStd, 3R-610.21
Three ground faces for vertical or horizontal mounting on the machine table.
- Tightening torque 6 Nm.
- Required drawbar 3R-605.2
- Fixed index positions 4x90°
- Flushing duct
- Weight 2.2 kg.

Manual chuck, MacroHP, 3R-600.15-3
Rust resistant pneumatic chuck for permanent mounting on the machine table.
- Drawbar 3R-605.2RS included
- Required air pressure 6±1 bar
- Fixed index positions 4x90°
- Rust resistant
- Weight 0.8 kg.

90842
- Required drawbar 3R-605.1, otherwise as 3R-610.21-S.

Except 90842
Macro – Chucks

Pneumatic chuck, MacroStd, 3R-600.14-30
Pneumatic low profile chuck for permanent mounting on the machine table.
- Required drawbar 3R-605.2
- Required air pressure 6±1 bar
- Fixed index positions 4x90°
- Weight 2 kg.

Pneumatic chuck, MacroStd, 3R-602.81
Pneumatic low profile chuck for permanent mounting on the machine table.
- Required drawbar 3R-605.10
- Required air pressure 6±1 bar
- Fixed index positions 4x90°
- Weight 1 kg.

Pneumatic chuck, MacroHP, 3R-602.81 RS
Rust resistant pneumatic low profile chuck for permanent mounting on the machine table.
- Required drawbar 3R-605.10
- Clamping force 6000 N
- Fixed index positions 4x90°
- Air-blast cleaning of Z-references
- Rust resistant
- Weight 1 kg.

Pneumatic chuck, MacroHP, 3R-602.10-1
Rust resistant pneumatic low profile chuck for Macro holders. Supplied with drawbar 3R-605.10 and protective cover.
- Clamping force 7000 N
- Fixed index positions 4x90°
- Air-blast cleaning of Z-references
- Rust resistant
- Weight 1.0 kg.

Pneumatic chuck, VDP, 3R-602.10-V
Pneumatic vibration-damped chuck, low-profile version.
- Required drawbar 3R-605.10
- Required air pressure 6±1 bar
- Fixed index positions 4x90°
- Air-blast cleaning of the Z-references
- Turbo locking.

Pneumatic chuck, VDP, 90716.09
Pneumatic vibration-damped chuck.
- Required drawbar 3R-605.1 or 3R-605.4
- Required air pressure 6±1 bar
- Fixed index positions 4x90°
- Carbide XY-references
- Air-blast cleaning of the Z-references
- Turbo locking
- Weight 6 kg.
Macro – Chucks

Pneumatic chuck, MacroStd, 3R-600.10-30
Pneumatic table chuck locked/opened with air gun.
- Required drawbar 3R-605.1 or 3R-605.4
- All references of hardened and ground steel
- Required air pressure 6±1 bar
- Fixed index positions 4x90°
- Air-blast cleaning of the Z-references
- Turbo locking
- Weight 4.4 kg.

Pneumatic chuck, MacroHP, 3R-600.10-3
Pneumatic table chuck locked/opened with air gun.
- Required drawbar 3R-605.1 or 3R-605.4
- Required air pressure 6±1 bar
- Fixed index positions 4x90°
- Air-blast cleaning of the Z-references
- Carbide XY-References
- Turbo locking
- Weight 4.4 kg.

Pneumatic chuck, VDP, 3R-600.1-30V
Pneumatic vibration-damped table chuck.
- Required drawbar 3R-605.1 or 3R-605.4
- Required air pressure 6±1 bar
- Fixed index positions 4x90°
- Air-blast cleaning of the Z-references
- Turbo locking
- Weight 6 kg.

Pneumatic chuck, MacroStd, 3R-610.46-30
Pneumatic chuck for horizontal or vertical use.
- Required drawbar 3R-605.1 or 3R-605.4
- Required air pressure 6±1 bar
- Fixed index positions 4x90°
- Air unit included
- Weight 4.4 kg.

Pneumatic chuck, MacroHP, 3R-610.46-3
Pneumatic chuck for horizontal or vertical use.
- Required drawbar 3R-605.1 or 3R-605.4
- Required air pressure 6±1 bar
- Fixed index positions 4x90°
- Air unit included
- Carbide XY-references
- Weight 4.4 kg.
Macro – Chucks

**Manual chuck, MacroStd, 3R-600.28-S**
Cast chuck low profile with ground back face for mounting on the machine spindle. Also suitable in a fixture on the machine table or with adapterplate 3R-A26488.
- Tightening torque 6 Nm
- Required drawbar 3R-605.2
- Fixed index positions 4x90°
- Flushing connection
- Weight 1.1 kg.

**Manual chuck, MacroStd, 3R-600.23-S**
Cast chuck with mounting flange for mounting on the machine spindle or in a fixture, alternatively 3R-A19724, on the machine table.
- Tightening torque 6 Nm.
- Required drawbar 3R-605.2
- Fixed index positions 4x90°
- Flushing connection
- Weight 0.7 kg.

**Manual chuck, MacroStd, 3R-600.24-S**
Cast chuck with ground back face for mounting on the machine spindle with 3R-A11489 or in a fixture on the machine table.
- Tightening torque 6 Nm.
- Required drawbar 3R-605.2
- Fixed index positions 4x90°
- Flushing connection
- Weight 0.7 kg.

**Manual chuck, VDP, 3R-600.24-V**
Manual vibration-damped table chuck, Ø170 mm.
- Tightening torque 6 Nm.
- Required drawbar 3R-605.2
- Building-in height 85 mm.
- Centre spacing 63 to 100 mm
- Weight 6 kg.

**Manual chuck, MacroStd, 3R-SP15055**
Cast chuck with ground flange for installation in fixture/plate.
- Required drawbar 3R-605.2
- Tightening torque 6 Nm
- Fixed index positions 4x90°
- Flushing connection
- Weight 0.7 kg.

**Manual chuck, MacroHP, 3R-600.24RS**
Rust resistant manual chuck for Macro holder. Designed for permanent mounting.
- Tightening torque 6 Nm
- Required drawbar 3R-605.2RS
- Rust-resistant
- Fixed index positions 4x90°
- Weight 0.7 kg.
Macro – Chucks

Pneumatic chuck, MacroStd, 90412.1X
Pneumatic chuck with built-on surface-mounted swivel. Intended for B-axes and similar. Air connection from the side. For further information contact System 3R.

- Required drawbar 3R-605.1
- Required air pressure 6±1 bar
- Fixed index positions 4x90°
- Turbo locking.

---

Pneumatic chuck, MacroHP, 90412.2X
Pneumatic chuck with integral swivel at the rear. Intended for B-axes and similar. Air connection from the rear. For further information contact System 3R.

- Required drawbar 3R-605.1
- Required air pressure 6±1 bar
- Fixed index positions 4x90°
- Turbo locking.

---

Pneumatic chuck, MacroStd, 3R-SP24460
Pneumatic chuck for building-in, for example in a fixture, dividing head or B-axis.

- Required drawbar 3R-605.1 or 3R-605.4
- Required air pressure 6±1 bar
- Fixed index positions 4x90°
- Air-blast cleaning of Z-references
- Turbo locking
- Weight 1.8 kg.

---

Pneumatic chuck, MacroHP, 3R-SP26771
Pneumatic built-in chuck, MacroHP, 3R-SP26771-RS
Rust resistant chuck for Macro holder. For permanent mounting on the machine spindle or fixture.

- Required drawbar 3R-605.1RS
- Clamping force 6000 N
- Required air pressure 6±1 bar
- Carbide XY-References
- Rust resistant
- Fixed index positions 4x90°
- Weight 2 kg.

---

Pneumatic chuck, MacroHP, 3R-SP7359
Pneumatic chuck for building-in, for example in a fixture, dividing head or B-axis.

- Required drawbar 3R-605.1 or 3R-605.4
- Required air pressure 6±1 bar
- Carbide XY-References
- Air-blast cleaning of Z-references
- Turbo locking
- Weight 1.8 kg.

3R-SP7359-RS
- Rust resistant version, otherwise as 3R-SP7359.

---
Macro – Chuck adapters & adapters

Pneumatic chuck adapter, MacroMagnum-Macro, 3R-682.600-A
MacroMagnum chuck adapter with built-in pneumatic Macro chuck for mounting in 3R-686.10-2A.
- Required drawbar 3R-605.1 or 3R-605.4
- Required air pressure ±1 bar
- Fixed index positions 4x90°
- Turbo locking
- Weight 4.5 kg.

Pneumatic chuck adapter, Dynafix-Macro, 90356.22
Dynafix chuck adapter with built-in pneumatic Macro chuck for mounting in 90356.10 or 90576.05.
- Required drawbar 3R-605.1
- Required air pressure ±1 bar
- Clamping force 6000 N
- Carbide XY-References
- Turbo locking

Hydraulic adapters
Adapters with hydraulic locking of end mills for re-grinding or new production.

K-40338.4
- Ø10 mm
- Construction height 80 mm
- Rust resistant
- Adapted for automatic changing
- Ready for code carrier
- Weight 1.3 kg.

K-40338.3
- Ø16 mm
- Construction height 80 mm
- Rust resistant
- Adapted for automatic changing
- Ready for code carrier
- Weight 1.4 kg.

K-40339.1
- Ø20 mm
- Construction height 90 mm
- Rust resistant
- Adapted for automatic changing
- Ready for code carrier
- Weight 1.6 kg.

K-40338.2
- Ø25 mm
- Construction height 102.5 mm
- Rust resistant
- Adapted for automatic changing
- Ready for code carrier
- Weight 1.7 kg.

K-40338.5
- Ø32 mm
- Construction height 101 mm
- Rust resistant
- Adapted for automatic changing
- Ready for code carrier
- Weight 1.8 kg.

K-40338.1
- Ø40 mm
- Construction height 140 mm
- Rust resistant
- Adapted for automatic changing
- Ready for code carrier
- Weight 2.2 kg.

Pneumatic chuck adapter, Dynafix-Macro, 90356.22
Macro – Pallets & reference elements

Pallets and ref. element, 54x54 mm

<table>
<thead>
<tr>
<th>Article number</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>3R-651E-P</td>
<td>rust resistant</td>
</tr>
<tr>
<td>3R-651.7E-XS</td>
<td></td>
</tr>
<tr>
<td>3R-651.7E-P</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Pallets and reference elements, 54x54 mm</th>
<th>Article number</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardened reference element 12.5 mm, HP</td>
<td>3R-651.7E-P</td>
<td>rust resistant</td>
</tr>
<tr>
<td>Hardened reference element 12.5 mm, Std</td>
<td>3R-651.7E-XS</td>
<td></td>
</tr>
<tr>
<td>Hardened pallet 30 mm, HP</td>
<td>3R-651E-P</td>
<td>rust resistant</td>
</tr>
</tbody>
</table>
Macro – Pallets & reference elements

<table>
<thead>
<tr>
<th>Article number</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>3R-601.7E-P</td>
<td>rust resistant</td>
</tr>
<tr>
<td>3R-601.1E-P</td>
<td>rust resistant</td>
</tr>
<tr>
<td>3R-651.70-P</td>
<td>reference element 54x54 mm</td>
</tr>
<tr>
<td>3R-651.75E-P</td>
<td>reference element 54x54 mm</td>
</tr>
<tr>
<td>3R-601.52</td>
<td>rust resistant</td>
</tr>
<tr>
<td>3R-601.116-75PA</td>
<td>With reference element Ø75 mm</td>
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</table>

### Pallets and ref. elements, 70x70 mm

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<tr>
<th>Article number</th>
<th>Feature</th>
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</thead>
<tbody>
<tr>
<td>3R-601.7E-P</td>
<td>rust resistant</td>
</tr>
<tr>
<td>3R-601.1E-P</td>
<td>rust resistant</td>
</tr>
<tr>
<td>3R-651.70-P</td>
<td>reference element 54x54 mm</td>
</tr>
<tr>
<td>3R-651.70-XS</td>
<td>reference element 54x54 mm</td>
</tr>
</tbody>
</table>

### Ref. element, Ø75 mm

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<th>Feature</th>
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</thead>
<tbody>
<tr>
<td>3R-651.75E-P</td>
<td>rust resistant</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Article number</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>3R-601.52</td>
<td>3Refix Ø10 mm, rust resistant</td>
</tr>
<tr>
<td>3R-601.116-75PA</td>
<td>With reference element Ø75 mm</td>
</tr>
</tbody>
</table>
Macro – Pallets & reference elements

Pallet Ø116 mm, 3R-601.116-75PA
Unhardened pallet with reference element 3R-651.75-P.
• X, Y & Z-references hardened
• Ready for code carrier
• Ready for automation.

Accessories:
Sealing ring, High, 3R-612.116-A
Suitable for some Macro chucks with drawbar 3R-605.1*.
Note: Only suitable for Ø116 mm pallets.

Sealing ring, Low, 3R-612.116-S
Suitable for some Macro chucks with drawbar 3R-605.2*.
Note: Only suitable for Ø116 mm pallets.

*For more info please ask System 3R.

PT Pallet 70x70 mm, 3R-651.70-P
Unhardened pallet with reference element 3R-651.7-P.
• Ready for code carrier
• Ready for automation
• Gripp outside the pallet
• Sealing ring between pallet and chuck
• Weight 1 kg.

PT Pallet 70x70 mm, 3R-651.70-XS
Unhardened pallet with reference element 3R-651.7-XS
• X, Y & Z-references hardened
• Ready for code carrier
• Ready for automation
• Gripp outside the pallet
• Sealing ring between pallet and chuck
• Weight 1 kg.

Accessories:
PT Sealing ring, High, 3R-612.54-A
Suitable for some Macro chucks with drawbar 3R-605.*.

PT Sealing ring, Low, 3R-612.54-S
Suitable for some Macro chucks with drawbar 3R-605.2*.

*For more info please ask System 3R.

Reference element Ø75 mm, 3R-651.75E-P
Hardened and milled with clearance holes for eight fixing screws.
Note: Must be mounted on the workpiece(fixture) before it is locked in a chuck.
• Fixed index positions 4x90°
• Parallel-ground top and bottom faces
• Rust resistant
• Supplied in sets of 10 pcs.
• Weight per set 2.7 kg.

Reference element 54x54 mm, MacroHP, 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°
• Rust resistant
• Supplied in sets of 8
• Weight per set 1.3 kg.

Accessories:
PT Sealing ring, High, 3R-612.116-A
Suitable for some Macro chucks with drawbar 3R-605.1*.
Note: Only suitable for Ø116 mm pallets.

PT Sealing ring, Low, 3R-612.116-S
Suitable for some Macro chucks with drawbar 3R-605.2*.
Note: Only suitable for Ø116 mm pallets.

*For more info please ask System 3R.
**Reference element 54x54 mm, MacroStd, 3R-651.7E-XS**

Hardened pallet for copper electrodes and workpieces.
Note: Must be mounted on the workpiece before it is locked in a chuck. For graphite electrodes spacer plate 3R-658.1E is required.
- Untreated side faces
- Supplied in sets of 8
- Weight per set 1.3 kg.

**Reference element 70x70 mm, MacroHP, 3R-601.7E-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°
- Rust resistant
- Supplied in sets of 5
- Weight per set 3 kg.

**Pallet 54x54 mm, MacroHP, 3R-651E-P**

Hardened, with clearance holes for four fixing screws.
- Ready for code carrier
- Fixed index positions 4x90°
- Rust resistant
- Flushing duct
- Supplied in sets of 8
- Weight per set 3.4 kg.

**Pallet 70x70 mm, MacroHP, 3R-601.1E-P**

Hardened, with clearance holes for four fixing screws.
- Ready for code carrier
- Fixed index positions 4x90°
- Rust resistant
- Flushing duct
- Supplied in sets of 5
- Weight per set 3.2 kg.

**Pallet Ø116 mm, MacroHP, 3R-601.52**

Hardened, with 3Refix holes and clearance holes for ten fixing screws.
- 3Refix Ø10 mm
- Ready for code carrier
- Parallel-ground top and bottom faces
- Fixed index positions 4x90°
- Rust resistant
- Weight 1.9 kg.

**Accessories:**

**Sealing ring, High, 3R-612.116-A**

Suitable for some Macro chucks with drawbar 3R-605.1*.
Note: Only suitable for Ø116 mm pallets.

**Sealing ring, Low, 3R-612.116-S**

Suitable for some Macro chucks with drawbar 3R-605.2*.
Note: Only suitable for Ø116 mm pallets.

*For more info please ask System 3R.
Macro – Accessories

Drawbars

3R-605.1E
- Ø20x57.1 mm with flushing holes Ø7 mm
- Supplied in sets of 10 pcs.

3R-605.1EE
- Supplied in sets of 40 pcs.

3R-605.2E
- Ø20x36.9 mm with Ø7 mm flushing hole
- Supplied in sets of 5 pcs.

3R-605.2EE
- Supplied in sets of 20 pcs.

3R-605.4E
- For round pallets adapted for automatic changing
- Ø20x57.1 without flushing hole
- Supplied in sets of 10 pcs.

3R-605.4EE
- Supplied in sets of 40 pcs.

3R-605.10
- Ø20x13 mm
- Rust resistant.

3R-605.10E
- Supplied in sets of 10 pcs.

3R-605.10EE
- Supplied in sets of 20 pcs.

Clamping force meter kit, 3R-SSP115-BASE

For both pneumatic and manual chucks. This stand alone unit in combination with individual drawbars or drawbar kits, able to cover MacroJunior, Macro, MacroMagnum and Dynafix.

Note: Require drawbars with bayonet interface similar to 3R-605.1.
- Add-on kit for use in Macro/MacroMagnum, 3R-SSP115-MACRO
- Operating temp. +10 to +40° C
- Gauge size Ø90x47 mm
- Working range 1-22 kN
- Deviation ± 0.1 kN.
- Weight:
  - Display 0.34 kg.
  - Gauge 1.3 kg.

Add-on kit, 3R-SSP115-Macro

Add-on kit for 3R-SSP115-BASE
Control ruler, 3R-606.1
For setting angular positions and for centring Macro chucks.
- Ground hole for centring.
- Measuring length 100 mm
- Weight 1.4 kg.

Control ruler, 3R-656.1
For setting angular positions. Ground outside diameter for centring.
- Measuring length 50 mm
- Weight 0.8 kg.

Control rod, 3R-606
Check mandrel with ground C-reference for setting Macro chucks.
- Measuring length 110 mm
- Weight 2.3 kg.

Control rod, 3R-656
Check mandrel with ground C-reference for setting Macro chucks.
- Measuring length 38 mm
- Weight 1 kg.

Converter kit, 90842.01
To convert 3R-600.24-S to enable long drawbar 3R-605.1.

Converter kit, 3R-A27634
To convert 3R-600.28-S to enable long drawbar 3R-605.1.
- Extra height 18.5 mm.
Macro – Accessories

**Centring ring, 3R-612.6**  
For centring 3R-600.20.

**Adapter plate, 3R-A26488**  
For mounting 3R-600.28-S.

**Adapter plate, 3R-A19724**  
For mounting of 3R-400.34, 3R-460.34 and 3R-600.24-S on machine table. Supplied with fixing screws for chuck and table.

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**Splash guard, 90027**  
Splash guard for Macro chucks with long drawbar. Can also be used as a cover for unused chucks.  
Note: Does not work with sealing ring 3R-612.116.

**Torque wrenches, 3R-614-04**  
Mainly for MacroCombi and Ø10 3Refix mandrels.  
- 4 Nm.

**3R-614-06**  
For Macro chucks.  
- 6 Nm.

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**Lathe taper, 3R-TXXX**  
Taper attachment for mounting chucks in taper spindles.  
Note: Manufactured on request. State machine type, taper [1], drawbar thread [2] and which 3R chuck is to be mounted.  
Use the order form at the end of the catalogue.

**Allen key, 3R-333-03**  
- 3 mm  
  - Supplied in 10 pcs.

**Allen key, 3R-333-05**  
- 5 mm  
  - Supplied in 10 pcs.
Connection for air gun, 90815
For manual operation of pneumatic chucks with air gun.
- Supplied in sets of 2 pcs.

Locking ring key, 3R-605-GE
To lift the locking ring of the drawbars.
- Supplied in sets of 2

Control unit, 3R-611.2
Foot operation of pneumatic chucks.

Control unit, 3R-611.4
Unit for operation of pneumatic chucks. Two functions, opened/closed.

Control unit, 3R-611.46
Unit for hand operation of pneumatic chucks. Three functions – open/neutral/closed.

Code carriers, 3R-863.01-10
With pre-programmed unique identity, designed for pallet use.
- Supplied in sets of 10.

3Refix mandrel
Note: When positioning with 3Refix mandrels – always tighten the expanding mandrel in the R₀ hole first.

3R-901-10E-TX
- 3Refix Ø10 mm
- Recommended tightening torque 4 Nm
- Supplied in sets of 10 pcs.
- Weight per set 0.2 kg.

3R-901-20E
- 3Refix Ø20 mm
- Recommended tightening torque 10 Nm
- Supplied in sets of 10 pcs.
- Weight per set 1 kg.

3R-901-10RS
- 3Refix Ø10 mm
- Rust-resistant
- Recommended tightening torque 4 Nm
- Weight per set 0.5 kg.

3R-901-20RS
- 3Refix Ø20 mm
- Rust-resistant
- Recommended tightening torque 10 Nm
- Weight per set 0.1 kg.