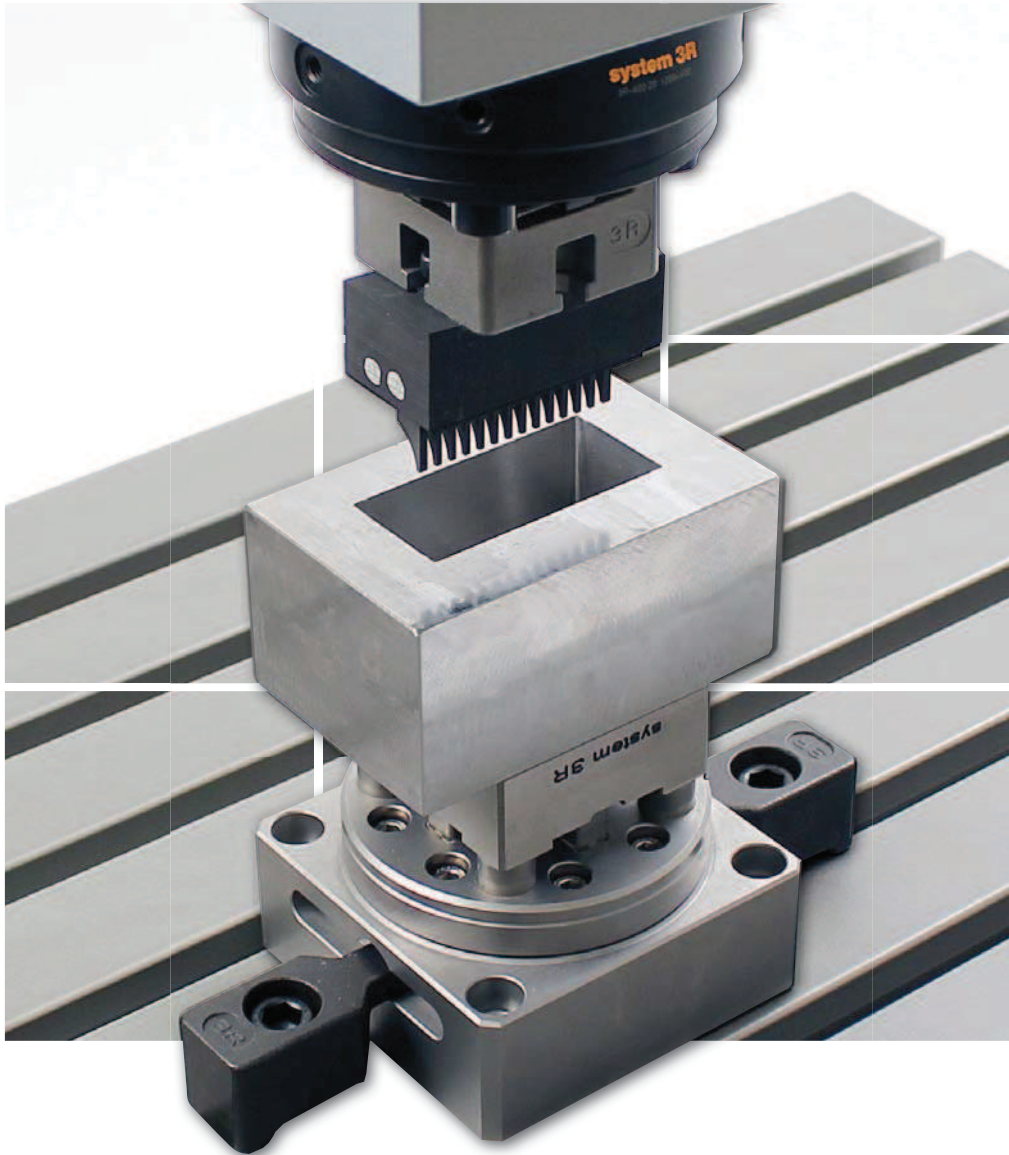
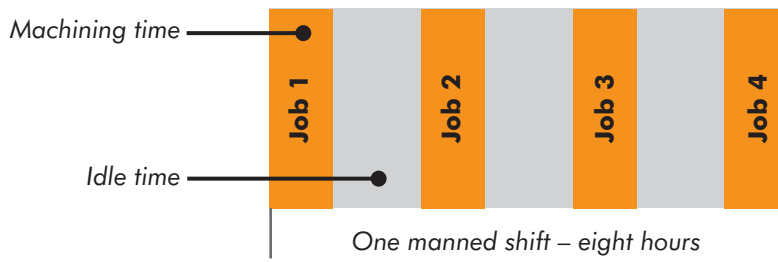


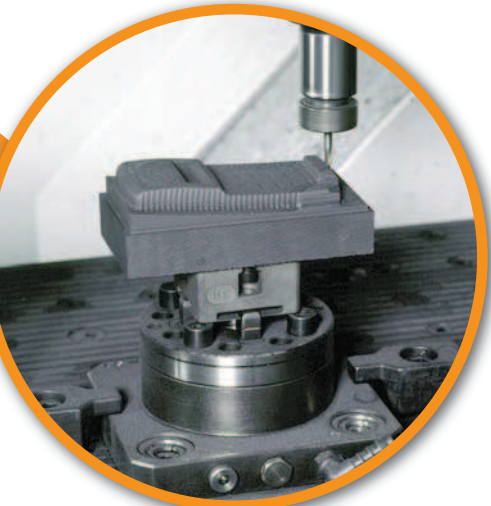
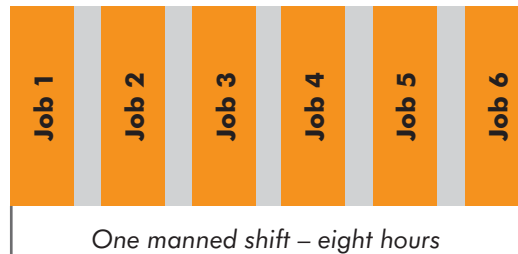
Reference systems for electrode manufacturing & EDMing



Conventional setting-up



Pallet system



Higher productivity, calculation example:

	Conventional setting-up	Pallet system
Working time per day	8	8
Setting-up time per day (hours)	-4	-0.5
Spindle time per day	=4	=7.5
Working days per week	x5	x5
Spindle time per week	= 20	=37.5

Faster payback, calculation example:

	Conventional setting-up	Pallet system
Hourly invoicing (€)	50	50
Spindle time / week (hours)	x20	x37.5
Revenue / week (€)	=1 000	=1 875
Capital cost of machine (€)	150 000	150 000
Capital cost pallet system (€)	0	+10 000
Total capital outlay (€)	=150 000	=160 000
Paybacktime (weeks)	150	85



A reference system minimises setup times

Every minute that can be converted from internal to external setting time increases the spindle time of the machine and with it the productivity of the business.

Big earnings are within your reach

The machine generates revenue when its spindle is turning – and only then.

Work smarter, not harder.

From small to large

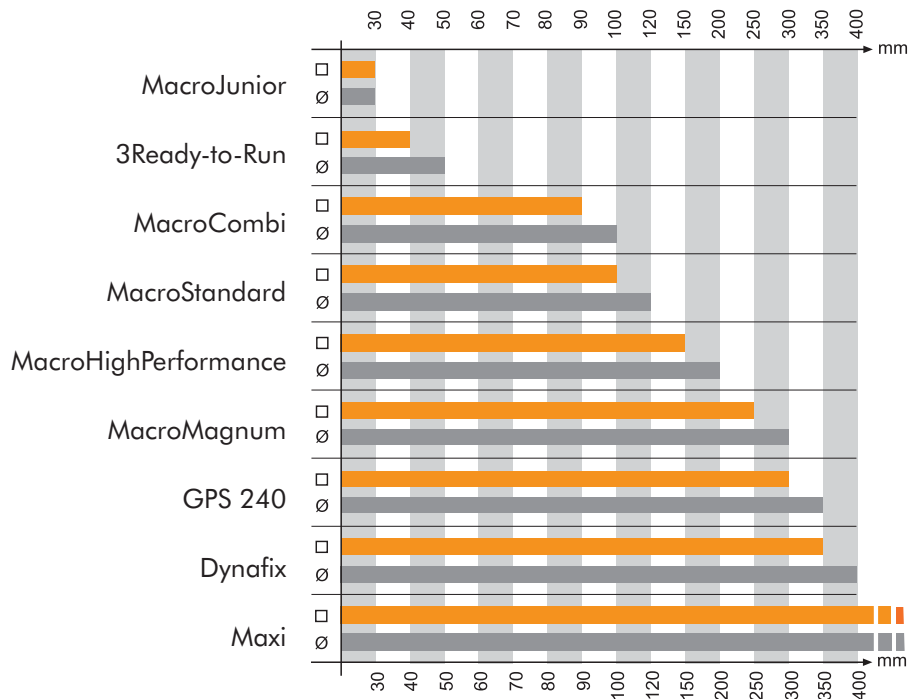
The engineering industry is complex. Every company is unique in terms of type of production, machinery, capacity etc.

To satisfy all these different requirements, System 3R has developed reference systems of exceptional flexibility.

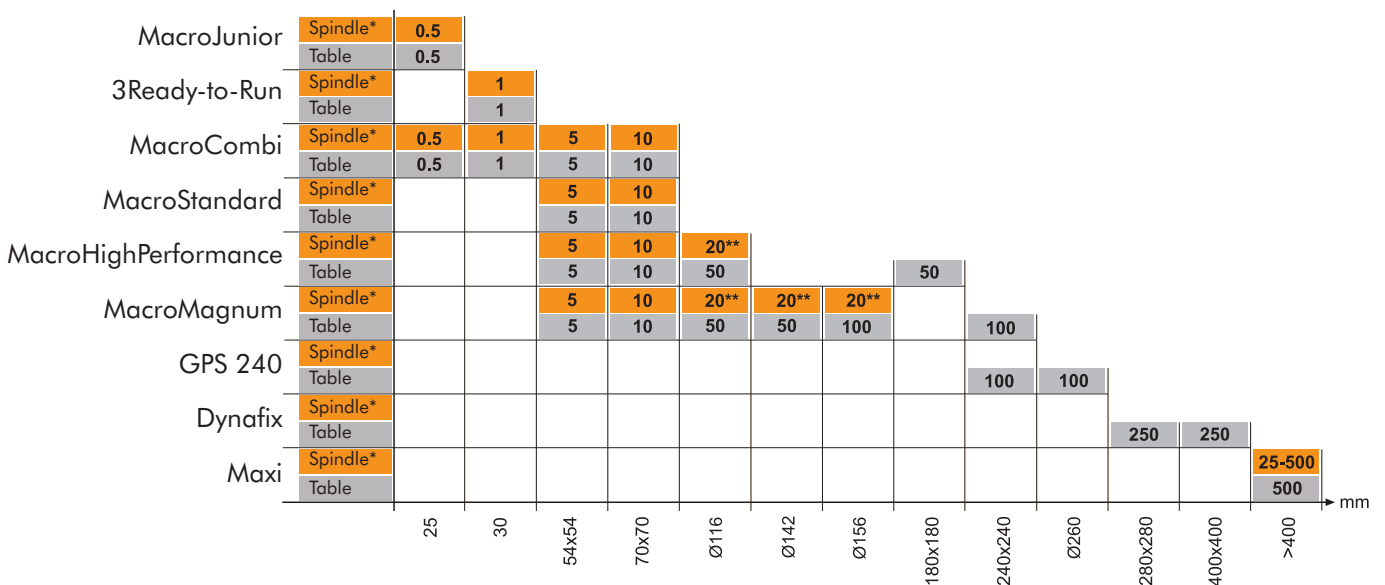
For every size of pallet there is a "recommended"

maximum workpiece size. However, this should only be regarded as a guide, since the size of the workpiece relative to the pallet depends above all on the material and the type of machining.

Maximum size of workpiece or electrode, square or round / mm



Maximum weight of workpiece or electrode, spindle chuck or table chuck / kg



* Die-sinking EDM spindle

** With automatic changing

Maxi

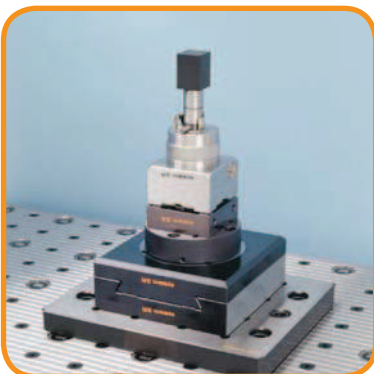
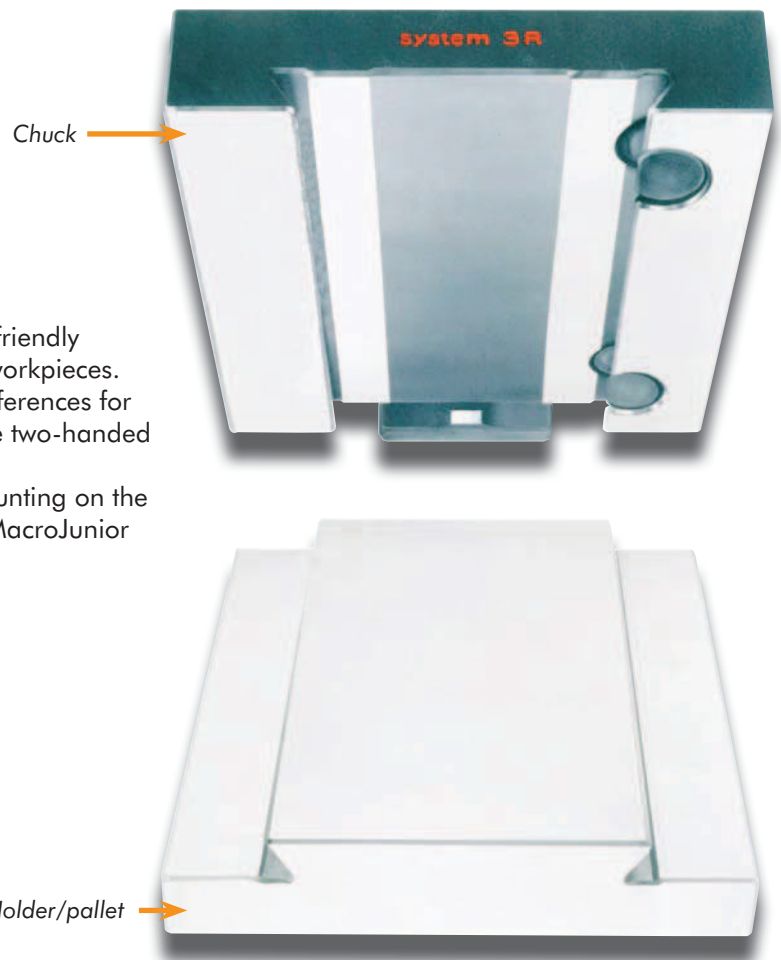
- ... reduces setting-up times.
- ... is user-friendly.
- ... gives access to a large part of System 3R's product range.

Maxi

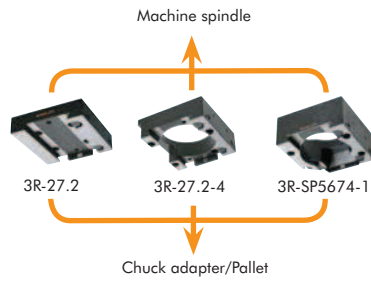
An especially robust, uncomplicated and user-friendly system for larger and heavier electrodes and workpieces. The chucks are of the fishtail type with three references for rapid mounting of the accessories with a single two-handed operation.

Chuck adapters – with Maxi as the basic mounting on the machine table – also give access to the Mini, MacroJunior and Macro systems.

- Repetition accuracy within 0.01 mm.
- Recommended maximum weight 500 kg.



Maxi – Chucks



Spindle chucks

	Article number	Image	Feature
Manual	3R-27.2		
Manual	3R-27.2-4		Machine-adapted
Manual	3R-SP5674-1		Machine-adapted

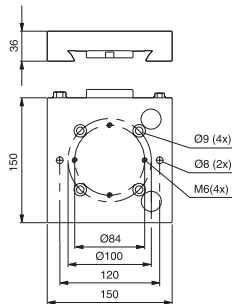
Table chuck

	Article number	Image	Feature
Manual	3R-27.2		

Manual chuck 3R-27.2

For mounting on the machine spindle or on a machine table.

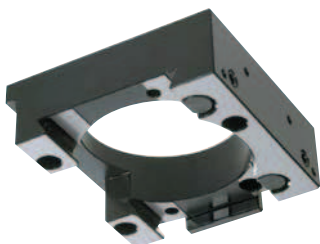
- Immersible
- Maximum electrode weight 500 kg
- Mechanical locking
- Weight 5 kg



Manual chuck 3R-27.2-4

Intended mainly for AGIE machines with Macro as the basic mounting in the machine spindle.

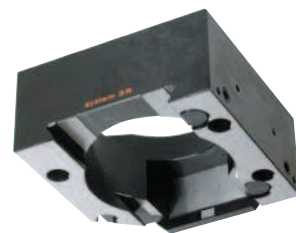
- Immersible
- Maximum electrode weight 500 kg
- Mechanical locking
- Weight 5 kg



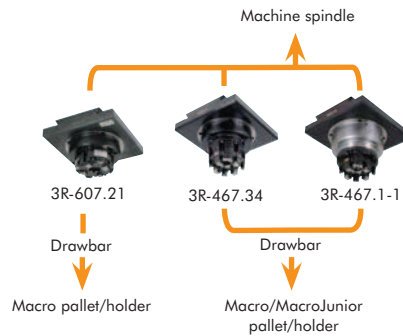
Manual chuck 3R-SP5674-1

Intended mainly for Charmilles machines with Macro as the basic mounting in the machine spindle.

- Immersible
- Maximum electrode weight 500 kg
- Mechanical locking
- Weight 5 kg



Maxi – Chuck adapters



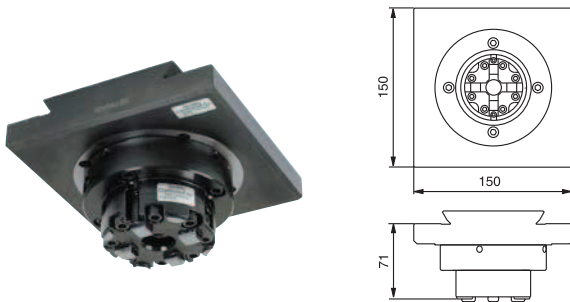
Chuck adapters

Manual	Article number	Feature
Manual	3R-607.21	Maxi ► Macro
Manual	3R-467.34	Maxi ► Macro/MacroJunior
Pneumatic	3R-467.1-1	Maxi ► Macro/MacroJunior

Manual chuck adapter, Maxi-Macro 3R-607.21

For mounting of Macro holders in the Maxi system.

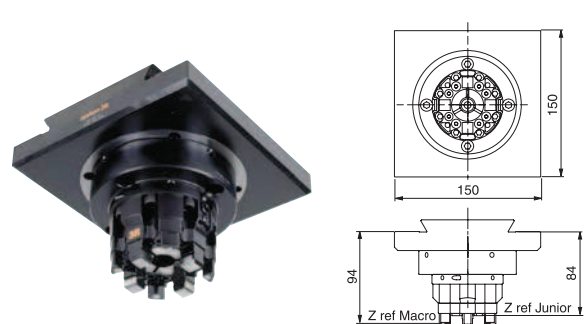
- Required drawbar 3R-605.2
- Fixed index positions 4x90°
- Maximum electrode weight 50 kg
- Flushing connection
- Weight 6.7 kg



Manual chuck adapter, Maxi-MacroCombi 3R-467.34

For mounting MacroJunior and Macro holders in the Maxi system.

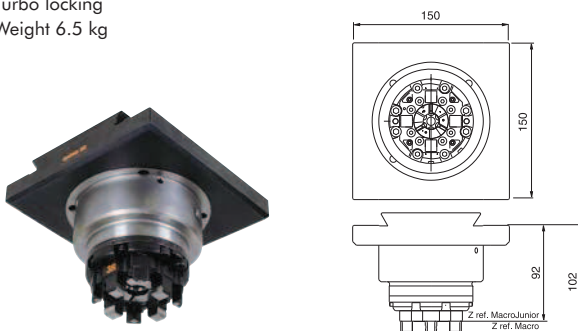
- Required drawbar for Macro holder 3R-405.16
- Required drawbar for MacroJunior holder 3R-405.11
- Weight 7 kg



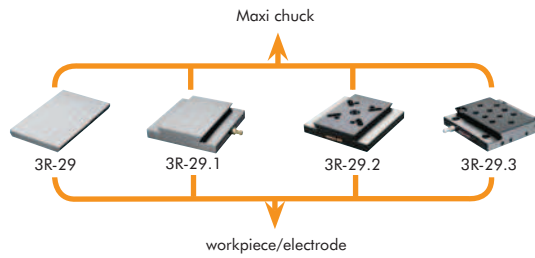
Pneumatic chuck adapter, Maxi-MacroCombi 3R-467.1-1

For mounting MacroJunior and Macro holders in the Maxi system.

- Adapted for automatic electrode changing
- Required drawbar for Macro holder 3R-405.16
- Required drawbar for MacroJunior holder 3R-405.11
- Required air pressure 6 ± 1 bar
- Air-blast cleaning of Z-references
- Turbo locking
- Weight 6.5 kg



Maxi – Pallets



Pallets	Article number	Feature
Unhardened 150x90 mm	3R-29	
Unhardened 150x150 mm	3R-29.1	
Hardened 150x150mm	3R-29.2	
Hardened 150x150mm	3R-29.3	3Refix Ø10 mm

Pallet 150x150 mm 3R-29.1

- Unhardened
- Flushing connection
- Flushing duct
- Weight 4.4 kg

Pallet 150x150 mm 3R-29.2

Pallet with 16 clearance holes for M6 screws and eight M6 threads.

- Hardened
- Weight 4.6 kg

Pallet 150x150 mm 3R-29.3

Pallet with four clearance holes for M6 screws and 3Refix holes.

- 3Refix Ø10 mm
- Hardened
- Flushing connection
- Flushing duct
- Weight 4.6 kg

Pallet 150x90 mm 3R-29

- Unhardened
- Weight 1.2 kg