

Dynafix

Without sacrificing accuracy and quality, Dynafix enables machining with optimal cutting data. The easy-to-handle aluminium pallets have high-alloy steel reference elements with directly measurable Z-references.

A locking mechanism with in-built soft-landing protects the references and simplifies handling in applications involving heavy workpieces. Additionally, automatic air-blast cleaning of the Z-references and peripheral sealing make Dynafix a practical and user-friendly reference system. It minimises set-up times, increases machine capacity and provides a basis for automated production.

As the basic means of fixing workpieces to machine tables, Dynafix gives unsurpassed flexibility as regards size. Using chuck adapters gives you access to practically every reference system in System 3R's extensive product range. With Dynafix as your basic mounting, you have rapid, precise changing (manual or automatic) of pallets ranging in size from \varnothing 25 mm to 400 x 400 mm.

- Repetition accuracy within 0.002 mm
- Clamping force 50.000 N
- Fixed index positions 4x90°
- Required air pressure, pneumatic chuck 6 bars (\pm 1)
- Max workpiece weight (manual loading) 100 kg.

ADVANTAGES

- enables machining with optimal cutting data
- Reduces set-up times
- Ensures precision and quality
- Gives access to System 3R's entire product range
- Is suitable for automatic changing with System 3R's automation program

Pallet/holder



Table chuck



Dynafix in detail

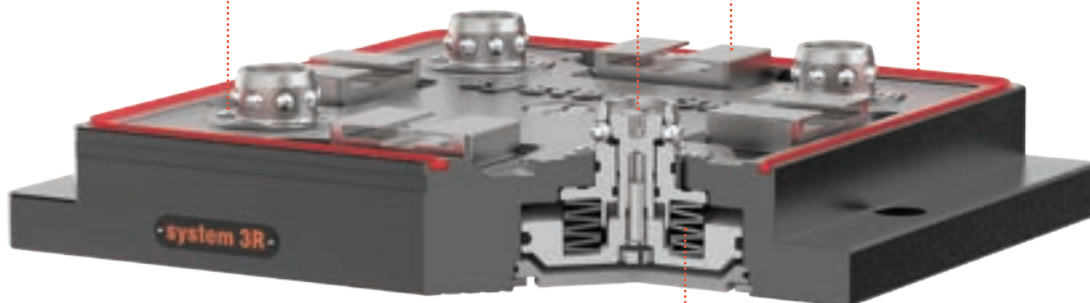


Z-references are cleaned by air blasted through the chuck's Z-reference nozzles.

When loading heavy workpieces, a lifting mechanism that operates on clamping/releasing protects the references.

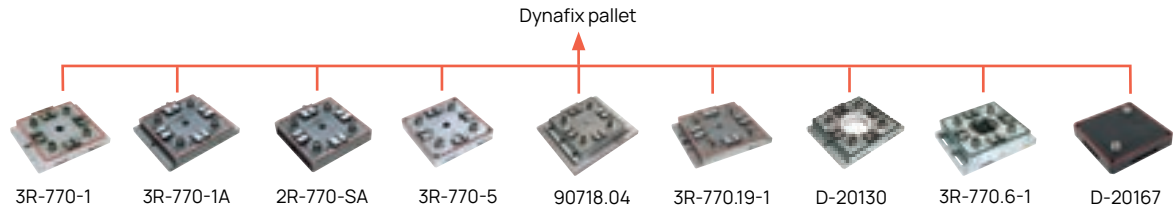
The X and Y-lips ensure that each pallets takes up the right position.

Lip seals maximise protection from debris and fluids.



Spring-loaded when idling; special Turbo function via added air pressure.

Dynafix – Chucks

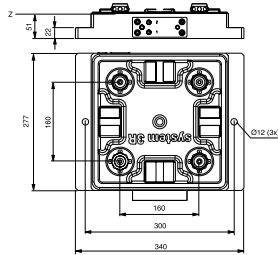
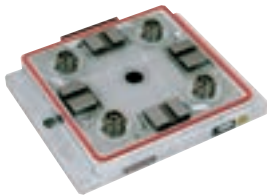


Chucks	Article number	Feature
Pneumatic	3R-770-1	
Pneumatic	3R-770-1A	for chuck adapters, with mounting flange
Pneumatic	3R-770-5A	for five-axis machines
Pneumatic	3R-770-5	for five-axis machines
Pneumatic	90718.04	vibration-damped
Pneumatic	3R-770.19-1	3Refix holes
Pneumatic	3R-770.6-1	built-in pneumatic Macro chuck
Pneumatic	D-20130	through hole Ø110 mm
Pneumatic	D-20167	load station

Pneumatic chuck, 3R-770-1

Pneumatic table chuck.

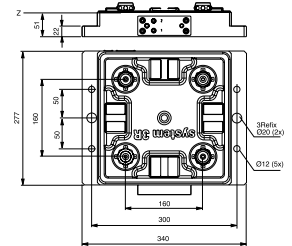
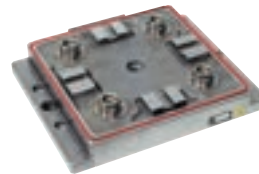
- Required air pressure 6 bars (± 1)
- Fixed index positions 4x90°
- Recommended actuator 3R-611.4 or 3R-611.2.
- Air-blast cleaning of the Z-references
- Weight 24.5 kg.



Pneumatic chuck, 3R-770.19-1

Pneumatic table chuck with 3Refix-holes.

- 3Refix Ø20 mm
- Required air pressure 6 bars (± 1)
- Fixed index positions 4x90°
- Recommended actuator 3R-611.4 or 3R-611.2
- Air-blast cleaning of the Z-references
- Weight 24.5 kg.



Pneumatic chuck

Pneumatic chucks with extra connections for automatic chuck adapters.

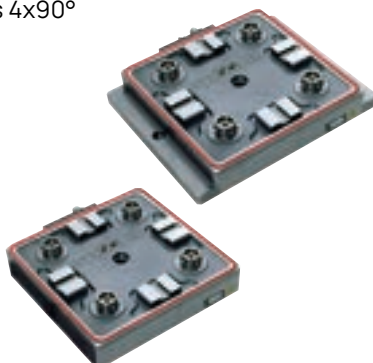
NOTE: Requires two control units.

- Air-blast cleaning of the Z-references.
- Required air pressure 6 bars (± 1)
- Fixed index positions 4x90°

3R-770-1A

With fixing lugs.

- Weight 24.5 kg.



3R-770-5A

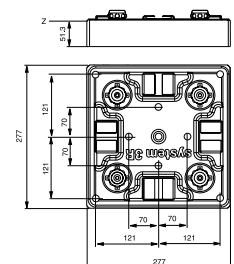
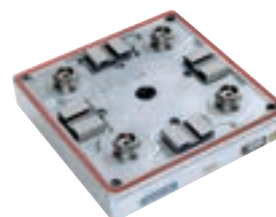
Without fixing lugs.

- Weight 23.5 kg.

Pneumatic chuck, 3R-770-5

Pneumatic table chuck for applications in five-axis machines.

- Air connection from below.
- Required air pressure 6 bars (± 1)
- Fixed index positions 4x90°
- Air-blast cleaning of the Z-references
- Weight 23.5 kg.

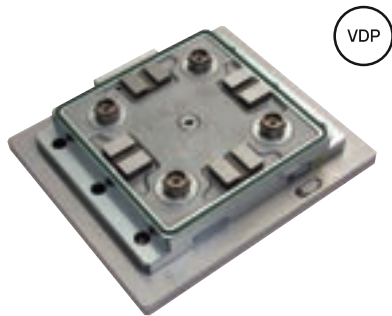


Dynafix – Chucks

Pneumatic chuck, VDP, 90718.04

Pneumatic vibration-damped chuck.

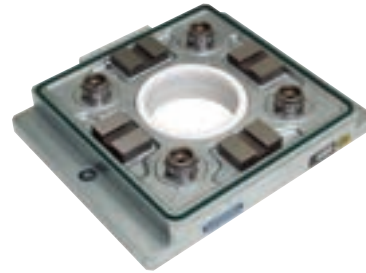
- Required air pressure 6 bars (± 1)
- Fixed index positions 4x90°
- Air-blast cleaning of the Z-references.



Pneumatic chuck, D-20130

Pneumatic chuck with through holes $\varnothing 110$ mm.

- Required air pressure 6 bars (± 1)
- Fixed index positions 4x90°
- Air-blast cleaning of the Z-references
- Weight 22 kg.



Pneumatic chuck, 3R-770.6-1

Pneumatic chuck with integrated Macro chuck.
For CMM machines.

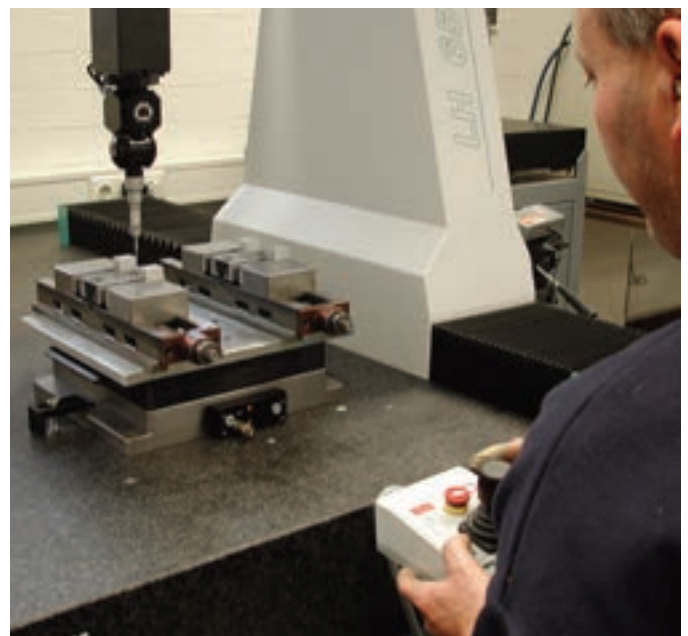
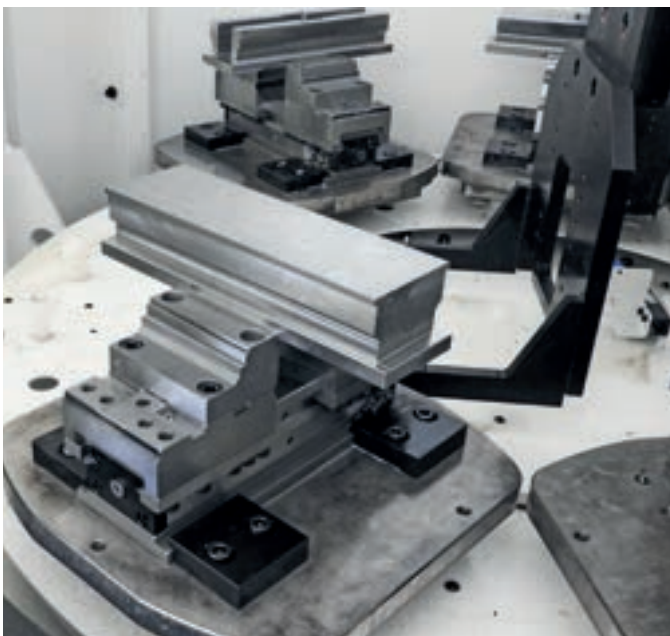
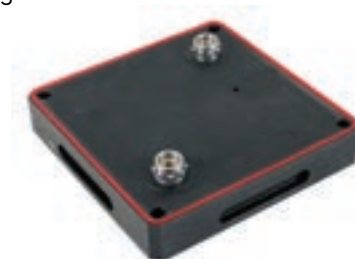
- Required air pressure 6 bars (± 1)
- Fixed index positions 4x90°
- Air-blast cleaning of the Z-references
- Weight 32 kg.



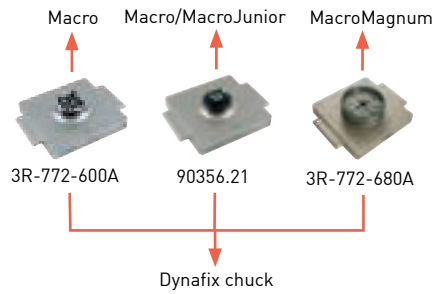
Pneumatic dummy chuck, D-20167

To use as a load station for pallets with workpieces.

- Rust resistant
- Prepared for sensor 05-7041
- Clamping force 5.000 N
- Max load weight 250 kg
- Weight 11 kg.



Dynafix – Chuck adapters

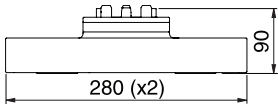


Chuck adapters	Article number	Drawbar	Feature
Pneumatic	3R-772-600A	3R-605.2	Dynafix ► Macro
Pneumatic	90356.21	3R-405.11 and 3R-405.16	Dynafix ► MacroCombi
Pneumatic	3R-772-680A	3R-605.1	Dynafix ► MacroMagnum

Pneumatic chuck adapter, Dynafix-Macro, 3R-772-600A

Chuck adapter with built-in pneumatic Macro chuck for mounting in 3R-770-1A or 3R-770-5A.

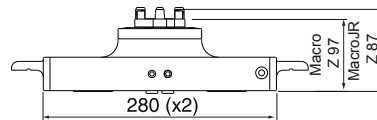
- Requires drawbar 3R-605.1
- Weight 11 kg.



Pneumatic chuck adapter, Dynafix-MacroCombi, 90356.21

Chuck adapter with built-in pneumatic MacroCombi chuck for mounting in 3R-770-1A or 3R-770-5A.

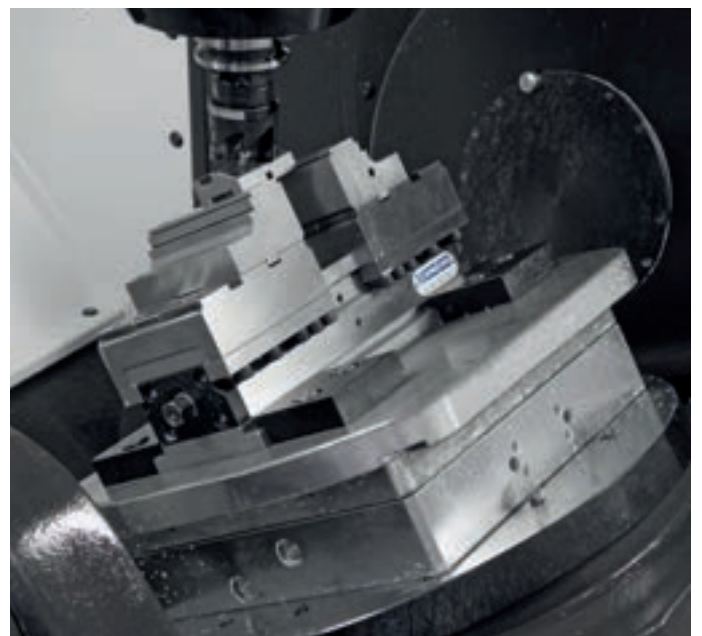
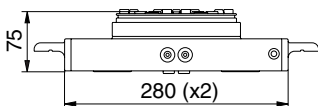
- Requires drawbar 3R-405.11 and 3R-405.16
- Weight 11 kg.



Pneumatic chuck adapter, Dynafix-MacroMagnum, 3R-772-680A

Chuck adapter with built-in pneumatic MacroMagnum chuck for mounting in 3R-770-1A or 3R-770-5A.

- Requires drawbar 3R-605.1
- Weight 13.5 kg.



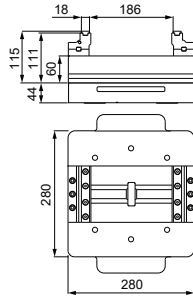
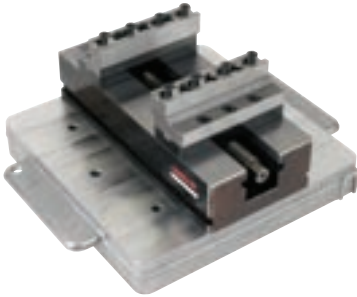
Dynafix – Chuck adapters

Centering vice, Dynafix, 3R-778-CV

Centering vice on Dynafix pallet.

Choose between different inserts (not included).

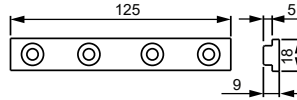
- Vice length 280 mm
- Jaws width 125 mm
- Clamping length 186/246 mm
- Clamping force 50.000 N
- Weight 22.8 kg.



Pair of clamping inserts, Dynafix, 3R-778-J4

Clamping inserts 125 mm. Rough carbide coating. Fits on Centering vice, Dynafix, 3R-778-CV.

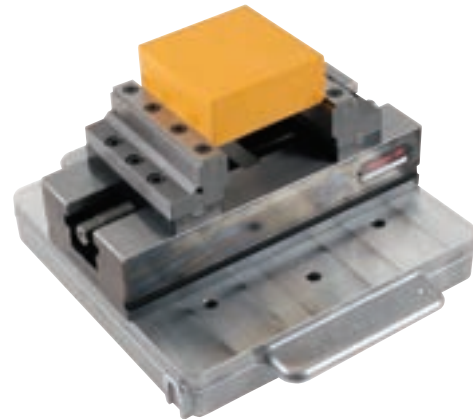
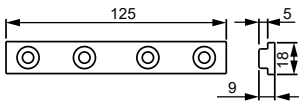
- Weight 0.15 kg.



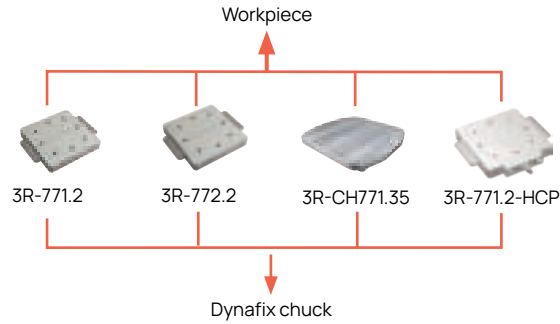
Pair of grip inserts, Dynafix, 3R-778-J3

Grip inserts 125 mm. Fits on Centering vice, Dynafix, 3R-778-CV.

- Weight 0.15 kg.



Dynafix – Pallets

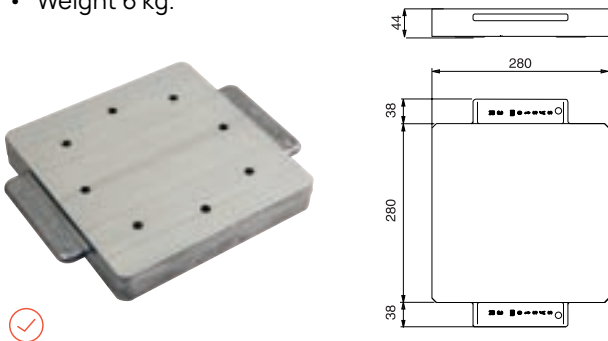


Pallets 280x280 mm	Article number	Feature
Aluminium	3R-771.2	milled
Aluminium	3R-772.2	ground
Aluminium	3R-CH771.35	
Aluminium	3R-771.2-HCP	milled, HCP robot grip

Pallet 280x280 mm, 3R-771.2

Milled aluminium pallet.

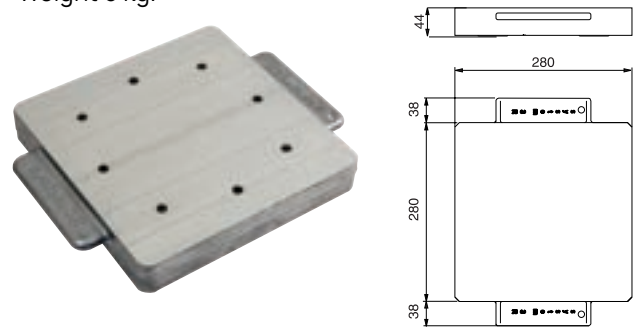
- Adapted for automatic changing
- Ready for code carrier
- Flatness 0.04 mm
- Thickness tolerance +0.05/-0 mm
- Weight 6 kg.



Pallet 280x280 mm, 3R-772.2

Ground aluminium pallet.

- Adapted for automatic changing
- Ready for code carrier
- Flatness 0.005 mm
- Thickness tolerance -0.1/-0.14 mm
- Weight 6 kg.



Pallet with HCP robot grip, 3R-771.2-HCP

Milled pallet with HCP robot grip mounted on pallet side.

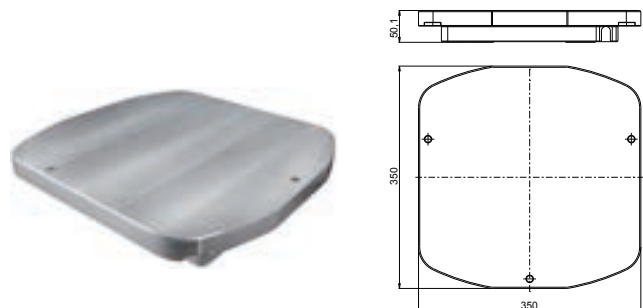
- Prepared for through holes (sealed at delivery)
- Adapted for automatic changing.
- Load weight 150 kg.
- Weight 6.5 kg.



Pallet 350x350 mm, 3R-CH771.35

Aluminium pallet.

- Adapted for automatic changing.
- Ready for code carrier
- Weight 12.1 kg.



Dynafix – Accessories

Reference elements, 3R-771.7

Reference kit for users who want to make their own pallets or fixtures.



Master pallet, 3R-776.1-2

For alignment of the Dynafix references. With ground reference rulers, hole and surface.

- Adapted for automatic changing
- Ready for code carrier
- Weight 8 kg.



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 Dynafix, 3R-SSP115-DYN
- 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-DYN

Add-on kit for 3R-SSP115-BASE

