

GPS 240

In the GPS 240 system, the machining zero point is defined by the centre of the chuck. The chuck can be mounted on the machine table of any machine tool.

The pallet's standardised hole pattern enables the mounting (from below) of workpieces, fixtures and accessories such as vices, three-jaw chucks and magnetic tables. This gives collision-free mounting, even with five-sided machining.

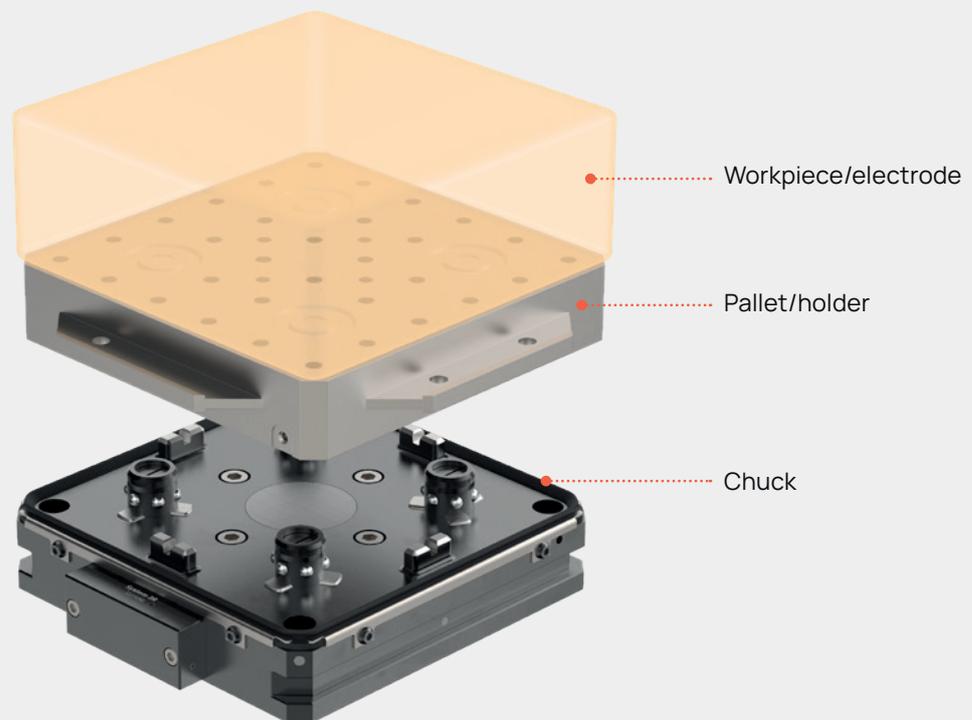
The economical, pressure-die-cast aluminium pallets are very light. Thus, they are also suitable for manual handling. Naturally the GPS 240 is also suitable for automatic changing.

The chuck seal prevents dirt penetrating between the chuck and the pallet. This simplifies maintenance and lengthens the life of the components. When loading heavy workpieces, a lifting mechanism that operates on clamping/releasing protects the references.

- Repetition accuracy within 0.002 mm
- Indexing accuracy within 0.005 mm
- Clamping force 25,000 N (with force boost 50,000 N)
- Fixed index positions 4x90°
- Required air pressure, pneumatic chuck 6 bars
- Max workpiece weight (manual loading) 150 kg.

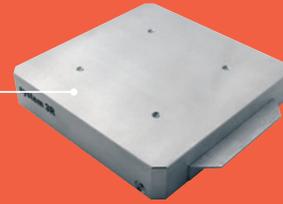
ADVANTAGES

- reduces set-up times.
- ensures precision and quality.
- is sealed against dirt and swarf.
- has lightweight pallets.
- is suitable for automatic changing with System 3R's automation program.



GPS 240 in detail

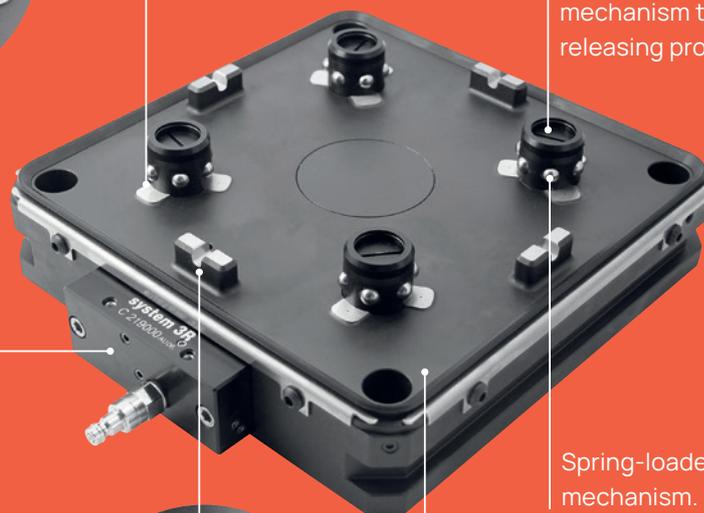
Die-cast aluminium pallets
(standardised hole pattern or
solid).



Pallet with handles for manual
handling or automated pallet
changing by robot.



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

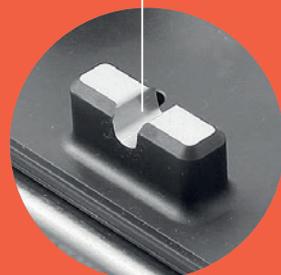


When loading heavy workpieces, a lifting
mechanism that operates on clamping/
releasing protects the references.

Connection block.

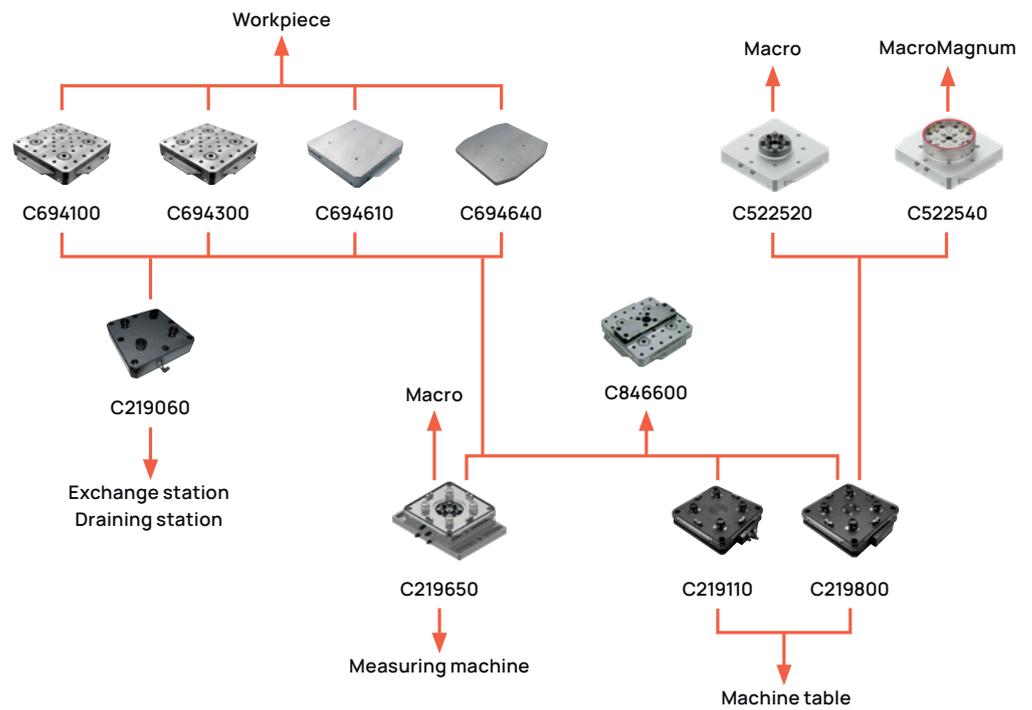
Spring-loaded, air-released clamping
mechanism.

Hardened, one-piece
(for maximum stability)
chuck body with
prisms for X and Y
centring. Has 4x90°
indexing.



Chuck-pallet interface completely
sealed against dirt
and swarf penetration.

GPS 240 – Chucks and pallets



Square chucks	Article number	Feature
Pneumatic automatic/manual	C219110	for manual and automatic machining operations
Pneumatic automatic/manual	C219650	build-in pneumatic Macro chuck
Pneumatic automatic/manual	C219800	connection from below, 2-fold air dock
Pneumatic automatic/manual	C210060	dummy chuck

Square pallets	Article number	Feature	Size (mm)
Cast aluminium 	C694100		240x240
Cast aluminium 	S694300	ground	240x240
Solid aluminium 	S694610		240x240
Solid aluminium 	C694640		300x300

 Pallet with spring-loaded pin.

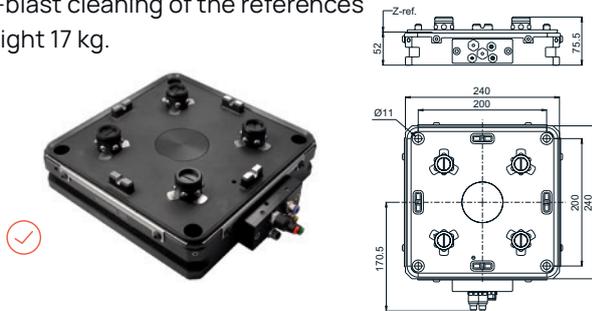
 Pallet with coined cams.

GPS 240 – Chucks

GPS 240 Chuck automatic, C219110

Pneumatic table chuck, mainly intended for applications in die-sinking EDM machines.

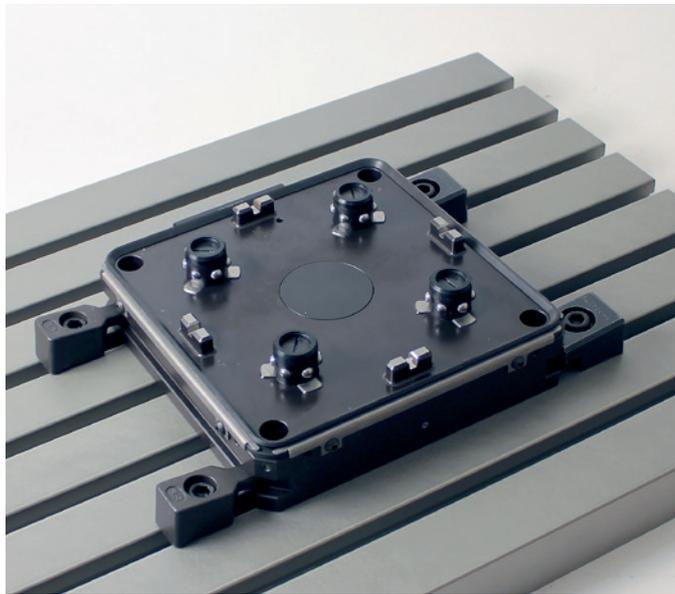
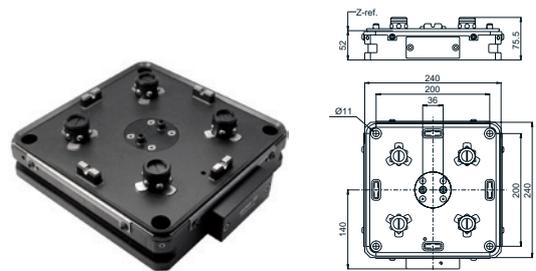
- Required air pressure 6 bars
- 5 air connections
- Repetition accuracy 0.002 mm
- Indexing accuracy 0.005 mm
- Clamping force 25,000 N/50,000 N
- Recommended control unit C810830
- Air-blast cleaning of the references
- Weight 17 kg.



GPS 240 Chuck automatic with 2-fold air dock, C219800

For manual and automatic machining operations.

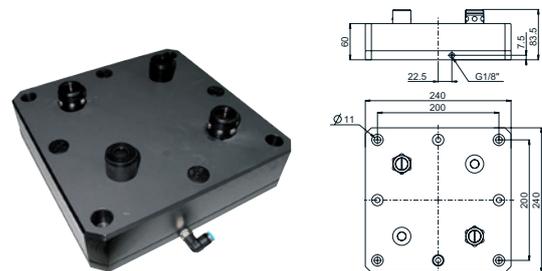
- Build-in height 52 mm
- Air connections positioned centrally on the underside (prism, Z-cleaning, clamping/releasing, turbo locking/ventilation)
- 2-fold medium connection
- Clamping force 25,000 N/50,000 N
- Weight 17 kg.



GPS 240 Dummy chuck, C210060

Dummy chuck for clamping a GPS 240 pallet on to an exchange or draining station.

- Required air pressure 6 bar.
- Weight 9.5 kg.

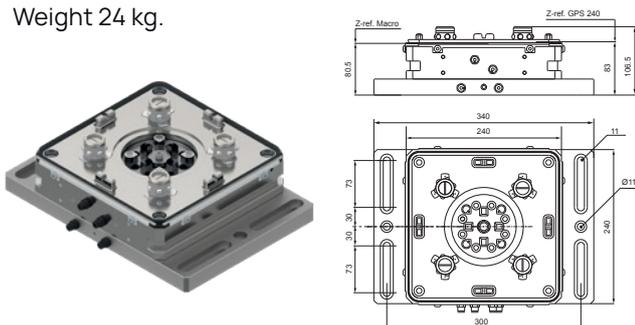


GPS 240 Pneumatic chuck with in-built Macro chuck, C219650

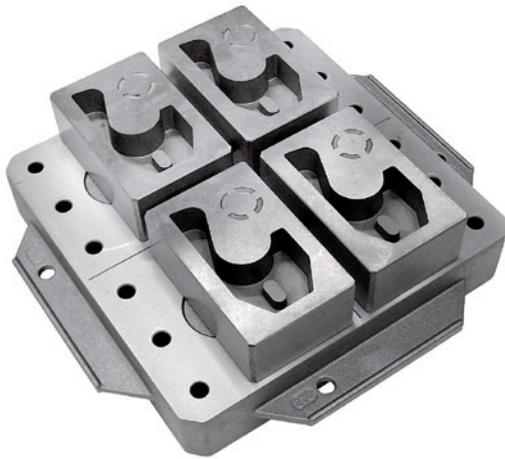
Pneumatic chuck with in-built Macro chuck. Intended mainly for measuring machines.

Using C219650, the Macro 54x54 mm and Macro 70x70 mm pallets can be mounted in GPS 240.

- Required air pressure 6 bars
- Air-blast cleaning of the references
- Weight 24 kg.



GPS 240 – Accessories



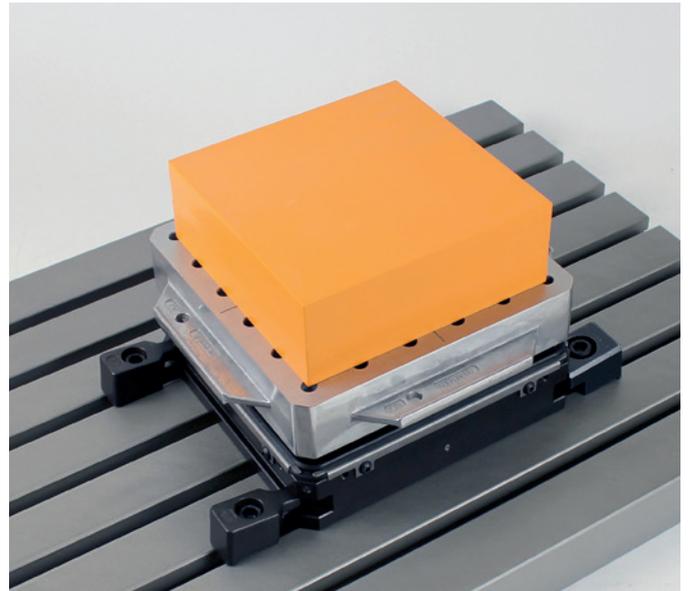
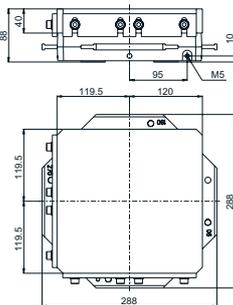
GPS 240 Magnetic table, C694260

High-precision magnetic plate for grinding and spark erosion work.

- Magnetic field height 5 mm
- Holding force 100 N/cm²
- Dimensions 240x240x88 mm
- Weight 23 kg.



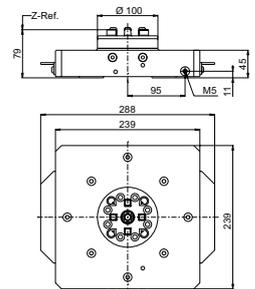
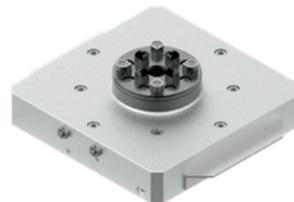
C694300



Pneumatic chuck adapter, GPS 240-Macro, C522520

Chuck adapter with in-built pneumatic Macro chuck for mounting in C219800.

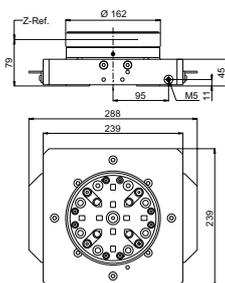
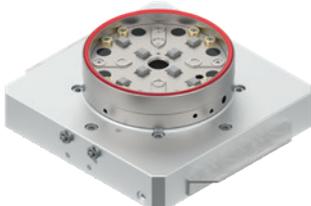
- Built-up height 79 mm
- X and Y-centring with springy cams, hardened, stainless
- Macro chuck 3R-SP24460
- Drawbar 3R-605.1 or 3R-605.4
- Adapted for automatic changing
- Weight 8.5 kg.



Pneumatic chuck adapter, GPS 240-MacroMagnum, C522540

Chuck adapter with in-built pneumatic Macro Magnum chuck for mounting in C219800.

- Built-up height 79 mm
- X and Y-centring with springy cams, hardened, stainless
- MacroMagnum chuck 3R-90809.03
- Drawbar 3R-605.1 or 3R-605.4
- Adapted for automatic changing
- Weight 11.7 kg.



Other chuck adapters GPS 240-GPS 70, C522810 GPS 240-GPS 120, C522800

-  Pallet with springy hardened cams.
-  Pallet with spring-loaded pin.
-  Pallet with coined cams.

GPS 240 – Accessories

GPS 240 Controller, C810830

Unit for controlling C219110 pneumatic chucks.

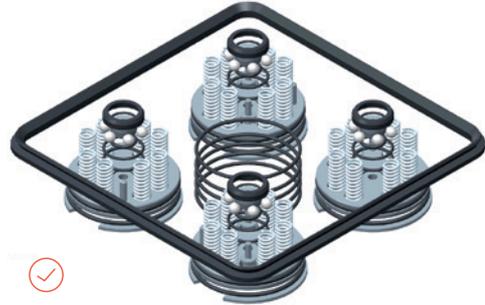
- 4 connections (X and Y location, air-blast cleaning of Z, open/lock, turbo/ventilation).



GPS 240 Spare parts set, S220000

Contains all elements for normal servicing.

- Suitable for all square chucks
- Recommended use is every 2 years for manual systems and annually for automated systems.



GPS 240 Chuck seal, C219007

The chuck seal is a wear part which should be replaced every three to six months.

- Material Viton
- Supplied singly.

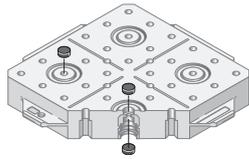


GPS 240 – Accessories

GPS 240 Seals, C531250

To seal the holes in the four clamping elements of pallets.

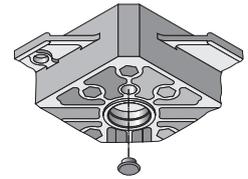
- Material elastomer
- Supplied in sets of 20.



GPS 240 Reference protectors, C531210

To protect pallet Z-references.

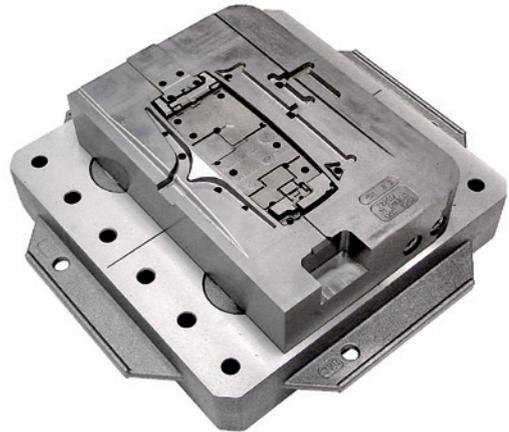
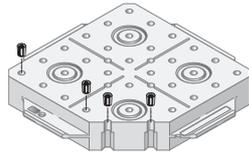
- Supplied in sets of 20.



GPS 240 Sealing plugs, C531500

Plugs for sealing GPS 240 pallets.

- Supplied in sets of 40.



Code carriers, 3R-863.01

With pre-programmed unique identity, designed for GPS 240 pallets.

3R-863.01-10

- Sets of 10.



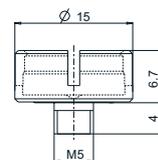
Code carrier, fixture, C960740

Fixture for code carrier 3R-863.01-10.

- The code carrier can be clicked into position
- Supplied in sets of 10.

C960745

- Supplied in sets of 50.



GPS 240 – User kits

GPS 240 Clamp strip kit, C810880-XX*

C810881 undrilled clamp strip (x2)

E010144 washer M10 (x4)

E010143 washer M8 (x4)

E000428 Allen screw M10x45 (x4)

E000354 Allen screw M8x45 (x4)

12 E040030 T-slot nut M10x12 (x4)

14 E040031 T-slot nut M10x14 (x4).

* When ordering, please state the dimensions of the required T-slot nut.



GPS 240 Presetting station, C810650

For aligning workpieces on GPS 240 pallets.

- Parallelism 0.005 mm
- Required air pressure 6 bars (± 1)
- Supplied with dial indicator, dial indicator holder and actuator.

