

GPS 240

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

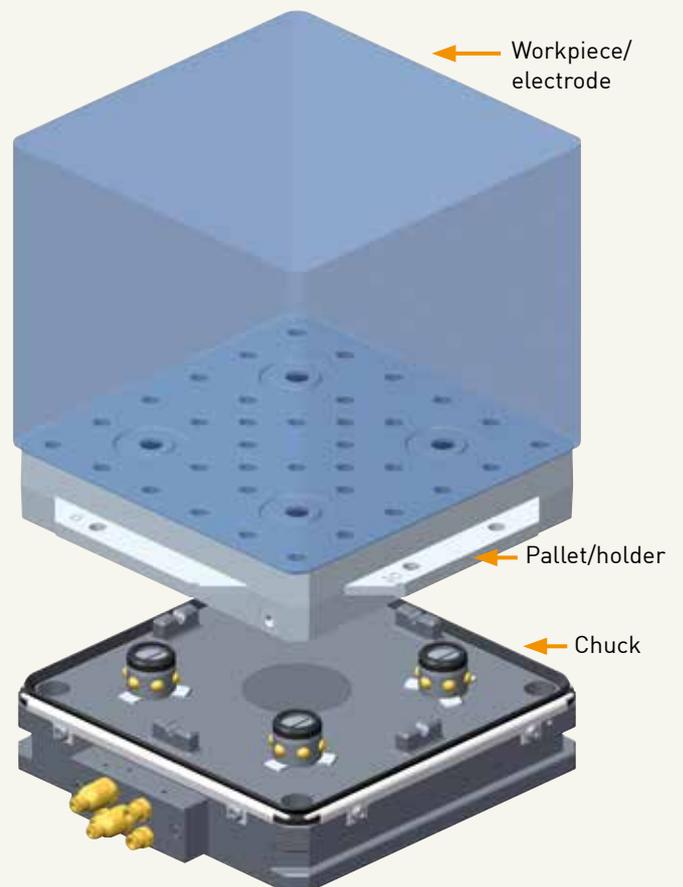
The machining zero point is defined by the centre of the chuck in the GPS 240 system. The chuck can be mounted on the machine table of any machine tool.

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

The economical, pressure-die-cast aluminium pallets are very light, making them 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. A lifting mechanism which operates on locking/opening protects the references when loading heavy workpieces.

- + Repetition accuracy – within 0.002 mm
- + Indexing accuracy – within 0.005 mm
- + Locking force – 30 000 N (with force boost 60 000 N)
- + Fixed index positions – 4x90°
- + Required air pressure, pneumatic chuck – 6 bar
- + Recommended max workpiece weight – 150kg.



GPS 240

Die-cast aluminium pallets with standardised hole pattern or solid aluminium pallets.

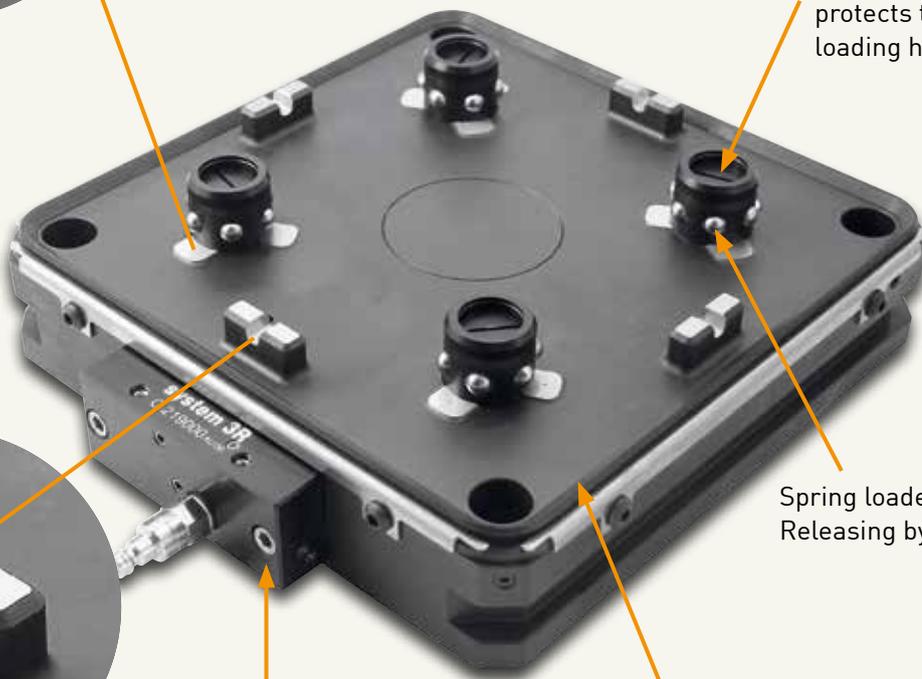


Pallet with handles for manual pallet handling or automated pallet change by robot.

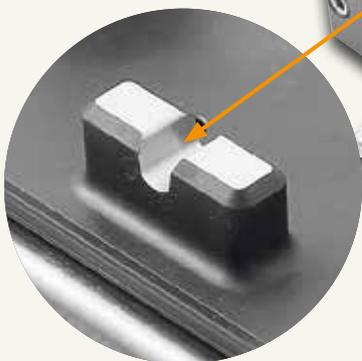


The Z-references are air-blast cleaned, through nozzles in the Z-references of the chuck.

A lifting mechanism which operates on clamping /releasing protects the references when loading heavy workpieces.



Spring loaded clamping mechanism. Releasing by air.

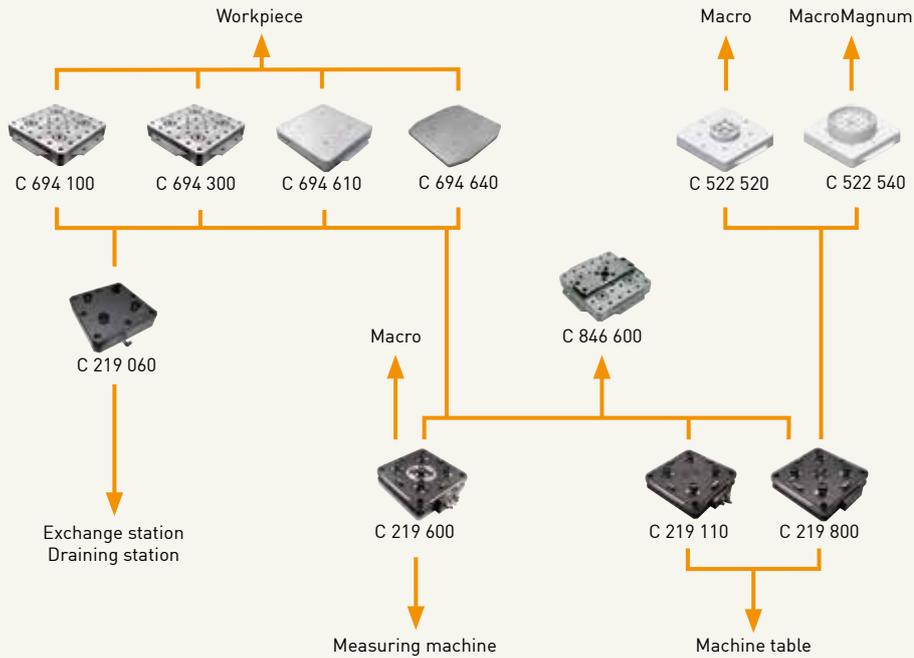


Hardened chuck body with prisms for X/Y centring made out of one piece for maximum stability. Indexing 4 x 90°.

Seal for a completely sealed chuck-pallet interface against dirt and swarf.

Connection bloc.

GPS 240 – Chucks



Chucks, square	Article number	Feature
Pneumatic automatic/manual	C 219 110	for manual & automatic machining operations
Pneumatic automatic/manual	C 219 600	built-in pneumatic Macro chuck
Pneumatic automatic/manual	C 219 800	connection from below, 2-fold Airdock
Pneumatic automatic/manual	C 210 060	dummy chuck

Pallets, square	Article number	Feature	Size (mm)
Cast aluminium	⊙ C 694 100		240x240
Cast aluminium	⊙ S 694 300	ground	240x240
Solid aluminium	/// S 694 610		240x240
Solid aluminium	/// C 694 640		300x300

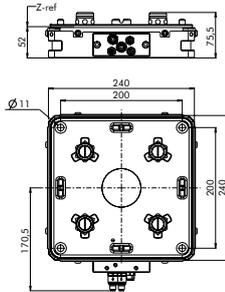
/// Pallet with coined cams. ⊙ Pallet with spring-loaded pin.

GPS 240 – Chucks

GPS 240 Chuck automatic, C 219 110

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

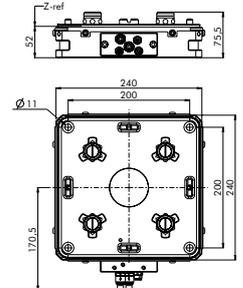
- Required air pressure 6 bar
- 5 air connections
- Repetition accuracy 0.002 mm
- Indexing accuracy 0.005 mm
- Clamping force 30 000 N/60 000 N
- Recommended control unit C 810 830
- Air-blast cleaning of the references
- Weight 17 kg.



GPS 240 Chuck automatic with 2-fold Airdock, C 219 800

For manual and automatic machining operations.

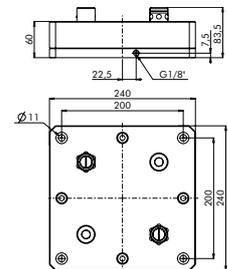
- Builing-in height 52 mm
- Air connections positioned centrally on the underside - prism - Z-claing - clamping/releasing - Turbo/ventilation
- Medium connection 2-fold
- Clamping force 30 000 N/60 000 N
- Weight 17 kg.



GPS 240 Dummy chuck, C 210 060

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

- Required air pressure 6 bar
- Weight 9.5 kg.



GPS 240 Pneumatic chuck with built-in Macro chuck, C 219 650

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

The following pallets can be mounted in GPS 240 by means of C 219 650: Macro 54x54 mm and Macro 70x70 mm

- Required air pressure 6 bar
- Air-blast cleaning of the references
- Weight 22 kg.



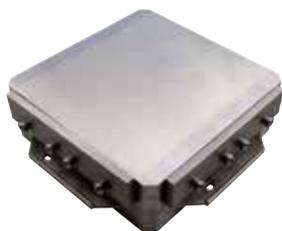
GPS 240 – Accessories



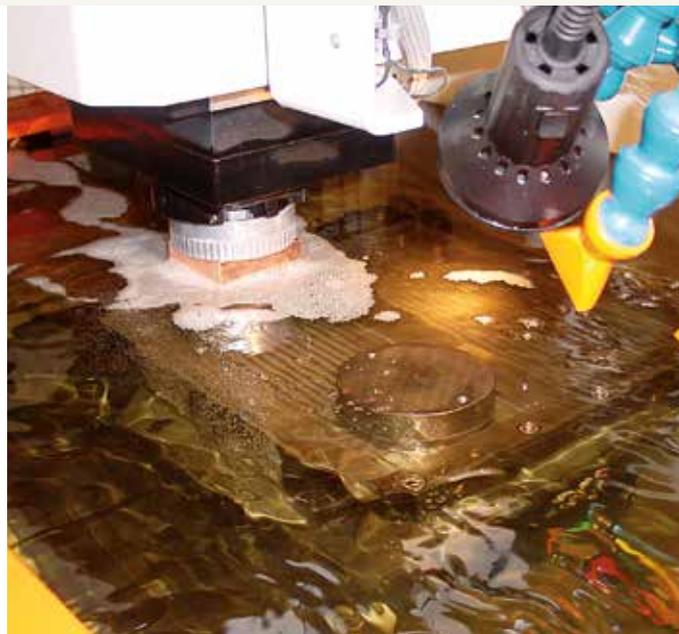
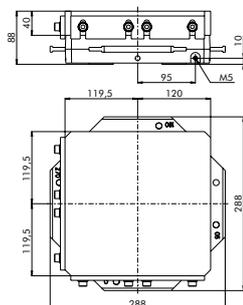
GPS 240 Magnetic table, C 694 260

High-precision magnetic plate for grinding work and for erode.

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



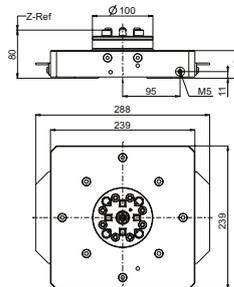
C 694 300



Pneumatic chuck adapter, GPS 240-Macro, C 522 520

Chuck adapter with built-in pneumatic Macro chuck for mounting in C 219 800.

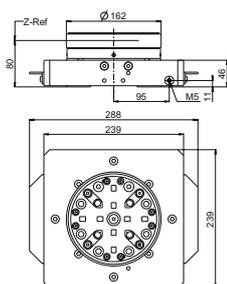
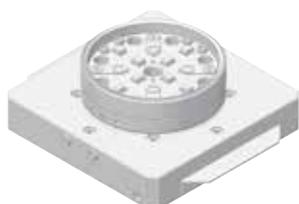
- Built-up height 80 mm
- X/Y-centring with springy cams, hardened, stainless
- Macro chuck 3R-24460
- Drawbar 3R-605.1 or 3R-605.4
- Adapted for automatic changing
- Weight 8.5 kg.



Pneumatic chuck adapter, GPS 240-MacroMagnum, C 522 540

Chuck adapter with built-in pneumatic Macro Magnum chuck for mounting in C 219 800.

- Built-up height 80 mm
- X/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.



 Pallet with spring hardened cams.

 Pallet with spring-loaded pin.

GPS 240 – Accessories

GPS 240 Controllers

C 810 830

Unit for controlling pneumatic chucks C 219 110.

- 4 connections – X/Y-locating – air-blast cleaning of Z – open/lock – turbo/ventilation.



C 810 850

Unit to control two pneumatic chucks.

- 5 connections – X/Y-locating – air-blast cleaning of Z – open/lock – turbo/ventilation – ventilation tube.



C 810 810

Unit for controlling pneumatic chucks C 219 600.

- 6 connections – X/Y-locating – air-blast cleaning of Z – clamping/releasing – turbo/venting – Macro clamping/releasing – Macro air-blast cleaning of Z / turbo



GPS 240 Spare parts set, S 220 000

Contains all elements for a normal service.

- Suitable for all square chucks
- Recommendation: every 2 years if used manually and annually if used in the automation system.



GPS 240 Chuck seal, C 219 007

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

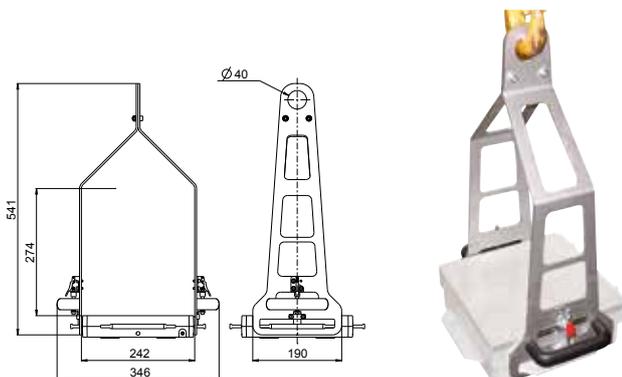
- Material Viton
- Supplied singly



GPS 240 Lifting grip, C 810 960

Lifting gear for handling GPS 240 pallets 240x240 mm.

- Weight 2.9 kg.

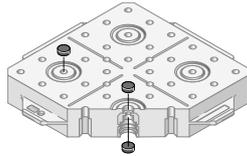


GPS 240 – Accessories

GPS 240 Seals, C 531 250

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

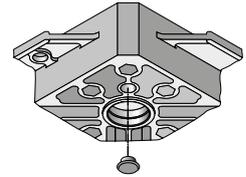
- Material elastomer
- Supplied in sets of 20.



GPS 240 Reference protectors, C 531 210

To protect the Z-reference of the pallet.

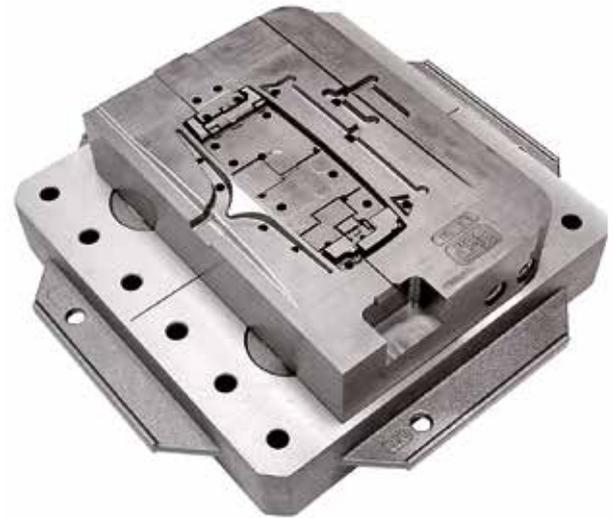
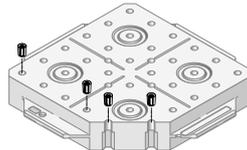
- Supplied in sets of 20.



GPS 240 Sealing plugs, C 531 500

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

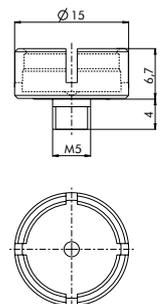
- Sets of 10 pieces.



Code carrier, fixture, C 960 740

Fixture for code carrier 3R-863.01-10.

- The code carrier can be clicked into position.



GPS 240 – User kits

GPS 240 Clamp kit, C 810 870-XX

E 030 220 clamp (x4)
E 010 144 washer M10 (x4)
E 010 143 washer M8 (x4)
E 000 428 Allen screw M10x45 (x4)
E 000 354 Allen screw M8x45 (x4)
01 E 040 030* T-slot nut M10x12 (x4)
02 E 040 031* T-slot nut M10x14 (x4)
03 E 040 032* T-slot nut M10x16 (x4)
04 E 040 033* T-slot nut M10x18 (x4)
05 E 040 020* T-slot nut M8x12 (x4)
06 E 040 021* T-slot nut M8x14 (x4)
07 E 040 022* T-slot nut M8x16 (x4)
08 E 040 023* T-slot nut M8x18 (x4)

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



GPS 240 Clamp strip kit, C 810 880-XX

C 810 881 undrilled clamp strip (x2)
E 010 144 washer M10 (x4)
E 010 143 washer M8 (x4)
E 000 428 Allen screw M10x45 (x4)
E 000 354 Allen screw M8x45 (x4)
01 E 040 030* T-slot nut M10x12 (x4)
02 E 040 031* T-slot nut M10x14 (x4)
03 E 040 032* T-slot nut M10x16 (x4)
04 E 040 033* T-slot nut M10x18 (x4)
05 E 040 020* T-slot nut M8x12 (x4)
06 E 040 021* T-slot nut M8x14 (x4)
07 E 040 022* T-slot nut M8x16 (x4)
08 E 040 023* T-slot nut M8x18 (x4)

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



GPS 240 Presetting station, C 810 650

For alignment of workpieces on GPS 240 pallets.

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

