PALLETIZING SYSTEM 8000 FOR MACHINE TOOLS

60000 N Clamping force
0.002 mm Wiederholgenauigkeit
stabil, kompakt, wirtschaftlich
Operation
Most tools are supplied with an operating guide. Correct operation cannot be ensured and danger to personnel and machine cannot be excluded unless these operating instructions or information given in this catalogue are observed.

Accuracy
The individual tool planes incorporate hardened and precision ground X & Y centering prisms and separate Z-supports. This assures positioning accuracy of each tool with a repetitive accuracy (consistency) of < 0.002 mm (0.00008") measured 100 mm below the tool plane.

Service and Maintenance
Since the Fixturing system is subject to mechanical and chemical influences, maintenance and service has to be performed with special care.

Technical Changes
All products shown in this catalogue are subject to ongoing improvements and developments; we reserve the right to make modifications without notice.

Quality ISO 9001 and EN9100
All products of HIRSCHMANN GmbH are manufactured using the latest production methods. All products are submitted for ISO 9001 and EN9100 (air and space industry standard) quality assurance.

Warranty
We provide a 12 month warranty for all Fixturing system parts; starting from invoice date, and assuming correct use and maintenance as specified have been observed. The warranty is restricted to replacement or repair, free of charge, of any defective parts. Claims arising from improper use or handling shall not be considered. Warranty claims must be submitted in writing.
Palletizing System 8000

Application
The HPS320 is used as reference system on milling and drilling machines, surface and jig milling machines and sinking EDMs for fixture and workpiece palletizing. The pallets can be changed manually or automatically with the HIRSCHMANN Workpiece Changer EROBOT, EROBOT/flex and Robot Sytems. The compatibility with the Fixturing System 4000 for wire EDMs and the Fixturing System 5000 for sinking EDMs is guaranteed with the Pallet Clamper H8.11.32M with centrical Clamper.

Economic Efficiency
To compete in a global market, every effort must be made to utilize the full potential of today’s “State of the Art” production systems. When workpieces are clamped manually in the machine tool without using a quick changing system, valuable machine set-up time is wasted and eroding profitability is extending the machine cost amortization.

Ein durchschnittlicher Werkstückwechsel dauert ohne ein Palettiersystem ca. 18 - 20 Minuten, mit einem Palettiersystem max. 2 Minuten. Dies ergibt eine Rüstzeiteinsparung von ca. 90%.

The optimization of the manufacturing process through the use of the Palletizing System 8000 guarantees higher output of the machine tool. One shift operation/day projected to 220 working days/year gives a set-up time reduction of ca. 58 hours. This is, at a hourly rate of 70 EUR, a benefit of ca. 4000.- EUR. At two or more shift operations the benefit is analogical multiplied.

Employment of the Palletizing System 8000 guarantees high productivity of all machine tools.
Characteristics:
- Highly precise, positive clamping
- Integrated x-y-z-references
- Reference elements of hardened steel
- Manual and automatic change
- Solid, compact, economical

Technical data:
- Pallet sizes (l×w)  320×320 mm (12.60”×12.60”)
- Repetitive accuracy  0.002 mm (0.00008”)
- Indexing accuracy (4×90°)  0.01 mm (0.0004”)
- Loading weight up to  300 kg (660 lbs)
- Clamping force  60000 N

**H 8.11.32 Pneumatic Pallet Clamper**
Positioning and repetitive accuracy 0.002 mm (0.00008”)
Indexing accuracy 4×90°  0.01 mm (0.0004”)
Clamping force (additional pneum. assistance)  60000 N
Max. perm. workpiece weight  300 kg (660 lbs)
Weight approx.  34 kg (75 lbs)
Compressed-air  6 - 8 bars
3m pneumatic hoses are included in the delivery.

**H 8.11.32M6 Combined Pallet Clamper**
with centrically locate manual clamper **H 6.11.10.1** for the pallets and holders of the Fixturing System 5000 for Sinking EDM with clamping journal **H 6.611** (not for pallet H8.180 and the MINIFIXplus electrodes).
Positioning and repetitive accuracy 0.002 mm (0.00008”)
Indexing accuracy 4×90°  0.01 mm (0.0004”)
Clamping force (additional pneum. assistance)  60000 N
Clamping force (without pneum. assistance)  20000 N
Clamping force of the center clamper  1500 N
Max. perm. workpiece weight  300/50 kg (660/110 lbs)
Weight approx.  35 kg (78 lbs)
Compressed-air  6 bars
3m pneumatic hoses are included in the delivery.

**H 8.11.32M Combined Pallet Clamper**
Same as H8.11.32M6 with centrically locate manual clamper **H 8.11.20** for the pallets and holders of the Fixturing System 5000 for Sinking EDM and the MINIFIXplus electrodes with clamping journal **H 5.611** (not for pallet H8.180).
Common features

- Four centering and clamping elements of hardened steel and apart from each other
- Covered and hardened x-y-z reference elements
- Manual and automatic change

### H8.320 Pallet
Aluminium pallet, ground, without clamping bores.

- Flatness: < 0.01 mm (0.0004")
- Parallelism: < 0.01 mm (0.0004")
- Dimensions: 320x320x56 mm (12.6x12.6x2.2")
- Weight approx.: 14 kg (31 lbs)

### H8.320PS5 Pallet with Clampers H8.16
Aluminium pallet with five Pallet Clampers H 8.16 for the fixture of all holders and pallets of the Fixturing System 5000 for Sinking EDMs with clamping journal H 5.611..

- Flatness: < 0.01 mm (0.0004")
- Parallelism: < 0.01 mm (0.0004")
- Dimensions: 320x320x92 mm (12.6x12.60x3.62")
- Weight approx.: 18 kg (40 lbs)

### H8.320PS5.6 Pallet with Clampers H6.16
same as H8.320PS5 but with clampers for pallets and holders with clamping journal H 6.611.

Pallets with thread bores and T-Groove are also deliverable on request.
**H4101 Pneumatic control unit**

Manual control unit for activating (opening, cleaning, clamping) the pneumatic clamps.

Working pressure
max. 10 bars

---

**H 8.32.12 Foodswitch**

For opening or closing the pneumatic pallet clamps manually.

---

**H 8.32.34 Small Seal**

Spare part for Pallet Clamps H.8.11.32...

---

**H 8.32.35 Large Seal**

Spare part for Pallet Clamps H.8.11.32.
Handling Devices, Robots

HIRSCHMANN, an Automation integrator, offers complete turnkey (from design to install) automated cells for CNC machining centers, EDM’s, measuring machines etc. Robots can be configured to load multiple positions on machine tables, load electrodes on sink EDM’s, wash parts after machining etc. They can be mounted on tracks or gantry’s to service multiple machines.

**EROBOT**

For automatic electrode and workpiece exchange.

- Electrode magazine places: max. 60
- Workpiece magazine places: up to 24
- Transport weight: max. 140 kg

Equipment details and dimensions upon request.

**EROBOTflex**

The HIRSCHMANN EROBOTflex is a modular configurable and universal applicable handling unit for the loading of one or several machines with workpieces and tools. The modular design and the flexible composition possibilities of the magazine levels in turning magazines or racks enables an universal adaption to the type of clamping system, the number of magazine places and the available storing space.

- Transfergewicht: max. 125 kg

**Robotic Cells using 6-axes Robots**

HIRSCHMANN offers complete layout, design and development of turn-key installations utilizing the benefits of 6-axes robots.

Specifications and technical details are application dependant.

The pallets H8.320.. can for automatic changing be equipped with different gripper systems.
PRODUCT OVERVIEW

**FIXTURING SYSTEM 4000**
for Wire EDM

**REFERENCE SYSTEM 5000**
for Sinking EDM

**FIXTURING SYSTEM 9000**
Modular Zero-Point Fixturing

**FLEXIBLE AUTOMATION SOLUTIONS**
for Machine Tools

**PALLETTIZING SYSTEM 8000**
FOR MACHINE TOOLS

Representatives, consultants and distributors in:

- Australia · Austria
- Belgium · Brazil · Bulgaria
- Canada · China · Croatia
- Czech Republic
- Denmark
- Finland · France
- Great Britain
- Hong Kong · Hungary
- India · Indonesia · Israel · Italy
- Japan · Korea · Malaysia
- Netherlands · Norway · New Zealand
- Philippines · Poland · Portugal
- Singapore · Slovakia · Slovenia
- Spain · Sweden · Switzerland
- Taiwan · Thailand · Turkey
- United States

Catalogues upon request

HIRSCHMANN GMBH · KIRCHENTANNENSTRASSE 9 · D-78737 FLUORN-WINZELN
FON +49 (0)74 02 183-0 · FAX +49 (0)74 02 18310 · www.hirschmann-gmbh.com · info@hirschmann-gmbh.com