# EUROMATIC attains to ever higher levels of excellence in pharma



#### **ORE VALUES**

focuses Euromatic on the design and realization of complete production units for converting glass tubes into containers for the pharmaceutical industry. This critical approach manifests itself in a driving force that won't be satisfied with past achievements. Such is the foundational innovative spirit that distinguishes the Euromatic team. The company's technologically advanced facilities, its wealth of experience and its continuous investment in human resources are all cornerstones that have it meeting customer needs while being always

Euromatic is now a solid, wellorganized group with facilities spanning over 13.000 square meters and with 105 employees operating in technical, sales and administrative departments - all intensely loyal to the company, which is accounted for personnel turnoby the low ver. Highly-qualified design staff equipped with significant expertise are guaranteeing the best synergy between mechanics and electronics for both equipment efficiency and production quality. Euromatic customers are market leaders within the field of primary packaging for pharmaceutical glass and the company's equipment is commissioned by some of the best glass converting companies around the world.

#### **PRODUCTS**

Euromatic's portfolio of products reflects its strong focus on glass conversion machines for the pharmaceutical industry. The company's tube converting equipment covers the complete range of pharmaceutical products, from vial to cartridge, syringe to ampoule glass conversion machines - thus providing a complete range of solutions for many



A strongly innovative approach, a consolidated experience and commitment to quality have been the impetuses for an increase in demand from international markets as well as the true motivation behind customer loyalty that makes the company a leader in its field.

## **PHARMA**

glass processing machine needs.

#### **ENGINEERING**

Euromatic is a company known worldwide for its glass transformation production processes. Its engineering and R&D teams are dedicated to developing technological state-of-the-art solutions for converting glass tubes into vials, cartridges, syringes and ampoules. The complete project cycle is internally-managed and directly handled as follows by highly-specialized human resources:

- feasibility study, technical and economic proposal;
- time planning;
- design activity;
- production of parts;
- logistics;
- assembly, cabling & software development;
- FAT/SAT activity;
- after sales service.

#### **TUBE-LOADER**

Euromatic's automatic vertical tube loader is suitable for accepting six glass tube bundles in just 1.2 square metres of floor surface. The Lambda tube loader can be integrated for both index and continuously forming machine carousels. Glass bundles are easily loaded onto the revolving table in vertical position by an operator thus ensuring frictionless contact

between tubes. The automated system is provided to pick one tube at a time from the bundle gently so as to avoid potential tube damage, with glass-to-glass contact avoided throughout the entire process. A superior PLC structure provides recipe storage and recovery for a considerable reduction in change format size and start up.

#### **FORMING MACHINES**

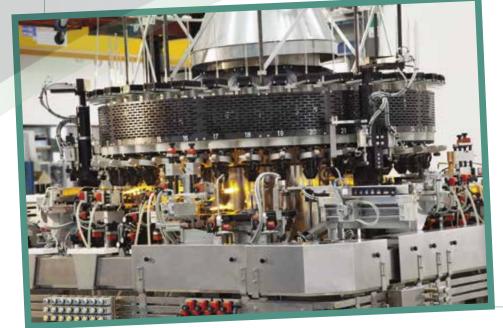
Thanks to decades-long experience in the forming process, Euromatic offers a sizable range of different forming machines all designed and distinguished by various special features:

#### Zeta 18-10 for vials

- Outer diameter: 10.0 30.0 mm (other working ranges upon request)
- Total length: 27.0 100.0 mm
- Product geometry: ISO 8362-1, ISO 11418-7 and blow back
- Machine performance: 3.600 cycles per hour
- Single indexed motion
- No glass-to-glass contact
- Tube economizer
- 18 chucks for the main carousel
- Self-centering chucks
- Plug cooling system

#### Zeta 16-10 for vials

- Outer diameter: 10.0 - 32.0





mm (other working ranges upon request)

- Total length: 27.0 100.0 mm
- Product geometry: ISO 8362-1, ISO 11418-7 and blow back
- Machine performance: 3.000 cycles per hour
- Single indexed motion
- No glass-to-glass contact
- Tube economizer
- 16 chucks for the main carousel
- Self-centering chucks
- Plug cooling system

#### Tau 36 for ampoules

- Outer diameter: 8.75 22.5 mm (other working ranges upon request)
- Total length: 60.0 160.0 mm
- Product geometry: Din/ISO and Marzocchi
- Machine performance: 7.200 cycles per hour
- 36 chucks
- -In-line first bottom of a new tube
- One stem system



- Solid structure for the main body

#### Kappa 36-30 for cartridges

- Outer diameter: 8.65 12.6 mm (other working ranges upon request)
- Total length: 35.0 95.0 mm
- Product geometry: Dental and insulin cartridges
- Machine performance: 7.200

cycles per hour

- Single indexed motion
- 3 out
- In-line dimensional control
- Self-centring chucks
- Plug cooling system

## AFTER-FORMING WORKING LINE

Euromatic automatic after forming working lines are suita-

ble for connection with any kind of upstream forming machine and conveyor line speed is automatically synchronized with the forming machine speed. All the equipment is CE-compliant as standard. Guards and doors are safety interlocked and the safeguarding system monitors the position of a guard or gate. It is then used to power off, control



personnel access and prevent the machine from powering on when the guard is open.

All the handling systems have been specifically developed to avoid glass to glass-to-glass contact and to hold the containers in a proper way in order to elude possible marks on the surface of the product. Furthermore, pick and place are designed with special features in order to handle the containers from the external surface gently - nothing must be admitted inside the container.

The after-forming working line can also perform the following functions, if required:

- dimensional camera system to inspect internal diameter and total length of the vial;
- system of electro-mechanical gauging heads to detect the total length of the vial and/or concavity of the bottom;
- servo-motor driven silk screen printing station;
- optical sensor to measure bottom thickness and concavity.

#### **ANNEALING LEHRS**

Annealing lehrs can be electrically heated or gas-heated. Here Euromatic lehrs are designed with special features that guarantee a homogeneous temperature distribution inside the chamber through the different product lanes/rows. The products are positioned on a corrugated mesh belt carrier system made of transversal flight channels to allow the products to be placed in a horizontal position, slightly inclined, with V-shaped attachments that support the vial neck. The channel trays are designed to cover the product size range, thereby avoiding the need for a changeover. Thanks to a controlled heating and cooling process, the annealing lehr allows for a perfect release of residual stress of the glass products. The annealing curve perfectly represents the required heating time to reach the above annealing point temperature while being kept constant for a set time period. Following this, the atoms have the possibility to rearrange themselves. The annealing lehr has been developed with thermocouFeasibility study, technical & economical proposal

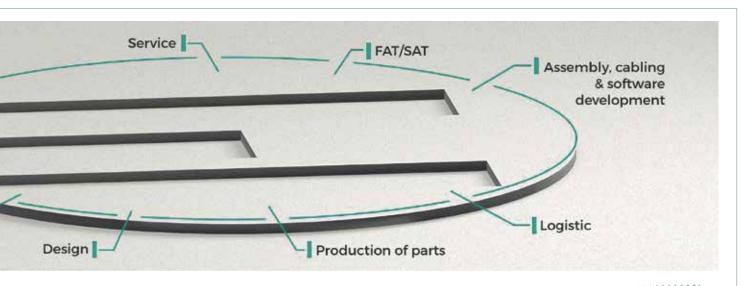
Time planning

ples installed in specific positions in order to detect the temperature in those areas. The loading and unloading systems at the lehr inlet and outlet are equipped with servo-driven motors with self-teaching functions to provide easy changeover from one size to another.

The annealing lehr, if required, can also integrate:

- sampling stations both at the lehr inlet and outlet to collect samples of containers during production without stopping the equipment;
- visual camera system for print inspection.





# AUTOMATIC PACKING MACHINE

The automatic packing machine is CE-compliant as standard. The glass products are transferred from the annealing oven, thanks to a pick and place system which moves the products without glass-to-glass contact and via positive handling.

The automatic packing unit can handle different box sizes according to customer needs. The different format sizes are managed by recipes with a friendly user interface. Upload and recovery of the recipes includes the possibility to have a quick format size change and start up in order to reduce downtime.

The handling systems are all developed to ensure glass-to-glass contact is avoided.

The indexed revolving table can handle five trays.

If required, the automatic packing unit can also perform the following functions:

cosmetic inspection system via camera to detect such imperfections as cracks, air lines, scratches, chips, etc. for the finish, body and bottom.



Euromatic offers both after-sales service as well as assistance to respond to customer needs. Not only. Remote analysis and diagnostics enables the company's technicians to guide maintenance staff to support customer requests.

- Offered services include:
- Telephone support to our customers' staff;
- Remote assistance in collecting data on equipment status as well as correcting malfunctions without onsite intervention;
- Intervention at customer premises, saving time thanks to preliminary analysis and consultation of diagnostic messages.



### **EUROMATIC**

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