

Filling Machine

E-PS120A

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Pure-Pak[®] Aseptic System

- High machine output up to 12,000 cartons/hour
- Optimized machine footprint with integrated cap application
- Highly flexible filling of 3 sizes design changes within a few minutes
- Minimal manpower required semi-automatic blank feed magazine
- fully automatic cleaning
- Fully aseptic technology
- Advanced sealing properties
 due to inductive top sealing
- Complete data recording



Trendsetting in Aseptic

The new generation of Elopak's filling lines.

With the development of the first fully aseptic gable top system, Elopak is pursuing the strategy of highly functional packaging concepts, offering convenient and cost-attractive packaging solutions for high and low acid products in ambient distribution.

Elopak's new **Pure-Pak® Aseptic filling concept** is designed to meet today's consumers' higher expectations with regard to product design, functionality and quality as well as the industry's demand for maximum efficiency and exceptional reliability.

This aseptic filling machine (E-PS120A) meets all market requirements and offers unprecedented performance. The E-PS120A sets new standards in the market and ensures fully aseptic filling technology: from the loading area to the outfeed belt.

The E-PS120A benefits from its modest space requirements. The effectiveness is outstanding, thanks to an output capability of up to 12,000 cartons per hour. The machine is not only highly efficient, but also highly flexible, changeover of designs and sizes can be managed rapidly.

The machine is easily accessible and can be operated with minimum manpower. The machine's versatile design makes it capable of processing high as well as low acid products.

The inductive top sealing technology and the integrated cap welding allow for a highly accurate and perfectly sealed carton packaging.

Pure-Pak[®] Aseptic System

10,250 mm



Minimum floorspace required

incl.

- semi-automatic blanks feeding
- integrated cap applicator



Footprint 22 m²

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Engineered with passion – designed for success.

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ELOPAK



Blank Feeding

Requires minimum manpower due to

- semi-automatic blank feeding
- one control loading station
- storage of 4,000 blanks in total
- 20 min. of buffer capacity within conveyor belt





Blank Wheel

Space-saving

 as no external cap applicator is needed

More accurate cap application

· due to inside cap applicator

Automatic discharge of capless blanks

Improved hygienic performance

- · cap-welding with ultrasonic energy
- de-duster to remove dust (PE, paper fibers, particles)



Bottom Mandrel

More robust bottom seal and optimized energy consumption • due to improved bottom folding

and shorter sealing time

Compact design enables space for the aseptic chamber

- short distances
- servo-controlled drive system
- integrated overbreaker to improve carton shape





The machine is made of 6 modules



The filling machine

This offers a multitude of unique benefits in manufacturing, assembly, operation and maintenance:

- easily accessible e.g. for maintenance
- easy to transport (module fits into standard container)
- easy to assemble and disassemble



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Chain Unit:

- blanks double folding ensures equal folding characteristics
- pocket design for reliable carton transport

Aseptic Chamber:

Small aseptic chamber unit guarantees

- fully aseptic performance with well proven $\rm H_2O_2$ 35 % vapor sterilization system
- very accurate filling due to advanced filling system
- controlled sealing properties, less space, improved energy consumption due to inductive top sealing units
- less manpower required due to easy, automatic and effective cleaning of aseptic chamber (incl. internal foam cleaning system)

Outfeed Conveyor:

Flexibly adjustable to customer's needs

- upright carton transport
- ejection of wrongly filled cartons

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ELOEE – Elopak Overall Line Equipment Effectiveness

Data capturing system embedded as a standard. Reporting system optional.

Central data storage with remote access to reports and databases. Integrated operator touch screen interface provides easy access to all dashboards, statistics and error messages. Integration of all up- and downstream equipment and multi-line option.

Technical Data Inline Operating Unit

- 15" LCD touch screen
- Industrial PC / SSD Drives / Microsoft® Operating Systems Microsoft® SQL Database
- Ethernet Switch / Cable and fiber optic connection to the network
- Wireless Bar Code Reader
- WEB based dashboard access

Data Optional

- ELOPAK Maintenance contract (recommended)
- ELOPAK Backup and recovery system
- ELOPAK Remote access and central data hosting service
- ELOPAK Spare part package
- ELOPAK System and user training
- ELOPAK Client license

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Together we make packaging work



The mark of responsible forestry

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Machine standard equipment:

- · Blank magazine with 4,000 blanks storage capacity
- · Cap supply system on top of the machine
- Integrated cap application by ultrasonic welding
- Bottom sealing by hot air
- Carton transfer chain with fix pockets (each pocket contains 8 cartons)
- Carton sterilization by 35 % peroxide
- 1 step filling system with 8 fillers in total
- · Top sealing by inductive heating system
- · Full automatic cleaning system of aseptic chamber
- Integrated Foaming In Place (FIP) Ecolab Unit
- HEPA clean-air system
- · Integrated valve cluster on top of the machine
- Integrated Control System with PLC
- Data Capturing system ELOEE
- CE conformity

Machine optional equipment:

- Nitrogen injection after filling
- Spare part kit

Filling specifications:

Production speed:

Up to 12,000 cartons per hour Maximum speed depends on product to be filled

Product applications: Liquid milk, juice (fruit & vegetable)

Filling temperature: 18 – 25 °C

Filler accuracy: +/- 2 g

Machine dimensions and weight:

- Machine Footprint (I x w x h): 10.2 x 2.0 x 5 m
- Footprint air supply unit (I x w x h): 2.7 x 1.6 x 1.7 m
- Room height required: ~ 7 m
- Installation floor space requirement: $\sim 60\ m^2$
- Shipping dimensions: 40-foot containers
- Machine weight: ~ 18,500 kg
- Carton discharge height: 1.4 m

Packaging specifications:

Package volume and dimensions: Standard cross-section 70 x 70 mm

Carton configuration: Pure-Pak[®] Classic Pure-Pak[®] Diamond

Pure-Pak[®] Sense

Standard metric sizes: 500 ml, 750 ml, 1,000 ml

Board types: Aluminium board

Opening features: Pure-Twist® 2U, Pure-Twist® X, Pure-Twist® Optima

Utility requirements:

Product requirements: Product supply pressure: 100 kPa +/- 50 kPa

Electrical power requirements:

400 / 230 V, 50 Hz, 3 phase / N Permissible voltage variation within +/- 3 % Connected load: 206 ampere Consumption during production: 80 kW/h

Compressed air:

Minimum supply pressure: 0.7 MPa Consumption 1,000 NI/min.

City Water: Supply temperature ambient Supply pressure : 300 kPa Consumption: 2 l/min.

Steam, food quality (for SIP): Saturated steam pressure: 300 – 400 kPa Steam pressure min. 500 kPa Capacity: 60 kg/h, min 134°C

H₂O₂ Consumption usage: 35 % H₂O₂: 5,2 l/h at 12,000 cph 35 % H₂O₂: 4,4 l/h at 8,800 cph

CIP (customer CIP): Medium temperature: 60 – 80 °C Supply pressure: 250 kPa Consumption: 16,000 l/h

FIP unit:

Water temperature: 40 – 60°C Supply pressure: 300 kPa Consumption: 7 – 100 l/min **Cooling Water:** Supply temperature: < 6 °C Supply pressure: 300 kPa Max. cooling capacity: 25 kW (with delta T=5K) Max. flow: 70 l/min