



# Elo Pak's new filling machine platform for fresh products

S-PSF70UC • S-PSF140UC • S-PLF50UC

# The flexible Shikoku filling machine platform

*Elopak's new filling machines S-PSF70UC - S-PSF140UC - S-PLF50UC are the first ones offering a new flexible platform for fresh, pasteurized and ESL processed products.*

These efficient filling machines can fill up to 14.000 cartons per hour (cph) depending on customer requirements and carton configurations used. Due to flexibility features, the machines offer automatic size changes and have the capability of producing up to 6 present sizes and three different carton shapes.

With quick and easy changeovers between products, carton design and sizes, a short lead time is guaranteed providing maximum flexibility in fast moving markets. With a new hygienic design, the Elopak's new filling machines enable a more secure hygienic performance for maximum product quality.

They incorporate low-concentration hydrogen peroxide spray (2 %) system, followed by UV-light exposure

and air drying. This reduces the peroxide consumption while still complying with the carton decontamination requirements.

A more compact design, with no standalone auxiliary components other than cap feeder, CIP unit and Elofoam unit, give reduced machine footprints. The combination of low utility consumption whilst maintaining high flexibility functionalities are the extra features that give the new Elopak filling machine platform its true competitive edge.

The machines are smarter and more modern for more products, more carton configurations and therefore more opportunities in ever demanding markets.



# Automatic reports on production line data

*State-of-the-art report system to enhance efficiency and effectiveness of filling equipment.*

The ELOEE System (Elopak Line Overall Equipment Effectiveness) is a system that generates automatic reports on production, technical performance and quality of the filling equipment. It is designed to capture all necessary production line data for key production indicator, CCP's, downtime reason, traceability, action log, quality factors, and more.

With central data storage, the ELOEE System provides Production, Technical and Quality Managers remote access to establish detailed reports. The report will give a detailed view of production runs as well as action plans to maintain and raise production capacity.

As a decision support tool it contributes to reduce waste, save costs and increase the production profit.

The ELOEE system using WS Pack Standard, developed and maintained by TU Munich and several PLC suppliers and Food and Beverage companies, enables integration of all Up- and Downstream Equipment and Multi-line option.

The Integrated Operator Touch Screen Interface provides easy access to all dashboards, statistics and error messages.



# Equipment and options



## Machine standard equipment

- All aseptic valves in fluid path
- HEPA clean-air system
- Ergonomic blanks magazines
- Fully automatic size changing
- Double diaphragm filler
- Sterilizable filling station
- Mitsubishi PLC
- Frequency controlled variable speed drive
- Independent conveyor servo drives
- CE conformity
- Automatic lubrication system
- Integrated screwcap applicator
- Spray disinfection system
- Exterior foam cleaning system
- Embedded data capturing system ELOEE

## Optional features

- Cap feeder system
- Spare part kit
- Triple wall filling tank
- Proportional motion inlet valve
- Combi Filler
- CIP/SIP Unit with heat exchanger
- CIP recovery pump



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### High efficient filling of wide range of fresh product applications:

- Filling machine                      cartons per hour
- S-PSF70UC                              7.000
- S-PSF140UC                            14.000
- S-PLF50UC                             5.000
- for dairy ESL: up to 28 days shelf-life
- for juice: up to 60 days shelf-life



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### Small machine footprint:

- compact machine design
- no standalone auxiliary components other than CIP and Elofoam
- integrated HEPA-units



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### Flexible filling:

- Applicable for Pure-Pak® Classic and Pure-Pak® Sense cartons
- Filling machine                      Cross sections
- S-PSF70UC                            70x70, 65x65, 57x57
- S-PSF140UC                          70x70, 65x65, 57x57
- S-PLF50UC                            91x91, 96x70



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### Different sizes:

- Filling machine                      Available sizes
- S-PSF70UC                            6 sizes: 250-1.136 ml
- S-PSF140UC                          6 sizes: 250-1.136 ml
- S-PLF50UC                            3 sizes: 1.500-2.000 ml



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### Different screw caps:

- easy rebuilt to fit Elo-Cap™ configuration in Small – Medium – Large



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### Flexible operation:

- quick product, design and size change over with minimum manual intervention

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### Optimized technology:

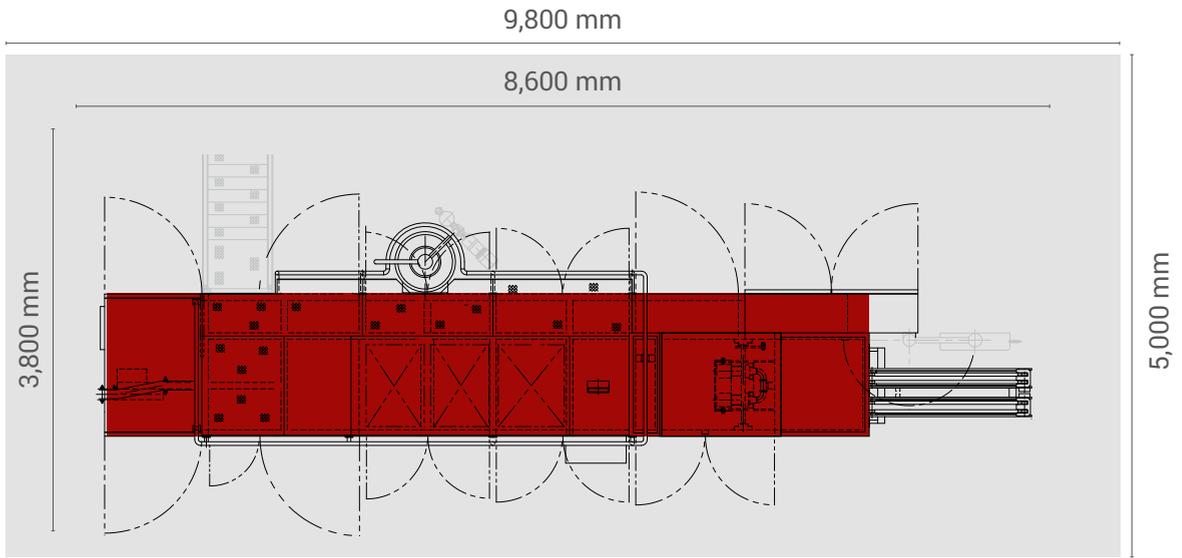
- improved gable top sealing technology and operating window
- improved hygienic design with less manual cleaning operations

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### Effective control and data capturing:

- improved HMI helps to efficiently operate and control filling equipment
- central data storage with remote access to data and reports
- userfriendly operator touchscreen interface

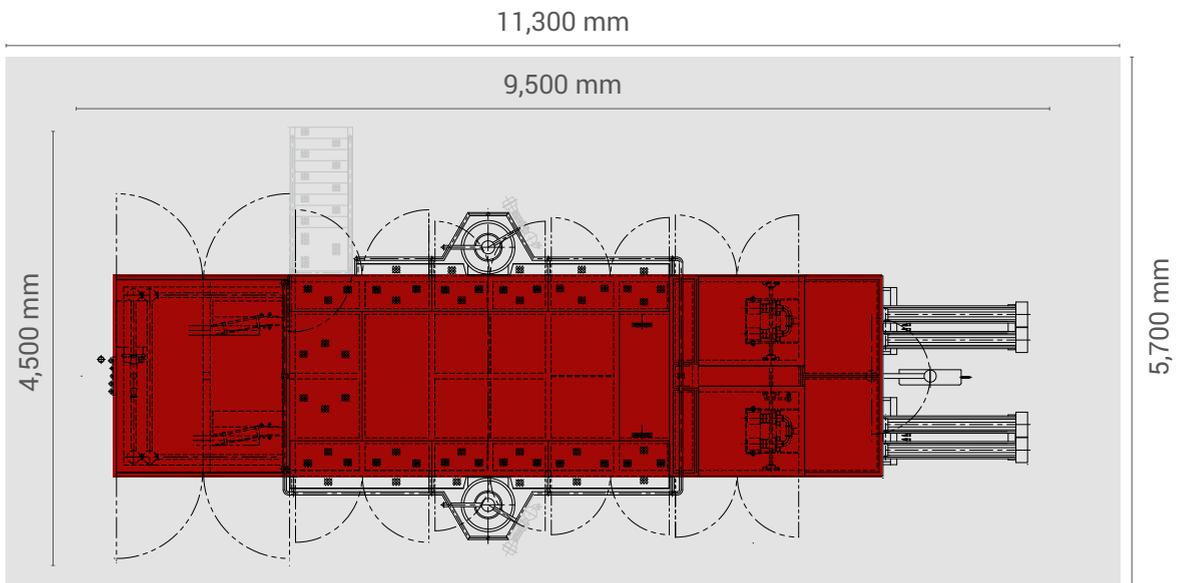
# S-PSF70UC



Footprint 32.7 m<sup>2</sup>

Space Requirement ~ 49 m<sup>2</sup>

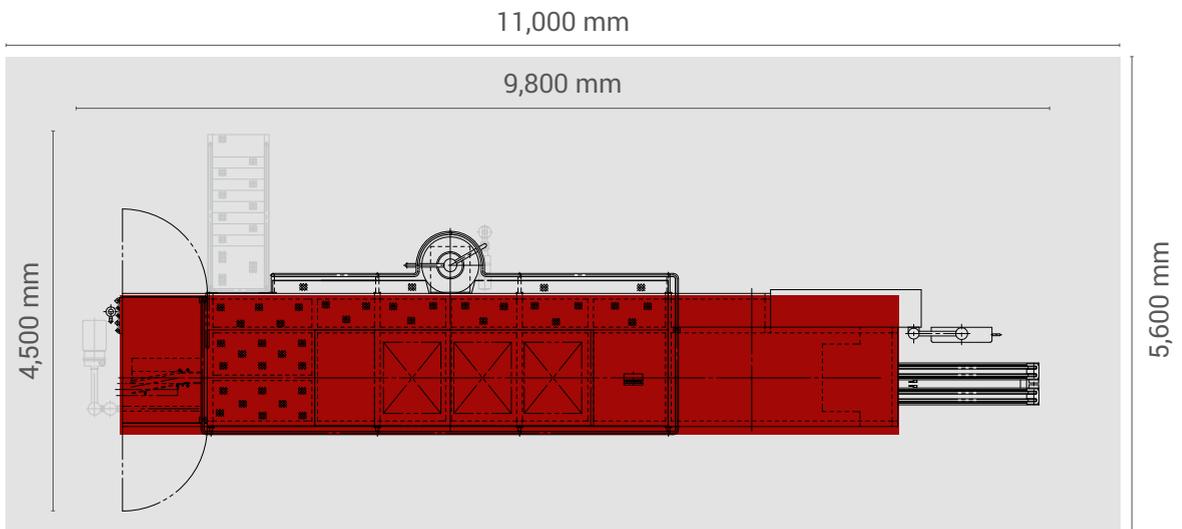
# S-PSF140UC



Footprint 42,7 m<sup>2</sup>

Space Requirement ~ 64,4 m<sup>2</sup>

# S-PLF50UC



Footprint 44,1 m<sup>2</sup>

Space Requirement ~ 61,6 m<sup>2</sup>

## Filling specifications:

### Production speed:

Machine capacity:  
S-PSF70UC: up to 7,000 cartons per hour  
S-PSF140UC: up to 14,000 cartons per hour  
S-PLF50UC: up to 5,000 cartons per hour  
Maximum speed depends on product to be filled.

### Liquid food products:

- Juice and fruit drinks up to 60 days shelf-life at < 8 °C
- Pasteurised milk up to 13 days shelf-life at < 8 °C.
- Extended shelf-life milk products up to 28 days shelf-life at < 8 °C
- Fermented dairy products (Combifiller is option)

**Filling temperature:** > 2 to < 8 °C

**Filler accuracy:** span of 3 gr. using rubber nozzles filling water (span 0.106 oz)

### Magazine capacity:

Autonomy time with filled magazines: 15 minutes

## Packaging specifications:

### Package volume and dimensions:

Standard cross-section 70 x 70 mm  
Large cross-section 91 x 91 mm  
Mini cross-section 57 x 57 mm  
Pure-Pak® Classic and Sense cartons with optional Curve®.

### Standard metric sizes:

250 ml • 330 ml • 500 ml  
750 ml • 1,000 ml • 1,136 ml (2 UK pints)

### USA-specific sizes (on request):

8 oz • 10 oz • 1 pint • 1.5 pint • 1 quart

**Board types:** EVOH and PE Board

### Opening features:

Elo-Cap™ U or X family  
Elo-Cap™ O to be available in future

### Product supply pressure:

0.02 – 0.10 MPa (3 – 15 psi)

## Machine specifications:

### Machine dimensions (l x w x h):

S-PSF70UC: 3,8 x 8,6 x 3,5 m  
S-PSF140UC: 4,5 x 10,1 x 3,5 m  
S-PLF50UC: 9,7 x 1,7 x 3,9 m

### Room height required:

S-PSF70UC: ~4,6 m  
S-PSF140UC: ~4,6 m  
S-PLF50UC: ~5,0 m

### Floor space required:

S-PSF70UC: ~49 sqm  
S-PSF140UC: ~64,4 sqm  
S-PLF50UC: ~61,6 sqm

### Shipping dimensions:

1 x 40 foot container and 1x 20 foot container

### Machine weight without options:

S-PSF70UC: ~8000 kg m  
S-PSF140UC: ~13 000 kg  
S-PLF50UC: ~9000 kg

**Noise level:** < 80 dBA

**Carton discharge height:** 945 mm (37.2 in)

## Electrical power requirements:

Depending on selected option.

## Compressed air:

Minimum supply pressure 0.6 MPa (80 psi)  
Air consumption: depending on selected option.

## Chilled water:

Minimum flow 15 l/min for S-PSF70UC and SPLF50  
25 l/min for S-PSF140UC  
Maximum temperature +3 °C (37.4 °F)  
Minimum supply pressure 0.2 MPa (29 psi)  
Maximum supply pressure 0.3 MPa (43,5 psi)

## City water:

Supply temperature ambient  
Minimum flow rate SF70 is 7l/min  
SF140 is 15L/min  
SPLF50 is 7l/min  
Minimum supply pressure 0.2 MPa  
Maximum supply pressure 0.3 MPa

## H<sub>2</sub>O<sub>2</sub> consumption usage

S-PSF70UC: 0,84 L/hr  
S-PSF140UC: 1,68 L/hr  
S-PLF50UC: 0,84 L/hr

*Together we make packaging work*



The mark of  
responsible forestry

**Elopak Group Headquarters**

ELOPAK AS · Postbox 418 · Skøyen · N-0213 Oslo

Visiting address: Hoffsvæien 1A · N-0275 Oslo

Tel.: +47 31 27 10 00 · Fax.: +47 31 27 15 00 · [elopak@elopak.com](mailto:elopak@elopak.com)

[www.elopak.com](http://www.elopak.com)

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