



Masters of Aseptic & Food Processing



FBR-ELPO S.p.A.

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FILLING MACHINES
FOR **BAG IN BOX**





WORLDWIDE LEADER IN BAG IN BOX MARKET

With over **800** aseptic installations sold worldwide, **FBR ELPO** is considered a leading company for the manufacturing of lines, machines, automatic and semiautomatic easy to use and high-quality aseptic fillers for **BAG in BOX** market.

FBR ELPO also manufactures ultra-hygienic fillers for the automatic filling of webbed bags provided with cap/dispenser for products which do not need to be aseptically filled.

The range of lines and plants for **BAG in BOX** is completed by the solution for the bags cartoning, adaptable to every kind of carton and production exigencies.



FOR ANY TYPE OF PRODUCT

FBR ELPO's BAG in BOX aseptic fillers are extremely performing for liquid, pasty and concentrated products, as well as for products with pieces, based on tomato, fruit and other vegetables.

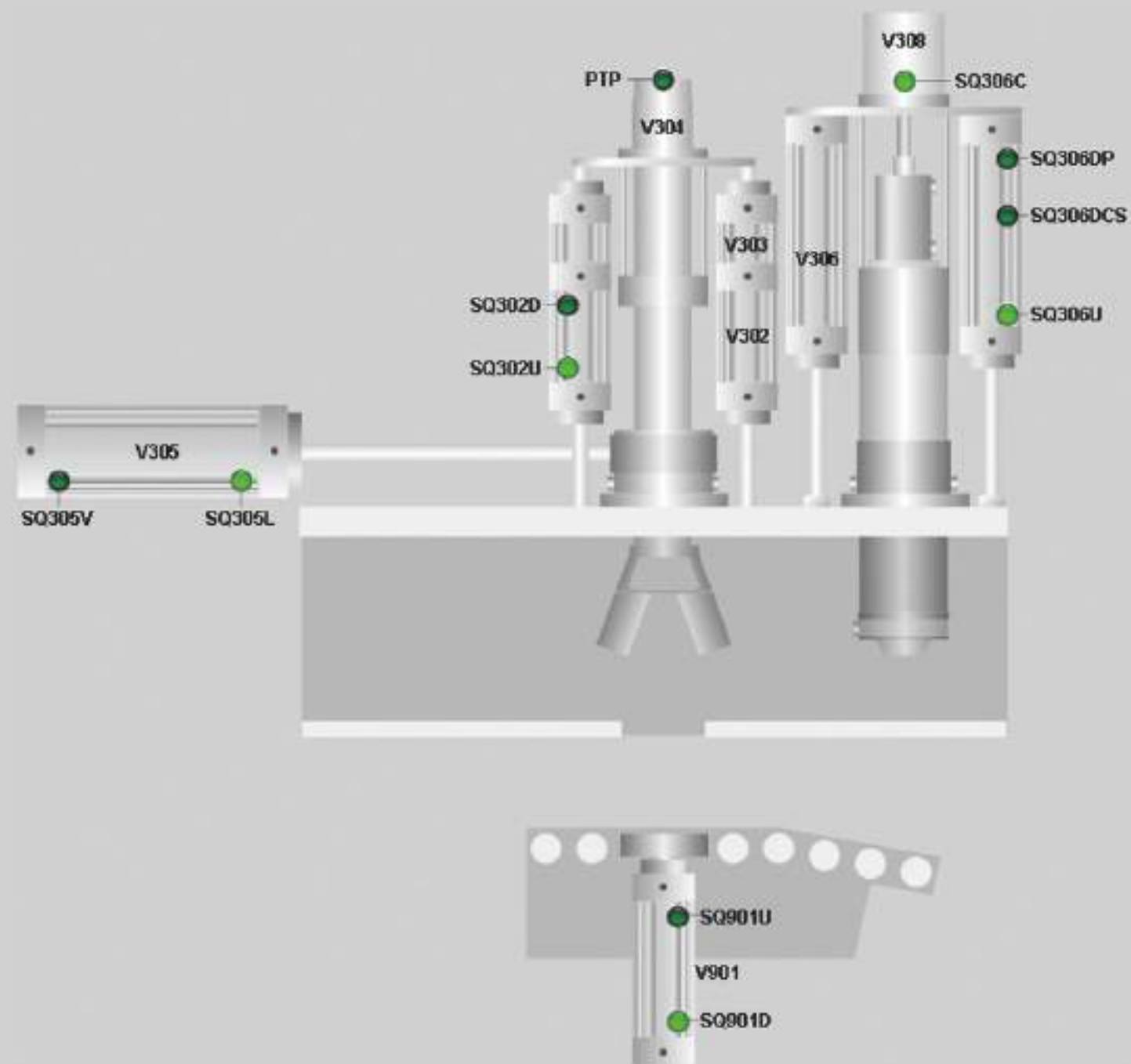
The aseptic fillers for **BAG in BOX** are the best solutions to fill dairy products, such as yogurt, milk, creams, basis for ice cream and by-products.

The **BAG IN BOX** range has come out to be particularly suitable even for the application to pharmaceutical field, for the aseptic filling of pharmacological products and fertilizers applied to agriculture.

Last, but not least, **FBR ELPO's** ultra-hygienic fillers are applied for products such as ELS milk, wine, oil, water and other liquids and/or semi-thick products which do not need to be aseptically filled.

INTUITIVE RELATIONSHIP INDUSTRIAL SUPERVISION IRIS

The new intuitive operating system **IRIS** developed by **FBR ELPO** allows to monitor all the production cycle, controls the various process phases and sets the various operating parameters. It is also possible to view and historicize the values of the measured physical quantities, signal alarms and anomalies.



The storage of a large amount of data and information in the database of the machine, together with the availability of efficient research tools, allows a quick and focused analysis of the eventual anomaly and its consequent solutions.

IRIS also provides a WEB Server in order to browse the WEB reporting pages and to access the stored data (alarms, events, production data, recipes, etc.), creates own reports and analyzes and exports them in more common formats.

The whole system has been designed for an eventual remote assistance connection via internet: upon request, a technician of **FBR ELPO** can remotely get on line and access the control system, performing extremely rapid and efficient diagnostics in real time.



Web

THE HISTORY OF BAG IN BOX

Promptly meeting all market requirements has always been **FBR ELPO's** mission, a leading company in the aseptic filling sector. Entirely automatic and boasting an excellent performance, the **WEB** range was designed to fill pre-sterilised **bags from 1,5 to 20 litres** in a continuous feed. The cutting-edge technology is combined with great versatility, rendering the **WEB** model a bestseller worldwide.

TECHNICAL DATA		
VERSION	AS-I-30-WEB	AS-II-30-WEB
OPERATING SPEED	Up to 420 b.p.h.*	Up to 840 b.p.h.*
HEIGHT	2.870 mm	2.870 mm
WIDTH	1.300 mm	3.800 mm
LENGTH	3.700 mm	3.700 mm
FILLING ACCURACY (*)	±0,5% of filled volume (min. ±30 ml)	±0,5% of filled volume (min. ±30 ml)
PRODUCT FILLING TEMPERATURE	from +5°C up to +45°C	from +5°C up to +45°C

[*] Data referred to water filling.



GREAT FLEXIBILITY AND VERSATILITY

- ❏ **WEB** range can work with bags that use any type of nozzle available on the **BAG IN BOX** market, including those supplied with product emptying valves, pipes and taps.
- ❏ The spouts can be both “short neck” and “long neck” type, positioned in the center of the bag or in a corner.
- ❏ Possibility to sterilize the cap either with chemical agents or simply by using steam.



WHATEVER YOU NEED TO FILL

Originally perceived for low-acidity dairy sector products, the line turned out to be perfect for the whole food industry.

Both beverages and products with chunks can be easily processed with the **WEB** range:

- UHT milk, milkshakes, yogurt, cream and whipped cream
- Ice-cream basis
- Natural fruit and tomato juices, purees and concentrates
- Diced tomato and paste, tomato pulp
- Pizza sauce, ketchup and more
- Coconut water
- Liquid eggs
- Diced onion and puree





Jet

THE WEB REVOLUTION

From the experience of **FBR ELPO** in the **BAG IN BOX** sector, the new **JET** aseptic filler is born, evolution from the **WEB** range fillers, with even higher performances. Thanks to its significant flexibility, the new **JET** aseptic filler can work with bags that use any type of spout available on the **BAG IN BOX** market, including those supplied with product emptying valves, pipes and taps, which are particularly indicated for the dispensers. The spouts can be both “short neck” and “long neck” type, positioned in the centre of the bag or in a corner.

TECHNICAL DATA

FILLING RANGE	BAGS OF 1,5-20 LITRES
OPERATING SPEED (*)	5L bags – up to 600 bags/h 10L bags – up to 500 bags/h 20L bags – up to 380 bags/h
HEIGHT	2.870 mm
WIDTH	1.300 mm
LENGTH	3.700 mm
FILLING ACCURACY (*)	±0,5% of filled volume (min. ±30 ml)
PRODUCT FILLING TEMPERATURE	from +5°C up to +45°C

(*) Data referred to water filling.

NEW UPGRADE FOR NEW PERFORMANCE

- ❑ New automation and control technologies to consistently increase the performance of the machine.
- ❑ Maximum flexibility in installation and possibility of customization through several accessories.
- ❑ Possibility to sterilise the cap either with chemical agents or simply by using steam.
- ❑ Outlet roller conveyor to allow the bag unloading on a conveyor belt or directly into a system of bag introduction inside the carton.
- ❑ A cutter, which can be continuously adjusted by means of a wheel, permits a fast regulation of the format change.
- ❑ Maximum level of sterility with a low consumption of sterile air, chemical agents and/or steam.

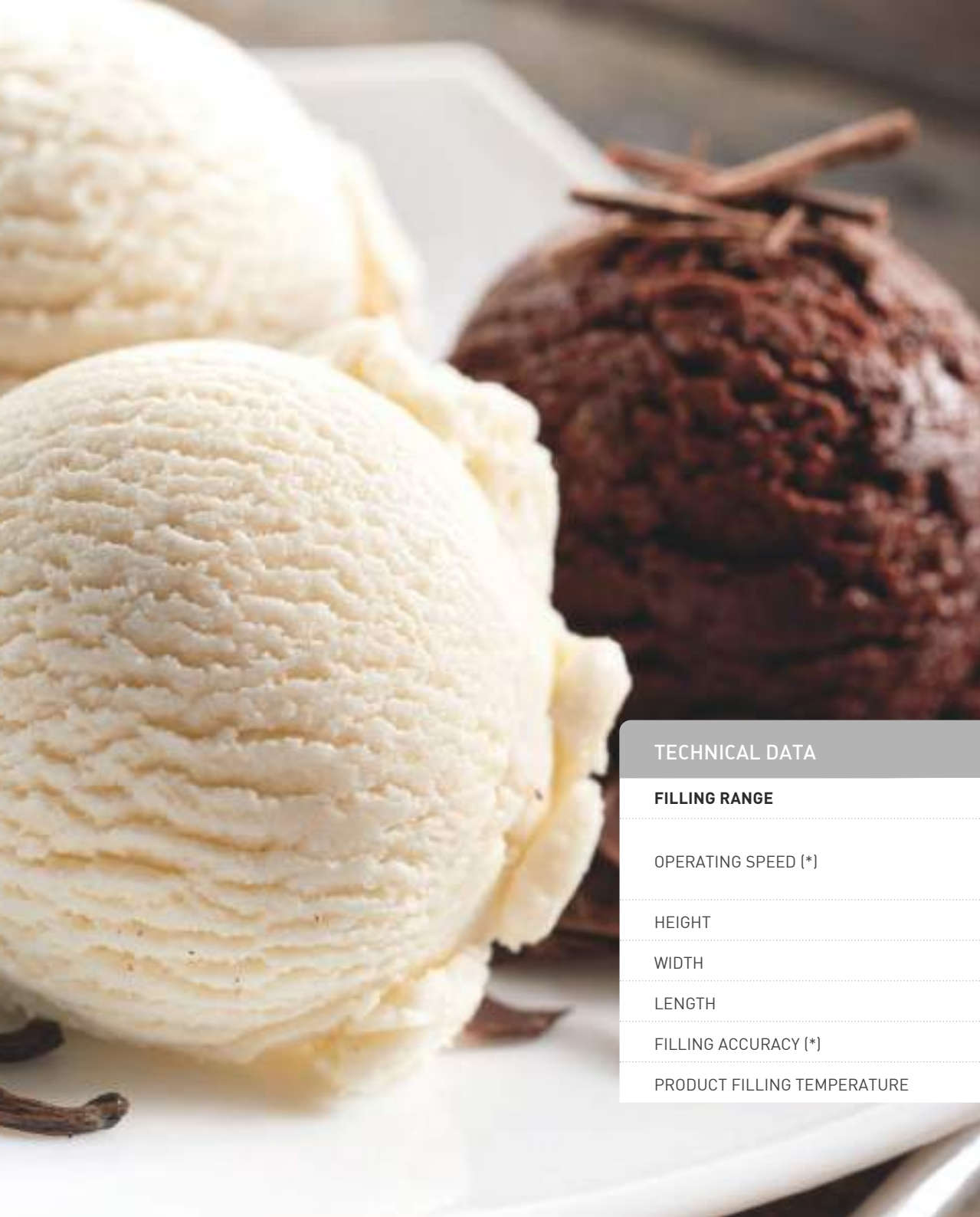




FOR ANY KIND OF PRODUCT

The new **JET** aseptic filler, completely automatic and made of stainless steel, is designed to fill a wide range of products, liquid and with pieces, low and high acid, such as milk, yogurt, cream, ice-cream basis, natural fruit juices, puree and concentrates, coconut water, tomato sauces, diced tomato and paste, ketchup, liquid eggs, diced onion and puree, tea and more, handling pre-sterilized **bags from 1,5 to 20L** with continuous module, with working **capacity up to 600 bags/h.**





Mustang

AS FAST AS POSSIBLE

Achieving extremely high working capacities to satisfy the **BAG IN BOX** market.

It is possible now, thanks to the new completely automatic **MUSTANG** aseptic filler, built in stainless steel with double filling head with production **capacity up to 1.200 bags/h**, the new **MUSTANG** double-head aseptic filler can handle pre-sterilized **bags from 1,5 to 20L** with continuous module.

TECHNICAL DATA

FILLING RANGE	BAGS OF 1,5-20 LITRES
OPERATING SPEED (*)	5L bags – up to 1.200 bags/h 10L bags – up to 1.000 bags/h 20L bags – up to 760 bags/h
HEIGHT	2.765 mm
WIDTH	2.000 mm
LENGTH	3.800 mm
FILLING ACCURACY (*)	±0,5% of filled volume (min. ±30 ml)
PRODUCT FILLING TEMPERATURE	from +5°C up to +45°C

(*) Data referred to water filling





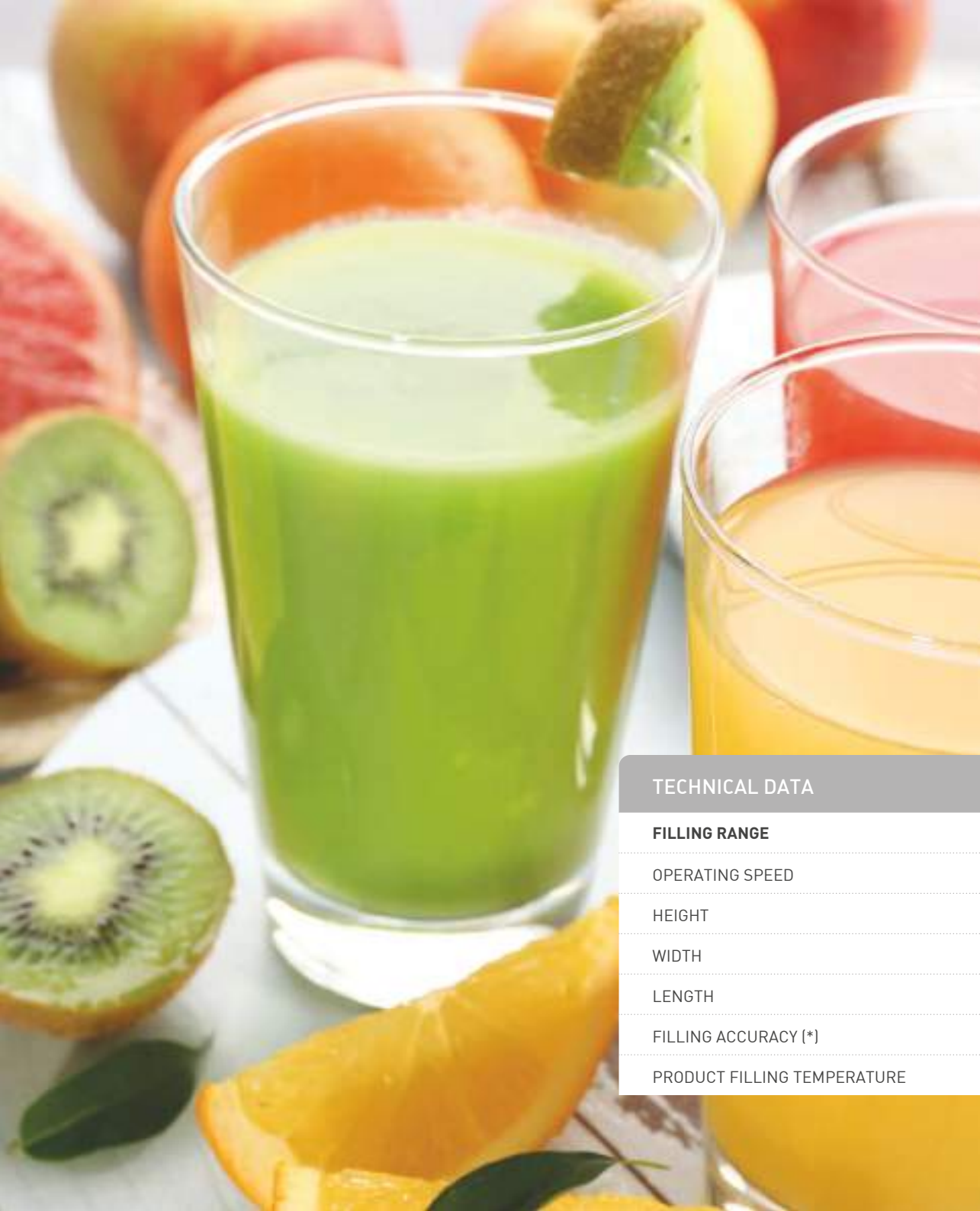
DOUBLE HEAD FOR DOUBLE PERFORMANCE

- ❑ Possibility to use any type of spout available on the **BAG IN BOX** market including those with pre-mix or post-mix dispensing pipes.
- ❑ Spouts can be “short neck” or “long neck type”, placed in the centre or in the corner of the bag.
- ❑ Maximum level of sterility with a low consumption of sterile air, chemical agents and/or steam.
- ❑ An outlet roller conveyor allows the bag unloading on a conveyor belt that permits the further bag insertion inside the box.
- ❑ The cutter, which can be continuously adjusted by means of a wheel, permits a fast regulation of the format change.
- ❑ The sliding doors guarantee less space and more functionality.

MAXIMUM PERFORMANCE WITH ANY PRODUCT

Designed for the filling of a wide range of products, liquid and with pieces, low and high acid, such as milk, yogurt, cream, ice-cream basis, natural fruit juices, puree and concentrates, coconut water, tomato sauces, diced tomato and paste, ketchup, liquid eggs, diced onion and puree, tea and more, the standard version allows the reception of the product directly from a sterilizer without needing the interposition of an aseptic tank (usually indispensable for this kind of machines).





MiniWeb

THE MANUAL ASEPTIC FILLER FOR BAG IN BOX

The **MINI WEB** aseptic filler by **FBR ELPO** is designed for the filling and packaging of a wide range of products, liquid and with piece (also low and high acid), such as milk, yogurt, cream, ice-cream basis, natural fruit juices, puree and concentrates, coconut water, tomato sauces, diced tomato and paste, ketchup, liquid eggs, diced onion and puree, tea and more by using **bags from 1,5 to 20 liters** with manual feeding.

TECHNICAL DATA	
FILLING RANGE	BAGS OF 1,5-20 LITRES
OPERATING SPEED	10L bags – up to 100 bags/h (manual feeding)
HEIGHT	2.640 mm
WIDTH	1.650 mm
LENGTH	2.000 mm
FILLING ACCURACY (*)	±0,5% of filled volume (min. ±30 ml)
PRODUCT FILLING TEMPERATURE	from +5°C up to +45°C

(*) Data referred to water filling

SPOUTS, CAPS AND DRUMS

- ☐ Handling any kind of spout/cap available on the **BAG IN BOX** market, including those with dispensing pipes.
- ☐ Using the appropriate devices, the spout can be replaced without losing sterility inside the product pipe.
- ☐ Spouts can be “short neck” or “long neck” type, placed in the center or in the corner of the bag.
- ☐ The spout can be sterilized with steam in case it is heat-resistant and the product to be filled has a high acidity or by means of sterilizing agents in case the spout is not heat-resistant, or the product is low acid.
- ☐ By means of an appropriate device, it is also possible to **fill 200 l. drums**.



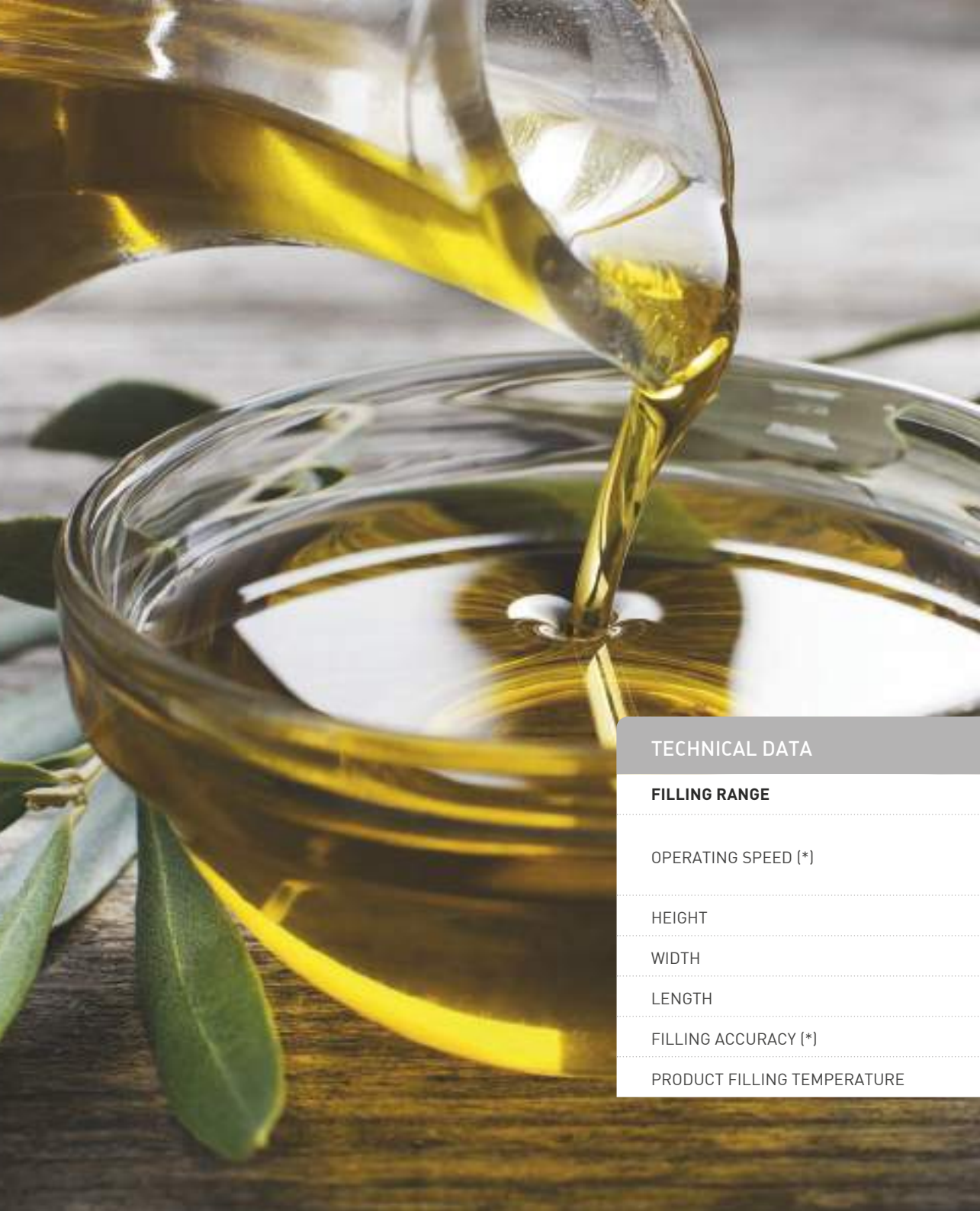
STERILIZATION AND DOSAGE

A constant jet of sterile air, together with a controlled atomization of disinfectant solution, guarantees the maintenance of the sterile conditions in the filling chamber.

Sterility can also be guaranteed by steam only.

The dosage of the product inside the bag is volumetric, controlled by a magnetic (or mass on request) flowmeter and a dosing valve. A jet of steam cleans the inner surface of the spout, at the end of the product dosage and before the repositioning of the cap.





Naf

ULTRA-HYGIENIC FOR BAG IN BOX

FBR ELPO manufactures an ultra-hygienic filling machine named **NAF for 1,5-3-5-10-20 liter** webbed bags in continuous feed, particularly suitable for products such as ESL milk, wine, oil, water and other liquids and/or semi-thick products which do not need to be aseptically filled.

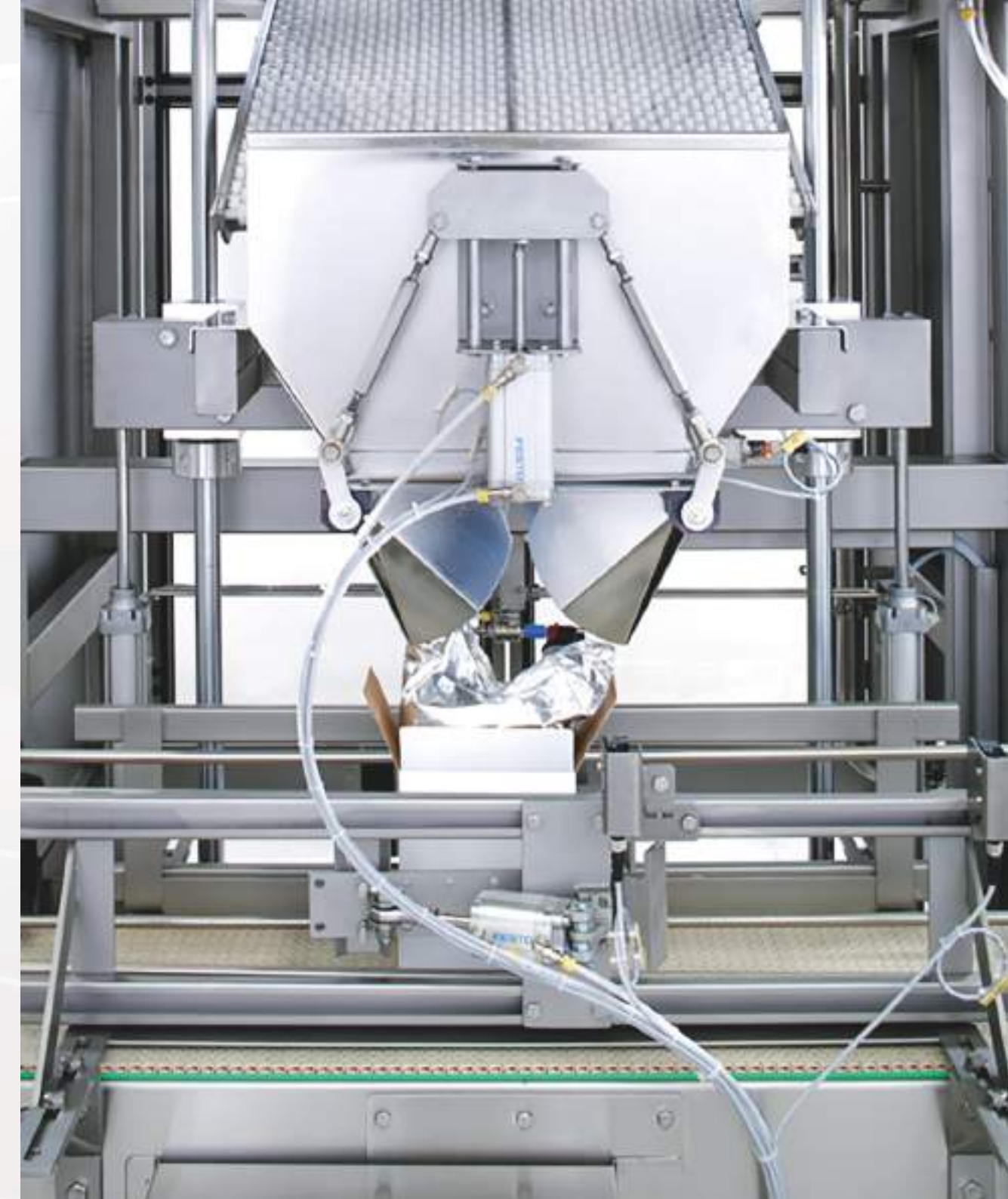
TECHNICAL DATA

FILLING RANGE	BAGS OF 1,5-20 LITRES
OPERATING SPEED (*)	5L bags – up to 1.200 bags/h 10L bags – up to 1.000 bags/h 20L bags – up to 760 bags/h
HEIGHT	3.000 mm
WIDTH	1.360 mm
LENGTH	2.520 mm
FILLING ACCURACY (*)	±0,5% of filled volume (min. ±30 ml)
PRODUCT FILLING TEMPERATURE	from +5°C up to +45°C

(*) Data referred to water filling

EQUIPMENT TO COMPLETE THE LINE

- ▣ **NAF** filler can be integrated with the complete line for carton formation, transfer, filling and sealing, in addition to the buffer tank.
- ▣ Like the other aseptic fillers, even the **NAF** model can work with bags that use any type of nozzle available on the **BAG IN BOX** market, including those supplied with product emptying valves and taps.
- ▣ The spouts can be both of the “short neck” and “long neck” types, positioned in the center of the bag or in the corner.

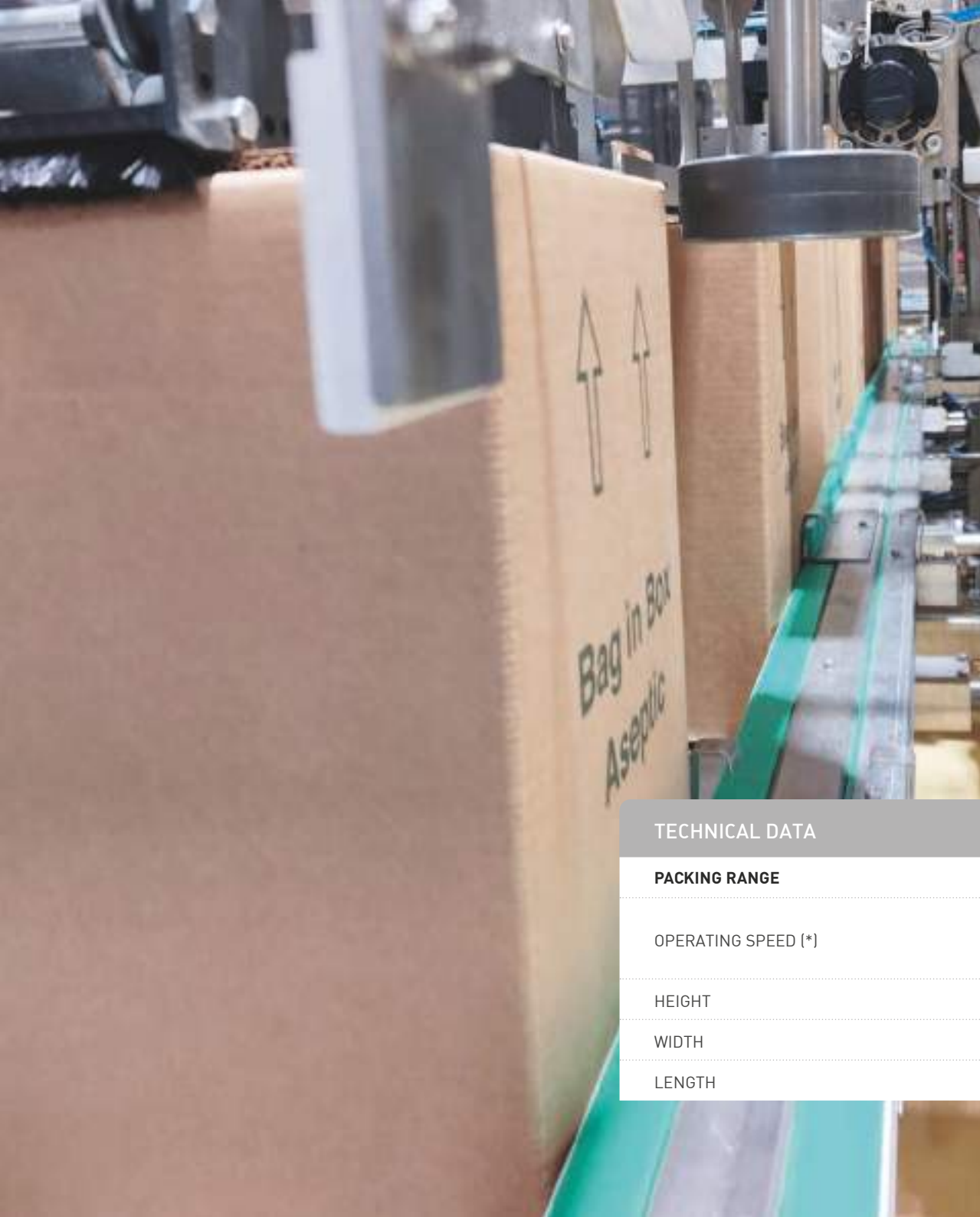


OPERATING SPEED AND END OF LINE

The operating speed reaches **up to 1.200 bags/h** with the double-headed version.

The **NAF** ultra-hygienic filling machine can be coupled with a forming and cartoning machine.





WeBox

YES, WE BOX

WE BOX is a cartoning machine suitable for the packing of **3-5-10-20 l** bags, developed by FBR ELPO to complete the possible solutions to couple its **BAG IN BOX** series to a cartoning line.

In the new **WE BOX** cartoning machine, the carton forming unit, the carton packing unit and the carton closing unit are installed in a single structure.

TECHNICAL DATA

PACKING RANGE	BAGS OF 3-20 LITRES
OPERATING SPEED (*)	5L bags – up to 1.000 box/h 10L bags – up to 1.000 box/h 20L bags – up to 760 box/h
HEIGHT	3.350 mm
WIDTH	1.605 mm
LENGTH	5.745 mm





FEATURES AND ADVANTAGES

- ❑ Bags of 3-5-10-20 l are sent from the aseptic Bag in Box filler to the carton packaging section, where each phase is run electronically.
- ❑ The carton forming machine is managed by a fast and innovative robotic system allowing a quick format change.
- ❑ The carton can be closed only with tape, only with glue or with both solutions.
- ❑ The machine is equipped with a warehouse of empty carton that can be placed on three of the four available sides and it is possible to adjust its capacity.
- ❑ Horizontally or vertically bag introduction.

PACKING HAS NEVER BEEN SO SIMPLE

The result is a simple and compact stainless steel monoblock, with easy and fast maintenance and compact dimensions.
The outgoing cartons filled with **3, 5, 10 or 20 l bags** are ready to be sent to the palletization

