



Smurfit
Westrock | Bag-in-Box®

Filling solutions for Bag-in-Box®

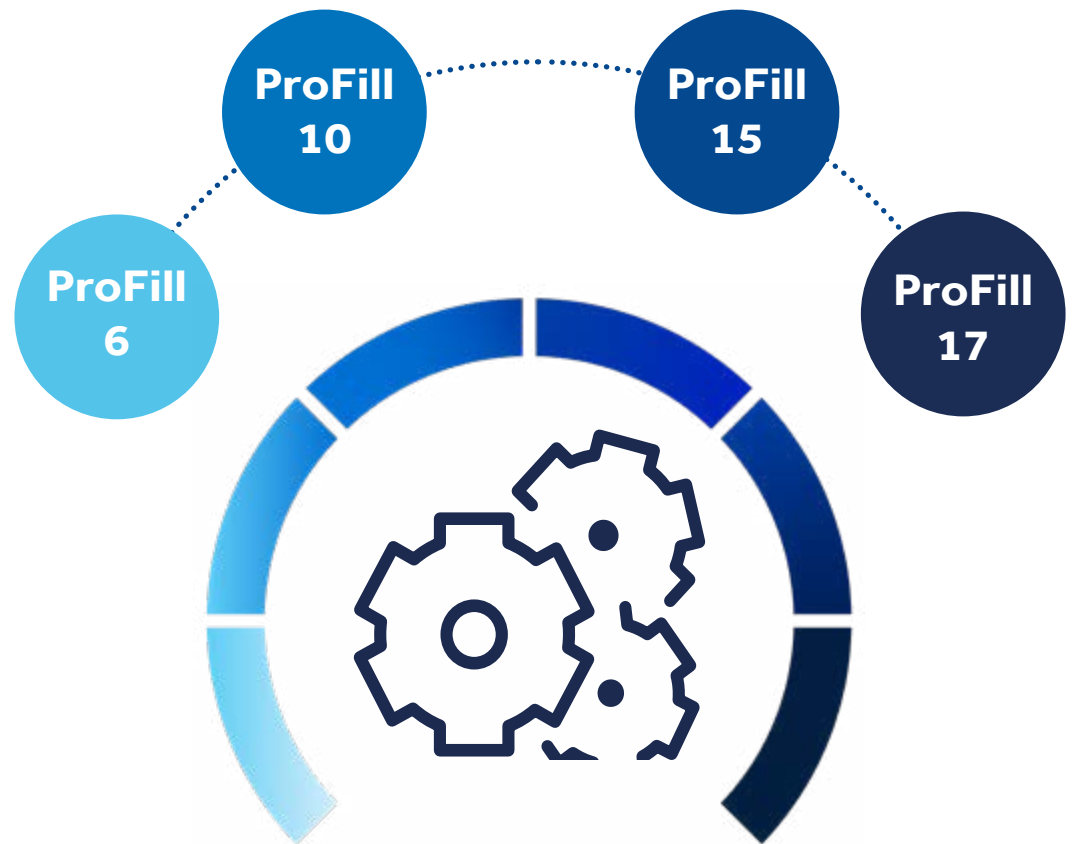
**Fill good
Feel great**





Designers and leaders

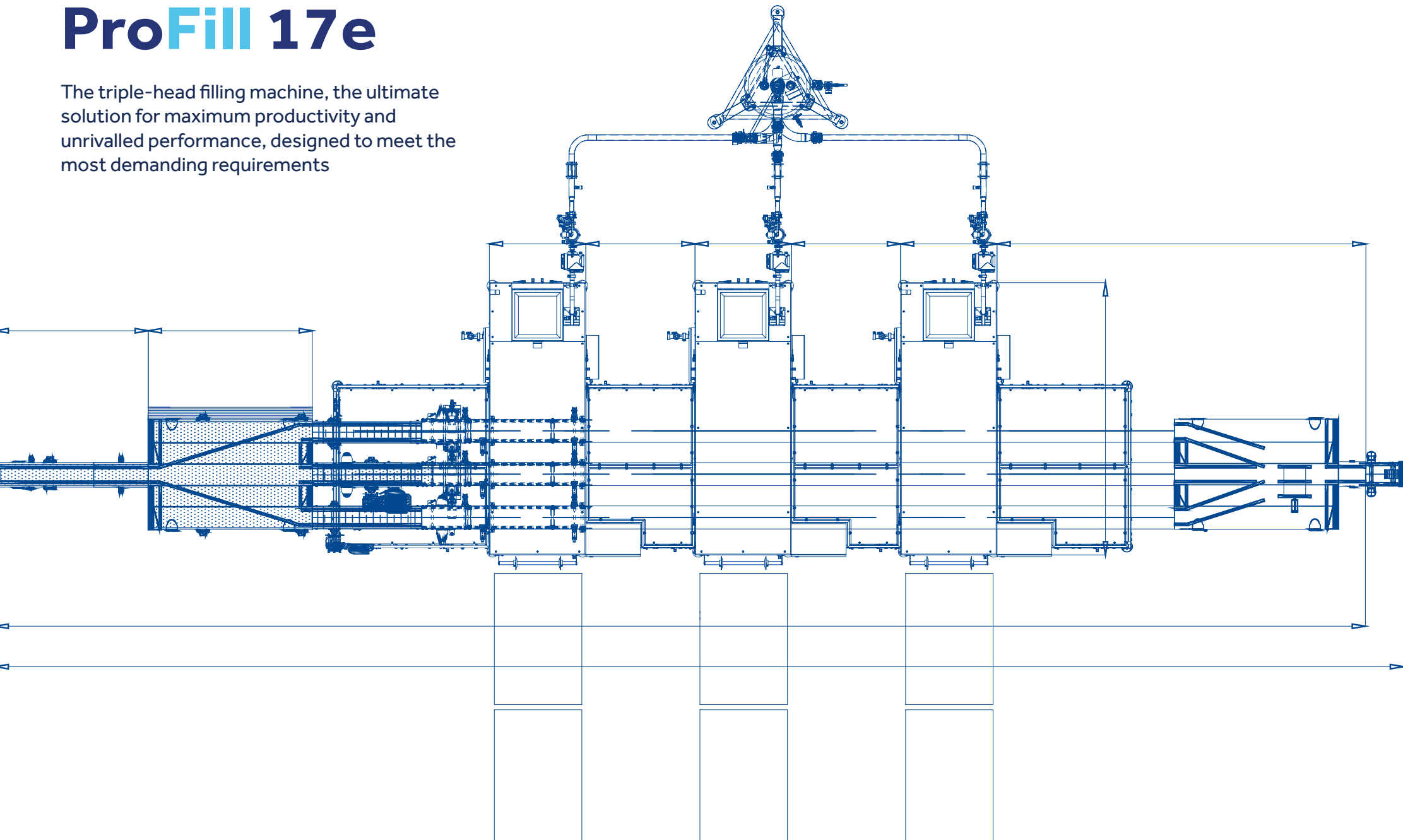
We design our filling machines with the same expertise; when you know how to make the best bags, you also know how to create the best machines to fill them.





ProFill 17e

The triple-head filling machine, the ultimate solution for maximum productivity and unrivalled performance, designed to meet the most demanding requirements



Our top services

Offering specialist advice on the optimisation of filling machines, our expertise is built on more than 50 years' experience

As pioneers in this field, we have developed, manufactured and installed automated filling lines in numerous countries and sectors.

Designed to guarantee precise, efficient and reliable filling, our filling line solutions can be customised to meet your specific requirements. We are committed to providing filling solutions offering optimal yield and a competitive total cost of ownership.

Global identity

Our identity is based on a commitment to excellence and innovation.



Bag-in-Box®

Smurfit Westrock offers a comprehensive solution for Bag-in-Box® packaging, including, films, accessories, bags, taps, boxes and filling lines.

Our system provides global expertise for the packaging of Bag-in-Box® liquids.

Our Bag-in-Box® products reduce carbon footprint and extend shelf life, by providing a sustainable choice for a variety of sectors such as wines, juices, liquid eggs, dairy products, as well as non-food applications such as motor oils and chemical products.



ProFill filling machine

The automatic ProFill machine offers outstanding versatility for Bag-in-Box® filling, with multiple settings adapted to various liquids and production requirements.

Its robust design and ease of use make this the ideal choice to optimise the packaging process.



50 years
of Bag-in-Box®
expertise

Recyclable



Customised machines

Options

The options available for Bag-in-Box® filling machines offer a wide range of settings to meet diverse requirements.

They enable you to improve the safety, precision and efficiency of the filling process, while providing extra versatility to adapt to various formats and production needs. In short, these options provide a comprehensive and customisable solution to optimise Bag-in-Box® filling machine performance.

Semi-Auto

The semi-automatic machines are designed to meet the requirements of small and medium-sized businesses.



Our expertise

World-renowned expertise: hundreds of machines in operation, millions of Bag-in-Box® filled, and an adaptable offer thanks to dozens of options.

A worldwide presence for efficient, reliable and bespoke filling solutions.

Our presence

Full lines
Bespoke projects

for
20+
types of products

300+
heads fitted

in
4
continents

millions
of Bag-in-Box®
filled

40+
countries have
chosen
our machines



Our priorities

We combine our experience in automated packaging with our world-renowned expertise to bring you a complete packaging solution.



Machine performance

BIB ProFill filling machines offer outstanding performance thanks to optimal precision and filling speeds. Equipped with advanced sensors and real-time control systems, they ensure high-speed, high-quality and steady production.

Manufactured with robust materials, they offer maximum durability and reliability, limiting stoppage times and maintenance costs.

Each machine can be customised to meet your specific requirements, ensuring seamless incorporation into your production line.



Customer experience

Our state-of-the-art equipment is designed to meet your needs perfectly, thus guaranteeing versatility, quality and reliability. We focus on innovation and quality to ensure intuitive use, easy maintenance and peace of mind.

Your satisfaction and peace of mind are at the heart of our activities. When you opt for one of our machines, you benefit not only from high-performance products, but also ongoing support. Our team of professionals is always at hand to help you, whether you need advice on use, maintenance services or customised training. We work alongside you at every step, enabling you to operate your business with complete peace of mind.



The impact on your business

The impact on your business does not stop at the performance of our filling machines. By working with us, you benefit from solutions designed to enhance your operations and boost your profitability. We do our utmost to incorporate technological advances which help you to progress in your sector and explore new opportunities.





The first eco-friendly Bag-in-Box® tap. The best tap in the world and for the planet

Vitop® Uno combines all the advantages of previous versions of Vitop® taps, guaranteeing excellent packaged-product quality and enhanced shelf life, as well as compliance with the Single Use Plastics Directive.



Discover **Vitop® Uno**, the Bag-in-Box® tap setting a **new standard** in safety, performance and durability. Thanks to its innovative and eco-friendly tamper-proof system, Vitop® Uno not only meets professionals' needs, but also marks a new advance for more sustainable plastic resource management.

ProFill 6

filling machine

Performance

THE VITOP SEMI-AUTOMATIC FILLING MACHINE IS DESIGNED TO FILL LIQUID AND VISCOUS PRODUCTS IN BAGS AND POUCHES.

Ideally suited to small and medium-sized businesses filling bags and/or Pouch-Up®, this semi-automatic filling machine offers an excellent level of performance and reliability. The filling machine uncaps and vacuums the bag, fills it with the required volume, injects nitrogen into the bag and recaps. Nitrogen is injected at the end of the filling process to enhance product shelf life and help clean the valve neck. An optional laminar flow decontaminates the area around the valve. Exclusive, innovative software significantly improves filling precision and can instantaneously rectify more than 99% of the repeatability error caused by the variation in product flow.

Solution

FILLING VALVE

PRODUCT INPUT

FILLING CHAMBER

ADJUSTABLE SUPPORT
PANEL

VACUUM TANK
(inside, depending
on type)

ADJUSTABLE LEGS

CONTROL PANEL

- Touch screen
- Start button
- Cycle stop button
- Reset button
- Emergency stop button
- LED indicator for low air pressure

BAGS

1 L TO 28 L

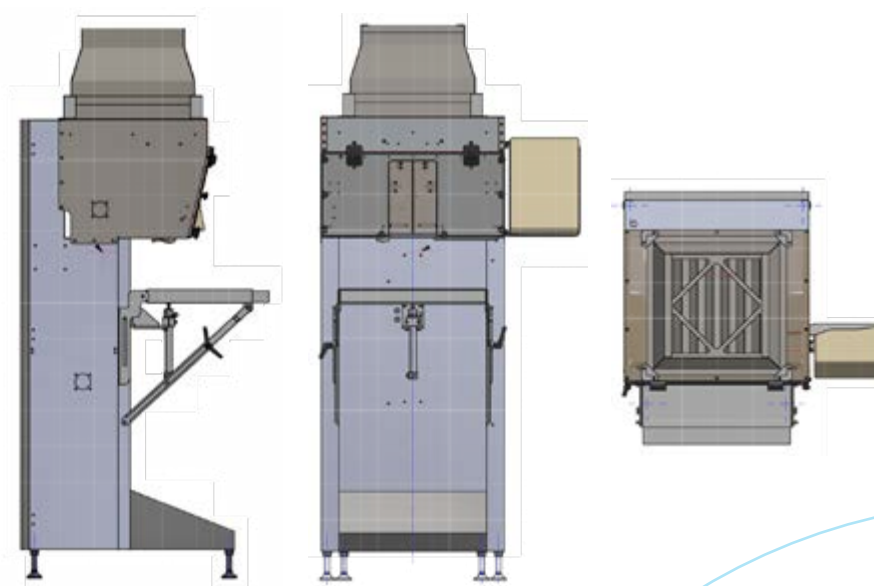
POUCH-UP®

1 L TO 3 L



Technical data

Voltage	230 V- 1 phase 50/60 Hz
Installed capacity	5 A max (with laminar flow)
Pneumatic supply (filtered, dehumidified and non-lubricated)	min. 6.5 bar
Nitrogen feed pressure	1 ÷ 3 bar
Product feed pressure	0.5 to 2 bar
Flow (according to dosage device fitted)	0.5 to 3 L per sec
Flow if machine is fitted with a rotary flow meter (For more information, see the turbine operating guide)	≥ 0.8 ÷ 1.4 L per sec max (varies according to product density and viscosity)
Dosage capacity	0.1 to 1,500 L
Filling temperature	85°C max (according to bag type)
Dosage adjustment	Via screen
External dimensions	L 850 x W 1000 x H 1560 (H 1900 with laminar flow) mm
Weight	120 kg (150 kg with laminar flow)
Bag feed	Manual



500+
ProFill 6
installed
since 1989

ProFill 10

filling machine

Innovation

AN UPGRADE OF OUR VITOP SEMI-AUTOMATIC MACHINE, THE SEMI WEB VITOP MACHINE IS THE IDEAL STARTER EQUIPMENT FOR MEDIUM-SIZED BUSINESSES.

The Semi Web Vitop machine is designed to improve work station ergonomics and reduce bag snagging during filling operations. In addition to offering all the advantages of the current semi-automatic filling machine, the new machine can also use web bags. Exclusive, innovative software significantly improves filling precision and can instantaneously rectify more than 99% of the repeatability error caused by the variation in product flow. The dosing valve has also been modified to enable closing in two steps and thus reduce the run-off rate in the first phase by 80%.

Solution

FILLING VALVE

PRODUCT INPUT

FILLING CHAMBER

ADJUSTABLE SUPPORT
PANEL

VACUUM TANK
(inside, depending
on type)

ADJUSTABLE LEGS

CONTROL PANEL

- Touch screen
- Start button
- Cycle stop button
- Reset button
- Emergency stop button
- LED indicator for low air pressure

BAGS

2 L TO 20 L

(2 L TO 20
L FOR WEB
BAGS)

POUCH-UP®

1 L TO 3 L





Technical data

Voltage	230 V- single-phase 50/60 Hz
Installed capacity	5 A max (with laminar flow)
Pneumatic supply (filtered, dehumidified and non-lubricated)	min. 6.5 bar
Nitrogen feed pressure	1 ÷ 3 bar
Product feed pressure	0.5 to 2 bar
Flow (according to dosage device fitted)	0.5 to 3 L per sec
Flow if machine is fitted with a rotary flow meter	≥ 0.8 ÷ 1.4 L per sec max (varies according to product density and viscosity)
Dosage capacity	1 to 30 L
Filling temperature	85°C max (according to bag type)
Dosage adjustment	Via screen
External dimensions	L 1100 x W 1100 x H 1850
Weight	120 kg (150 kg with laminar flow)
Bag feed	Manual or automatic

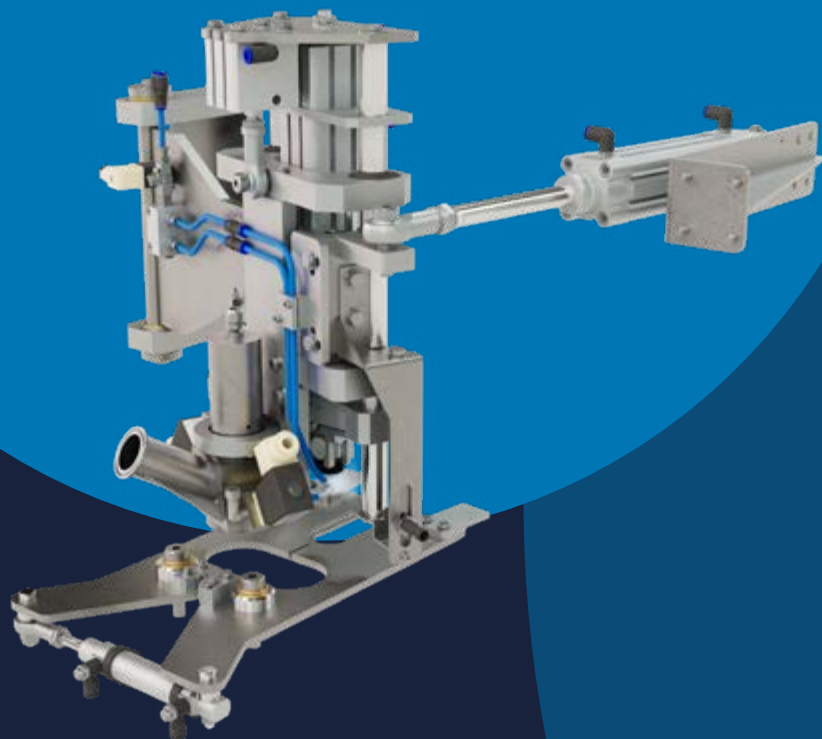
30+
ProFill 10
installed
since its launch

ProFill S filling machine Innovation

**Single
head**

Ideal for small production volumes, this model offers unrivalled filling precision.





Machine type	Single head	
Machine version	Pneumatic	Electric
Machine name	ProFill 15 S	ProFill 17e S
Performance	15 BIB per min	17 BIB per min
BIB format	1.5 L to 20 L	
Weight	900 to 1000 kg (depending on options)	
Minimum box size	H:220 mm / L:123 mm / W:80 mm	
Maximum box size	H:410 mm / L:255 mm / W:232 mm	
Power supply	400V/50hz 3P+N+E	
Pneumatic pressure	6 to 7 bars	

ProFill D filling machine Innovation

**Double
head**

Offering increased output,
this model is designed to meet
the growing needs of your
business.





Machine advantages and specifications

- 1** **SHELF LIFE:** Revolutionary filling valve - separate vacuum and nitrogen circuits. Solenoid valves embedded in the filling valve allow for enhanced air cone management and improved packaged-product shelf life.
- 2** **USER FRIENDLY:** Thanks to its new operator interface, this user-friendly machine offers improved control, intuitive setting management and incident or alert tracking. Access to the various parts of the machine is facilitated through clearance of the surrounding space.
- 3** **NO WASTE:** An electromagnetic flow meter ensures precise dosage (other types available as options). Reduced leakage rate thanks to sensitive bag handling during filling and the new funnel.
- 4** **HYGIENE:** CIP cleaning system compatible with chemical products or steam at 120°C. Separate vacuum and nitrogen circuits ensure improved hygiene.
- 5** **PERFORMANCE:** Robust design and manufacture offering enhanced productivity. High flow and high-speed valve (the highest in the range). Flexible bag feeder cylinders, combining sensitive handling and precision to ensure constant production. New raised buffer tank, optimised to ensure regular flow and weight repeatability at machine output. Certified and approved materials for food contact.
- 6** **ACCOUNTABILITY:** Stainless steel 304 frame, mechanical parts and conveyors. Stainless steel 316L tubing and parts in contact with product.

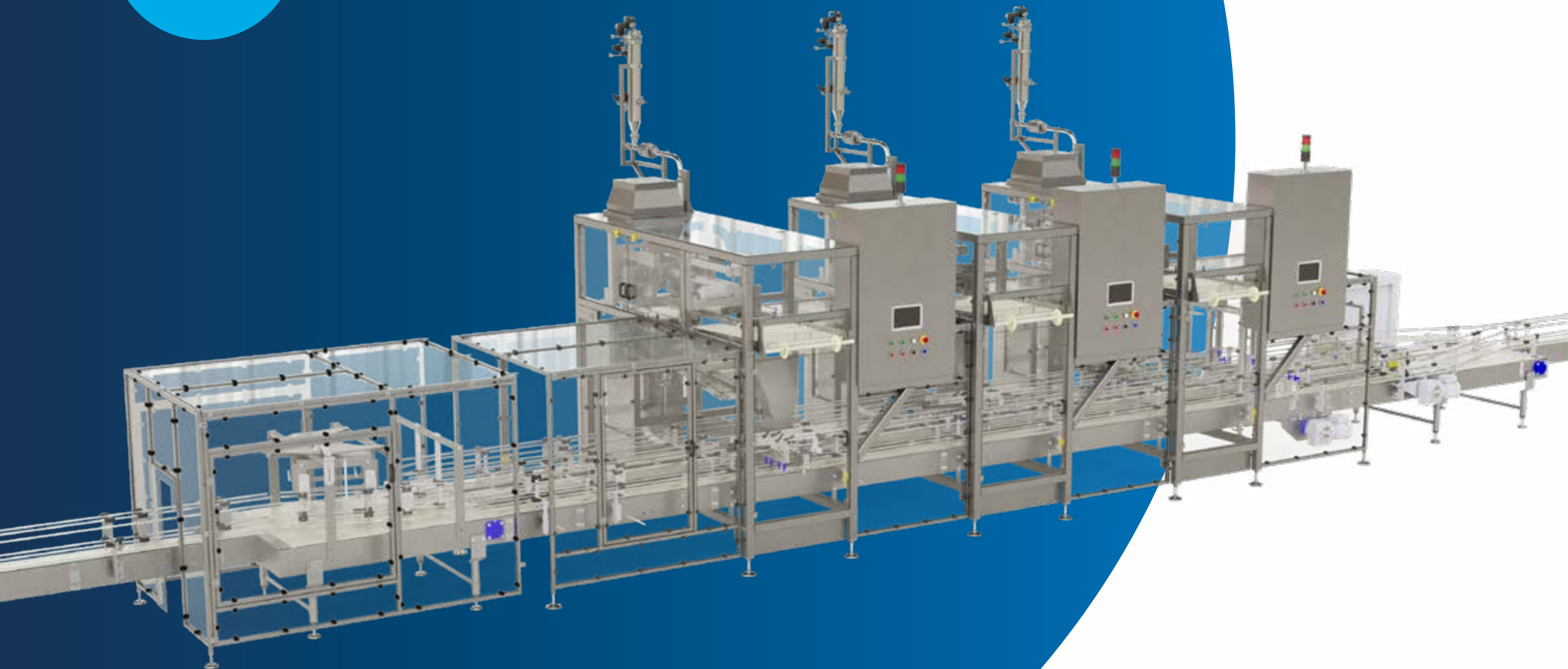
Machine type	Double head	
Machine version	Pneumatic	Electric
Machine name	ProFill 15 D	ProFill 17e D
Performance	30 BIB per min	34 BIB per min
BIB format	1.5 L to 20 L	
Weight	900 to 1000 kg (depending on options)	
Minimum box size	H:220 mm / L:123 mm / W:80 mm	
Maximum box size	H:410 mm / L:255 mm / W:232 mm	
Power supply	400V/50hz 3P+N+E	
Pneumatic pressure	6 to 7 bars	



ProFill T filling machine Innovation

Triple head

The ultimate solution for
maximum production,
combining speed and efficiency.



THE TRIPLE-HEAD AUTOMATIC FILLING MACHINE IS A TRUE INNOVATION THANKS TO A THIRD FILLING LINE AND A RANGE OF NEW OPTIONS, IT OFFERS THE HIGHEST PERFORMANCE OF ALL OUR MACHINES.

This high-speed automatic filling machine is designed for industrial-scale production capacities and promises efficiency, reliability and high-quality filling. Like all our other machines, it is equipped with a new-generation filling valve boasting the best Total Oxygen Values (TOV) in the bag, and a third filling line to boost productivity and performance.

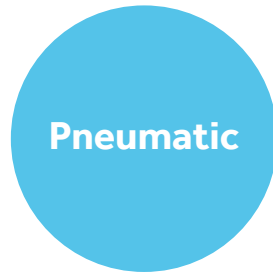
Machine type	Triple head	
Machine version	Pneumatic	Electric
Machine name	ProFill 15 T	ProFill 17e T
Performance	45 BIB per min	51 BIB per min
BIB format	1.5 L to 20 L	
Weight	900 to 1000 kg (depending on options)	
Minimum box size	H:220 mm / L:123 mm / W:80 mm	
Maximum box size	H:410 mm / L:255 mm / W:232 mm	
Power supply	400V/50hz 3P+N+E	
Pneumatic pressure	6 to 7 bars	



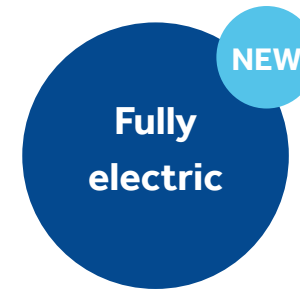
ProFill versions, innovative and multi-purpose filling operations

Each of these models and versions is rigorously designed to meet specific requirements, offering unequalled versatility for the filling process. The ProFill range stands out for its ability to adapt to your business, ensuring steady production and outstanding quality. Discover the power of the ProFill range and raise your output to new heights.

Advanced versions



A robust choice, using air power for reliable performance.



At the cutting edge of innovation, this fully electric version guarantees optimal automation and top-level performance.

With these enhanced versions, we bring you a new generation of machines with integrated electric cylinders in strategic positions.

Two alternatives are available, offering the following key benefits:

- Increased productivity
- Optimised maintenance costs
- Enhanced movement flexibility (greater speed, extended travel distance, increased torque, etc.)
- Precise, smooth and jolt-free positioning.
- Customisable settings (speed, torque, distance, etc.) for each cylinder to simplify programming.
- Smooth transition from one tap to another without the need for mechanical adjustments.

The new standard for filling machines

PROFILL IS THE ONLY MODEL ON THE MARKET EQUIPPED WITH 7 ELECTRIC CYLINDERS, OFFERING A FILLING SPEED OF 17 BAGS PER MINUTE FOR 3 L FORMATS.

- **Cylinders impacted by electrification:**

Cylinders located under insertion bags.

Cylinders with capping and uncapping functions.

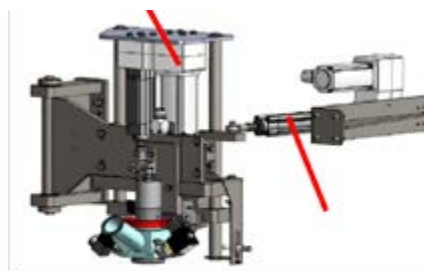
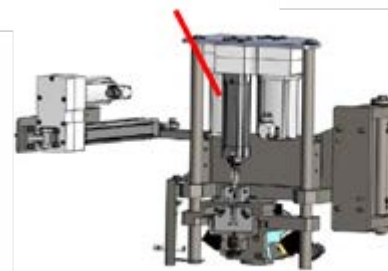
Cylinders equipped with adjustable valves in high and low positions.

Transfer cylinder for cork or valve gripper.

Height-adjustable cylinders for the funnel.

**ProFill
Fully electric**

NEW



An innovative filling solution designed to optimise your operations while reducing maintenance costs.

With 66% less air use and an electric output exceeding that of traditional compressors, the ProFill17 offers optimal power use.

Equipped with automatic adjusters to separate pouches and adapt the filling head position during cork changes, its offers unbeatable versatility.

Advantage of electric cylinders

Electric cylinders offer numerous benefits ensuring optimal operation and greater versatility for your machinery.

The main advantages:

Multi-format management without the need for added options

Switch easily from one bag format to another (1.5 L to 20 L) without the need for extra options, enabling optimal adaptation for a range of production activities.

Reduced maintenance costs

Thanks to their maintenance-free design, these cylinders help to reduce servicing costs, thus improving profitability and machine availability.

Precision and repeatability

With precise positioning and excellent movement repeatability, the brushless cylinders enable reliable and steady operations, even in the case of frequent format changes.

Simplified settings

The absence of position sensors simplifies settings, thanks notably to encoder resolution via HMI (Human-Machine Interface).


Precise position adjustment via the screen

- Centred positioning of the cork gripper and filling valve on the gland.
- Adjustment of funnel height during loading.
- Adjustment of capping height and pressure for flawless sealing.
- Optimisation of work and waiting positions.
- Adjust the waiting position of the cylinder under the bag, in addition to the pressure applied to the lower part of the gland. Manage also the waiting, return and insertion position of the gland in the gripper with enhanced precision.

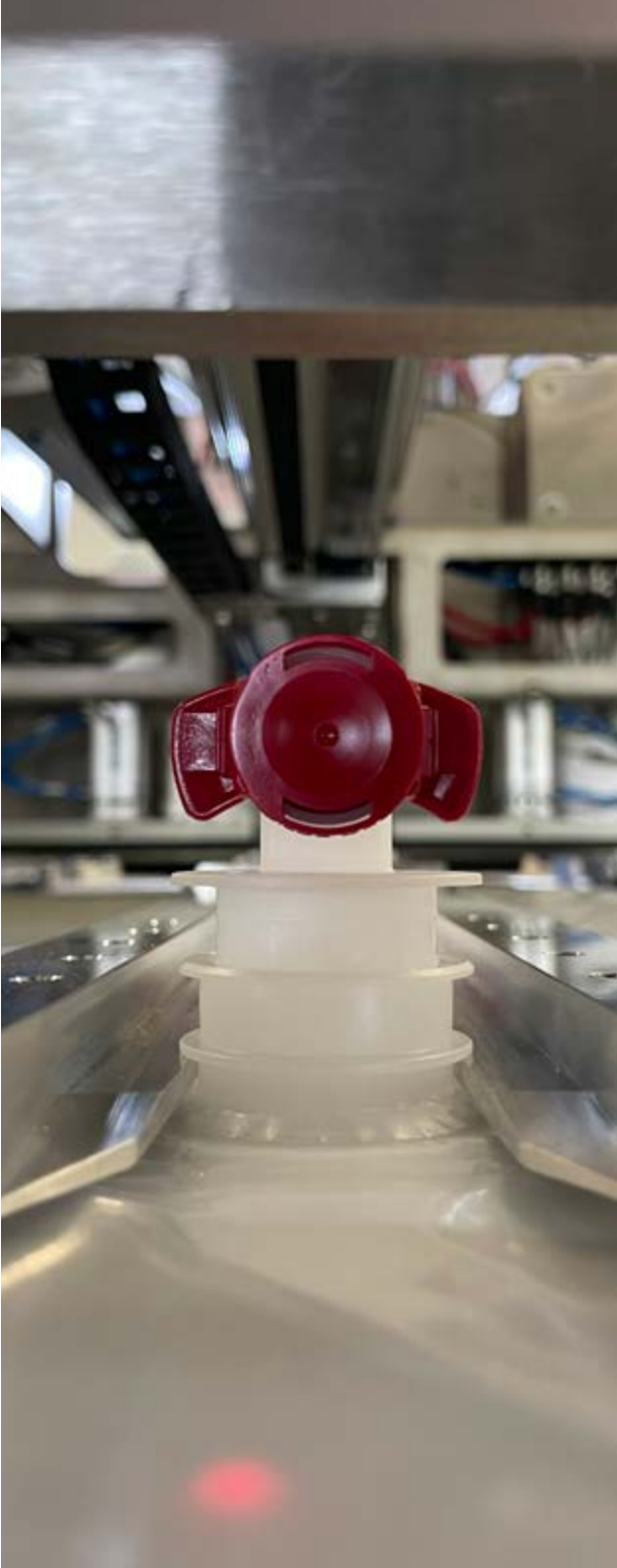
These advanced functions make brushless cylinders an ideal technical solution for seamless, fully controlled filling and capping operations.



Technical data

		Performance	
		Pneumatic	Fully electric
Single head	3 L	900 BIB per hour	1000 BIB per hour
	5 L	800 BIB per hour	900 BIB per hour
	10 L	600 BIB per hour	700 BIB per hour
	20 L	400 BIB per hour	490 BIB per hour
Double head	3 L	1800 BIB per hour	2000 BIB per hour
	5 L	1600 BIB per hour	1800 BIB per hour
	10 L	1200 BIB per hour	1400 BIB per hour
	20 L	800 BIB per hour	980 BIB per hour
Triple head	3 L	2700 BIB per hour	3000 BIB per hour
	5 L	2400 BIB per hour	2700 BIB per hour
	10 L	1800 BIB per hour	2100 BIB per hour
	20 L	1200 BIB per hour	1470 BIB per hour

Performances based on 12,000 L per hour at instantaneous speed



Advanced options and functions Extensions



The Pouch-Up® extension

Thanks to its removable frame, the Pouch-Up® module can be easily inserted onto the front panel of the ProFill filling machine. This model is equipped with an in-feed conveyor on which the operator places the empty bags, as well as an output conveyor that discharges the filled bags. This model comes with additional built-in features, designed to manage bag travel up to the filling zone.



Idle roller conveyor

Gravitational roller conveyor, adapted to the machine output point to recover filled bags.



Option: Motorised conveyor for machine front

Removable motorised conveyor with modular belt, designed for filled bag handling. Dimensions may be adjusted according to the required setting.



Advanced machine options and functions

All options:

Setting options

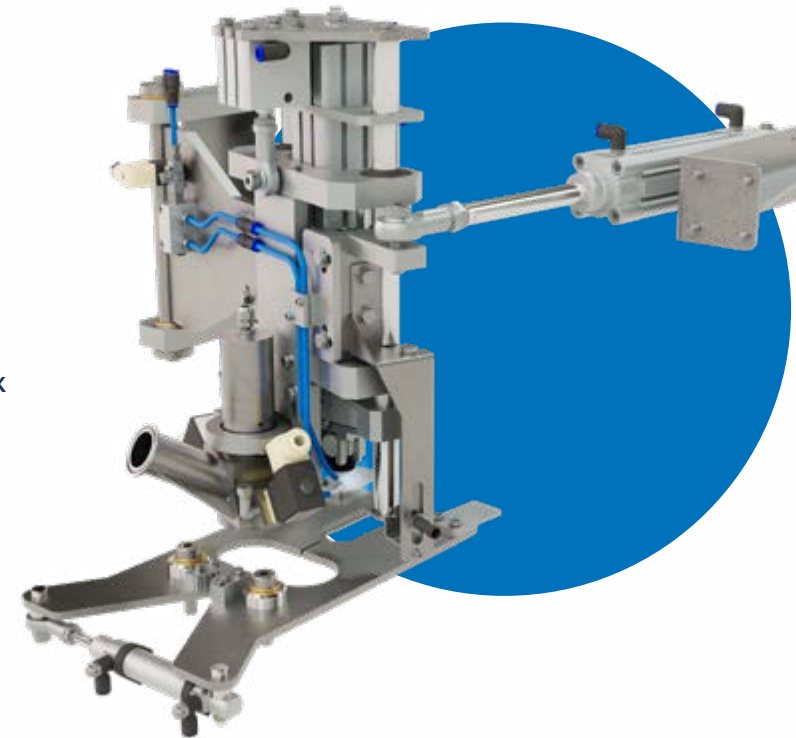
- **Loading:** Dedicated conveying and funnel for the automatic loading of bags in boxes, thus facilitating end packing and finished goods transportation.
- **Without loading:** Suitable for businesses not requiring automatic loading, this is a simpler, more economical solution.
- **Long frame for potential use of a double head:** Anticipate increased production yield by adding a second filling head at a later stage.

Conveyor options:

- **Motorised out-feed table** Facilitate filled-product transfer with automatic travel.
- **Bag impression after box loading:** Helps check bag corners after box loading to facilitate hot-glue sealing operations.
- **Pouch-Up® trolley extension:** Specific conveyor extension for Pouch-Up® handling on the filling machine in-feed conveyor.

Format Management options:

- **Required tooling per new box format:** Adapt to the specifications of each new box format to meet filling centre and end-user requirements.
- **Small-format bag management:** Efficient handling of small-format bags, ensuring precise filling and safe handling of small packaging.



Smooth Process options:

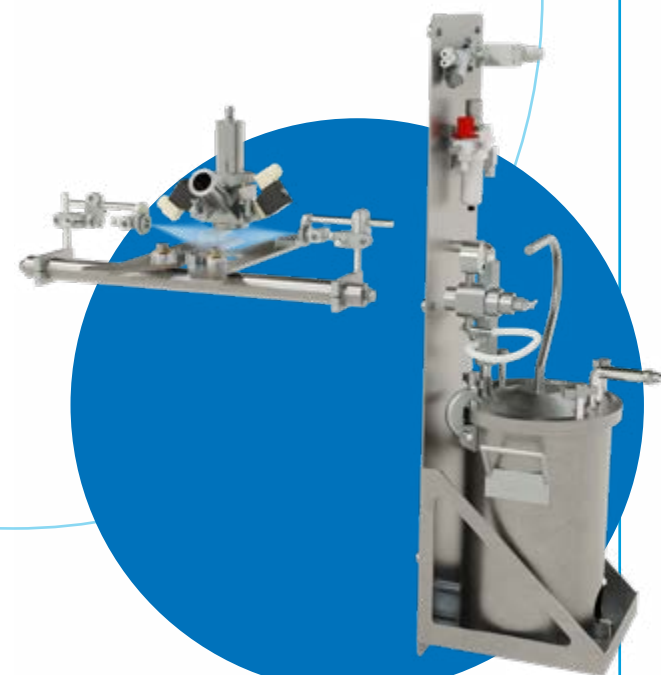
- **High-temperature filling:** Fill liquids at a high temperature, to improve shelf life and sterilise heat-sensitive products.
- **Automatic shock absorber:** Reduce vibrations and shocks during the filling process, and thus ensure safe product handling and steady production.
- **Mass flow meter:** Measure the flow of low-water-content liquids accurately, to ensure the precise and uniform filling of containers.
- **Nitrogen injection control:** Control the addition of nitrogen precisely for modified atmospheric packaging, to preserve product freshness and shelf life while reducing oxidation mechanisms.
- **Disinfectant spraying:** Automatic disinfection of critical machine surfaces.
- **Bulk volume filling:** For efficient and fast filling of bulk liquid volumes.
- **Nitrogen flushing for gland / cork:** Ensure effective flushing of the gland or cork with nitrogen, to reduce contamination risks and preserve product quality.

Safety and Certification options:

- UL / CSA standards
- Translation of operating guide and screen

Monitoring and measuring options:

- **CIP temperature sensor:** Monitor and control temperature during the cleaning process.
- **Lid sensor:** Detect the presence of corks on containers before filling, to ensure correct positioning and avoid malfunctions or spillage.





Bag-in-Box®

Looking for a Bag-in-Box filling machine?
We are the centre of excellence offering the best service!



CONTACT US:

France

Quai de l'Île Belon
CS 21002
51200 Epernay Cedex
France
Phone: +33(0)3 26 55 70 10

Vitop Italy

Via Enzo Ferrari 39
Zone Industriale D3
15100 Alessandria
Italy
Phone: +39 0131 241 601

