

CHRONOS OMP-2090 B
Fully automatic bagging
station for powdery products

Elevate your packing process

The new fully automatic bagging station

Elevate your packing performance: Introducing the CHRONOS OMP-2090 B for maximum efficiency, the result of a strong partnership of market leaders Premier Tech and Bühler.

The CHRONOS OMP-2090 B is a fully-automatic bagging system designed for powdery products, capable of efficiently handling open-mouth bags across a wide range of sizes and materials. Featuring a monobloc design and compact footprint, it integrates into any plant setup, offering high performance and robustness. Operated via an intuitive HMI touch screen panel, it facilitates easy cleaning, maintenance, and swift product and bag changeovers. Addressing market demand for flexibility, quality, and affordability it represents an ideal investment to enhance plant profitability while ensuring adherence to stringent safety standards.

Key benefits



Maximized productivity thanks to fully automatic and highly reliable operation.



Maximum up-time thanks to the uniquely robust bag handling concept ensuring care-free operation for a wide range of bags.



Full transparency in machine and process data made possible with unlimited connectivity to Bühler Insights and any plant control system.



Increased profitability by achieving a reliable bagging accuracy of $\pm 0.2\%$ (at 2σ) for 25 kg bags.



High product and human safety thanks to the implementation of hygienic design and presence of comprehensive safety features.

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Bag specifications	Width	320 mm to 700 mm
	Length	600 mm to 1100 mm
	Weight	10 – 25 kg (26 – 50 kg on request)
	Closing type	Plain sewing, fold-over and sewing, double thread sewing
	Bag magazine	2 x up to 240 bags / magazine
Electrical requirement	3x 400 V (+/-10%) @ 50 Hz or 3x 440 V @ 60 Hz	
Electrical power requirement	38 kW	
Operating pressure	6 bar, air must be dry, clean and not lubricated	
Aspiration	90 m ³ /min, 600 pa	
Ambient temperature	+5 °C to +50 °C	
Accuracy	± 0.2% at 2 sigma (σ) (95% pass rate) for 25 kg bags	
Control system	Siemens PLC	
Standard HMI	9" Color touch screen	

Application

High density powders with low fat content like wheat flour, maize grits, maize flour, fine semolina (0.45 – 0.65 t/m³)

Market applications



Wheat flour



Fine semolina



Maize flour



Maize grits

Product properties



High density powders

Bag types



Pillow



Gusseted



Block bottom



Cross bottom

Bag material



Paper



Paper with inner liner*



Woven PP



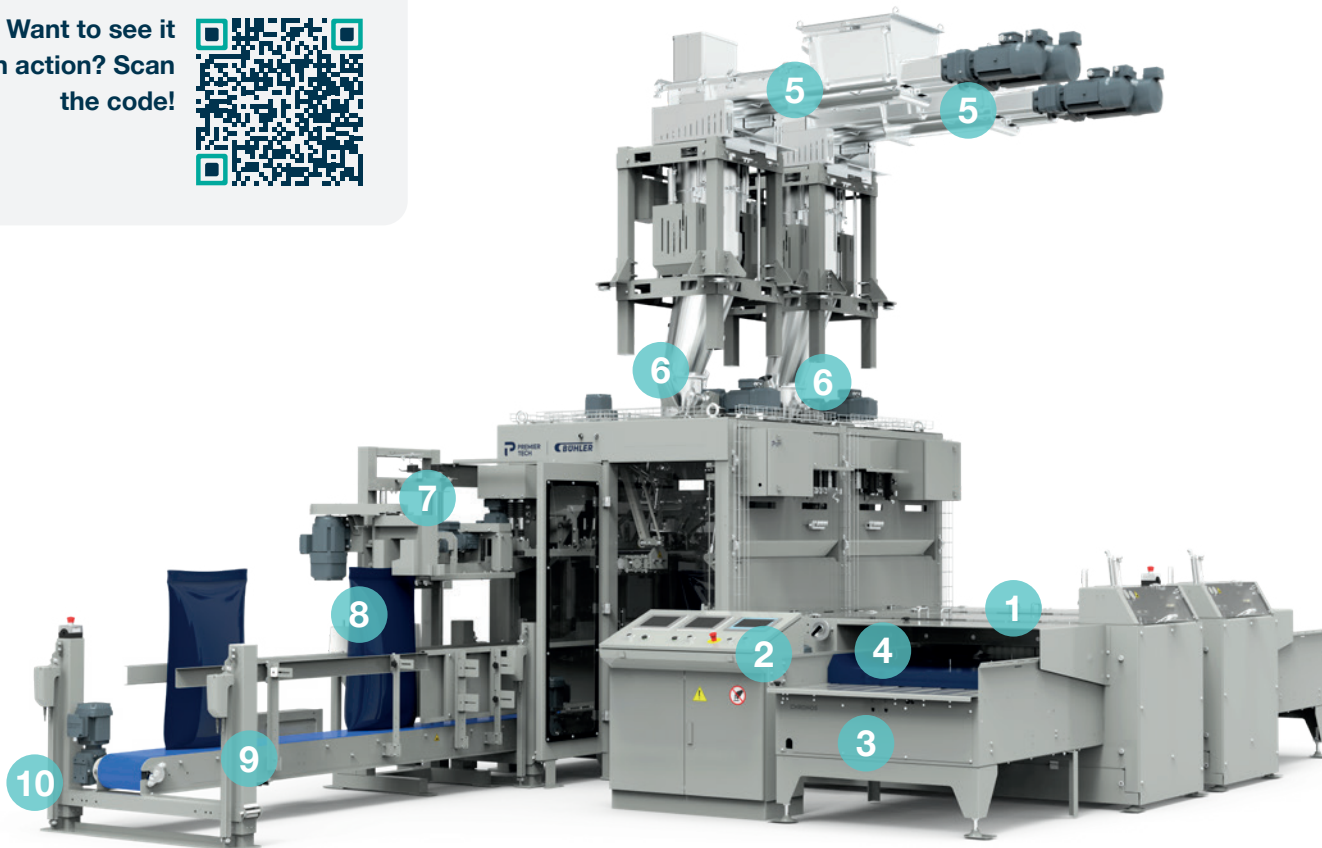
Woven PP with inner liner*

* The inner liner must be fixed to the bag on top

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Scope and options

Want to see it
in action? Scan
the code!

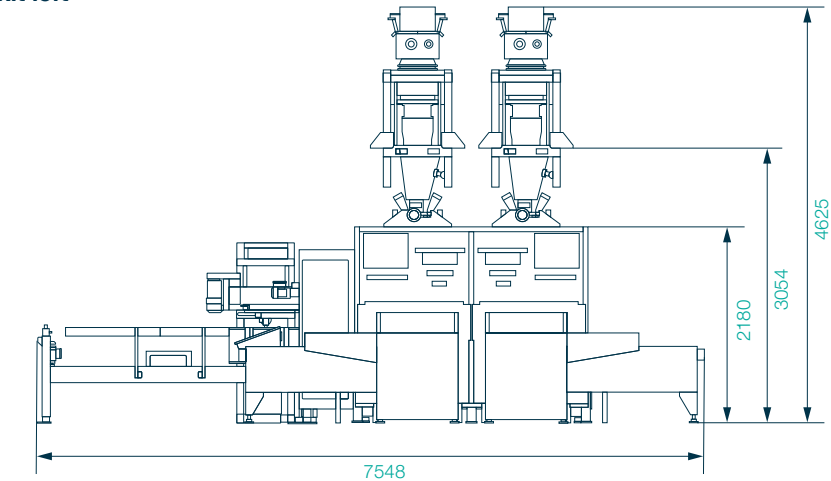


- 1. Layout**
Basic: Bag magazine right
Alternative: Bag magazine left
- 2. Cooling system cabinet**
Basic: None
Option: Cooling of control cabinet
- 3. Bag magazine & placer**
Up to 240 bags / magazine
- 4. Bag opening device**
Basic: Pneumatic bag opening device
Alternative: Bag opening device for partially welded (woven PP) bags
- 5. Product feeder**
2x double screw feeders
- 6. Aspiration**
Connections for aspiration
- 7. Bag closing**
Basic: Plain sewing
Alternative: Fold-over and sewing
Alternative: Double thread sewing
- 8. Bag weights**
Basic: 10 – 25 kg
Alternative: 26 – 50 kg on request
- 9. Conveyor height**
Automatic height adjustment
- 10. Bag exit**
Basic: Standing bag
Option 1: In-line turner
Option 2: Bag kicker 90° left or right

Compact monobloc design

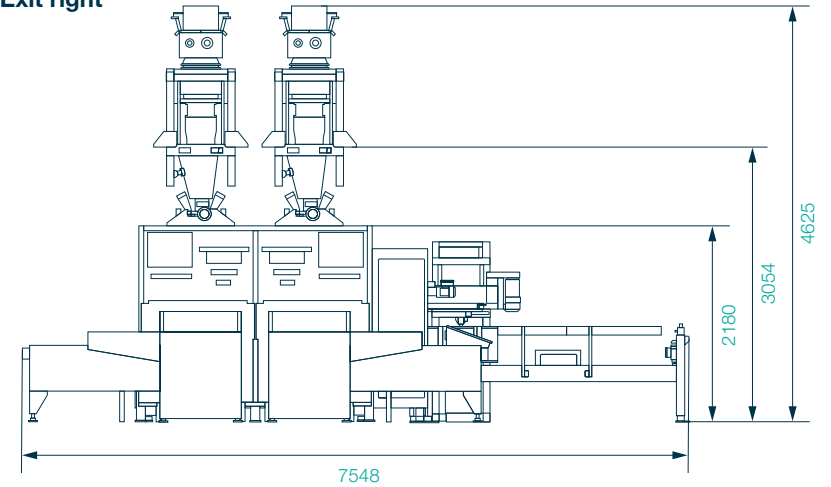
Dimensions and layouts

Exit left

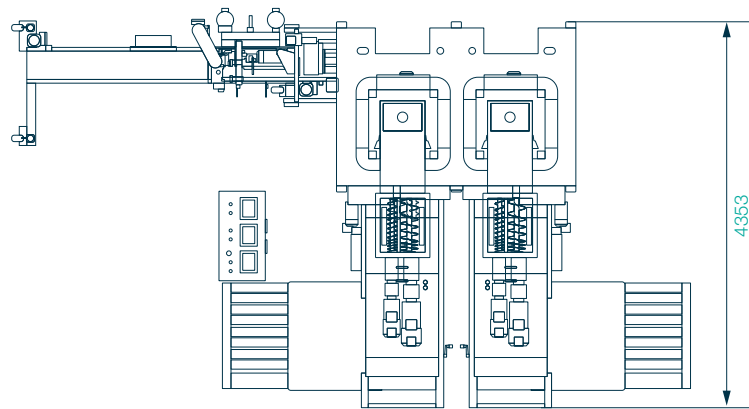


Front view

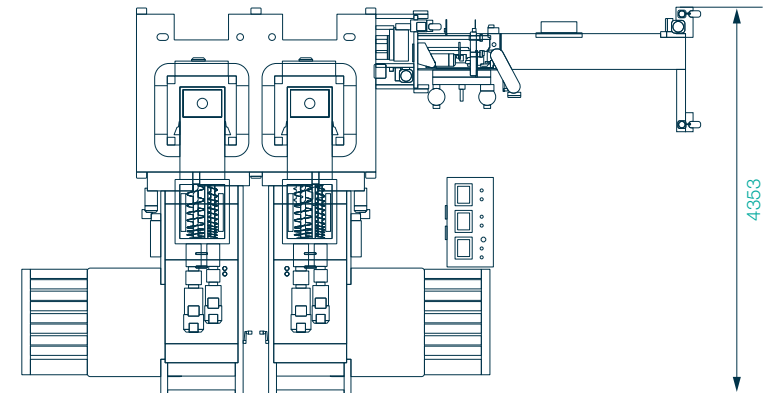
Exit right



Front view



Top view



Top view

Increased profitability through innovation

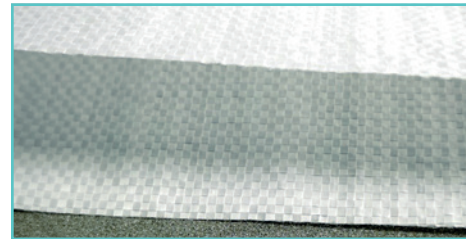
Optimize your margin with a reliable bag opening operation

Bag opening device for bags with fully opened mouths

Our bag opening devices are designed to handle various types of bags. Each bag is opened precisely as it is dispensed from the magazine, making it ready to be placed on the spout immediately. The integration of suction cups ensures effective handling of different shapes and materials, as long as the bag mouth is fully opened.

Operation with consistent bag quality

- Effective solution for any bag with completely opened mouth and reasonably high air-permeability.



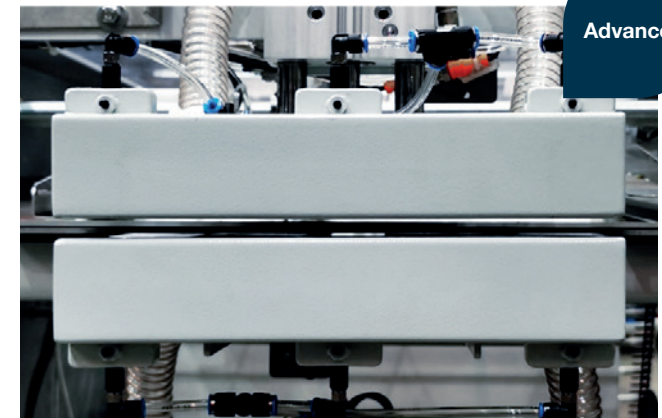
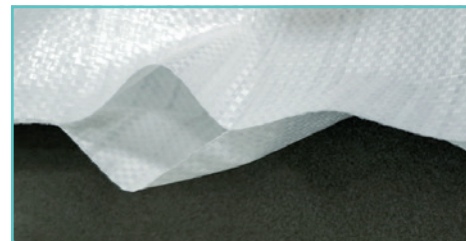
Basic

Bag opening device for partially welded bags

Our bag opening device can also handle lower quality woven polypropylene bags. It operates reliably, even with partially welded woven polypropylene bags, which are often a byproduct of hot-wire cutting during the manufacturing process. This innovative technology allows the use of more cost-effective bags, optimizing your margin without compromising the efficiency of your operations.

Operation with multiple bag origins and consistencies

- Robust and reliable opening of a wide variety of bags under possibly inconsistent conditions.
- Optimize margin thanks to cost-effective sourcing of bags.



Advanced

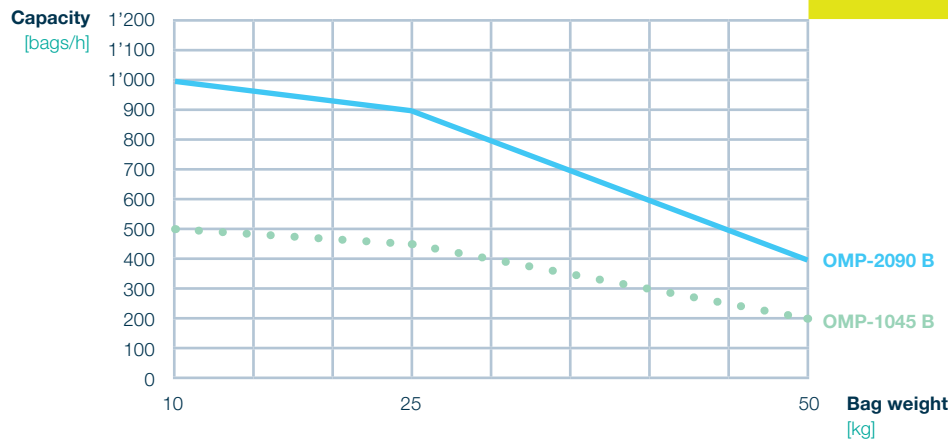
Unleashing full potential

Tailored solutions for various powders

		High density powders		
Bag weight (26 – 50 kg on request)	kg	10	25	50
Production capacities* OMP-2090 B	bags/h	1'000	900	400
	t/h	10	22.5	20
Product specification		bulk density 0.4 – 0.65 t/m ³ granulation ≤ 0.5 mm low fat content		

Estimated production capacity of **900 bags per hour** (at 25 kg bag weight)*

Estimated production capacity for high density products



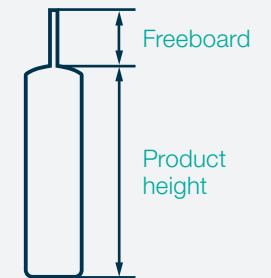
*Depending on the application, bag characteristics, and machine configuration

Essential factors for optimal performance

The performance depends on various factors, including the quality of the bag, its size and characteristics.

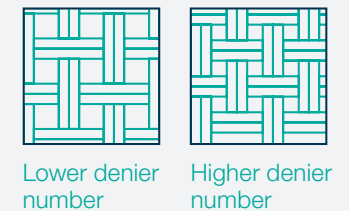
Freeboard of the bag

A crucial element is the freeboard — the unused space from the top of the bag — which should exceed 160 mm for plain sewing and 200 mm for fold-over sewing to ensure optimal performance, as less freeboard can decrease the production capacity of the bagging station.



Quality of the bag

The denier number measures the weight and density of the yarn used in the bags. Woven PP bags perform better with a denier number of 780 or higher. It is important to operate the station at full capacity to achieve optimal results. Lower numbers may reduce maximum production output.



Enhanced productivity

Benefit from maximum safety and process transparency



Human and product safety standards

We ensure the safety of the product with:

- Dust control chute that reduces product discharge
- Food-safe materials for all components that come in contact with the product
- Hands-free automatic operation during bagging
- Wide transparent safety doors for easy access to the bagging section
- Open frame with limited legs for easy cleaning
- Transparent covers for easy inspection of machine cleanliness during operation

We ensure human safety with:

- Safety covers, doors and walls around moving parts
- Safety switches at the doors to stop operation when open
- Easy access to emergency stops

Process transparency

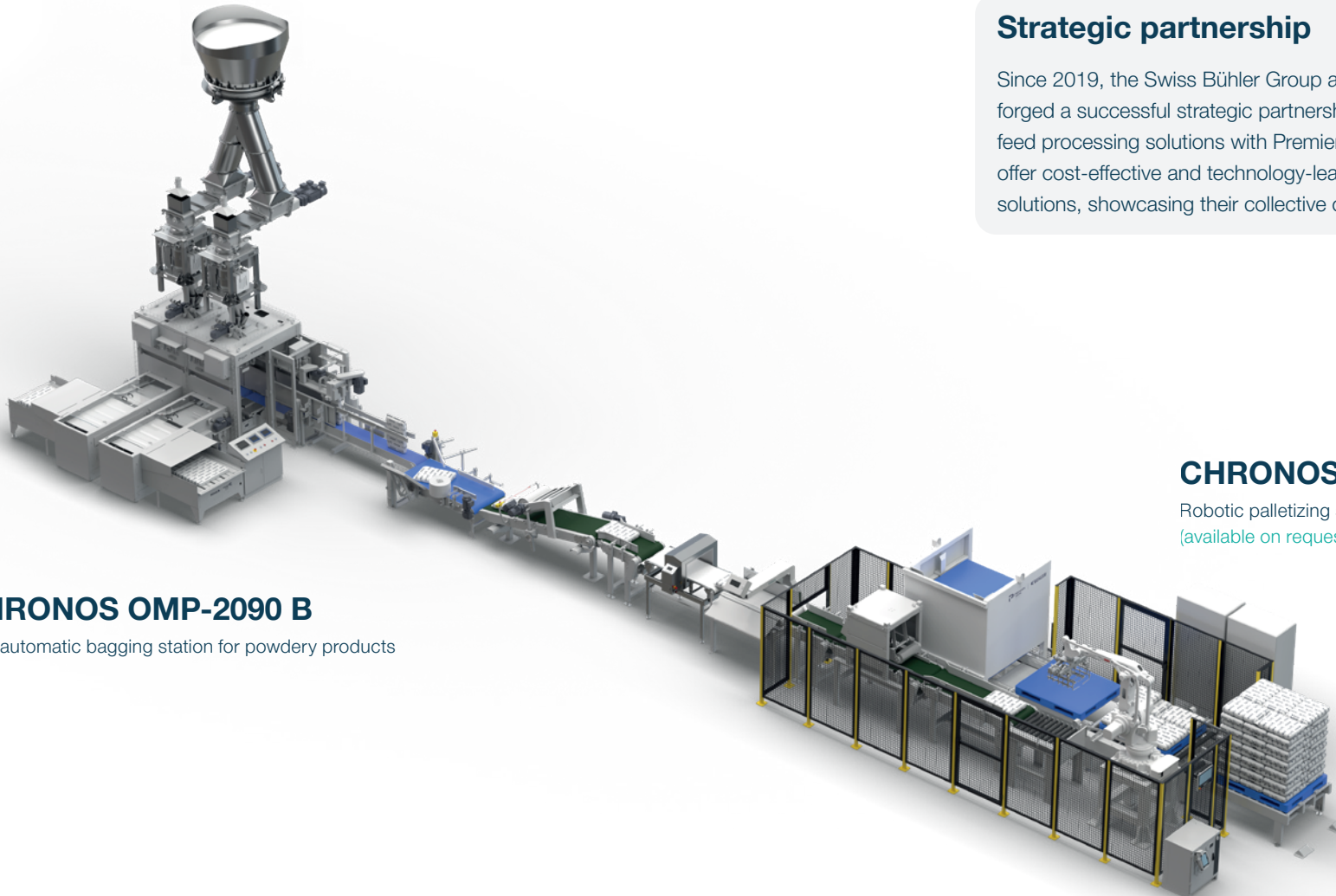
Process and machine data transparency in packing are essential for achieving maximum uptime and output optimization. The CHRONOS OMP-2090 B provides an unlimited connectivity to a wide range of control and analysis systems to help you keep track of your most important KPIs.

Possibility to connect to:

- Bühler Mercury MES
- Digital services platform Bühler Insights or Bühler Smart
- Any third party automation and plant control system

Your partner for full-line concepts

Achieving packing and palletizing excellence



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Strategic partnership

Since 2019, the Swiss Bühler Group and Canadian Premier Tech have forged a successful strategic partnership, integrating Bühler's food and feed processing solutions with Premier Tech's packaging expertise to offer cost-effective and technology-leading packing and palletizing solutions, showcasing their collective core competencies.

CHRONOS RPL-B Series

Robotic palletizing station for bags
(available on request)



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