CHRONOS OML-B Series

Fully automatic bagging stations for granular products

Innovations for a **better world.**

BÜHLER

Elevate your packing process
The new fully automatic bagging stations

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

The CHRONOS OML-B Series contains fully automatic bagging systems designed for granular products, capable of efficiently handling open-mouth bags across a wide range of sizes and materials. Featuring a monobloc design and compact footprint, the machines integrate into any plant setup, offering high performance and robustness. Operated via intuitive HMI touch screen panels, the systems facilitate easy cleaning, maintenance, and swift product and bag changeovers. Addressing market demand for flexibility, quality, and affordability the CHRONOS OML-B Series 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 ± 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.

CHRONOS OML-B Series
Fully automatic bagging stations for granular products

		CHRONOS OML-1060 B	CHRONOS OML-1140 B
Bag specifications	Width	320 mm to 700 mm	
	Length	600 mm to 1’100 mm	
	Weight	20 – 50 kg	
	Closing type	Plain sewing, fold-over and sewing, double thread sewing	
	Bag magazine	Up to 200 bags	Up to 400 bags*
	Electrical requirement	3x 400 V (+/-10%) @ 50 Hz or 3x 440 V @ 60 Hz	
	Electrical power requirement	10 kW	15 kW
	Operating pressure	6 bar, air must be dry, clean and not lubricated	
	Aspiration	20 m^3/min	
	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	

*with extended bag magazine

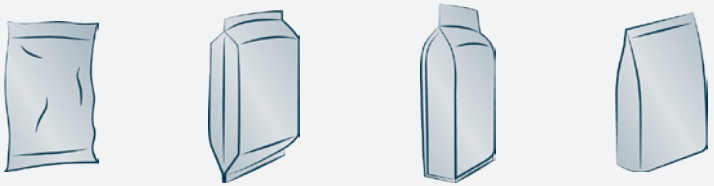
Applications

Various granular products like animal / aqua feed pellets (0.65 – 1.0 t/m^3), animal / aqua feed mash (0.5 – 1.0 t/m^3), various grains like rice and malt (0.65 – 1.0 t/m^3).

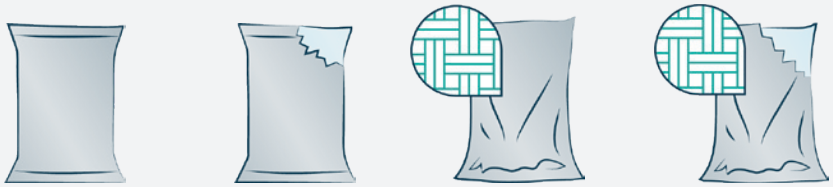
Product properties

Granular bulk material

Bag types



Bag material



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

CHRONOS OML-1140 B
Scope and options

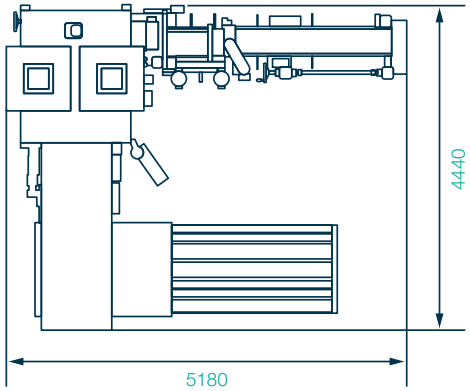
Want to see it in action? Scan the code!

Estimated production capacity of **up to 1200 bags/h**.

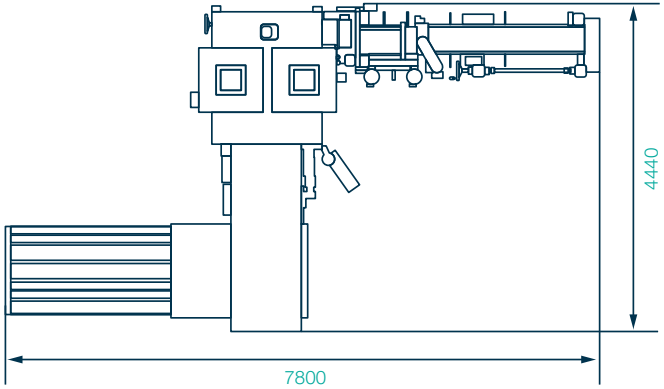
1. **Layout**
   Basic: Bag magazine right inwards
   Alternatives: Bag magazine right or left, inwards or outwards
2. **Cooling system cabinet**
   Basic: None
   Option: Cooling of control cabinet
3. **Bag magazine & placer**
   Basic: Up to 200 bags / magazine
   Alternative: Up to 400 bags / magazine
4. **Bag opening device**
   Basic: Pneumatic bag opening device
   Alternative: Bag opening device for partially welded (woven PP) bags
   Alternative: Motorized bag opening device
5. **Product feeder**
   Basic: 2x gravity feeder (for grains)
   Alternative: 2x belt feeder (for pellets & mash)
6. **Aspiration**
   Connections for aspiration
7. **Bag closing & labeling**
   Basic: Plain sewing
   Alternative: Fold-over and sewing
   Alternative: Double thread sewing
   Option: Bag labeling device
8. **Bag weights**
   20 – 50 kg
9. **Conveyor belt**
   Manual height adjustment
10. **Bag exit**
    Basic: Standing bag
    Option 1: In-line turner
    Option 2: Bag kicker 90° left or right

CHRONOS OML-1140 B
Dimensions and layouts

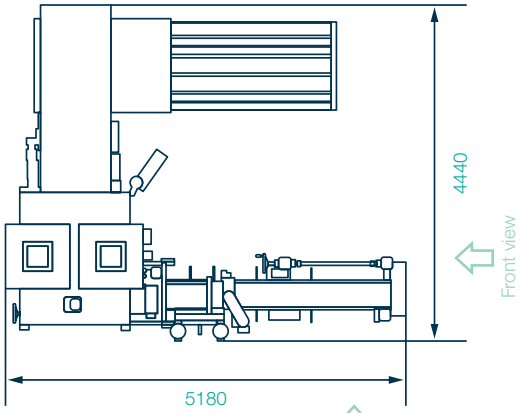
Top view



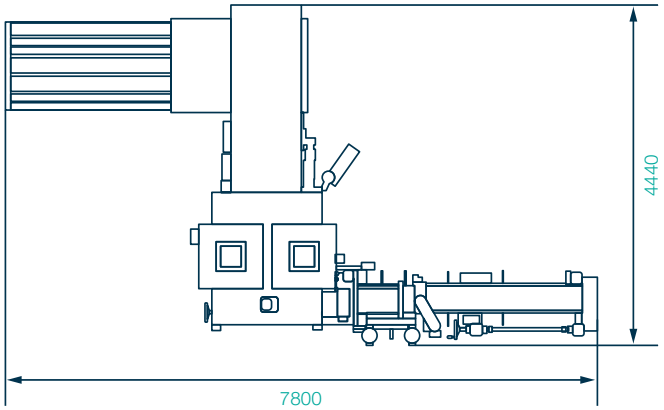
Layout A



Layout B

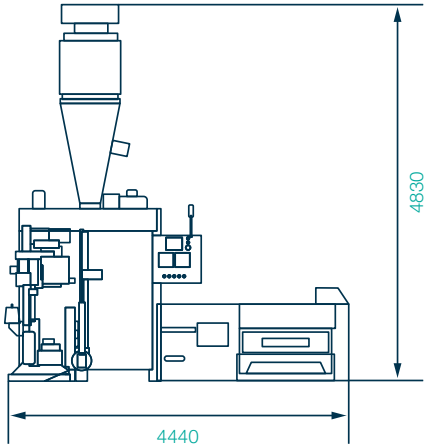


Layout C



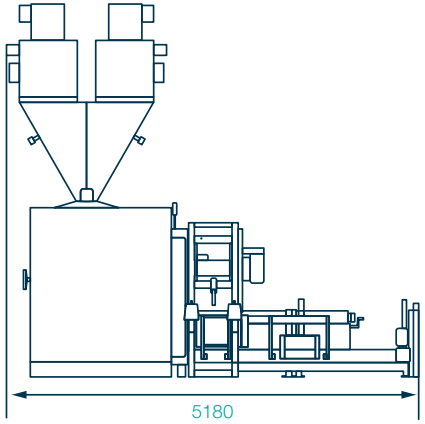
Layout D

Front view



Layout C

Side view



Layout C

CHRONOS OML-1060 B
Scope and options

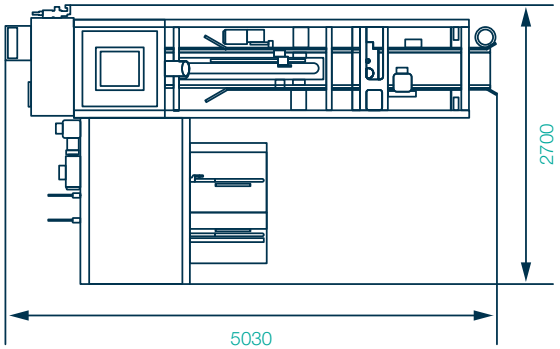
Want to see it in action? Scan the code!

Estimated production capacity of **up to 600 bags/h**.

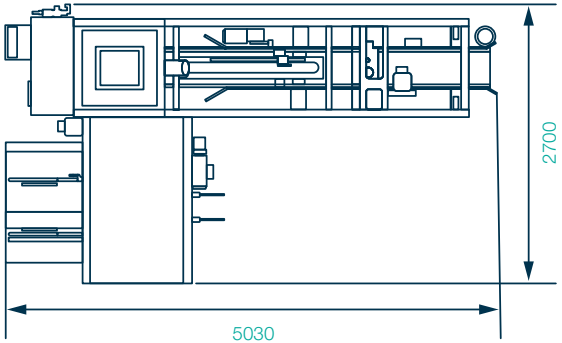
1. **Layout**
   Basic: Bag magazine right inwards
   Alternatives: Bag magazine right or left, inwards or outwards
2. **Cooling system cabinet**
   Basic: None
   Option: Cooling of control cabinet
3. **Bag magazine & placer**
   Up to 200 bags / magazine
4. **Bag opening device**
   Basic: Pneumatic bag opening device
   Alternative: Bag opening device for partially welded (woven PP) bags
5. **Product feeder**
   Basic: Gravity feeder (for grains)
   Alternative: Belt feeder (for pellets & mash)
6. **Aspiration**
   Connections for aspiration
7. **Bag closing & labeling**
   Basic: Plain sewing
   Alternative: Fold-over and sewing
   Alternative: Double thread sewing
   Option: Bag labeling device
8. **Bag weights**
   20 – 50 kg
9. **Conveyor belt**
   Manual height adjustment
10. **Bag exit**
    Basic: Standing bag
    Option 1: In-line turner
    Option 2: Bag kicker 90° left or right

CHRONOS OML-1060 B
Dimensions and layouts

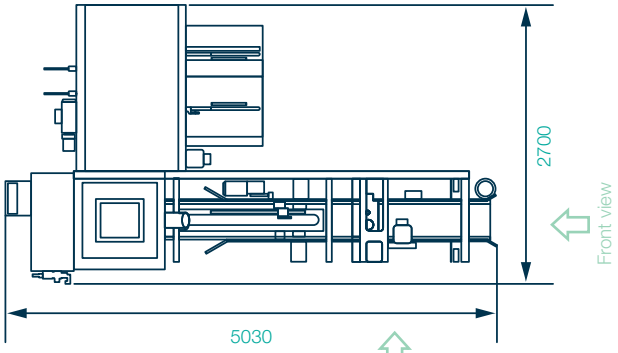
Top view



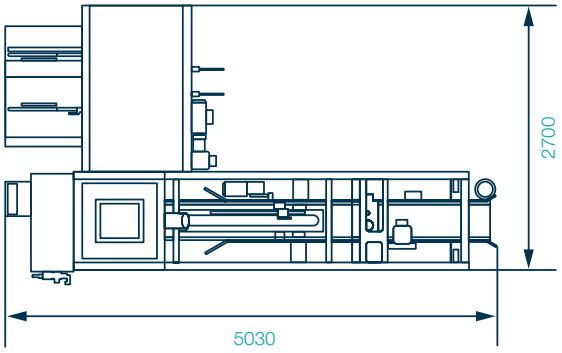
Layout A



Layout B

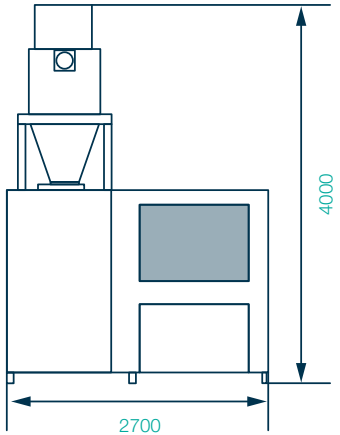


Layout C



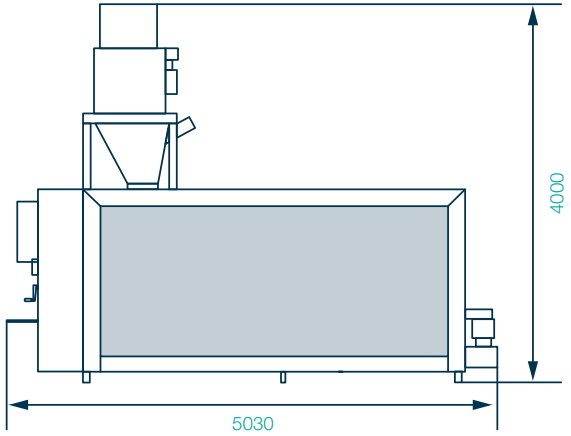
Layout D

Front view



Layout C

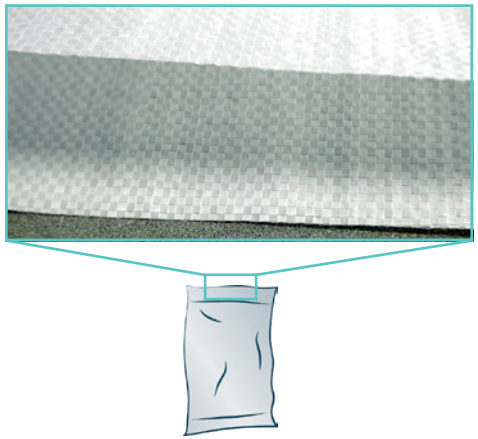
Side view

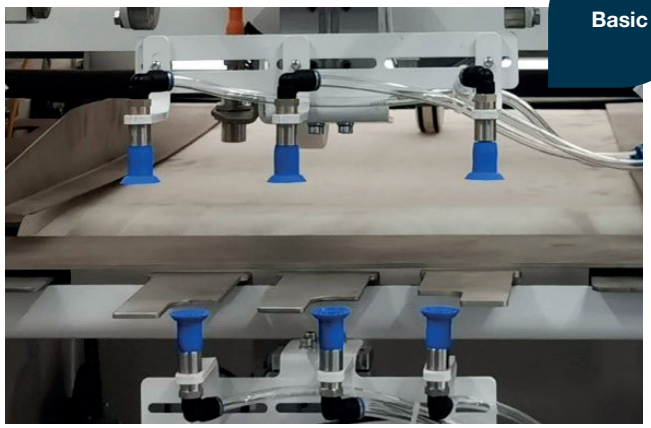


Layout C

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.

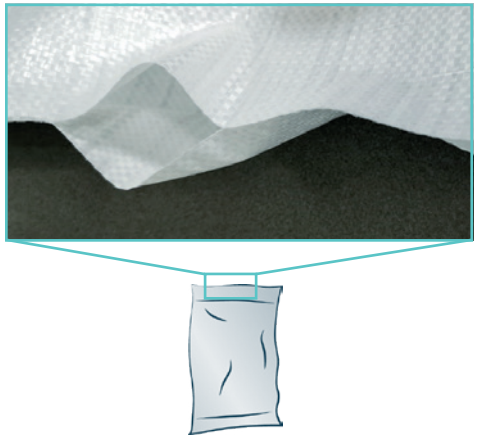


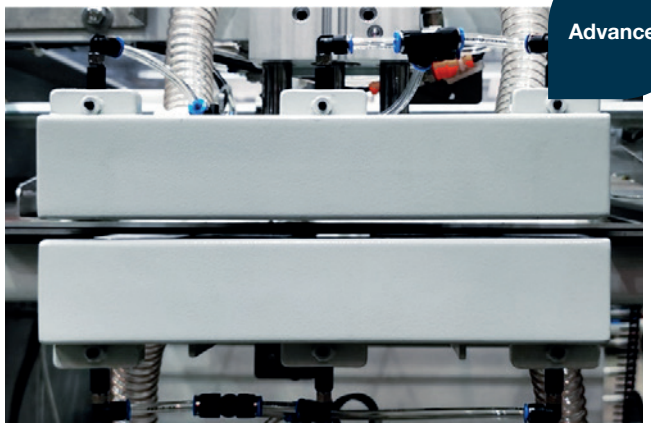


Operation with consistent bag quality

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

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

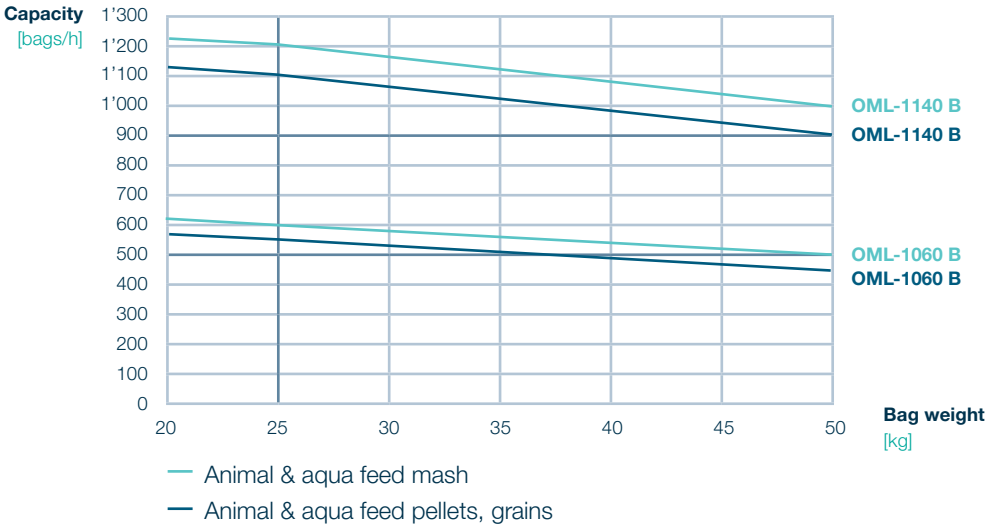
- Robust and reliable opening of a wide variety of bags under possibly inconsistent conditions.
- Optimize margin thanks to cost-effective sourcing of bags.

Unleashing full potential
Tailored solutions for various applications

		Animal & aqua feed pellets		Animal & aqua feed mash		Grains (rice, malt, etc.)	
Bag weight	kg	25	50	25	50	25	50
Production capacities* OML-1140 B	bags/h	1’200	1’000	1’100	900	1’200	1’000
	t/h	30	50	30	45	30	50
Production capacities* OML-1060 B	bags/h	600	500	550	450	600	500
	t/h	15	25	15	22.5	15	25
Product bulk density	t/m³	0.65 – 1.0		0.5 – 1.0		0.65 – 1.0	
Product granulation	mm	2 – 20		0.2 – 2		0.2 – 6	

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

Estimated production capacity for granular products

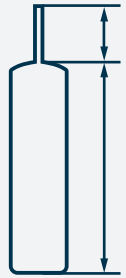


Essential factors for optimal performance

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

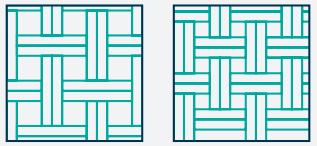
Freeboard of the bag

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 OML-B series bagging stations provide an unlimited connectivity to a wide range of control and analysis systems to help you keep track of your most important KPIs.

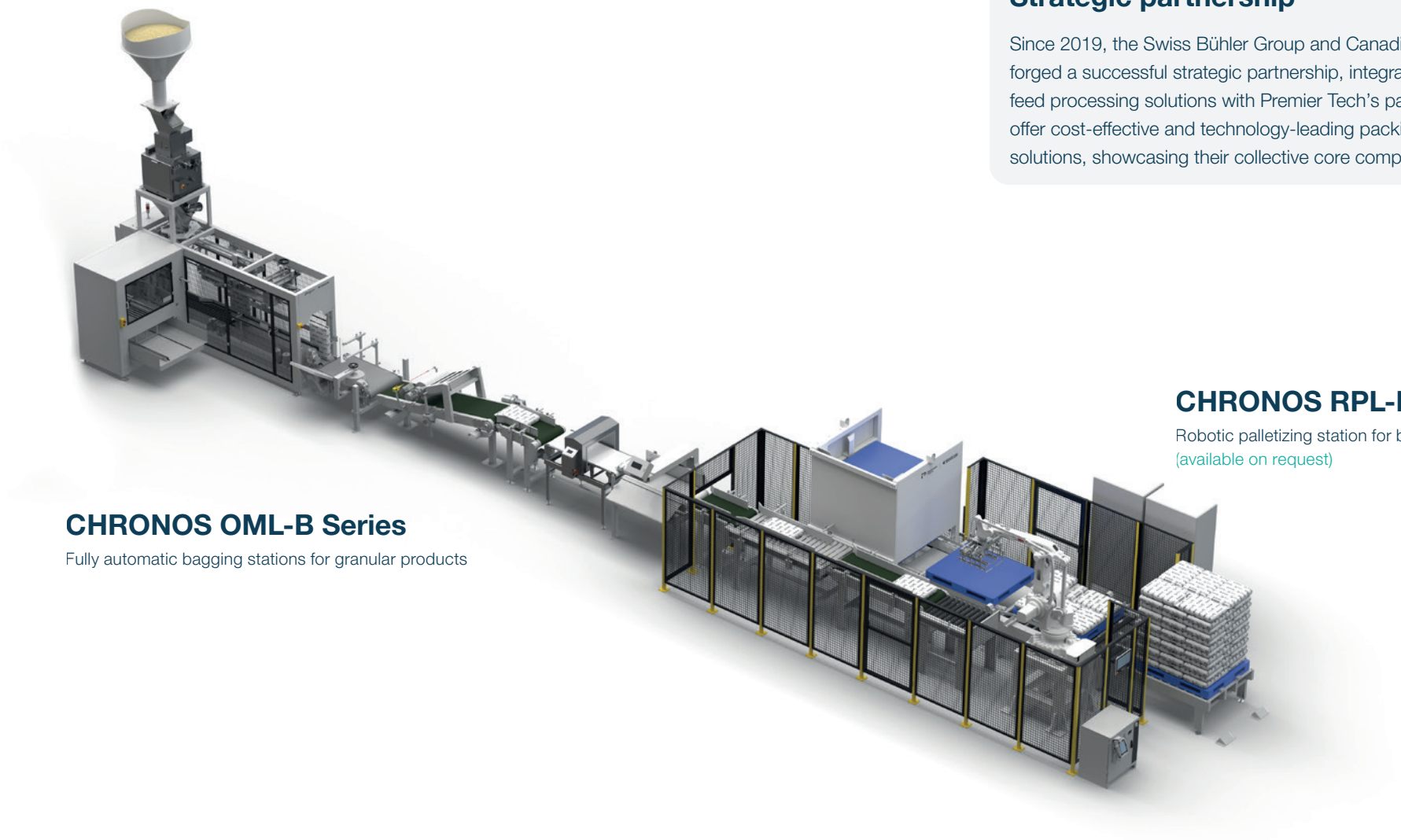
Possibility to connect to:

- 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

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)

CHRONOS OML-B Series

Fully automatic bagging stations for granular products

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