

FP210 Series (High Flexible Pre-Made Bag Packaging Machine)

Provol[®]

CONTENT



**Product
Performance**

01



**Application
Industry**

02

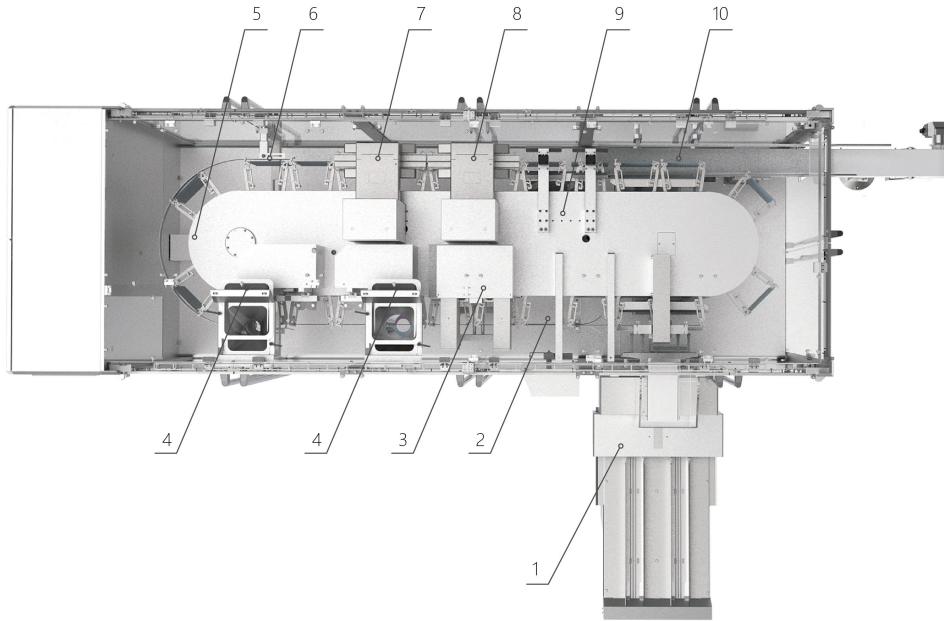


**Professional
Team**


03

Part 1

Product Performance

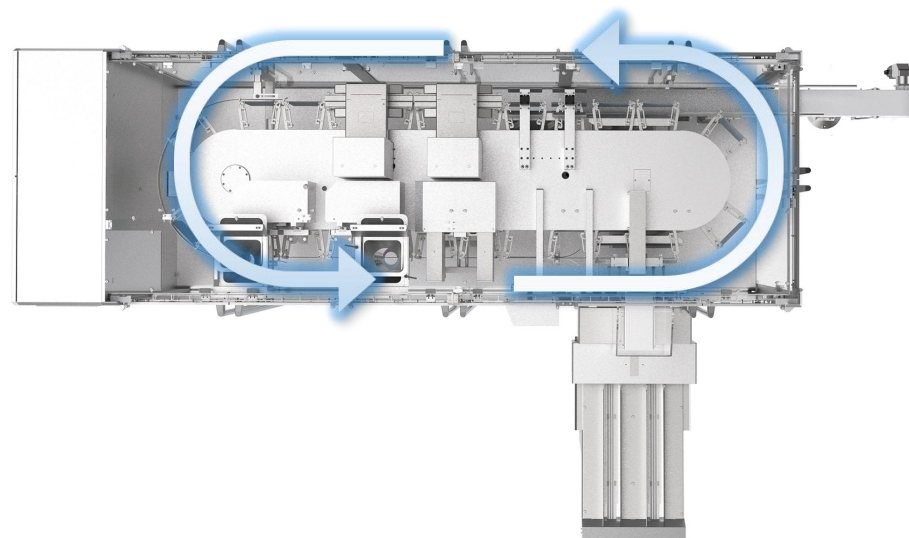


NO.	Name	Fuctions	QTY
1	Bag Magazine	It is to store pre-made bags and page them.	1
2	Reservation Station	It is a reserved space to install the code printer as an option.	1
3	Bag Opening	It is to open the bag top & bottom side.	1
4	Bag Filling	It is to install the filling hopper with the driven assembly.	1
5	Reservation Station	It is a reserved space to install other functional assembly as required.	1
6	Bag Stretching	It is to close the bag after product filled.	1
7	Bag Sealing and Cooling	The bag is sealed well after sealing and cooling.	1
8	Bag Flattening & Cooling	It is to ensure the sealed bag at normal temperature after sealing.	1
9	Bag Reject	It is to reject the empty bag or no sealed bag.	1
10	Bag Discharger	The belt is to transfer the bags to next track.	1

Machine Model	FP210-I2
Bag type	 <input type="checkbox"/> 三边封 <input type="checkbox"/> 四边封 <input type="checkbox"/> 自立袋 <input type="checkbox"/> 拉链袋 <input type="checkbox"/> 拉手袋 <input type="checkbox"/> 异型袋 <input type="checkbox"/> 加嘴袋
Products to be filled	Granular, Powder, Particle, Seasoning, etc
Bag size (mm)	Min: 100 (W) x 140 (H)
	Max: 210 (W) x 340 (H)
Speed (bpm) (up to the filled product properties)	80-120
Length of bag magazine (mm)	1450
Dimension of overall machine (mm)	4,290 (L) x 2,850 (W) x 2,152(H)
Height of outlet belt (mm)	400
Protection grade	IP54
Noise level	≤75
Number of required operators	1
Number of working stations	10
Power	8KW

**Structure
Advantages**Quick
ChangeoverConvenient
MaintenanceSafety
StandardEnergy
Efficiency**Cycle Chain Structure**

Functional Modular Design



- **Less floor footprint**
- **More reserved functions**

Structure Advantages

Quick Changeover

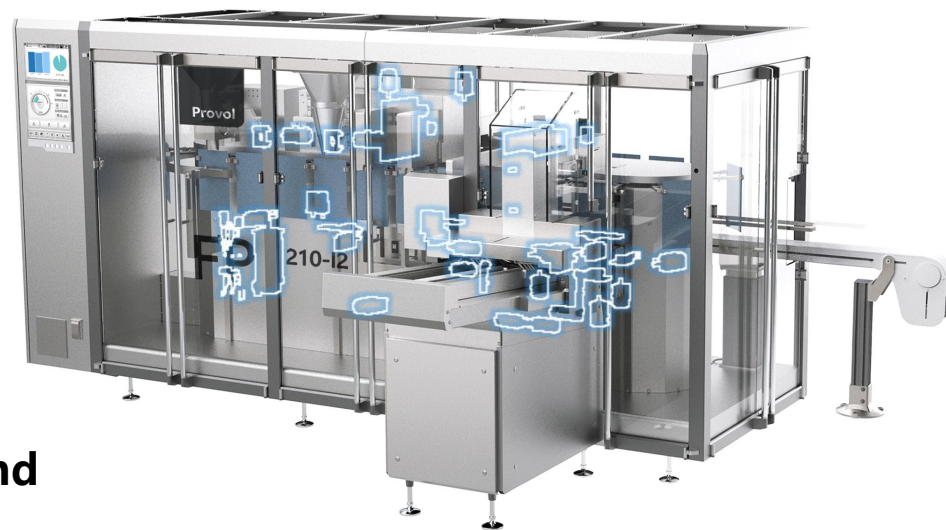
Convenient Maintenance

Safety Standard

Energy Efficiency

Cycle Chain Structure

Functional Modular Design



- **Standard interface and simple installation**

Structure
Advantages

Quick
Changeover

Convenient
Maintenance

Safety
Standard

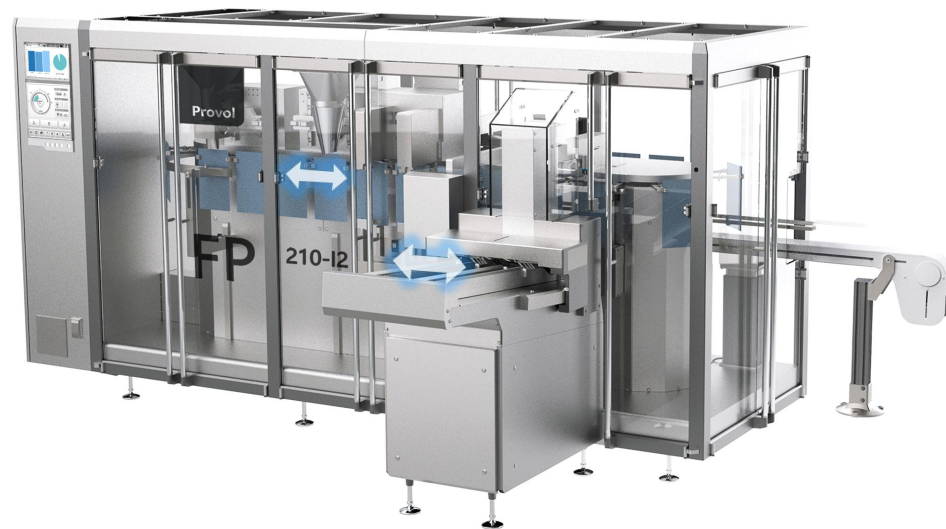
Energy
Efficiency

Automatic adjustment to bag grippers(refer to bag width)

No tool required to adjust the assembly(refer to bag height)

Recipe Administration via Touch-Screen

- The **high flexibility** of Provol FP430 concerning bag size and design, is of great convenient to convert the system from small bag sizes with or without zipper to large sizes within a very short time, even the fastest changeover can be within **10S**, which is awesome.



Structure
Advantages

Quick
Changeover

Convenient
Maintenance

Safety
Standard

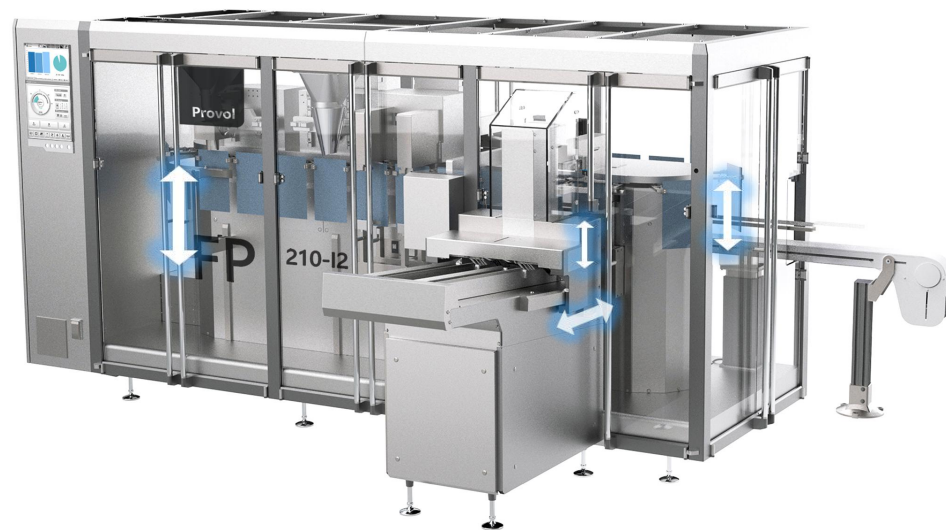
Energy
Efficiency

Automatic adjustment to bag grippers(refer to bag width)

No tool required to adjust the assembly(refer to bag height)

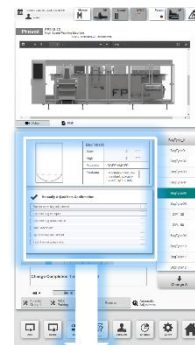
Recipe Administration via
Touch-Screen

- Thanks to the labor-saving mechanical structure design of FP series machine, the manual adjustment can be done by using standard tools even **without tools**.



Structure
AdvantagesQuick
ChangeoverConvenient
MaintenanceSafety
StandardEnergy
EfficiencyAutomatic adjustment to bag
grippers(refer to bag width)No tool required to adjust the
assembly(refer to bag height)Recipe Administration via
Touch-Screen

- **Recipe administration** via touch-screen is much clear for operators who could check easily all of the changeover parts according to different bag sizes and products, that make the detailed records for each changeover, which will be helpful to optimize the machine efficiency continuously.
- **Quick changeover** to different bag sizes and types can be done within a short time.



	Bag Type05	
	Wide	0 mm
	High	0 mm
	Materials	BOPP/VMCPP
Features	Moisture-proof, oil-resistant, oxygen-proof, light-proof,	

Manually Adjust Item Confirmation

- Bottom open bag adjustment
- Give the bag to adjust
- Give the bag wheel adjust
- Bag Seal adjust
- Up open bag adjustment
- Feed Funnel adjustment

Structure
Advantages

Quick
Changeover

Convenient
Maintenance

Safety
Standard

Energy
Efficiency

Machine Quick Spot Check

Efficient Machine Clean

- Before the machine starts up each time, it is usually necessary to check the exposed small parts and electrical instruments on the packing machine, in order to avoid the abnormal machine performance and the risk of foreign bodies in the well packed products.
- FP430 series packaging machines adopt the simple appearance design, the power distribution cabinet and key electrical components are visible, so that the status of the machine is clear at a glance.



Structure
Advantages

Quick
Changeover

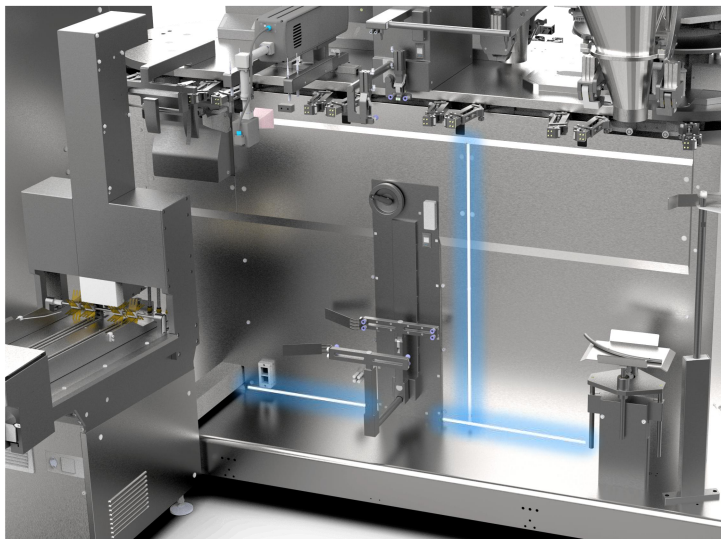
Convenient
Maintenance

Safety
Standard

Energy
Efficiency

Machine Quick Spot Check

Efficient Machine Clean



- There is a possibility that the primary packaging machine will contact with the products, so it is necessary to avoid the **hygiene dead angle**, which requires a higher hygienic grade.
- FP series packaging machine is designed referring to **Provol hygienic design standard**. The driving part of the overall machine has high sealing performance, the mechanical structure has no hygienic dead angle. The air tube and electric wire are not exposed, so it is convenient to wipe and clean by the operators. As for those parts need to be removed to clean and replace, such as cloth coated on the heating jaws, conveyor belt etc., no tools are needed to quickly clean and replace.

Structure
Advantages

Quick
Changeover

Convenient
Maintenance

Safety
Standard

Energy
Efficiency

- Overall machine control system is designed to meet Safety Standard as below:

EN ISO 13849-1

- Overall machine is designed to comply with the certificated requirements as below:

CE Certification Standard

Structure
Advantages

Quick
Changeover

Convenient
Maintenance

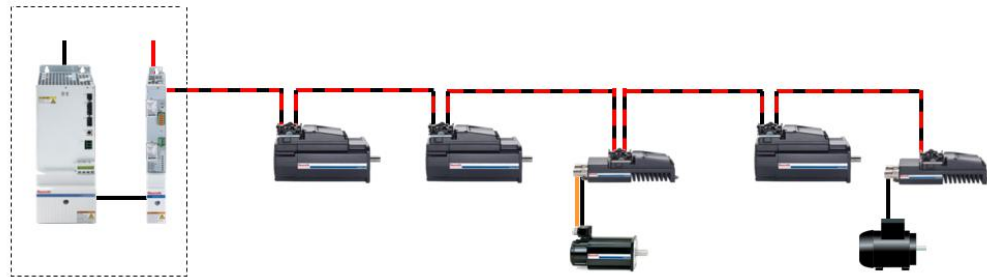
Safety
Standard

Energy
Efficiency

Distributed IO Application

OEE data is visual and
accessible via multi terminals

- The servo drive system of FP series machine uses pre-wired hybrid cables with **plug & play solution** in network configuration. Compared with the traditional servo solution, it reduces the amount of **wiring required by up to 70%**, and at the facility site, the workload is also **decreased by about 50%**.
- It will no need to change the control cabinet when adding more other module.



- Structure Advantages
- Quick Changeover
- Convenient Maintenance
- Safety Standard
- Energy Efficiency

Distributed IO Application

OEE data is visual and accessible via multi terminals.

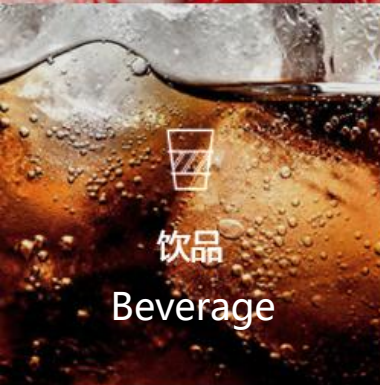
- The combined feedback from in-line weighing, bag position checking, bag height detecting, coding etc will be displayed on HMI, which help **monitor the OEE** in real time efficiently.
- The user-friendly HMI can be accessed by multi-users via **different terminals**, the statistics of production data and status of machine operation in real time can be displayed. What' s more, the OPC UA communication interface for industry 4.0 smart factory standard is integrated.





Part 2

Application Industry



A semi-transparent blue overlay covers the image. The background shows two men in a factory or industrial setting. The man on the left is wearing a dark polo shirt and holding a clipboard with a pen. The man on the right is wearing a light blue polo shirt and a headset. In the background, there is a sign that says "Provo".

Part 3

Professional Team

Team

**20
years**

Professional Team with
over 20 years industry
experience

**300
customers**

Rich service experience
for more than 300
customers

**3,000
packaging
machines**

Design and installation of
over 3000 packaging
machines



Technical Service Support

● Spare Parts Management

Maintain the sufficient spare parts to guarantee the production normally.

● Remote Service

Lower service cost, faster production recovery.

● Professional Training

Well trained operator is critical for the machine running normally.

● Machine Relocation

Professional engineering team assist you for the turnkey project.

● Installation & Commissioning

Help to achieve the production efficiently.

● Project Modification

Deeply understand the customers requirements, which is the key to realize the value.

● Machine Maintenance

Scheduled maintenance is the optimized daily operation plan.

● Production Support

Real-time onsite technical support, which the resident engineers play an important role for your production capacity.



THANK YOU



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