



## 全自动抽真空充氮封罐机

Fully Automatic Vacuuming Nitrogen Filling and  
Can Seaming Machine

- 根据客户实际需求，可灵活配置双头/三头机型。
- 整机无任何清理死角，完全符合GMP设计要求。
- 在单一工位即可完成抽真空、充氮、封罐的过程。
- 罐内负压可根据实际需求调整，解决了困扰多年的胀罐问题。
- 具有多项发明专利的抽真空封罐方式，在保证速度前提下，将飞粉量控制在0.2g以内。
- 灵活多样的开环布置方式，便于设备的操作、维护、保养，解决了国内同类设备人员进入操作不便的问题。

- Double or tri-head can be flexibly applied as per actual requirements.
- The whole machine is extremely easy to clean and fully meets the design requirements of GMP standards.
- The equipment can finish vacuumizing, nitrogen filling and seaming at a single station.
- Negative pressure can be adjusted based on specific demands, thus solving the long-troubling tin bulging problem.
- The vacuumizing method is with several invention patents, which dramatically controls the amount of powder lose and ensures operation speed.
- Flexible and diversified open-loop layout facilitates equipment operation, maintenance and servicing, solving the inconvenience of personnel access of other similar equipment.

**自动抽真空充氮封罐机****Automatic Vacuum, Nitrogen Filling and Seaming Machine**

外形尺寸	Dimensions	L1420mm*W1585mm*H2000mm
标准重量	Machine weight	800kg
工作电压	Voltage	3/N/PE AC380V±5% 50HZ
最大功率	Max. power	8kVA
防护等级	Protection Grade	IP64
压缩空气耗气量	Compression Air consumption	≤5L/Cycle
工作气压	Air pressure	≥0.6MPa
氮气耗气量	Nitrogen Air consumption	20L/Cycle
氮气源气压	Nitrogen Air pressure	≥0.4MPa
噪音极限	Noise Limit	≤80dB
适应罐高范围	Can height applied range	(110~200) mm
罐直径范围	Can diameter applied range	(73~131) mm
封罐速度	Seaming speed	12~16 cpm
残氧量	Residual Oxygen	≤2.5% online

**设备技术参数****Machine Technical Data**

- 在单一工位就能完成抽真空、充氮、封口;
- To finish vacuuming, nitrogen filling and seaming all at one station;
- 独特的真空室设计和抽真空方式, 有效的控制了飞粉量;
- Unique design of vacuum chamber and nitrogen filling process, to well control the powder lost during vacuuming
- 新一代的多头式封罐机 (转盘方式), 占地面积更小, 使用率更高
- Rotary double-head type, less footprint and optimized space usage
- 运行速度: 12~16 cpm
- Speed: 12~16 cpm
- 残氧量:  $\leq 3\%$
- RCO:  $\leq 3\%$



罐定位和顶罐托盘的优化设计 (采用平板方式, 没有任何缝隙), 清理维护更为方便, 且封罐的过程中避免损坏罐子

Can positioning and can lifting unit design, flat and no gap, more convenient for cleaning and avoid the can get broken during running



- 顶罐过程中定位轮全程定位, 运行更安全;
- Can fixed by the positioning wheel during running all the time, which ensures the stability;
- 罐定位部件整体为快拆式设计, 规格切换更快捷
- Fast changeover for the whole positioning unit



## ■ 技术改进 TECHNICAL INNOVATION

### Digital simplicity: Festo Motion Terminal VTEM



FESTO

### Digitised pneumatics!

#### Highlights

- Many functions in a single component – thanks to apps
- Combines the advantages of electric and pneumatic technologies
- Highest possible level of standardisation
- Reduced complexity and time-to-market
- Greater profitability and knowledge protection
- Less installation work
- Increased energy efficiency

The Motion Terminal VTEM is opening up radical new dimensions in the world of automation, as it is the world's first valve to be controlled by apps. The first product to truly earn the label "digitised pneumatics". For a multitude of functions that currently require more than 50 components.

Festo Motion Terminal – discover the new world of pneumatics.

#### Standardise – and still be fit for Industry 4.0

Standardise your production and still delight your customers with highly individual products. Our Motion Apps allow you to integrate a huge range of functions that can be changed at the push of a button without changing the hardware.

This enables you to produce customised consumer goods more economically and more easily than ever before – even for batches of 1. From simple valve functions to Soft Stop and proportional pneumatics, VTEM covers all the pneumatic functions you need for your production.

#### Outstanding energy and economic efficiency

The Festo Motion Terminal uses an integrated concept to ensure energy-efficient operation. In addition to apps for saving energy, low-energy piezo valves have been developed for controlling the main valve stages. These reduce the power consumption for the pilot control by up to 90%, while using just a single valve variant reduces process costs from the design to the modernisation stage.

久煜封罐机技术持续改进，率先将Festo最新技术**运动终端VTEM**应用于封罐时顶罐的动作；

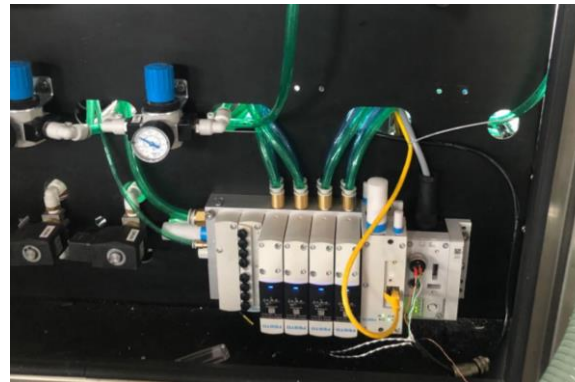
JOYO keeps on improving on the current machine, innovatively use the VTEM system from Festo on the can lifting movement of the seamer

#### 优势Advantage:

原设计完全靠电磁阀控制气缸上升抽真空、下降后再充氮，但是上升与下降之间的行程无法精确控制。The original design was controlled by cylinder and solenoid valve to make the can go up and down, the route was fixed and can't be adjusted precisely.

升级后顶罐采用VTEM数控系统进行提升，由自己独立的阀岛的行程开关来控制自己的行程距离,并且压力和速度精确可调，从而整体提升设备的性能，运行更稳定、噪音更小!

After upgrade, the whole process can be controlled by the independent valve terminal, speed and pressure can be set precisely. This improves the performance, make it more stable and less noise.



升级后，顶罐压力可在触摸屏中精确调整

The can lifting pressure can be precisely set on the HMI