



EFFICIENT END OF LINE WITH SMI PALLETISERS

Producers of food need to be more and more competitive, to face a demanding market that is continually evolving.

This objective can be reached more easily if innovative, flexible and personalised solutions are used within the production plant. Starting from this requirement, and from market trend analysis, SMI invests in cutting edge solutions to offer their customers packaging lines that are characterised by high performance, optimised operation versatility and TCO (Total Cost of Ownership). Today, the design of a new bottling and packaging plant is highly influenced by the modern technology created for the “smart factory” of the future, with this high quality, production lots can be created at a reduced cost, without neglecting important aspects such as, eco-sustainability and process, energy efficiency.

In the environment of industrial plants dedicated to end of line packaging, SMI offers a wide range of models of APS ERGON automatic palletising systems, that are based on innovative principles like:

- **simple operation:** the SMI palletising systems are proud of their modern, technical, ergonomic and functional solutions, which allow you to reach



production efficiency high while reducing the line operators workload

- **easy and intuitive control and management:** this advantage can be enhanced further, if the palletisers supplied by SMI, are equipped with the SWM supervision and control system by Smitec, which allows the constant, gathering, monitoring and “interpreting” of production data, improving efficiency and safety, containing costs and a return on the investment.
- **energy savings:** thanks to latest generation technical solutions, like the ICOS motors equipped with integrated, digital servo-drivers, the new APS ERGON palletising systems are able to guarantee low, environmental impact and low, energy cost production, while significantly reducing maintenance, energy waste and machine and plant noise..





Flexible, reliable palletising lines

The overall efficiency of a bottling and packaging plant, also depends on the reliability of end of line operations, where palletisers need to work perfectly, to guarantee uninterrupted production flow. This is only possible if the pallet loading, layer forming and pad insertion operations are synchronised in a precise, continual way with the other machines on the production line. The technology applied to the new models of APS ERGON by SMI, guarantees vast operation versatility and high possibility to personalise production processes, as the Cartesian axis system can be programmed automatically, according to the requirements of the specific application. The SMI palletisers are easily adapted to different requirements in terms of format changeover, product changeover and logistic programmes within the end of line area. They are also able to manage a wide range of palletising patterns, based on the specific requirements of the customer, contributing to guarantee the optimal performance of all the production plant.

A unique range of machines for lots of different requirements

The APS ERGON range consists of an automatic, single and double column (Model APS 4140 L) system to palletise boxes, bundles, tray and packs in general. The SMI palletisers have different modules, which can be programmed in a personalised way, according to the logistic conditions of the end of line area and to the work

required, either in existing lines or in new installations. The heart of the single column system is made up of a vertical axis module, a long fixed column, along which the horizontal work beam slides on recirculating ball guides.

The beam along which the head-holder beam slides, always on recirculating ball guides, can be combined with:

- product infeed module and preform layer system (variable according to model chosen)
- pallet module with maximum payload of 300 kg (max. 10 pallets with max. height 150 mm and max. payload of 30 kg/pallet), that includes the moving and storage of empty pallets (Pallet modules with a greater payload are available as optional accessories)
- module pad insertion (optional), consisting of a pad magazine and a pad inserting device with controlled axis
- surrounding safety barrier


The double column model is equipped with a column with a motorised belt, while the second with a basket.

At the single-column palletiser infeed, the product infeed conveyor forms the line, assisted by the transfer system that, with one direction movements, helps to create the layer. The layer loading head picks up the layer of packs that has been formed, from a conveyor at operator height. The vertical movements of the beam and the horizontal ones of the head-holder are activated by "brushless"



motors, which guarantee perfect trajectories during all palletising phases. All the operations are managed by a “user-friendly” machine, automation and control system, which allows the operator to use the palletising system easily and efficiently.

Main Advantages

- The ergonomic and functional structure of the frame allows the operator to easily carry out all the activities related to the use and maintenance of the system.
- The door closure system is equipped with a deceleration device, which slows down the final phase of the cycle by accompanying the door harmoniously.
- The accident prevention protections are made of aluminum and polished polycarbonate (PC).
- Palletising schemes are optimised for truck loading.
- Format changeover times are kept to a minimum.
- The handling of the containers is fluid and avoids damage during handling.
- Use of innovative design solutions in IoT key.
- Simple and intuitive control of all operations.
- ICOS motors equipped with integrated digital servo-drive, which ensure production with reduced environmental impact and low energy consumption. 

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SMI ने भारत में अपनी उपस्थिति को मजबूत किया

SMI India

SMI ने भारत में एक ब्रांच खोली है, जिससे तेजी से बढ़ते बाज़ार में इसकी उपस्थिति मजबूत हुई है। फ़िलहाल, संबंधित बॉटलर्स पर इंस्टॉल किए गए 3 रोटरी स्ट्रेच-ब्लो मोल्डर्स वाली तकरीबन 60 मशीनों के गुप के साथ, भारत में ग्राहकों को बेहतर और तेज सेवा उपलब्ध कराने के लिए स्थानीय सुविधा होना SMI के लिए प्राथमिकता बन गई है।

SMI India न सिर्फ़ एक स्थानीय कार्यालय है, बल्कि भारतीय बाज़ार के मजबूत विकास के लिए SMI की प्रतिबद्धता का प्रतीक भी है। 2001 में बेंगलूर में SMI India प्रतिनिधि कार्यालय के साथ शुरुआती उपस्थिति और अन्य भागीदार कंपनियों के साथ अनुवर्ती सहयोग के बाद, SMI ने इस महत्वपूर्ण बाज़ार की सबसे अच्छी सेवा करने के लिए प्रत्यक्ष और संरचित उपस्थिति का विकल्प चुना है। गोरेगांव (मुंबई) में स्थित SMI India Pvt Ltd, भारतीय पेय क्षेत्र में बड़े स्तर पर अनुभव वाले व्यक्ति विट्ठल कलबाटे के नेतृत्व में, एक स्पेयर पार्ट्स गोदाम और स्थानीय बिक्री के बाद का स्टाफ़ है। पॉलिमर केमिस्ट्री में विशेषज्ञता के साथ केमिकल इंजीनियरिंग में स्नातक और बिजनेस मैनेजमेंट में मास्टर डिग्री हासिल करने वाले विट्ठल कलबाटे ने पॉलिमर इंजीनियरिंग, पैकेजिंग और पेय पदार्थ संबंधी क्षेत्र में तीस साल का अनुभव हासिल किया है। पिछले 13 सालों में उन्होंने अहम पैकेजिंग मशीनरी निर्माताओं के निदेशक के रूप में महत्वपूर्ण पदों पर काम किया है। वे नए क्षेत्रों में पीईटी के प्रमुखता से लागू करने से संबंधित खास सेमिनारों में एक प्रमोटर और स्पीकर भी रहे हैं।