

The sustainable choice of SMI for the beverage industry

Technological innovation plays a crucial role in helping bottling companies choose packaging solutions that reduce waste and optimize resources, as the experience of the company Bebidas Refrescantes de Nogales (BRN) an important bottler in Mexico part of the Mexican Coca-Cola company, shows.

For the secondary packaging of the PET bottles, produced under the brands Coca-Cola and Ciel, Bebidas Refrescantes de Nogales turned to SMI by purchasing a compact wrapper from the CSK range equipped with a methane gas shrink-tunnel, and a conveyor

system to transport the loose and packed bottles.

The installation of the new CSK 40 F ERGON series compact packer was the most suitable choice, as these technological cutting-edge packaging machines are distinguished for energy saving, environmental respect, advanced automation and flexibility of use.

The CSK ERGON series comprises numerous models, each with a compact and ergonomic design which incorporates the leading technology within the sector, capacity to work up to 50+50 packs/minute (*maximum speed is according to the bottle capacity and pack for-*

mat), in shrink-film only, cardboard pad + film or in tray + film (according to the model).

The advantages of SMI solution

- Packer equipped with motorized system of oscillating guides situated at the machine infeed to facilitate the channelizing of loose products on the conveyor, equipped with chains made of thermoplastic material featuring low friction co-efficiency
- Continuous motion product grouping device for grouping loose products in the desired format by means of electronically synchronized fingers
- High efficiency motors attached directly to the drive shaft with



CSK 40 F ERGON series packer installed at Bebidas Refrescantes de Nogales in Mexico (SMI).

the consequent advantage of reducing maintenance, energy waste and noise

- Machine equipped with an optional device to register printed film with reference mark.
- Compact film cutting unit, with film cutting blade driven by “direct-drive” brushless motorization which makes the cutting more precise and facilitates maintenance
- New ICOS brushless motors, equipped with integrated digital servo-driver, able to simplify machine cabling and ensure greater energy efficiency, less noise and reduced component wear and tear
- Machine equipped with optional shrink-tunnel driven by methane gas, an innovative technological solution with low environmental impact.

Friendly solutions for the environment

Energy efficiency is a key factor in every company for the management of available resources and for this reason, the SMI Research & Development laboratories are constantly studying new solutions to optimize energy saving and ensure high levels of efficiency from the systems they produce. Among solutions available within the secondary packaging sector, a shrink tunnel driven by methane is without a doubt an innovative technological proposal, with reduced environmental impact especially in those countries where electricity is produced by fossil combustion.

The new tunnel can be combined with all the packers in the LSK, CSK, AFW and SK ranges and with the combined machines in the CM and LCM range.

It is a highly technological solution that guarantees remarkable advantages, as it:



CSK 40 compact packer equipped with a methane gas shrink-tunnel (SMI).

- is eco-friendly (low environmental impact);
 - guarantees considerable energy saving. From a study on the costs of electricity in Italy carried out in 2016, it is estimated that there is a saving of 60% compared to a standard tunnel with electrical resistances;
 - ensures a reduction in electricity costs;
 - has a gas tunnel that reaches the ideal temperature faster than one run by electricity. In addition, the amount of methane that it consumes is minimum, ensuring energy savings, low CO₂ emission and immediate operational availability;
 - is extremely safe, thanks to the latest generation safety systems and sensors;
 - reduces maintenance, the only parts that need replacing are the electrodes;
 - is possible to use thinner shrink-film thanks to a more efficient distribution and control of the tunnel temperature compared to traditional tunnels.
- Compared to traditional fuels used to produce electrical energy, natural gas has various advantages:
- it guarantees zero pollution, as it burns in a clean way (harmful emissions are practically non-existent);
 - it costs less than electricity (in some countries);
 - it has a high level of safety;
 - it is an abundant source of energy;
 - it is available everywhere and has no supply restrictions (as happens in some countries with electricity);
 - it can easily be stored inside the factory. It can be put in special tanks within the plant where it is to be used;
 - it immediately transforms into heat and guarantees a considerable reduction of CO₂ emissions compared to the production of electricity, that has many phases during its transformation process.;
 - it is a continual source of energy in countries where there are frequent power surges or supply failure.
- Global commitment to innovation is the main motor for sustainable growth and for this reason it is fundamental to continually invest in innovative installations and systems designed to successfully follow its development plans, respecting the territory where it operates.
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