

CONDIMENTS HAVE THE POWER TO TRANSFORM SOMETIMES BLAND DISHES, INTO DISHES WITH A BRIGHTER TASTE. THIS IS WHAT HAPPENS, FOR EXAMPLE, WITH TOMATO SAUCE, A CONDIMENT THAT IS INCREASINGLY FASHIONABLE AND LOVED BY YOUNG PEOPLE, WHOSE CONSUMPTION HAS BEEN GROWING STEADILY FOR MANY YEARS. THIS TREND CAN ALSO BE SEEN IN VENEZUELA, WHERE THE COMPANY EMPRESAS POLAR, BASED IN CARACAS, FOR THE SECONDARY PACKAGING OF PAMPERO BRAND TOMATO SAUCE GLASS BOTTLES, HAS RECENTLY TURNED TO SMI FOR THE INSTALLATION OF A NEW CSK 40 T ERGON SHRINK WRAPPER FOR THE MODERN PLANT IN VALENCIA, IN THE STATE OF CARABOBO.

➤ **SECTOR FOOD**
EMPRESAS POLAR
Caracas, Venezuela

- Shrink wrapper CSK 40 T ERGON
- Conveyors



EMPRESAS POLAR



INVESTING TO SATISFY A GROWING MARKET

To meet the demands of an ever-growing market, increasingly demanding in terms of quality and safety, Empresas Polar, one of the leading food companies in Venezuela invests in extremely versatile and innovative production processes and systems. To keep up with changing consumer demands, the Caracas-based company must in fact equip itself with machinery that ensures operational flexibility of the plants and advanced automation of production processes. The CSK 40 T ERGON automatic packaging machine supplied by SMI is the ideal solution for packaging Pampero brand glass ketchup and tomato paste bottles, in practical bundles with tray and shrink film, a practical, appealing packaging that is highly appreciated by consumers.

→ QUALITY, PRACTICALITY AND FLEXIBILITY

Empresas Polar is particularly attentive to the level of quality of its products, eco-sustainability, safety and efficiency of the systems and the reduction of management and maintenance costs of the operating structures. Starting from these needs and from the request of the Caracas company to package the glass ketchup bottles in practical and resistant bundles with tray and shrink film, SMI's designers proposed a shrink wrapper from the CSK ERGON series, a versatile and efficient packaging solution, together with the handling systems for incoming bulk bottles and outgoing packs.

The CSK ERGON series is the ideal solution for the automatic packaging of food products in different formats and methods; the model installed at the Valencia plant packs 198 g and 397 g glass containers in 6x4 tray + film bundles and is prepared for the future packaging of the larger 567 g and 1000 g bottles in 4x3 and 3x2 formats respectively, always with tray + film. The tray support is the most suitable choice for glass bottles, as it ensures greater robustness and practicality of the package both during palletizing and during handling and storage in stores.

Empresas Polar's decision to invest in the purchase of a new packaging machine revolves around the need to increase the performance of the current Pampero ketchup production line; the machine model supplied by SMI ensures high flexibility and automation of production processes, fundamental factors for responding promptly to market demands. In addition, the compactness of the CSK series ensures optimal use of existing logistics space and easy use by operators during plant operation and maintenance activities.

These characteristics have already been widely tested and appreciated by the Venezuelan company since 2009, the year in which SMI supplied Empresas Polar with a shrink wrapper from the LSK ERGON series, together with a DV 500 ERGON model divider, for the packaging of Rikesa brand spreadable cheese.

EMPRESAS POLAR

Empresas Polar is a Venezuelan company that, through its subsidiaries Alimentos Polar, Cervecería Polar and Pepsi-Cola Venezuela, operates in the food, alcoholic and non-alcoholic beverages sectors. This industrial reality currently holds a leadership position in the food & beverage sector and is one of the most important entrepreneurial structures in Latin America.

The birth of Empresas Polar dates back to 1941, when Lorenzo Alejandro Mendoza Fleury founded the Cervecería Polar company in Caracas, specialized in the marketing of beer and malt.

In 1954 the company Productos Remavenca was born, with the aim of producing maize, the raw material necessary for the production of Polar beer. Over the years, the Venezuelan group has expanded its range significantly, ranging from "Las Llaves" detergents to pet

food, from powdered soft drinks to "P.A.N." precooked flour, from maize oil to rice and pasta, and then yoghurt, tuna, sauces and spreads and, of course, the inevitable tomato sauce and ketchup under the Pampero brand.

Pepsi-Cola Venezuela also belongs to Empresas Polar which specialises in the production and marketing of a wide portfolio of products: Pepsi, Pepsi Light, 7up, Golden Sabores, Agua Mineral Minalba, Gatorade, Jugos Yukery and others.



→ ISA GROUP CA

The success of the new CSK ERGON packaging machine project in Empresas Polar was confirmation of the importance of close collaboration between the customer, SMI and the local partner ISA Group CA, which is based in Caracas.

The professionalism and experience of ISA Group, a company managed by Roberto Cavallini, are fundamental factors in ensuring an efficient service to Venezuelan customers such as Empresas Polar, who are supported in choosing the optimal technological solution to increase the performance of their production plants.

The primary objective of SMI and the local partner is total customer satisfaction, for which since 2005 ISA Group has also activated a technical assistance department that ensures timely support for breakdowns, maintenance, spare parts, etc.

THE ORIGINS OF KETCHUP AND THE TOMATO VARIANT

The ancestor of modern ketchup was tomato-free; although it is often considered a US product, ketchup actually has oriental origins. In fact, it is thought that the term "ketchup" derives from Chinese ideograms that mean "brine/juice" of "salmon/fish". The original recipe of the product was in fact based on fermented fish and not tomato. The Chinese spread it to Southeast Asia, where it entered the Malay language as "kecap" or "kicap", and

then switched to the English language as "ketchup". When this sauce landed in Europe in the seventeenth century, cooks began to devise variations using different ingredients, including oysters, mushrooms, walnuts and lemon. The modern ketchup recipe began to develop at the end of the eighteenth century in the United States, when some cooks began to use tomatoes in the production of this condiment.



THE KETCHUP MARKET IN THE WORLD

THE INCREASING CHANGE IN EATING HABITS, THE AVAILABILITY OF CHOICE OF TASTE, AND MODERN LIFESTYLES ARE THE MAIN FACTORS DRIVING THE GROWTH OF THE MARKET FOR TOMATO KETCHUP SAUCE, A CONDIMENT OFTEN USED IN COMBINATION WITH A RANGE OF FOODS (E.G. CHIPS, SANDWICHES AND BURGERS) WHICH, IN SOME COUNTRIES, IS A CONVENIENT SUBSTITUTE FOR SAUCE AND OTHER CONDIMENTS. GLOBALLY, THE KETCHUP SECTOR CURRENTLY GENERATES A TURNOVER OF ABOUT 40 BILLION USD AND IS EXPECTED TO GROW BY ABOUT 4% PER YEAR FROM 2025 TO 2029.





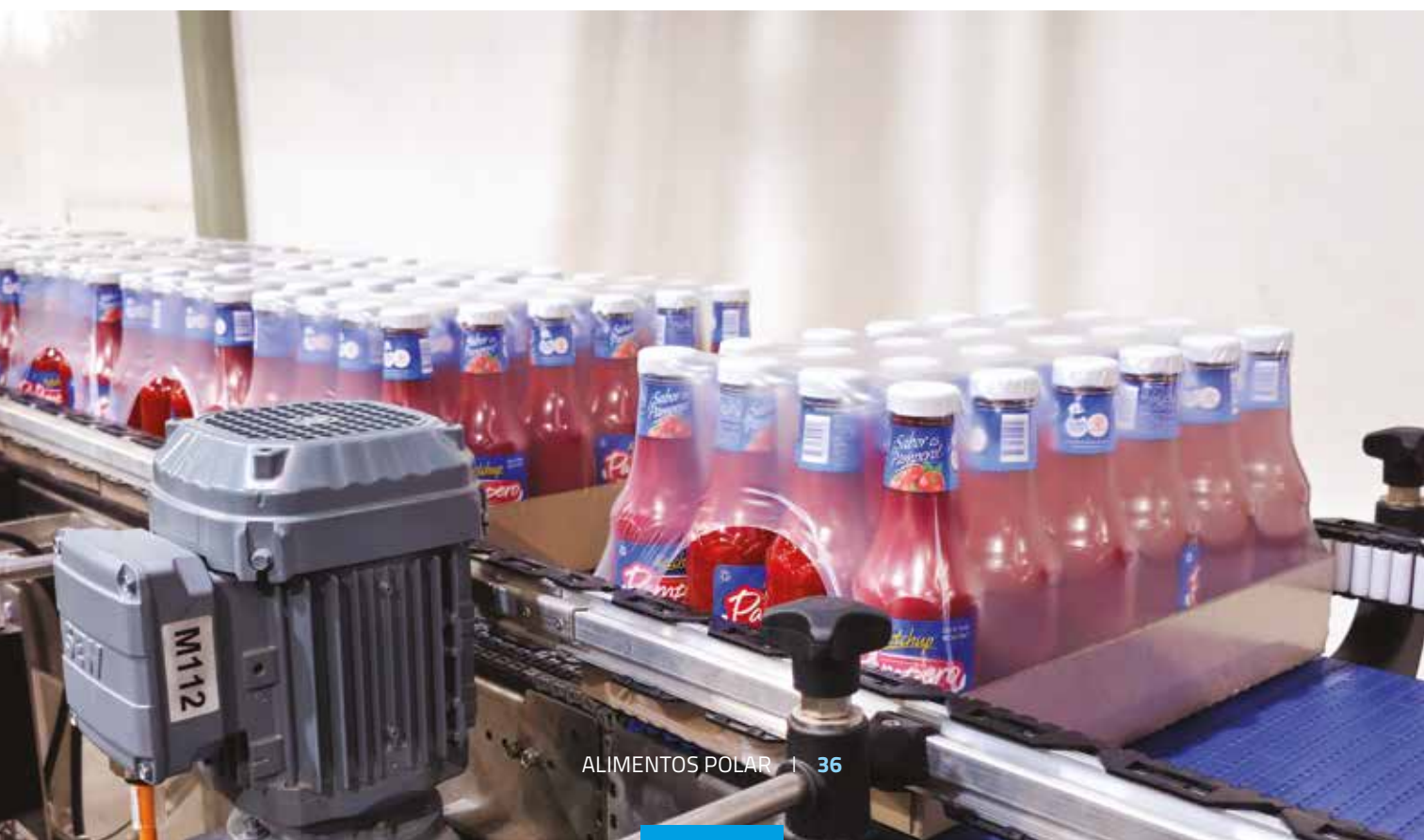
SMI SOLUTIONS

FOR EMPRESAS POLAR

For the packaging process of Pampero brand ketchup bottles, Empresas Polar relied on the experience of SMI, with which it had already collaborated in 2009 for the supply of a packaging machine for Rikesa brand spreadable cheese jars.

The CSK 40 T ERGON series shrink wrapper, recently installed in the Venezuelan company's Valencia plant, is the ideal solution for tray + film packaging of glass ketchup bottles and stands out for its operational flexibility and ease of format changeover.

The choice of this model appeared to be the most suitable solution to optimize the end-of-line secondary packaging process, thanks to specific features such as advanced automation, versatility of use, low energy consumption and respect for the environment.



➤ PACKER CSK 40 T ERGON

Products packed: 198g and 397g ketchup glass bottles (567g and 1000g future bottles).

Packs made: 6x4 packs in tray + film for 198 g and 397 g bottles; Future 567g bottles will be packed in the 4x3 tray + film format and the 1000g bottles in 3x2 tray + film.

Key features:

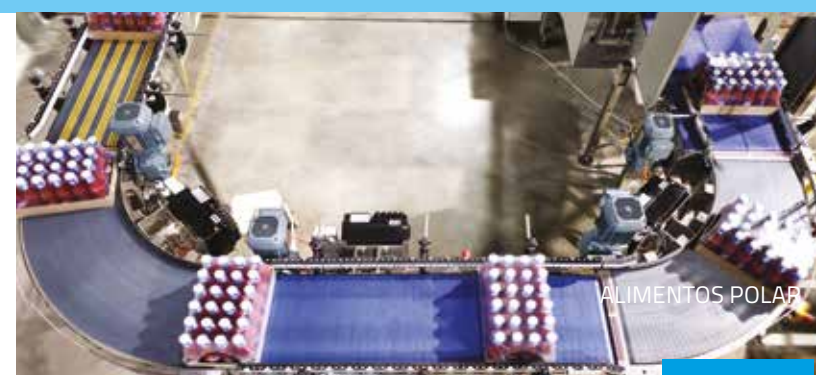
- compact and ergonomic design
- carton magazine positioned under the infeed belt, from where the cardboard blanks are picked up by means of an alternating movement sheeter consisting of a group of suction cups with a vacuum suction system
- curvilinear cardboard climbing in the initial and final section, to facilitate the insertion of the cardboard pad
- very smooth product infeed system for easy channeling of loose bottles on the conveyor belt equipped with thermoplastic chains with low friction coefficient
- grouping of bulk containers in the desired format continuously
- film cutting unit with a compact design, with high-precision film cutting operations thanks to the brushless "direct-drive" motor
- simplified maintenance operations thanks to the ergonomic design of the machine
- SMITEC ICOS motors equipped with integrated digital servo-drive (driver), able to simplify the wiring of the machine and ensure greater energy efficiency, less noise and reduced wear of the components
- the model installed at Empresas Polar mounts an optional additional 1,150 mm belt, positioned at the exit of the tunnel, for a rapid cooling of the packages and better aesthetic quality of the package itself
- machine supplied with other optional devices, such as the output product stabiliser and the bottle presence verification system installed upstream.

➤ CONVEYORS

Function: handling of loose glass ketchup bottles entering the CSK 40 T ERGON shrink wrapper and of tray + film packs leaving the same.

Key features:

- smooth handling of loose bottles and tray+film packs
- simple and intuitive human-machine interface
- simplified maintenance
- reduced format changeover times for the transition from one production to another.





CARACAS

THE CITY OF ETERNAL SPRING

Caracas, thanks also to its long history of domination and freedom, is one of the most fascinating places in South America, where in the space of a few blocks you go from unspoilt nature to the chaos of a large metropolis and from the opulence of very high skyscrapers to the precariousness of the poorest areas. The discovery of the capital of Venezuela, which has about 9 million inhabitants within the metropolitan area, can only start from the "Candelaria", the oldest and most famous district of the city for the high concentration of imposing historical architecture and cultural sites that

can be reached along long cobbled streets. Here, for example, stands the Museo de Bellas Artes, flanked by numerous churches and civic structures such as the Panteón Nacional and the Teresa Carreño Theater. There are also long queues of shops for shopping, art galleries dedicated to local contemporary artists, cafes and restaurants offering typical dishes cooked according to the most ancient traditions as part of a gastronomic offer that is always of a high standard. Caracas is also an excellent destination to seek contact with the lush nature of South America, thanks to the presence of large parks; the city is in fact located within a valley belonging to the

Venezuelan coast cordillera system, separated from the central coast by the Waraira Repano national park (called Parque Nacional El Ávila until 2011). Other important parks include Parque Los Chorros, important for its scenic waterfalls, and Parque del Est, an ideal destination for outdoor excursions through forests and artificial lakes. By virtue of its status as the capital of Venezuela, Caracas is home to the institutions in charge of state administration and numerous service companies such as banks, shopping malls and hotels, which make the tertiary sector the main voice of the city's economy.

