

■ Vinicola Aurora ■ Fante ■ Vinicola Galiotto  
■ Penacova ■ Spumador ■ La Galvanina

# smi now

Magazine 2014/12

**VINÍCOLA AURORA,  
FANTE & GALIOTTO**

## Wine

A NEW SIDE TO BRAZIL

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**P**eople and companies are increasingly focused on the use of new technologies which improve the quality of life and the level of efficiency of production activities, respecting the environment in which we live and work and using the available energy resources responsibly. Even the SMI Group is focused on the development and implementation of environmentally sustainable technologies and solutions, both concerning its range of products and the organization and management of its production. In 2013, at the Drinktec international exhibition in Munich, the SMI Group presented to the market a range of advanced technology machinery in the blow-moulding, bottling and packaging sectors, allowing the end user to produce more efficiently and flexibly and also to save on the energy and maintenance costs of machines and systems.

SMI's vocation for the development of innovative and cutting-edge technologies, which has characterized the Group for over 25 years, was rewarded in 2013 by a significant increase in sales, confirming that the proposed technical solutions can adequately meet our customers' current and future needs.

In the course of 2013 we also began to transfer SMI's business to the new company installation, derived from the redevelopment of the buildings that until 2004 had belonged to the pre-existing business of Cima Paper Mills.

The new facility is a unique example of zero-impact buildings, focusing on the Architecture & Environment combination, for the upgrading of which we adopted a number of innovative solutions to minimize environmental impact and ensure energy saving.

I would also like to remind you of our commitment in providing our customers with a range of web-based services, which promote and simplify the use of our machinery, such as SmyCloud for on-line consultation of continually updated technical handbooks and Smigroup e-store for on-line purchase of the main spare parts through a dedicated web environment, complete with photos and technical description of the items.

*Paolo Nava,*  
*Chairman & CEO*  
**SMI S.p.A.**

## smi now | magazine

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**INSTALLATION**

- 6.** Brazil: Aurora Wine Cooperative
- 16.** Brazil: Fante Industria de Bebidas
- 22.** Brazil: Vinícola Galiotto
- 26.** Portugal: Aguas das Caldas de Penacova
- 36.** Italy: Spumador
- 42.** Italy: La Galvanina



**A NEW SIDE TO BRAZIL:  
ENOLOGY**

Brazil is now the fifth largest wine producer in the southern hemisphere. More than 1,000 wineries were surveyed, spread over a total area of over 82,000 hectares.

This huge South American country is also known for its wine, the production of which has grown to such an extent in recent years that

**INNOVATION**

- 58.** Interpack 2014 Première
- 60.** Cutting-edge technologies for efficient line end
- 66.** APS 1550 P PLUS: the new automatic palletizing system
- 68.** Smipack: new packers with sealing bars BP802AL 600R and BP8002AL 600R-P



**66.**

**INFORMATION**

- 74.** Smigroup e-store: original spare parts at your fingertips!



**74.**



## A NEW SIDE TO BRAZIL: ENOLOGY

**W**hen you think of Brazil, your first thought is certainly not linked to wine but rather to having fun or the beaches, the sea, football, the Rio Carnival or samba; instead, this huge South American country is also known for its wine, the production of which has grown to such an extent in recent years that Brazil is now the fifth largest wine producer in the southern hemisphere. More than 1,000 wineries were surveyed, spread over a total area of over 82,000 hectares.

The beautiful and varied wine regions of Brazil are an irresistible destination for visitors who want to discover this little-known part of this country; tasting its fine wines while losing one's gaze to the horizon in the vast expanses of vineyards that shape the landscape, is a unique and

unequalled experience.

The state of Rio Grande do Sul is the one with the highest enological vocation.

This is where you can find most of the wineries: located in the southernmost part of Brazil, on the border with Uruguay and Argentina, this region is characterized by green valleys, multi-colored gardens and majestic waterfalls thanks to its subtropical climate.

The winemaking history of Brazil began in the ninth century with the arrival of Italian immigrants to the region of Serra Gaúcha, in the state of Rio Grande do Sul. Along with their customs, their culinary tradition and their culture, Italians also brought along the art of winemaking, finding the ideal geo-climatic conditions in these lands for the lush growth of vineyards.



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now





# VINÍCOLA AURORA

WINE INDUSTRY

**Aurora Ltda. Wine Cooperative**  
Bento Gonçalves, Rio Grande do Sul, Brazil

• Wrap-around case packers  
Smiflexi WP 450 and LWP 25



VIDEO



GEO LOCATION



The Aurora Wine Cooperative includes over 1,100 small families who work side by side, sharing skills, traditions and goals. The numerous components and their varied make-up are not an obstacle, contrary to what you may think, to the organization of the production activities but represent an added value that allowed the Aurora Cooperative to become a point of reference in the Brazilian wine industry.

Today the Aurora Wine Cooperative exports to more than 20 countries, including the United States, France, Germany, the UK and Japan.

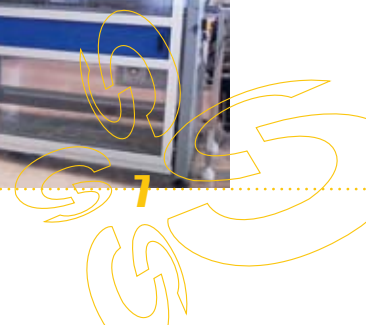
The origins of this company date back to 14 February 1931, when sixteen families from the city of Bento Gonçalves, who were vineyard owners, joined forces to create what would become the largest enterprise of this kind in Brazil: the Aurora Wine Cooperative.

The following year, thanks to a production of 317,000 kilos of grapes and to the modern technologies that



were adopted, the newly formed cooperative became the largest in Brazil.

In actual fact, the basis of this success dates back to 1875 when many immigrants from northern Italy settled in the Serra Gaúcha region, in southern Brazil where they found, thanks to the favorable climate and landscapes similar to those of their homeland, the ideal environment to preserve their culture and their customs, hence starting up the wine production business.





# IT'S THE SMALL THINGS IN LIFE THAT LEAD TO SOMETHING BIGGER

The production of the Aurora Cooperative is coordinated by experts in constant contact with the families who cultivate the vines, providing them with appropriate assistance and valuable advice. The technical team oversees the entire production process and is responsible for the quality of the final product. Moreover, the use of advanced technologies allows the 1,100 farms making up the consortium to operate efficiently, respecting the environment. Special care is taken during every stage of the production cycle, from planting the vines to bottling the final product, with the main objective of marketing only high quality wines. In pursuing this goal, a very important role is played by latest generation machinery used for handling, controlling and packaging the product. In fact, the Aurora Wine Cooperative has decided to focus on European high-tech in choosing the automatic packers to be installed in its own production lines, by purchasing a Smiflexi WP 450 wrap-around case packer and a Smiflexi LWP 25 case packer from SMI. The first machine, a WP 450 model, which can pack up to 45 cardboard





boxes/trays per hour, is interlocked to the 12,000 bph glass bottling line, where the 0.75-liter and 1.5-liter bottles, branded Saint Germain, Sangue de Boi, Country Wine and Brazilian Soul, are grouped in the 2x3 collation and the 0.375-liter ones in the 3x4 collation. The second machine, a LWP 25 model for outputs up to 25 cardboard boxes/trays per hour, is interlocked to the 9,000 bph glass bottling line and packages the Suco Aurora and Casa de Bento 0.3 / 0.312 / 0.5 / 1-liter bottles in the 3x4 pack collation and both the cylindrical 1-liter and 1.5-liter bottles and the square 1-liter bottles in the 2x3 pack collation. Achieving the highest quality of the final product also includes the careful selection of the raw material, i.e. the grapes. In this regard, the Brazilian

cooperative has established its own internal department in charge of providing the small vine plants to its members, with the aim of choosing the most appropriate type of vine according to the cultivation area, the type of grapes to be obtained and the characteristics of the wine to be produced. In addition, the company has set up its own logistics system, which connects the three main production units through a network of more than 4,500 meters of interconnected tubes, expressly designed to ensure efficient two-way transport for the produced wine.



# AURORA

## QUALITY REWARDED WORLDWIDE

Over the years, the Aurora Wine Cooperative has caught the attention of wine connoisseurs worldwide and has participated in important wine competitions, many of which have led to major awards.

For example, at the “Concours Mondial de Bruxelles”, a sort of wine & spirits world cup that was held in 2013 in Bratislava in Slovakia, the Brazilian company won 3 silver medals for its “Aurora Brut Rosé” sparkling wine, its “Aurora Moscatel” white wine and its “Aurora Reserva Merlot” red wine.

These three wines were selected among 8,200 products from the 50 countries that took part in the contest and were judged by a panel of 350 experts of 40 different nationalities.

The “Concours Mondial de Bruxelles”, which is the largest global event of its kind, was established in 1994 in Belgium and is yearly held in major European cities.

Always in 2013, at the “San Francisco International Wine Competition” contest, the Aurora Wine Cooperative won a gold medal thanks to its “Aurora Moscatel” sparkling wine.





# RIO GRANDE DO SUL AND THE WINE & GRAPES ROUTE

**T**he most important wine-growing region of the Brazilian state of Rio Grande do Sul is Serra Gaúcha, where visitors can choose to visit the main local wineries, attend to the cultivation of the vine and the production of wine or go on exciting trips to discover the wonders of nature. The famous "Wine & Grapes Route" starts from the city of Porto Alegre, a road that connects the rural areas of the municipalities of Bento Gonçalves, Farroupilha and Monte Belo do Sul. Along the way you can see many houses that have remained largely unchanged from the late nineteenth century to the present day, with large courtyards

and spaces for the cultivation of grapes, which have turned into shops that sell traditional craft products, including wine and cheese. Due to the fact that the Serra Gaúcha region is between the 30th and 50th parallel, it possesses the ideal climatic conditions for viticulture, which however are "marred" by heavy rainfall right during the grape-picking time, the most crucial period for the ripening of the grapes. Nevertheless, the wines produced in this area are among the best in the world and the whole region is a festival of colors, aromas and flavors in a geographical scenario with a European touch. In recent years,

Brazilian wines from Rio Grande do Sul have captured the attention of nationally and internationally renowned connoisseurs and received many prestigious awards such as the Gold Medal in the French wine competition "Vinalies Internationales 2005". A significant example is represented by the Aurora Winery which, in recent years, has won important medals such as the gold one at Vinitaly (Italy) for its sparkling Aurora Moscatel (developed with an "Asti" type process), as well as other gold medals won in France, the United Kingdom and the United States during renowned wine & sparkling wine competitions.



# A WELL DIVERSIFIED PRODUCT PORTFOLIO

The product portfolio of the Aurora Wine Cooperative is extensive and well diversified and includes more than 10 brands of still and sparkling wines popular in Brazil and abroad: Aurora, Marcus James, Conde de Foucauld, Clos des Nobles, Saint Germain, Maison de Ville, Casa de Bento, Keep Cooler, Mosteiro, Country Wine, Sangue de Boi, Frei Damião and Prestige. The Brazilian company also produces grape juice, the consumption of which

is on the rise. The Aurora Cooperative is headquartered in the city of Bento Gonçalves, which is considered the wine capital of Brazil, and every year about 42 million liters of wine, obtained from the cultivation of 2,650 hectares of land, come from the wine-cellar of its members.









# SMIFLEXI CASE PACKERS

## THE RIGHT TECHNOLOGY FOR THE WINE INDUSTRY

The wine sector is traditionally linked to the glass bottle, which requires a shock- and impact-resistant packaging for its distribution. Most of the main wine producers agree that the most suitable package for this purpose is the corrugated cardboard wrap-around box, which allows preserving the integrity of the bottles and their contents during handling and transport. In addition, this type of package is a great marketing tool because the sides of the box can be printed in full color, with graphic images that have a strong visual impact for advertising the product to effectively promote "brand-identity". The aforementioned protection of bottles against various types of impact, breaking and shock, ensured by the package made with the Smiflexi WP series case packers, can be further increased by means of cardboard separators.



These separators are inserted between one bottle and the other during the packaging process to protect containers and labels from abrasion and rubbing, which could compromise the quality of the package and, as such, its sale.





## THE ADVANTAGES OF WRAP-AROUND TECHNOLOGY

The innovative wrap-around packaging system allows the use of a single machine, the "case packer", to form the cardboard box and close the product inside it. Thanks to this system, Smiflexi packers of the WP series allow greater flexibility of use, high production speeds, improved stability of the produced packs and an optimal use of the space used for storing the packaging materials. The cardboard box is formed, through uninterrupted operation, around the group of containers to be packaged simultaneously with their grouping in the required collation, without making any machine stops. Hence the possibility of carrying out high speed productions up to 80 packs per minute, leading to an improvement in the efficiency of the entire line. Moreover, with the wrap-around system, various types of rigid containers can be packaged in different types of packs such as completely closed or semi-closed cardboard boxes, with or without pre-assembled cardboard separators between one container and the other, cardboard trays with rectangular and octagonal bases, trays with edges of the same height or different heights, and easy-opening boxes. Besides, with the option of customizing the graphical image on the sides of boxes and trays, the final package becomes a valuable promotional means for the marketed product and its brand, and is of strategic importance in attracting new consumers.



# FANTE

## WINE INDUSTRY

**Fante Industria de Bebidas Ltda.**  
Flores da Cunha, Rio Grande do Sul, Brazil

- Wrap-around case packer  
Smiflexi LWP 30



VIDEO



GEO LOCATION







The respect for tradition and the enthusiasm for innovation are two essential values of the Fante Industria de Bebidas company mission that for over 40 years has been passionately dedicated to the production of wine and beverages. This company is headquartered in Flores da Cunha, a town of 25,000 inhabitants in the Brazilian Serra Gaúcha region. This area is the heart of Brazil's wine sector, where the traditions and secrets of this art have been handed down from father to son for over three generations. The Fante Industria de Bebidas company is one of the leading lights of the local wine scene and its full range of beverages (sparkling wines, liqueurs, juices and non-alcoholic beverages) is very popular at home and abroad thanks to its proven quality. The strong link with tradition and the vocation to innovate are the basis of Fante Industria de Bebidas' day-to-day business, as well as its commercial success. Furthermore, the merging of old and new knowledge creates the right mix of technical expertise



that, thanks to carefully selected and perfectly dosed ingredients, allows this company to produce beverages having a unique taste and an unmistakable identity. Thanks to an entrepreneurial organization based on strong values such as family, solidarity and cooperation, this company has achieved a prominent position in Brazil's enological context over the years and even in 2012 it achieved satisfying sales results, celebrated with a beautiful party attended by employees and their families.



# FLEXIBILITY

## AND CUSTOMIZED PACKAGES

**F**ante Industria de Bebidas relied on SMI experience for the installation of a wrap-around cardboard box packer at its facility. The model it chose, a Smiflexi LWP 30, is an automatic machine designed to package glass bottles of different capacities at a max speed of 30 cardboard boxes/trays per hour. Indeed, the bottling of glass bottles requires a shock- and impact-resistant package, able to preserve the product intact and which is easy to stack when palletized. Based on these prerequisites came Fante Industria de Bebidas' choice to avail itself of SMI's advanced technologies, through which the wide range of products of the Brazilian company (wines, spirits, juices and non-alcoholics) can be easily packaged in multiple types of packs and configurations. The Smiflexi LWP 30 wrap-around case packer is equipped with a mechanical system that groups the product and is able to make cardboard box packages which change according to the collation,

capacity and size of the containers. Specifically, the 1-liter bottles branded *Vodka Rajska*, *Aperitivo de malt whisky Black Stone* and *Suco de Uva tinto integral Quinto do Morgado*, both cylindrical and squared, and the 0.75-liter and 0.3-liter bottles branded *Vinho Tinto Cordelier Equilibrium*, *Espumante Cordelier*

*Moscatel* and *Vinho Bordo Suave* Quinta do Morgado are packaged in wrap-around boxes in the 3x4 collation, whereas the squared 1-liter bottle is also packaged in the 2x3 collation. The larger 1.5-liter and 2-liter bottles are packed in 6-piece packs.





# THE INTRODUCTION TO VINE CULTIVATION



**T**he first historical record of vine cultivation in Brazil dates back to 1626.

That year, after crossing the Uruguay River, Jesuit Father Roque Gonzáles da Santa Cruz, from Buenos Aires, founded the first Brazilian mission in what is now the state of Rio Grande do Sul.

Vine cultivation began simultaneously with the construction of the monastery, since it was well suited to the characteristics of the soil and to climatic conditions.

But it was only between 1870 and 1875 that local viticulture took a decisive turn due to increased Italian immigrants, whose traditions and agricultural skills were applied also to this sector.

However, the production of wine remained confined locally up to the

70s of the twentieth century.

In the following decade, the steady growth in wine consumption by the Brazilian population increased the imports of this product, creating an internal market of great interest even for local producers.

In a few years, thanks to the advent of new production technologies, these producers were able to industrialize the process and begin marketing their wines on a national scale, hence giving the final thrust to the final success of Brazilian viticulture.

According to the latest data from IBRAVIN (Brazilian Vine & Wine Institute), the yearly wine consumption in Brazil is now around 2.5 liters per person, with forecasts of strong growth for the coming years. In 2014, Brazil hosts the Soccer World Cup and Rio de Janeiro will host the Olympics in 2016; these two international events should provide a further boost to the wine sector, positively influencing the consumption of the many varieties of local wine by the millions of foreign visitors expected for the aforesaid events.



# TO EACH ONE

## THE MOST SUITABLE PACKER



The wrap-around packaging technology developed by SMI for high speeds (Smiflexi WP series case packers) has also been applied to the range of medium-speed case packers of the LWP series. The Smiflexi LWP series, suited to meet production needs of up to 30 packs per minute, features a simplified modular design, which allows to reduce assembly time in the factory and, consequently, delivery time to the end user.

For example, the cardboard blanks magazine is entirely housed beneath the machine's infeed conveyor, thanks to the fact that the reduced production speed does not require additional modules for storing the cardboard blanks to ensure a certain degree of operating performance, as is the case for the WP series.

This solution greatly reduces the overall dimensions of the LWP models and allows installing them even in limited-space packaging systems.





# FLUID AND ACCURATE MOVEMENTS

The Smiflexi case packers of the LWP series package various types of rigid containers into corrugated cardboard boxes and/or trays. The machines belonging to this series are equipped with a motorized oscillating sorter, placed on the infeed belt, which facilitates the channeling of the loose containers to the grouping area in the required collation and also prevents sudden stops in the feeding flow.

The group of containers is formed through a mechanical system made up of a pneumatic separator and a synchronized supporting bar.

The former spaces two consecutive groups of loose containers while the latter, which receives the products from the pneumatic separator, completes the composition of the required pack collation and accompanies it to the box/tray-forming unit.

The format change operation on the Smiflexi LWP series case packers is manual but can be performed simply and quickly as it does not require the replacement of any mechanical or electronic machine component.

After completing the expected mechanical adjustments, the operator simply selects the new format to be processed via the POSYC control panel; even switching from a small-sized pack to a larger one or vice versa can be performed quickly since the operator can easily change the machine's pitch using the colored position indicators placed on the product moving chains.



# VINÍCOLA GALOTTO

## WINE INDUSTRY

### Vinícola Galotto Ltda.

Flores da Cuhna, Rio Grande do Sul, Brazil

- Wrap-around case packers
- Smiflexi LWP 25



GEO LOCATION





The Galiotto family, founder of the company, originally came from the Italian city of Arzignano, in the province of Vicenza, a major city in the Veneto region. In 1883, the Galiottos emigrated to the northeast of the Rio Grande do Sul state and settled in Flores da Cunha, where they began cultivating the vine according to the techniques, know-how and experience they had brought from their mother country. From the beginning, the activities of the colonial cellar were essentially limited to the production of wines for personal use and local sale. But later on, in the 70s of the twentieth century, wine consumption in Brazil began to grow significantly. Hence, in 1982 the Galiottos decided to expand, so they founded the company, gave it their name and equipped their cellars with more modern grape cultivation and wine production machinery. Their success in sales led the Vinícola Galiotto to expand, in the following years, the variety of grapes grown, launch new products such as dry white wines and juices, and equip their plants with more technologically advanced systems



to keep improving the quality of the final product and the efficiency of the production lines. Today, the Brazilian company has a production area of 3500 m<sup>2</sup>, a storage capacity of about 7.8 million liters and its own R&D labs. In addition, the Vinícola Galiotto is involved in many projects related to sustainable growth and the creation of production systems with reduced environmental impact.





Desde 1966

# Galiotto

## MODERN FACILITIES TO PRESERVE THE QUALITY OF THE PRODUCT



**A** rooster, which is the symbol of the city of Flores da Cunha, also identifies one of the largest wineries in Serra Gaúcha: the Vinícola Galiotto Ltda.

With a yearly output of 7.2 million liters, Vinícola Galiotto is on the national and international market with a broad portfolio of fine wines and special labels.

All the products of the Brazilian company are characterized by high quality and exclusivity, achieved thanks to a production process that combines ancient traditions with modern technology.

With dedication and modern wine-growing techniques, the Vinícola Galiotto offers a wide range of high quality wines produced using only grapes which are selected and harvested by hand in the Serra Gaúcha.

Special attention is also given to

the wine bottling process performed by special machines that prevent contact with air, which avoids the oxidation and contamination of this precious product.

Once bottled, the glass bottles are packaged in corrugated cardboard wrap-around boxes by an automatic Smiflexi LWP 25 model packer that was just recently installed.

This machine is able to pack all types of bottles, at the max speed of 25 boxes per minute, which come out of the Vinícola Galiotto production





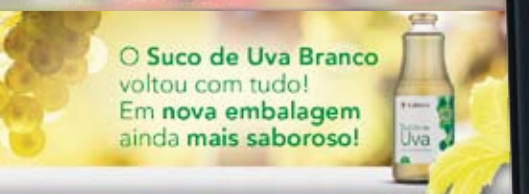
lines: the 0.375 / 0.75 / 1-liter bottles are packaged in completely closed cardboard boxes in the 3x4 collation while the 2-liter bottles are also packaged in closed boxes in the 2x3 configuration.



Conheça  
nossa linha de  
vinhos de mesa.



Mudamos somente a  
embalagem, pois o sabor  
continua incomparável.



O Suco de Uva Branco  
voltou com tudo!  
Em nova embalagem  
ainda mais saboroso!



# PENACOVA

WATER SECTOR

**Aguas das Caldas de Penacova S.A.**  
Mata das Caldas, Penacova, Portugal

- Rotary stretch-blow moulders  
Smiform SR 8 and SR 6 HC



VIDEO



GEO LOCATION





**A**guas das Caldas de Penacova is headquartered in the pristine environment of Serra do Buçaco where the company extracts, bottles and sells the natural mineral water called "Caldas de Penacova", using the best technologies available on the market in order to provide its national and international customers with excellent quality products at a reasonable price. The Portuguese company has relied on SMI experience and technology for the production of the PET bottles used in the bottling line. The collaboration between Aguas das Caldas de Penacova and SMI dates back to 2006, when the Smiform SR 8 stretch-blow moulder had been installed to meet the requirements of the 12,000 bottle/hour production line. The increase in sales in Portugal and abroad led to the investment of two more Smiform stretch-blow moulders: the SR 6 HC model dedicated to the 6,000 bottle/hour line for bottling high capacity



containers (5 liters) and a Smiform SR 8 for the 14,400 bottle/hour line for the 1.5-liter format.



# AGUAS Caldas de Penacova

## IN THE HEART OF A PRISTINE ENVIRONMENT

In the valley of the Mondego River, about 1 km from the town of Penacova and 0.5 km from Vila Nova, there are a number of water sources of excellent quality known as the "Caldas de Penacova" springs from which an exceptionally tasting, crystal clear water flows, much appreciated by the locals who ascribe remarkable therapeutic

properties to it, confirmed by its light weight, low degree of salinity and reduced minerals content.



This pure and uncontaminated water is bottled by Aguas das Caldas de Penacova that, in 2011, with a staff of about 50 persons, packaged almost 145 million liters of water (an 8% rise on 2010) and 160 million liters in 2013. During that time in Portugal, the bottled water sector had undergone a decrease of 2.87% at national level (data from AMPIAM association). In recent years, the Portuguese company's sales have grown significantly both in the domestic





WATER:  
ESSENTIAL ELEMENT  
FOR HUMAN SURVIVAL

Water is the origin of man: it constitutes 70% of the human body and contains all the necessary elements for its survival.

Water and its content of minerals are indispensable for the perfect functioning and development of the human body and essential for many metabolic functions such as digestion.

Unfortunately, the recent change in eating habits, characterized by low consumption of wheat, green vegetables and fruit, and the simultaneous intake of processed foods have contributed to a significant reduction in the daily intake of water and minerals, making those elements increasingly important for human health.

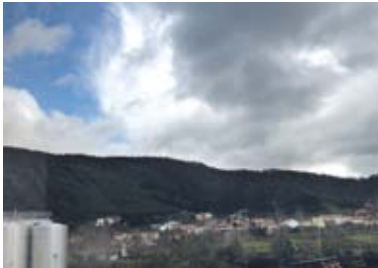
market and in exports, not only to Africa (Angola, Mozambique, Cape Verde and São Tomé) but also the U.S. and Europe (Spain, Germany and Switzerland).

These results have encouraged Aguas das Caldas de Penacova to invest heavily in the modernization of its production facilities and subject the entire company organization to a series of improvements to

achieve compliance with NP EN ISO 22000:2005 certifications in terms







of safety and IFS (International Food Standard) in terms of quality.

The primary objective of the Águas das Caldas de Penacova organizational structure is to consolidate its position on the domestic and international markets.


The three pillars of the company's strategy are the quality of the products offered, the satisfaction of the demands and needs of customers and salespeople, and the compliance with the legal regulations relating to

environmental protection.

For this Portuguese company, it is crucial that even its suppliers agree to abide by the same aforesaid quality standards and the same environmental regulations, in order to create a "supply chain" able to operate efficiently and in an environmentally friendly manner.







# THE MAGIC OF SERRA DO BUÇACO

**S**erra do Buçaco is located just a few kilometers from Coimbra, in west-central Portugal. It is a large botanical garden with about 700 local and exotic species protected by a seventeenth century papal decree that threatened to excommunicate whoever damaged this garden. Among the protected species, the Caucasian fir, the Buçaco cedar and the evergreen sequoia (a giant tree that can grow up to 100 meters) are the trees that stand out. In the sixteenth century, the Vicar General of the Discalced Carmelites thought this would be the perfect place in which to build a retreat where monks could devote themselves to the contemplative life in contact with nature. After 1628 this idea turned into reality with the building of the convent, various hermitages and penance chapels scattered throughout the Buçaco forest that, even today, along with countless lakes and waterways, make this environment magical. Today, of the original convent you can visit only the cloisters, the chapel and some of the cells. In nineteenth century the area had been occupied by a palace in Neo-Manueline style and was then converted in the existing Hotel Palace do Buçaco. From the former convent's viewpoint, you can appreciate the incredible beauty of the surrounding mountains that reach the maximum height of 549 meters. The peace of this idyllic Portuguese place was deeply disturbed in 1810 when the Portuguese and the British fought the French in the Battle of Buçaco.







# ENVIRONMENTALLY FRIENDLY TECHNOLOGIES

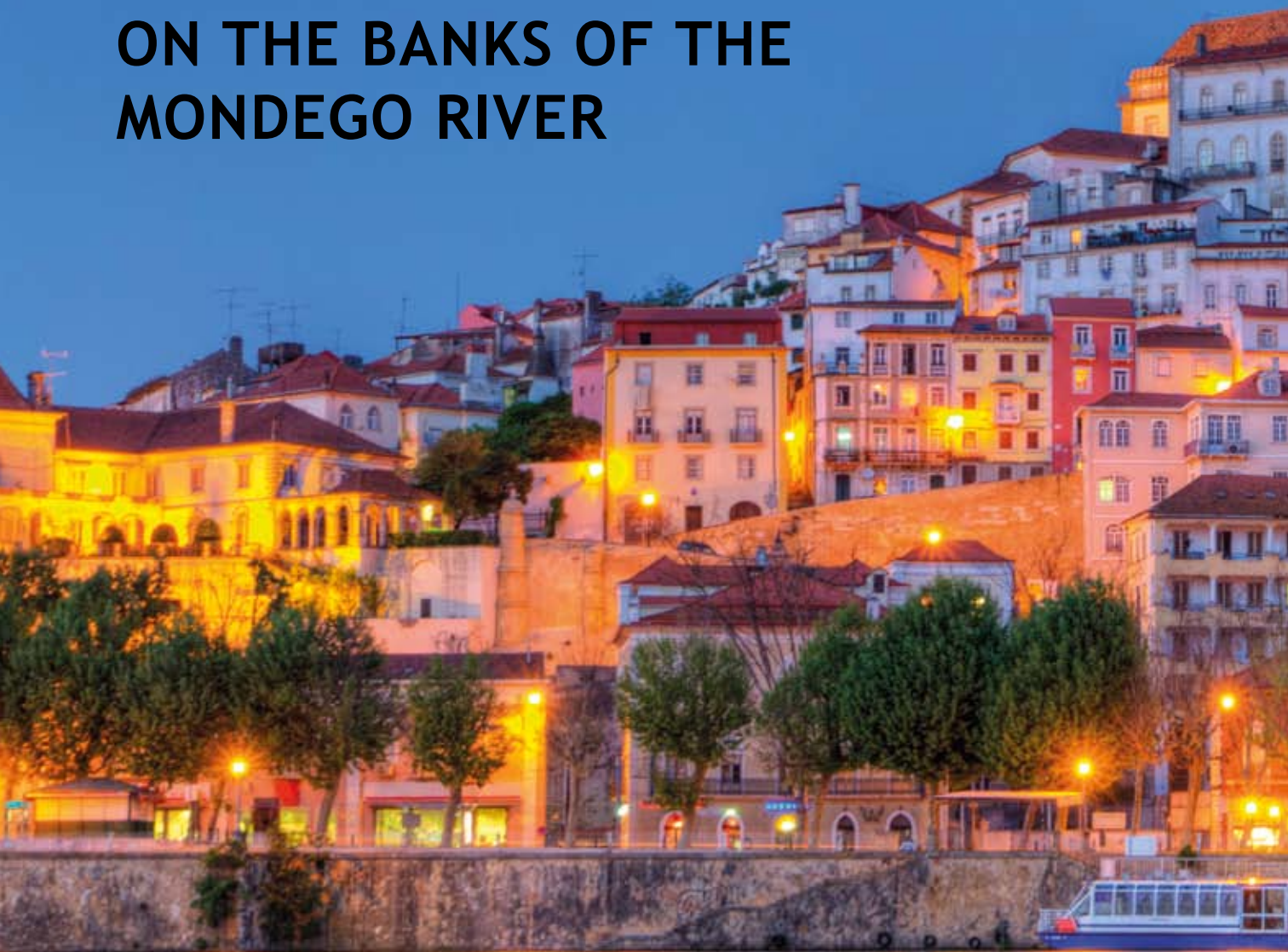
**F**or the expansion and modernization of its production facilities, Aguas das Caldas de Penacova has chosen only latest generation technology provided by SMI, which allows it to manage its business efficiently, respect the environment, preserve the natural resources of the surrounding ecosystem and reduce energy consumption as much as 20% compared to more traditional solutions. The Smiform stretch-blow moulders installed at the plant of Aguas das Caldas de Penacova are equipped with an innovative system that retrieves compressed air at high pressure (ARS - Air Recovery System), used in the stretch-blow moulding of PET bottles which reduces the plant's energy costs and cuts up to 40% of compressed air consumption during the production process. Thanks to this device, a part of the high pressure air used in the stretch-blow moulding circuit is recovered and reused to supply the low pressure pre-blowing circuit and the machine's

service circuit. The ARS installed on Smiform machines is essentially made up of two exhaust valves fitted on each stretch-blow moulding station: the first valve injects air into the recovery system tank while the second one discharges air that cannot be recycled. The working pressure of the pre-blow-moulding circuit is controlled by an electronic regulator while that of the service circuit is controlled by manual reducers. This innovative air recovery system can be fitted as an option on all Smiform stretch-blow moulders, adding value in terms of energy saving and eco-friendliness. Systems installed by SMI in the Portuguese company's bottling plant use the most advanced technologies in terms of flexibility, reliability and efficiency thanks to which the production capacity of its production lines can easily be adapted to market demands, with low operating costs and optimal use of resources.





# COIMBRA: THE CAMPUS ON THE BANKS OF THE MONDEGO RIVER




**C**oimbra is a quiet and pleasant city, gathered within the loop of the Mondego River, which gave birth to six Kings of Portugal and the first Portuguese dynasty, and hosts the largest university center in the country. Its origins date back to the second century BC, when the Roman Empire expanded to the Iberian Peninsula and founded numerous

colonies which would later become modern European cities as in the case of Coimbra (Conimbriga in Latin). Under the rule of emperor Caesar Augustus, (first century), the city had a remarkable development with the construction of the Baths and the Forum. In 711 the Moors invaded the Iberian Peninsula and Coimbra was occupied, remaining under

Arab influence until 1064, when it was finally re-conquered by the Christians. Among the major points of interest, besides the University (founded in 1290) and its impressive Baroque Joanina Library, there are the Old Cathedral, the remains of Saint Sebastian, the Botanical Gardens and several monasteries and churches. An original way to enjoy this





city is to take one of the boats that offer mini cruises on the Mondego River. From Coimbra you can also reach the shores of the Atlantic Ocean in less than one hour. This Portuguese city also boasts a long musical tradition: in this regard, the fado of Coimbra is one of the two variants of the Portuguese fado, together with that of Lisbon.



# SPUMADOR

## WATER AND BEVERAGE SECTOR

**Spumador S.p.A.**

Como - Sulmona, Italy

**Group:** Refresco Gerber Group

Smiflexi MP 300 TRBF packer

Smiflexi SK 600 T shrinkwrapper

Smiline conveyor belts



VIDEO



GEO LOCATION





City trams and buses cross the streets of Milan with their sides and backs lined with billboards depicting a glass mug filled with a black-colored drink: the year is 1938 and the product in question is Spumador's famous "Spuma Nera".

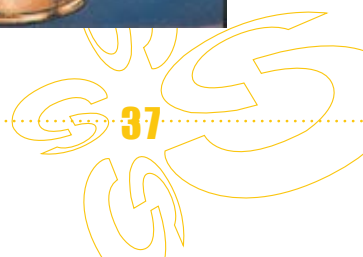
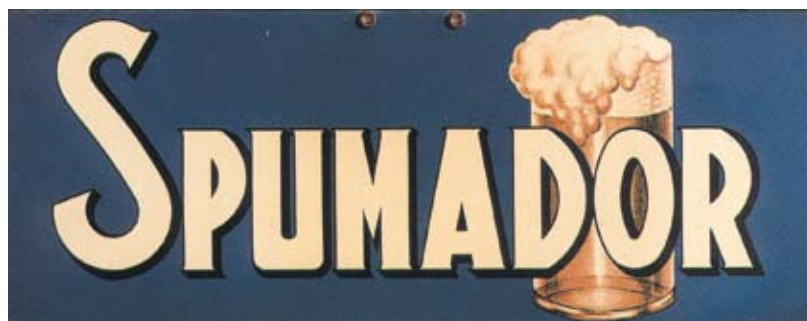
This Como-based company built a great success story on this drink, created from the infusion of seventeen herbs that give it its unique and inimitable taste (different from colas and drinks flavored with sour-orange juice), achieving excellence after the war within the panorama of the Italian beverage industry.

The Spumador company currently has 5 production plants equipped with the latest bottling and packaging technologies, including the packaging machines that SMI provides to the company since 1997.

The SMI systems installed in the Spumador lines consist of about twenty Smiflexi automatic packers for secondary packaging; recently,



SMI was also involved in the modernization project of the Sulmona plant, in the province of Aquila, where the Como-based company has installed two Smiflexi latest generation packers: an MP 300 TRBF model cardboard sleeve multipacker and a SK 600T model shrinkwrapper, both equipped with conveyor belts.





## A STORY... OF TASTE, LASTING OVER 120 YEARS



The story of the Spumador Group begins in 1888, year in which Mr. and Mrs. Verga began the production of soda water in a small factory in Cermenate, a town in the province of Como. In 1922 their son Antonio Verga moved to Caslino al Piano (a natural oasis near Lake Como) where he began to produce a tasty drink called "gazzosa" (soft drink) marketed under the brand name "Spumador". The new drink was an immediate success among consumers, also thanks to the chosen packaging: a glass bottle with a particular shape, enclosed by a glass ball that gives the gazzosa the dialect nickname "ul sciampagn de la balèta", i.e. "the champagne with the ball". 1938 was the year of the legendary "Spuma Nera" (a black effervescent soft drink) created by Antonio Verga from the infusion of 17 herbs, known as "Spuma Nera" or "Spuma

type 1938". Its brewing process is expertly made within the essence room according to a historic and secret recipe which has given it its unique flavor ever since. In the following decades, the range of Spumador drinks was enriched with new products to meet growing and diversified consumer demands until, in 1966, with the acquisition of the Fonte S. Antonio, the Como-based company also entered the mineral water market. The S. Antonio Water soon became a leader, with the glass line, in the door to door family service, in addition to establishing itself in the bar and catering channels. With the advent of PET bottles, in the 80s the Spumador products began to be distributed in supermarkets and mass retail outlets. The Spumador Group greeted the year 2000 with the introduction of modern aseptic bottling technologies and with

the development of new fruit-based beverages. Always true to its core values, vocation for quality and technological







innovation, the Como-based company enriched itself with new spring water brands over the years such as Fonte S. Francesco, S a n A t t i v a and Gioiosa, consolidating

its financial strength through the acquisition of Fonti San Carlo and Acque Oligominerali Valverde (in the early 90s) and Fonte S. Andrea (in 1998). Spumador uses the most advanced bottling technologies and daily monitors the entire production

## REFRESCO GERBER GROUP IN SHORT

Refresco Gerber is the European leader in the production of soft drinks and fruit juices for commercial brands and among the main industrial suppliers for leading international brands. Thanks to the merger of 12 November 2013 between the Refresco and Gerber Emig Groups, today Refresco Gerber can boast really important numbers: a yearly turnover of 2.3 billion Euros, 4,700 persons in 9 countries. With Spumador, the Group was able to expand its market share in geographic areas of interest such as Italy. In fact, Spumador is a highly reliable, professional partner for Italian retail, able to offer a rich tradition and a management team that has shown great effectiveness in the development of the company. The entry of Spumador in the Dutch company is of paramount importance for the Como-based company since it offers new opportunities for growth and development, thanks to the sharing of know-how and product portfolios, which will also strengthen the position of Refresco Gerber in the private label sector.



chain to achieve the highest standards of quality and best batch traceability. In addition, the company performs rigorous lab tests, specializing in the chemical and bacteriological fields. In 2008 Spumador celebrated its 120 years in business, with a strong entrepreneurial tradition of great success and a leading role in

the excellence of Italian beverages. Today's numbers are witness to this success: more than 400 employees and five factories - Cadorago-Caslino al Piano (CO), Sant'Andrea (PR), Spinone al Lago (BG), Quarona Sesia (VC) and Sulmona (AQ) -, 900 million bottles produced each year (equally divided between soft drinks

and mineral waters), 21 bottling and packaging lines. In 2011 Spumador S.p.A. became part of the Dutch Refresco Group B.V, European leader in the production of private labelled non-alcoholic beverages and fruit juices, today called Refresco Gerber Group after the recent merger with Gerber-Emig.



# SPUMADOR

## AND THE SULMONA PRODUCTION SITE



**T**he Sulmona factory (in the province of L'Aquila) was purchased by Spumador in November 2011.

The drinks and aperitifs produced in this new industrial location have allowed this company, among other things, to increase its widespread distribution, especially in south-central Italy.

The industrial modernization plan

implemented by Spumador in the industrial site of Sulmona has led to substantial capital investment in new machinery for the secondary packaging of the soft drink glass bottle line.

The new production line supplied by SMI includes a Smiflexi sleeve packer, model MP 300 TRBF, which packs 0.18-liter and 0.1-liter glass bottles in cardboard sleeves in

"NT" version; more specifically, the 0.18-liter bottles are marketed in the 2x3 cluster format while the 0.1-liter ones are in the 2x3 and 2x5 collations. The SMI packer model chosen by Spumador is very versatile and can also pack cans, cartons and plastic, metal and glass jars in various types of packs.

The machine installed in the Sulmona plant is equipped with the BF -



"Bottom Flap" module; this system forms packs with lower containment flaps that strengthen the package's overall solidity, suitable for packaging bottles with special shapes.

Smiflexi's MP series consists of automatic machines that package containers of low and medium capacity in cardboard sleeves, in "OTT" or "NT" versions; all MP models feature an electronic system that groups the product and manual format changeovers.

The MP packers can also be equipped with the optional automatic format change system: the new format is adapted electronically by brushless motors, and in most cases requires neither the use of tools nor any operator intervention.



Therefore, in these cases, format change just involves selecting the new configuration via the POSYC control panel.

The packers of the MP series are the ideal solution for creating "multipacks" with eye-catching graphics, have better impact resistance, are easy to handle, open and store: all features which attract the attention of the consumer to a specific product.

Within the same production line of the

Medibev-Spumador plant in Sulmona, even a Smiflexi SK 600T model shrinkwrapper has been installed to repackage the 2x3 and 2x5 clusters arriving from the MP 300 TRBF packer in the 4x6 and 6x5 collations in tray only, film only and tray+film, or in the 6x9 and 6x10 film only collations (only 0.1-liter bottles).

Smiflexi's SK series shrinkwrappers, available in a wide range of models working in single lane and double lane, are equipped with a system that electronically groups the product and that automatically performs format changeovers.

# LA GALVANINA

## WATER SECTOR


**La Galvanina S.p.A.**  
Rimini - Apecchio, Italy  
**Group:** Galvanina Group

- Smiflexi WP 450 Wrap around case packer
- Smiflexi SK 502T Shrinkwrapper



GEO LOCATION





In the early twentieth century, La Galvanina (headquartered in Rimini - Loc. San Lorenzo Monte, in the Rimini province) started up its business in the packaged beverage sector, by industrially bottling the Acqua Minerale Galvanina (Galvanina Mineral Water) in glass bottles which, in those days, was mostly used by a small circle of noble families from that area. Since then, more and more customers have come to appreciate the great digestive qualities of this product that, year after year, has expanded to the point of covering the entire Italian territory. In 1989, Acqua Minerale Galvanina landed on all continents, from Africa to Asia, from Australia to the Americas, making it one of the most renowned and popular mineral waters in the world.



To keep pace with its success on the international markets, the Rimini company expanded its production facilities, pursuing the total quality of its products through the continuous upgrading of technologies used. La Galvanina currently operates through its two production sites in Rimini and Apecchio, which employ a total of approximately 70 employees in Italy and more than 30 in the commercial branches abroad.



valdimeti  
ACQUA OLIGOMINERALE

QUALITY PRODUCTS AND ONGOING TECHNOLOGICAL UPGRADES

In the town of Apecchio, in the province of Pesaro, La Galvanina bottles water low in mineral content branded Val di Meti, in an industrial location that was taken over in October 2008, after having closed down for several years caused by repeated and unfortunate changes of ownership. Thanks to this important investment, La Galvanina restarted the production and marketing of this water, which has long-standing traditions and is an icon of the authenticity of the Marche region and pristine source of the mountains from which it comes. The Val di Meti mineral water springs at an altitude of about 700 meters above sea level in





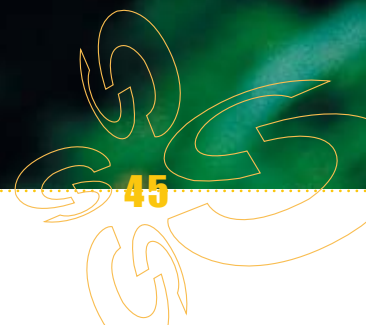


the heart of the Central Apennine Mountains, in the Marche region, on the border between Umbria and Tuscany. The pristine landscape of Monte Nerone on one side and that of the Monti della Carda on the other, snowcapped for much of the year, surrounds this wonderful water which is perfectly balanced in its low mineral content composition. Known and appreciated for centuries, this water is distinguished by its perfect composition of trace elements, ideal in early childhood and for people on low-sodium diets, excellent with meals and useful for sportspeople... virtually suitable for all and at any time of the day. The "rebirth" of the Val di Meti water plant became feasible thanks to the massive modernization and expansion of the bottling plants, required to bring the production lines back to conditions of efficiency and productivity. The plant's surface was more than doubled to be able to house both the production of glass and plastic bottles under the same roof. In its



industrial project, including the upgrading and modernization of its systems, La Galvanina focused on technologically advanced solutions that could give the Val di Meti

Water brand the same international visibility of the Group's other products, thanks to increase in exports and innovative marketing strategies.





# GALVANINA GROUP



The ancient splendor of mineral water and natural non-alcoholic beverages

**L**a Galvanina S.p.A. is famous in Italy and around the world not only for its mineral water but also for the production of flavored waters and non-alcoholic beverages made with fruit juices and natural flavors, which began in the early years of the twentieth century. Historically, Galvanina is one of the oldest sources of natural mineral water in Italy; in fact, since its founding in 268 BC, the colony of Ariminum (modern Rimini), where the source is located, was one of



the most important Roman cities in northern Italy.

To confirm the interest of the Romans to this place, rich in therapeutic waters, are the archeological finds





which surfaced during the excavation of the tunnels conveying the Galvanina water and the fixing up of the ancient Renaissance fountain, suggesting the existence of ancient Roman baths.

These findings have made an exceptional scenario of rock and massive culverts accessible to man, where the Galvanina Mineral Water has been running deep for millennia.







Galvanina Water, thanks to the magnesium, calcium and bicarbonates dissolved in it, along with a moderate content of free carbon dioxide (38.5 mg of CO<sup>2</sup> per liter), acts on the liver and stomach and, hence, may aid

hepato-biliary functions. It also stimulates digestion if taken with meals, it is diuretic and can decrease the uric acid level in the blood.



☼ Rino Mini  
President of La Galvanina S.p.A.





*L'inimitabile  
gusto Italiano!*

**GALVANINA**

A C Q U A M I N E R A L E N A T U R A L E



## Galvanina meets fashion

The "Iceberg mineral water" was born after the encounter of the Galvanina Mineral Water with the prestigious Iceberg fashion "maison", sold only in selected "concept stores" and "design restaurants". Hence, the renowned quality of the Galvanina Mineral Water is presented in a pack with sophisticated and essential graphics, containing a product "made in Italy" for those who love fine drinking around the world.





# Galvanina water is born in the heart of Italy, in the city of dreams...

**F**or over 160 years, Rimini has been the answer to the dreams of generations of vacationers: the friendliness, the hospitality of its inhabitants and a land offering miles of beaches,

traditional foods, arts, relaxation, fun and an ancient tradition of wellness and spas, make this city of the Romagna region a landmark of international tourism. Whoever is attentive to well-being and health knows very well that Rimini is rich in therapeutic waters, already known in Roman times, as the Galvanina water, that flows from the top of Rimini's San Lorenzo Monte. Its taste and purity come from the heart of the rocks of the Northern Apennines, from which the snow and rain that fall plentiful on these mountains run on a long and deep journey through the earth's core, crossing rocks and underground

passages until they reach, in pristine state, Rimini's San Lorenzo Monte source. Since 1901, the water that flows from this source is bottled by "La Galvanina S.p.A." in one of the most modern plants in Italy, which operates according to three essential principles: product quality, energy saving and environment protection. In addition to the Rimini plant, La Galvanina has also modernized the Val di Meti Water bottling plant in Apecchio, buying SMI's high-tech machines such as the Smiflexi SK 502T shrinkwrapper and the Smiflexi WP 450 wrap around case packer.



INSTALLATION / La Galvanina





## PARCO TERME GALVANINA

Ancient trees, green meadows, flowers, an area rich in scents that you can breathe among the ruins of an ancient Roman settlement: we are talking about the vast and beautiful park called the Parco Terme Galvanina, which the Romans had chosen as a spa and which is one of the most enchanting places in Rimini. After years of closed gates, this park has recently reopened its doors in style by hosting the 13th edition of the Festival of Italian Cuisine, an extraordinary event full of good food, fine wine and wellness. Thematic areas dedicated to oil, wine, beer, pizza, signature cuisine, hundreds of quality artisan products, organic productions, have been made available to the public for tasting and special purchases for on-the-spot consumption with the family or to take home as a tasty souvenir of a memorable culinary experience.





## MODERNIZATION STARTS FROM PACKAGING FLEXIBILITY

**T**o meet the changing preferences of consumers, companies in the drinks sector should have modern bottling lines capable of adapting quickly to market trends. For this reason, La Galvanina chose

SMI systems such as the Smiflexi SK 502T shrinkwrapper and the Smiflexi WP 450 wrap-around case packer, specifically designed to switch easily and quickly from the packaging of PET and glass bottles branded Val di Meti, Iceberg and Galvanina Executive,

to organic non-alcoholic beverage containers that the company bottles for several private brands. The WP 450 wrap-around case packer meets the production needs of the 24,000 bph line and packs both the PET (0.5-liter and 1.0-liter bottles)





and glass (0.355-liter, 0.75-liter and 1.0-liter bottles) in wrap-around cardboard boxes with and without the preformed cardboard separators. More specifically, the 0.5-liter PET bottles are packed in the 4x6 configuration, while the 1-liter

bottles in the 3x4 collation are packed in wrap-around boxes with and without separators. The 0.355-liter glass bottles branded Prestige and Iceberg are packed in wrap-around boxes in the 4x6 collation, while the 0.75-liter ones -

always under the Prestige and Iceberg brands - in the 3x4 collation in boxes with and without separators. Finally, the 1.0-liter bottles are packed in the 3x4 and 2x3 collations. Even the SK 502T shrinkwrapper ensures the same operative flexibility

of the aforesaid wrap around case packer.

In fact, the 0.5-liter PET bottles are packed in double lanes in the 3x2 and 4x3 film only collations, and in the 6x4 film only and tray + film collation, whilst the 1-liter bottles are packed in the 3x2 and 4x3 film only collations and in the 4x3 tray + film collation.

The Smiflexi SK 502T and WP 450 packaging machines have fully met the expectations of La Galvanina in terms of versatility and flexibility since, besides allowing rapid format changeovers, they can easily be adapted to future processing with new products, formats and packages. All SMI packer models of the Smiflexi series are particularly suitable for

THE BEST MEDITERRANEAN FRUIT FOR A FRESH, BUBBLY AND ORGANIC JUICE!



Since 2011, La Galvanina is a licensee of the Almaverde Bio Italia brand, a consortium that combines 11 companies in the Italian food industry with proven experience in the organic food sector. Almaverde Bio was founded in 2000 with the aim of offering a complete range of organic products with the same "umbrella" brand, combining Italian companies specialized in their own market sector, which are autonomous in terms of marketing but invest together on a single brand. Today Almaverde Bio is recognized as the leading brand of organic products in Italy and boasts an absolutely unique range in this field, suitable for all business channels. La Galvanina, the historical company in the Italian agricultural scene, operating throughout the country since 1901 and abroad since 1987, is known for its production of natural mineral waters and fruit-based non-alcoholic beverages characterized by the special attention it puts on the abundance of natural components. From the pomegranate juice to the coffee drink, from the Mediterranean grapefruit juice to lemonade, the range of Galvanina drinks has always offered products rich in natural and healthy substances, the quality of which is organically certified. For years, this Rimini-based company has been developing a line of non-alcoholic beverages, both carbonated and still, made from organic products with no added sugar and in mineral water. Specifically, two lines of exclusive products have been created for Almaverde Bio, aimed at both the domestic and the European markets: one of these lines includes four types of drinks (the 'blonde' orange juice, the Sicilian lemonade, tangerine and red fruits), while the other line includes four types of iced tea (lemon, peach, green and white with guava pulp, and lotus flower essence).







multi-product and multi-format bottling lines, where switching from one production to another must be simple, fast and low-cost.

For the secondary packaging of the PET and glass bottles of Val di Meti water, the La Galvanina bottling company opted for the installation of packaging machines made by SMI, which, thanks to their high operative flexibility, allow the customer to package quite a variety of products in many different pack configurations.





# ROMAGNA: LAND OF TASTE FOR GLUTTONOUS PALATES

Ten thousand square meters dedicated to taste, combined with the leading lights of Italian gastronomy: all this is the Italian Cuisine Festival that finally landed in September 2013 at the beautiful location of Parco Terme Galvanina, on the hills of Rimini, after making some stops in a few Italian regions. During the Italian Cuisine Festival, a truly gigantic food amusement park with the best of food, wine, beer and wellness, the Park's department of mineral

water treatments was reopened to the public, where visitors and guests were able to quench their thirst free-of-charge with the Galvanina's famous thermal and digestive waters. Furthermore, the adjacent Archeological Museum was also opened, featuring Roman, Byzantine and Renaissance remains found in the ruins of the Parco Terme Galvanina, and the Ancient Roman Hot Springs with water abstraction and sedimentation chambers through the complex network of an underground water supply system. Now in its 13th edition, it is one of the most important appointments in the enogastronomic sector. This event, which brings together the best of Italian wine & food, is a traveling one: in 2012 it took place in Pergola, in the Marche region, known as the city of the prized white truffle, involving TV broadcast stations, journalists, important Italian chefs and foreign buyers (in addition to attracting a large audience on site), all of whom had the opportunity to taste excellent food and wines.



INSTALLATION / La Galvanina



 **unity is  
strength!**

ECOBLOC®  
INTEGRATED  
SYSTEM OF  
BLOWING, FILLING  
AND CAPPING



## ECOBLOC® integrated systems: a perfect work team!

Smiform's ECOBLOC® series of compact integrated systems gathers up in a single machine the operations of stretch-blow moulding, filling and capping of PET containers. ECOBLOCs® are the ideal solution for bottling lines of still and carbonated drinks, milk and edible oil up to 36,000 bottles per hour, ensuring energy saving and low operating costs.



# interpack® 2014

## INTELLIGENT ANSWERS TO INTELLIGENT QUESTIONS



Innovationparc Packaging is the brand name that characterizes Interpack 2014 and the related forums dedicated to special future-oriented issues. Interpack is, in fact, the world's leading trade fair committed to the packaging industry and all pertinent process technologies. The appointment is in Düsseldorf (Germany) from 8 to 14 May 2014: this is where visitors and exhibitors will meet to exchange views and ideas on major social, economic and

ecological issues.

In 2014, Innovationparc Packaging will focus on "SAVE FOOD", with the aim of developing some concepts for sustainable packaging solutions, thanks to the valuable help of many experts in this field, which can significantly reduce the waste of food. Each year almost 1.3 billion tons of food are lost due to storage errors, inadequate transportation conditions and insufficiently optimized packaging and storage methods.



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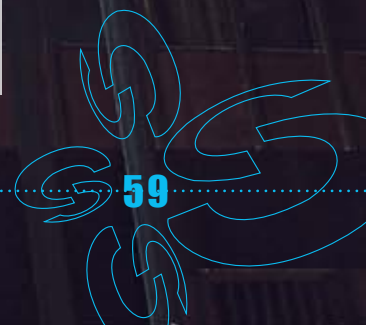
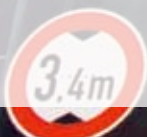




# GOOD PROSPECTS FOR THE FOOD & BEVERAGE SECTOR

In the food & beverage sector, environmental and economic sustainability of the production and marketing processes is of great importance, to the point that it has become one of the main challenges in the primary and secondary packaging sectors.

In this context, at Interpack 2014 the SMI Group will be presenting a number of innovative solutions with high energy efficiency, which allow optimizing the industrial packaging processes, reducing production and plant maintenance costs while maintaining a high level of quality of the final product.







# SMIPAL & SMIFLEXI



**T**he need to save energy is an issue on the agenda.

In fact, due to the continuous rise in the price of fuels and raw materials, it is increasingly important to adopt solutions which avoid unnecessary waste and that preserve the lifespan of the electric motors used in the industry.

Specifically, significant savings in power consumption can be achieved using innovative technologies able to transform energy more efficiently from one form to another and reduce wasting and losing it when distributing and using it.

In this context , since 1997 SMI has been using only high energy-efficient

motors in its secondary packaging machinery, thanks to which the end user can eliminate unnecessary waste and extend the average life of components, hence reducing maintenance and replacement costs.



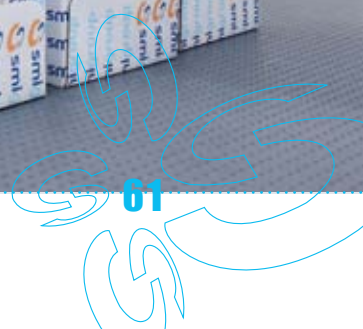
# CUTTING-EDGE TECHNOLOGIES FOR EFFICIENT LINE END

Today, energy is an increasingly valuable asset and, as such, companies that handle large bottling and packaging systems are paying more and more attention to how to use it, and choose high-efficiency and low power consumption machines.

When designing the line end solutions presented at Interpack in Düsseldorf, SMI kept in mind the needs of energy saving and environmental protection.

In fact, SMI machines used for line end packaging are equipped with brushless motors without using geared motors; thanks to this choice, the production facilities have greater energy efficiency and consequently use up less electrical current.

According to recent analyses, electric motors within an industrial plant account for 74% of the total electricity consumed.



Thanks to the better technological characteristics of the motors and the manner in which their operation is managed you can achieve many advantages, the first on the list being significant cost savings in the user's bill. Specifically, the solutions adopted by SMI improve the efficiency of its machines mainly through two types of measures: use of high efficiency motors and relating speed control, according to the real needs of each and every application, avoiding running the machine's motors at full power when not required.

The advantages arising from the integration of these two technical solutions is much appreciated by users of SMI systems which, compared to standard solutions available on the market, allow to significantly improve the overall performance of the production system.



## ENERGY SAVING WITH HIGH EFFICIENCY MOTORS

High efficiency electric motors feature, with respect to traditional ones, lower energy losses that can be of various types in a three-phase asynchronous electric motor:

- losses of mechanical origin, due to friction of bearings and brushes and to ventilation;
- losses in iron when running idle, due to the magnetic hysteresis that occurs in the stator's core;
- losses by Joule effect, proportional to the square of current intensity and the resistance of the conductors in stator and rotor windings.



In high energy-efficiently motors, the foregoing losses are greatly reduced through the choice of building materials or by modifying some building components: hence, lower heat generation.

In doing so, power being the same, these motors are more efficient than conventional ones, with a flatter yield curve as the load changes; this allows you to maintain a high degree of overall efficiency even if the load changes.

For this reason, for many years now, the Smiflexi shrinkwrappers of the LSK and SK series no longer mount any geared motors.

The same solution was recently applied also to the automatic palletizing systems of Smipal's APS series.

The integrated "Packbloc" system displayed at Interpack 2014 for secondary packaging, obtained by joining a Smiflexi packer with a Smipal palletizer, is driven solely by high-efficiency brushless motors (yield up to 98%), which ensure a marked reduction in power consumption, maintenance costs and noise levels.

The conveyor belts used in the system are equipped with drives that regulate motor speed based on the machine's actual operational needs.

As such, they provide the system with only the amount of energy required at a given time and ensure savings of up to 35% on electricity consumption.



# A COMPLETE SYSTEM IN JUST A FEW METERS

**S** miflexi's LWP 30 model wrap-around case packer presented at Interpack, in "Packbloc" combi mode with a Smipal palletizing system, is an example of how innovative ideas can be effectively applied to the industrial machine sector for compact, flexible and easy to use production systems. In the LWP models, the machine's main adjustments are performed by the operator through comfortable handles which allow switching from one pack collation to another simply, quickly and accurately without the use of tools. The cardboard blanks picker is mechanical and ensures optimum synchronization with the other operations performed by the machine;

the cardboard blank which is used to make the finished box is transferred to the main working surface fluidly and uninterruptedly. The frame of the new wrap-around case packers of the LWP series is compact and sturdy and is able to adapt easily to any logistics condition of the production facility in which they are installed. These automatic packers produced by Smiflexi are also equipped with special devices which increase safety levels such as, for example, the door closing system by means of micromagnets, which has allowed eliminating any type of interlocking elements. All motor drives have independent axes to improve machine flexibility and reduce format changeover time.



# SMIPAL APS PLUS

## THE INNOVATIVE PALLETIZING SOLUTION "3 IN 1"



The compact integrated "Packbloc" system on display at the Smigroup stand of Interpack reintroduces the conceptual innovations presented at the last edition of Drinktec. In fact, SMI engineers have further optimized the compactness and flexibility of this system which, as concerns the part dedicated to line end palletizing, uses the advanced technology of Smipal's new APS PLUS series. The main and most innovative element of the APS PLUS palletizers is the integration in the machine's fixed column of all the mechanical components which are in charge of palletizing layers, feeding empty

pallets and inserting interlayers. The following three components move on this column: the layer-loading head-holding cross beam, which performs vertical movements; the loading head (the so-called "basket") that, thanks to a system of telescopic guides, performs rapid and accurate horizontal movements along the cross beam and, lastly, an articulated arm based on SCARA technology that





ORDERLY AND  
LOGISTICALLY EFFICIENT  
END OF LINE

The new palletizers of the Smipal APS PLUS series adopt a number of design features that, compared to traditional solutions, have led to a significant reduction in the size and overall dimensions of the system.



Furthermore, the integration of multiple functions (all housed in one central column) offers considerable advantages as far as operative flexibility, workplace safety and machine maintenance are concerned. Another advantage of the compact design of the APS PLUS systems is the option of concentrating the use of forklifts, transpallets, etc. in a well-defined zone, optimizing the management of the loading and unloading areas.

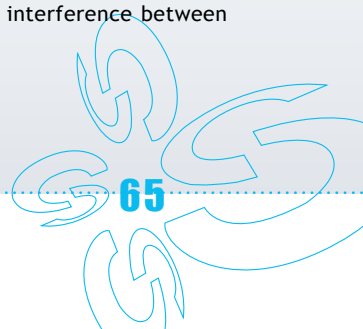
In fact, since the pallets and interlayers are handled on the same side of the palletizer, this does not interfere with the other activities of the production line.

With its compact size, the Smipal system can be easily installed also in bottling and packaging lines, the end line area of which is enclosed in cramped spaces.



performs both vertical and horizontal movements for feeding the empty pallets and inserting the interlayers. The aforesaid articulated mechanical assembly is housed on one side of the central column, perpendicular to the one that houses the loading basket-holding cross beam; the SCARA arm performs vertical movements by sliding on the central column to pick up and release the pallets and the interlayers and moves horizontally in a range of 180° to transfer the

pallets and interlayers from their magazines to the palletizing pallet. These operations are handled by the machine's automation and control system in perfect synch with the operations performed by the layer-loading head, so that the vertical and horizontal movements of the various mechanical units installed on the central column can follow precise and coordinated trajectories that prevent any contact or interference between them.



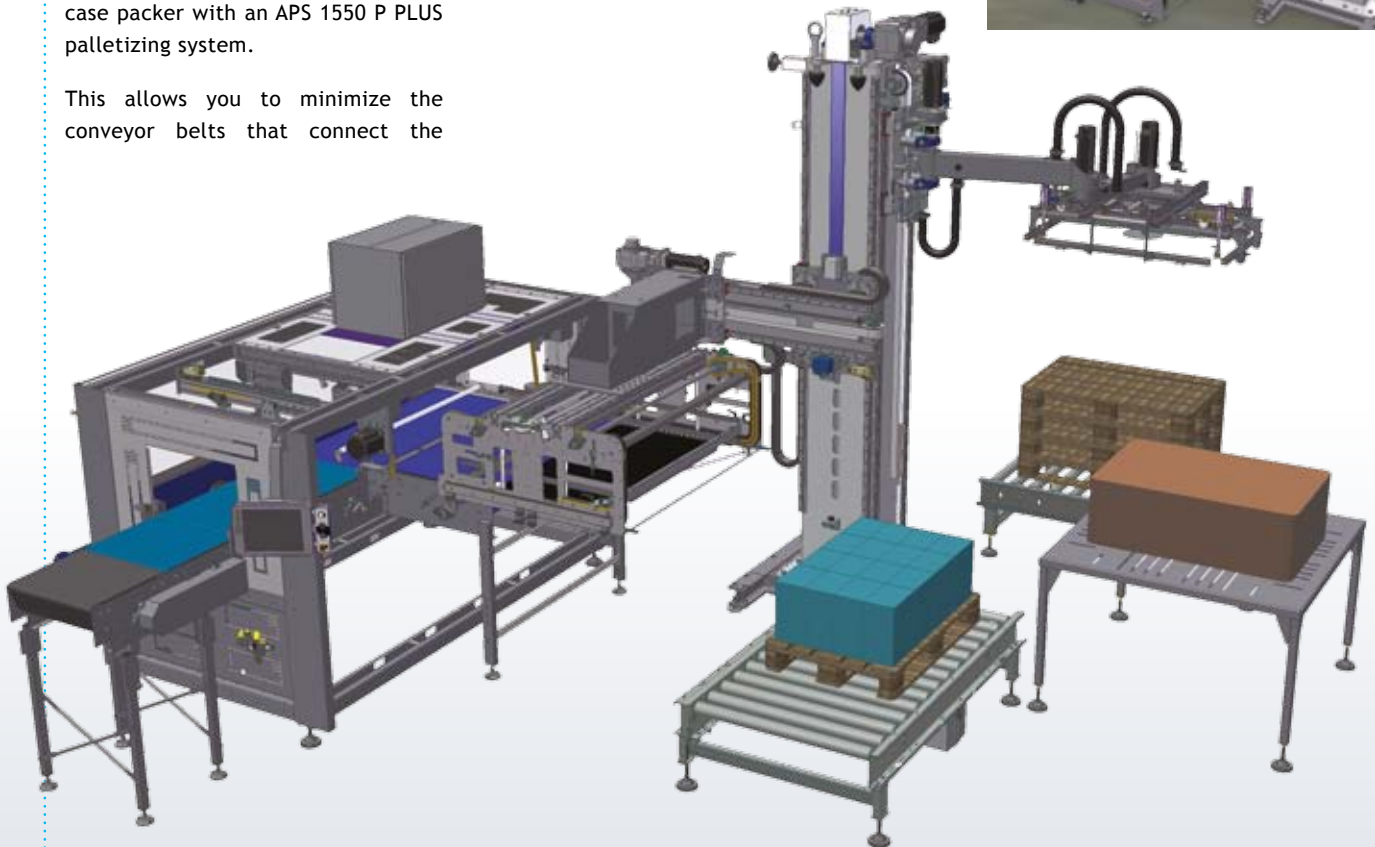
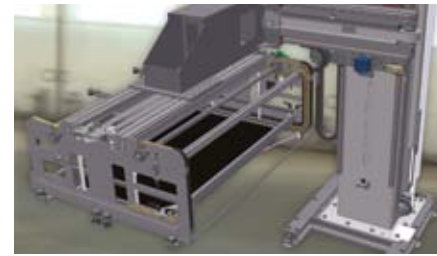
# NEW

## APS 1550 P PLUS AUTOMATIC SYSTEM

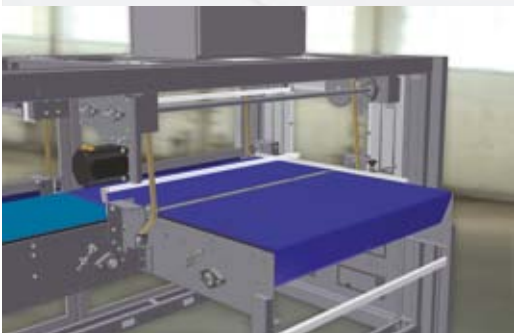
**T**he new APS 1550 P PLUS system can be configured both in standalone and "Packbloc" mode in conjunction with a Smiflexi packer; the model exhibited at Interpack 2014 integrates Smiflexi LWP 30 model wrap-around case packer with an APS 1550 P PLUS palletizing system.

This allows you to minimize the conveyor belts that connect the

two machines, save on the initial investment and limit running and maintenance costs of line end packaging systems.







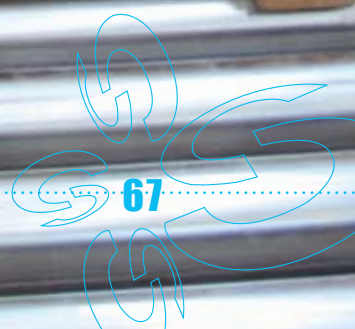
The APS 1550 P PLUS palletizing system satisfies production requirements up to 50 packs per minute (about 150 layers per hour) and can handle 800x1200 mm (euro-pallets) and 1000x1200 mm pallets.

Another innovative aspect of the model exhibited at Interpack is made up of the machine inlet and the layer pre-composition system, consisting of a cadencing belt, a product insertion belt, which forms the row, and a one-way translation system that contributes to forming the layer.

The layer is transferred from the belt to the basket smoothly and precisely as it exploits the belt's movement, and does not require the use of any mechanical layer translation components.

Smipal's new automatic system, designed according to FCR (Full Cost Reduction) methods, is pre-tested at the factory and delivered to the customer fully assembled and wired.

Hence, the time required for start-up is minimized to the benefit of the management operations and scheduled system maintenance.





# SMIPACK



**S**ince 1997 SMIPACK distinguishes itself on the market for the production and marketing of a wide range of packers used in various sectors, both “food” and “non food”.

The growing attention to the changing needs of the market has led the company to make increasing investments in developing new packaging solutions that meet the demands of flexibility, reliability and cost-performance

coming from the large pool of existing and potential customers.

The new range of  $\beta$ P AL shrinkwrappers with sealing bars, the result of the foregoing investments in R&D, had its world première at the 2013 edition of Drinktec, the most important international exhibition of new technologies and innovations for the beverage industry.





## SMIPACK

THE HISTORICAL  $\beta$ P SERIES NOW  
EVEN WITH LINE INLET

The historical series of  $\beta$ P shrinkwrappers continues to record increasing success among end users thanks to its compact structure, high operative flexibility and excellent quality/price ratio.

For these reasons, the  $\beta$ P series was further innovated with the launch of the new series called "AL", which is characterized by the line inlet as compared to the standard series.

Compared with the traditional 90° inlet system, present on all versions with the automatic collation proposed so far, the new AL series with line inlet is suitable for several layout solutions and therefore offers new packaging solutions for the customers' production lines.

The new  $\beta$ P AL range currently includes the  $\beta$ P 802AL 600R and  $\beta$ P 802AL 600R-P models, which are the ideal solution for packaging round products in film only and pad + film, respectively.

The new  $\beta$ P AL shrinkwrappers' design is innovative and use cutting-edge technical solutions that offer excellent performance and high reliability for production requirements up to 25 packs per minute (depending on the type of product, its size and its stability).



# BP SERIES

## EASY TO USE FIRST OF ALL!

New packers with sealing bars  
BP802AL 600R (film only) and  
BP802AL 600R-P (pad+film)



**T**his new range of shrinkwrappers was designed to simplify the operations performed by line operators and to facilitate format changeovers. The infeed belt of

the new BP AL series, motorized in line, controlled by an inverter, is equipped with a speed change sensor and an electromechanical sorter for channeling the products from a single-row belt to 8 rows at inlet.

Smipack also strongly focused its attention on the 760 mm pneumatic sealing bar and the cutting of the film with the cold blade, to achieve maximum yield with the different products to be processed.







The range of BetaPack shrinkwrappers with sealing bars is equipped with product infeed guides, adjustable in width and height, and a separator equipped with a synchronized pneumatic press with motorized chain pusher controlled by inverters and encoders. This pusher, combined with the pneumatic system of side guides, accompanies the formed product beyond the sealing bar to form packs of superior quality. The upper reel-holder is controlled by an inverter fitted with a potentiometer while the lower reel is motorized.



## THE IMMEDIATE BENEFITS OF THE NEW SMIPACK SOLUTION

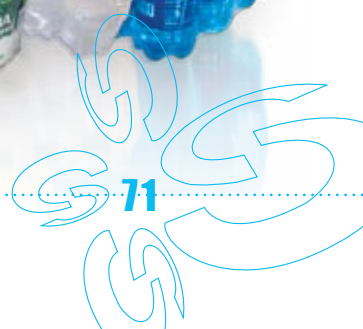
- greater operative flexibility, thanks to layout solutions with line inlet that can be easily adapted to every logistics requirement;
- greater production efficiency since product collation takes place automatically and the packaging process can therefore be carried out at higher speeds;
- standalone Flexmode® control panel, equipped with 32-bit microprocessor for controlling and managing the machine;
- distribution of products on multiple rows by means of an electromechanical system controlled by inverters and encoders, transported by motorized conveyors also controlled by inverters and encoders; this technology counts and performs the dimensional control of the processed items;
- a check sensor at shrinkwrapper infeed, which keeps the product flow regular and constant to exert an adequate feeding pressure on the loose product at machine infeed.

### Features of the BP 802AL 600-R / BP 802AL 600-R P

- Production capacity: up to 25 packs per minute (\*)
- Pack typology: film only and pad+film (BP 802AL 600-R P model)
- Sealing bar: 760 mm
- Height of workable product: up to 380 mm
- Minimum workable diameter: 40 mm
- Tunnel conveyor: fiberglass bars



(\*) according to container and pack configuration.



To facilitate reel change operations, the machine also has a support for the second upper and lower reel.

The  $\beta$ P802AL 600R-P model, specifically designed for pad+film processing, is equipped with a vertical pneumatic system for taking the flat cardboard pads whereas the pad conveying system is motorized, self-centring and controlled by inverters and encoders.

The pads, inserted below the products to be packaged, are synchronized with the arrival of the products on the conveyor belt, thanks to the electronic pad insertion device.

If necessary, the pad insertion system can be easily and quickly deactivated to perform packaging in film only, a feature that greatly simplifies all format change operations.



Another innovative aspect of the  $\beta$ P AL range is represented by the double-chamber shrinking tunnel that, thanks to a control system of the differentiated airflow and regulated by independent flaps

placed at the beginning and at the end of the tunnel, allows the perfect shrinking of the wrapped product, provides excellent performance and saves on energy consumption.





HSR SERIES  
HIGH SPEED  
ROTARY STRETCH-  
BLOW MOULDERS



**Faster.**  
**Smarter.**  
**Greener.**



## New HSR blow moulder: technology that will change the PET world

Thanks to revolutionary solutions, HSR stretch-blow moulders reach production speeds up to 2,500 bottles per hour per cavity, save as much as 30% of energy compared to conventional systems and reduce running and maintenance costs.



# SMIGROUP E-STORE



## ORIGINAL SPARE PARTS JUST A CLICK AWAY!



To simplify and speed up the supply of its standard spare parts (not based on ad-hoc drawings), SMI recently launched a new on-line shop, called Smigroup e-store ([www.smigroup.it/store](http://www.smigroup.it/store)), which enables customers - for now only those of the European Union - to purchase SMI original spare parts, directly and immediately.

Finding your way around the Smigroup e-store is very simple: just browse through the various product





categories (e.g.: chains, belts, brakes, motors, etc.) or enter the code of the part required, which can be found by consulting the machine's spare parts manual in SmyCloud or through the nameplate on the part to be replaced.

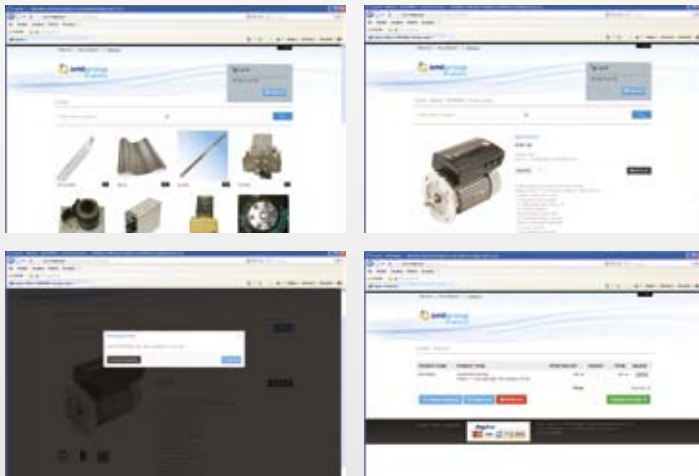
After finding the product of interest, and by clicking on its tab, you will enter the description of the technical specifications, the image gallery and the view of the sale price, with the option to add it to your cart and confirm the purchase order.

The operation is completed by entering shipping information and your on-line payment, which can be made by credit card or pay-pal via an absolutely safe, secure system.



## A SERVICE WITH MANY FEATURES: THE ADVANTAGES OF SMIGROUP E-STORE

- item search by name or code
- images and technical specs of the item
- your orders are displayed and you can check open ones
- the purchase process is simple, fast and secure
- instant conversion of quotes into purchase orders
- consultation of invoices, statements and open orders



## WE WILL BE EXHIBITING AT...



Düsseldorf  
GERMANY  
8-14 MAY



São Paulo  
BRAZIL  
3-6 JUNE



Mexico City  
MEXICO  
17-21 JUNE



Mumbai  
INDIA  
25-27 SEPTEMBER



Tokyo  
JAPAN  
7 - 10 OCTOBER



Beijing  
CHINA  
13-16 OCTOBER



Chicago, IL  
U.S.A.  
2-5 NOVEMBER



Nuremberg  
GERMANY  
11-13 NOVEMBER



Paris  
FRANCE  
17-20 NOVEMBER



Cologne  
GERMANY  
24-27 MARCH 2015





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