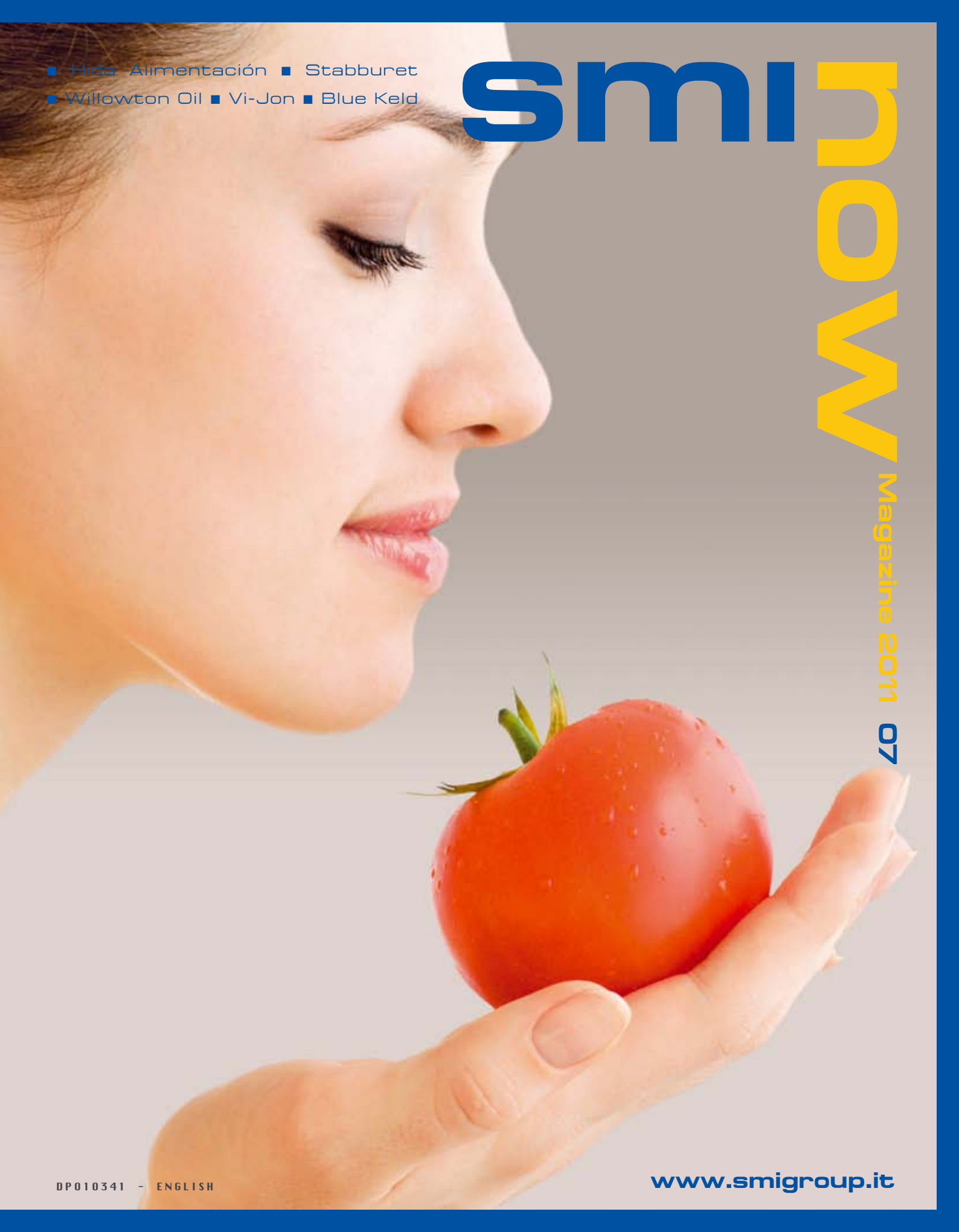


■ Hida Alimentación ■ Stabburet  
■ Willowton Oil ■ Vi-Jon ■ Blue Keld

# smi now

Magazine 2011 07



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# smi NOW

Editorial



“Hi-Tech”  
solutions to support  
efficiency and  
safety”

A new wind seems to be blowing in the “packaging” market after the upheavals triggered by the 2008-2009 period in the world economy and after we all had to think about a new way to set up our work to overcome the crisis and look with confidence to the future.

SMI has always firmly believed that the best “antidote” to the ups and downs of the market is a business strategy based on innovation, the essential objective of daily activity that allows us to design efficient, smart and versatile products and solutions also thanks to increasingly remarkable digital technology performance.

The flurry of projects and initiatives recorded in the world of “packaging” since the beginning of 2011 gives us hope that the technological innovations developed by our R&D laboratories are properly welcomed by our customers, who are constantly looking for increasingly reliable, flexible and energetically “virtuous” plants.

Among the novelties presented by SMI in 2011, I wish to mention the new “automatic system for generating format changeovers”, available on Smiflexi packers and on Smipal palletisers, which is able to automatically “think” of the best pack and layer configuration after entering the basic data of the product to be processed into the machine’s control panel.

Moreover, the extremely important task of protection and security of the parameters and sensitive information linked to production is entrusted to digital technology. For this purpose, SMI has developed a new device called “USB Smipass Fingerprint”.

The “innovation” section in this issue of SMI NOW is dedicated to the latest innovations we have introduced on our machines. In the “installation” section you will find some interesting “case histories” that testify how important research and Innovation investments are for SMI and useful for our customers.

**Paolo Nava,**  
President & CEO  
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# smi NOW

Magazine 2011 07

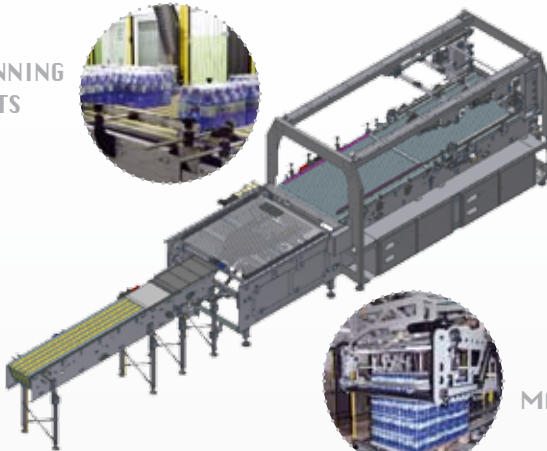


In recent years, the market for tomato-based products has seen a remarkable diversification of the offer: concentrate, peeled, puréed, pulped, ready sauces, ketchup, sauces... The tomato processing industry is now one of the most important entities of the economy and it seems impossible to imagine that pizza, pasta and many other dishes were born and lived a long time without this ingredient.

LOW RUNNING COSTS



SPACE REDUCTION



LOW MAINTENANCE



**New Smipal infeed with continuous pre-forming:**

compact solutions for line-end packaging with continuous pre-composition

**UP TO 80 PPM**

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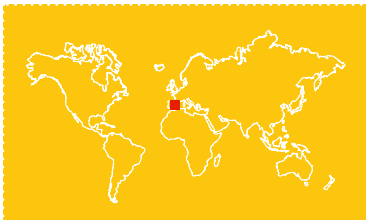
**Smi wins the award "The Tigers of 2010"**

The prize was awarded last July 1, 2011 at Villa Castelbarco (Milan) at the ceremony that was attended by over 130 representatives of the business and professional world.

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# Hida Alimentación.



## FOOD SECTOR

### Hida Alimentación S.A.

Hida Alimentación Group

Mula, Murcia, Spain

>> shrinkwrappers

SMIFLEXI SK450T - LSK35T

>> multi-packer

SMIFLEXI MP 300



## ▪ Murcia: the garden of Europe

In the enchanting region of the autonomous community of Murcia, in the south-eastern part of Spain between Andalusia, Castilla-La Mancha and Valencia, on the coast of the Mediterranean Sea, is where the greatest vegetable production in Europe is carried out. It is no coincidence, in fact, if Murcia is described as the "garden of Europe". Farmers and agro-processing companies operate in an ideal environment, benefiting from this region's excellent micro-climate. The dynamic and competitive farms in Murcia produce and market various types of products such as wine, rice, olive oil, lemons and paprika. In turn, companies manufacturing canned food, juices, beverages and frozen foods contribute to create one of the most active and innovative industrial districts of Europe. Hida Alimentación S.A. operates in the center of this great and fertile environment. Over 56 years of operation, together with continued investment in new production technologies, have brought this Spanish company to win a leadership position in domestic and international markets. To support the growth of turnover, Hida has chosen to install two new shrinkwrappers of the Smiflexi SK and LSK series and a sleeve packer of the MP 300 series that allow the Spanish company to greatly improve its productive efficiency.

# Technological innovation in support of traditional cuisine

■ Founded in 1954 in the city of Murcia, Hida Alimentación is a company that manufactures canned vegetables, the turnover of which was around 14 million Euros in 2010. In recent years the company has experienced a booming business, achieving a leadership position in the Spanish market (Nielsen 2010) in the production of "Tomate frito casero", characteristic fried tomato-based sauce. The Spanish company also focuses on the processing and production of a wide variety of homemade products such as "pisto, cebolla frita, zarangollo (zucchini and onion), asadillo, gazpacho, cabello de angel";

to complete the range there is a line of fried tomato-based organic food, zucchini and roasted peppers with fried tomato. Sauces and preserves with the Hida brand are manufactured using traditional methods with quality fruit and vegetables, carefully selected among the best varieties provided by the local crops and harvested at the right point of maturation. The supreme quality of the finished product is achieved thanks to a careful process of transforming the "raw material", which includes the use of extra virgin olive oil as key element of the Mediterranean diet (healthy, balanced and free of cholesterol). The high quality of Hida products has allowed the company to achieve significant awards reflecting the happy "marriage" between genuine food, quality of raw material, technological innovation and industrial production.



# Advanced systems for greater operating flexibility



Packaging machines Smiflexi LSK 35T, SK 450T and MP 300 have fully met Hida's expectations in terms of versatility and flexibility, as they are able to switch quickly from one type of format to another and can be easily adapted to future processing of new products, formats and packages. All SMI packer models of the Smiflexi series are especially suitable for multi-product and multi-format bottling

Over the past six years, Hida Alimentación has completed an ambitious process of modernization of its production lines, focusing strongly on technological innovation of machines and plants. Thanks to corporate management's farsighted choices, this process of innovation has allowed Hida Alimentación to greatly expand and develop its market share, without compromising the "artisanal" quality of its food products. To complete this innovative process, the Spanish company has recently

started production in the new factory of Mula, which occupies an area of over 22,000 m<sup>2</sup> and is equipped with the most advanced technologies for the processing of fruit and vegetables and the production of sauces, preserves and other fruit & vegetable-based products. With its growing production capacity and consolidated distribution and logistics network, Hida Alimentación has become a reference point at national level among the brands manufactured in the Mula plant.



- The “night of the drums”

In the city of Mula, in the autonomous community of Murcia, on the night of “Holy Tuesday” the drum becomes the protagonist and does not rest until the following day. It is the “night of the drums”, a traditional festival dating back to the mid-nineteenth century, open to anyone who wants to participate and has a drum.

The players usually wear a black robe and, sometimes, a hood.

The rumble of the drums begins at midnight of the “Holy Tuesday” in the square of the Municipality of Mula; from that moment, the sound of the drumming marks the rhythm of the city until four in the afternoon of the next day.

The large participation of the local people and tourists creates a spontaneous show of all types of players, who compete in a test of skill and endurance.



lines, where switching from one process to another must be simple, fast and affordable.

For over fifty years Hida Alimentación has given prominence to the satisfaction of needs and tastes of its customers, customizing recipes,

containers and packaging. To propose an innovative and impressive packaging, representing the best brands of the group, the Spanish company has chosen the Smiflexi cardboard sleeve packer of the MP series, which is dedicated to packaging 500 gr. and



6 oz. tinplate cans in 1x3 and 1x2 collations. The machine chosen by Hida is very versatile and can also pack bottles, cartons and plastic, metal and glass jars in various types of pack at speeds up to 300 pack/minute (depending on the type of container and format selected).

Even a Smiflexi shrinkwrapper, model LSK 35T, has been installed inside the same production line, which packages the 1x3 and 1x2 packs - arriving from the MP 300 - in the 8x3 and 8x2 collations in tray+film. The same shrinkwrapper is also able to pack cans, bottles and glass jars

## ■ Awarded for excellent quality

Total quality is one of the underlying ideas of Hida Alimentación's "mission", as demonstrated by ISO-9001:2000 (Quality Management System) and ISO 14001:2004 (Environmental Management System) certificates. Quality, tradition and recognition are ideally and expertly blended to achieve total customer satisfaction. Among the most important awards received by the Spanish company, recently settled in Mula, it is worth quoting:

- EROSKI award for Best Product in the region of Murcia (2001)
- CARREFOUR award for the best small/medium-sized business in Murcia (2001)
- FOOD PROCESSING QUALITY award for the best innovations and research (2004)
- MERCURIO award for industry in the region of Murcia (2005)
- TASTE OF THE YEAR recognition for the Gazpacho product (2009)
- Prize of the Murcia region for ENTREPRENEURIAL EXCELLENCE (2010).



in various collations (for example 8x5 and 5x2 in tray only) or 3x2, 4x3, 5x2 or 6x4 in tray+film for the 500 gr. or 12 oz. tinplate cans. In the second bottling line of the new plant in Mula, Hida Alimentación has decided instead to install a Smiflexi 45 pack/minute packer, model SK 450T, suitable for packaging cans, bottles and glass jars in various tray + film or tray only collations. The packers of the SK series, available in a wide range of models in single lane and double lane version, are equipped with an electronic product-grouping system and automatic format changeover.

## ■ Murcia: the “kitchen garden”


The region of Murcia can boast a gastronomic tradition that represents the meeting point among products of exceptional quality and innovative recipes, the result of the culinary influences of the many peoples who have inhabited this region over the centuries. The size and geographical diversity of Murcia is expressed in a variety of recipes that include the use of fish and seafood from the Mar Menor and the Mediterranean Sea, fruits and vegetables, meat, traditional sausages as well as the excellent wines. Even rice-based dishes, sausages, preserves, dried fruit, herbs, fruits and desserts stand out in the gourmet cookbook of the community of Murcia. Talking about Murcia gastronomy is to speak of garden products, especially vegetables, present in most of its traditional dishes. In this “gourmet paradise” you can taste: fresh fried broad beans with onions; dried broad beans boiled in the famous michirones (stew of broad beans with ham, small salami, bacon and spices); fresh garlic, present in almost all stews (which can also be prepared sautéed with Swiss chard or in a




frittata); thistle in almond sauce; zarangollo (zucchini and onion pie); artichokes; roasted pepper in a salad; gazpacho (made with various vegetables: tomatoes, red peppers, green peppers, cucumber, onion, garlic and olive oil); the regional pisto made with tomatoes, green and red peppers, eggplant and zucchini; the asadillo, containing red peppers to be oven roasted, and red tomatoes, garlic, cumin and olive oil, which are used for the sauce to mix with the peppers.



# Stabburet.



FOOD SECTOR  
**Stabburet AS**  
Orkla Group  
Rygge, Norway  
» combined packer  
SMIFLEXI CM 350  
» belts and divider  
SMILINE DV 200



■ Impossible not to be dazzled by the beauty of Norway, which, not coincidentally, had inspired many poets, artists and writers in the past.

The landscapes vary from the tundra to the beaches, from charming fishing villages - that seem to come out of a storybook - to vast pristine forests, from spectacular ice caps to the famous fjords (which are now the symbol of the country).

Norway is loved by all types of travellers both in winter when it is covered by a thick blanket

of snow, and in summer, when nature awakens and gives vigor to the landscape and to people.

In Norway summer is magic: the sky opens to the strong rays of the sun, the blue becomes intense and the rocks stand out clearly in the fjords.

The hours of light increase and the night turns different colors: it is the natural spectacle of the "midnight sun", when even at night the sun remains over the imaginary line of the horizon and generates strong emotions in the viewer.

# Stabburet:

## The tomato meets Norway

■ Stabburet AS is one of the largest producers and distributors of food in Norway. Thanks to brands such as Idun Tomatoketchup, Grandiosa, Nora Nugatti and Fun Light, the Norwegian company has acquired a leadership position in the market for food sauces, frozen products and other food products.

Every day Stabburet products form a significant part of meals to hundreds of thousands of Norwegians; in fact pizza, sauces, ready meals, drinks are sold by the major chains of retail stores and are used by the most popular restaurant chains.

Among the many products of the Norwegian brand, "Idun Tomato" is definitely one of the best selling ketchups: hence the need for Stabburet to have a very versatile packaging system, able to pack ketchup containers of different capacity into different pack collations. Since 1956, Idun Tomato ketchup has been on the tables of almost all Norwegians, with its unmistakable flavor of fresh tomatoes and recognizability of the container, whose style has remained unchanged for over 30 years.

Recently, Stabburet has launched an updated version of the currently marketed bottle, aiming at an innovative oval design. The launch of the new container was also facilitated by the installation



of a new Smiflexi combined packer of the CM series, which from the beginning of the project proved to be the ideal machine for its great operating flexibility and ease of management and control.

These features have enabled the processing of both containers and the easy integration of the packaging machine with pre-existing palletizing systems.



# Combined packaging: the ideal solution for every need



■ To respond effectively to new market trends, manufacturers of the “food & beverage” sector focus increasingly on very versatile and fully automated secondary packaging systems, such as the combined packers of the Smiflexi CM series, which bring together in one machine the features of a wraparound case packer, a trayformer and a shrinkwrapper. The model installed at the Stabburet factory in Rygge,

Norway, packs ketchup containers with round and rectangular-shaped bases, for the channeling of which a Smiline DV200 model divider was supplied. The CM 350 combined packer produces a wide range of high quality packaging solutions in tray + film, tray only and closed cardboard box. When the processing programme features tray only or wrap-around box packaging, the shrink oven and the film wrap

system are automatically deactivated by the machine control system.

The collations produced by the model installed at the Norwegian company range from small 3x3 tray + film and tray only packs for the 520 gr. bottles to the larger 5x2 collations, always tray + film and tray only, for the 890 gr. containers.

The 540 gr. and 870 gr. bottles were packaged in tray only corrugated boxes, before the new container was launched in January 2011.

The Smiflexi packer in Stabburet also has an additional cooling conveyor located at the outlet of the tunnel, which ensures the perfect





shrinking of the packs in the 5x2 collation, allowing them to rotate by 90°. The Smiflexi CM series is the ideal solution for the Norwegian company's production needs as it "gives its best" especially in packaging lines characterized by frequent switch-overs from one product to another or from one format to another.

On introducing the new squeezable bottle on the market, Stabburet simultaneously started a package standardization process; for this reason, the Norwegian company has unified the shape and size of packs that make up a "full pallet" (divided into

## ■ Prizes awarded for innovation and creativity

Stabburet AS was awarded the prize for the 10th edition of the "Grand Prize", a competition organized to raise awareness among the companies within the Orkla group about the importance of advertising tools and also to reward those who created the most innovative product and the best advertising. Stabburet received this award for food spreads recently launched on the market, which are among the "top sellers" of the Norwegian brand.



single packs again before being placed on the shelves) and those that make up 1/3 of a pallet (placed directly on the shelves).

The only difference is the type of final packaging, since the packets placed directly on the shelves are packed in a cardboard tray only.



# The new challenges

## of secondary packaging



■ Stabburet is a leading company in Norway in the production of food. Founded in 1943 by Gunnar Nilsen, the Scandinavian company, belonging to the Orkla Foods group, runs 8 manufacturing plants in southern Norway and employs over 1000 people. The current company structure is the result of the merger and acquisition of several companies that, within a short time, led Stabburet to win the leadership position in the market.

Suffice it to say that in 1947, just 4 years after founding, the company held a prominent position among the producers of fresh and canned fish.

The development of Stabburet is marked by continuous competitive challenges that have led to large capacity for innovation and flexibility in adapting to changing business demands.

In fact, the frequent and often unpredictable changes in consumer habits and preferences require companies of the "food & beverage" sector to install more flexible,



efficient and economic production systems. As part of this evolutionary process, the final packaging of the product plays a crucial role since it must be able to intercept new market demands by offering the right product, in the right format and





packaged appropriately. Hence the need to introduce a new container for the ketchup line that responded to the new buying habits of consumers, who increasingly are

targeted towards very practical, easy-to-open formats, characterized by a strong image of quality and freshness of the product: convenience, quality and freshness that



## ■ The "Idun Tomato" ketchup

The industrial production of this sauce was initiated by Stabburet in 1956. Today the product has a market share of 75% in the reference field and sales in Norway amount to 13.5 million bottles a year. The origins of the "Idun" brand date back to 1930, when the "Det norske edikkbryggeri" factory was set up in the Norwegian town of Moss for the production of vinegar and mustard marketed under the brand name "Idun". In 1961 Idun Norex was founded, which later became Idun AS, a company that became part of the Stabburet world in 1991.



Stabburet guarantees even after opening the product, thanks to the new squeezable container with particularly innovative cap and dispenser.

The latest generation of packaging machines produced by SMI is able to provide increasingly complex and customized packaging solutions: for example, the Smiflexi CM 350 model combined packer, chosen by Stabburet for the secondary packaging of ketchup bottles of 520 and 890 grams, is able to create packages - at speeds up to 35 packs/minute - in cardboard trays with or without

shrink film.

Thanks to the use of such a versatile machine, the Norwegian company can now quickly and easily switch from one type of production to another, periodically adapting the entire production system to market demand.

SMI was able to propose an ad hoc technical solution to Stabburet by developing a management software that ensures perfect synchronism between the CM 350 combined packer and the two pre-existing palletisers, the first of which is dedicated to the composition of pallets of packs in tray only while

## ■ Ketchup: origins and uses

Many think that this sauce is the "American product" par excellence but, in truth, ketchup has an Oriental origin: the name derives, in fact, from the Malay word "kecap", a sauce made of fermented and marinated anchovies, or from the fusion of Persian words "ket" and "siap" (which in essence means "pickled fish").

When ketchup landed in Europe in 1600, cooks began to customize it by adding other ingredients, including oysters, mushrooms, walnuts and lemon. The recipe of ketchup as we know it gained ground at the end of the eighteenth century when, in the United States of America, some chefs began using tomatoes to make this sauce.

The tomato-based recipe becomes widespread in the early nineteenth century, when it appears in some very popular cookbooks appreciated by chefs and connoisseurs.

Initially produced and sold in agricultural farms across the United States, this sauce becomes a "consumer commodity" from 1872 onwards when Henry John Heinz begins manufacturing it industrially on a grand scale. Over the following decades, the "tomato ketchup" has become an essential ingredient in the culinary habits of millions of consumers, to go with chips or to match it with the mayonnaise to prepare the cocktail sauce.





## ▪ Gastronomic traditions that come from nature

Norwegian cuisine draws from the generous and fresh products in the basket that land and sea provide: farmed meat, game, vegetables and fruit. Game-based dishes excel in the national gastronomic hit parade, with freshly hunted reindeer and moose, while the fish basket has its strong points in smoked salmon and cod.

Dairy products are first choice, such as the exquisite "Geitost", sweet cheese made with cow and goat milk.

Traditional consumer drinks are the brandy (akevitt) and the excellent native beer.

In recent years there has been a gradual and steady increase in the consumption of food sauces - ketchup and mustard at the top of the list and, more moderately, mayonnaise - all used for the preparation of elaborate meals or to



add flavor to various dishes. The increased demand for these products has allowed companies like Stabburet to seize the opportunities offered by new trends, offering the market a well diversified portfolio with a rich variety of tastes.

In addition to ketchup, the range of food sauces of the Norwegian company includes mayonnaise, mustard, Tabasco sauce and many other seasoning products.

the second is for tray + film packs.

The simple signal-exchange system allows the customer to change automatically - without operator intervention - the type of package made by the CM 350 combined

packer (tray only or tray + film), according to format requirements sent by the control system of the palletiser in operation (between the two installed). In fact when the palletiser, dedicated to composing the pallet with the tray only



- Orkla Group



The Norwegian Orkla group operates through three main divisions, each of which is a leader in its field of reference: Orkla Brands, Sapa and Investments.

Orkla Brands manufactures a wide range of consumer goods such as food, drinks,

snacks, detergents, personal hygiene, etc. Besides the Stabburet brand, many other food companies of primary importance in Northern Europe and in the Baltic States are part of this division such as Procordia, Abba Seafood, Bakers, Beavais, etc.

The Sapa division specializes in the production of aluminium solutions for the building sector, systems of energy production from renewable sources, heat exchanger sectors, etc., while the Investments division is active in financial investments.

With a turnover of 57 billion NOK (Norwegian crowns), amounting to over 7.3 billion Euros, 30,000 employees in approximately 40 countries, Orkla is an industry of great importance for the economy of Northern Europe and Baltic States, with significant market shares in Russia, India and Austria.



packs, has completed its work cycle, a special signal is sent from the control system to the Smiflexi packer, that automatically switches to the tray + film format to feed the other palletiser.



**Above:** the presentation of the jersey of the Fredrikstad F.K. football club, sponsored by Stabburet.



## New APS palletizer:

robustness and reliability at top levels




The APS series is composed of automatic systems for the palletisation of cases, bundles, trays and other commonly used packs.

Smipal palletizers of the APS series are the outcome of an intense activity of research and innovation and, thanks to the accurate design of the central column and of the horizontal beam, along with the precise motion on recirculating-sphere guides, assure fluid and continuous movements, with very little dynamic bendings and virtual absence of vibrations: this is the key to guarantee a long life cycle of the mechanical components.


**APS SERIES:**  
lift beyond your limits.



> stretch-blow moulding machines > shrinkwrappers and tray packers > wrap-around casepackers > conveyor systems > palletisers

OIL SECTOR  
**Willowton Oil**  
 Willowton Group  
 Pietermaritzburg, South Africa  
 >> case packer  
 SMIFLEXI WP 450  
 >> belts and divider  
 SMILINE DV 500



- In the heart of the South African economy

In a broad valley, surrounded by green hills, lies the city of Pietermaritzburg, elected capital of the Republic of Natalia in 1838, after the Boer victory of Blood River.

After regaining control over the city in 1843, the British changed its urban and architectural appearance considerably by building Victorian inspired buildings.

The Indians then thought to further enrich the cultural landscape of the city, whose massive immigration in the nineteenth century was essential to support the growing number of sugar cane plantations. Currently Pietermaritzburg is an important industrial hub at regional level. The richness of the KwaZulu-Natal region is based on agriculture, livestock breeding, tourism and the processing industries, which represent 30% of its economy: in fact, 30% of goods exported from South Africa are produced here.

# A long journey to excellence

■ Every journey begins with the courage to take the first step but it's the subsequent moves that determine where you are going. This is how one can sum up the story of Willowton Oil, among South Africa's leading companies in the production of cooking oil, margarine and spreads, detergents and candles.

Compared to other companies in the food sector, Willowton Oil has always been at the forefront of the technological innovations introduced in its factories; a farsighted choice that has assured this South African's company a long period of growth and success since its founding.

For Willowton Oil it is very important to provide all its consumers with prime



quality products, achieved using the best "raw material" available, as well as processing and production facilities equipped with cutting-edge technology.

The recent investment in new secondary packaging machinery is part of the foregoing perspective for the four oil lines for the packaging of 2- 4- and 5-liter PET containers.

In order to expand its production capacity, made necessary by the increasing demand, Willowton Oil has relied on SMI technology and experience. In the four oil production lines including the Sunfoil, Sunshine D, D'Lite, Sungold brands plus other private labels, the South African company has decided to install four Smiflexi model WP 450 wrap-around case



packers, which receive the containers to be packed in cardboard boxes from four Smiline model DV500 dividers/channelers.



# Willowton Oil and Smi: tradition and innovation at the service of the market

■ The Willowton Group, headquartered in Pietermaritzburg in the KwaZulu-Natal region, has experienced a sustained growth in recent years, which required significant investment to increase production capacity in the plants of Pietermaritzburg, Johannesburg and Cape Town, where a total of 1,250 people work. The group's activity revolves around well-established principles, such as service excellence, continuous

technological innovation and the enhancement of human resources. The presence of a Research Center common to all the companies of the Group is critical for the development of new products and the maintenance over time of the excellent quality standards achieved. Products of the Willowton Oil Group, including brands Sunfoil, D'Lite, Crown, Britelite, Daily, Cameo, Sunshine D, Nuvo and Romi, are available at all major retail chains,



*Above: the new device at DV500 inlet is designed to orient the bottles with the handle in the required position.*





supermarkets, wholesalers and shops both in South Africa and in Sub-Saharan Africa. The growing demand, also coming from strong exports, is the factor that pushed the company to invest in the purchase of four SMI Smiflexi WP 450 series wraparound case packers, capable of producing up to 45 packs/minute, for the factories of Pietermaritzburg and Gauteng. The edible oil with the Sunfoil, Sunshine D, D'Lite and Sungold brand is bottled in rectangular 2- 4- and 5-liter PET containers, which are then packed in corrugated cardboard boxes by the WP 450



## ■ 40 years of sustainable development

In 2010 the Willowton Group celebrated 40 years of business and decided to celebrate it in a rather singular way, which however expresses the company "mission" at best: it donated 4 million South African Rand (equal to more than 400,000 Euros) to 40 different organizations, which work in the social sector, distributed to the community (100,000 Rand each). Each association taking part in the selection for the prize had to respond to Willowton Oil's invitation to "Tell us why you're the best". In fact, the South African company believes that funded organizations are the "pillars" of the community.





**Above:** Mr. Ali Akbar Moosa of Willowton Oil (to the left) meets Mr. Calvin Christy of Caltech Agencies (SMI agent), in the Isando Foods plant.



wraparound case packer: the 2-liter bottles in the 3x4, 2x4 and 2x5 collations, the 4-liter bottles in the 2x3 collation and the bigger 5-liter bottles in the 2x2 collation. The bulk rectangular bottles are sorted by a Smiline DV500 divider/channeler, which receives the containers in a single row, distributes them across multiple rows and channels them to the WP 450 case packer by means of the Smiline conveyor belts. A special device was installed at DV500 inlet to rotate the rectangular bottles. The process of handling the bottles from the divider to the case packer takes place in a smooth and steady manner while ensuring maximum operational flexibility.

The Smiline conveyor belts allow optimal management of product flows through a careful study of accumulation, distribution and handling dynamics, and are characterized by modular design, minimized format changeover times and maintenance, high operational reliability and levels of noise and friction among the lowest in this industrial field. Both start-up and management of the Smiflexi packer are simple and user-friendly, thanks to the POSYC operator panel with touch screen and interactive graphics. The wrap-around case packers produced by SMI adopt



newly developed technical solutions that allow you to significantly lower energy consumption and operating costs compared to other cardboard box packaging systems on the market.



## ■ Packaging in wrap-around boxes

To package edible oil in PET bottles, Willowton Oil opted for packaging in completely closed corrugated cardboard boxes; this solution provided the best protection of the product during the distribution process.

Besides, the cardboard boxes are very stable and, therefore, more easily stacked in the warehouse.

The innovative wrap-around packaging system proposed by SMI entails the use of a single machine, called case packer, to form the cardboard box and close the product inside, with the following significant benefits for the user of the plant:

- high versatility of use;
- high production speeds (up to 80 packs/minute in the WP 800 model);
- optimal protection of the packaged containers against impact and damage;
- exceptional stability of the finished package, with clear advantages in logistics;
- maximum impact for marketing the product, thanks to the possibility of printing color graphic motifs on the sides of the box.



A further advantage is the optimization of the space occupied by the packaging material, since the boxes used by SMI's wrap-around machines are supplied in flat dies, which occupy about half the space of the RSC (Regular Slotted Carton) boxes, with positive effects on transport and storage costs.

# Vi-Jon.



CLEANING SECTOR  
**Vi-Jon Inc.**  
Vi-Jon Group  
Smyrna, TN, USA  
» case packer  
SMIFLEXI WP 350  
» belts and divider  
SMILINE DV 500



■ The market for products for personal hygiene and body care is undergoing profound changes. It is no longer enough to have products that make people feel better about themselves. Consumers are increasingly focused on leading a healthy, balanced lifestyle and taking care of their image more and more. Therefore, they require a wide range of high quality products, highly customized and in line with the new demands of authenticity, transparency and eco-compatibility. Healthy lifestyle and physical well-being of individuals are essential

to ensure personal satisfaction. Vi-Jon Inc., one of the most famous private label companies in the United States, specializing in the manufacture of cosmetics and personal care products, has always been committed to helping people feel good, look good and lead a more enjoyable life. This “vitality” requires Vi-Jon to make continuous investments, both financial and in human resources, to innovate the products of its brand and those of several private brands for which the company produces. An example of this dynamism is the recent expansion of the



manufacturing plant in Smyrna, Tennessee, for which SMI has provided Vi-Jon with a series of machines for the Rubbing Alcohol packaging line.

Specifically, the new supply consists of a Smiflexi model WP 350 wraparound case packer for secondary packaging in cardboard boxes, a DV

500 model divider and the conveyor belts for handling bulk bottles within the production line.

## Innovation: the lifeblood of Vi-Jon

■ Innovation is Vi-Jon's engine of growth. The U.S. company based in St. Louis, Missouri, has managed to perfectly combine the experience gained in over 100 years of activity with the innovative momentum of the R&D team, which is distinguished by its ability to formulate new products and propose cutting-edge solutions. The perfect mix of these two business "souls" has allowed Vi-Jon to quickly respond to the expectations of a changing marketplace.

Innovation is also the "lifeblood" of this successful enterprise that, to meet the challenges posed by its customers and by increased competition, launched an impressive array of new products,



improved and customized packaging and gave a more appealing look to its brand. The plan for expansion and modernization of the plant

in Smyrna, Tennessee, aimed at the improvement of the indexes of flexibility, efficiency, safety and productivity of plants.



The excellent quality/price ratio, reduced maintenance and operating costs and the low energy consumption of the new WP350 case packer installed in Smyrna contribute decisively to maintain the competitiveness of the Vi-Jon product on the market. Safeguarding the integrity of the square 0.5 liter PET bottles of the Rubbing Alcohol disinfectant is ensured by the closed cardboard boxes, in the 2x3, 3x4 and 4x6 collations,

■ The Vi-Jon brands

Vi-Jon produces a large number of leading brands in the field of health care and beauty products.

Cited among the major brands are "Germ-X", which includes hand sanitizers, antibacterial wipes, etc. and the line of products branded "Inspector Hector®", which includes cleaning products for hands and oral cleaning products especially suited to children, as a special formula makes it change color during use.

Vi-Jon also produces a wide variety of products for private labels, especially large chains of retail stores and shopping centers in North America.

Therefore, Vi Jon turned to SMI's experience in the secondary packaging field for the installation of high-performance machines after a careful analysis of their production needs. SMI proposed a Smiflexi 35 packs/minute wrap around case packer, model WP 350, that perfectly "matched" the expectations and the modernization plan decided by the U.S. company's top management for the production of the Rubbing Alcohol product, a disinfectant solution.





performed by the SMI machine. A Smiline model DV500 divider/channeler, installed to sort the bottles at the inlet of the packaging machine, receives the containers in a single row, distributes them across multiple rows and channels them to the WP 350 on Smiline conveyor belts.



- Vi-Jon: more than 100 years of success

In 1908 John B. Brunner started the production of peroxide in the city of St. Louis, Missouri.

Thus was born the "Peroxide Specialty Company" that, following the expansion of production, lays the groundwork for the establishment, in 1933, of the current Vi-Jon Laboratories, the name of which derives from the combination of the first name of John B.

Brunner and his wife Viola Brunner (whose closest friends called Vi). Even the violets and daffodils on the labels of the first successful line of cosmetics launched by Vi-Jon inspired the new name of the company. The period between the Thirties and



Forties witnessed the great expansion of the business of the Brunner couple, but the story of this family is also sadly marked in 1946 by the sudden death of John B. Brunner in a tragic accident.

The fate of the company passed into the hands of their twenty-three year old son, John W., who assumed the presidency of Vi-Jon Laboratories and who, animated by strong goals and supported by all the company's staff, succeeded in expanding the family business to reach its current size.

The history of Vi-Jon, through a whole century, was also influenced by other great events: the economic boom, the Great Depression, two world wars, the change in lifestyle and technological progress. This company was able to create over the years a portfolio of high quality products that actually help people live better, improving their image and physical well-being.



# SMI solutions

## for the channeling and handling of shaped containers

■ Smiline's DV dividers/channelers are compact and flexible systems that allow sorting and channeling a wide range of non-cylindrical shaped containers and already packaged packs. The SMI customer can choose between the models of the DV series or the GDV series for the handling of bulk containers in a bottling line. The models of the DV

series receive the bulk product in a single row, distribute them across multiple rows and channel them to the secondary packaging machines. The DV 500 model installed at the Vi-Jon plant in Smyrna is a continuous motion divider that reaches its maximum working speed of 750 containers/minute, depending on the type and size of the handled container.

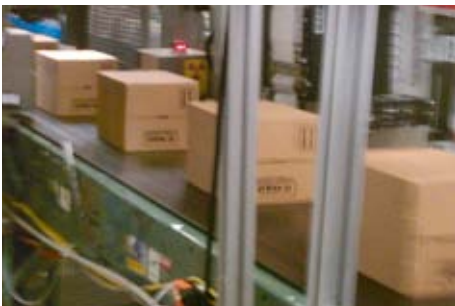


### ■ St. Louis, Missouri

Today Vi-Jon has production and distribution facilities in the states of Missouri and Tennessee. But the true symbol of Vi-Jon is the city of St. Louis: here the company was founded by John B. Brunner in 1908 and here, after more than a century, is still home to headquarters. St. Louis, so named by its founders in honor of King Louis IX of France, is a modern American city the counties of which extend into Missouri and Illinois and whose metropolitan area reaches a population of 2.7 million inhabitants (it is the nineteenth largest city in the United States). From an architectural point of view the skyline of St. Louis is dominated by the Gateway Arch, a gigantic steel and concrete arch inaugurated in 1967, designed by the famous Finnish-American architect Eero Saarinen. Built on the banks of the Mississippi River near the place where the city was founded in 1763, this 192-meter tall monument symbolizes the westward expansion of the United States and ideally represents the big "door" through which the pioneers passed in search of new lands to colonize. The top of the arch has an observation deck where you can enjoy a breathtaking view of the city.



Instead, the models of the GDV series are capable of receiving the product in multiple rows at inlet (up to 4) and distributing them in multiple rows at outlet (up to 6), always with max performance up to 750 containers/minute. Smiline's dividers/channelers are made with quality materials, which ensure operational reliability and durability. The use of wear resistant components also reduces cleaning and maintenance, significantly lowering total cost of production facilities management. The connection between the Smiline DV500 divider and the Smiflexi WP 350 wraparound case packer is ensured by Smiline conveyor belts, characterized by fluid, accurate and constant motion thanks to a last generation automation and control system and the use of sophisticated sensors.



## ■ SMI USA inaugurates the new headquarters in Atlanta

After more than 12 years of direct presence on U.S. territory, Smigroup has decided to transfer the headquarters of its subsidiary SMI USA Inc. from Windsor, CT, to Atlanta in Georgia.

The opening ceremony of the new building was held on June 20, 2011, in the presence of a group of major U.S. and Canadian customers.

The decision to transfer the seat of SMI USA to the new Atlanta complex was born from the need to have a more spacious location to accommodate both the growing technical and sales staff, in addition to a showroom of packaging machines produced by Smipack.

The vast network of motorways and airports in Atlanta is a hub for communications and logistics in North America and enables SMI USA to conduct timely and efficient technical assistance and parts supply.

The professionalism and helpfulness of the staff of the Smigroup's North American subsidiary is definitely one of the key factors for the good sales results achieved in the United States and Canada, where over 170 automatic packaging machines produced by SMI are installed.

The offices in Atlanta have a modern conference room equipped with the latest tele/video conferencing devices, which allow for immediate contact with customers and with the parent SMI in Italy and for the organization of training courses aimed at line operators using SMI and Smipack packaging machines.





# Blue Keld.



WATER & CSD SECTOR  
**Blue Keld Springs Limited**  
 Blue Keld Group  
 Driffield, United Kingdom  
 >> packer  
 SMIPACK βP802AR 280R-S 

## ▪ Quality water from the springs of Yorkshire

Fascinating and quiet landscapes, silent fields and rolling hills with endless green horizons all around: this is the framework in which Blue Keld Springs Ltd operates, a leading British company that bottles natural mineral water from an artesian spring in the county of Yorkshire.

Since its founding in the early '90s, Blue Keld Springs has forged a strong bond with the territory it belongs to, encouraging the development of cultural and economic opportunities that have contributed to the welfare and protection of the environment.

The British company is a highly respected industrial entity, which draws the strength for its sustainable development and future innovation from nature. Recently, Blue Keld Springs chose Smipack technology for the packaging process of mineral water in PET bottles, by purchasing a βP802 series packer.

# The force of nature.

From the “artesian” spring ...

■ “Blue Keld” artesian spring water is a natural product that comes from a pristine and crystal clear aquifer. Water is filtered naturally through a land rich in chalk on the surface, making it particularly rich in calcium and low in sodium. Curious is the origin of the name “Blue Keld”: “Keld” is a word from an ancient Viking language and means, in fact, water.



“Blue Keld” is, therefore, the equivalent of “Blue Spring”, i.e. blue source.

The term “Keld” appears in many ancient books and historical maps; water sources, in fact, have always had the utmost importance to ancient peoples, an invaluable asset to be guarded and passed down to subsequent generations through the centuries.

Blue Keld mineral water occupies a prestigious position in Anglo-Saxon catering; it is available both in plastic bottles and

in glass bottles that, thanks to the elegant and refined line, are able to express the purity and quality of this water present on the most famous tables in Great Britain.



# ...to the PET bottles

packaged in shrink film



■ In order to package its water in PET bottles with shrink film only, British company Blue Keld has chosen a Smipack shrinkwrapper model  $\beta$ P 802 AR 280RS, with inlet at 90°. This is an automatic monobloc machine with a sealing bar, which is characterized by its high versatility of use.

In fact, the numerous models of the  $\beta$ P series are used in various market segments: beverages, food, chemicals, wines, liquors, cosmetics, detergents, textiles, etc. and can package bottles, cans, jars and many other bulk containers in multiple pack collations. The model installed at the Blue Keld factory is used to pack 330-ml bottles in 4x3

and 6x4 collations, 500-ml bottles in 4x3 collation and 1.5- and 2-liter bottles in 2x2 and 3x2 collations.

At the entrance of the Smipack packer the bulk containers can arrive on 1, 2 or 3 rows and are fed at 90° thanks to an automatic belt either on the left or on the right.

The composition of the pack is managed by an automatic grouping system while a motorized pusher, controlled by inverter and encoder, conveys the products into the packaging machine for the subsequent film wrapping and shrinking stages.

The Flextron® control system, fitted with an alphanumeric LCD control panel, allows storing up to 20 work programs and ensures simple and accurate management of all production parameters and stages such as: sealing temperature and time; sealing bar opening; pusher speed and position; oven temperature; oven belt speed.

The belt of the shrink oven moves at variable speed controlled by inverter, is equipped with glass fiber bars and comes with an extra chain for better

sliding of the heavy packs. Smipack's  $\beta$ P series is characterized by a very compact one-piece structure that facilitates the handling of the machine within the production facilities (also thanks to the dual feet/wheel solution).



## ■ J Marr Limited

The J Marr Group, of which Blue Keld is a part, was born in 1870 to carry out fishing activities in depth, but then underwent a gradual decline over the following decades.

To counteract the negative effects, J Marr Group Ltd diversified its business interests and developed a series of activities that allowed the company to continue to grow: the production of ice, which is a key product for the fishing industry, was among the most successful ones.

The need for natural mineral water for the production of ice is the key factor that led to the alliance with Blue Keld Springs, whose division dedicated to the production of ice cubes developed and expanded rapidly after the entry of the spring water into the J Marr Group Ltd, until it gained a leadership position in the market.



# The artesian aquifers and the Blue Keld source



short time to industrially ramp up this business initiative by expanding the areas used for bottling and packaging, up to its current size. Thanks to modern offices, warehouses and production and distribution plants, Blue Keld Springs is able to serve a large number of large- and small-sized customers in the United Kingdom and around the world.

In August of 2003, Blue Keld Springs enters a new "era" as the British company is purchased by J Marr Group Ltd, a leader in the depth fishing industry.

■ The virtues of Blue Keld artesian spring water have ancient origins but its use in the industry is recent history.

Thanks to a modern bottling facility and an efficient distribution network, the mineral water of a British company has gained a reputation and a growing clientele over the years.

The origins of the entrepreneurial success of Blue Keld date back to the early '90s, when the owners of the company bought the land around the spring to start a crop of potatoes.

At that time it was difficult to predict that, in a few years, nature and the fertile land in Yorkshire would both have given them fame and success in the bottled water industry.

The water from the sources in this English region is of excellent quality and, therefore, consumer demand is on the rise.

Attentive to market needs, the founders of Blue Keld Springs decided to bottle and distribute the water that gushed from the ground owned by them and, thanks to their initial hard work, they succeeded in a





Blue Keld Ice Ltd was founded in April of 2005, equipped with advanced technology systems for the production of over 20,000 bags of ice per day; each cube of ice packed inside a Blue Keld Ice bag is produced individually by highly specialized machinery that, in addition to preserving the purity of the natural water used, produces regular-sized cubes of superior quality. An "artesian aquifer" is understood to be a body of water formed by the water that a certain amount of rocks e/o sediments occupies, surrounded (even at the top) by waterproof

## ■ Quality bottled in a "tear-drop"

The beautiful cobalt blue teardrop-shaped bottle, made of Venetian glass, perfectly expresses the quality of Blue Keld mineral water.

The prestigious still and sparkling mineral water bottle is available in the 330-ml and 750-ml size and is present in all the best hotels and restaurants worldwide.



materials like clay.

As such, this type of aquifer is characterized by the fact that it is confined on all sides by materials that do not allow water to seep through.

This situation, from a hydraulic point of view, is comparable to a pressurized pipe, since the water pressure inside the aquifer is greater than the atmospheric pressure.

For this reason, when a well is created that pierces the top waterproof layer of the aquifer, the water tends to flow upwards thus reaching a level directly proportional to the pressure inside the aquifer.

Blue Keld is artesian water because it comes from a spring in the depths of the earth, protected by layers

of clay and rock. Since the source has no openings to the earth's surface, the water never comes in contact with air and therefore is protected from air pollution and any other type of contamination.



# BLUE KELD

Blue Keld water contains bicarbonate, calcium and magnesium: all minerals necessary to the human body; it is low in sodium and therefore can be drunk by everyone, including the hypertensive, those who suffer from water retention or who are on a diet.

Blue Keld water is marketed both in PET bottles and in glass bottles. PET bottles are available in 0.33 - 0.5 - 1 and 2 liter sizes and are designed to bottle still and sparkling mineral water, flavored in 10 different



## ■ East Yorkshire: nature to discover

Exploring England along its long paths and pedestrian routes is certainly the best way to make the most of its beauty.



Eastern Yorkshire is mostly flat. To the north it reaches its maximum altitude of 246 meters with the Yorkshire Wolds, situated on the border with North Yorkshire.



A strip of undulated land characterizes the central part of the county, while the southern boundary is mostly marked by the large estuary of the Humber River.

From the award-winning hiking trails in the countryside to the coast and towns of breathtaking beauty, East Yorkshire is the ideal destination for relaxing holidays during which to enjoy both the scenic beauty - the sea cliffs, the spectacular headlands and rolling hills - and a historical-cultural heritage of great value.

flavors (including traditional and exotic fruits).

Since the added flavors are exclusively natural and sugar-free, Blue Keld flavored waters are ideal for a balanced diet rich in minerals.



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DISTRIBUTORI AUTOMATICI  
[www.serim.it](http://www.serim.it) *Comfort break*





# Smitec.

■ Smitec is the SMI division specialized in offering 360 degree solutions for industrial automation, both custom and standard. Smitec's activities range from designing vertical and custom-made solutions (hw/fw/sw) to the design and construction of industrial automation solutions with PLCs, PC controllers, with or without motor control (direct or via fieldbus), using commercial components (SIEMENS, AB), components supplied by the customer or Smitec-produced components. Smitec's hardware and software systems are used as the control system for Smiflexi automatic

packaging machines, Smiform stretch-blow moulding machines, Smipal palletisers, Smiline conveyor belts and Smipack "prosumer" packaging machines. Outside the "packaging" industry, Smitec manufactures advanced home automation solutions, control systems for industrial heating systems, automation devices for solar parks, LED-based public lighting, etc. During the last edition of Interpack 2011, held in Dusseldorf from May 12 to 18, Smitec's latest innovations in industrial automation were presented at the Smigroup stand, which we will deal with in the following paragraphs.

# New design

## for the POSYC 4100 operator panel

■ The last edition of Interpack 2011, held in Dusseldorf from May 12 to 18, was the opportunity to present the world première of the new design of Smitec's POSYC 4100, an industrial Panel PC for SCADA applications that can be installed both on vertical panels and on mobile platforms as an operator station or a machine control unit.

Smitec designers performed a complete "makeover" of the POSYC housing, improving ergonomics, robustness and "usability".

As regards the machine's management software, the graphical interface and the icon-fitted interactive menu, they have been made even easier and more user-friendly to the full benefit of



the line operator.

After reaching high quality technical performance, as a result of this new project Smitec's designers wanted to create a Panel PC with an innovative design, able to express at best the care and attention that SMI dedicates to designing its facilities and systems.

### The new POSYC 4100 features:

- reduced depth;
- addition of a USB port;
- front panel and electronic equipment removed in a single block;

- possibility of using it as a simple terminal, robust and reliable, leaving the delicate part, i.e. the PC itself, within the machine panel;
- ability to host Windows XP, Windows XP embedded, WinCE, Linux and possibly Android;
- prearrangement for external Wi-Fi antenna for wireless connections;
- webcam prearrangement and audio system for remote support;
- operator recognition software via webcam.



# Smipass FingerPrint USB:

## the ideal solution for total security

■ Almost all of us know the meaning of the word "password" but often underestimate the real importance and risks that may result from its superficial and poor management.

Today more than ever, in the era of globalization and digital communications, the use of a password or a PIN (Personal Identification Number) is a very normal action to read emails, withdraw money, make payments online and, in the industrial sector, manage and change the parameters and functions of machines and plants present in bottling and packaging lines. We often forget that if we are asked to enter a "password" it's because it is required to protect data,



files, parameters, etc. Sometimes the "secret word" is taken from us illegally and then misused by third parties. Therefore, even when using high-tech industrial machinery it is increasingly important to limit its access to a small number of users through an individual identification system. Smittec has recently developed a new product that meets these requirements, called "USB Smipass FP (FingerPrint)". The system is based on using a USB key with built-in digital fingerprint reader, which allows access to

machine confidential data using the operator's digital fingerprint instead of entering numerous passwords to access various applications. Thanks to this biometric device, it is now possible to authenticate authorized users through their digital fingerprint; to further increase security, the digital fingerprint recognition can be combined with a personal password chosen by the user. The new Smipass FP USB memory sticks have a digital fingerprint reader and 8 GB storage (or larger, depending on the



model you have chosen), the content of which is accessible only to the recognized user.

Besides the access to the area reserved for storage, the recognition function offered by this device is also used to login into PCs fitted with MSWindows and to access internet sites and encrypted files or discs; therefore, it can also be used for other IT applications.

Smipass FP USB is the evolution of an established technology used in the pre-existing Smipass keys - now used successfully by a growing number of SMI customers - which, besides allowing access only to authorized persons, allows users to store parameters, machine updates and documents, and ensure electronic access.

With the Smipass FP USB, SMI wanted to offer its customers an innovative and easy-to-use tool to ensure better protection of sensitive data in production facilities, avoiding damage due to error or incompetence and the illegal use by unauthorized persons in case of theft or loss of the electronic key.

## ■ How Smipass' FingerPrint USB stick works

The Smipass FP stick is used in POSYC-PC operator panels equipped with SMISHELL software, version 2.0.2 or higher, after appropriate programming and customization.

After activating the device according to the procedure provided in the earlier versions of the Smipass key, the customization must be performed solely by the user to whom it is intended.

When plugged in the first time into the POSYC-PC USB port, the device automatically triggers the request for entry of controller user data, i.e. his/her password and digital fingerprints.

The next step is to activate the reserved storage area through the special Transcend software and the Smipass function.

Once the customization process is finished, each time the authorized operator inserts the key into the POSYC-PC USB port, a dialog box will appear on the touch-screen display for digital fingerprint recognition.

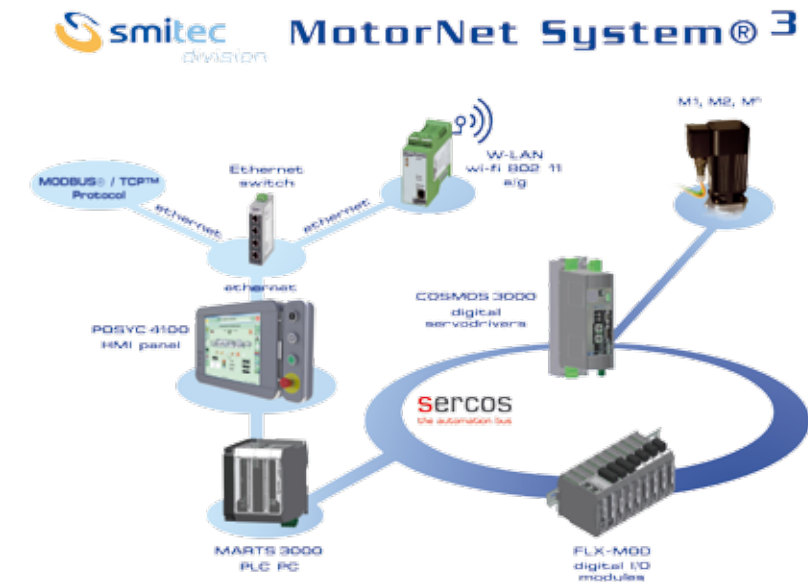
The operator passes his/her finger over the key's sensor, designed to recognize fingerprints and then, if approved, POSYC-PC will automatically verify the user's Smipass credentials through SMISHELL software and authorize him/her to the machine functions he/she is allowed to manage.



# Smitec & Linux:

## The configuration of new formats automates

■ The continuing development of industrial automation within “open” systems has led Smitec to create software solutions based on Linux operating system with “realtime” extension. This is an important step forward in the direction of the “open source” world, which allows Smitec to propose a constantly changing system, appreciated by the market, which can be implemented, with greater flexibility than now, with all the functionalities required by customers-users. Smitec now has the possibility to reuse its consolidated “Motion Control” library or to propose a “PLC Open” solution. On the Linux platform, you can also either use “SoftPLC opensource” or any commercially available one, depending on the performance required, allowing SMI’s different divisions to write the logic of the machine, produced by each division, into one of the languages laid down by IEC 61131. The machine’s logic can then be written as if the control system were a classic, commercially sold PLC, which gives the customer-user the ability

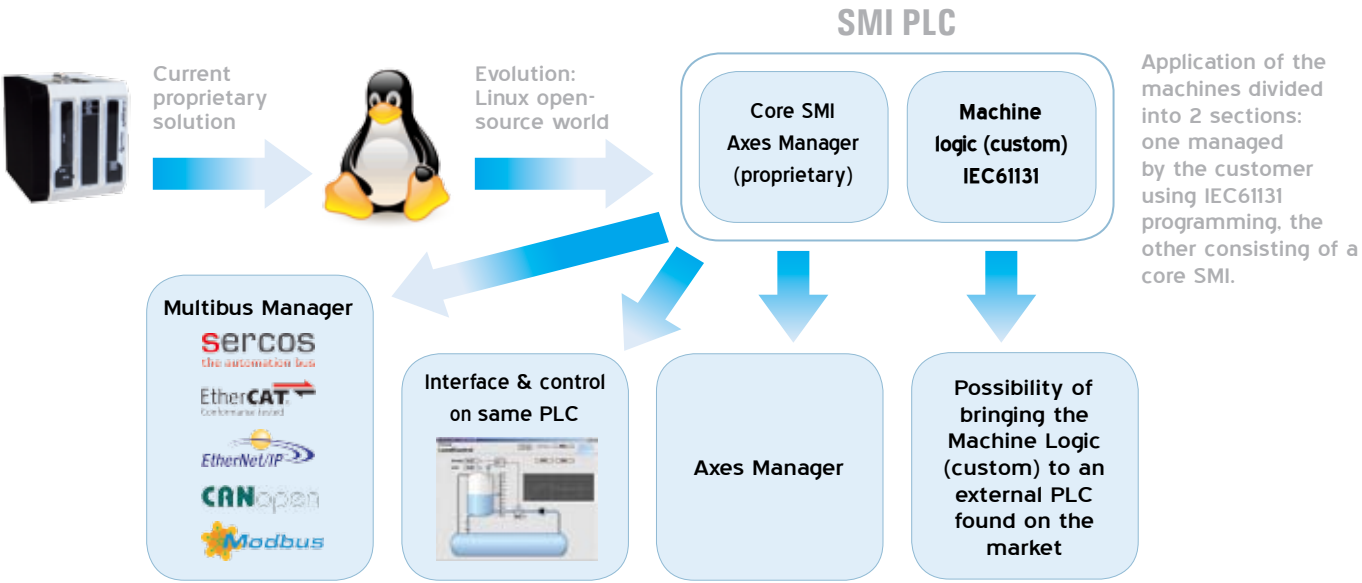


to “program” machine operations in a totally customized way with considerable advantages in terms of system configuration versatility and flexibility. As such, all customers who require a control system based on a specific PLC will be able to buy a machine that meets their desires, without forsaking all the advantages offered by SMI in terms of price/performance ratio. The configuration of the machines will be particularly simple and flexible because “runtime” functional

modules can be loaded and unloaded to/from Linux for managing fieldbuses such as SIII, Profinet and Ethernet/IP and other modules for managing the belts or the shrink oven. The use of Linux offers SMI customers the opportunity to take advantage of a complete and free operating system as well as a huge library of easily updated programs, in addition to ease of installation and the availability of several graphical user interfaces. Last but not least is to mention the opportunity

that, for not particularly "heavy" applications, you may also merge the control part and the HMI part into a single controller, with obvious cost reduction. In this specific case, the integration with the POSYC 4100 - in the "terminal" version - will be crucial. In the era of digital globalization and internationalization of markets, we see increasingly frequent changes in the habits and buying preferences of consumers. In the "food & beverage" sector, for example, these new trends require production companies to make rapid "reconversions" of their packaging systems in order to intercept new business opportunities offered by the market and to effectively promote, through custom packaging solutions and an attractive look, a product

mix that meets every minimum requirement of each customer. Hence the need to be equipped with very flexible, efficient and economical manufacturing systems and processes. The software solutions developed by Smitec aim to provide the user, who already owns automatic packaging machines, the ability to automatically configure his/her systems according to format changeover requirements and current type of package. The machine's management program is also able to offer automatically a wide range of possible pack configurations, generating alternative formats based on the characteristics of the container to be packaged. Users of SMI machines equipped with the foregoing system will be able to add a new format



to be processed in "zero time", simply by carrying out the following four steps identified by icons on the screen:

- selection of the basic format;
- modification of the format;
- choice of the optimal solution among the alternatives proposed in automatic;
- choice confirmation.

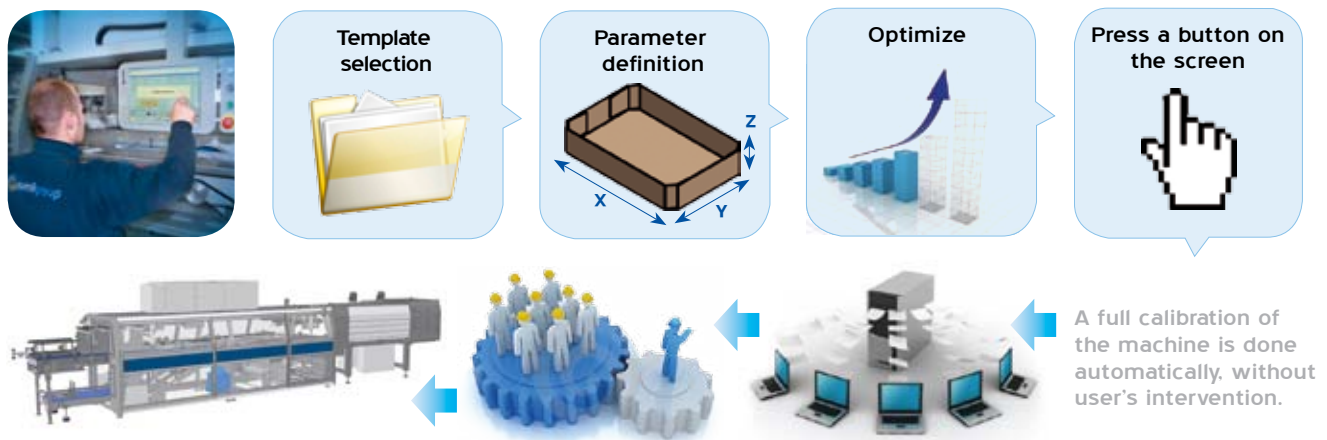
The customer-user also has the possibility to buy

additional "empty" formats, i.e. without pre-set processing parameters. With this new feature, the customer can then activate new formats in his/her own machine according to current production requirements, without the intervention of a SMI technician. This new application can be installed, even as an "upgrading" of existing systems, on all Smiflexi packers, stretch-blow moulding machines, Smiform integrated systems and

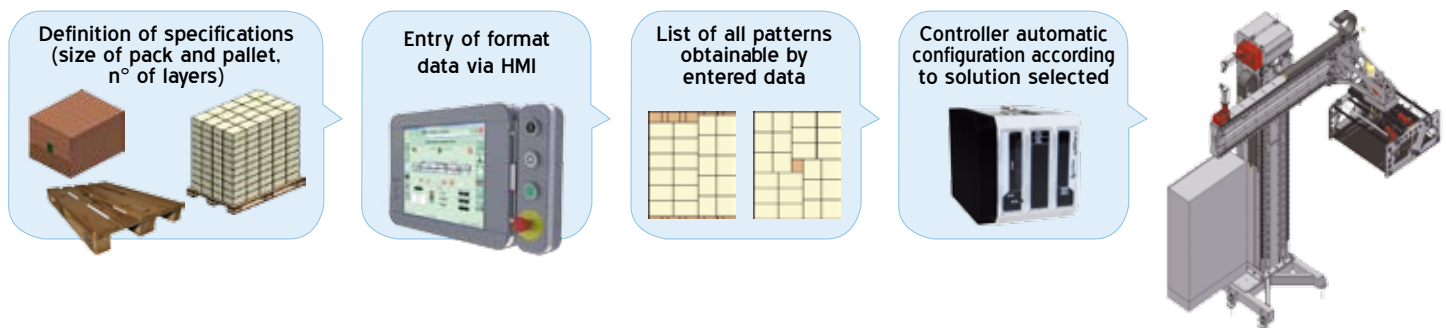
Smipal automatic palletisers, allowing the creation of a new format in a simple, user-friendly manner. Assuming, for example, the user wishes to add a new format on an APS 3000 palletiser, he/she just has to provide the following data to the control system: type of pack to be palletized, size, pallet format and number of layers. At this point the software will display on the POSYC-PC screen all the possible palletizing patterns generated from the entered data, among which the user need only select what he/she wants to enable automatic configuration of machine parameters.

## Computer-generated patterns

The user can work with a new format through the operator panel by selecting the required pack configuration from a rich library.



If the user enter the pack collation specifications, the Posyc will suggest all possible palletisation patterns.



# Spare parts:

Immediate identification thanks to the "QR code"

■ SMI has always been a company oriented to innovation and technical progress; among the numerous innovations introduced recently in its own productive organization there is also the use of the "QR code" for the marking of spare parts. QR (acronym for Quick

Response) is an innovative technology that in recent years has revolutionized the communication system, making the square of black dots, which is its symbol, an ideal "trait d'union" between the paper world and the multimedia world of internet. A gateway to additional contents that, due to their digital nature, would not find space on paper and that instead arrive, via the web, directly on the screen of your mobile phone. SMI has decided to apply this technology to the management of the spare parts process for easy parts identification and customer orders. This new service, which had its world première at the Smigroup stand of Interpack 2011 in Dusseldorf, provides for the application of the "QR code" on all components of machines manufactured by SMI. Then, using a



compatible mobile phone, it will suffice to photograph the part's code to immediately receive the card with photos, specifications and description of applications. If interested in purchasing the highlighted component, the user can take advantage of a system of automatic order compilation that will then be sent to SMI's spare parts office via e-mail.





# Smipal

■ The intense business of research and innovation of SMI's labs has allowed the development of solutions increasingly oriented to versatility of use and energy saving. Among the latest innovations introduced to the market, SMI has developed a new system for composing the layer in continuous for its own line of Smipal APS series automatic palletisers, which meets the needs of compactness, operating flexibility and high efficiency of the end-line system. The concept of "compact

line" is not new to SMI, which has always been characterized by considerable investments in research and development of integrated solutions that have led, among other things, to the launching of the ECOBLOC® and ECOBLOC® PLUS integrated systems of Smiform division. We are dealing with high-tech machines that group the following functions in a single facility: stretch-blow moulding, filling, capping and labeling for a 36,000 bottles/hour PET line.

# Compact solutions

for line-end packaging with continuous pre-composition.

■ The need to offer customers versatile and efficient end-line solutions, which at the same time maximize both space and production costs, was the determining factor which led to the development of the new continuous layer composition system.



It is an optional application to be installed between an automatic Smiflexi packer and an automatic Smipal APS series palletiser.

The basic idea behind the new "module" is to create a single machine capable of integrating the functions of a secondary packaging packer and an automatic palletiser with man-like movements.

Technically speaking, the continuous layer composition system is based on an innovative



"multi-row diverter" that, through rotation or translation, arranges the loose packets - arriving on the belt in a single row from the Smiflexi packer - into multiple rows to position them correctly according

to the selected palletizing pattern. In this way, the “pre-composition” of the layer is obtained that is separated by a mechanical actuator from the loose packets building up.

The “pre-composed” layer is driven into the roller palletizing head through a bar system while the “multi-row diverter” prepares the next layer.

This new device proposed by Smipal eliminates the traditional storage pallets at palletiser inlet, offering the end user significant advantages from a logistics and economical standpoint:

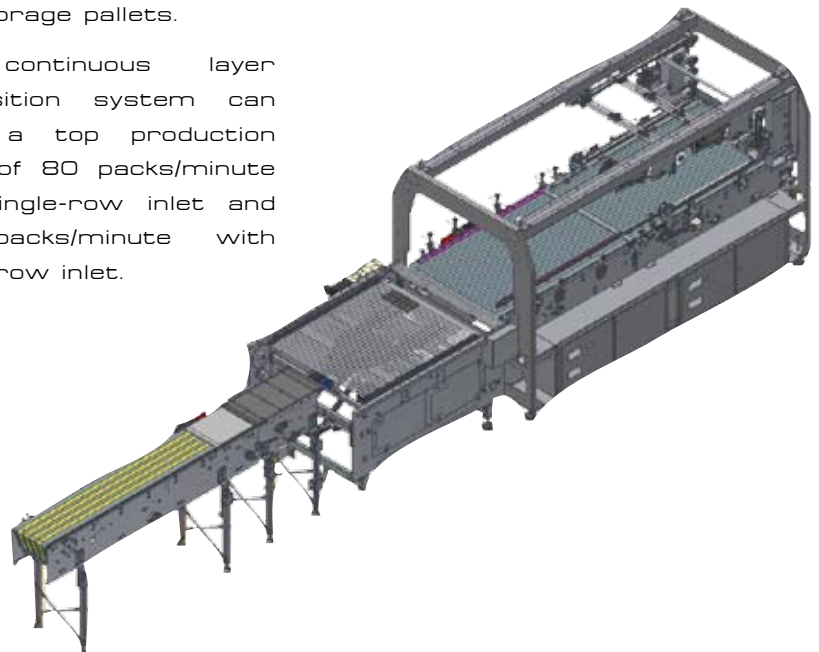
- reduction of the size of line end systems, thanks to the pushed integration of the packer and the palletiser;



- lower initial investment and lower operating and maintenance costs as belts, rollers and pallets are no longer needed;
- better packaging quality because the bottles are not subjected to crushing pressure typically present on storage pallets.

Compared to the traditional systems on the market, the continuous composition proposed by Smipal ensures unidirectional motion and can orient the packets in any position.

The continuous layer composition system can reach a top production speed of 80 packs/minute with single-row inlet and 160 packs/minute with double-row inlet.





# Smipack.

■ Since the presentation at Interpack 2011 the new Smipack packers, models FP500HSE and FP500HS, were welcomed by the market with great interest. Characterized by solutions that favor the reduction of energy consumption and increasing production capacity, the new packaging machines attracted many visitors to the Smipack stand at their official launch. In addition to the FP500HS model exhibited at the show - suitable

for production up to 6000 packs/hour - the FP 500 series of automatic packers includes the FP500HSE model capable of reaching the production speed of 4200 packs/hour.

These two models are distinguished by the newly designed operator interface that in the FP500HSE model consists of an alphanumeric control panel while in the FP500HS model has a "Panel PC" with 7" wide touch screen.

# Smipack FP500HS:

the new frontier in automatic packaging

■ Smipack FP500 series packers employ cutting-edge technology and are designed to achieve high productivity, greater environmental compatibility and reduced overall costs of operation (TCO - Total Cost of Ownership). Suitable for packaging a wide range of products with "center folded" film at the maximum speed of 6000 packs/hour (FP500HS), these machines are equipped with a longitudinal continuous sealer that, compared to the "L" shaped sealer system, allows expanding system usability:

- packs of unlimited length;
- passage of products up to 400 mm wide and 200 mm high, thanks to the motorized cross sealing bar controlled by inverter and encoder;
- significant increase in production performance also thanks to faster belt speeds;
- less film off-cuts, allowing for a reduction in the costs of packaging material.

- > FP500HS model: up to 100 ppm
- > FP500HSE model: up to 70 ppm
- > Longitudinal continuous sealer
- > 500mm sealing bar
- > Maximum pack height: 200 mm
- > Unlimited pack length

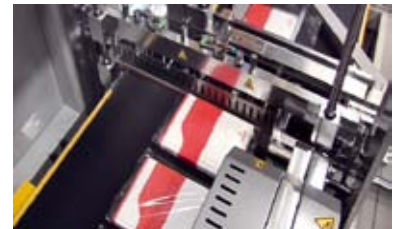


# Advanced electronics

to ensure operational flexibility and ease of use

■ As standard, the two new models include a motorized system for centering the seal and the innovative automatic film tightening system. The new range reflects the peculiarities of all the packaging machines manufactured by Smipack, known on the market

for their modular design, operational flexibility, high operating efficiency and their ease of use by the operator. The FP500HS model is equipped with a x86 computer based on Intel Atom™ architecture, with 7" touch screen color display, which allows the user to remotely control the machine via Ethernet (optional), update/change any machine operating parameters and monitor the packaging process while the other model, the FP500HSE, mounts a control panel with a 4 lines x 20 characters display. Smipack's FP 500HS and FP500HSE packers are last-generation systems whose operation is entrusted to "FlxMod" technology developed by Smitec. "Flx Mod" is a compact electronic system dedicated to process control, which offers the advantage of being highly customizable and configurable also thanks to a single CPU that can handle up to 45 functional



modules and even very complex control systems through a fieldbus. The control hardware of the FP500HS and FP500HSE packers consists of the new COSMOS 3000 servo drivers in "inverter" configuration for asynchronous motors.



# Smi wins the award

“The Tigers of 2010”



**Above:** Manuel Bonanomi (to the left), SMI CEO, receives the “Le Tigri del 2010”.

■ SMI was awarded the “Le Tigri del 2010” prize for its internationalization abilities and for its heavy investment in research and development for new products and industrial processes. The prize was awarded last July 1, 2011 at Villa Castelbarco (Milan) at the ceremony that was attended by over 130 representatives of the business and professional world. The “Le Tigri del 2010” award is dedicated to Small and Medium-Sized Enterprises that, animated by strong dynamism and remarkable focus on innovation, have successfully

passed the crisis of recent years. The award was sponsored by TickMark, independent auditors, with the contribution of Banco Popolare, Segro and the scientific support of the Legislation & Markets Observatory of Cuoia Finance, the Kilometro Rosso Scientific Park,





Cerif Research Centre on Family Companies and Foundation Green and High Tech District Monza Brianza, under the patronage of the Province of Bergamo.

The jury, chaired by Andrea Amaduzzi, Professor of Accounting, Budget and Control at the Bicocca University in Milan, evaluated the applications received and nominated 5 finalists, including SMI.

The comparative assessment was made on the basis of some quantitative and qualitative parameters, such as economic and asset indicators as well as financial results of 2009 and 2010 (observation period), the trend of relevant companies specializing in this market sector in times of crisis, propensity to invest, product and process innovation, trade and marketing policies, ethical values and financial transparency.

# smi now Magazine



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# Spare parts

just a “click” away

■ SMI customers who bought a Smiflexi packer after March 2009 can implement a new service on their own PC for the interactive viewing of machine spare parts lists and manuals.

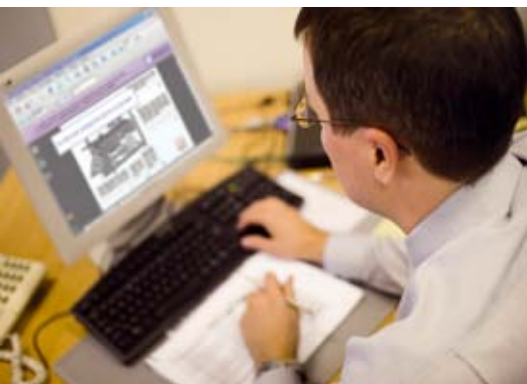
This service is available immediately: simply install the software from the CD-ROM supplied along with the machine manuals to activate “Net Spares”, plug-ins AdobeAcrobat® and



AcrobatReader® used to create and publish spare parts catalogues and manuals on CD.

SMI customers can then benefit at once from all the advantages offered by information technology both for immediate consultation of manuals and for ordering spare parts, thanks to an automatic link between



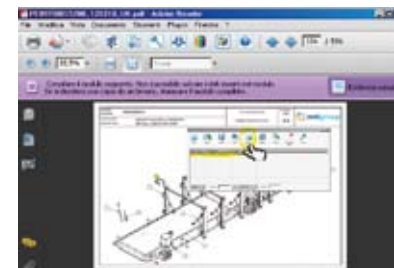
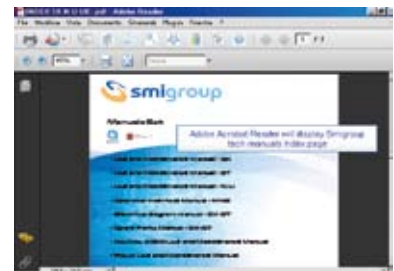


the pdf documents and the company database. The manuals on CD contain interactive synoptic tables

of the machine, thanks to which SMI customers can view different sections of their system in 3D on their PC screen.

By positioning the mouse on any area of the machine, the customer can view the spare parts connected to it and bearing the relevant identification code.

Clicking on this code, the selected spare part is added to a "shopping list" and at the end of the session the customer can turn this list into a spare parts order with a simple click, which the installed software automatically sends to SMI's spare parts office via e-mail.



# Training:

## the Ting Hsin and YST case



*Above: participants in the training with Danilo Dogadi, center, SMI Service Area Manager for China.*

■ The centrality of training is an inalienable principle of Smigroup's mission. It is what ensures future development and the "progress of knowledge". Training is also the road that helps develop and enhance the level of operating efficiency of the machines and systems of the production line. SMI is a center of "incubation" of ideas, projects, knowledge and intelligence. The sharing of experiences and working methods results in a continuously evolving scientific, technical and

cultural background, available to the community through a wide range of training and "knowledge transfer" programs. The machine's quality is even greater if the operator has an excellent background of information and knows the machine's features and functionality perfectly. Starting from these considerations, SMI organizes training and refresher courses, aimed at both the staff of the Smigroup companies and all external operators interested in the growth

and the sharing of knowledge and learning experiences. These are the goals that, in December 2010, led a group of technicians and operators of Ting Hsin and YST companies to participate in several training sessions held by SMI directly in China. In fact, a total of more than 130 Smiflexi automatic packers of various types are installed in the bottling plants of these two major producers in the "food & beverage" sector. Courses were



held both in a classroom, for the theoretical part, and in the departments, for the practical part, working directly on the machines during production. The training sessions were a great success among the participants, who also had the opportunity to learn the latest technological innovations introduced by SMI on their machines, including the new film-cutting system powered by brushless motors. This device is standard on all new generation Smiflexi shrinkwrappers and can also be installed on machines already in operation, providing the user with a greater productive efficiency for any type of application. Thanks to the numerous research and development projects of new technically innovative, environmentally friendly and economical products, SMI is now able to offer its customers a broad portfolio of interventions to upgrade existing machines so that they may be able to provide optimal performance to the end of their lifecycle.



## ■ SMI Training Center

The SMI Training Center organizes technical training courses for the optimal use of SMI machines. The courses are taught by senior technicians in the main foreign languages in rooms fitted with the most modern technologies. The strong points of SMI's training proposal are:

- tested theoretical-practical mix, which allows you to check what you learned in the classroom directly on the machine;
- diversified teaching programs according to machine model, number of participants, level of detail and days available;
- courses for various professionals: line operators, maintenance technicians, mechanical technicians, electric and electronic managers, production managers;

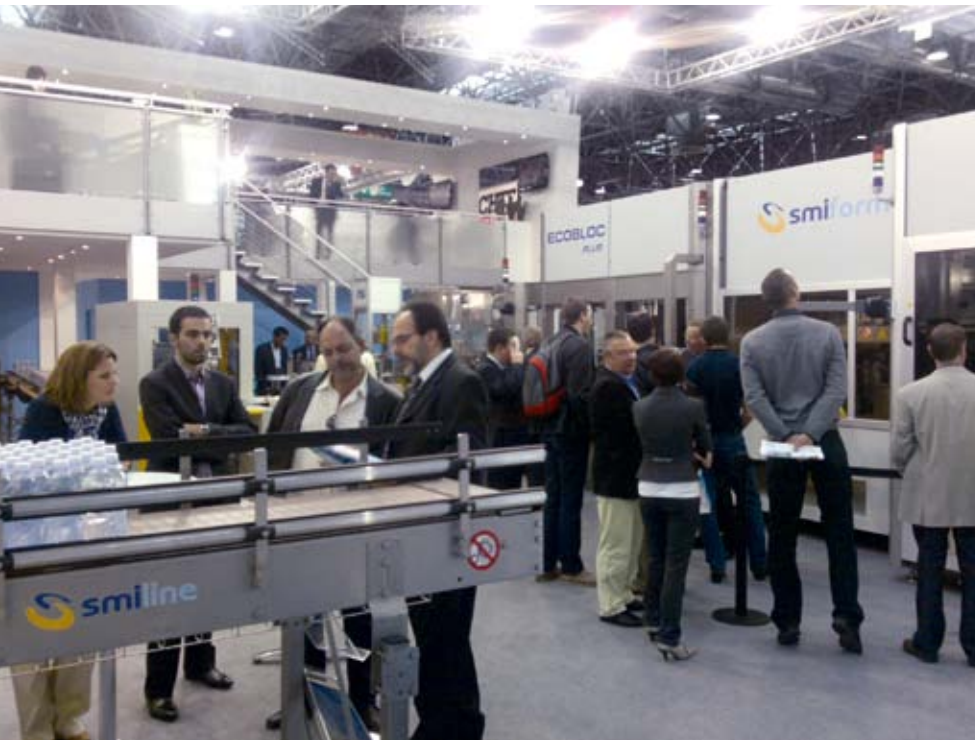


- issuance of certificate of participation at the end of the course;
- possibility of organizing training programs at the customer's facility.



# Trade Fair Events:

a 2011 full of success



EXPO LAS VEGAS 2011 at the end of September, an event that is the meeting point of America's leading packaging machines manufacturers. At the SMI USA stand in Las Vegas, many visitors were able to "get acquainted" with Smipack's wide range of machines, including the FP560A semiautomatic L-sealer with the T450 shrink tunnel and the FP6000CS automatic model, the SL44 and SL56 L-sealing hood packers and the ßP800AR 230R automatic shrinkwrapper with the sealing bar. This year, Smigroup will participate for the first time at CBST (China International Beverage

■ After the huge success of INTERPACK 2011, which proved the most successful edition in its 53-year history, even the last months of 2011 will be full of trade fair events of international importance. Sustainability, safety and convenience were the key themes of Interpack 2011, the international appeal of which once again confirmed the global importance of the fair in the field of packaging and related industrial processes. 166,000

visitors from around the world, 2,700 exhibitors, 60 countries represented: these are numbers that summarize the success of this year's edition. During the Dusseldorf "kermis", Smigroup had its world première for the new line of ECOBLOC® PLUS integrated systems for stretch-blow moulding, filling, capping and labeling of PET containers for outputs up to 36,000 bottles/hour. Smigroup, through its subsidiary SMI USA, also attended PACK



Industry Exhibition on Science & Technology), held in Shanghai from 6 to 8 November 2011, which, two years after the previous edition, is aimed at a growing number of professionals in this sector. Suffice it to say that the beverage industry in China is growing annually by more than 15%. At the Smigroup stand, visitors can see the Smipack HA 50 handle applicator within a circuit of conveyor belts that simulate their operation during production. In conjunction

with the exhibition in China, Smigroup is present, as usual, at the PETNOLOGY and THE PACKAGING WALL OF EXCELLENCE events (Nuremberg, 7 and 8 November 2011), where specialists from all over the world take stock of the situation on new technological and eco-friendly developments in the packaging sector. As an ideal continuation of the two foregoing events, the BRAU BEVIALE trade fair (Nuremberg, 9 to 11 November 2011) is a privileged "showcase" at European level for the presentation of the latest technological innovations for the brewing and beverage industry; on the occasion of this event, Smigroup displays a rotary stretch-blow moulding machine of the latest generation of the Smiform SR series. Participation in ANDINAPACK, in Bogota, Colombia from 8 to 11 November 2011 is the gateway, for leading packaging machine manufacturers, to the markets of the Andean, Caribbean and Central American countries. After the busy trade fairs scheduled in 2011, the world of "packaging" is already



looking to 2012 for the next edition of IPACKIMA, which will take place in Milan from February 28th to March 3rd. Even the coming year promises to be full of new and important opportunities for interaction and business for all stakeholders.



Nürnberg, Germany  
09.-11.11.2011

## Brau Beviale 2011

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