

- Coca-Cola Bottling Co. of Egypt
- YUBCO ■ DICO ■ Al-Ahlia ■ FA. Neptun

smi now

Magazine 2015/14

WATER

MAIN SOURCE OF

life



PACKBLOC NEO

MORE COMPACT
END-OF-LINE SYSTEMS

Smilab

TOUCHPLANT
PROJECT



“ SMI's compact solutions for sustainable development ”

When speaking of complete and efficient bottling and packaging lines, sustainable both from an economic and an environmental standpoint, we must necessarily start from our customers' needs when it comes to reducing energy consumption and the running and maintenance costs of production facilities.

A good road to take to optimize systems and processes is that of integrating machines and systems within the bottling and packaging lines.

Investments made by the SMI Group in recent years have privileged this design strategy, allowing us to implement a series of highly innovative solutions in terms of compactness, efficiency and energy saving.

One of the most recent examples of the foregoing is represented by PACKBLOC NEO, the new line-end packaging system presented at the last edition of Brau Beviiale, which features the integration of a packer, a palletizer and a turnplate-based pallet wrapper all in a single compact unit.

I invite you to discover the many advantages of this new solution as well as other interesting news in the “innovation” section of this Sminow issue, and also to take a look at the “installation” section where you will find a broad overview of high-tech systems installed by SMI in various parts of the world.

Paolo Nava,
President & CEO
SMI S.p.A.



sminow | magazine

Created by:

SMI S.p.A. - Marketing Dept.
Via Carlo Ceresa, 10
IT-24015 San Giovanni Bianco (BG)
Tel.: +39 0345 40111
Fax: +39 0345 40209
www.smigroup.it



Printed in 12,200 paper copies with 100% recycled paper Cyclus Print (pages inside)

Paper:
Polyedra S.p.A.

Print Agency:
Goisis Services



Available in:
Italian, English, French,
Spanish and Chinese.

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Contributors to this issue:
Coca-Cola Bottling Co. of Egypt - YUBCO - DICO - Al-Ahlia - F.A. Neptun

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NOW

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Water is the main source of life, the most precious natural resource. When it comes to mineral water bottling plants, you inevitably think of a natural, lush environment that transmits sensations of freshness and purity, far away from any pollutant. When one thinks of the water sources in Yemen, the image cannot change since the desert landscapes give way to those of the beautiful enchanted region of Alsyani.

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TCCBCE

THE COCA-COLA
BOTTLING COMPANY
OF EGYPT

SOFT DRINKS SECTOR

The Coca-Cola Bottling Company of Egypt
Nasr City, Cairo, Egypt
Group: The Coca-Cola Company

 Shrinkwrapper
Smiflexi SK 500T



GEO LOCATION

INSTALLATION / TCCBCE



History and modernity follow one another and mingle in Cairo, a city where the symbols of Egypt's ancient history can be seen at every street corner and where the reality of the pyramids, the ancient pharaohs, the sphinx or Cleopatra coexists with that of a metropolis of more than 10 million inhabitants (the largest in the Arab world and the second-largest in Africa). The historic centre of Egypt's capital has spread in all directions and has now incorporated many other neighborhoods and cities, including Giza and Heliopolis. Cairo today is a very important industrial center and is home to multinational companies such as The Coca-Cola Bottling Company of Egypt (TCCBCE), located in the district of Nasr City. This company is continually investing



in new technologies to meet the growing demand from an increasingly broad range of consumers. For these reasons, TCCBCE recently turned to SMI for the installation of a new shrinkwrapper, model Smiflexi SK 500T, designed to package 0.33 L and 0.355 L Coca-Cola cans in film only and tray+film configurations.



EGYPT: THE CRADLE OF ONE OF THE GREATEST CIVILIZATIONS OF THE WORLD

Egypt is one of the most populous states in Africa and the Near East and the 15th most populous in the world. The vast majority of its 84 million inhabitants lives near the banks of the Nile River,

in an area of about 40,000 square kilometers which has the only arable land in the country. The large regions of the Sahara Desert, which make up most of the Egyptian territory, are sparsely populated.

This large North African state is one of the leading lights of Universal History, having been continuously inhabited since the 10th millennium BC. The history of Egypt officially begins with the union of the Upper



and Lower Egypt by Narmer, first ruler of the 1st dynasty, around 3100 BC, although these events were preceded by a preparatory urban phase that lasted several centuries. In fact, thanks to recent archaeological discoveries, we now know that Egyptian civilization had existed for at least one millennium before. "Mişr", modern Egypt's Arabic and official name, is a word of Semitic origin; in Akkadian the noun "mişru" means "border, territory"; "maşartu" means "guard, sentinel, border" and the verb "muşuru" means "to establish a border". Egypt is a country of many contrasts: if on the one hand Western influence is getting stronger,

on the other you can breathe an air of authenticity. This is a country where the silence of the monuments of an ancient past merge with the noise of the big modern cities where tradition coexists with the scenarios of the new millennium. It's all a blend of different worlds: high powered sports cars driven by yuppies, "fellahs" immersed in the chaotic traffic with their donkeys, businessmen chauffeurs aboard luxurious sedans who seem to slip quietly in the indomitable Cairo traffic, fruit and vegetable carts, makeshift stalls on the sidewalks with the most varied goods; all this, and much more, is the city of Cairo.

All these realities, seemingly contradictory, are in truth the diverse, unique and fascinating Egyptian universe, one that captivates, unites and is loved. The nearby countryside is the reference to the origins that modernity has not affected, because the real Egypt is that of the fertile banks of the Nile and the desert with its oases. Egypt is a many-sided country, a world that should be lived day and night, because it enhances, enriches, unites and lets you perceive the beauty that enters your heart and is never forgotten.



THE PYRAMIDS OF GIZA: ONE OF THE SEVEN WONDERS OF THE ANCIENT WORLD

The Giza necropolis is a cluster of ancient monuments about 8 km away from the city of Giza, on the Nile, and about 25 km away from the center of Cairo. The majestic and world-renowned pyramids at Giza soar in the middle of this archeological location. Their perfect shape was adopted by Egyptian builders not only because they worshipped the pharaohs but also for their cult of the Sun. The edges of the pyramid are said to represent the sun's rays falling on earth while the entire building would symbolize the ladder for climbing to the sky.

The three pyramids in Cairo are funerary temples dedicated to pharaohs Cheops, Chephren and Mycerinus and all date back to the fourth dynasty, i.e. the Old Kingdom of Egypt. The pyramid of Cheops (2500 BC) is the largest and the oldest of the three pyramids. Originally 146 meters tall (today "only" 137 due to weather and erosion), the one called the Great Pyramid was the tallest man-made structure in the world for over 3,800 years and is the only one of the seven wonders of the ancient world which is still substantially intact today.

The fascinating statue of the Great Sphinx faces the sunrise and guards the pyramids of Giza. It is the largest stone statue in the world, about 70 meters long and 20 meters tall, with the body of a lion and the head of a person, which Egyptologists currently believe was meant to be the likeness of Khafre. The necropolis was built around the 28th century BC. Destined to be one of the royal necropolises of Memphis, it became popular in the days of Hellenism when the Cheops Pyramid was added to the list of the seven wonders of the world by Antipater of Sidon.



CAIRO

THE “SUBJUGATOR”

Egypt's capital, Cairo, is the most tangible example of the charm of this nation. Its name comes from the Arabic “al-Qāhira” and means “the Subjugator”; the Fatimids gave this name to Cairo. After having expelled the ruling dynasty, they refounded the city in the hope that it could subjugate the Islamic world. And, indeed, history proved the Fatimids right: Cairo prevailed over events, wars and occupations, but especially over time that instead of overwhelming this city, makes it increasingly charming to our eyes. This city is located on the shore and on the island of the Nile River, in northern Egypt, immediately south of the point where the river leaves the course of the desert and breaks into two branches forming the Delta region. Today, when walking downtown, the Nile is always in the

background and its size is simply breathtaking. To feel part of this fascinating metropolis, you must get lost in its outlying suburbs and be led aimlessly through its most bygone alleys. But you should discover Cairo's true nature by walking around its crowded streets, where a good part of more than its 10 million inhabitants pour into every day (15 million if you consider the urban area), and which are uninterruptedly occupied by an endless number of cars: from old vehicles no longer found on the market to modern sedans, from popular buses to motorcycles of every kind and age. A modern subway runs below the road network of the Egyptian capital, which connects the entire city and carries an average of 5 million people a day. At night, modern skyscrapers and ancient mosques compete in an amazing

play of lights and colors, while many commercial signs dominate the crowded streets of the city; among them, the Coca-Cola signs are the most familiar face of this glittering advertising spectacle.



COCA-COLA INVESTS US\$ 500 MILLION IN EGYPT



The African continent continues to show high rates of increase in GDP. In fact, in 2013 five of the ten countries with the strongest economic growth in the world belonged to this geographical area. Even consumption appears to be growing, the boom of which is expected in 2030. Therefore, it is not a surprise to find out that the American Coca-Cola Company has decided to increase investment in Africa and the East, especially focusing on Egypt and Pakistan, i.e. two strategic markets from a sales prospects viewpoint. Despite the country's political uncertainty, Egyptian consumers keep drinking Coca-Cola, also thanks to numerous, highly successful commercial and marketing initiatives as "Coke Studio Middle East", a television series that fuses Arabic music with that of international artists. In early 2014, The Coca-Cola Company announced plans to invest about 500 million dollars in the North African country, spread over the subsequent three years. The same also applies to Pakistan, where investments have been planned in several manufacturing facilities to meet the growing demands



of that market as well. After all, the expansion of the company that produces the most popular drink in the world certainly does not stop here. Anticipating the strong demand for carbonated beverages at the 2022 World Cup, Coca-Cola has just started to build its first bottling plant in Qatar as evidence of the importance that emerging markets are assuming in the business strategies of the US company at a time when consumption in consolidated markets remains stable.





The Coca-Cola Bottling Company of Egypt in short

The Coca-Cola Bottling Company of Egypt (TCCBCE) is headquartered in Cairo, in the district of Nasr City. This Egyptian company bottles and sells all the Coca-Cola branded soft drinks, which are produced in 9 packaging plants and distributed through 35 commercial warehouses equipped with more than 1,000 vehicles. The soft drink range marketed in Egypt includes, in addition to all the "Coke" variants, Fanta, Schweppes, and Dasani branded products. Egypt is one of the key markets for this US company since it is the most important one in the Arab world and home to some "historical" Coca-Cola facilities since 1942. For these reasons, the Atlanta head office has announced an investment of US\$ 500 million for the next 3 years in the Egyptian market with the goal of doubling the exports volume, which currently accounts for about 30% of the TCCBCE bottling plants' output. The Coca-Cola Company's massive investment comes at a time in which Egypt is recovering from three years of political and economic turmoil, which had caused foreign investments to shift elsewhere, hence proving that this North African country is re-attracting the interest of big multinational companies. The 9 production facilities of The Coca-Cola Bottling Company of Egypt currently provide jobs for more than 12,000 people, with good prospects of further employment opportunities, both direct and in allied industries, as a result of the new US\$ 500 million investment.



∴ Above, from left

Hatem Sherif, Project Manager of TCCBCE, Mohamed Abdel Hamed, Managing Director of Internation Pack (SMI agent) and Ayman Soud, Plant Manager of TCCBCE.

THE UPGRADING OF THE SECONDARY PACKAGING LINE

The Coca-Cola Bottling Company of Egypt (TCCBCE) is strongly committed to increase its production and distribution capacity to keep up with the growing demand for carbonated soft drinks. Hence the decision to upgrade their can packaging systems by purchasing a new Smiflexi SK 500T shrinkwrapper, which is an addition to the SK 600P model and related conveyor belts provided by SMI in 2004. The new SK 500T packs 0.33 L and 0.355 L aluminium cans in the 3x2 and 3x3 collations in shrink film only, at a top speed of 50+50 packs per minute in double lane and in the larger 4x3 and 6x4 collations in tray+film at max 50 packs per minute in single lane. In fact, the SMI machine installed at the TCCBCE plants is equipped with a device that simultaneously produces two flanked packs in film-only, with the advantage of doubling machine productivity with the smaller pack formations. To date, SMI has provided to the Coca-Cola Group over 350 secondary packaging machines worldwide, of which about 60 are installed in Egypt. After all, SMI has worked for years to contribute to the process of modernization and expansion of many bottling plants globally, offering a wide range of machines and systems with maximum operating flexibility and high energy efficiency. Using a single packaging machine to pack a large portfolio of products in multiple pack configurations is undoubtedly an advantageous choice from an economic point of view, because it allows to quickly and easily adapt the bottling plants to the market's changing demands. Smiflexi's shrinkwrappers of the SK series can also be equipped with additional equipment, which increases their basic features and allows a high degree of customization of the final package. Smiflexi's SK series shrinkwrappers are automatic machines that package rigid containers made of plastic, metal or glass. The continuous packaging system they are equipped with ensures smooth production processes devoid of jerks, which protect the containers from impacts and shocks and also guarantee greater reliability, better quality of the pack and reduced mechanical wear. Each packer can carry out multiple collations, which vary according to the shape, capacity and size of the containers to be packed. Depending on the model chosen, packs can be made up of film only, cardboard pad + film, tray only, cardboard tray + film, at full speed, according to the shape and size of the container, 80 to 100 packs per minute in single lane, 140 to 200 packs per minute in double lane and 450 packs per minute in triple lane (2x2 film-only packs of 0.33 L cans).



SK SHRINKWRAPPERS

ADVANCED TECHNOLOGY AND ENERGY SAVINGS

The Smiflexi SK series shrinkwrappers are equipped with an automatic format changeover device that minimizes manual adjustments as well as the time required to switch from one pack configuration to the next, greatly easing the work of the machine operator. The innovative technology of the SK packers, together with the smoothness and automation of the packaging system, ensures high performance in terms of process reliability, quality of the final package, reduction of operating costs and energy savings. Their ergonomic and functional design allow the operator to easily carry out all the activities related to the use and maintenance of the system, in full compliance with highest safety standards. There is no contact between the moving components and the packaged product because the threaded shafts, on which the guide and chain adjusters slide, are housed in a safe environment that protects them from dirt and dust. Moreover, the SMI shrinkwrappers do not use geared motors as they are driven by

brushless motors, servo-driven by digital drives, which are connected directly to the drive shafts, with the consequent advantage of reducing energy dissipation, noise and maintenance.

The packs made by Smiflexi's SK series shrinkwrappers feature a high aesthetic quality of the finished package thanks to the perfect tautness of the film and high precision in cutting the film, made



⋮ Above, from left

Ayman Soud, Plant Manager of TCCBCE, Mohamed Abdel Hamed, Managing Director of Internation Pack (SMI agent) and Hatem Sherif, Project Manager of TCCBCE.



possible by the electronic control of the film reels unit and the use of brushless motors. The shrink tunnel of the SK 500T shrinkwrapper installed at TCCBCE is equipped with a system that distributes hot air flows by optimized settings to ensure a more homogeneous and even heat-shrinking of the film in every point of the package. Hence, packages have a perfect appearance (no wrinkles or folds) even when produced at high production speeds. The electronically controlled temperature inside the tunnel is maintained at optimum values set by the production program, throughout the working cycle, also thanks to newly designed technical solutions which drastically reduce heat dispersion. Even the permanence of the packs inside the shrink tunnel is set automatically by the machine's control system, keeping it constant for all processed formats. If different pack configurations are necessary, with subsequent shrinkwrapper change of speed, a special device automatically compensates the speed difference between machine and tunnel by adjusting the belts that pass between the two modules, which allow you to achieve high quality shrink-wrapped packs, regardless of the format.





COCA-COLA COMMITMENT FOR SUSTAINABLE DEVELOPMENT

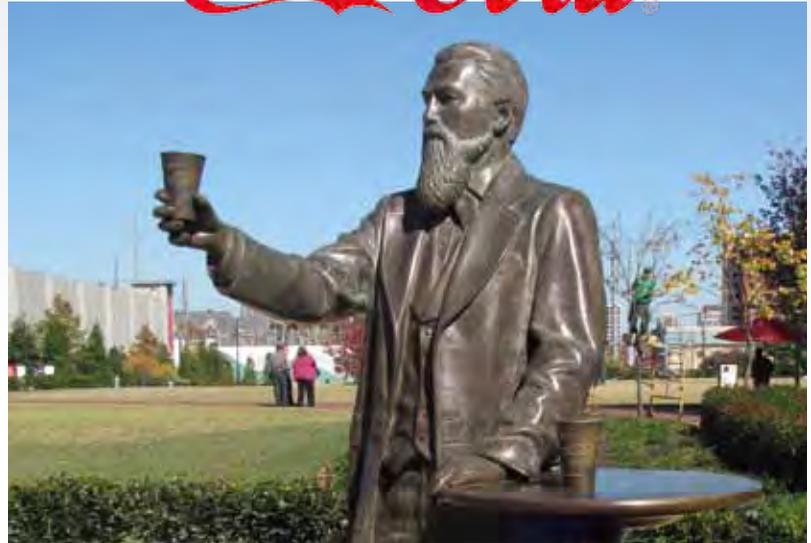


Since the growth rate of the world population is uninterruptedly anchored to the plus sign, the need for drinking water grows at the same pace. Hence the imperative need for many large-sized companies, including Coca-Cola, to pay close attention to the efficient and responsible use of this important natural resource. With its commitment to become "water neutral" by 2020, and replenish 100% of the water used for the production of its soft drinks, the American company has started-up several projects to optimize the use of water. The Coca-Cola Company's global commitment to sustainable development aims to promote economic growth in every country on the planet. The "Ekocenter"

program, which stemmed from this premise, envisages the installation of 1,500 to 2,000 eco-kiosks in 20 nations by 2015. "Ekocenters" are mono-brand outlets that not only provide soft drinks of the Coca-Cola Group but also drinking water, electricity, free internet access and, potentially, even medicines and vaccines in proper storage conditions. These kiosks should be managed almost only by women or small local entrepreneurs in Africa, Asia, South America and North America, in order to ensure maximum social and economic sustainability for this development project. Through this initiative, The Coca-Cola Company wants to bring real help to improve living conditions where it is needed the most. Hence, we are facing an evolution in the marketing operation of "sharing happiness" launched by the Atlanta company in 2009, the aim of which was to associate the idea of happiness with the historic brand.



Coca-Cola



The Coca-Cola branded soft drink was invented by US pharmacist John Stith Pemberton on May 8, 1886 in Atlanta, initially as a remedy for headaches and fatigue. Despite his discovery, Pemberton had gone deeply into debt and so he sold Coca-Cola formula and rights for US\$ 2,300 to Asa Candler, a local businessman who had perceived the beverage's potential and understood the importance of advertising to entice consumers to buy, and beat competition. After the company's quotation on the stock exchange in 1919, Coca-Cola began to spread worldwide in the twenties of the 20th century, turning into a large business that was managed, starting from 1892, by The Coca-Cola Company headquartered in New York, which also bottled Fanta, Sprite and many other products. "Coke", as the drink is often called in the US, owes its name to the fact that its recipe includes, among other substances, extracts from cola nuts

and extracts from coca plant leaves, after removing toxic substances from the latter. At any rate, the complete Coca-Cola recipe (or even only a part of it) was never revealed officially, and was kept for 86 years in a maximum-security vault of a bank in Atlanta, where the skyscraper in which the company is headquartered is located. At the end of 2011, the original recipe was transferred to a safe inside The World of Coca-Cola museum. From 1886 to today, the Coca-Cola brand has walked hand in hand with the history and life of millions of people throughout the world as it has become the symbol for special occasions and a synonym of unforgettable moments in almost every nation of the planet, where this drink is consumed every day in 1.8 billion single doses (except Cuba and North Korea which have prohibited its sale).





INSTALLATION / Yemen

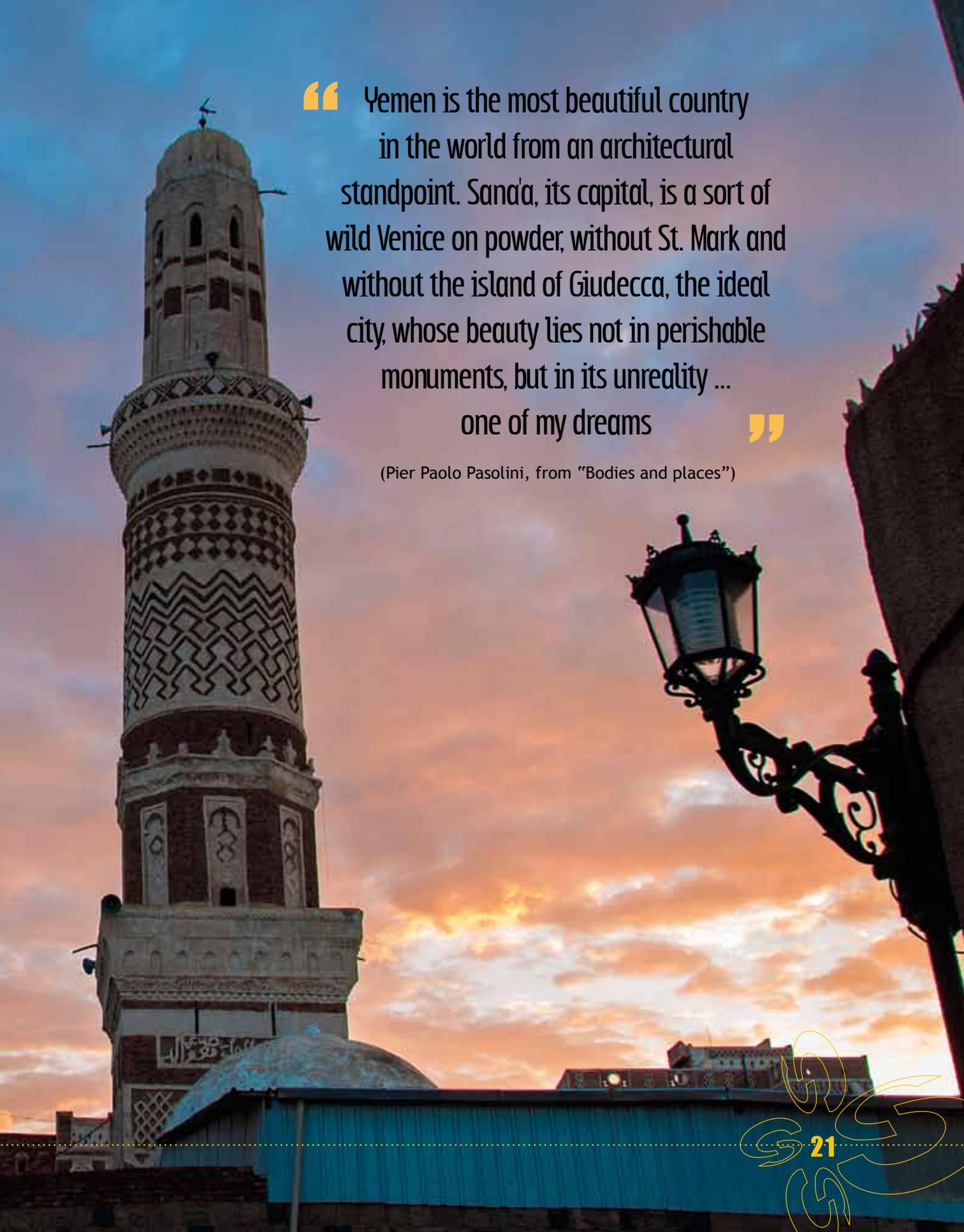


YEMEN: ONE OF THE 20 MARKETS OF THE FUTURE

A recent market research published by the London-based market intelligence firm Euromonitor International, identified Yemen as one of the 20 markets of the future, where producers of consumer goods in the world will find excellent opportunities for developing their business. This research analyzes the economic environment, demographic situation, infrastructures, communication routes and lifestyles of the Yemenis, providing a full picture of the social and economic situation of the country and identifying development opportunities today and tomorrow. After a long period of political turmoil and internal conflicts that had led to the creation of two states, North Yemen and South Yemen, and caused a sharp slowdown in economic growth, since 1990 the reunification has given this country the go-ahead for great works to modernize its infrastructures and industrial facilities, the latter also driven by the oil sector and its derivatives. Even the production of consumer goods has benefited from the aforesaid program of public and private investment and can now look to the future with optimism, thanks to the good opportunities of growth offered by the rapid spread of modern retail channels. The industrial excitement experienced in Yemen comes from these perspectives, which also lead companies involved in the “food & beverage” sector to continually invest in new production lines equipped with cutting-edge technologies. Among these companies, the following three stand out: YUBCO (acronym of Yemen United Beverage Company), DICO (acronym of Derhim Industrial Company) and Al Ahlia Mineral Water Company, which have been working with SMI for many years for the supply of machines and bottling and packaging systems.

YEMEN: THE MAGIC OF THE COUNTRY OF THE ARABIAN NIGHTS

Enchanted by the beauty of these places, Pier Paolo Pasolini, Italian poet, writer, director, screenwriter, playwright and columnist, fought long for the Protection of Yemeni cities. In fact, during the filming of the movie "The Decameron" and "The Flower of the Arabian Nights", Pasolini shot some documentaries in the form of appeal to UNESCO, appeal then upheld in 1986 when the old city of Sana'a was declared a World Heritage Site. To visit the capital of Yemen is like taking a cultural breath of air. Sana'a is a big city that continues to grow in size and population, whose old part is a superb example of Yemeni architecture. The Old Town is a fabulous jewel, a magical leap into the glorious past of this land, and wandering within its walls is a unique experience not easily forgotten. Sana'a boasts an amazing collection of beautiful and ancient buildings, such as the renowned Yemeni multi-storey buildings, the so-called "tower-houses", and the grand mosque of Saleh that dominates the whole city with its tall minarets. The houses of Sana'a, estimated at about 14,000 units, are made of ancient bricks, according to a unique architectural style. The windows are one of the peculiarities of these buildings because they do not follow a common pattern but have shapes and sizes that are completely different from one another: some are made of wood, others of mud, some have glass and others only peepholes. In the city of Shibam, in the eastern region of Hadramawt, the "tower-houses" look like real mud skyscrapers, which have been pointing resolutely to the sky for over 500 years. You enter Old Sana'a by crossing Bab al-Yemen, the "gateway to Yemen", a huge door that leads into a large market filled with a multitude of small shops where you can buy just about anything. The old city of Sana'a is a complicated maze of different and narrow alleyways, none of which are straight; Yemenis say that no matter how many times you've been in this city, you'll always end up in a street that you had never seen before.



“ Yemen is the most beautiful country
in the world from an architectural
standpoint. Sana'a, its capital, is a sort of
wild Venice on powder, without St. Mark and
without the island of Giudecca, the ideal
city, whose beauty lies not in perishable
monuments, but in its unreality ...
one of my dreams ”

(Pier Paolo Pasolini, from “Bodies and places”)



INSTALLATION / Yemen

YEMEN

THE “LAND OF THE SOUTH”

If natural scenery and architecture are a feast for the eyes, the pride, kindness, good will and courtesy of the Yemeni people are a joy for the heart. Yemen charms visitors not only thanks to its fantastic landscapes including mountains, rivers, seas and deserts but also with its population of simple, welcoming and cheerful people. This Arab country is one of the oldest centers of civilization in the world. Until at least from the second millennium BC, populations who

settled in this region have exploited the territory's particular orogenetic characteristics. Perennially rich in hills and waterways, Yemen (in Arabic “al-Yaman”, whose Semitic linguistic root means “right” or “southern”) is home to a type of vegetation that produces particular substances which the surrounding cultures appreciate, which the Greeks used to call “aromata” and that, in short, we can essentially relate to incense. This is a country where you can still feel History, both through the ruins

and ancient monuments and through tradition and culture handed down from century to century to the present day. Still rather isolated from the rest of the Arab world, Yemen has a population of about 24 million inhabitants, of which about 10% live in the capital's metropolitan area, San'a. This city is the commercial, cultural and economic center of the country, it is divided into three districts (Arabic, Turkish and Jewish) and is served by an international airport.



YUBCO & DICO

WATER & SOFT DRINKS SECTOR

◆ YUBCO (Yemen United Beverages Co.) Al-Marawea, Al-Hodeidah, Yemen

- 6 Smiform SR12 rotary stretch-blow moulders
- Smiflexi SK 450T shrinkwrapper
- Smiline conveyor belts & subcontracting equipment

◆ DICO (Derhim Industrial Co.) Al-Marawea, Al-Hodeidah, Yemen

- Smiform SR 12 and SR 16 stretch-blow moulders
- Smiflexi SK 400T shrinkwrapper
- Smiflexi SK 350T shrinkwrapper
- Smiflexi SK 450T shrinkwrapper
- Smiline conveyor belts



GEO LOCATION



In the past, the Greeks used to call Yemen “Arabia Eudaimon”, while the Romans called it “Arabia Felix”; in both cases, the meaning was “Happy Arabia”, in contrast to “Desert Arabia”, i.e. the Saudi desert, i.e. the quintessence of an inhospitable land. The definition of Happy Arabia is a reflection of the reputation that this country had reached internationally in ancient times, thanks to the enormous income from the trade of incense and perfumes as well as the importance it had in history as one of the oldest centers of civilization in the world. Yemen, full of hills and perennial waterways, is now one of the fast-growing markets and one of the most promising economies of the Middle East. Among the most dynamic sectors is the one connected to the production of beverages, whose leading lights are companies such as Yemen United Beverages Co. (YUBCO) and Derhim Industrial Co. (DICO);

through continuous investment in new production technologies, these two Yemeni companies are contributing to the rapid growth of this sector and to the country’s economy in general. YUBCO and DICO, both managed by the Derhim brothers, represent a booming industry in Yemen’s domestic “food & beverage” market as well as in neighboring markets; this development process is made possible also by the use of latest generation bottling and packaging systems that SMI has been providing to these two companies for over 10 years.



AL-HODEIDAH

THE “CINDERELLA” OF THE RED SEA

YUBCO and DICO are both headquartered in the city of Al-Hodeidah, in Arabic “Al-Hudaydah”, considered the “Cinderella of the Red Sea” because of its strategic position for Yemeni trade. Al-Hodeidah ranks fourth among the cities of Yemen, with a population approaching half a million inhabitants, and is the capital of its governorate. The city, which lies on the shores of the Red Sea, was known as one of Yemen’s major ports in the 18th and 19th centuries, renowned

for the pearl trade but especially for coffee; the latter was so important that the Yemeni town of Al-Mocha, in Arabic al-Mukhā, gave its name to one of the finest varieties of coffee known to the world. Today Al-Hodeidah is best known for its busy fish market where shark fishermen pour in from all over the region. This is one of Yemen’s most beautiful cities thanks to its luxuriantly green nature and spectacular colors. At night the markets light up with men selling fruit in the light of the lamps

while at dawn the fish market turns into a hive of frantic activity.



INSTALLATION / Yemen

THE ANCIENT “WAY OF INCENSE”

The so-called “Way of Incense” was a caravan route used since the time of the ancient Romans, connecting the tip of the Arabian Peninsula (today’s Oman and Yemen) with the Mediterranean Sea. It was the sacred way of scents, an ancient highway, where even tolls and duties had to be paid, crossing deserts and mountains, which allowed a very special resin to be traded: incense. This leg of the journey surely guaranteed mishaps of all kinds to travelers who suffered attacks from robbers and brigands, cursed sandstorms, lack of water and difficulties in orienting oneself. The Way of Incense was especially important because goods arriving by sea from India and the Far East were transported on it. Goods included: perfumed essences (in addition to incense, also sandalwood, musk, myrrh, balsam), camphor, bamboo, precious spices used for food and for storing food (pepper, nutmeg, cloves and cinnamon), substances used for pharmacopoeia and cosmetics, gold, silver and precious stones, as well as less valuable goods such as rice, cereals and cane sugar. Not only did many goods transit from Yemen in the past, but also science, culture and legends, because distant and very different worlds such as Europe, India, Arabia and Africa met, mingled and integrated through the “Way of Incense”. Yemen is often considered a precious jewel thanks to its strategic position. In fact, this country is located at the entry of the Bāb el-Mandeb, i.e. the “door of the funeral mourning”, the strait that connects the Red Sea, the Gulf of Aden and the Indian Ocean. It is about 30 km wide at the narrowest point and separates Yemen from Djibouti on one of the busiest shipping lanes of the world.

WHEN

COMPETITION IS IN THE FAMILY

When talking about Yemen United Beverages Co. (YUBCO) and Derhim Industrial Co. (DICO), you can truly say that competition lies within the family, more specifically in that of the Derhim brothers. The choice to set up two separate companies, both dedicated to the production and marketing of water, juices and carbonated soft drinks, was dictated by the market. In order to

meet the growing demand for such products, the bottling plants were divided between the two family businesses with a view to respond more quickly to consumer demands. This strategic choice has proved successful since today YUBCO and DICO hold the largest market share of the Yemeni "food & beverage" sector. A success made possible by the close collaboration between the Derhim brothers and the decision to





equip their production lines with the modern stretch-blow moulding and packaging technologies proposed by SMI.



⋮ Above, from left (standing):

Walter Conti, Service Area Manager of SMI; Pierre Anid of Novadim (SMI Agent); Mohamed Derhim, Owner of DICO; Fabio Sisimbro, Sales Area Manager of SMI; Refaie Alwan, Technical Advisor of DICO.

On their knees: Charaf Rguibi, Service Engineer of SMI and Mahir Abdol Gabar Derhim, Export manager of DICO.





Derhim Industrial Company (DICO) was started in the spring of 1980 near the city of Al-Marawea, about 26 km from Al-Hodeidah (second port of Yemen after the one in Aden). The business success of this Yemeni firm should certainly be attributed not only to the dedication, professionalism and great experience of all the staff who work there, but also to the determination, commitment and sacrifices of the Derhim family who founded it and made it grow. This company employs about 800 people, including chemists, engineers, technicians, administrative and sales staff, all led by a group of professionals who possess high managerial skills and considerable experience gained both locally and abroad. In addition to the soft drinks and natural mineral water sold under its own brand, the Yemeni company also bottles Sinalco

products, the popular line of non-alcoholic fruit drinks created in 1902 by German psychotherapist Friedrich Eduard Bilz. Last but not least is the distribution agreement signed between DICO and Carlsberg in 1993 for the promotion and sale of some of the Danish company's products in Yemen. DICO, along with YUBCO, is considered at the forefront of the Yemeni industry and, together with YUBCO, has been the leading light in this country's economic development over the last thirty years, also thanks to the cutting-edge production technologies provided by SMI, company that the owners of DICO and YUBCO wanted and chose for their bottling and packaging plants.



INSTALLATION / Yemen

SR SERIES

SR SERIES: THE IDEAL SOLUTION FOR MULTIPLE BOTTLE FORMATS

The rotary stretch-blow moulders installed by SMI at the YUBCO and DICO plants are the ideal solution for the large-scale production of PET bottles of various shapes and sizes, the most common of which are the 0.33 L - 0.3 L - 0.5 L and 0.75 L bottles. These advanced technology machines meet the production requirements of the carbonated soft drink bottling line, allow the end user to optimize the blow-moulding costs of the PET bottles and help improve the overall efficiency of the company's facilities. In particular, the Smiform SR series

stretch-blow moulders purchased by the Derhim brothers mount the innovative Air Recovery System (ARS), which features a significant reduction of energy costs and savings of up to 40% in compressed air consumption. In fact, this device recovers part of the high pressure compressed air used in the bottle production process to reuse it either for the pre-stretch blow moulding of these bottles or as utility air for the system. SMI's supply also includes the moulds needed to produce the various types of bottles marketed by the two Yemeni companies; these moulds are made



by Smimec, another company of the SMI Group, using a sophisticated FMS production line consisting of 12 CNC machining centers. These are technologically advanced, fully automated machine tools, which work 24/24, 7 days a week, even unmanned.

ABOUT

YUBCO



The Yemen United Beverages Company (YUBCO) was founded in 1968 when a group of merchants decided to open a business for the production of soft drinks under the Canada Dry brand.

Among the companies involved in this initiative, YUBCO immediately played a major role thanks to the high quality of the water produced by it (key ingredient for the production of soft drinks), the company's proximity



∴ From left:

Abdul Malek, Accounting Manager of YUBCO; Moteea Sultan Abduldaim and Musheer Aziz Ali, Mechanical Managers of YUBCO; Fabio Sisimbro, Sales Area Manager of SMI; Pierre Anid of Novadim (SMI agent); Walter Conti, Service Area Manager of SMI; Faysal Derhim, Project Manager of YUBCO; Charaf Rguibi, Service Engineer of SMI.

INSTALLATION / Yemen



to the city of Al-Hodeidah and its important trading port. Today, YUBCO's range of bottled drinks is quite extensive and includes both its own brand and Canada Dry-branded non-alcoholic beverages, fruit juices and mineral water. Equally varied are the types of bottles and packages through which these drinks are marketed, both domestically and abroad in the countries of the Horn of Africa and the Persian Gulf.



CANADA DRY

Created in Canada in 1904, Canada Dry is a unique and original drink with ginger extracts, whose beautiful amber color is obtained by a natural coloring, i.e. caramel; it is very popular in the United States thanks to its refreshing and thirst-quenching taste. The history of this drink began in 1890, when pharmacist and chemist John J. McLaughlin opened a small company in Toronto for the production of a soda sold to pharmacies. After hundreds of experiments, in 1904 McLaughlin achieved the perfect formula for his "Canada Dry Pale Ginger Ale", a ginger-based drink that he called "Dry" because it was less sweet than existing drinks. In the '20s of the twentieth century, this new drink became very popular in New York City and from there it spread to the eastern United States. After the founder's death, PD Saylor and Associates purchased the company from the McLaughlin family in 1923 and shortly later transformed it into Canada Dry Ginger Ale, Inc. After several changes of ownership, the latter was sold in 1986 to Cadbury Schweppes in London and, finally, to the Texan company Dr Pepper-Snapple Group, Inc., the current owner. In addition to producing the original Canada Dry, the Dr Pepper-Snapple Group now produces a wide range of drinks and beverages (colas, orangeades, lemonades, tonic and flavored water, energy & sports drinks, juices, etc.) marketed virtually worldwide.



PACKAGING

THE CHOICES OF YUBCO AND DICO



Since their foundation, the two Yemeni companies have always faced the most important choices together, starting from the selection of suppliers. The beginning of the collaboration between YUBCO, DICO and SMI dates back to 2002 when DICO had purchased two 21,600 bottles/hour Smiform SR 12 series

stretch-blow moulders and one 45 packs/minute Smiflexi SK 450T series shrinkwrapper from SMI, whereas YUBCO had installed two Smiform SR 12 series stretch-blow moulders and two Smiflexi SK 450T series shrinkwrappers in its plants. In the following years, a number of positive events led to an exponential growth in

sales for the two Yemeni companies, resulting in the need to expand the production departments by purchasing additional primary and secondary packaging machines and relevant conveyor belts. Consequently, the existing carbonated soft drink bottling lines were expanded to adapt them to the new production requirements with





the addition of a 28,800 bottles/hour Smiform SR 16 series stretch-blow moulder at DICO and another 21,600 bottles/hour Smiform SR 12 series stretch-blow moulder at YUBCO. Following the primary packaging line, both companies use three Smiflexi SK series shrinkwrappers for packaging their PET bottles in various pack collations and types.



MODULAR AND ERGONOMIC DESIGN FOR BOTTLE CONVEYORS

The conveyor belts that SMI installed in the YUBCO and DICO bottling lines feature modular design and great operational flexibility, achieved through the use of frequency converters (inverters) which optimize the belts' operating speed and increase their efficiency. The integrity of the containers conveyed on the Smiline belts from one machine to another is ensured by product guides made of stainless steel and antifriction UHMW plastic material; furthermore, the guides for maintaining the bottles' trajectory are made with plastic, non-abrasive brushes that ensure the correct lateral position of each type of container and reduce format changeover time. The entire production plant is managed by an automation and control system designed and implemented by SMI in accordance with criteria of maximum simplicity of use and process flexibility. In fact, the bottling line is managed by a single industrial PC (POSYC), equipped with control and operator interface functions, which can be placed in the plant's most strategic point to facilitate the operator's job. Besides, thanks to the use of inverters with built-in motors, the space taken up by the electrical panels is minimized and the wiring of the conveyor belts is simplified.



AL-AHLIA



WATER SECTOR

Al-Ahlia Mineral Water Company (AMWC)
Ibb, Alsyani region, Yemen

25,200 BOTTLES PER HOUR PET LINE

- Smiform 14-54-14 VMAG ECOBLOC®
- Smiflexi LSK 40T Shrinkwrapper
- Smipal APS 3070 palletizer
- Smiline conveyor belts
- Subcontracting equipment



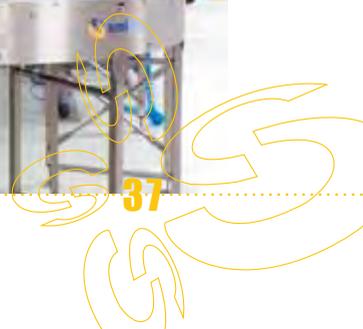
GEO LOCATION



Water is the main source of life, the most precious natural resource. When it comes to mineral water bottling plants, you inevitably think of a natural, lush environment that transmits sensations of freshness and purity, far away from any pollutant. When one thinks of the water sources in Yemen, the image cannot change since the desert landscapes give way to those of the beautiful enchanted region of Alsyani, in the south-western Yemeni plateau, known for its amazing nature, its green landscapes, the freshness of its water, its permanent vegetation and for the presence of companies like Al-Ahlia Mineral Water Company (AMWC), which make environmental protection a pillar of the company mission. This Yemeni company makes use of modern production lines and cutting-edge technologies designed to protect the environment and optimize production costs. The system that SMI supplied to Al-Ahlia Mineral Water Company stands out among the latter company's most



recent investments, which includes Smiform's ECOBLOC® 14-54-14 VMAG integrated stretch-blow moulding, filling and capping system, a Smiflexi shrinkwrapper for packaging bottles in shrink film, model LSK 40T, and an automatic Smipal APS 3070 palletizing system. The supply also includes Smiline conveyor belts, the line management and automation system developed by Smitec, and machinery and equipment made by SMI's leading partners such a rotary labeller, control systems, encoders, etc.



THE PERFECT

HARMONY BETWEEN COMPANY AND NATURE

The Al-Ahlia Mineral Water Company is specialized in the production and marketing of mineral water under the Beladi and Zaina brands, bottled in PET containers of different sizes and capacities. This company's facilities, spread over an area of more than 50,000 square meters, are used as administrative offices, bottling and packaging lines and water sources. AMWC is headquartered in the Ibb governorate, in the Alsyani region, i.e. the most humid area of the entire Arabian Peninsula. Temperatures are high, with an average of 30° Celsius, although the nights can be quite cold and, excepting urban areas, nearly the entire territory is cultivated with a great variety of different crops. Thanks to sophisticated water-management systems, the Yemeni farmers in this region are able to achieve good harvests even in dry periods. Al-Ahlia Mineral Water is very keen to preserve the local ecosystem, investing in latest generation technology that combines the necessary business development with the protection of the surrounding territory. The new line provided by SMI for the Beladi and Zaina water



☼ Above

Fabio Sisimbro, Sales Area Manager of SMI, Pierre Anid of Novadim (SMI agent), Walter Conti, Service Area Manager of SMI, and Charaf Rguibi, Service Engineer of SMI, while tasting a traditional dinner at Yousuf Abdulwadood and Salahaddin Abdulwadood's (owners of Al-Ahlia).

bottling and packaging facility was designed, built and installed in full compliance with the environmental sustainability parameters imposed by the Yemeni company.



Al-Ahlia Mineral Water and the environment

Al-Ahia Mineral Water pays utmost attention to the environment in which it operates and to the main source of its business: water. In this case, water comes from aquifers located a short distance from its facilities and is extracted from a depth of about 400 meters through modern technologies. Every year, about 60,000 cubic meters of water gush from AMWC's wells that are used for the production of the Beladi and Zaina-branded natural mineral water. Even though the water extracted from the local aquifers and bottled by the Yemeni company is of good quality, it undergoes rigorous laboratory tests to measure its organoleptic properties and mineral content, and also filtration and purification processes before packaging. In other words, the company is able to provide the market with a product the purity and quality of which is exceptional and highly appreciated both by domestic and international consumers.

SUSTAINABLE DEVELOPMENT AND ADVANCED TECHNOLOGIES

Al-Ahlia Mineral Water Company began bottling water in PET containers in 2004, following an investment of US\$ 4 million to modernize existing plants in operation since 1998. In the following years, thanks to this investment, the Yemeni company was able to reach a market share of 25-30% of the more than 150 million liters of water bottled annually in Yemen. The new 25,200 bottles/hour turnkey plant supplied by SMI in 2014, will allow AMWC to fully meet the growing consumer demand and further increase its market share in the domestic "food & beverage" sector. More specifically, the new production facility of natural mineral water under the Beladi and Zaina brand features primary packaging in 0.33 L - 0.6 L - 0.75 L and 1.5 L PET bottles through a Smiform ECOBLOC® 14-54-14 VMAG integrated system as well as secondary packaging in tray+film packs in the 6x5, 6x4, 5x4 and 4x3 collations and film only in the 4x3 and 3x2 collations by means of a Smiflexi LSK 40T shrinkwrapper. The foregoing packs are then taken by an advanced Smipal automated palletizing system, model APS

3070P, equipped with a fixed column and a simple double inlet, which stacks them on 1000X12000 mm pallets. Then these pallets reach, by means of a motorized roller system, an automatic wrap-around film wrapper that prepares them for the subsequent transport and distribution steps. The mechanical parts mounted on the palletizer's fixed central column are driven by brushless motors that ensure reliable and accurate movements on all the machine's operating axes. The use of this technical solution guarantees high reliability, reduces maintenance

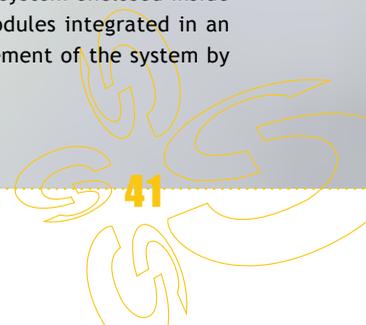
and ensures low running costs. The entire production line that SMI supplied to Al-Ahlia Mineral Water Company is managed by an advanced control system that has a simple and user-friendly HMI which also allows the user to carry out format changeovers quickly, thanks to the high degree of automation of its machines.





THE ADVANTAGES OF THE ECOBLOC® INTEGRATED SOLUTION

S miform's integrated system of the ECOBLOC® series, purchased by the Al-Ahlia Mineral Water Company, offers many advantages to the end user such as, for example, the machine's modular and compact structure (which brings together the stretch-blow moulding, filling and capping modules in a single block) that allows you to eliminate the connection belts between blow moulder and filler and even, except in rare cases, the bottle rinsing machine. With this type of system, there is a significant reduction in the consumption of water and electricity and also the management and maintenance of the production line. The "baseless" technology of the filling module, for instance, offers the advantage of placing the motors and transmission components at the top of the machine, leaving its base completely free to facilitate access to the filling carousel and also simplifies cleaning and maintenance. In addition, the stretch-blow moulding module of Smiform's ECOBLOC® integrated system can be equipped with an ARS (Air Recovery System), which recovers up to 40% of the high pressure compressed air used in the bottle production process to reuse it either during the pre-stretch blow moulding stage or in the machine's utility systems. Smiform's ECOBLOC® integrated system greatly reduces the risk of contamination of the bottles on their way from the blow moulder to the filler thanks to a star-star system enclosed inside a hollow joining cavity equipped with steel guards. The stretch-blow moulding, filling/capping modules integrated in an ECOBLOC® system are governed by a single automation and control system that allows the management of the system by only one line operator through a simple and user-friendly man-machine interface.



NEPTUN

WATER SECTOR

F.A. NEPTUN

Mena, Chernihiv Oblast, Ukraine

Group: Avangard

- 14,400 BOTTLES/HOUR PET LINE
- Smiform 8-66-8 LG-VMAG ECOBLOC®
- Smiflexi SK 500F shrinkwrapper
- Smipal APS 3050P palletizer
- Smiline conveyor belts
- Subcontracting equipment



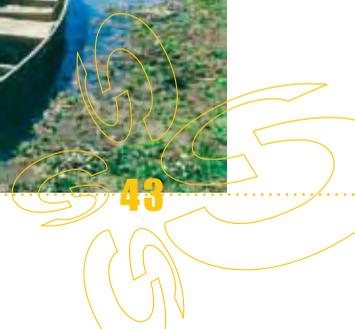
GEO LOCATION



Golden domes sparkle over modern buildings, medieval cities contrast with oriental motifs ... We are in Ukraine, in the heart of Eastern Europe, a frontier land both from a geographic and cultural point of view; a land that lies between the western world and the eastern Slavic world, whose name means, in one word, "borderland". Ukraine, inhabited by 46 million people and its extension of 604,000 square kilometers, is the second largest state in Europe, after European Russia and first of metropolitan France. The fertility of this land has been known for centuries, so much so that in the past they used to call Ukraine the "bread basket" of Europe or the "barn of Europe". Not surprisingly, wheat and its derivatives are the symbols of tradition and basic ingredients of the Ukrainians' daily diet, as well as the leading lights of dinners and banquets organized for important events and national holidays. The spring from which the "Ostrechenskaya" water is sourced is located in the Oblast (i.e. province) of Chernihiv, one



of the greenest and most picturesque landscapes in northern Ukraine, far from the big factories of the main industrial centers. This water is extracted from the soil at a depth of 830 meters and boasts excellent therapeutic and healing properties. Ostrechenskaya water is bottled in PET containers by F.A. Neptun, in a modern 14,400 bottle/hour plant supplied by SMI.



NATURAL AND CULTURAL HERITAGE

Ukraine is a land that will enchant you not only for its spectacular nature but also for its picturesque regional traditions such as those related to ancient monasteries, which are celebrated regularly by the population, with folkloristic events including singing, folk dancing and local cuisine. The Ukrainian landscape mostly consists of fertile plains and vast steppes that stretch as far as the eye can see, crossed by several rivers including the Dnepr, the Donec, the Dnestr and the southern Bug, which leap into the Black Sea and into the smaller Sea of Azov; in the southwestern part, the delta of the Danube forms the border with Romania.

The few existing mountain ranges are the foothills of the Carpathian Mountains, to the west, whose highest peak is Mount Hoverla (2,061 meters), and the mountains of the Crimean Peninsula. The natural, historical and cultural heritage of Ukraine is very rich, and UNESCO has included many of its tourist attractions on the World Heritage list. It suffices to say that over 500 Ukrainian cities go back thousands of years and that about 4,500 villages have existed for over 300 years. Thanks to its strategic geographical position, Ukraine is also an excellent communication trade route with Asia and is therefore the ideal bridge between Europe and the Eastern countries.







A trip to Ukraine can only start from its capital, Kiev, which, according to legend, was built 1,500 years ago on the hilly shores of the Dnieper River by three brothers, Kyi, Shchek and Khoryv, and their sister Lybid. Kiev was probably founded long before the 5th century and acted as a trade route between Constantinople and north-eastern Europe. The Goth historian Jordanes recorded the existence of the city with the name of Danaprstadr. When the region came under the Slavic-Varangian influence, the city became known as Kyiv and was elected to Mother of Russian Cities by Oleg of Novgorod. The entire region around Kiev was known by the name Rus' and the Kievans were generally called Rusiny/Rusici.

Coming to more recent times, on September 19, 1941, during Operation Barbarossa of World War II, Germany occupied Kiev, destroying a large division of the Red Army, which controlled the area, and taking over 650,000 prisoners. The city remained in German hands until the Soviet Red Army took it back on November 6, 1943. For its heroism during the war, the title "hero city" was later bestowed upon this city. Finally, after 57 years as capital of the Soviet Union's Ukrainian SSR, Kiev became the capital of independent Ukraine in 1991. Today Kiev is a modern metropolis of nearly 4 million inhabitants, where the sun is reflected in the golden domes of numerous churches, built around the 11th century when Kiev was the largest city in Europe. The reflection of the domes makes streets and buildings gleam in the sun while the interior of the Byzantine cathedrals is decorated with magnificent frescoes that completely cover walls and ceilings.

KIEV, THE CITY OF GOLDEN DOMES



THE MINERAL WATER:

OSTRECHENSKA



The Ukraine mineral water market is growing constantly, thanks to sustained growth in the demand for bottled drinking water by a large segment of the population. F.A. Neptun is among the most active companies in this sector, which stands out in the Ukrainian market for continued investments in new technologies and new production facilities for its plant in Mena, in the province of Chernihiv. Recently, the Ukrainian company turned to SMI for the design, implementation and installation of a new Ostrechenska mineral water bottling and packaging line, both natural and carbonated, in 0.5 L and 1.5 L PET bottles. SMI also provided the client with technical support in the 0.5 L and 1.5 L bottle study and design stage. The new PET containers design and manufacture took into consideration Neptun's expectations in terms of functionality, cost-reduction and brand image. The new bottles of Ostrechenska mineral water are made of lightweight preforms and fully comply with the customer's environment policy, while maintaining a very good robustness. Following this new investment,

Neptun's production facilities today consist of two modern lines: one for the production of mineral water under the Ostrechenska brand, bottled in 0.5 L and 1.5 L PET containers, and one for the bottling of lemonade-based soft drinks, beverages with natural fruit juices and herbs, orangeades and tonic beverages marketed under more than 18 brands.



“ the Neptun company name inevitably evokes mythology and Neptune, the god of water, and all the popular legends and traditions that over the years have helped to increase the popularity and demand for this water of high quality ”



NEPTUNE AND GREEK-ROMAN MYTHOLOGY

Neptune is a religious deity of the ancient Romans, the god of freshwater, the sea and earthquakes, and is the equivalent of the Greek god Poseidon, brother of Zeus and god of the sea, the horse defender and he who unleashes earthquakes. In some legends, Poseidon appears as the older brother of Zeus (Jupiter to the Romans), in others as the younger brother; the most reliable legend is the one that unites all brothers and sisters, according to which the father Kronos devoured his children at birth to avoid falling victim to the prophecy which in turn condemned him, in the future, to be ousted from his own heirs. But Rhea, Kronos' wife, determined to preserve her offspring, had recourse to a stratagem when Zeus, the last son, was born: she replaced the baby with a stone and covered him with some bands so that her husband would not discover the subterfuge and devour this one, too. Once grown, Zeus was able to deal with Kronos and free all his siblings by forcing his father to expel them from his belly. Later on, they randomly divided the various kingdoms and Poseidon became the god of the seas. Even the god of the sea has a long list of lovers, just like his brother Zeus, both among goddesses, nymphs and mortal women. It was because of the love affair with Poseidon/Neptune if the Gorgon Medusa was transformed into the monster having the face of a hideous human female with living venomous snakes in place of hair that we all know. Mythology has it that Medusa consumed her passion with the mighty god of the sea on the floor of Athena's temple. This enraged Athena who transformed Medusa into a horrible monster in revenge for this blatant disrespect.



A COMPLETE

SPECIFICALLY DESIGNED LINE



The line solution that SMI provided to the Ukrainian company Neptun is the result of a preliminary study of the project as well as the logistical conditions of the production site, accurate analyses of the dynamics of accumulation, distribution and handling of the product to be bottled and packaged, to ensure a fluid and constant production flow as well as utmost operational flexibility of the machines installed. In fact, the proper design of the bottling line, the appropriate sizing of machines and systems and the smooth running of the entire system are essential elements that enable Neptun to produce the Ostrechenska water efficiently, at low cost and with a good competitive edge. The line solution installed by SMI in the Mena plant favors energy saving and provides, for the “wet” part, an ECOBLOC® 8-66-8 LG-VMAG unit, suitable for both carbonated and still products. Smiform's ECOBLOC® integrated system brings together stretch-blow moulding, filling and capping features in a single system (and also labeling, on request). This is an innovative solution that reduces

overall dimensions and power consumption and also significantly lowers the production costs of every single bottle, especially thanks to energy saving devices and systems with which the machines are equipped for production cycle optimization (such as the Air Recovery System of the stretch-blow moulding module, which reduces the consumption of high pressure compressed air up to 40%).





LINE EFFICIENCY ALWAYS AT THE TOP

The use of a latest generation automation and control system, which uses sophisticated sensors positioned in the line's most strategic points, allows maintaining high levels of machine performance during all production cycle stages. Furthermore, the systems' advanced automation optimizes the use of raw materials, workforce and energy resources, promoting social and environmental compatibility in the proposed solutions. In addition, the bottling and packaging line installed by SMI in Neptun's plant in Mena features energy-efficient motors that further contribute to energy savings and cost reduction. Bottles blow-moulded, filled and capped by the ECOBLOC® 8-66-8 LG-VMAG unit are then customized by a wraparound label from a reel and packaged in shrink-film only packs, by a Smiflexi SK 500F shrinkwrapper. More specifically, the 0.5 L PET bottles are grouped in 4x3 film only packs while the 1.5 L bottle is packed in the 3x2 film only collation. Finally, both types of packages are placed on 800x1200 mm pallets by the Smipal APS 3050P automatic palletizing system.

THE ADVANTAGES OF THE ECOBLOC® INTEGRATED SOLUTION

The compact systems of Smiform's ECOBLOC® series integrate the functions of a rotary stretch-blow moulder, an electronic rotary filler and a rotary

capper, and are characterized by their modular and compact structure as well as their extensive customization features. These SMI-produced systems are the ideal solution to produce, fill and cap PET containers of various capacities and sizes, having simple or complex shapes, and offer significant advantages in economic terms, as they do not require the presence of the rinsing machine, the conveyor belts between blow moulder and filler and the accumulation conveyors, all of which are provided in the case of separate machines. All the ECOBLOC® models are equipped with an innovative system that transfers

the containers, minimizing the risk of contaminating the product to be bottled and increasing the machine's overall performance. Furthermore, the aforesaid models use exclusively latest generation filling technologies that offer the advantage of managing the filling cycle in a fully electronic manner. The filling parameters are selected directly via the operator panel, depending on the product, the container and the required production speed. The filling valves feature great simplicity of maintenance and cleaning, while format changes are quick and easy and do not require the replacement of any mechanical parts.

FLEXIBLE

AND DYNAMIC LINE END



S mipal's APS 3050P series palletizing system is very flexible and can be easily adapted to the line end logistics conditions of the F.A. Neptun production plant. The mechanical components housed in the machine's central column are driven by brushless motors that ensure fast, accurate and smooth movements on all operating axes. This is a solution which guarantees high process reliability, reduced maintenance and low operating costs of the palletizing system. The automation and control system on-board the machine has a simple and user-friendly HMI, which allows the user to quickly and easily manage all line end palletizing operations. Moreover, when you enter the specifications of the packaged pack, the size and number of layers, the system automatically displays all the possible palletizing patterns on the operator panel screen. The entire range of Smipal palletizers of the APS series is equipped with a standard, brand new, dedicated "safety PLC" for programming the

safety systems flexibly, reliably and efficiently. This PLC monitors the working efficiency of all the machine's safety devices, integrating them with each other, and creates intersecting safety areas within the plant's boundaries. This allows significantly reducing machine downtime, both in case of emergency and during the pallet or interlayer loading operations, etc. thanks to differentiated logics in the various areas of intervention. Hence, maintenance can be carried out very easily and any adjustments to future safety standards can be implemented in no time.





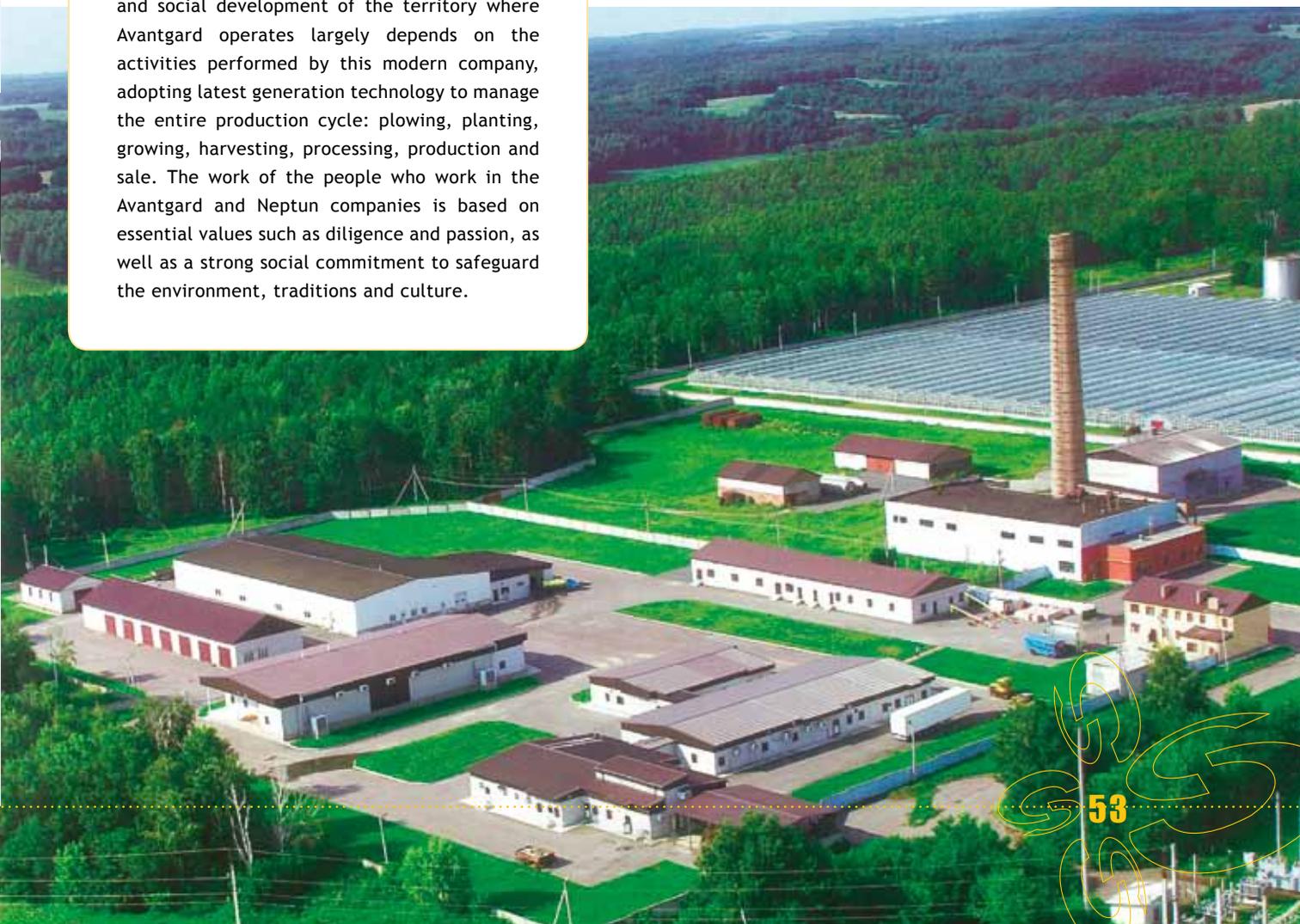
NEPTUN AND THE AVANTGARD FARM

F.A. Neptun's success is linked to that of the Borovik family, owner of the company, whose dedication to work, entrepreneurship and great ability to innovate continuously led the Ukrainian company to occupy a leading role in the country's economy. Besides Neptun, the Borovik family also owns and operates Avantgard, a company located in the town of Sverdlovka (not far from the Ostrechenska water source), which is one of the largest and most modern agribusinesses in Ukraine (it holds 3,025 hectares of farming land, of which 1,776 are cultivable). It produces many of the products grown on their agricultural expanses, made directly from their cattle farm (sausages, milk, yogurt, etc.). The economic and social development of the territory where Avantgard operates largely depends on the activities performed by this modern company, adopting latest generation technology to manage the entire production cycle: plowing, planting, growing, harvesting, processing, production and sale. The work of the people who work in the Avantgard and Neptun companies is based on essential values such as diligence and passion, as well as a strong social commitment to safeguard the environment, traditions and culture.



🌾 Above:

A.G. Borovik, owner of F.A. Neptun, with his grandsons Alexander and Anatoly.





THE CITY OF CHERNIHIV

Founded in the 13th century, the city of Chernihiv, also known as Chernigov, is an urban center of about 300,000 inhabitants. In the past, it was among the most important principalities of Kievan Rus', a medieval monarchical state (whose dawn was marked around the end of the 9th century in part of the territory including today's Ukraine, western Russia, Belarus, Poland, and the three Baltic states of Lithuania, Latvia and Estonia). It is considered the oldest organized East Slavic state, of which Kiev was the capital for a long time. Chernihiv, renowned for its many religious buildings of the 11th and 12th centuries, among the most beautiful in the country, is indeed one of Ukraine's oldest cities and also the regional center of the homonymous region, located to the right of the Desna River.



NEW SOLUTIONS FOR CONTROLLING THE PRODUCTION LINE



The bottling and packaging lines of the “food & beverage” sector must combine the need to preserve the quality of the finished product and maintain high levels of system efficiency. These goals can be achieved more easily if the production process is highly automated and adequately equipped with advanced control systems which control all the production stages. The management and monitoring systems developed by SMI in collaboration with SMITEC, the company of the SMI Group that deals with the design and production of hardware and software dedicated to industrial automation, are among the most innovative solutions available in this industry.

Specifically, SMI has developed a wide range of latest generation automation systems, able to efficiently respond to the requests of countless industrial sectors. We are talking about advanced devices of video-monitoring, based on a machine-mounted video camera connected to the control PC, which carries out an accurate real time visual analysis of the manufacturing process and ensures high levels of running efficiency, product quality, batch traceability, cost reduction and energy savings. Artificial vision systems are the best solution for checking the quality of the production as they ensure the automatic, reliable, objective and steady



monitoring, over time and even in high-speed systems, of a number of parameters set in the production line's control system, without the need for any manual intervention



by the operator. In this context, SMI recently introduced a technologically advanced control device based on a video camera mounted on Smiflexi packers' outfeed performing a real-time visual analysis of the sizes and characteristics of each pack produced and comparing the outcome with the specifications set in the packaging program. Using this type of control system, not only will you be able to check if the produced pack is present/absent or its size, but also know whether or not it has been properly made and closed, if it is damaged or torn and if, where applicable, a stamp or a sticker was applied to it, etc. Compared to traditional solutions based on simple sensors, which can detect only the presence/absence of the pack and its general characteristics, this new artificial vision system allows the user to greatly increase the quantity and quality of the checks performed automatically by the system's management program, relieving the line operator from this type of "at sight" monitoring activity. This system's high efficiency is achieved because you can set the parameters that each produced pack must have, compared to those of an ideal model. These parameters are entered in the system's control system, which will then use them as benchmarks for analyzing data from the camera. Input data relating to the quality parameters of the "master" pack can be taken from a library of type-packages available on the machine operator panel or directly from a physical sample, which is photographed to detect its technical specifications to enter them into the control system.

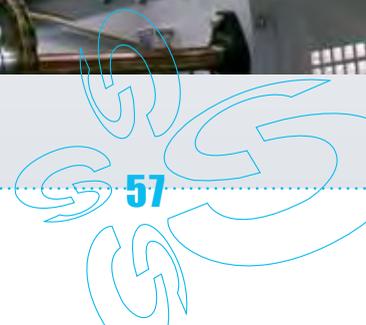
CONTROL CAMERA: THE EVOLUTION OF THE AUTOMATION SYSTEM

Thanks to new camera-based artificial vision systems, the industrial packaging world has made quite a breakthrough as compared to previous inspection solutions, since they not only detect the size of the pack but are also able to recognize any flaws and non-conformities with respect to set parameters.

Since no type of production can be said to be free from defects, most of which are visually detectable, this is why automatic quality control systems are among the most popular applications in the industrial world and allow companies to reduce costs associated with specialized operators to carry out the aforesaid activities, the handling of items to be rejected and production downtime due to manufacturing defects and flaws.

The camera control systems developed by SMI are very versatile and can be applied to all many types of machines available on the market.

Video cameras can be installed both on the outside of the machine, where they monitor the quality of the pack at outfeed, and inside the machine, as in the case of the camera used to check the spraying of the glue in the Smiflexi cardboard sleeve multipacker of the MP series.





SMIPAL & SMIFLEXI



At the last edition of Brau Beviiale 2014, SMI presented its "Packbloc Neo", i.e. an evolution of the integrated and compact end-of-line packaging system that SMI had launched in 2013. The new model presented in Nuremberg is an excellent example of how innovative ideas can be applied to the industrial sector

to reduce the overall dimensions of systems and production costs within automatic packaging lines. In fact, the integrated and compact structure of the Packbloc solution comprises functions, all grouped in only one small-sized system, which are usually performed by several machines, in sequence, connected by conveyor belts. Specifically, SMI's

Packbloc Neo system performs the operations of an automatic shrink film packer or an automatic wrap-around case packer, a fixed-column automatic palletizer and a pallet wrapper.

INCREASINGLY COMPACT END OF LINE WITH **PACHBLOC NEO**



The integration of multiple machines in a single compact structure offers considerable advantages from the standpoint of operational flexibility and reduction of costs and energy consumption, as it virtually eliminates the need to install long stretches of conveyor belts (usually required to connect various standalone units to one another),

allowing a single operator manage the entire system. More in detail, the "Neo" solution presented by SMI at Brau Beviiale 2014 included a Smiflexi model LWP 30 wrap-around case packer built into a Smipal model APS 1550 P palletizer, which in turn integrated an "Easy round" turntable wrapping machine, supplied by Pieri, into its own structure.



STURDY AND ELEGANT PACKAGES:

LWP 30

CASEPACKER

The automatic LWP 30 wrap-around case packers produced by SMI, suitable for production speeds up to 30 packs per minute, stand out in the “entry-level” packaging machine market for a number of technical features which place them at the top of the reference range. More in detail, machine adjustments in these systems are made by means of convenient cranks and useful numeric counters, which allow the operator to switch from one pack format to another simply, quickly and accurately without having to use any tools. Furthermore, the cardboard blanks are picked up by a mechanical system that ensures precise synchronization with the other operations performed by the packaging machine. The

blanks used in making the finished boxes are transferred from the cardboard blanks magazine to the main work surface smoothly and uninterrupted, by an innovative up-going, slightly curved system that

significantly improves continuity in the feeding of the packaging material. Smiflexi's LWP series new wrap-around case packers have a compact and solid frame, able to adapt easily to any logistic condition



of the production plant in which they are installed. These case packers also mount brushless motors that drive the axes, i.e. a "green motion automation" solution which allows the user to reduce energy consumption. The LWP series packaging machines can also be equipped with accessory devices that increase their level of efficiency such as, for example, the camera control system. It is mounted at packer outfeed to inspect every single pack produced, to detect its size characteristics and correct closing; it also rejects any pack automatically, in case it does not comply with the quality parameters entered in the production program. The foregoing control system can be further automated by installing a new device for ejecting and unloading of defective packs consisting of a conveyor belt that runs on free ball bearings. This belt carries the non-conforming pack to the outside of the production line by gently acting on the bottom of the pack instead of pushing it abruptly on the sides (as occurring in traditional ejection systems).



PALLETIZER:

APS 1550 P

The heart of the compact and integrated Packbloc Neo system is the new Smipal APS 1550 P palletizer, the evolution of the APS Plus series, which houses all the movable mechanical components within the fixed central column, i.e.: the cross-member that supports the layer-loading head that moves up and down on the column, the layer-loading head (the so-called "basket") which performs fast and accurate horizontal movements along the cross-member thanks to a telescopic guides system and, finally, an articulated arm based on SCARA technology, which performs both vertical and horizontal movements to feed the empty pallets and insert the cardboard pads between layers. All the vertical and horizontal movements of the mechanical components of this SMI palletizing system are managed by

the machine's automation and control system, which establishes precise and coordinated trajectories for each one, in perfect synchrony with the operations performed by the layer-loading head, so that the machine's various components will never touch or interfere with one another.

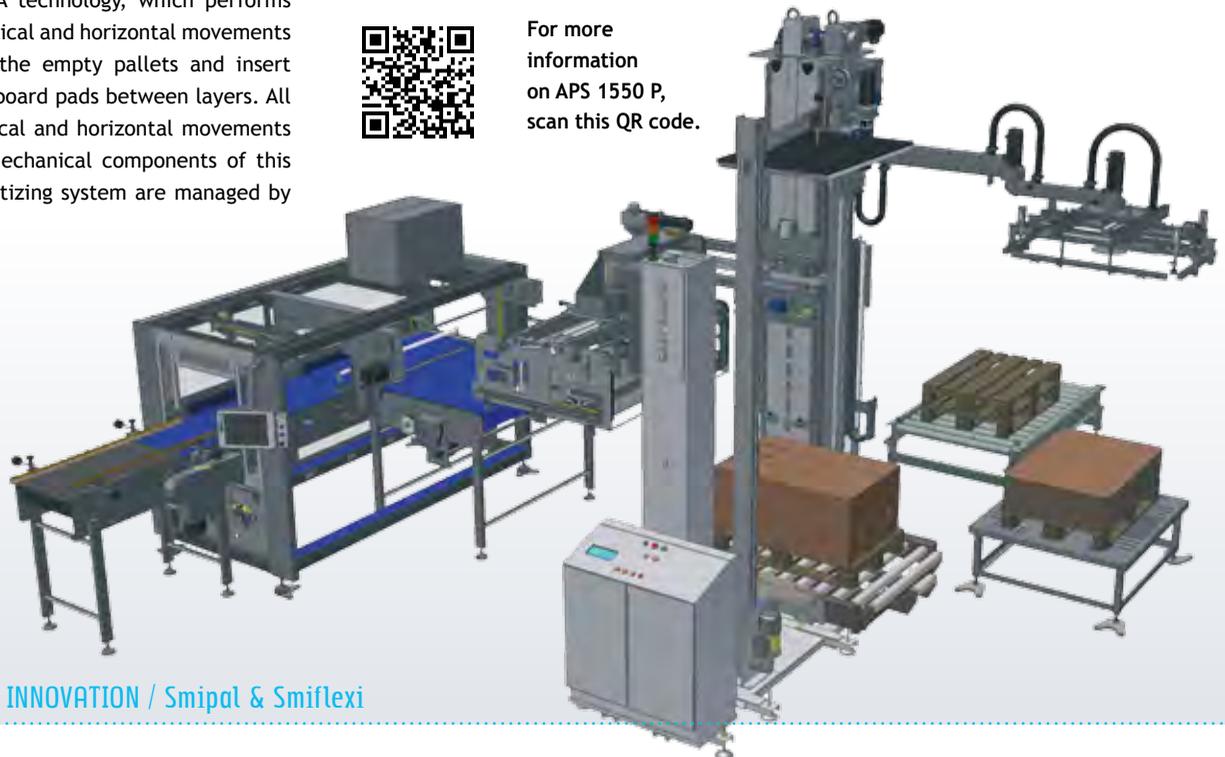
- **Continuous-flow layer formation**

Among the innovative features of the new Smipal APS 1550 P model palletizer, presented at the last edition of Brau Beviare, one that is definitely worth

mentioning is the layer the machine's infeed section with pre-composition system, which comprises a pack rotation device equipped with belts running on free ball bearings, a row-formation belt and a layer-formation belt. In the new system proposed by Smipal, packs are rotated in the palletizer's infeed section, before the row is formed, through an innovative conveyor belt fitted with free ball bearings. By setting this function in the palletizing pattern, these bearings impart rotary motion to the bottom of the transiting pack. This



For more information on APS 1550 P, scan this QR code.



feature avoids the drawbacks linked to traditional pack-turning systems in which the pack is turned by making it collide against a fixed blocking element located above the sliding belt. The next step involves the formation of a row of boxes which is pushed by a thrust bar to a layer-formation "parking" belt that waits for the next rows. From here, another thrust bar inserts the complete layer into the grasping head, the so-called "basket", which finally transfers it to the pallet being created.

• **Orderly and efficient end of line**

The compact design of the APS palletizing systems lets you combine the use of forklifts, transpallets and packaging material all together within a bounded area, thereby minimizing the management of the loading and unloading operations. Furthermore, the integration of multiple functions (all housed in the central column) offers considerable advantages as far as operating flexibility, workplace safety and machine maintenance are concerned. Even the use of digitally-driven brushless motors improves system flexibility, increases the



**"EASY ROUND"
TURNPLATE WRAPPER**

The compactness and efficiency of the Packbloc solution proposed by SMI were further enhanced by integrating a turnplate pallet wrapper in the palletizer's structure, the "Easy Round" model supplied by Pieri, which wraps the individual layers as soon as they are placed on the pallet.

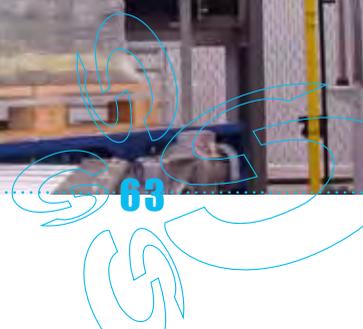
In fact, the configuration of the Packbloc Neo packaging system showcased at the last edition of Brau Beviiale featured the wrapping of the pallet in wrap-around film simultaneously with the formation of its layers, thereby eliminating dead time typical of other solutions in which the wrapping takes place once the pallet is finished.

This solution is especially suited to the palletizing of unstable containers such as, for example, loose 5 to 10-liter bottles not packaged in cardboard trays and which remain firmly placed on the pallet, as it advances on the machine's conveyor belts, thanks to the wrapping of the single layer.

In the "Easy Round" wrapper, load stability is further increased by an optional device consisting of a "push-down" arm which moves downward to keep the entire pallet compact as it turns on the plate to wrap the single layers with the wrap-around film.

accuracy of mechanical movements and reduces changeover times and energy

consumption, as compared to systems equipped with geared motors.



SMILAB

RESEARCH FOR INDUSTRY



S MILAB is a nonprofit research, training and consulting body which conducts, in partnership with universities and businesses, scientific and technological research, experimentation, development, technology transfer and staff training. SMILAB's activity began in 2008 and, thanks to a network of international collaborations, has achieved outstanding results through its research and innovation projects. SMILAB is registered in the National Register of Research at the Ministry of Education, University and Research (MIUR), which accredited its laboratories. It also obtained accreditation from the Lombardy and Veneto Regions as "Center of Research and Technology Transfer - CRTT" and can now provide "Technology Vouchers".



SMILAB's "mission" is to strengthen cooperation between the world of research and the world of companies through the transfer of new and innovative technologies, developed in its own laboratories, to the industrial production sector, an example of which is the "Touchplant" project, launched in January 2014 in conjunction with the University of Bergamo and the Milan Polytechnic.



TOUCHPLANT

THE ORIGINS OF THE PROJECT

The “Touchplant” project was created to meet the needs of two SMILAB partners: COSBERG (manufacturer of assembly systems) and INDEVA (manufacturer of industrial manipulators), who decided to launch a research project to develop innovative remote monitoring and control techniques of machines and industrial systems through the use of modern wireless technologies and MID terminals



(handheld devices, subnotebooks, smartphones, tablets, etc.). SMILAB was invited to participate in the foregoing project, also supported by Intellimech (consortium of 17 high-tech companies committed to interdisciplinary research) thanks to the skills of its staff and credits obtained, making it an authoritative firm towards funding bodies. Specifically, SMILAB conducted research and provided the technologies, subject-matter of the project, in collaboration with the Departments of Engineering of the University of Bergamo and the Milan Polytechnic.



Schwerelos...

- Heben
- Bewegen
- Positionieren
- Stapeln

LIFTRONIC EASY

- automatische Lasterkennung
- elektronisch gesteuert
- schnell, präzise
- ergonomisch
- kompakt, handlich
- keine Schalter oder Bedientaster

Wir entwickeln Sicherheit und Ergonomie im Bereich Materialhandling.

INDEVA
INTELLIGENT DEVICES FOR HANDLING

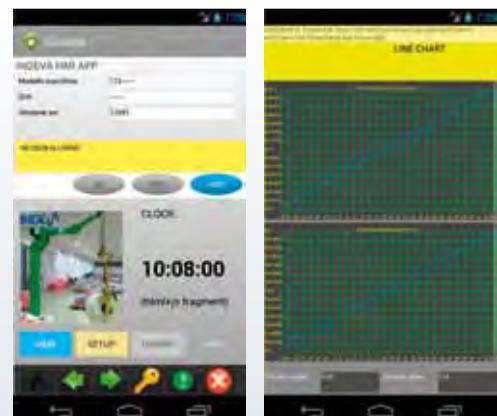
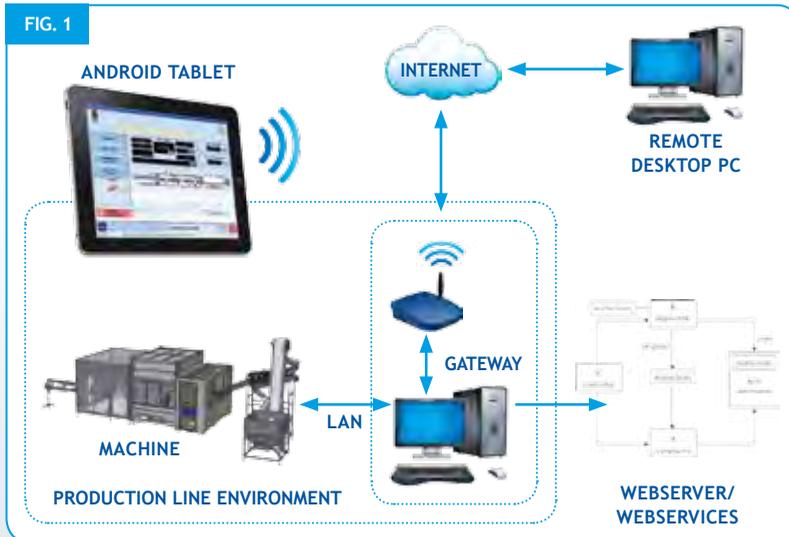
Italgia INDEVA GmbH | Ennsstraße 40A | D-70376 Stuttgart
Tel. 0711 505 92 20 | Fax 0711 505 92 21
mail: info@de.indevagroup.com | www.indevagroup.com

Wir stellen aus auf der LogMAT
in Stuttgart vom 02.03.-04.03.2010, Halle 7, Stand 411



• Description of the project

Touchplant's main goal is the development of a hardware and software platform, featuring the connection between machines manufactured by the companies participating in the project and MIDs (Mobile Internet Devices). This communication platform is available in two "demonstrators": one relating to the use of MIDs to monitor all the machines installed at the customers' facilities (the "vendor-side"), the other relating to their use to increase the number and quality of services the manufacturer offers to its customers (the "user-side"). Any industrial machinery, including existing machinery (shown on the left side of fig. 1), can be connected to an MID terminal in bidirectional wireless mode through an additional hardware card to be installed in its control electronics. The computational capacity of the MID (handheld device, subnotebook, smartphone or tablet) is such that it can reprocess data flow in both directions (from and to it) and towards the two points of interconnection (machine and manufacturing company).



THE IMPORTANCE OF QUALITY MANAGEMENT SYSTEMS, ENVIRONMENT AND SAFETY

Among the many activities undertaken by SMILAB, one must not leave out the one pertaining to training and consultancy to companies in terms of quality management systems, environment and safety (ISO 9001 - ISO 14001 - OHSAS 18001).

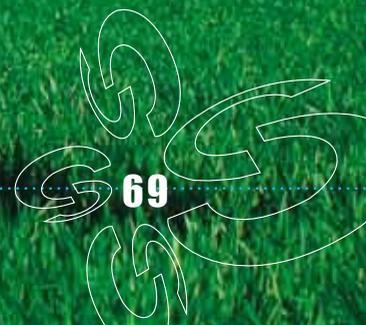
Depending on the size of the business partner, SMILAB provides a kind of

customized support which can even include the direct management of all the aforesaid issues in the most complex cases.

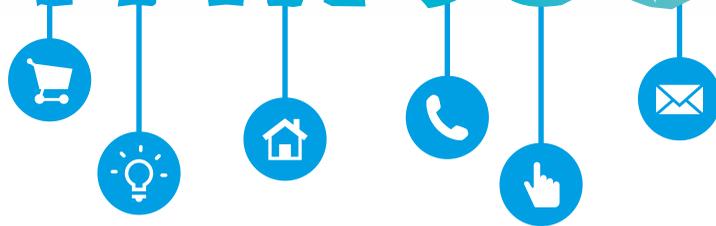
SMILAB's "mission" is to strengthen cooperation between the world of research and the world of companies by helping its partners grow and develop according to management systems of proven reliability.

This goal is achieved by implementing procedures and management rules which are streamlined, clear and shared by the various business skills and company departments, making it easier to meet standards.

Among the aforesaid activities, one must undoubtedly mention the "case history" of the Mai Dubai LLC industrial site, to which SMILAB provided its consultancy in terms of QHSE company management (Quality, Health, Safety, Environment), as well as the organization of training and refresher courses required by Decree 81/08 on workplace safety and other issues.



INTERNET *of* THINGS



THE GOALS AND BENEFITS OF “TOUCHPLANT”

The aim of the Touchplant project is to increase and simplify man-machine integration by generating customized information, which varies according to the skills and knowledge of the end user. This system allows users to have a number of features and information always at their “touch”: from specific data of a single machine to the performance indicators of the entire plant, up to the possibility of integrating smart devices directly in the supervision and control system (Smartphone-in-the-loop). From the end users' viewpoint, the high degree of automation on-board the machine ensures greater output as well as the reduction of running costs, thanks to appropriately automated monitoring systems. One of these systems' limits,

based on dedicated HW, is currently represented by the fact that they are isolated and weakly interconnected with other computer systems, making it somewhat difficult to adequately monitor industrial systems. On the contrary, in the Touchplant system the modern technologies used by the MIDs (Mobile Internet Devices) allow the exchange of organized and integrated

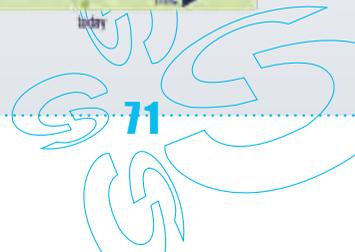
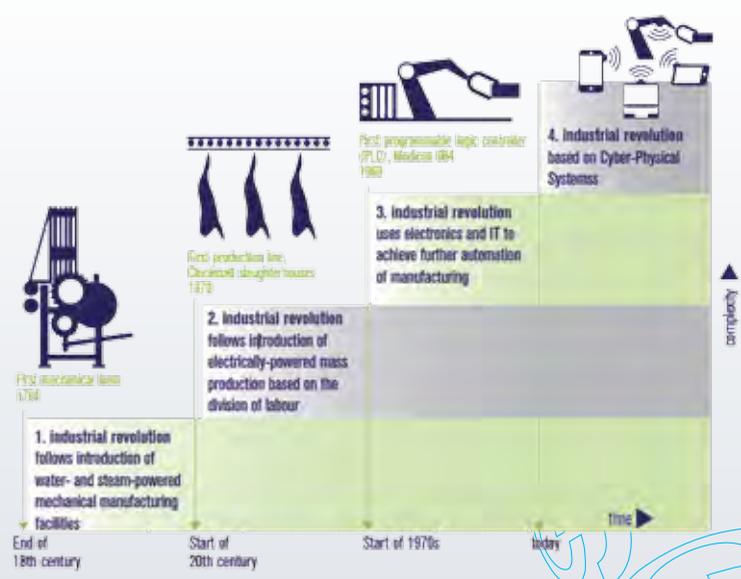




HOW TO FINANCE A RESEARCH PROJECT

There are countless examples of SMILAB research activities, offering end users a remarkable contribution to the development of products and services with high technological content. In fact, the use of sophisticated equipment by SMILAB, such as 3D printers, enables customers to make strategic choices in technical innovation, both effectively and successfully, thanks to lab testing of prototypes and sampling, prior to the release of new products and systems. The research and innovation projects managed by SMILAB can benefit from the contributions and financial support provided by public and private agencies and organizations at regional, national and European Union level (Horizon 2020 energy efficiency program). The recent "Touchplant" project, for instance, falls within this category, funded by the Lombardy Regional Government and the Cariplo Foundation. The economic support of these two prestigious institutions aims to upgrade the research agency's test labs, internationalize its activities and implement a close cooperation between companies and universities. Foreign and Italian researchers participating in this twenty-month-long project are directly involved in the development activities of the participating companies.

information, without geographical constraints, thereby ensuring efficient and detailed diagnosis and controls of machines and industrial plants wherever they may be. The technological development of communication infrastructures will increasingly enable the evolution of devices and systems to systems that are strongly interconnected by the internet (Internet of Things, Industry 4.0).



A LEAP IN TURNOVER

THE SMI GROUP RANKS FIRST IN ITALY

According to data reported in the annual rankings of the research department of Mediobanca, the SMI Group has established the Italian record in the increase in turnover in 2013 (+28%) from € 91 million in 2012 to over € 117 million the following year. Data taken into account by the Mediobanca research relate to all Italian companies with a turnover of less than € 3 billion or those that employ more than 499 employees. What are SMI Group's secrets of success? Undoubtedly innovation, flexibility and the excellent price/quality ratio of its products. In

From left

Paolo Nava, SMI President and CEO, Bruno Nava, SMI Executive Officer and Ennio Nava, SMI Executive Officer.



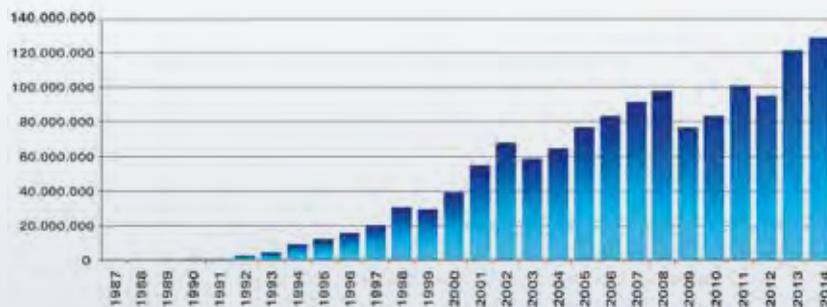


recent years, the SMI Group has indeed made significant investments in research and development, not only by innovating products or processes but also improving the working environment. Especially with regard to the latter, the Bergamo company did things in grand style by inaugurating its new headquarters in 2014 over an industrial area of 65,000 square

meters, within which it implemented unique environmentally sustainable solutions. These solutions enabled the SMI Group to bring together under one roof all the offices and departments involved in the pre-assembly, assembly, testing and shipment of machines and systems, ensuring flexibility and prompt responses to customers.



SALES REVENUES (€)



**Note: in 2009 SMIWRAP permanently ceased production.*

SMIPASS

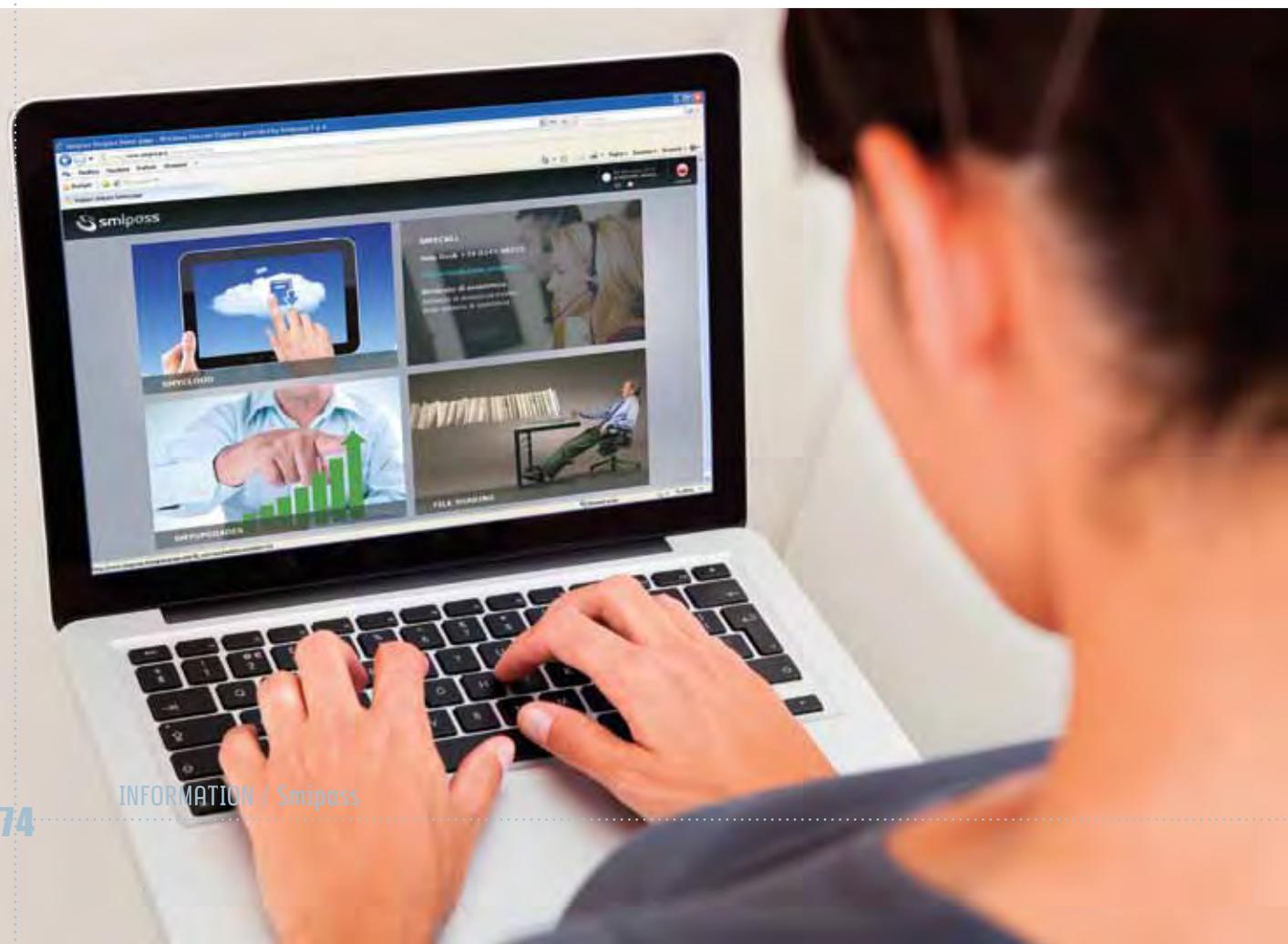
THE ACCESS KEY TO SMI SERVICES



SMI is a customer-oriented organization committed to the design and manufacture of high-tech systems for the bottling and packaging of a wide range of products for multiple industries.

Investments in advanced technologies are designed to fully meet customer expectations in terms of efficiency, reliability, flexibility and energy saving.

But SMI's responsibility goes far beyond the commissioning of the machines it supplies and comes to fruition through a set of after-sales services which constantly support its customers, to ensure the smooth



operation of their systems and the timely achievement of their production goals.

SMI customers can benefit from the many advantages offered by Smipass information technology, the new web platform based on technical after-sales support via the Internet.

Smipass is an area of the www.smigroup.com website created to bring together in a single environment all its after-sales services on-line, to which SMI customers can log-in at any time to view, among other things, a constantly updated database of current information about their machine and to receive assistance and technical advice from SMI, promptly and efficiently.



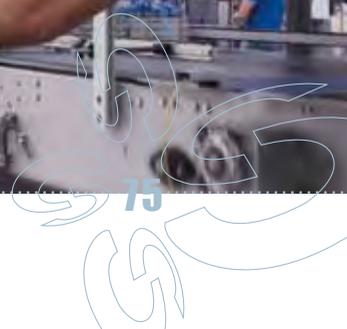
80
specialized technicians
with broad
experience

5326
machines
installed
worldwide

9
spare parts
warehouses in Italy
and abroad

Product Life Cycle Management

PLAN SOLVE MAINTAIN ENHANCE



SPARE PARTS & UPGRADES

HOW TO IMPROVE INSTALLED MACHINES



The Spare Parts & SmyUpgrades service area features a wide range of services and solutions designed to prevent the decline of efficiency of SMI machines during their lifecycle. In fact, most of the existing systems can be upgraded with the latest technologies thanks to special upgrade kits installed by skilled technicians, by implementing new applications, additional format changes and new accessories. All information about available upgrades can be found at www.smigroup.it/upgrade.php. Also, from October

2014 the orders management of spare parts in store provides an additional service: all orders received by SMI headquarters from Monday to Thursday will be processed within the next day while those received on Friday will be processed by Saturday morning. In order to maintain high levels of efficiency and



productivity in your SMI machines, there is also an extensive original spare parts catalog, which can be requested to SMI's headquarters in Italy (all types of spare parts) or to SMI foreign branch next to your plant, which can solve your problem promptly by providing the most indispensable parts on site. SMI has also extended

the procedures for requesting original spare parts by introducing a range of services based on modern information technology and web applications. The latest innovations introduced by SMI now allow you to identify the spare parts to be ordered by scanning the QR code of the components mounted on the machine, requesting an offer

manuals, spare parts manuals and wiring diagrams associated with their machines. Customers also have the option of downloading technical documentation and saving it in pdf on their computer or tablet and automatically generating requests for spare parts offers by simply clicking on the drawing that depicts them.

online and managing orders easily and quickly directly via your own PC, tablet or smartphone. You can also request your spare parts through S m y C l o u d , SMI's innovative multimedia digital library of SMI, to which authorized users can log in 24/7 to interactively c o n s u l t operating and maintenance



SMI HELP DESK NEVER LEAVES YOU ALONE

SMI customers can benefit from the Customer Service Center (CSC), which provides custom service "on-site" and "on-line", carefully designed to plan, resolve, maintain and improve the performance of the systems supplied, throughout their life cycle. SMI's integrated after-sales service was designed according to Product Lifecycle Management principles and makes it possible to agree, together with the customer, which interventions are necessary to prevent system efficiency from running down, maintaining over time a high degree of operational flexibility, energy saving, return on investment and minimizing total costs. Therefore, SMI technical staff is available to the customer, anywhere in the world, to provide technical support and advice promptly and efficiently. Moreover, from October 1 2014 the operators of the company's technical support and spare parts offices have extended their service to customers so that now they can be reached by calling direct number +39 0345 40255 Monday to Friday from 7 a.m. to 7 p.m. (GMT+1) and on Saturday from 7 a.m. to noon (GMT+1). Besides these office hours, always calling +39 0345 40255 you can get in touch with an active emergency technical service: Monday to Friday from 7 p.m. to 10 p.m. (GMT+1), on Saturday from noon to 10 p.m. (GMT+1) and on Sunday (and all public holidays) from 10 a.m. to 10 p.m. (GMT+1).

+39 0345 40255



ANUGA FOOD TEC

THE INTERNATIONAL EXHIBITION OF FOOD & BEVERAGES TECHNOLOGY



The SMI Group's 2015 fair calendar opens with a prestigious event in the food and beverage sector: Anuga FoodTec.

From processing to packing and packaging technologies, from ingredients to food safety and quality management up to logistics and handling, Anuga FoodTec showcases the full range of the processing and packaging chain of the "food & beverage" sector.

The appointment is in the German city of Cologne from 24 to 27 March 2015, where it is estimated that there will be over 43,000 visitors who will have the opportunity to learn about the latest innovations in the food processing, packaging and food safety fields.



koelnmesse

During this important event, SMI's stand will be showcasing a Smiflexi model SK 500F shrinkwrapper equipped with an AISI stainless steel frame.

This is the ideal solution for packaging at the max speed of 50 packs per minute, that uses, for fair demos, 1x2 clusters of 100 g glass jars containing fruit pulp packed in the film-only 6x4 collation.



**WE
WILL BE
ATTENDING...**

Hispack

Barcelona
SPAIN
21-24 APRIL

DJAZAGRO
THE CROSSROADS OF FOOD INDUSTRIES

Algiers
ALGERIA
20-23 APRIL

**ipack
ima**
2015
PROCESSING & PACKAGING
Piemonte 11-12-13-14 May 2015

Milan
ITALY
19 - 23 MAY

**EXPO
PACK**
2015
Mexico

Mexico City
MEXICO
16-19 JUNE

Fispal

São Paulo
BRAZIL
23-26 JUNE

**PACK
EXPO**

Las Vegas, NV
U.S.A.
28-30 SEPTEMBER

SCANPACK

Gotenburg
SWEDEN
20-23 OCTOBER

PET
PETechnology

**BRAU
Beviale**

Nuremberg
GERMANY
10-12 NOVEMBER

Andina-Pack
International Packaging Exhibition

Bogotá
COLOMBIA
10-13 NOVEMBER

CBST

Shanghai
CHINA
20-22 NOVEMBER





SMI S.p.A. Headquarters

S. Giovanni Bianco (BG), Italy
Tel.: +39 0345 40111
Fax: +39 0345 40209

SMIPACK S.p.A.

S. Giovanni Bianco (BG), Italy
Tel.: +39 0345 40400
Fax: +39 0345 40409

SMIMEC S.p.A.

S. Giovanni Bianco (BG), Italy
Tel.: +39 0345 40111
Fax: +39 0345 40708

SMITEC S.p.A.

S. Pellegrino Terme (BG), Italy
Tel.: +39 0345 40111
Fax: +39 0345 40809

SMILAB S.r.l.

S. Pellegrino Terme (BG), Italy
Tel.: +39 0345 40111
Fax: +39 0345 40895

SMI USA Inc.

Atlanta, GA, United States
Tel.: +1 404 7999929
Fax: +1 404 9946414

SMI Centroamericana S.A. de C.V.

Mexico City, Mexico
Tel.: +52 55 5355 3870
Fax: +52 55 5354 5384

SMI do Brasil Ltda.

São Paulo, Brazil
Tel.: +55 11 36015334
Fax: +55 11 36937603

SMI Benelux BVBA

Turnhout, Belgium
Tel.: +32 14706751
Fax: +32 14703281

OOO SMI Russia

Moscow, Russian Federation
Tel.: +7 495 7206797
Fax: +7 495 7206797

SMI East Europe S.r.l.

Timisoara, Romania
Tel.: +40 256 293932
Fax: +40 256 293932

SMI S.p.A. - Dubai Rep. Office

Dubai, UAE
Tel.: +971-4-8063543
Fax: +971-48160010

SMI Machinery Beijing Co.Ltd

Beijing, People's Republic of China
Tel.: +86 10 6947 9668

*Guangzhou, Guangdong,
People's Republic of China*
Tel.: +86 20 8439 6460
Fax: +86 20 8439 8391

*Nanjing, Jiangsu,
People's Republic of China*
Tel.: +86 258 470 4716
Fax: +86 258 470 4776

SMI Asia Services Sdn. Bhd.

Shaah Alam, Selangor, Malaysia
Tel.: +603 5103 5368
Fax: +603 5191 3368

SMI Pacifica Pty. Ltd.

Melbourne, VIC, Australia
Tel.: +61 3 95843622
Fax: +61 3 95843633