

BEBIDAS REFRESCANTES DE NOGALES

WE HEAR MORE AND MORE ABOUT SUSTAINABLE GROWTH, INTENDED AS AN ESSENTIAL CONDITION TO GENERATE RICHES FOR THE COMMUNITY, TO RESPECT AND TAKE CARE OF THE RESOURCES USED AND TO ENCOURAGE A CORRECT AND BALANCED STYLE OF CONSUMPTION. IN THE FIELD OF INDUSTRIAL BEVERAGES, SUSTAINABILITY PLAYS AN IMPORTANT PART AND INVOLVES ABOVE ALL THE PACKAGING, WHERE A LOT OF FACTORS ARE INVOLVED, AMONG WHICH, THE RAW MATERIALS USED, AND ENERGY CONSUMED TO PRODUCE A SPECIFIC PACKAGING. FOR THIS REASON, TECHNOLOGICAL INNOVATION PLAYS A CRUCIAL ROLE IN HELPING THE BOTTLING COMPANIES CHOOSE "PACKAGING" SOLUTIONS THAT HELP TO REDUCE WASTE, OPTIMIZE RESOURCES, ENSURE GROWTH AND RESPECT THE ENVIRONMENT, AS CAN BE SEEN THROUGH THE EXPERIENCE OF THE MEXICAN COMPANY BEBIDAS REFRESCANTES DE NOGALES S.A.P.I. DE C.V.

- BEVERAGES SECTOR
- BEBIDAS REFRESCANTES DE NOGALES
- Industria Mexicana de Coca-Cola Group
- Ave. Tripoli, Nogales, Mexico
- CSK 40 F ERGON packer
- Conveyors



GEO LOCATION

THE SUSTAINABLE CHOICES OF COCA-COLA NOGALES



Un paso más hacia la botella del futuro.

Hecha hasta con 30% de material de origen vegetal. 100% reciclable.



Sustainability is not a new topic for The Coca-Cola Company and for all the companies in its group, among these Bebidas Refrescantes de Nogales (BRN) an important bottling company in Mexico and part of the Mexican Coca-Cola industry. It is intensely active towards constant sustainable growth and environmental respect, as can be seen through recent investments to modernise

the production and bottling line of the famous drink in PET bottles. A new SMI packer from the CSK 40 F ERGON series, complete with a methane gas shrink tunnel was installed within this line. Global commitment to innovation is the main motor for sustainable growth and for this reason it is fundamental to continually invest in innovative installations and systems designed to allow the world of industry to successfully follow its development plans, respecting the territory where it operates.



ABOVE FROM LEFT: MANUEL CASTRO, PLANT GENERAL MANAGER OF BEBIDAS REFRESCANTES DE NOGALES AND SERGIO PEREZ, SALES MANAGER OF SMICENTROAMERICANA.

↓ | **BELLOW FROM LEFT:** EMANUEL CARRANZA, PRODUCTION MANAGER OF BEBIDAS REFRESCANTES DE NOGALES; SERGIO PEREZ, SALES MANAGER OF SMICENTROAMERICANA AND RAFAEL OBREGÓN, FINANCIAL CONTROLLER OF BEBIDAS REFRESCANTES DE NOGALES.



INNOVATION AND SUSTAINABILITY: THE MOTORS OF COLLABORATION

Coca-Cola's model of sustainability is based on healthy and active life styles, on the importance of a balanced diet, on product and packaging innovations, and on environmental protection. Coca-Cola believes that the innovations that will have the greatest impact over the next decades, will come from the application of various forms of sustainability, for this reason the company is working to incorporate sustainable

innovations both globally and locally in every aspect of its activity, from its ingredients, to the expansion of varieties of beverages, from the rendering of used water to avoid waste, to the recycling of the packaging. The area and range of the global challenges of today require a model of cooperation based on what the American multinational defines as the "golden triangle", that is the meeting point between institutions, private businesses and civil companies.



BRN'S COMMITMENT TOWARDS A HEALTHY LIFESTYLE AND THE ENVIRONMENT

Bebidas Refrescantes de Nogales (BRN), like all the other companies that are part of the Coca-Cola group, understands the importance of promoting the culture of a healthy lifestyle with many different initiatives that encourage physical activity and personal care. The success of these is possible, thanks to the constant commitment of all the company "stakeholders", together with the government's efforts and the local communities to develop programs that contribute to a healthy lifestyle. The Mexican company invests continually in innovations for its portfolio of products, to offer a greater variety of beverages with fewer calories and suitable for the tastes and thirsts of its consumers. BRN promotes sport activities in schools involving a high number of people, and favours cultural development through events and exhibitions. Among the activities carried out each year there is a day dedicated to cleaning creeks and the surrounding areas, and creating and maintaining green areas etc.



The Coca-Cola Company

The biggest beverage producer in the world which for over 132 years has refreshed its consumers with over 500 carbonated and non-carbonated drinks. Apart from the world-famous Coca-Cola drink, the

company is proud of having a portfolio of many other branded drinks like Coca-Cola Light, Fanta, Sprite, Coca-Cola Zero, Vitaminwater, Powerade, Minute Maid, Simply, Georgia and Del Valle. Globally, The Coca-Cola Company is the market leader with its range of carbonated drinks,



ready-made coffee and juices. Thanks to one of the largest distribution systems in the world, consumers from more than 200 companies choose beverages from The Coca-Cola Company, with around 2 billion beverages consumed every day in every corner of the planet. With continual commitment to create a sustainable system, the American multi-national concentrates on initiatives that protect the environment, promote healthy, active lifestyles, create a safe work environment for its employees, and improve economic development in the community where it operates. Together with its bottling partners, it is among the top 10 companies in the world and has more than 700,000 employees.

COCA-COLA HAS BEEN PRESENT IN MEXICO FOR MORE THAN 90 YEARS, THE PRODUCTION AND DISTRIBUTION OF ITS BEVERAGES IS CARRIED OUT BY A NETWORK OF COMPANIES COMPRISING COCA-COLA MEXICO, EIGHT GROUPS OF

BOTTLING COMPANIES (ONE OF WHICH BIODIFESA RINFRESCARE DE ALESSANO), JUGOSLAVO DEL VALLE AND SANTA CLARA. THESE MEXICAN COMPANIES ARE TOTALLY INDEPENDENT BUT OPERATE WITHIN THE UNIQUE SYSTEM OF THE SAME CRITERIA AND THE SAME POLICIES THAT DISTINGUISH COCA-COLA AROUND THE WORLD.



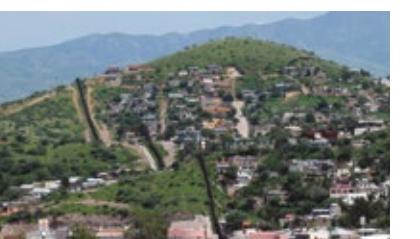
THE MARKET FOR CARBONATED DRINKS IN MEXICO

#WELCOME TO MEXICO

THE BEBIDAS REFRESCATES DE NOGALES (BRN) PLANT IS SITUATED A FEW KILOMETERS FROM THE BORDER BETWEEN MEXICO AND THE UNITED STATES OF AMERICA. THE HISTORY OF THE CITY OF NOGALES IS PART OF THE LONG HISTORY OF THE 2,000 MILES OF BORDER THAT DIVIDES THE TWO COUNTRIES.

Nogales Sonora, which is in Mexico, and Nogales Arizona, in the United States, are in fact two cities divided by a wall which is now part of the imaginary border. But it wasn't always like this, once upon a time, the roads, that are now interrupted by barbed wire and border check-points, were roads in the same city, the city of Nogales. No other section of wall is as impressive as that of Nogales, which, built in 2011, has the aim of separating the two cities, north and south, which have kept the same name. Thanks to its position on the border, this area is one of the most important points of entry for American tourists. The city-centre, which has around 250,000 inhabitants, is alive with bars, hotels and restaurants that serve varied culinary specialities, and a high number of shops that sell a huge variety of local, handmade objects, which also come from the central and southern parts of the country.

STARTING FROM THE LEFT:
PAOLO MAGARINI, SALES MANAGER AT SMI; MANUEL CASTRO, PLANT GENERAL MANAGER OF BEBIDAS REFRESCANTES DE NOGALES AND SERGIO PEREZ, SALES MANAGER AT SMICENTROAMERICANA.



In 2017 the consumption of carbonated drinks in Mexico, grew by 2%, which compared to 2016, showed a decrease. This reduction in consumption is attributable to a series of reasons, including the introduction of a sugar tax on beverages, and the earthquakes which hit the country. Coca-Cola is the proven brand leader in Mexico, and the company's strategy to strengthen its market position pushed it to add further to its portfolio, with low sugar content and low-calorie products. The launch of Coca-Cola Zero Sugar (which has substituted Coca-Cola Zero) has benefited from an intense marketing and promotional campaign, and it is foreseen that in 2018 the consumption of carbonated beverages will rise, even if at a slower pace compared to the past. From a "packaging" point of view during 2017 two main trends have been recorded mainly caused by different consumer habits. In the cities, more single use PET bottles have been consumed, while in the rest of Mexico consumers prefer the more economical multi-pack.

BEBIDAS REFRESCANTES DE NOGALES

Year of foundation: 1957

Group: Industria Mexicana de Coca-Cola

Activity: Bottling and distributing products under Coca-Cola brand

Customers: over 6,000

Distribution centres: Agua Prieta, Cananea and Nacozari.

Objective: to offer soft drinks to consumers together with quality services that satisfy their needs, improving the company's output, relationship and collaboration with the community where it operates.

Values: honesty, responsibility, commitment to its services, loyalty, and working as a group.

(Global Data – Mexico soft market Insights - May 2018)



SMI SOLUTIONS

FOR BEBIDAS REFRESCANTES DE NOGALES



For the secondary packaging of the PET bottles, produced under the brands Coca-Cola and Ciel, Bebidas Refrescantes de Nogales turned to SMI, purchasing a compact wrapper from the CSK range equipped with a methane gas shrink-tunnel, and a conveyor system to transport the loose and packed bottles. The installation of the new CSK compact packer was the most suitable choice, as these technological cutting-edge packaging machines are distinguished for energy saving, environmental respect, advanced automation and flexibility of use. The CSK ERGON series comprises numerous models, each with a compact and ergonomic design which incorporates the leading technology within the sector, capacity to work up to 50+50 packs/minute (maximum speed is according to the bottle capacity and pack format), in shrink-film only, cardboard pad + film or in tray + film (according to the model).

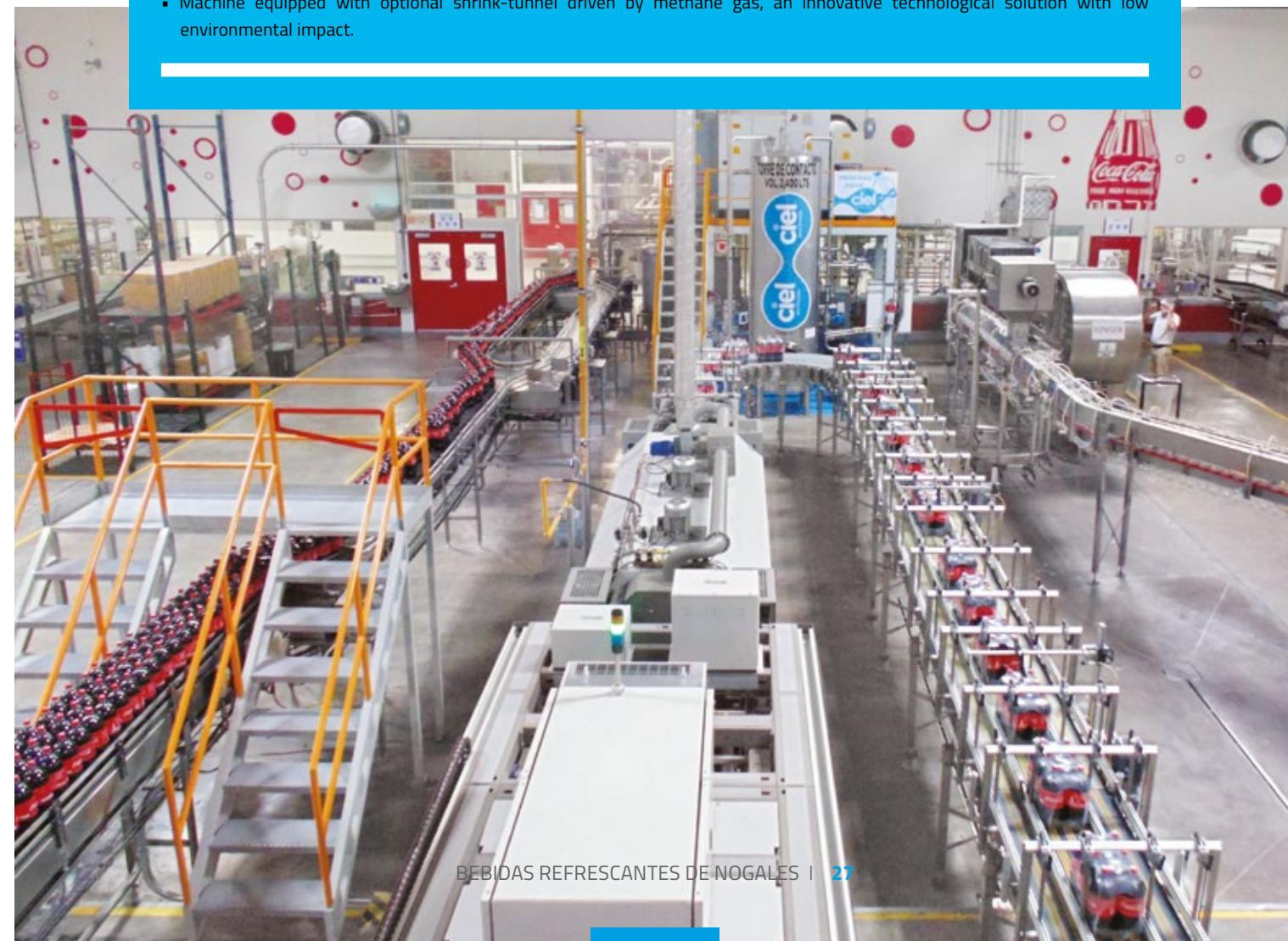
→ CSK 40 F PACKER – Production up to 40 packs/minute

Packed products: PET bottles in 0.6 L / 1 L / 1,5 L / 2 L and 3 L

Packs worked: formats 3x2 twin-lane in film-only and 4x3 and 6x4 single lane film-only for the 0.6L PET bottles. Format 4x3 in film-only for 1L and 1,5L PET bottles. Format 4x2 film- only for the 2L bottle and 3x2 film-only for the 3L bottle

Main advantages:

- Packer equipped with motorized system of oscillating guides situated at the machine infeed to facilitate the channelizing of loose products on the conveyor, equipped with chains made of thermoplastic material featuring low friction co-efficient.
- Continuous motion product grouping device for grouping loose products in the desired format by means of electronically synchronized fingers.
- High efficiency motors attached directly to the drive shaft with the consequent advantage of reducing maintenance, energy waste and noise.
- Machine equipped with an optional device to register printed film with reference mark.
- Compact film cutting unit, with film cutting blade driven by "direct-drive" brushless motorization which makes the cutting more precise and facilitates maintenance.
- New ICOS brushless motors, equipped with integrated digital servo-driver, able to simplify machine cabling and ensure greater energy efficiency, less noise and reduced component wear and tear.
- Machine equipped with optional shrink-tunnel driven by methane gas, an innovative technological solution with low environmental impact.



FRIENDLY SOLUTIONS FOR THE ENVIRONMENT

Energy efficiency is a key factor in every company for the management of available resources, for this reason, the SMI Research & Development laboratories are constantly studying new solutions to optimize energy saving and ensure high levels of efficiency from the systems they produce. Among solutions available within the secondary packaging sector, a shrink tunnel driven by methane is without a doubt an innovative technological proposal, with reduced environmental impact especially in those countries where electricity is produced by fossil combustion. The new tunnel can be combined with all the packers in the LSK, CSK, AFW and SK ranges and with the combined machines in the CM and LCM range. It is a highly technological solution that guarantees remarkable advantages, as it:

- is eco-friendly (low environmental impact)
- guarantees considerable energy saving. From a study on the costs of electricity in Italy carried out in 2016, it is estimated that there is a saving of



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60% compared to a standard tunnel with electrical resistances

- ensures a reduction in electricity costs
- has a gas tunnel that reaches the ideal temperature faster than one run on electricity. In addition, the amount of methane that it consumes is minimum, ensuring energy savings, low CO₂ emission and immediate operational availability
- is extremely safe, thanks to the latest generation safety systems and sensors
- reduces maintenance, the only parts that need replacing are the electrodes
- is possible to use thinner shrink-film

thanks to a more efficient distribution and control of the tunnel temperature compared to traditional tunnels

Compared to traditional fuels used to produce electrical energy, natural gas has various advantages:

- it guarantees zero pollution, as it burns in a clean way (harmful emissions are practically non-existent)
- it costs less than electricity (in some countries)
- it has a high level of safety
- it is an abundant source of energy

- it is available everywhere and has no supply restrictions (as happens in some countries with electricity)

- it can easily be stored inside the factory. It can be put in special tanks within the plant where it is to be used

- it immediately transforms in heat and guarantees a considerable reduction of CO₂ emissions compared to the production of electricity, that has many phases during its transformation process

- it is a continual source of energy in countries where there are frequent power surges or supply failure.



DID YOU KNOW THAT...

Methane is an ideal solution for the changes in climate that our planet is facing, and it is the only source of energy that can make economic and industrial progress compatible with environmental safeguarding. Methane gas is a fuel that is much cleaner than coal and crude oil (and those that derive from them such as petrol and diesel), this is because its combustion produces between 40 to 45% less carbon dioxide (CO₂) compared to coal, and between 20% and 30% less compared to products deriving from crude oil. Another characteristic of this source of energy, is that it does not radiate solid particles (it does not contain lead or heavy metals) nor ash following combustion. The level of nitric oxide (NO_x) that it gives off is lower than other fuels, while the sulphurs (SO₂) are practically zero. This has been acknowledged by countries with strict laws to protect the environment, where the use of natural gas is spreading in many applications. Gas also has, among all fossil fuels, the highest ratio between energy developed and quantity of carbon dioxide released and therefore contributes very little to the phenomenon of global warming.



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