

NIRVANA

WATER SECTOR

Nirvana Inc.

Forestport, NY, USA

36,000 BPH PET LINE

- Smiform SR 20 Stretch-blow moulder
- Smiflexi SK 450T Shrinkwrapper
- Smiline Conveyor belts
- Smipal APS 3070 automatic palletizer

Smipal APS 3050P automatic palletizer



GEO LOCATION



The water bottling industry in the United States has always been in the forefront in promoting the recycling of plastic containers to reduce the environmental impact of this business.

In fact, in recent years companies working in this sector have progressively reduced the weight of the plastic resin preforms used for the production of PET bottles.

Nirvana Natural Spring Water enthusiastically married this best practice, faithful even to the corporate motto that defines the spring as the "cradle of the purest spring water in North America".

In order to implement more and more eco-friendly production plants, this American company has relied on SMI technology and the project was born from this collaboration for a new bottling line that entails the use of ultra-light 0.5 liter PET bottles.

The new system was added to those already provided by SMI in the early 2000s, when Nirvana had chosen the experience of the Italian manufacturer to purchase a number of secondary packaging machines and a rotary stretch-blow moulder for the production of large-capacity containers.

The new complete turnkey line recently installed by SMI in the Forestport factory includes a Smiform SR 20 stretch-blow moulder which can produce up to 36,000 bottles per hour, a Smiflexi SK 450T shrinkwrapper, Smiline conveyors for the handling of empty and packaged bottles and a Smipal APS 3070 automatic palletizing system.

Nirvana's investment in SMI technologies also includes a second Smipal APS 3050P automatic palletizer for the palletizing of packs arriving from a second bottling line.





ECO-FRIENDLY SPRING THAT LOVES THE ENVIRONMENT

The “source of pure water” of Nirvana Inc. is at the foot of the Adirondack Mountains in upstate New York, in the town of Forestport (Oneida County).

Unlike what happens to other bottlers that use water transported from external sources, Nirvana water emerges naturally to the surface and is bottled at the source; therefore, no tankers are needed to transport the water from the spring to the production facility, with obvious benefit to the authenticity and purity of the product and environment protection.

Nirvana’s natural water is “green”, i.e. environmentally friendly, as highlighted by the “naturally green” label applied to the product.

Surrounded by a 2,000-acre park of unspoiled beauty, Nirvana Inc. knows very well the importance of preserving the purity of the source and the surrounding area during the entire water bottling and packaging process.

Bottles marketed under the “naturally green” and “positively pure” brand are

produced by the new Smiform stretch-blow moulder with 20 cavities, that uses 11.5-gram PET preforms for the production of the 0.5 liter containers.

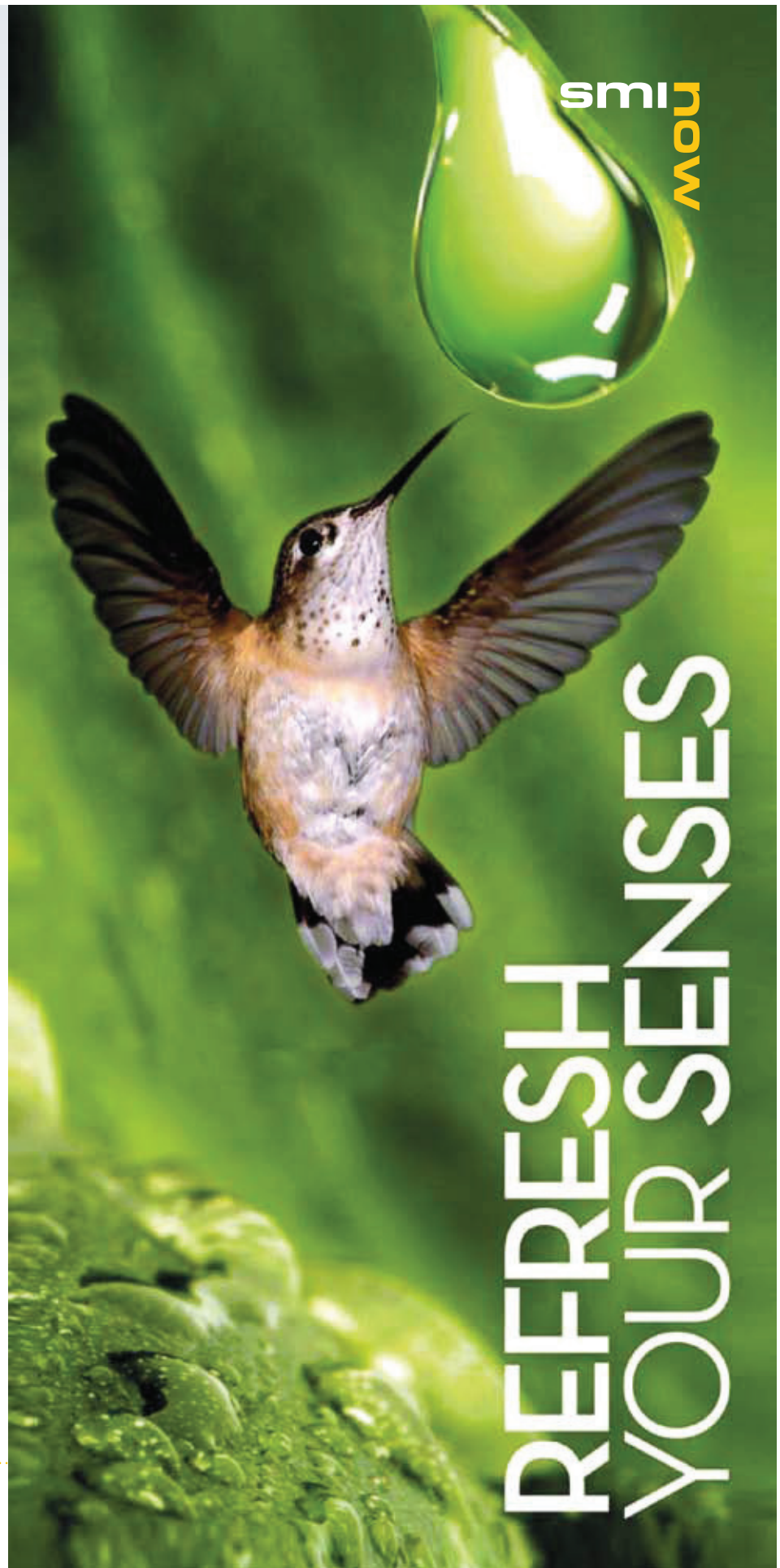
So, thanks to Smiform technology, Nirvana is able to obtain much lighter bottles compared to those commonly used for this collation, without





affecting the integrity and quality of the finished product.

Less plastic in each bottle means, of course, less consumption of material of petrochemical origin, less pollution during production, fewer empty containers to be disposed of and recycled by consumers; all to the direct and immediate benefit of the environment and public health.



ADIRONDACK MOUNTAINS

THE BEAUTY OF NATURE

The Adirondack Mountains are a crystal clear massif that crosses New York State. Its surface area of 6.1 million acres (25,000 km²) are part of Adirondack

Park, which in turn is part of the New York Forest Preserve. Once inhabited by the Mowhak Indians, the area was transformed in 1892 into one of the largest national

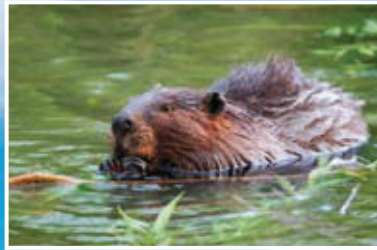
parks of the United States.

There are thousands of streams and lakes within the Adirondack Park, among which the best known are Lake Placid, adjacent to the homonymous

village that hosted the Winter Olympic Games in 1932 and 1980, Lake Saranac and Lake Raquette.

This park, which is among the largest in the United States, is a favorite destination for canoe and kayak lovers, who can find all kinds of paths and can also enjoy a pristine natural environment.

The territory of Andirondack Park includes 46 mountains above 1,230 meters, 325,000 acres of wetlands, the springs of 5 major rivers, thousands of lakes, ponds and streams, a thriving population of deer, bears and beavers as well as vast forest areas in their natural state, protected by the Constitution of the State of New York, which prohibits its cutting, removal or destruction.



smi
now

TECHNOLOGICAL INNOVATIONS FOR THE ENVIRONMENT

REFRESH
YOUR
SENSES



Over the last few years, Nirvana Inc. has been involved in a process of rapid expansion, allowing it to achieve a leading position in the bottled water market. One of the most significant stages of the aforesaid growth process is the recent investment made by the American company in a new 36,000 bottle/hour bottling line for the production of 0.5 liter PET bottles of “positively pure” and “naturally green” Nirvana

water and the expansion of an existing line for bottling 3-liter and 1-gallon containers.

Specifically, the new 36,000 bottle/hour system supplied by SMI includes a Smiform SR 20 stretch-blow moulder, a Smiflexi SK 450T shrinkwrapper



INSTALLATION / Nirvana

for the tray + film packaging of the 0.5 liter bottles in 5x4, 6x4 and 7x5 collations, and the Smiline conveyor belts designed for the handling of bulk containers and finished packs. Whereas for the modernization of the existing line, Nirvana purchased the new automatic Smipal APS 3000 palletizing system from SMI. The line engineering solution proposed by SMI allows Nirvana to optimally manage production flows, thanks to the accurate study on the accumulation, distribution and handling dynamics of the products to be packaged, performed by SMI engineers when designing new systems. SMI machines installed in the Nirvana Natural Spring Water plants ensure maximum operational flexibility, a constant and fluid production process and efficient management of any product flow variations due to unforeseen situations. Furthermore, the use of a latest generation automation and control system, equipped with sophisticated sensors, allows the user to maintain high-level efficiency of the systems during all stages of the production cycle. All the machines supplied by SMI are designed in full compliance with the requirements specified by Nirvana Inc. as concerns respect for the environment and energy saving; for example, all the motors are equipped with inverters for the reduction of electricity consumption and the Smiform SR 20 stretch-blow moulder fits a device that recovers blown air. Moreover, Smiline's chain conveyors are lubricated with silicone material, which allows a considerable saving of water and reduced release of organophosphates residues in the drains, while the air conveyors are equipped with filters to prevent contamination of empty transferred bottles.

THE WORD TO THE CUSTOMER

Interview with Mozafar Rafizadeh,
Chairman & CEO of Nirvana Inc.



Nirvana is the US leader in the production of natural mineral water. What do you expect from the manufacturers of your bottling line machines?

"For our company, it is essential that suppliers become an integral part of our growth process, share goals and principles and help us in the pursuit of our "mission" by manufacturing high-tech machinery, with low environmental impact and low operating and maintenance costs.

In the specific case of the new bottling line recently commissioned to SMI, these requirements were applied even more carefully, because we wanted an innovative integrated solution capable of handling the entire production process at high efficiency levels, from the blow-moulding of the bottles to the end-of-line packaging in different types of packs".



How important is the "packaging" for the success of your products?

What role does the partnership with SMI play in Nirvana's competitiveness on the market?

"The packaging is definitely one of the main aspects to be taken into account for the success of our products; in fact, the first contact established between the consumer and us is visual and, therefore, the outer wrapping that encloses Nirvana water takes on a strategic importance to attract new customers.

Dozens of studies have shown the importance of "emotional buying", i.e. that emotional impulse that drives consumers to choose certain products instead of others; therefore, as goes a famous motto, if "there is no second chance to make a good first impression" you must rely on experts to choose the most suitable packaging solution to meet both our expectations and those of our customers.

The collaboration between Nirvana and SMI, which began at the beginning of 2000, has developed over the years in this direction and today represents significant added value in the consolidation and expansion of our market share.

Thanks to the advanced technology and operational flexibility of the systems supplied by SMI, Nirvana Inc. can look with confidence to the future, knowing that we will be able to face and overcome the challenges that the market will pose".

What factors led Nirvana Inc. to choose SMI as a partner in implementing a new bottling line of 36,000 bottles per hour?

"For this new water production system in 0.5 liter PET bottles, Nirvana was looking for a reliable partner able to

deal with a turnkey installation.

After careful analysis of the various proposals on the market, we chose SMI's project both for the originality of the technical solutions adopted and for the ability of this manufacturer to provide us with a latest generation turnkey system in a very short time not forgetting, of course, their competence shown to us with previous supplies".

How important is it for Nirvana Natural Spring Water for SMI to be present in the US with a branch and staff dedicated to local technical support and the supply of spare parts?

"SMI's direct presence in the United States through its subsidiary SMI USA is of paramount importance for us and is one of the key factors underlying the long-term collaboration between the two companies; without SMI USA, Nirvana would hardly have chosen SMI as a business partner for the aforesaid project.

For any company in any sector, technical service and spare parts on hand are a must in the choice of trusted suppliers; in the case of SMI, for example, we know we can count on a well-organized local structure at any time, which responds effectively and in a timely manner to our requests, and on a staff consisting of skilled American technicians, trained at SMI's headquarters in Italy".

Looking ahead, which role do you think sustainable development will have in the next 5 to 10 years in the beverage industry?

"The beverage industry in the United States is constantly evolving from two points of view: the enlargement of the offered product range and the reorganization and modernization

of the production facilities, which should be more efficient, reduce costs and not damage the environment and natural resources.

Also, the bottling industry is often required to make sudden changes in marketing and production strategies to keep pace with the trends and demands of the market, which also require new and innovative solutions with regard to the final packaging of the product.

In the face of these challenges, I think that the beverage industry is destined to progress substantially in the next 5 to 10 years, adopting a model of responsible and sustainable development".

