

INTERVIEW WITH HENRI ATTIAS,
SIDEL GLOBAL KEY ACCOUNT VICE PRESIDENT

THE MOST POPULAR

WATER IS MANKIND'S NUMBER ONE RESOURCE; HOWEVER WITH THE COMBINATION OF THE POPULATION CONTINUALLY INCREASING AND MORE PEOPLE LIVING IN CITIES TODAY THAN EVER BEFORE, ACCESS TO AFFORDABLE WATER IS EVEN MORE IMPORTANT. AS WATER CONSUMPTION CONTINUES TO GROW SIGNIFICANTLY, THE TREND HAS BEEN FOR THE BOTTLED-WATER MARKET TO DO THE SAME. SALES WITHIN THE OVERALL WATER MARKET HAVE INCREASED 28% OVER THE FIVE-YEAR PERIOD FROM 2007 TO 2012. ADDITIONALLY, WATER ACCOUNTED FOR 37% OF THE GLOBAL SOFT-DRINK MARKET, AMASSING VOLUME SALES OF 229 BILLION LITRES. CARBONATED SOFT DRINKS (CSD) TOTALLED 36% OF THIS VOLUME, AND JNSDIT (JUICES, NECTARS, SOFT DRINKS, ISOTONICS & TEAS) MADE UP 27%. BREAKING DOWN SALES WITHIN THE WATER MARKET: STILL WATER LEADS AT 86% AND CARBONATED WATER COMES IN A DISTANT SECOND AT 14%. AND THE MATERIAL OF CHOICE IN THIS GROWING MARKET IS PET, WHICH ACCOUNTS FOR 85% OF ALL BOTTLED WATER SOLD IN 2012.

DRINK IN THE WORLD

Q Strictly speaking, water is all H₂O. So what makes water types so different?

A It has a lot to do with where the source is located and what processes the water goes through before it's sold to consumers. So there are differences between well water, spring water, mineral waters, distilled water and purified water. Well water, for example, is stored in permeable rocks and soil. It's similar to spring water in the sense that both are produced from natural aquifers located around rock beds and soil. Spring water, however, moves up naturally to the surface. Mineral water can come from a natural well or spring, but must contain a specified amount of trace minerals, such as calcium and magnesium. When it comes to distilled water, distillation is a process by which water is boiled until vapour is produced. Finally, purified water denotes a process by which contaminants or minerals, or both, have been removed from any water source. Whatever the type of water, producers' needs remain the same when it comes to bottling and hygiene.

Q What are the main characteristics of the bottled-water market?

A This market is highly competitive. It is a volume-driven category, but even

today, the global market remains fragmented. Between them, a limited number of key global players produce a multitude of brands. Some are internationally recognisable; some are even global; but most are available only regionally. In 2011, the top 10 brands accounted for 18% of total volume sold. Overall, it appears that the market for bottled water in Western Europe and Northern America is steadily reaching a standstill, while in regions such as Latin America, the Middle East and Asia Pacific, the market continues to grow quite significantly. This is particularly true of China and India. In 2012, the Asia Pacific region passed Western Europe as the leading consumer of bottled water, for the second time.

Q Have you seen changes in consumer habits and expectations over the past few years?

A Yes. Consumers' habits are changing. Over recent years, they have been increasingly concerned about health. Today, we clearly see a reaffirmation of consuming water for its intrinsic thirst-quenching qualities and natural attributes. In this respect, manufacturers are looking to maximise the benefits of natural products, sometimes adding ingredients to further enhance the rehydration properties of water.



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Around five years ago, an emerging segment through flavoured waters appeared. However, it ended up not appealing to the end-consumer. When it comes to packaging, mobility is also increasing worldwide, leading to growth in demand for smaller ‘on-the-go’ bottles that are easy to handle and transport.

Q What are the main challenges for bottlers in this market?

A One of the main challenges today is the need for sustainable “Overall Equipment Effectiveness” (OEE). The packaging performances are also key while optimising material and energy consumption. The combination of investment decisions to install equipment and lines is being taken later and later, with the demand for speed to supply the drink to the market, requires a fast ramp-up of the production line to get all the equipment operating efficiently. Sidel’s proximity to customers, combined with experienced technicians worldwide, ensures efficient installation and quick start-up. On top of providing reliable equipment, our solutions reduce unexpected stoppage while optimising the scheduled downtime, supported by simple operation – format changeovers, cleaning and maintenance – as well as standardised settings and pre-defined procedures. With early project management, all needs of standardised solutions can be anticipated, including layout equipment, working process and training. In all, this sustains the efficiency reached during the quick ramp-up over the long term. Early skill transfers to operators allow customers to manage the production line autonomously after the technical acceptance of the line. Global assessment of bottling-line performance with regards to their targets is also a key criterion. In this field, Sidel’s Efficiency Improvement Tool (EIT™) can evaluate where the line’s efficiency loss is coming from and on which equipment they should work on to quickly get back on track. It can be implemented on any line irrespective of its line integrator or Original Equipment Manufacturer.

Q How does the manufacturing scheme adapt to meet those trends?

A On the one hand, the single-serve market requires high-efficiency production at maximum speed, a key driver for reducing the total cost of ownership (TCO). In such markets, speeds typically range from 40,000 to 80,000 bottles per hour. In the USA, for instance, 85% of the market for water in

“**FOOD SAFETY REMAINS ONE OF THE KEY ISSUES FOR BEVERAGE PRODUCERS; WATER IS NO EXCEPTION AND THERE IS NO MARGIN FOR COMPROMISE.**”

PET packaging is in 20 oz. (0.6 litre) bottles, produced on dedicated high-speed lines. Today, Sidel are the world leader in high-speed lines for water products. Between 2007 and 2012, more than 30 complete lines with an output per line larger than 60,000 bottles per hour have been supplied by Sidel. On the other hand, there is a market for flexibility, serving multiple formats at lower speeds. In such markets, speeds range typically from 15,000 to 60,000 bottles per hour, which is optimal for reducing production cost.

Q When it comes to food safety, what are the requirements in terms of hygiene for packaging solutions?

A Food safety remains one of the key issues for beverage producers; water is no exception and there is no margin for compromise. Whenever minerals are taken from or added to water, it becomes more sensitive to micro-organisms which increase the risk of contamination. In the USA and soon in Japan, ozone can be used within the production process to overcome this issue, while this approach has not been authorised in Europe. Based on our experience

in aseptic filling, Sidel developed one of the highest hygienic standards to preserve the integrity of bottled water. And this is particularly true with the new Sidel Matrix™ systems, which ensure a high level of hygiene.

Q There has been a strong trend for light-weighting in the water market. Is it possible to get any lighter?

A The drive for ‘light-weighting’ and even ‘extra-light-weighting’ of PET bottles reduces the environmental impact and the production cost of the packaging process. Today’s producers are constantly striving for the lightest bottle with the best mechanical performance. Indeed, many are already applying this strategy in all their production facilities and are close to achieving the optimum acceptable weight for their various brands. The limits of light-weighting have not been reached yet. Over the next three years, for instance, the weight of a 1.5 litre PET bottle is expected to fall below 20 grams. In this field, on top of having strong expertise in packaging, Sidel have the capabilities to take light-weighting even further, and without any compromise on performance, appearance or feel. Due to our comprehensive overview of all industrial processes right from the start, such as blowing, filling, labelling, secondary packaging and logistics, we are able to go further in light-weighting without compromising bottle performance on the whole line. Sidel have, for instance, helped a major water player in North America to move from 14.5 grams to 9.1 grams. That’s a 35% weight reduction and about 70,000 tonnes of resin saved per year. This is a good example of partnering between a packaging expert and an Original Equipment Manufacturer (OEM) like Sidel early on in the process, benefiting from a deep understanding of not just the package alone, but also the product, the technology and their interdependencies with each other.

Q Light-weighting is essential for reducing operational costs. What are the other key sustainability and cost-efficiency factors?

A There is a need for optimal global-packaging solutions. To maximise margins, producers need to keep overheads to an absolute minimum. Packaging generally comprises about 70% of these production costs, distribution and logistics 20%, and actual filling only 10%. By minimising the weight of the bottles, the consumption of raw material will be kept low. To reduce the overall carbon emissions produced throughout the life of the finished bottle, more and

and cost savings by allowing the use of thinner film, leveraging eco-responsible materials, avoiding the use of glue and solvents and using light-weight bottles. Across Sidel’s entire range of equipment, product and format changeovers have been considerably simplified or are automatic. On a 20-cavity machine, assisted mould changeovers take less than 15 minutes, bottle to bottle, by a single operator thanks to our Bottle Switch™ system. Based on modular design and built with grease-free components, the robust and reliable Sidel Matrix requires significantly less maintenance: maintenance



more bottlers are beginning to use recycled PET or BioPET resin wherever available. Many are also reducing the secondary packaging that accompanies bottled water – like shrink-wrapping and over-wrapping – or eliminating it altogether. Maximising the efficient use of resources such as electricity, water and chemicals, and reducing materials is also key in this field. Sidel’s offering includes global solutions to meet these market needs. For instance, Ecoven installed on the SBO Universal2eco and the Sidel Matrix blower cuts electrical consumption by up to an impressive 45%. Moreover, the air recovery device embedded in the blower enables to save blowing air up to 35%, reducing the requirements of the compressor accordingly. When it comes to labelling, the Sidel Roll sleeve™ labeller makes significant strides in both sustainability

and nance time of our blowers is limited to 2.5% of equipment running time, our fillers are designed to minimize drastically maintenance activity before 6,000 running hours, and the maintenance required on our labellers has been reduced by approximately 40%.

Q How would new market changes impact the line of tomorrow?

A The rapidly growing population has greater access to bottled water in general. Consumers depend on water for life and well-being. For many countries, bottled water in PET is a source of safe drinking water, which requires hygienic packaging and the preservation of natural minerals. For other countries, the convenience of ergonomic, single-serve, on-the-go consumption and the taste sophistication of carbonation for instance are of high-

importance. Water consumers look for bottle shapes that differentiate an otherwise standard commodity on the supermarket shelves. Moreover, further industry consolidation is expected as the larger companies acquire small/niche players to increase capacity and product portfolio and gain a foothold in the less developed regions. In this context, beverage producers are constantly challenged to meet changing consumer needs and price points while still returning a profit. This is the reason why they would require solutions to ensure more configurability, versatility and compactness while adapting to very specific needs. This is Sidel’s vision of the lines of tomorrow. Reliable and efficient, the future lines will be hygienically designed and will strive to tend to a 100%-dry operation in order to minimise water consumption. They will be compact and simpler to operate to minimise intervention. They will also be operated remotely, using embedded intelligence to communicate with people or other machines. We’re already making key advancements in this area. For instance, the embedded machine intelligence of the Sidel Matrix blower increases self-monitoring and process automation with the Intelliblower system. This continuous and automatic process regulation improves quality control. The machine can automatically detect and eliminate process deviations, and it is especially designed to reduce scrap and to allow light-weighting. The continuous development of integrated quality-control systems combined with auto-adjustment functionalities will reduce downtime and ensure higher quality of the final product. In addition to this improved quality, Sidel’s water-bottling solutions will offer a very high level of efficiency and simplicity while reducing the total cost of ownership. ■