

# Corporate presentation 2007/2008

When sustainability meets business



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A large, clear water droplet is suspended from a green leaf. Inside the droplet, the Sidel logo (a stylized 'S' with a triangle) and the word 'Sidel' are visible. The background is a soft, out-of-focus green, suggesting a natural, eco-friendly environment.

Sidel

The environment is becoming a top concern within the beverage industry. By reducing raw materials and the consumption of energy, water and chemicals, Sidel creates eco-friendly and cost-effective solutions for future beverage packaging. Already today, we offer a wide portfolio of reduced bottle weight, new materials, energy saving technologies and improved production performance.

# Continued focus on complete lines

2007 has been a good year involving both internal reorganization and continued growth for us. Although the past year has seen a slower growth rate compared to 2006, we still outperformed our growth target by more than 10 per cent.

Our strategy for 2007 has been a selective approach to order intake and we experienced a significant rise in complete line orders, reinforcing our need to dedicate more resources to complete line development and production.

In March 2007, instead of acquiring an existing company, we decided to build our own facility in China. Focusing on complete lines and based on

our future industrial concept, the facility will be of considerable strategic importance for China, enabling us to serve one of our most important markets more efficiently.

## CONTINUED GROWTH

China continues to be a boom market for us with tea as the rising star on the product side. Good growth has also been seen in Eastern Europe and Russia, and we are currently monitoring developments in the USA where several of the largest beverage producers have decided to move their blowing operations in-house instead of using external bottle suppliers. While carbonated soft drinks have shown a flat curve because of the current focus on obesity, water continues to show strong growth globally.

On our product side we implemented the commercial launch of Predis, as well as launching our new NoBottle in 2007. Both are groundbreaking solutions within their respective fields and, from an environmental perspective, significantly reduce chemicals and waste. Additionally, we are currently

evaluating some very promising findings within blowing and will continue to develop our highly-regarded Universal series.

## NEW ORGANISATION

After merging Sidel and Simonazzi in 2006, we took a step further in 2007 and moved completely to one brand – Sidel.

At the same time we divided into three regional clusters and a product management organisation, which has moved decisions and responsibilities closer to our markets, further strengthening our already-close customer relations.

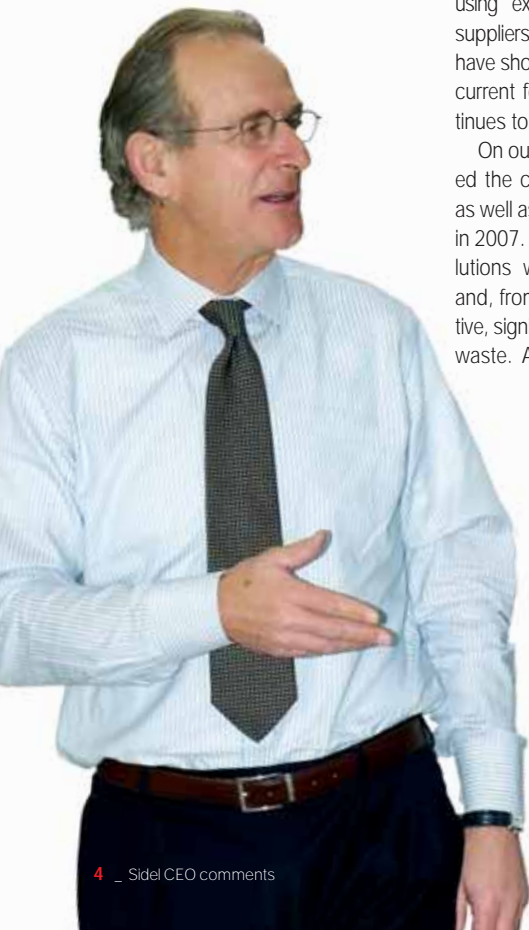
The changes underpin our decision to focus on complete lines and at the same time strengthen our company culture. It prepares us for the future when consolidation amongst our customers, as well as anticipated increase in the consumption of bottled beverages, will require world-class product and solutions development.

Internally, our new organisation structure has meant hundreds of employees changing roles and even locations. I would like to express my gratitude to all of our employees who have put so much into the transition process to make it happen.

Finally, having taken the decision to stand down from my position at the end of 2007, I look back at seven exciting and enjoyable years at Sidel. Mart Tiismann, previously EVP Industrial Operations, took over as CEO and President of Sidel on 1st January 2008. I have had the opportunity to work closely with Mart for the past couple of years, using last year as a transition period, and I know he will lead the company to continued success. I wish him and the company the best of luck for the future.

Gérard Stricher

I look back at seven exciting and enjoyable years at Sidel.





# 3

## Three questions to Mart Tiismann, President & CEO of Sidel

### **WHAT IS YOUR OVERALL VIEW OF SIDEL AS A COMPANY TODAY?**

Today we are perceived as leaders in several key technologies, as well as being flexible and responsive to our customers' needs. We have become an international group with a well-established and respected worldwide presence, and a product portfolio ranging from stand-alone machines to complete packaging lines for all beverages.

### **WHAT ARE THE MAIN CHALLENGES THAT SIDEL FACES IN THE NEXT THREE YEARS?**

My career in various industries has taught me that quality, in every aspect of work, is ultimately what makes the difference for customers. Therefore, I want our services and products to exceed our customers' expectations for performance, reliability, delivery times, and total cost of ownership.

We have many challenges. The first is to design and develop innovative new generations of equipment and lines that will become the market's gold standard.

To do this, Sidel's research and development investments in 2008 and

beyond will reach record levels, and our engineering teams are being mobilized to achieve these objectives.

The second challenge is to continue to strengthen our ability to handle the needs of every customer in a proactive and individually-customized way. Our new organization structure, with empowered local teams and the development of our global industrial footprint, is aimed at improving responsiveness to our customers' needs, working alongside the modular architecture of our new products.

Thirdly, like all industries, we need to become more efficient. By developing operating processes that are more efficient we can dedicate more resources to our first two priorities: innovation and customer relationships.

### **HOW WILL THE MARKET DEVELOP DURING THE COMING YEARS?**

We will certainly see continued growth of complete lines, and consolidation among our customers will continue. Emerging markets such as China, where we are opening a new factory, will become increasingly important. Finally, the demand for sustainable and environmentally-sensitive solutions will provide opportunities to develop and sell more advanced technologies.



## Sidel Global Leadership Team

FROM LEFT

Roberto Schianchi, Engineering & Packaging Solutions

Françoise Raoul-Duval, Strategy & Business Development

Riccardo Rosselli, Finance

Paul Mayer, Human Resources

Mart Tiismann, CEO

Sid Johari, Blowing & Coating

Ralf Bajorat, Cluster Europe, Middle East, Africa

Paul Holderith, deputy CEO



# Your future. Our solutions.

As a complete packaging line integrator, Sidel has gained time-tested experience in all aspects of packaging for liquids and other food products. The worldwide Group, comprising 5,000 people, covers all bottling needs for liquid foods in plastic and glass bottles, as well as in drink cans. Most important of these is PET – the area in which the company made its name and the one in which it is particularly strong. Being an equipment manufacturer as well as a packaging designer, Sidel presents its clients with designs that can easily be put into production.

Sidel has created its competitive advantage by the ability to keep an

eye on changes in the market and to react quickly to changing needs. Key to this ability is the importance the company attaches to R&D, where packaging design is a key element. The company has an integrated design centre and produces some 1,500 new bottle designs every year. Designs are conceived with the final product in mind, and Sidel is able to see the process through from beginning to end. This cuts down on time delays, and allows Sidel to respond to a market which has an increasing demand for constant evolution and new designs.

With expertise and know-how, Sidel can support all engineering needs

from preliminary design to developing an investment budget, drafting plans for line layout or building the bottling line on-site. The equipment offer encompasses blow moulding machines, barrier treatment, Combi equipment, fillers, conveyors, labellers, pasteurisers, palletiser/depalletiser, robotic equipment and end-of-the-line operations.

Lifecycle management – taking responsibility for the complete life of the equipment on behalf of the customer – is becoming more and more important. Sidel is supporting clients in 177 countries using its strong local presence.



# 2007 in brief

## Ecofriendly labels

A new type of label has gained much attention from beverage companies looking for more environmentally friendly solutions for returnable glass bottles. With the introduction of the Adhesive labeller, Sidel is responding to this innovation and to the trend towards ecofriendly labels. The new label looks identical to traditional, clear adhesive labels but is designed to wash off easily. When washed at temperatures of over 75 degrees Celsius with standard industrial bottle washers, these "wash-off labels" curl up, come off and are washed away by water. Removing adhesive labels from glass bottles is now both easier and more ecofriendly.



### Mexican Four-in-One

When Mexican company Gonac needed new technology to package their popular soft drink Fruti King, sold in seven different flavours, they turned to Sidel. The challenge was to find a technique to fill four bottles of different flavours in one single packaging session. Gonac needed to meet the new trend of customers wanting to buy soft drinks in variety packs with several different flavours, instead of just one. The cooperation between Gonac and Sidel led to the creation of Sidel's first machine capable of filling four different soft drinks simultaneously.

### New plant in Kuala Lumpur

In June, Sidel inaugurated its new facility in Malaysia. The plant is dedicated to low and medium-output PET blow moulding machines and boasts 6,500 square metres of production space as well as 2,800 square metres of office space. The new facility allows Sidel increase its manufacturing output considerably, from 70 to 120 machines per year. This also means shorter production and delivery times. With this investment, Sidel Malaysia has become the second largest blow moulding manufacturing centre after Sidel's main facility in Le Havre.

## The Rugby Bottle

A PET bottle shaped exactly like a rugby ball scored high selling points during the Rugby World Cup 2007. Sidel's idea was to create a collector's edition bottle for the major sporting event. The realistic-looking rugby ball bottle, complete with stitches and a kicking tee, was an intriguing challenge for Sidel's Process Engineering Department.

Les Eaux minérales d'Alet became the bottling partner, and because of the innovative shape they could market the 0.75 litre PET bottle at the price of €1.95 each. The new bottle has also enabled the company to expand their market to a regional level.





## Fastest Combi in the world

Sidel's latest Combi development is a record-breaking, high-speed machine that can produce up to 61,200 bottles per hour. Sidel has expanded its range of Combi equipment to meet manufacturer demands for high-speed equipment and solutions for smaller size bottles. The equipment is dedicated to the main market segments of water, juices and dairy products and carbonated drinks. Apart from speed, the new range is designed to be extremely flexible, with the facility to make format changeovers easier than ever.

To date, over 200 Combi machines have been installed worldwide.

## SBO Compact 2XL for large containers

In 2007 Sidel introduced its SBO 2XL, a linear blow moulding machine dedicated to producing packages ranging from 5 to 10 litres, primarily for water and edible oil.

The SBO 2XL has a per mould output of up to 1,200 bottles per hour, making it the most efficient machine in its class. But speed does not compromise high quality. Bottle quality is ensured by offering excellent material distribution and bottle lightweighting possibilities, even for "hard to manufacture" packages.



## Tech assistance at a distance

REAL (Remote Expert Assistance for Lines) is a revolution in remote technical assistance. With today's sophisticated packaging technology, having qualified staff that can resolve every technical problem is becoming increasingly difficult. Now a Sidel technician can see exactly what the manufacturer's problem is without travelling to the site, using refined remote technical support.

Equipped with a video camera, headset and technology for data transmission, the customer can send exactly what he sees to the Sidel technician in real time, who then provides instant support. The system can also be used for training and highly complex maintenance operations. Initially operational in Europe, the technique will cover all Sidel Group equipment and eventually expand worldwide.

## 200,000<sup>th</sup> mould to Nestlé Waters

In 2007, Sidel delivered the 200,000th blow mould to Nestlé Waters, the world's bottled water leader. The 200,000th mould is a symbol of the innovation that has always characterised both companies.

In 2006, Nestlé Waters launched its Eco-shape™ bottles project in the United States to reduce environmental impact by decreasing bottle weight. Sidel contributed its know-how in lightweighting using its Flex™ technology. The 200,000th mould completes the series of moulds used to produce Eco-shape™ bottles on Sidel blow moulding machines.

## Ten mountains in two days

In August, six Sidel employees participated in one of the world's toughest and most extreme foot races, the Mont Blanc Ultra-Trail. The trail covers 163 km, crossing ten mountains in France, Italy and Switzerland. And, it all has to be done within 46 sleep-deprived hours. Not surprisingly the race has a 40 per cent drop-out rate. But the Sidel team rose to the physical challenge. Only one of them had to interrupt the trail, due to illness. The Sidel athletes now have powerful memories and a hard-to-beat team spirit.

# Lightweighting gives Nestlé Waters a competitive edge

The new Eco-shape™ bottle developed jointly by Sidel and Nestlé Waters North America will play a key role in Nestlé Waters' expansion throughout the USA. Kim Jeffery, President and CEO of Nestlé Waters North America, sees lightweighting as one of the main challenges for the industry.



Nestlé Waters North America is the leading bottled water company in the USA. With leading regional spring water brands Poland Spring®, Ozarka®, Arrowhead®, Deer Park®, and Zephyrhills®, along with the world's leading brand of purified water Pure Life®, the company produces over 18 billion bottles a year and estimates its market share at 38 per cent. Kim Jeffery, President and CEO of Nestlé Waters North America, points to growth as the dominant trend in the market.

"In 1986, carbonated beverages eclipsed tap water as the number one beverage in America and what is

happening now is that water is going to go back into the number one position. But it is going back in a 21st century on-the-go method where people want convenience in their beverages. I think beverage trends in America are still moving toward health and wellness and, in that regard, bottled water is the healthiest beverage choice you can make", says Jeffery. He adds that although bottled water still has a long way to run, he expects water to be the biggest beverage category in the USA within the next eight or nine years.

## LIGHTWEIGHTING INCREASINGLY IMPORTANT

Competition in the market is fierce, and there is a constant call for product development and innovation. Together with Sidel, Nestlé Waters North America has developed the Eco-shape™ bottle. It is a lightweight premium water bottle combining low cost with good environmental performance.

"The interesting thing about the shape that Sidel brought to us is that it feels better than a straight-walled, lightweighted bottle of the same weight. That bottle may be just as

rigid, because it is the easiest way to make a bottle, but it does not feel as good. It was a great example of a collaborative approach where we had the desire to do this both from an environmental standpoint and a pragmatic, cost standpoint", says Jeffery, stressing the importance of continuous innovation.

"I know one thing about packaging innovation – it works. And it does not cost you anything. There is no launch cost for it. When we switched from our 24 oz sport-top bottle to the new shape, there was no cost. We had a little bit of tooling and costs for moulds.



Eco-shape™ is expected to save Nestlé Waters North America some 20 million tons of paper and 65 million pounds of resin annually, giving the company a competitive edge.

You are replacing one product with a better product and that is innovation. So I love package innovation."

#### **Eco-SHAPE™ BRINGS COMPETITIVE EDGE**

Jeffery sees recycling and lightweighting as two of the major challenges facing the American beverage industry.

"These are two important aspects of sustainability. Several NGOs (non-governmental organisations) have put bottled water against tap water as the competitive set. The notion that bottled water should be banned because it is bad for the environment ignores the fact that the containers are the lightest weight and that water, in any form, is good for you – better for you than other beverage choices. The bulk of bottled water growth over the past 10 years has come out of

sugared beverages, not tap water."

Using 30 per cent less resin compared to a standard water bottle, the Eco-shape™ bottle directly addresses the environment. It is expected to save Nestlé Waters North America some 20 million tons of paper and 65 million pounds of resin annually, giving the company a competitive edge.

"I believe, to win, you have to have the best brand, the lowest cost of manufacture, and the best price. If you have those three things, nobody is ever going to beat you. This is a really tough business to operate in. I have got two world-class competitors who have been trying to kill us for 4 years. As long as there is market share out there to be had, I do not want anybody getting it but me. The time to win that battle is when the market is expanding right now. So it is very, very intense for us, and we need every little advantage we can get", says Jeffery.



# At the forefront in the Spanish market

Over the past five years Sidel has seen spectacular growth in complete lines for packaging non-carbonated drinks. Now Sidel is setting out to become the first option for clients on the Iberian Peninsula.



In 2002, Sidel's estimate was that some 10 complete lines would be installed within the territory by 2010. At the end of 2007 the number of installed lines reached 20. This is one clear example of the growth in the Spanish and Portuguese markets, especially for sensitive liquids like juices, milk and isotonic beverages.

The Sidel Ibérica head office covers the market on the entire Iberian Peninsula. Competition between brand owners is fierce. Thus they are constantly developing new products, containers and packaging presentations to increase sales volumes. For Sidel, being on top still involves bringing the right solution

to the customer, for packaging design, stand-alone equipment and complete bottling lines.

## WATER ON THE RISE

Spain's consumption of water has been increasing very quickly over the last few years. Consumption per capita is now the highest in Europe. In this market Sidel is supplier to Grupo Danone and Nestlé Waters, as well as major Spanish fillers such as Vichy Catalán and the Leche Pascual Group.

Starting out in 1991, Sidel Ibérica's portfolio of clients now includes most reference brands of key sectors. In

soft drinks, Sidel is a recognised supplier for all the Coca-Cola concessionaire plants, as well as PepsiCo and Schweppes. In the beer market, groups such as Heineken, Damm and Mahou-San Miguel are among the clients. The fact that Sidel has been a key player in the expansion of the market in aseptic drinks has led to a very fast growth of sensitive beverages, with Leche Pascual, Garcia Carrion, Puleva and Fonte Salem. Sidel also has another important category of customers: merchant bottle suppliers like Logoplaste, Amcor and Caiba.

## SUSTAINABILITY HERE TO STAY

As in all the other EU countries, the topic of environmental thinking and sustainability is being debated hard in Spain, both in specialised forums and in political campaigns. Since the introduction of the eco-tax in Spain, known as the green dot, large budgets are being managed for investment in the collection and selection of waste for subsequent recycling.

Sidel's contribution to sustainability is that its teams strive to have the least possible impact on the environ-



ment, taking into account all the parameters that can impact directly on both the environment and safety, where energy and water consumption are always among the primary objectives.

Sidel believes sustainability is a major approaching industry trend that will influence the sector heavily in the immediate future.

#### **NEW TECHNIQUES KEEP PET IN THE GAME**

An important strategy for developing the PET market is lightweighting. Combined with new techniques such as

light and oxygen absorption barriers, the PET bottle will continue to be a reference product. It should not be forgotten that PET is a recyclable material, something that adds to its strategic value.

Following the positive growth, the main goal is to be the first choice for clients by 2010, a target which Sidel is confident of reaching. On the Iberian Peninsula this will be achieved by developing Sidel's supply to the needs of every client, making sure that Sidel's service continues to be of the same excellent quality that it already is today.

Sidel believes sustainability is a major approaching industry trend that will influence the sector heavily in the immediate future.

# Lightweight NoBottle™ benefits the environment

The NoBottle™ is a breakthrough in lightweight plastic bottles. Using the new Flex technology from Sidel, it weighs 25 to 40 per cent less than an ordinary plastic bottle.

It all started with a simple idea: design a water bottle that maximises shelf appeal and minimises environmental impact. The task was to look at the entire manufacturing process, from blow moulding to palletising, to propose a simple solution for customers. After a year, Sidel unveiled the NoBottle™ which combines appealing design with an unprecedented weight reduction in a bottle that can be manufactured and distributed on an industrial scale.

## BASED ON FLEX TECHNOLOGY

Weighing only 9.9 g (500 ml package), the NoBottle™ is based on another breakthrough from Sidel, the Flex technology. Typically, when bottle weight is reduced, ribs are added to brace the bottle walls. When compressed, these bottles are brittle and noisy, which reduces shelf appeal and premium image. The ribs also limit the scope for lightweighting.

"Instead of focusing on ways to brace bottles, we had to address the problem from a totally new angle. After various tests, we ultimately developed the Flex technology. It is based on shape memory and flexibility, allowing

the packages to spring back to their original shape after being squeezed or tampered", says Franck Hancard, Packaging Solutions Manager at Sidel.

## ALL SORTS OF SHAPES

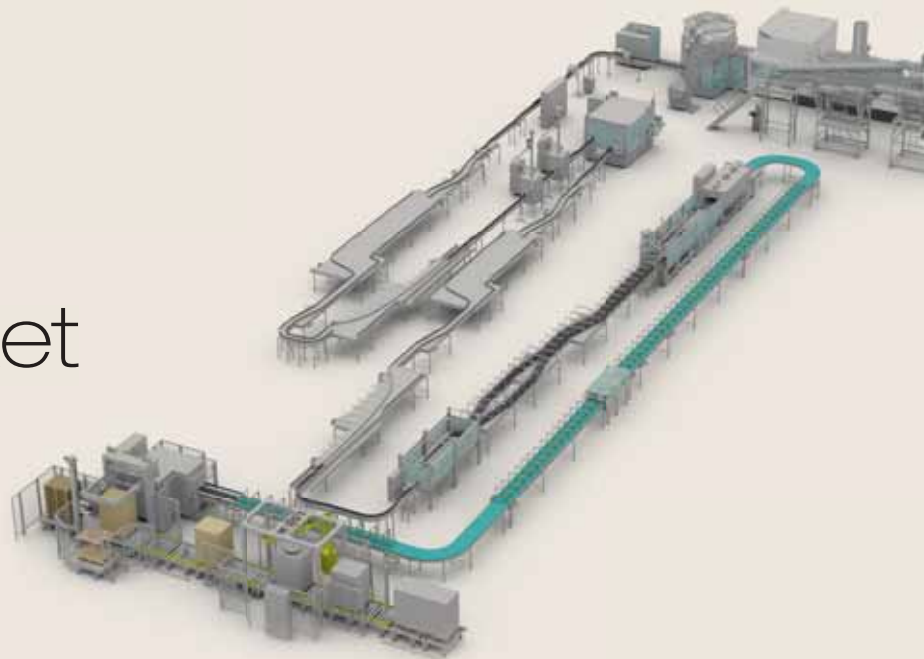
Not using any ribs, the Flex technology allows bottle designers to create all sorts of shapes, even for extremely lightweight bottles. These bottles are easy to grip, are supple and substantially less brittle than conventional bottles. And, thanks to the shape memory, they are better able to withstand conveying, packing, transport and handling.

The NoBottle™ weighs 25 to 40 per cent less compared to the average weight of a water bottle of the same capacity. This results in less plastic material to be recycled, proving to be an evident benefit to the environment.

"Water is the largest beverage market by volume with some 160 billion litres consumed globally in 2006. It also represents the highest growth sector and is expected to grow by 5.7 per cent annually between now and 2010. The additional tonnes of waste eliminated by this new, lighter design will be considerable", says Franck Hancard, Product Manager Packaging.



# Meeting market demand



The main tasks of the Complete Lines Center of Excellence, headed by Ludovic Tanchou, are to develop the competitiveness and profitability of complete lines while simultaneously ensuring consistent practices. Sidel is one of the biggest suppliers of complete lines in the world and Ludovic Tanchou, sees a growing market for these complete solutions.

The competition however, is fierce. "Even if Sidel covers almost any geographical area, you will always find a competitor wherever you go and for each deal you want to make", he says.

At the end of 2007, Ludovic Tanchou and his team made an extensive market analysis for PET lines. The end result is a global and local segmentation with a list of key properties to be fulfilled in order to answer and satisfy market demand.

## CONSTANT DEVELOPMENT

The key strategy for Sidel to stay on top of the competition is to invest in innovation and product development to create an uncontested market space in our selected global and local segments. "Sustainability demand gives us the opportunity to differentiate ourselves and create this space", says Ludovic Tanchou.

## COMPLETE LINES TO MEET SUSTAINABILITY DEMAND

Ludovic Tanchou labels 2007 as the year when environmental thinking made a big breakthrough in the in-

dustry. He predicts that sustainability will be one of the central key buying factors in 2008 and coming years. This means highlighting Sidel's sustainable solutions and strong product development programmes.

"At the end of 2007 we launched a programme to simultaneously mobilise the entire Sidel Product Manager community to develop the Sidel Sustainable PET Line", says Ludovic Tanchou. Today the concept is ready and promotes the capability to blow, fill, cap, label, pack and palletise a lightweight (below 10gr) 500ml PET

bottle. The solution has been developed in order to reduce air, water and electricity consumption but also reject rates. "The TCO of our sustainable line will be about 20% lower than a traditional solution", says Ludovic Tanchou.

"To validate our concept we tested each individual operation from blowing to full pallet transportation. We faced some difficulties and solved them. Today we are confident that we have an excellent product to meet sustainability demand", concludes Ludovic Tanchou.

Flexline, the Sidel Sustainable PET line, will be presented to the market in April 2008 at Interpack.





## China plant with green design

In Sidel's new plant in Beijing, China, Sidel had put green thinking at the centre of attention. With an investment of 35 million euros, architectural teams have worked to reduce environmental impact, especially through the use of systems designed to conserve water and electricity.

The philosophy is to work with nature, taking advantage of the environment when possible. This has resulted in using natural working light in some working spaces near windows, and providing natural shade by using plants and trees around the building. The presence of plants lowers the ground temperature by two to four degrees and helps natural air flow through the building, a welcome and much needed cooling effect during the hot Chinese summer months. Another feature is that the plant collects rain water for watercloset, maintenance and landscape watering. Collecting rainwater can reduce water usage by up to 50 per cent.

Besides the energy-saving focus, many of the plant's interior and exterior building materials are made from natural and recycled products.

The Chinese beverage market is one of the world's most dynamic, posting annual beverage consumption growth of about seven percent. It is also one of the most competitive. The plant will be Sidel's first multi-product facility, and it will assemble all equipment found on Sidel's complete lines, from blow moulding to palletising.

But the green design does not mean compromising production, quality or efficiency. In fact, the site will follow the same manufacturing processes, work practices and quality standards in place at all Sidel plants.



## Options & Upgrades are tools to reduce consumption on your machine fleet

Finding ways to reduce water, electricity and CO<sub>2</sub> consumption has become a way of life as companies strive to preserve natural resources and generate sustainable growth. As an equipment supplier, Sidel offers customers concrete solutions. The company has developed Options and Upgrades specifically designed to reduce the environmental impact of its global base of 27,000 installed machines. As part of Sidel's complete portfolio of Lifecycle Management services for machines and lines, Options and Upgrades enable the customer to lower consumption on already existing equipment while maintaining top production performance. And these consumption cutting measures come with a quick return on investment.

Options & Upgrades are specifically designed for existing equipment. They either add new functionalities to equipment (Options), or make improvements to existing functionalities using the latest technological advances

(Upgrades). For example, the Options & Upgrades range dedicated to curtailing consumption includes the air recovery system that makes it possible to reuse up to 40 per cent of the air expelled during bottle blow moulding. This results in a 15 per cent overall drop in consumption. Sidel's Option & Upgrade solutions also include a vacuum pump water recovery system for fillers. The system cuts the pump's water consumption in half. PRINCE (PRediction IN Control Equations), Sidel's control system for pasteurisation, slashes pasteuriser consumption of water and steam.

In all, Sidel offers nearly a dozen solutions for every step in the production process from blow moulding to product preparation, rinsing, filling, pasteurisation and washing. And Option & Upgrade possibilities are constantly expanding. Sidel is developing new solutions to reduce the consumption of chemicals, to curb pollution and noise, and to cut product losses.



## Eco-packaging trends turn towards plastics

Today, eco-friendly packages are among the market's top priorities, a fact that creates a new wave for plastic's popularity. In the industry, manufacturers are turning to increasingly lightweight packages. Compared to paper, glass or metal, plastic's market share is rising steadily because plastic pack-

ages are lighter weight and require less energy to produce. Sidel gets a head-start on the competition by offering a wide portfolio of reduced bottle weight, new materials, energy saving technologies and improved production performance.

## Green chemistry creates tomorrow's materials

Producing plastics from cereals is just one example of how new research is making way for the products of tomorrow. Sidel is an active partner in BioHub™, a program devoted to green chemistry, creating chemical products from renewable agricultural sources.

By developing chemical products from renewable agricultural sources such as cereals, the BioHub™ program will help limit the use of fossil fuels and reduce the production of greenhouse gases. With a seven-year timeframe and a 98 million euro budget, this research program is building on the synergies of chemists, public laboratories and manufacturers. Sidel, as a world leader in packages and

equipment for packaging liquid foods, will be contributing its expertise in processing materials and developing innovative plastic packages for foods. These include monomers and polymers, which until now have been manufactured from petroleum. Creating these new possibilities will lead to new and renewable materials, a step forward for both the food packaging market and the environment.





# Combining total food safety with environmental thinking

Sidel has put its expertise in preform decontamination to work on a technique to achieve better food safety for refrigerated products. The result is Predis, an innovative method of dry decontamination which is both economical and safe for the environment.

An important advantage with the Predis system is the substantial savings it can make compared to traditional methods on the market today, saving both money and natural resources. Since it is a dry decontamination system, no water and very little chemical products are required. Without a rinser, the process is also less complex with fewer mechanical parts, which helps to reduce maintenance and labour costs. In combination with the Sidel Combi, there is an overall five per cent energy saving compared to

an in-line process. In all, fewer chemical products, less energy and using no water, Predis is a more environmentally friendly method for decontamination.

## A NEW TECHNIQUE FOR SENSITIVE PRODUCTS

The preforms are decontaminated using hot hydrogen peroxide vapour. The process effectively stops recontamination and guarantees a significant reduction in microorganisms between the preform and the bottle, making it a highly hygienic method.

The technique took several years to develop and this new industrial solution can be used for all types of sensitive products such as milk, liquid dairy products and fruit juices. With the Combi, a single operator station means that just one person is needed to supervise all of the production steps, making it easy and reliable to use. It also requires less equipment and less space than a solution with a rinser.

## RISING TO THE CHALLENGE IN CROATIA

In Croatia, Sidel has equipped the country's leading dairy company Lura with the world's first Combi equipped with the Predis decontamination system.

Driven by consumer demand for more health-oriented products, Lura has developed an entirely new line with probiotic yoghurt products, a sensitive product range where hygiene and food safety is key. The company is also aiming to stay on top of their field in an increasingly competitive environment. More competitors are knocking at the gates with the prospect of Croatia joining the European Union in 2009.

That is why Sidel's Predis system appealed to Lura, combining a safe and economic choice with cutting-edge technology. Since 2006, they use Predis to package their BioAktiv probiotic yoghurt drink for the Croatian market, combining product quality with total food safety.





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## Tetra Laval – Sustainability in every sense

On a daily basis the industry groups within Tetra Laval bring customer value in many dimensions. We integrate environmental matters into our operations and solutions, to us this is a natural part of industrial leadership.

We constantly evaluate the environmental performance of our business, by questioning every aspect of our current operations and solutions. Only then will we contribute to improved sustainability in every sense.



[www.sidel.com](http://www.sidel.com)