

PIONEER HELLEFORS BREWERY

High productivity is a matter of survival.

ERIK NIELSON. KRONES NORDIC. DENMARK

The pioneer, Hellefors Brewery, was Sweden's first beverage bottler to install a complete line from Krones. In 2005, the company started up a non-returnable PET line delivered as a turnkey job, which provided this rapidly expanding company with additional bottling capacities for a growing PET market. By working together with large food and beverage retailers and by bottling private labels, the family firm, headed by Mats Holmstrand, has evolved into a major player on the market, which – determined as it is by tight margins – makes ultra-efficient bottling an imperative of particular significance.

EXPLOSIVE GROWTH

Charles Holmstrand founded Hellefors Brewery in the 1930s. His son, Elof Holmstrand, succeeded him, and today the third generation, in the shape of Mats Holmstrand, is at the helm, with son, Johannes, ready to continue the family tradition as fourth generation. The Hellefors Brewery is situated in the town of Hellefors in the Örebro district, roughly 250 kilometres west of Stockholm. During the past one and a half decades, the company has invested approximately 35 million euros in new machinery and lines. The halls of Hellefors Brewery, located idyllically on the shores of a forest lake, were continually expanded for this purpose in seven steps, offering Hellefors Brewery a total of around 20,000 m² of production and storage space. The year 1991 saw the beginning of an explosive growth, thanks to the successful launch of a new product range and the continuous stream of capital expenditure. In 1998, the newspaper, Svenska Dagbladet, placed Hellefors Brewery 17th in the newspaper's list of Sweden's most successful companies, which compiles the country's enterprises exhibiting the most vigorous growth over the last five years on a regular basis. The turnover achieved by Hellefors Brewery grew from 1.2 million euros in 1991 to just under 50 million euros in 2006. In the same period, the payroll increased from seven to 115.

When Hellefors Brewery started operation in the 1930s, it made soft drinks. And when, in 1991, the company moved from the city to the outskirts of Hellefors, it concentrated on the production of cider (with and without an alcohol content) in glass bottles. Today, Hellefors Brewery makes a wide range of beverages on a total of seven filling lines: four cartoning lines, two PET lines, and one for filling canisters. The formats filled are firstly 0.2 l, 1.0 l, 1.5 l and 2.0 l beverage cartons, secondly 2.5 l and 5.0 l plastic canisters, and thirdly 0.5 l, 0.63 l, 1.5 l and 2.0 l PET bottles.



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A CURSE AND A BLESSING: 400 DIFFERENT PRODUCT VARIANTS

The best-selling type of packaging exhibiting the steepest growth is, like everywhere else, the PET bottle. This type of container accounts for about 60 per cent of overall production (around 120 million litres), with around two per cent being filled in plastic canisters and just under 40 per cent in cartons. 'We offer the market an enormous variety of highly disparate products in different containers and sales packs', explains Mats Holmstrand. 'We're handling about 400 different product variants in all. This is both a curse and a blessing, with the main season being particularly difficult. During the four months of summer, we deliver almost half of our annual production. To have all our products ready for delivery here, we have to firstly fill round the clock in four-shift operation, and secondly make part of the range in advance and store the products in temporarily rented halls.'

'In this case, our own 17,000 pallet slots aren't enough when, during peak season, we deliver 25,000 pallets a month', adds the Head of Logistics, Leo Kiuru. 'What assumes enormous importance in this situation, and also, of course, against the background of small earnings in the low-price segment, is high filling productivity. This was one of the major reasons tipping the scales in favour of Krones when it came to installing a new PET line.'

BREAKTHROUGH ACHIEVED WITH PRIVATE LABELS

That the company name contains the word 'Brewery' is somewhat misleading today. It dates back to the 1930s when the firm made a sweet malt beer called 'Svagdrička', with an alcohol content of around 1 per cent. Today, Hellefors Brewery has an extensive production list, but no actual beer on the list: cider, juice, fruit puree, multi-vitamin juice, water, soft drinks, fruit syrup, fruit juice based beverages and light drinks. The largest segments are non-alcoholic cider (carbonated apple spritzer), water, soft drinks and juices. In addition to its own brands, accounting for just under a fifth of the production output, Hellefors Brewery fills products for other manufacturers as a contract packer under the latter's own brand names. However, the actual breakthrough came when, in the 1990s, Hellefors Brewery decided to fill private labels, with the customers here being both the large retailing chains ICO, Coop, and Axford and many autonomous retailers in the low-price segment. Hellefors Brewery's own products are mainly sold on the Swedish market, accounting for just under 90 per cent. The remainder of the company's output, slightly more than 10 per cent, primarily goes to the Scandinavian countries, with Finland contributing around five per cent to turnover. →

‘WATER IS ASSUMING EVER-GROWING IMPORTANCE FOR US AS WELL’

Hellefors Brewery fills cider, soft drinks, fruit syrup and water into PET bottles. The popular non-alcoholic cider is available as two brands: ‘Hellefors’ and ‘Läckö’. Another of Hellefors Brewery’s strong points is water bottling. ‘It looks as if water is the big issue just anywhere in the world’, says Mats Holmstrand. ‘It’s assuming ever-growing importance for us as well’. The carbonated water ‘Grythyttan’ is filled into 0.5 l and 1.5 l non-returnable PET containers, with the still variant ‘Grythyttan Stilla Vatten’ only being filled into the 0.5 l bottle.

ALTERNATIVE LABELLING IN SERIES

Krones supplied the line complete with the process engineering required, in this case a CIP system and a Contiflow 30/2 beverage preparation system, which had to be dimensioned for a somewhat greater output in order to cope with the high mixing ratio of product and water when producing cider. Furthermore, an instrument for measuring the alcohol content has also been integrated; it is needed for making alcoholic cider. The Contiform S10 blow-moulder is supplied with preforms via a preform hopper loading system and feed unit. It is mechanically BLOC-synchronised with the filler by means of an enclosed neck-handling drag chain with integrated container-base cooling. When it came to the filler, Hellefors Brewery opted for a field-proven 80-valve, mechanically controlled short-tube counterpressure filler, the Mecafill VKP-PET. After the bottles have been capped, a Checkmat F-G checks them for proper closure position by means of a camera and for the correct fill level by means of gamma rays. An Accuflow buffer table has been installed downstream of the inspector.

For labelling, Hellefors Brewery has left its options open, by installing both a Contiroll wrap-around labeller and a Pronto-



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matic for applying paper labels, which are arranged in series. In between, there is another Checkmat inspecting the bottles for proper positioning of the wrap-around labels. Hellefors Brewery can choose between two alternatives for end of the line packaging, as well: a Variopac TFS 60 with shrink tunnel makes 6-, 8-, 12- or 24-bottle shrink-packs, with or without a tray, packing 0.5 l, 0.63 l or 1.5 l bottles. A handle applicator has been installed downstream to fit handles to the packs, if so desired. A Pressant then forms layers which are palletised by a 3A robot with layer pads. To conclude packaging, a pallet strapper then stabilises the pallets’ loads.

The second variant consists of using returnable plastic trays (called ‘retrays’) from a returnables pool, which serve the retailers as display pallets for the sale of individual bottles. A 3A robot feeds these bright red 24-bottle trays into a lane running parallel to the shrink-pack conveyor, places 24 waiting 1.5 l bottles on



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top of each of them, and then loads two retrays at a time on two half-pallets, which in their turn sit on a europallet. Here, too, the pallet strapper is the last link in the packaging process. ‘The new Krones line really runs very well’, says Mats Holmstrand.

FOUR OPERATORS AT MOST

In parallel to this new installation, Hellefors Brewery upgraded its first smaller PET line (made up of pre-owned machines) by integrating a new Variopac shrink-wrapper and a Controll wrap-around labeller. This line concentrates on making 1.5 l bottle 6-packs.

A maximum of four operators per shift are sufficient for running the new line, which also includes feeding in all the consumables. ‘This, too, was an important factor in favour of placing the order with Krones’, the company’s executive explains. As a rule, the line is run in three shifts, and in the summer in four shifts.

Mats Holmstrand sees PET containers as the most important packaging of the future. ‘I don’t believe in cans, and we’re probably not going to be returning to glass, either’. Also proving a stroke of luck in the end for Hellefors Brewery, was the company’s decision to stick with non-returnable PET. Just a few short years ago, it looked as if returnable PET was going to be Sweden’s favourite for ecological reasons. But nevertheless, the country’s beverage bottlers turned away from this in mid-2007; the returnables system is finally a thing of the past. Now, because of shorter transport routes and less cleaning outlay, non-returnables are demonstrating their ecological advantages.

‘We’ve never had returnables here, it has been non-returnables all along.’

SIGHTS ON THE FUTURE – ON CHINA

Eco-compatibility, combined with lower costs, is also demonstrated by Hellefors Brewery in its distribution operation. On principle, Hellefors Brewery uses forwarding agents, not a truck fleet of its own, for transporting its goods. For several years now, some of them have also been shipped by rail, with the family company having its own siding. Four years ago, it was just three to four wagon-loads a week. Today, in the main season, it is eight to nine wagons a day that leave Hellefors Brewery loaded with products destined, primarily, for the regions in Northern Sweden, up to 900 kilometres away.

But Mats Holmstrand already has his sights on a new sales market, which, admittedly, is a bit farther away. In a not too distant future, China could be supplied with a newly developed alcoholic cider packed in 0.63 l PET bottles from the Swedish forests around Örebro. The Holmstrand family has put in place the technical preconditions for this with the new Krones line. ◻