

PARTNERSHIPS

A half-century of success: HEYE and SIVESA mark golden anniversary

Still jointly celebrating consistent growth, HEYE International and SIVESA recently marked 50 years of collaboration. After an agreement back in 1973 would see the Sivesa plant modernised, Heye's 'narrow neck press and blow' technology then went on to improve both efficiency and reduced bottle weight – all punctuated by a subsequent expansion of the Mexican glassmaker's beer exports.

Heye International recently celebrated the fiftieth anniversary of its Technical Assistance Agreement with Mexican glassmaker Sivesa (Sílices de Veracruz SA de CV). Over that half century, Heye has been Sivesa's trusted technology partner as the glassmaker grew to become part of the Crown Holding, Inc. going on to add a second glass plant (Vichisa S.A de C.V.) in the north of Mexico.

Says a jubilant Arturo Romo, Director of Operations of Crown Glass: "Heye's collaboration with Sivesa has generated very positive





results in joint operations spanning over 50 years - all thanks to the service and communication that's been provided to improve the performance of glass bottle manufacturing processes throughout this time period."

MODERNISATION FROM THE WORD 'GO'

The two companies signed their first Technical Assistance Agreement on 27 March 1973. An engineering and supply contract followed a year later. This included a new furnace with three IS-machines that became operative in 1975. It marked the first step towards modernising the Sivesa plant in Veracruz, southeast of Mexico City in a contract that included mould design as well as a general overhaul.

The original agreement was made between the customer and Glastechnik Winckler & Co., which promoted Heye technology. Over the 20 years that followed, Heye developed its own global presence, which included the acquisition of Glastechnik Winckler & Co. back in 1991.

The Technical Assistance Agreement has been periodically renewed - continuing now into the second half of this decade. The TAA encompasses every stage of

a project, from strategic concept to commissioning and operation. Here a key component is the training of local staff and the passing on of know-how by Heye specialists.

NNPB TECHNOLOGY

Introduction to the plant of Heye's narrow neck press and blow technology (NNPB) in 1979 resulted in a significant boost for Sivesa in Central and South America. Over two years, five of the plant's seven lines were converted to the new technology - invented by Heye International. Indeed NNPB capability distinguished Sivesa from its competitors and enhanced the firm's exports.

Says Heye International CEO Hans-Peter Müller: "For Sivesa, the original benefits of NNPB were efficiencies; the new technology saved energy and raw materials while providing even better stability for bottles. Its impact has been staggering. By 2010, we had reduced the weight of a 355ml Long Neck beer bottle from 310g to 180g." In the following years further weight reductions have been achieved, for example for the 355ml Premium ½ Expo 12oz beer bottle from originally 245g to 150g.

Since then, NNPB's efficiencies have been matched by its sustainability. Every glassmaker has woken up to the challenge

of climate change and the role lightweight recyclable and reusable glass packaging plays to combat the crisis.

MEETING A GROWING MARKET FOR BEER AND SOFT DRINKS

In subsequent decades, Sivesa expanded and modernised, adding new furnaces and increasing capacity to supply the packaging required by the beer and soft drinks market. Heye supplied a new batch house and melter as well as regular upgrades to the forming lines.

A further major conquest was made when Sivesa signed a supply contract with Coca-Cola in the early 1990s. Heye proved a reliable partner in this expansion after installing hot-end and cold-end equipment - going on to support Sivesa both with its training and with upgrading its expertise. Continuous weight reductions have been achieved through the years for beer and soft drink bottles. In 1996 Heye developed the Generica Coca-Cola bottle for Sivesa - a lightweight of 200g with a volume of 500ml.

Then 2013 saw more significant investment by Sivesa as global exports of Mexican beer took off. Heye provided furnace repairs along with new and modernised cold- and hot-end equipment.

PARTNERSHIPS



2015 was the year that marked new ownership for Sivesa as Crown Holdings bought the Empaque packaging operation from Heineken.

The popularity of Mexican beer has gained still greater traction over the past decade. 2014 yielded USD 2.35 billion, which grew to USD 5.01 billion in 2021. To cater for the rise in demand, in 2017 Crown decided to develop a second glassworks at Vichisa - near Chihuahua in northern Mexico. This drew on Sivesa's experience and the partnership with Heye, which supplied three 16-Section SpeedLines to the greenfield project, fully-equipped with swabbing robot. The USD 120M plant started production in January 2018, employing 200 people. The facility has a capacity of 450 tons of glass per day, which is equivalent to 660 million bottles per year supplied to the Heineken brewery.

As the two companies celebrate the fiftieth anniversary of their initial team-up, fresh projects are under development at both plants.

A VISION FOR FUTURE COLLABORATION

As the partnership goes from strength to strength, Sivesa strives for greater standardisation as it addresses every aspect of sustainability.

This is shown by its strong interest in energy-efficient furnace design, in predictive maintenance to reduce spare part stock requirements and in further lightweighting. Here Heye is researching and testing to see how light a glass beer bottle can be while retaining its safety under pressure.

There is also a drive towards standardisation by increasing modularity of the glass manufacturing equipment as well as by further digitisation.

This is no surprise. A frequent request by Heye customers is that of learning how to make production more sustainable and replicable while preventing critical defects and machine downtime. Here, within the decade since Heye last celebrated an anniversary with Sivesa, the company has been leading a massive leap in digitisation. Indeed modern Heye equipment features a host of automated sensors to reduce line errors and increase repeatability. Together these boost pack-to-melt numbers.

Heye's technical solutions are tested at in-house facilities in Germany along with dedicated pilot customers - also using the company's own staff whenever possible. Customers are focused on their environmental footprint, so Heye's technical experts have two research priorities: firstly, that of ensuring that furnace and machine design can reduce energy use and secondly, that of assisting customers to increase the number of bottles made from each ton of glass they melt.

WHAT MAKES THE SIVESA-HEYE PARTNERSHIP SPECIAL?

At the heart of the long-standing collaboration lies mutual respect for each company's advanced expertise and ambitious core values.

Heye's involvement has helped Sivesa and Vichisa achieve con-

sistently high quality standards and excellent production yields. Crown's Mexican glassmakers also benefit from sophisticated training programmes: Sivesa established its own training centre on site and has also trained its staff in Germany.

As Heye International CEO Hans-Peter Müller concludes: "Our continued relationship has seen the formation of many personal friendships between Sivesa and Heye staff. I congratulate Sivesa on its continued success and look forward to Heye providing the next generation of equipment and skills as we embark on our next 50 years together." ■



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SIVESA

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NNPB EXPERTISE

TECHNOLOGY AND ASSISTANCE



HiPERFORM

LESS WEIGHT & ENERGY

- + Less raw material and energy per container
- + Higher cavity rate
- + Lower unit costs per container
- + Better quality, higher added value
- + Higher output, revenue, margin

WE ARE GLASS PEOPLE