



Joint-venture success benefits Chinese glass container sector

It was in 2011 that a joint-venture was created between Bucher Emhart Glass and China's Shandong Sanjin Glass Machinery Co Ltd. Vincent Pang, Chairman of Sanjin and Martin Jetter, President of Emhart explain how the initiative has benefited both parties, as well as numerous customers in the Chinese glass container market.

Vincent Pang and Martin Jetter confirm that the Chinese glass container industry is still the most fragmented in the world, with more than 500 plants in operation. Over the years, there has been gradual consolidation, a process influenced by the efforts of the Chinese government to clean up the environment. "Glass plants that are unable to fulfil the new environmental requirements imposed by the Chinese government are forced to close down" Vincent Pang explains, emphasising that these tend to be smaller glassworks, with minimal investments in plant and equipment. "The bigger and stronger glass plants are able to invest in environmentally-friendly equipment, absorb the capacity vacated by those weaker plants and therefore, are growing from strength to strength."

In a more consolidated market, glass plants are demanding bigger and more productive forming equipment and fully automatic inspection machines. This is the strength and capability of the realigned Shandong Sanjin Glass Machinery Co Ltd. Based at Zibo, Shandong Province, the company has delivered some 60% of all IS machines used by local



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glassmakers and offers the most comprehensive equipment portfolio to cover the needs of all market segments. And via its co-operation with Bucher Emhart Glass (BEG), Sanjin can also deliver the most

exhaustive range of technical features.

The company focuses predominantly on serving the interests of local Chinese customers but also supports other selected international markets, where Sanjin equipment is a good fit for their requirements. In addition to a full range of IS machines, the company supplies distributors and forehearths, mechanical and servo feeders, annealing lehrs, single liners and inspection machines.

State-of-the-art operation

Since the joint-venture between Bucher Emhart Glass and Sanjin was created in 2011, BEG has invested in new production equipment and streamlined operational processes, while also focusing on the improvement of environmental protection. "We also invested in R&D and jointly developed new machine lines based on our existing components but focused on Chinese market requirements" Martin Jetter explains. "Today, the facility has a state-of-the-art standard, comparable to Western factories."

According to Vincent Pang, recent business performance has followed the Chinese glass container industry's investment cycle... reasonably good for the first two years, a downward trend for three years, before recovery during 2017.

It is apparent that the joint-venture has benefited both parties, providing valuable access to the Chinese ▶



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market for Bucher Emhart Glass. For Sanjin, the agreement has delivered technical knowhow transfer from one of the industry's leading suppliers, manufacturing and assembly knowhow transfer, access to the latest technologies for the glass container industry and support for investments in the latest production equipment.

There have also been some incidental benefits from working together, with BEG management and staff taking advantage of the opportunity to learn about Chinese culture and the Chinese way of doing things. In return, Sanjin management and staff get to learn about Western culture and the Western way of doing things. "It is a continuous process to recognise and implement the strength of both cultures to the benefit of Sanjin and ultimately to our customers" says Vincent Pang.

Furthermore, customers confirm that the quality of machines and parts has improved as a consequence of the joint-venture, thereby ensuring more reliable equipment. Machines have been introduced that are more productive and capable of making high quality bottles and jars, including parallel mould double and triple gob configurations, as well as 10-section triple gob and 12-section double gob machines.

Investments support market confidence

Sanjin is now well placed to help members of the Chinese glass container community to realise



Heat treatment at Sanjin's Zibo works.

higher production speeds, increased container quality, more sections/machine and more cavities/section, as well as better machine safety and higher machine flexibility. "Bucher Emhart Glass is worldwide leader in these aspects" says Vincent Pang "and with knowhow transfer from the company, Sanjin can lead the Chinese market towards these goals."

Martin Jetter confirms that significant investments have been made to equip the Zibo factory to produce consistent, high quality parts and machines for the glass container industry. This includes the adoption of

an advanced coated sand casting process, the installation of ion-nitriding, induction hardening and vacuum cleaning machines for heat treatment, robotic welding for section frames and an automated painting line. More than 50 CNC machines have been acquired and a lean assembly process adopted for mechanisms and section frames, together with the latest machine assembly seats and processes and installation of an advanced ERP system. Both partners expect the Chinese market to stabilise further during 2018, as the glass container industry starts to grow again. Further examples of market consolidation are expected, increasing the industry's need for higher quality, high productivity equipment. Sanjin will focus on continuing as the market leader, constantly developing and innovating to satisfy the needs of customers, supported by knowhow transfer from Bucher Emhart Glass. ●



An automated painting line has been installed.



Section assembly at Sanjin's Zibo works.

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