

# Providing solutions to everyday issues

Since 1983, Dura Temp has provided ware handling solutions to glassmakers for their everyday manufacturing issues. With each glassmaker having different production requirements and conditions, offering innovative and successful solutions tailored to each client's situation presents challenges. As Jennette K Goans explains, Dura Temp strives to provide exceptional service, proper ware handling, rapid order deliveries, constant innovation and enhanced product output for glassmakers worldwide.

The following clients called on Dura Temp to assist with difficult ware handling challenges and deadlines. While these issues are common to many glassmakers, if they are not addressed, they can have a large impact on the profitability and efficiency of the factory.

## Service

One of Dura Temp's clients recently experienced a major challenge when the conversion date for one of its IS machines was moved up several months. This meant that the sweepout assemblies had to be designed and produced on an expedited schedule. Providing high quality customer service in a timely manner is essential to help solve glassmakers' everyday ware handling issues. Dura Temp provides support for these time-critical issues by stocking enough inventory to meet last minute requests and allowing for flexibility in its production schedule.

The company was able to assist in this time-critical situation by exercising quick turnaround times for production and customised solutions made from standard products. Its engineering and production teams collaborated to move the sweepout design through quickly to manufacturing, all while keeping the client informed about the

project status and anticipated delivery to the factory. Because of this quick action, the sweepout assemblies were delivered to the client prior to the machine conversion, which prevented unnecessary delays.

The client was thankful for the service provided and said the following: "Dura Temp has been there to lend support via email, telephone or on-site assistance. They have designed custom solutions for many of my projects. Communication is easy, which makes the process much less painful when we are designing (sweepouts) for so many different shapes and sizes of containers. They have succeeded with all parts and equipment on-site to meet my deadlines. One of the best things about our relationship is that even when I must ask the impossible on lead times, they have come through on time to support the demand."

## Custom design

A USA-based client contacted Dura Temp because harsh operating conditions caused its standard transfer pockets to bend on the angle of the bracket. This glassmaker has very high speed production of beer bottles that created an impact too great for standard transfer pockets. The client requested an improvement be made to

the pockets to prevent bending. However, it could not affect how the pockets were mounted on the transfer or require a significant investment for a special design. The solution was to add reinforcement to the standard steel bracket to increase strength.

Considering the client's goals to reduce bending of the current transfer pockets without a significant investment or without impacting the attachment method, Dura Temp committed to provide a solution to reach those goals. Its technical specialists completed an analysis on the bent transfer pockets, the containers causing the pockets to bend and the ware handling environment. After a thorough analysis, the company's technical and production teams created an improved transfer pocket for these operating conditions. This stronger pocket incorporated reinforcement ribs in the 90° angle of the bracket. This ultimately increased the strength of the pocket while on the machine, nearly eliminating the occurrence of the pockets bending.

## Innovative materials

Dura Temp's materials are made for hot end ware handling and can withstand the harsh conditions of glass production. An independent glassmaker hit an unexpected challenge when the contact material that came standard on IS equipment was not performing to expectations. These production lines ran at higher speeds and temperatures than other facilities. The standard contact material was constructed with PTFE and was melting and warping under production conditions, causing ware to fall over. Additionally, the PTFE material was being replaced every few weeks due to rapid wear, resulting in a large expense.

Dura Temp's team of technical experts made an on-site visit to the client in order to better understand the operating conditions and equipment. After evaluation of the failing materials, the company was able to make a recommendation for different contact materials. Dura Temp's specialised DT-1 (silicone composite) and DT-65 (carbon fibre carbon) can withstand the demanding temperatures and speeds of the machines. The materials from Dura Temp ran on the machine for an extended period without showing signs of wear, resulting in increased efficiency, cost savings and improved ware handling.

The client has been satisfied with the performance of the materials and had this to say regarding the solution: "All of our single gob machines and triple gob machines are using either DT-1 or DT-65 material. Since the switch to Dura Temp's material, I estimate we are saving around \$10,000 a year. We plan to switch our double gob machines to this material and save an additional \$5,000 per year."



SP-1180-S finger with hexagonal socket.

*hexagonal socket*

### Efficiency

While all glassmakers face the challenge of producing high quality containers at top efficiency, this proves especially difficult when ware handling equipment changes cannot be made directly on the production line. A USA-based glassmaker encountered this issue with Dura Temp's universal SP-1180-S finger. Not having the ability to change fingers during production was dampening efficiency. Due to high production runs of a large liquor container, the finger needed to be changed often but the entire sweepout assembly had to be removed to do so, resulting in lost production time.

A solution was developed that would ultimately improve the ability to change the SP-1180-S fingers easily. For the finger to be removed directly on the production line, Dura Temp's technical specialists knew they would have to add a feature easy enough to access yet maintain the strength of the current design to prevent bending and breaking. The team decided to add a hexagonal socket to the end of the metal finger insert. Incorporating the hexagonal socket into the insert allowed the part to be installed and removed directly on the production line by an Allen wrench, a tool that was easily accessible in the plant. The success of SP-1180-S with the added hexagonal socket drove the Dura Temp team to make it standard on this part for better efficiency for all clients.

### Innovation

Clients often call upon their Dura Temp technical specialist when they are faced with challenges surrounding the production of flask containers. A USA-based client was experiencing issues in the production of a 187ml flask and a 375ml flask. They were using sweepouts with guide wires to assist in stabilising

Sweepout assemblies for different container sizes.



the flasks but this was proving to be unsuccessful. The factory was also facing stuck ware and shoulder contact due to improper spacing, as well as increased labour costs from constant monitoring and adjusting.

Perfecting ware handling for difficult containers, especially flasks, can be very challenging. But with years of experience studying and specialising in exactly that, Dura Temp often exceeds clients' expectations. As in this case, after a clear understanding of the client's challenges, Dura Temp's team of technical specialists developed

a sweepout pocket that contours the shape of the flask, providing it enough stability to be delivered safely to the main conveyor. The curve of the fingers is short enough that they do not interfere with the flask on the retract of the sweepout arm. With this improved sweepout, the factory was able to increase efficiency, remove guide wires and nearly eliminate stuck ware and shoulder contact of flasks.

Dura Temp's client had to say the following regarding the experience: "Our plant was having issues with ware handling from the sweepouts we were using on 187ml and 375ml flasks. We were losing a fair amount of ware on the main conveyor and in the transfer wheel because of the handling issues. Also, we were at a risk for stuck together ware, which is a critical defect. Dura Temp was able to design a sweepout that placed the bottle perfectly in the pocket and the ware handling on the main conveyor and transfer wheel has improved dramatically. We are very pleased with the Dura Temp sweepouts and the services provided."

Although many of these issues are common among glassmakers, Dura Temp is focused on providing solutions for every client's success. The Dura Temp team is committed to maximising profitability and efficiency for glassmakers worldwide. ●



Flask sweepout pocket.

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