

Case Study: Chocolate Process

PTFE Butterfly Valve and BIO-LINE ASEPT®



INDUSTRY

Food Processing – Chocolate

CUSTOMER

A major global confectionery group producing leading consumer branded products, with a focus on quality and customer satisfaction.

BACKGROUND

This customer's facility in Germany processes chocolate products, and they had experienced historical issues with butterfly valves for critical processes whereby the valves were failing prematurely and replacement parts were only available on a long lead-time. Additionally they required higher performing sealing solutions for hygienic connections throughout the process, requiring a superior material that would provide an effective seal while being resistant to aggressive process and cleaning media.

CHALLENGES FACED

Cocoa and chocolate processing can be very critical because when the cocoa beans are cracked oil and grease are released, thus presenting major challenges for many traditional sealing materials. Additionally in several areas the process media is very abrasive, which causes further challenges for the process components and seals.

OPERATING CONDITIONS

1. Media: Chocolate and Caramel
2. Pressure: 10 bar
3. Working Pressure: 0.8-6 bar
4. Temperature: 113°F (45°C)

SOLUTION AND BENEFITS

Unsatisfied with the existing butterfly valves as well as their seals for hygienic connections, the customer worked closely with Garlock in 2013 to organise trials of both GAR-SEAL PTFE Butterfly Valve (DN 80-150) as well as GYLON BIO-ASEPT® seals. With a key focus on process efficiency and reliability, the trial proved to be a great success with zero failures and no unscheduled downtime. Garlock's products have now been chosen throughout the process because of their excellent performance, extended lifetime and compliance with required industry standards such as FDA and EN1935. The short lead-time and strong service support from Garlock also means that the customer is now able to order the products only when required thus reducing the need for additional inventory and avoiding associated costs.

For more information, please visit:
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