

PowerlokTM Actuated Ball Valve – High Operation Cycle Application



INDUSTRY

Automation and Packaging Industry

CUSTOMER

One of the leading manufacturers of High-Volume Packaging Machinery for 'Ready to Eat' Food Industry.

BACKGROUND

One of the leading manufacturers of Packaging Machinery of Packaged Food items. Their emphasis on reducing 'downtime' was prime focus in our initial meetings. Reduced downtime simply meant increased productivity and hence increased revenue and profits.

CHALLENGE FACED

Current and immediate challenges were not one but multiple. Due to the high-performance demand of their application, No domestic product would solve their problem. Products from Industry Pioneers would mean minimum 8-12 weeks of lead time. This coupled with non-availability of the replaceable 'seal kits' meant further increase in downtime.

Prime focus was to supply a product with performance at par with Industry leaders with lead times as low as 5 weeks.

OPERATING CONDITION:

Fluid Temperature	: Ambient
Application	: Valve operation at High Cycles at 180 BAR pressure. 7 Second Open - 3 Second Close operation cycles
Media	: Instrument Air

SOLUTION AND BENEFITS

After understanding the application, Thomas & Brian[®] designed a Ball Valve selecting the right soft seat. This prototype was tested in their R&D lab for cycles until failure for close to 60000 cycles. The application parameters were replicated in the facility so as to get the exact results which could be expected on field. The valve was tested at 200 bar until failure which happened at 58000 cycles. No leakages were found during the ongoing tests until after failure. Replaceable 'Seal Kits' were provided additionally so customers could replace them at site to keep downtime to the minimum. All this in a period of 40 days.

Final verdict! Reduction in downtime by 80% and one very happy Customer!