STERIFLOW
a division of Jordan Valve

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| **Company** | Biopharmaceutical Manufacturer |
| **Challenge** | Control valves required annual breakdown and diaphragm replacement. Failed diaphragms caused unscheduled downtime |
| **Solution** | After using the Mark 978 control valve, the engineer was able to increase the routine PM schedule from one year to four, decreasing maintenance costs |
| **Results** | O & M costs were reduced significantly. Additionally a larger savings was associated with increase process availability and uptime |

# BIOPHARMACEUTICAL PLANT SAVES SUBSTANTIAL OPERATIONS/MAINTENANCE COSTS WITH STERIFLOW VALVE

A West Coast-based pharmaceutical manufacturer's engineer faced a challenge that every type of manufacturing facility is confronted with continuously. An effective, preventive maintenance program often means that functional equipment is removed from service and replaced or repaired. Often based on the equipment manufacturers recommendations and specifications, along with routine, regular maintenance checks, a MTBF (mean time between failure) is calculated and the maintenance schedule is based on the data.

In the case of a biopharmaceutical plant, this means that aseptic control valves must be carefully maintained to ensure proper operation. Used for precise control of flow and pressure in clean steam, WFI, buffer and drug product systems, valve failures cost the plant money in downtime and lost productivity.

## VALVE DIAPHRAGM REPLACEMENT INCURRED HIGH ANNUAL COSTS

This particular plant used a control valve for their critical processes. A chief source of failure in an aseptic control valve is the diphragm. This vendor's valves used a laminated PTFE/EPDM diaphragm. These diaphragms had to be replaced on an annual basis due to potential failure.

Over time, several of these diaphragms failed between scheduled maintenance and were placed on a tighter schedule for routine replacement. This increased maintenance costs significantly. When a diaphragm is replaced, the valve must be adjusted to ensure proper flow and pressure. At this facility, diaphragm repair had to be done at the factory service center because of valve adjustment issues. Outsourced valve repair costs added to the already increasing maintenance budget.