PLAST-O-MATIC APPLICATION BULLETIN IIC-1

MARKET CI	hemical Distribution
PRODUCT(S) F	Relief Valve Series RVD050V-PF, Gauge Guard Series GGMT200-PF,
E	Ball Valves Series MBV050VT-PF and MBV100VT-PF
REQUIREMENT	To provide by-pass safety relief from pressurized bromine line(s) in the event
	of blockage in "use" line.
PROCESS FLUID(S) Bromine Liquid	
INLET PRESSU	IRE/TEMPERATURE 80 - 150 PSI / Ambient



Packaged Bromine Delivery System provides variable flow by the use of two metering pumps. Control panel provides for bromine delivery of either or both pumps depending upon customer's demand. However, should blockage occur anywhere along the discharge line(s) the pump(s) will continue to run building pressures to 150 PSI – an extremely dangerous condition. A Series RVD050VT-PF Kynar[®] Relief Valve was installed on the common discharge line between the two pumps with by-pass flow returning to the main suction line. This provides assurance that should blockage occur while either or both pumps are operating, the total flow capacity would by "by-passed" safely until the blockage problem is corrected.



PLAST-O-MATIC APPLICATION BULLETIN IIC-3

MARKET Speciality Chemicals Manufacturing PRODUCT(S) Series RVT075V-PF Relief Valve

REQUIREMENT To provide back pressure on pump discharge to smooth flow and increase pump performance.

PROCESS FLUID(S) Proprietary Additives

INLET PRESSURE/TEMPERATURE 40 PSI



Manufacturer of specialty chemicals for the semiconductor industry required a backpressure valve to be installed directly in the pump discharge line (set at 20 PSI) to provide resistance to a variable flow chemical metering pump and act as a positive check valve when pump was off (to prevent reverse flow back into tank). Virgin, non-pigmented Kynar[®] PVDF Series RVT was selected due to its chemical resistance and non-contaminating, nonleaching properties. Teflon[®] shaft, U-cup design was critical for cycle life since valve had to cycle thousands of times per process cycle.



PLAST-O-MATIC APPLICATION BULLETIN IIC-6

MARKET Contact Lens Manufacturing
PRODUCT(S) Pressure Relief Valve Series RVT100B-PV as back pressure regulator and
Flow Control Valve Series FC050B-1/2-PV
REQUIREMENT To provide a consistent pressure and flow of saline (corrosive) solution to
various points of use.
PROCESS FLUID(S) Saline Solution
INLET PRESSURE/TEMPERATURE 20 PSI / Ambient



Following the manufacturing of contact lenses each lens must be individually washed with saline solution before packaged. Prior to incorporating the above products, each wash station had its own individual pumping system which was both expensive to operate and maintain. To resolve the problem the manufacturer redesigned the system using one pump for the entire process and installing one Flow Control Valve - 1/2 GPM at each station to assure precise flow. A Series RVT Relief Valve was installed as a backpressure regulator to provide consistent pressure to each Flow Control Valve. The used saline solution rinse empties into the bottom drain of the wash station and is recirculated back to the holding tank.

