



## How a Custom Valve Assembly Was Designed to Withstand Harsh Workplace Conditions

### THE CUSTOMER'S PRODUCT:

- Petro-chemical processing equipment (scrubber tank)
- Float valve control assembly provides automatic shutoff when the fluid level reached a certain point
- Assembly mounted to the side of the tank, with the actual float inside
- Used custom Humphrey 125 Series valve to send the shutoff signal.

### THE REQUIREMENTS:

- Eliminate components and reduce customer's assembly time
- Make the valve module less likely to be damaged accidentally by workers when they used the float assembly as a footstep

### THE HUMPHREY ENGINEERED SOLUTION:

- Compact body design is not easily damaged by workers
- Integral connections eliminated external plumbing
- Humphrey 125 Series valve is simple and reliable
- 2-position, pressure-operated, spring- and pressure-return
- 2-way or 3-way operation
- High flow rates (27.5 scfm @ 125 psig)
- NiTuf coating on body provides barrier against chemical attack
- Unit supplied pre-assembled to reduce customer assembly costs

SIC: 3492

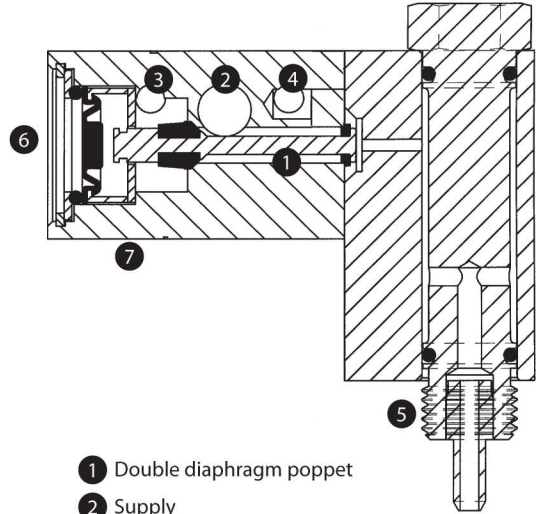
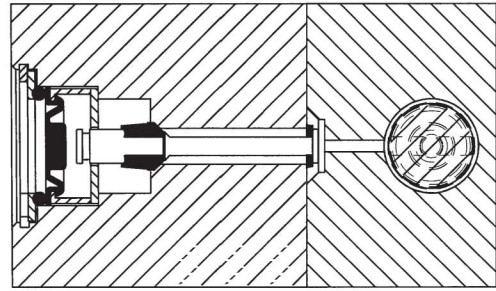


## THE SOLUTION:

While the original Humphrey valve was the only one that consistently worked, the company asked Humphrey for an enhanced design. Humphrey's Engineered Solutions team, working closely with the customer's engineering department, developed an integrated design that was more robust and helped the customer to reduce assembly costs.

## THE PROCESS:

When the customer initiated the request, Humphrey set the Engineered Solutions process in motion - assigning an engineer to work directly with the customer's engineer. Starting with the initial request for a more robust valve, the engineering team explored all the other factors that might enhance the product. This investigation uncovered the additional opportunity to reduce assembly costs, eliminate fittings and improve product performance in the field.



- 1 Double diaphragm poppet
- 2 Supply
- 3 Exhaust
- 4 Output
- 5 Integral mounting threads with factory-supplied thread caps to prevent damage
- 6 Manual override
- 7 NiTuf<sup>®</sup> body coating

**Humphrey**<sup>®</sup>  
Build On Our Experience