



## PINCH VALVE CASE STUDIES

### MID WESTERN COAL FIRED POWER PLANT

**Flow Media:** Limestone Slurries

**Service** - Flue Gas Desulfurization (FGD) lime, ash handling; high solids, abrasive, scaling prone medias

**Background:** Where pinch valves are required for these demanding services, careful attention is paid to selecting quality controls and accessories to insure high reliability and minimize maintenance downtime. Given dramatic improvements in pinch valve technology and quality over the last 17 years, valve and liner (sleeve) design must also be evaluated according to the same criteria.

In many state-of-the-art systems around the country, valve access (right) plus specifications for fail close mechanical spring (lower left) and manual override actuators (right, lower right) present users with unique installation, operation and maintenance challenges. For these difficult services **RF VALVE® is the industry leader in pinch valve technology** providing OEM's, engineering firms and end-users alike with an unbeatable performance package.



4" RF VALVE modulating w/digital control



4" & 2" RF VALVE modulating w/digital control



2" RF VALVE manual and automated on/off valves



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Conventional pinch valve maintenance – add up the cost!

**RF VALVE®** repair, below (also shown on previous page, upper right), in contrast to the procedure above, is performed by removal of lower valve body half and replacing worn elastomer tube from staircase by one maintenance mechanic in 1 hr, no special tools (see Quick & Simple Tube Change, diagram lower right).

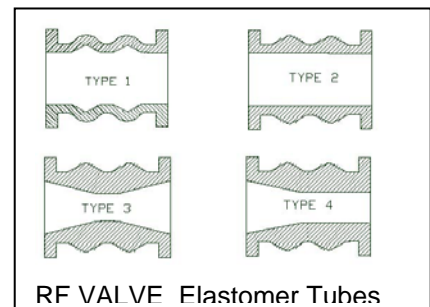
Gone are the days of poor sleeve performance when conventional pinch maintenance (**left**) and all its logistics drained the time and resources of operations and maintenance personnel. Cranes, spare valves, and excessive overtime can now be part of a power plant's past.

### **Best Available Control Technology**

Offering 2-3x longer elastomer tube life (the key wear component of a pinch valve) than its competitors, **RF VALVE®** design offers elastomer tube replacement **WITHOUT** removing valve from the pipeline even in the most difficult locations (lower left). Elastomer tubes are offered in full and reduced port trim configurations, and can be supplied with a wear sensor to provide preventive maintenance alerts.

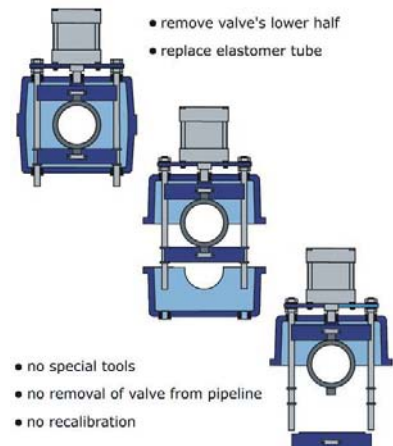


4" RF VALVE Modulating valve (close-up- access from staircase)



RF VALVE Elastomer Tubes

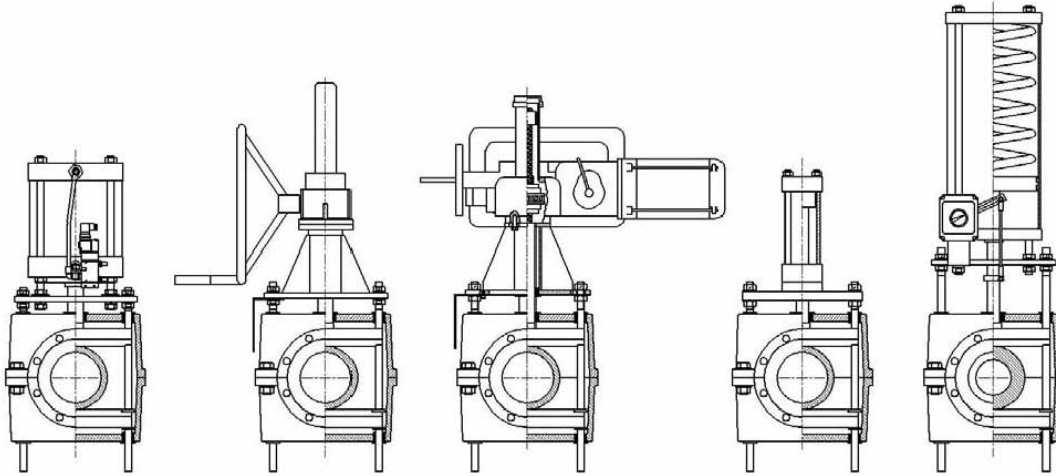
### QUICK AND SIMPLE TUBE CHANGE





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Installation of **RF VALVE**<sup>®</sup> pinch valves in FGD systems over the last 17 years has set a new global standard for high performance in on/off and modulating services.



### **RF VALVE**<sup>®</sup> Best Available Control Valve Technology

- BUILT TO ASME/ANSI B16.10 FACE-TO-FACE DIMENSIONS, 1" to 60" ID, THE SAME GLOBAL STANDARD FOR BALL, GATE, PLUG & DIAPHRAGM VALVES, PROVIDES CRITICAL OPERATIONS & MAINTENANCE INTERCHANGEABILITY PREFERRED BY YOUR CUSTOMERS.

**Important Note:** Most pinch valve manufacturers fabricate valves to non-standard face-to-face dimensions, LACKING interchangeability with other standard valves of same ID.

- OFFERS BEST LONGEVITY OF PINCH VALVE ELASTOMER SLEEVE DUE TO NON-STRETCH, FLEXIBLE FOLD DESIGN & THICK REDUCED PORT ELASTOMER SLEEVE TRIM FOR MODULATING CONTROL; **2- 4 TIMES LONGER LIFE** = LESS OPERATIONS, MAINTENANCE & DOWNTIME COSTS
- WEAR SENSOR MONITOR TO DETECT SLEEVE WEAR PRIOR TO FAILURE
- IN-LINE REPLACEMENT OF PRIMARY WEAR COMPONENT, THE ELASTOMER SLEEVE.
- ELASTOMER PINCH VALVES CAN OFFER A SIGNIFICANTLY LESS EXPENSIVE SUBSTITUTE FOR SERVICES WHERE METAL VALVES REQUIRE ALLOYS LIKE MONEL, HASTELOY, TITANIUM OR OTHER EXOTIC MATERIALS

Compare **RF VALVE**<sup>®</sup> quality, features and benefits against the pinch valve designs of other manufacturers. For more information visit [www.rfvalve.com](http://www.rfvalve.com)