

# Angle Pattern Valves for Power Plant Applications



In thermal power plants, steam is collected and distributed through a common steam header. Critical applications like ejector and gland sealing need a low pressure steam source. Header pressures can go up to 160 bar, based on boiler capacity. A pressure control valve is required to reduce high pressure steam to the required low pressure.

## Why Pressure Reduction Valves are Necessary

High pressure reduction valves are required in all power plants. Specific applications include gland sealing steam for turbines.



## **Forbes Marshall Angle Type PRV with Special Multistage Trim for High Pressure Drop Applications**

Pressure reduction causes volumetric expansion of steam, which in turn creates noise and vibrations due to high velocity.

In order to take care of super critical pressure drop at very high temperatures, we have a special multistage trim with noise reduction treatment for the source and the path. The multi-stage trim ensures effective pressure reduction as well as long trim life.

The angle pattern design provides additional room for the volumetric expansion of steam after pressure reduction.

## **Opportunities for Replication**

Any power plant up to 350 MW or higher, depending upon the steam pressure and temperature values.

## **Customer Benefits**

Reliable pressure reduction with advanced trim design

Desired operating times are achieved with a pneumatic actuator

Retro-fitting is possible for existing valves

High pressure reduction of boiler steam

Reliable pressure control for critical applications



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