

JORDAN APPLICATIONS

APPLICATIONS

- How many applications are there?
 - 4
 - What are they?
 - Solids
 - Liquids
 - Gas
 - Steam

APPLICATIONS


- Utilities are our “Sweet Spot”
 - Steam
 - Industrial Gases
 - Air
 - Water
 - Lube Oil
- We can do process, too

APPLICATIONS

- The “Jordan Box” is roughly 6 X 6 X 6
 - 6” in diameter
 - 600 psi
 - 600 F

REQUIRED INFORMATION

Type of control
Size
Material
Diaphragm



Spring Range
Seat Material
Cv
Model

Units

Process Information

Media
Type
Specific Gravity
Molecular Weight
Viscosity (cP)
Temperature

	Minimum	Normal	Maximum	Units
Inlet pressure	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Outlet Pressure	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Flowrates	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Set Point

Units

KEY QUESTION: What is the end user / customer trying to do with the valve?



SELF OPERATED REGULATORS

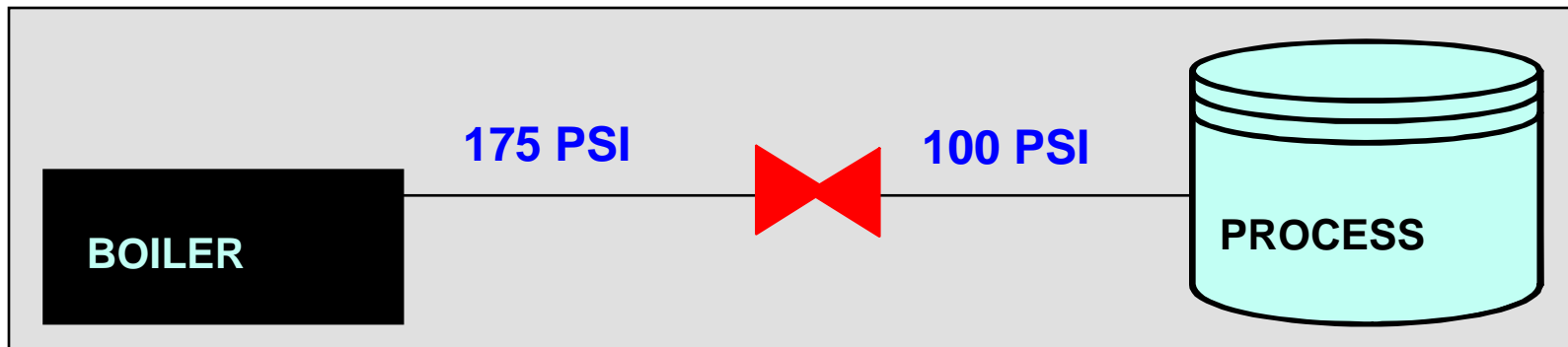
- Simplest type – force balance mechanism
- Low price
 - Steam
 - Liquids
 - Oil
 - Gas
 - Chemicals

PILOT OPERATED REGULATORS

- Greater accuracy
- Wider Rangeability
 - Steam
 - Liquids
 - Oil
 - Gas
 - Chemicals

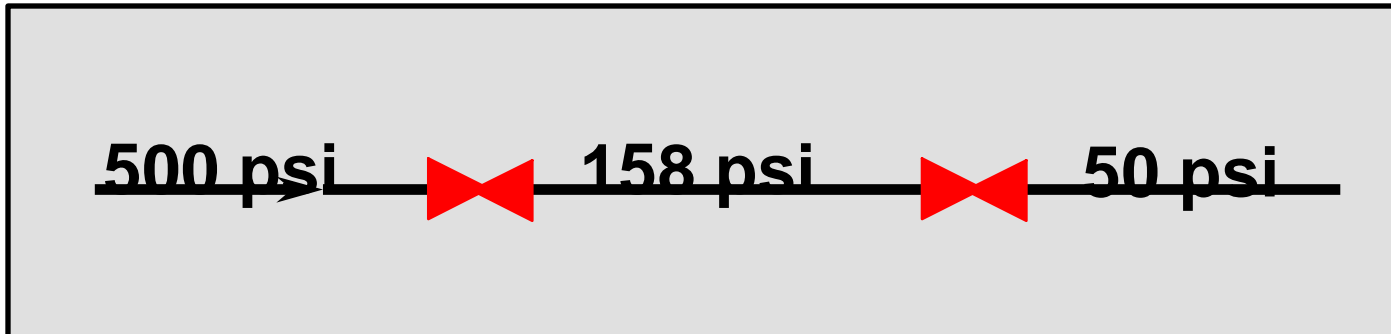
PRV APPLICATION

- A customer needs to reduce pressure on a steam line from his boiler. The steam pressure off the boiler is 175 psi, and he wants to reduce it to 100 psi.



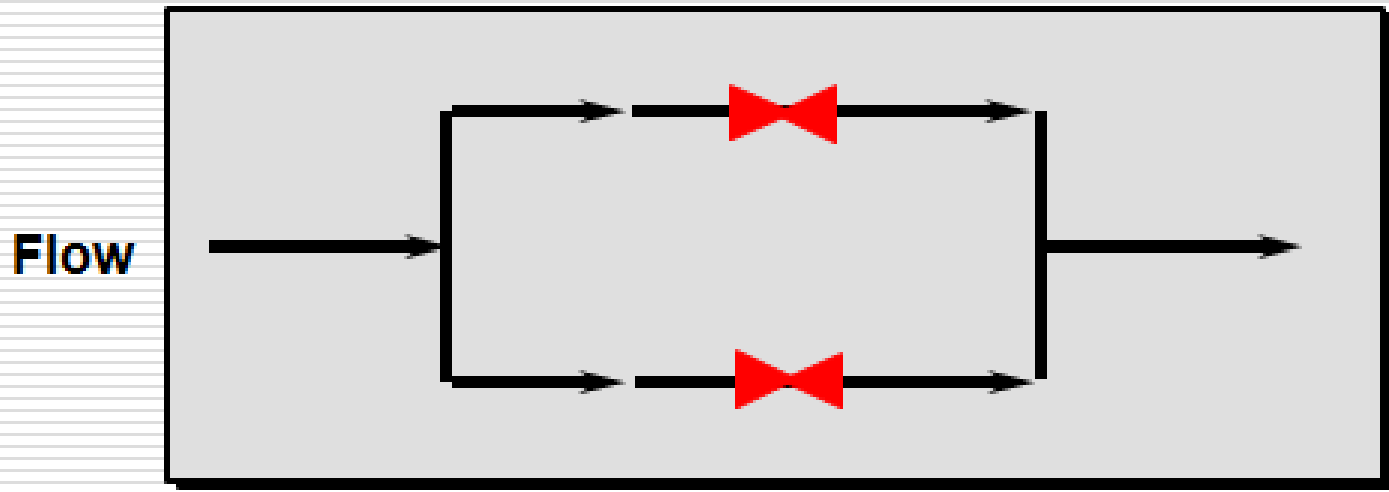
PRESSURE REGULATORS IN SERIES

- To handle high pressure drops
- First determine intermediate setpoint.
- A basic formula can be used to determine this:
 - $P2 = \text{square root of } (P1 \times P3)$
 - $P2 = \text{square root of } (500 \times 50) = 158 \text{ psi}$
- In most cases your second valve will require a larger Cv to handle the lower pressure media.
- Note: 2nd valve needs to rate to 500 psi inlet.

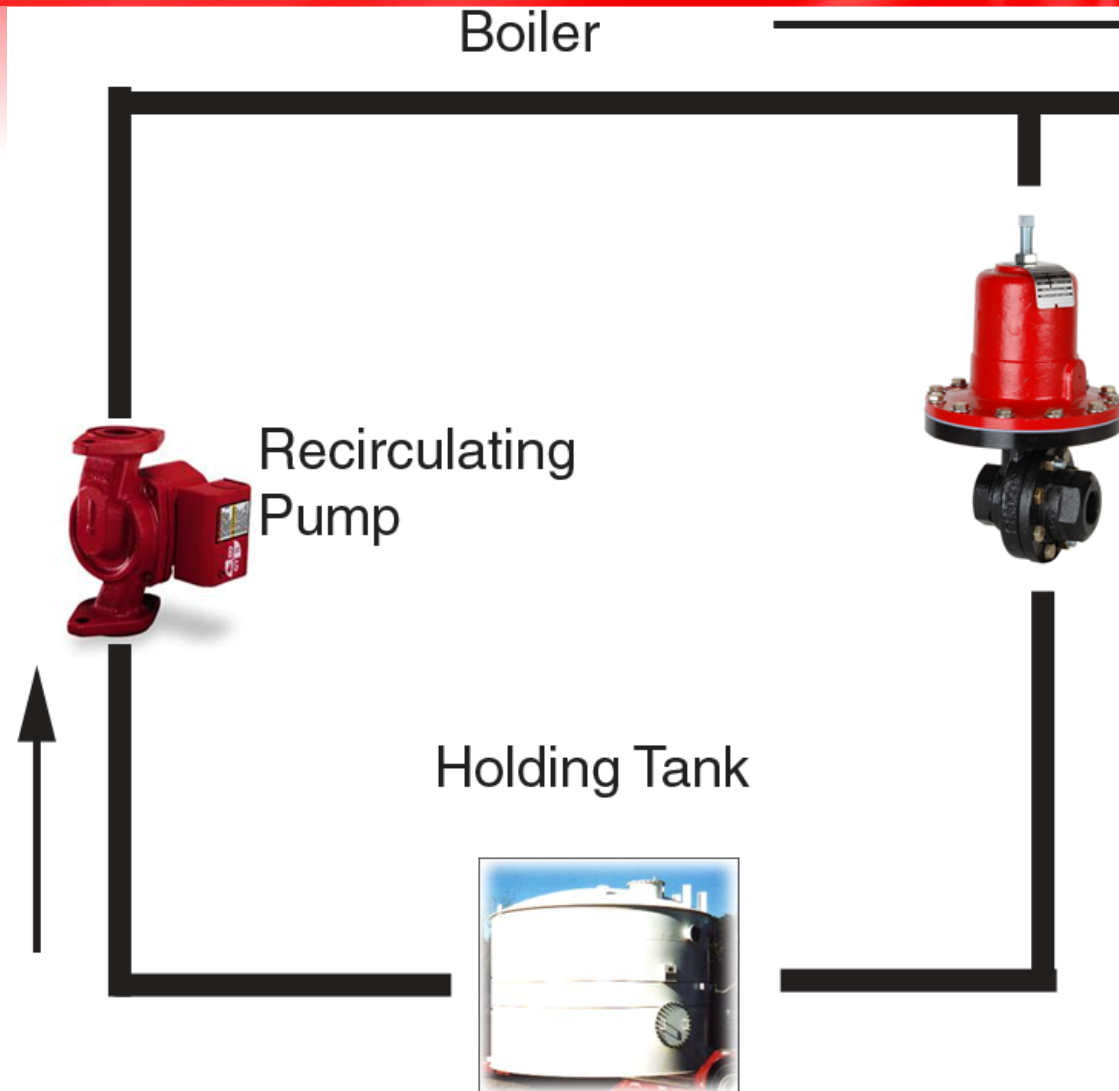


REGULATORS IN PARALLEL

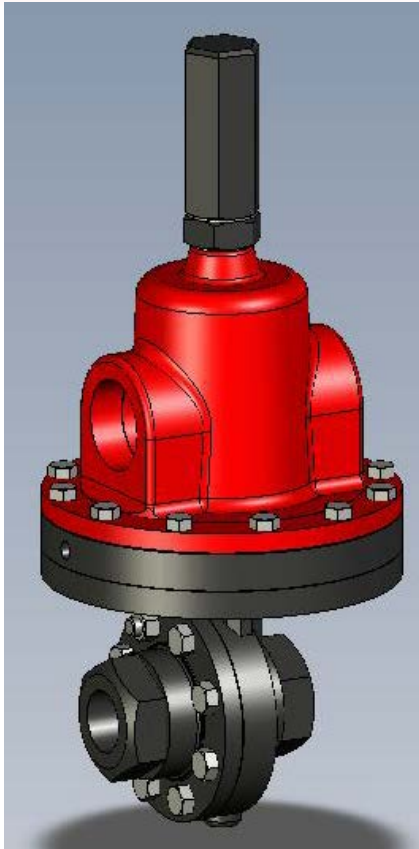
- When 2 greatly different flow rates are required.
- Regulators would vary greatly in Cv & possibly size.
- Set the smaller regulator a few psi above the larger regulator. This way the larger valve will only open when the capacity needed exceeds the capability of the smaller valve.



MK50 APPLICATION



MK63/64 DIFFERENTIAL PRESSURE REGULATORS

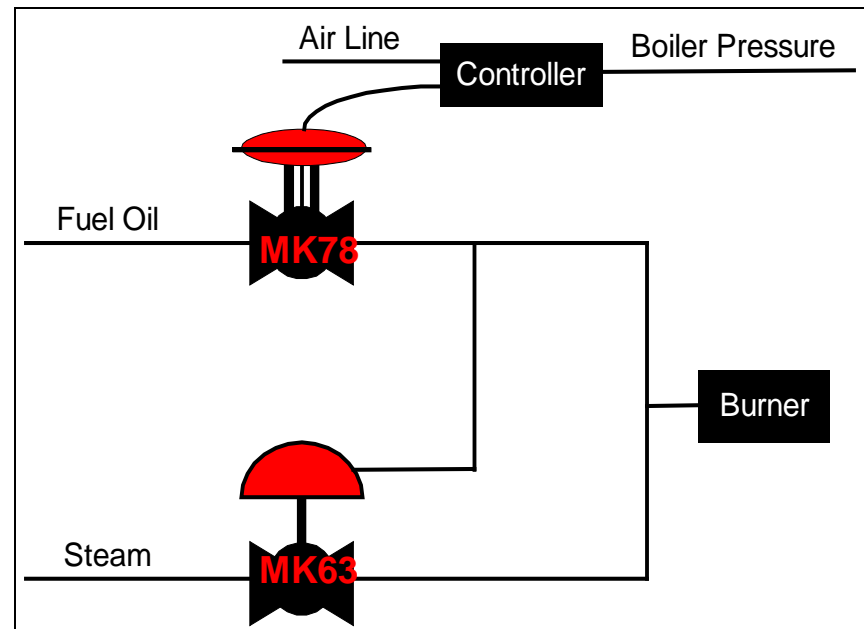


Maintains constant ΔP between valve outlet and signal pressure loaded on the diaphragm.

- 1/2" to 2" - DI, BRZ, CS & SS
- Threaded or Flanged
- Available with flow-through dome (CDF) for controlling atomizing steam or air for fuel oil atomization (burners)
- Separated double diaphragm

STEAM ATOMIZATION

- Steam and oil are combined, forming fine particles.
- Oil is sprayed into the burner and combusts.
- Maintains a constant differential between the steam and oil.



JORDAN TEMPERATURE REGULATORS

- Self-operated devices in which the energy to position the valve closure member is provided by changes in temperature energy of the controlled variable.

MARK 80 TEMPERATURE REGULATOR

- Set points from -40° - $+450^{\circ}\text{F}$
- 1/4" – 2.0"
- CV's up to 70 (801/802)
- 8' std. capillary; up to 100'
- High flow version available
- For tank heating, heat exchangers, steam tracing, air drying products, steam drain cooling, and regulating cooling fluids.
- Accurate to $\pm 2\%$
- 10°F span of control



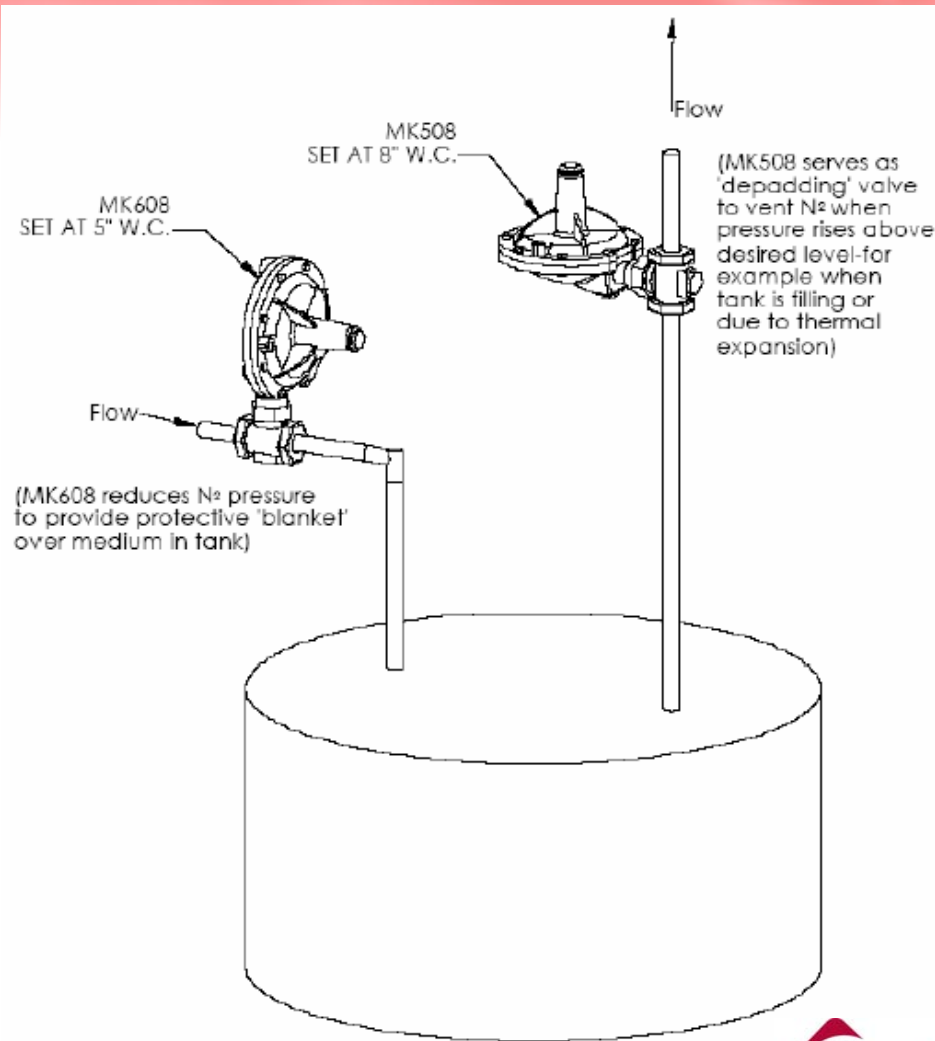
WHAT INDUSTRIES USE TEMPERATURE REGULATORS?

- Oil companies
- Chemical companies
- Tank farms
- Steel mills
- Pulp and paper plants

TEMPERATURE REGULATORS

- Tank heating
- Heat exchangers
- Steam tracing
- Air drying products
- Steam drain cooling
- Regulating cooling fluids for delicate system components

TANK BLANKETING



WEBSITE

www.jordanvalve.com

