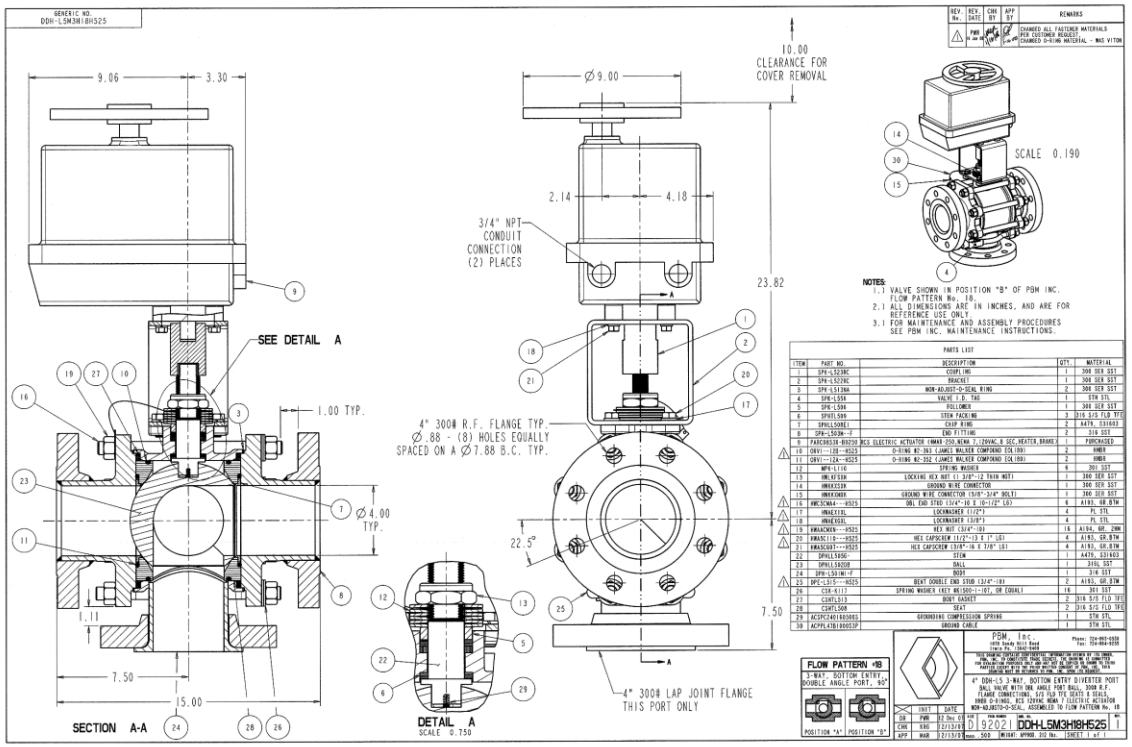
Industry: Oil Production
Product: Diverter Port Ball Valve
Media: Oil, Gas, and Water

www.pbmvalve.com

Application Brief:

- Process – Multiple oil/gas wells are piped into one production battery and fed into one of 2 separators to separate oil, gas and water.
  - Test separator – small unit that separates oil, gas and water to determine the mix for billing purposes.
  - Production separator – large unit that separates the oil, gas and water for distribution to downstream processing facilities.
  - Typically 10-50 automated valves per battery.
  - Multi-phase oil/gas media
- Problems:
  - Space to efficiently configure piping to either the production or test header.
  - Automation of old manual systems.
  - Control system complexity to synchronize two automated 2-way valves
  - Inherent problems of horizontally mounting electric actuators (cantilever loads on the valve, water egress into unit)
- PBM Product – 3-way, Diverter Port, bottom entry valve allows for well pipe to enter into the bottom of the valve (instead of the traditional side entry) and then flow to either a production header in one direction or a test header in the opposite direction.
  - Available in Class 150, 300, and 1500
- Advantages of the PBM solution
  - Bottom entry allows well pipe coming out of the ground to enter vertically into the valve to optimize space utilization and piping configuration.
  - System automation.
  - Top mounted electric actuator optimizes space and eliminates horizontal mount issues such as water egress, cantilever loads on the valve stem and packing, etc.
  - Cost improvement – one automated 3-way valve eliminates two 2-way automated block valves.
  - Control scheme simplicity – automating one 3-way valve is much simpler than synchronizing the automation of two 2-way block valves.
  - US Manufactured product
  - Automation: Electric or Pneumatic, 90 or 180-degree operation available



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