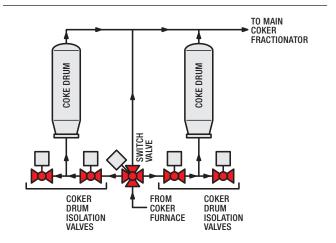
DV-4 Switch Valve for Delayed Cokers

Increased reliability. Increased run time.

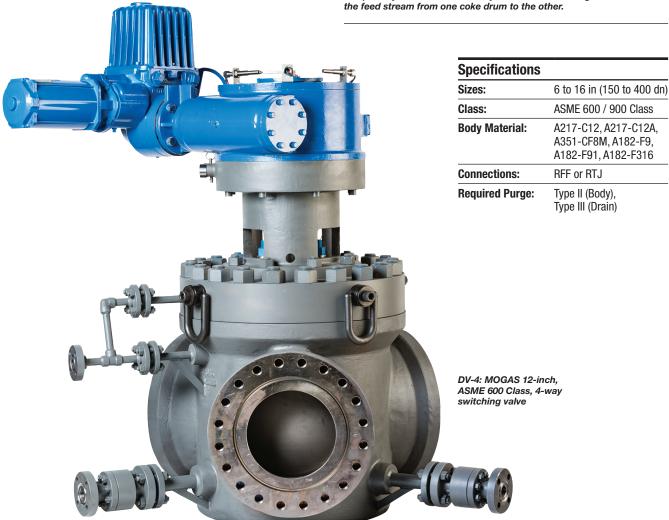
Page 1 of 2

As the dominant severe service technology company, MOGAS' strength is recognized in the harsh environments where reliability, durability and safety are the foundation of successful plant processes.

The DV-4 switch valve features many advantages over existing ball or plug valves on the market today. Backed by innovative R&D, world renowned after sales service and a reputation for quality, the DV-4 represents product advancements in delayed coking switching operations.



The primary function of the 4-way coke drum switching valve is to divert the feed stream from one coke drum to the other.



DV-4 Switch Valve

Features and Benefits

Page 2 of 2

1 Patent-pending oversized outlet

 Reduces backpressure and coke accumulation in heater by maintaining 90 to 100% flowrate during switching (compared to less than competitor's 60%)

2 Semi-trunnion (sleeve and seat ring supports ball)

• Maintains alignment and equalizes wiping forces

• Prevents uneven seat loading and leakage

· Lowers steam consumption by sealing body cavity

• Keeps process media out of body cavity

Reduces torque

3 Belleville springs with seat rings

 Lowers steam consumption by eliminating bellow spring purge inlets

• Eliminates prone-to-fouling bellow springs

4 Optimized purge system

 Simplifies installation using manifolds for two purge inlets and two purge outlets

- one packing purge
- three body purges
- two drain purges
- Increases switching reliability via body cavity flushing; evacuates body cavity media before and after switching using purge outlets
- Lowers steam consumption; appreciable steam consumption only during switching and body cavity flushing

5 Integral flange connections

 Prevents lock-up of the valve due to pipe loads (especially at warm up) because the seats are not coupled to the end flanges

6 Patent-pending bonnet

- Reduces area for coke build-up
- Simplifies repair and trim replacement via true top entry design

7 Patent-pending two-piece stem adaptor

Prevents stem and actuator damage using sacrificial pins

8 Dual stem guides

Prevents misalignment and packing leaks due to side loads

9 Extended mounting bracket

- Allows room for ease of packing maintenance
- Prevents electric motor and gear from high temperature exposure

10 External stem extension rod

- Indicates true flow and ball bore position
- · Verifies flow direction with actuator removed

