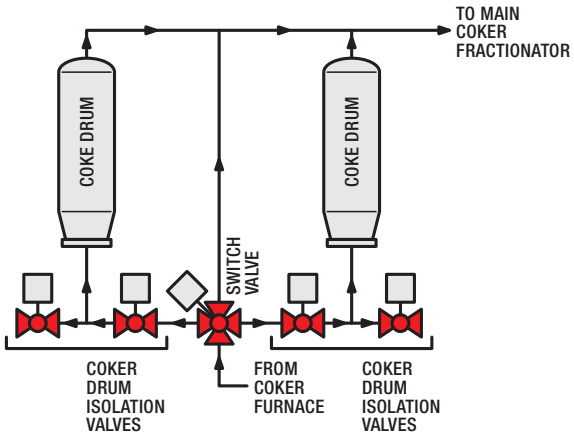
DV-4 Switch Valve for Delayed Cokers

DATA SHEET

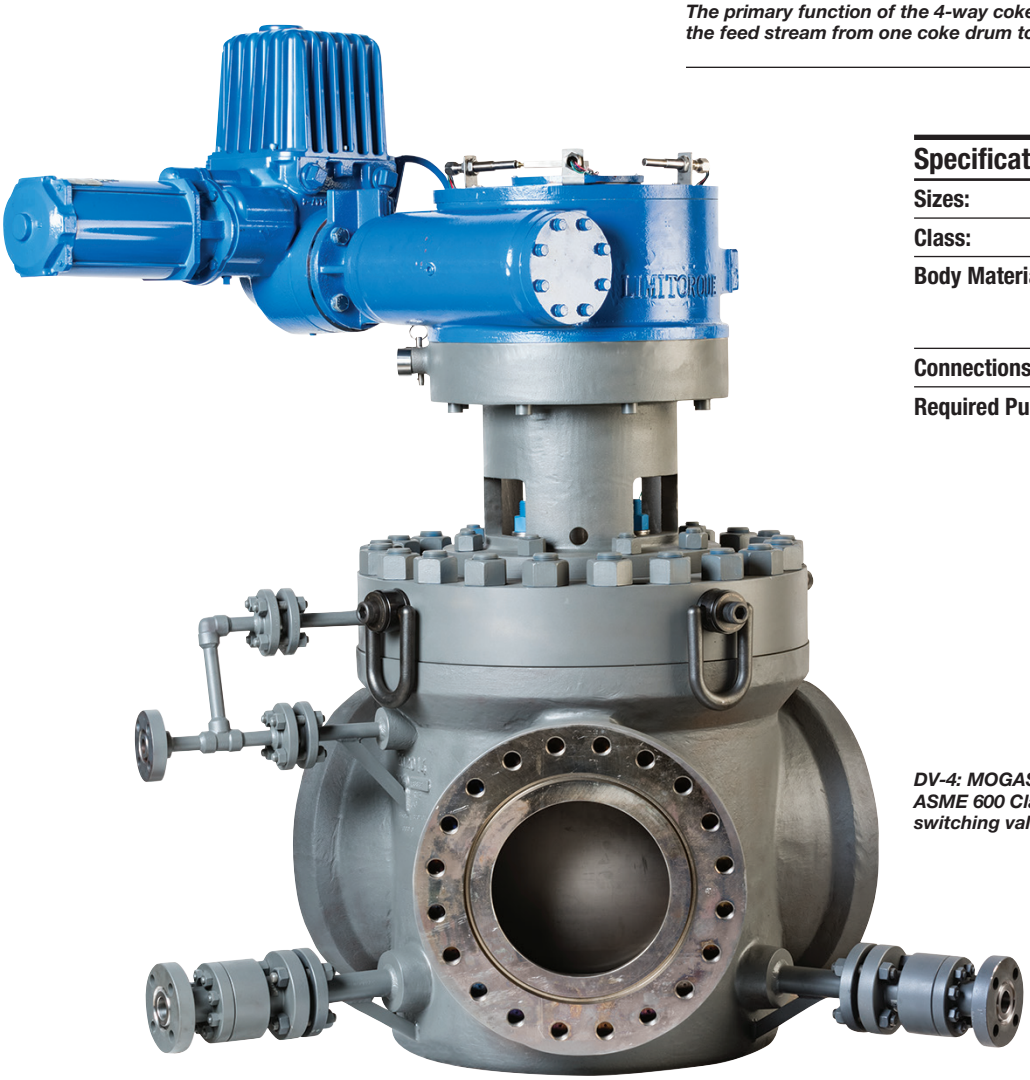
Increased reliability. Increased run time.

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: MOGAS 12-inch, ASME 600 Class, 4-way switching valve

Specifications

Sizes:	6 to 16 in (150 to 400 dn)
Class:	ASME 600 / 900 Class
Body Material:	A217-C12, A217-C12A, A351-CF8M, A182-F9, A182-F91, A182-F316
Connections:	RFF or RTJ
Required Purge:	Type II (Body), Type III (Drain)

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SEVERE SERVICE BALL VALVES

DV-4 Switch Valve

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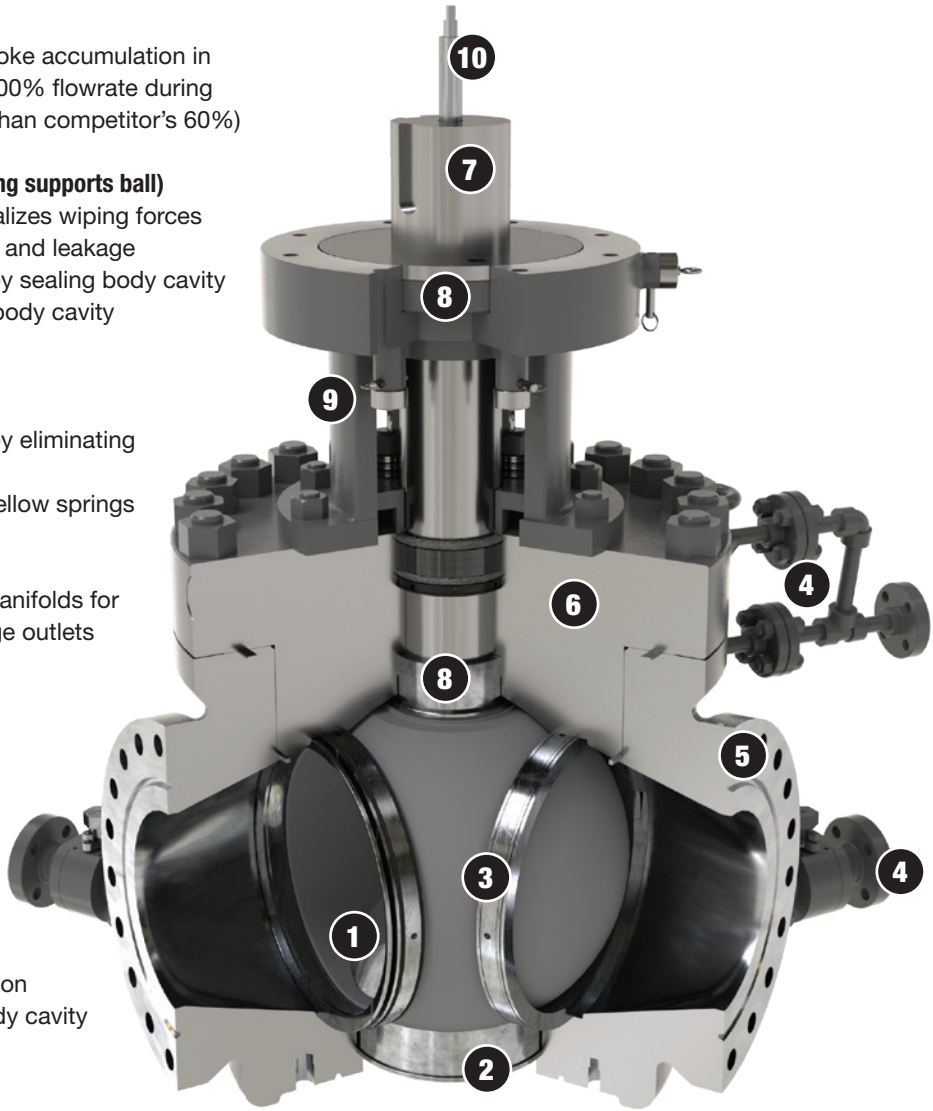
Features and Benefits

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

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