



Four Way Switch Valve

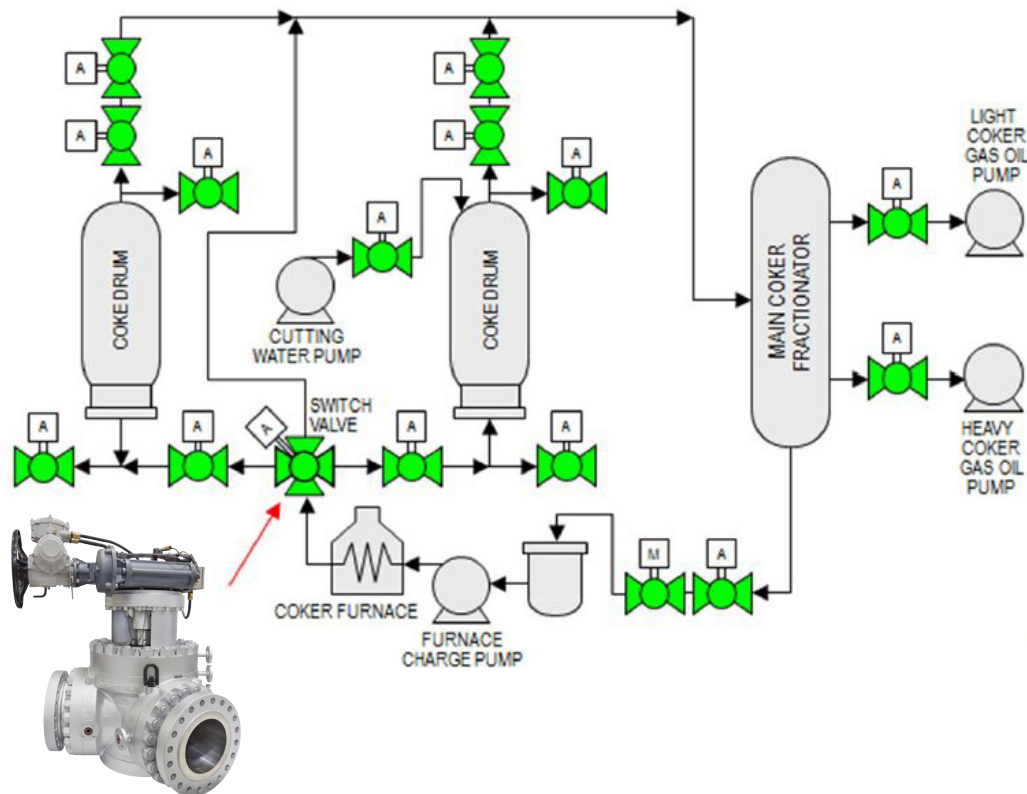
Reliable Process Performance

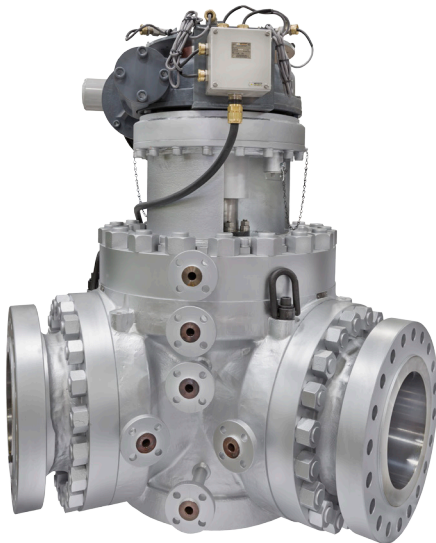
The ValvTechnologies four-way switch valve is designed for use in the delayed coker found in many integrated oil refineries. There are two drums in a delayed coker unit that work consecutively while in operation. When one drum is functioning, the other drum is being de-coked. The switching valve is required to direct hot feed to either drum A or drum B. The valve also has the bypass position to divert flow back to the fractionator for warmup or during emergencies. The bypass has the same port dimension as the main drum feed lines. The control package also has the capabilities of providing multiple intermediate positions to provide the capability to warm the new drum while slowly reducing feed to the live drum. The switch valve is the most critical valve in the unit.

Where is this valve usually found?

This valve is found in delayed coker units where multi-port valves are required in high-temperature coking applications. These systems contain sticky residue, solids and other system contaminants.

ValvTechnologies provides field proven solutions for severe service applications.





For more information,
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What features make this product superior?

Extended service life due to inconel spring seat loading vs. Bellows-seals in competitive valves, ANSI/ASME 900 lb class by design to meet modern pressure and temperature requirements, enhanced safety due to live-loaded gland (no steam lantern ring).

What makes this valve unique?

- Additional purges in the spring pocket, body and flanges
- Opened mounting bracket for easy access to the packing gland
- HVOF RiTech™ coatings for higher temperature resistance and longer life
- Low steam consumption with the consistent low-rate flow that is equivalent regardless if the valve is open or cycling to keep the valve free from coke buildup
- Belleville spring prevents pendulum motion which prevents packing leaks in the event of steam loss

Product benefits:

- Lower steam consumption
- Less downtime for repair
- Longer lifespan, saving the end user money
- Proven reliable design
- Improved safety and working conditions for the end user
- Low cost of ownership

ValvTechnologies	Competition
Live-loaded gland packing to achieve low emissions even with no steam injection	Lantern ring gland system which can allow hydrocarbon leakage to atmosphere if steam is interrupted
Belleville spring that provides full seat load without steam energy and is fire safe	Bellows seal that traps coke and is not fire safe
Consistent low-rate steam flow keeps the valve free from buildup and uses less steam which saves the end user money	Blasts the coke with high pressure steam which leaves coke residue in the valve to build up and creates a higher steam consumption rate for the end user