

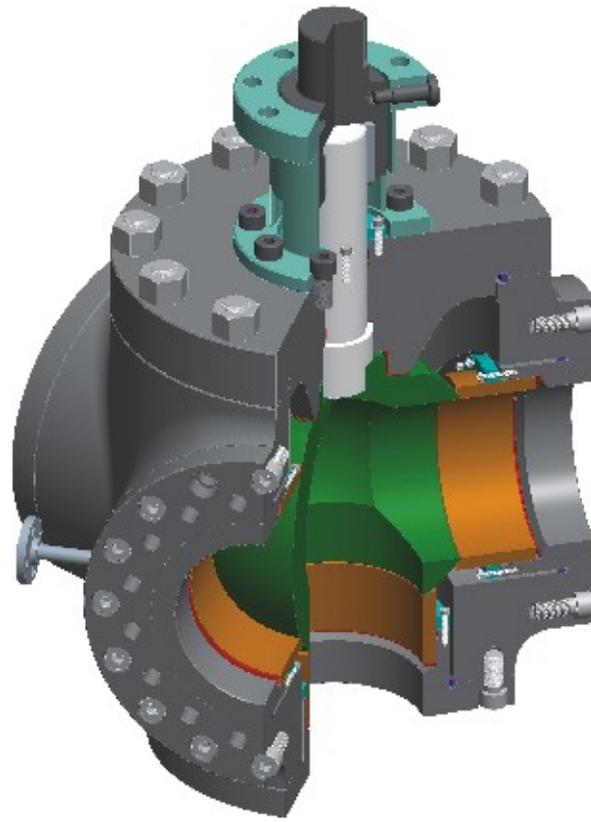
Engineered Valve Solutions for Coker Service



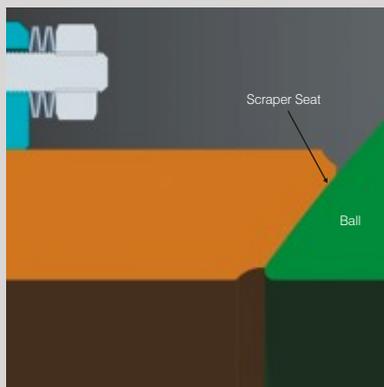
Switching Valve

This design offers unique features such as:

No bellows, eliminating pressurization issues High strength springs keep seats in constant contact with ball fewer parts meaning greater reliability and ease of maintenance.

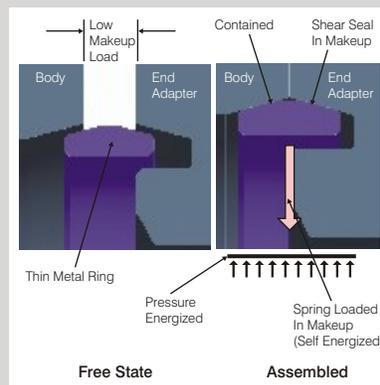


Common Features of Virgo EVS Valves



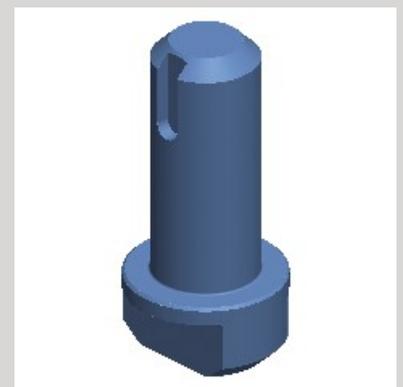
Scraper Seats & Purge Ports

Scraper seats and strategically placed purge ports can increase the life of the valve by removing media build-up from the body cavity. This prevents seizing and greatly reduces required maintenance.



Metal Body Gasket

Unique self-energizing pressure-energizing gasket ensures that there is no leakage during thermal transients.

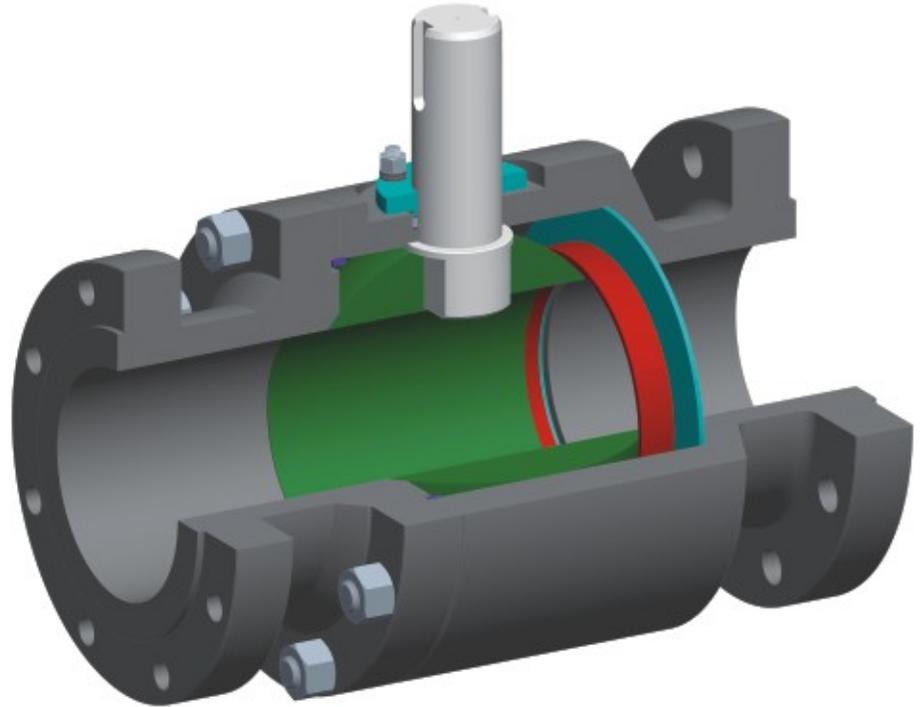


Blow-Out Proof Stem

Large, one-piece, machined, hardened and polished stem is a true "blow-out proof" design. There are no pins to depend on, increasing safety and reliability.

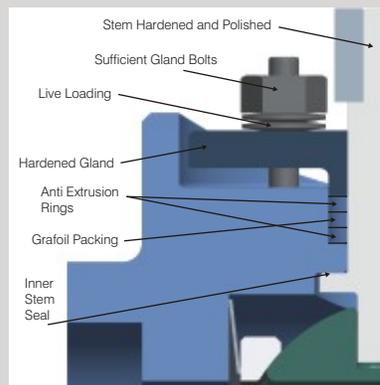
Isolation Valve

In this design the integral seat supports the ball. The seat carries the pressure end load. The centerline of the ball and the stem are at the same location while a large spring holds the ball against the seat. This ensures the coke does not get between the ball and seat.



Side-Mount Bracket

Side-mounted bracket prevents "side-load" and "bolt stress loads" vis a vis a top-mount design.



Packing Area

A compact stuffing box and live-loaded springs ensure packing is continuously energized. Lantern ring allows steam purging.

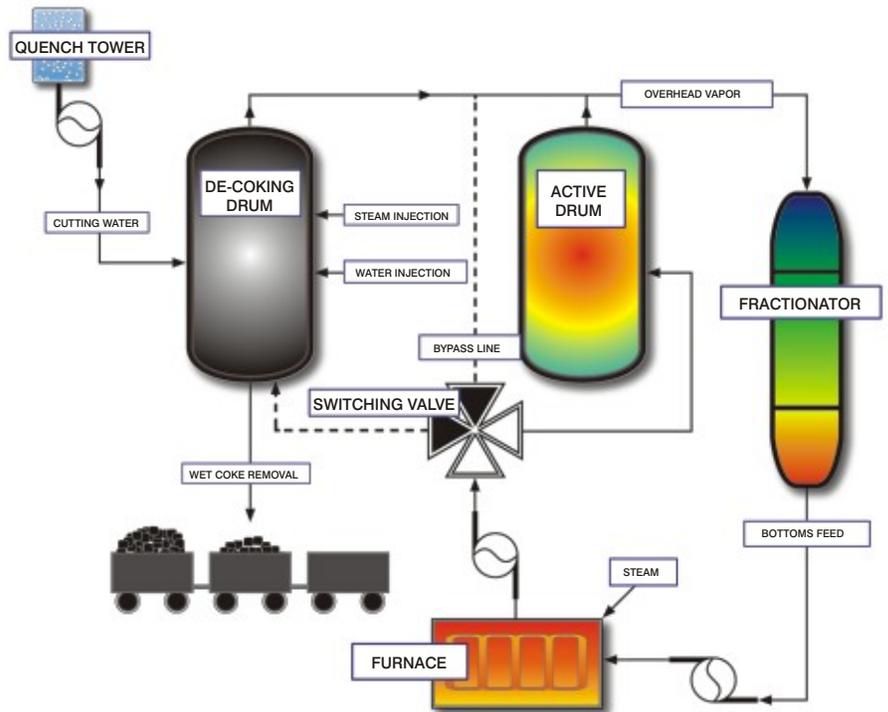


Multi-Bolt Gland

Superior multi-bolt packing gland design for easy adjustment and "live loaded" spring washers.

Coker Process

There are three basic coker designs found in refineries: Fluid Coker, Flexi-Coker and Delayed Coker. The most widely used technology by far is the Delayed Coker. The purpose of the unit is to take crude oil bottoms and "crack" it into numerous viable products. Delayed Coker units consist of two vessels called coke drums that operate continuously in a timed sequence. One drum is heated, filled and goes through the cracking process cycle; while the other drum is cooled, decoked in preparation for the next cycle. In the processing drum, high temperature and pressure cause the gas and liquid vapors to rise to the top of the drum where they are piped to the FCCU for separation. The remaining heavier sludge composition turns into coke during the cracking process and adheres to the internal walls of the drum. Once the cycle is near completion the feed is re-directed to the companion drum. The just completed cycle drum goes through a cooling process with steam then water, the top and bottom sections of the drums are opened, and high pressure water cuts the coke from the walls. The cut coke chunks either fall directly into portable rail cars or is sent to a holding pit for processing at a later time. This raw coke, dependent upon its composition, is utilized by various different industries as feed stock or as by-product.



EVS evolves from deep Virgo roots

EVS is a wholly-owned subsidiary of the Virgo Engineers Group, a globally successful valve and automation company servicing over 70 countries world-wide. Virgo Engineers is one of the fastest growing valve companies in the world. Virgo product designs are the result of decades of experience and innovation in the Oil & Gas process industry. Our designs are proven performers in the most severe environments. Virgo brand signifies quality and reliability.

For more information, please contact us



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