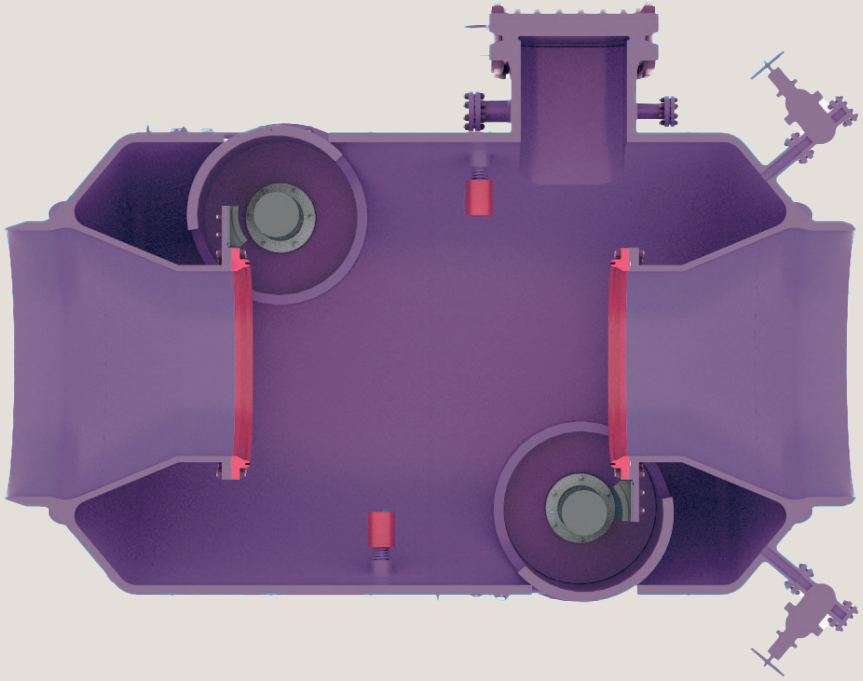
Process Automation

IMI Remosa
Double Clapet Isolation Valves

Breakthrough engineering for a better world



Fluid Catalytic Cracking

Double Clapet Isolation Valve

IMI's patented Double Clapet Isolation Valve ensures tight shut-off under the most extreme operating conditions, including high temperature and pressure. Installed in the Fluidised Catalytic Cracker (FCC) Power Recovery Unit, it allows maintenance of the Turbo Expander without interrupting FCC operation.

Tight Shut-Off: The valve ensures a reliable and secure seal, preventing any gas leakage even in challenging conditions.

Innovative Metal-to Metal Seal Design: The unique sealing mechanism enhances performance and durability.

Extreme Process Conditions: Whether subjected to high temperatures or varying pressures, this valve maintains its functionality.

The disc and seat design is unique, featuring stellite hardfacing on contact areas, while a floating disc compensates for thermal expansion, and a recessed sealing design prevents erosion.

Leakage class: up to Class V.

Product specifications

IMI Double Clapet Isolation Valve is available in varius materials including: nickel alloys, stainless steel, carbon steel.

Body Design: the valve can be designed either as hot wall (bare metal) or cold wall (refractory lined) depending on existing piping.

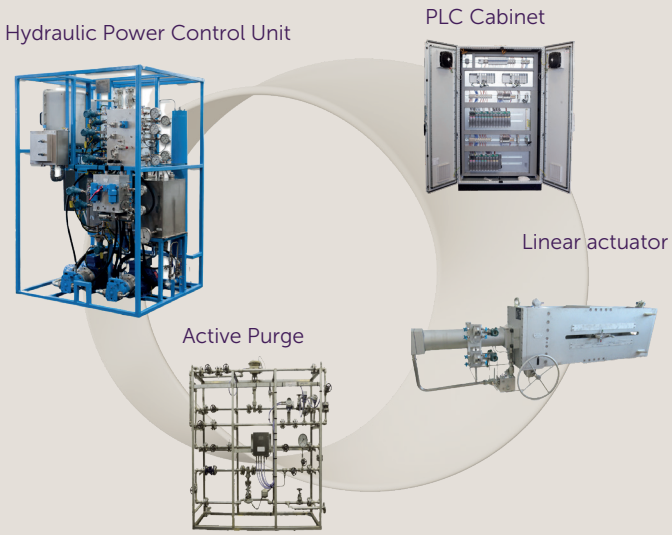
Nominal Diameter: Up to 150 inches.

Temperature Limits: Up to 850°C (1560°F) for cold-wall design and up to 950°C (1740°F) for hot-wall design.

Nitrogen valve body pressurisation: enhances safety during operation.

Full package solution

IMI's engineering experts have developed integrated packages that combine valves, actuators, and hydraulic power control units. These packages are tailored to meet customer needs for high-temperature and erosive applications. The goal is to provide a comprehensive solution that ensures optimal performance and reliability in demanding process conditions.



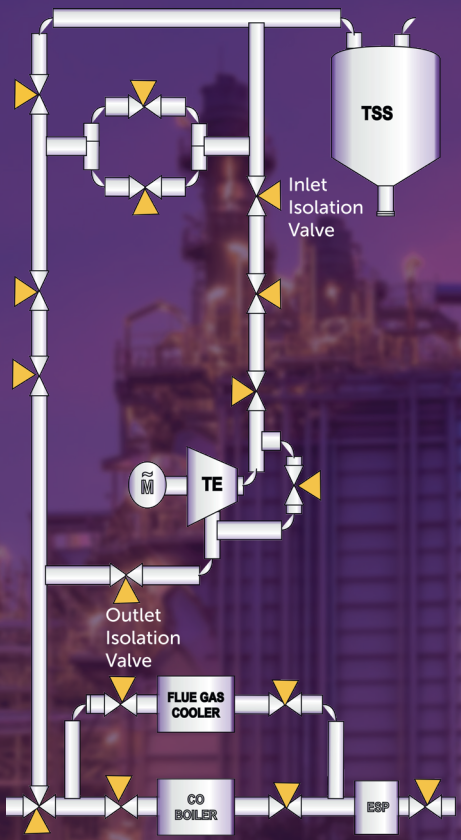
Benefits

IMI Double Clapet Isolation Valve's innovative design combines redundancy, floating discs, stellite hardfacing, and nitrogen pressurization to ensure tight shutt-off and safety.
Floating discs: the discs are designed to float within their housing, which allows them to accommodate thermal expansion and contraction. As the process temperature changes, the discs move to maintain a tight seal.
Stellite hardfacing: the contact areas of the discs are hardfaced with stellite, a wear-resistant material that enchances durability and prevents erosion.
It ensures that the sealing surfaces remain intact even after prolonged use.

Nitrogen valve body pressurisation: the valve body is pressurised with nitrogen when tight shutoff is required, enhancing the sealing effect. This feature prevents any process gas from leaking into the valve body.
Operator safety: operators are not exposed to hot gas during maintenance or operation. The valve design prioritises safety in critical refinery processes.

Certification and testing: IMI double clapet isolation valves have been rigorously tested by SGS for maximun seat leakage and certified according to ANSI/FCI70-2-2006 (Class V).

Application example



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