



FCC SLURRY  
**Isolation Valve**





# INNOVATIVE TECHNOLOGY

FLUID CATALYTIC CRACKING UNIT  
SLURRY ISOLATION VALVES



 **TAPCOENPRO**

# HIGH PERFORMANCE FCC FRACTIONATOR SLURRY ISOLATION VALVE

## Efficient, Durable and Designed for Critical Flow Solutions

The TapcoEnpro slurry isolation valve sets a higher standard for reliability and performance in high-temperature, dirty service applications. Specifically designed for slurry operations, it maximizes efficiency, reduces maintenance, and supports sustainability initiatives. This valve is built to withstand the demanding environments of FCCU Fractionation Units.

Featuring an anti-fouling design with gate containment plates, the valve traps process media within the gate's orifice, ensuring maintenance-free operation. Self-cleaning, live-loaded metal seats provide a tight shutoff, reducing media consumption and associated costs. Its top-entry design allows for in-line servicing without removing the valve, making it ideal for a range of slurry applications.

## Why Choose the TapcoEnpro Slurry Isolation Valve

- **Double Block and Pressure Assist Seating Technology** – Dual dynamic seats maintain contact with the gate creating a double block and with purge media pressure assist in the body cavity, process media is blocked ensuring reliable isolation.
- **Gate Containment Plates** – Traps process media within the gate orifice throughout the full stroke, preventing process buildup in the body cavity.
- **Pressure Assist Seating** – Unlike other valve providers, the TapcoEnpro isolation valve uses positive purge pressure to clamp the containment plates, ensuring a tight seal throughout the valve stroke and when closed—without relying on steam flow to sweep or purge the valve body or internals.
- **Tight Shut-Off** – The seal created greatly reduces daily purge costs and supports green initiatives by lowering energy consumption.
- **Long Service Life** – Hardened, polished, self-cleaning, live-loaded metal seats ensure reliable, bubble-tight shutoff, while durable construction minimizes downtime and maintenance.
- **High Performance** – Fire tested to API 607/6FA standards.
- **Top-Entry Design** – Allows in-line servicing and replacement of valve internals through the bonnet flange without removing the valve body from the pipeline.
- **Direct Valve Drop In** – Full port ball valve Face-to-Face (End to End) dimensions per B16.10. Custom Face-to-Face dimensions are available.
- **Pipeline System Operations** – Supports safe and effective pipeline maintenance by providing full-bore, through-valve passage that results in seamless pigging operations with no downtime.
- **Sustainability** – Minimize resource usage, such as reducing purge consumption to lower greenhouse gas emissions and waste, aligning with industry sustainability goals and regulations.
- **Versatility** – Suitable for hydrocarbons at coking temperatures, solid-laden liquids, and dirty vapor streams.



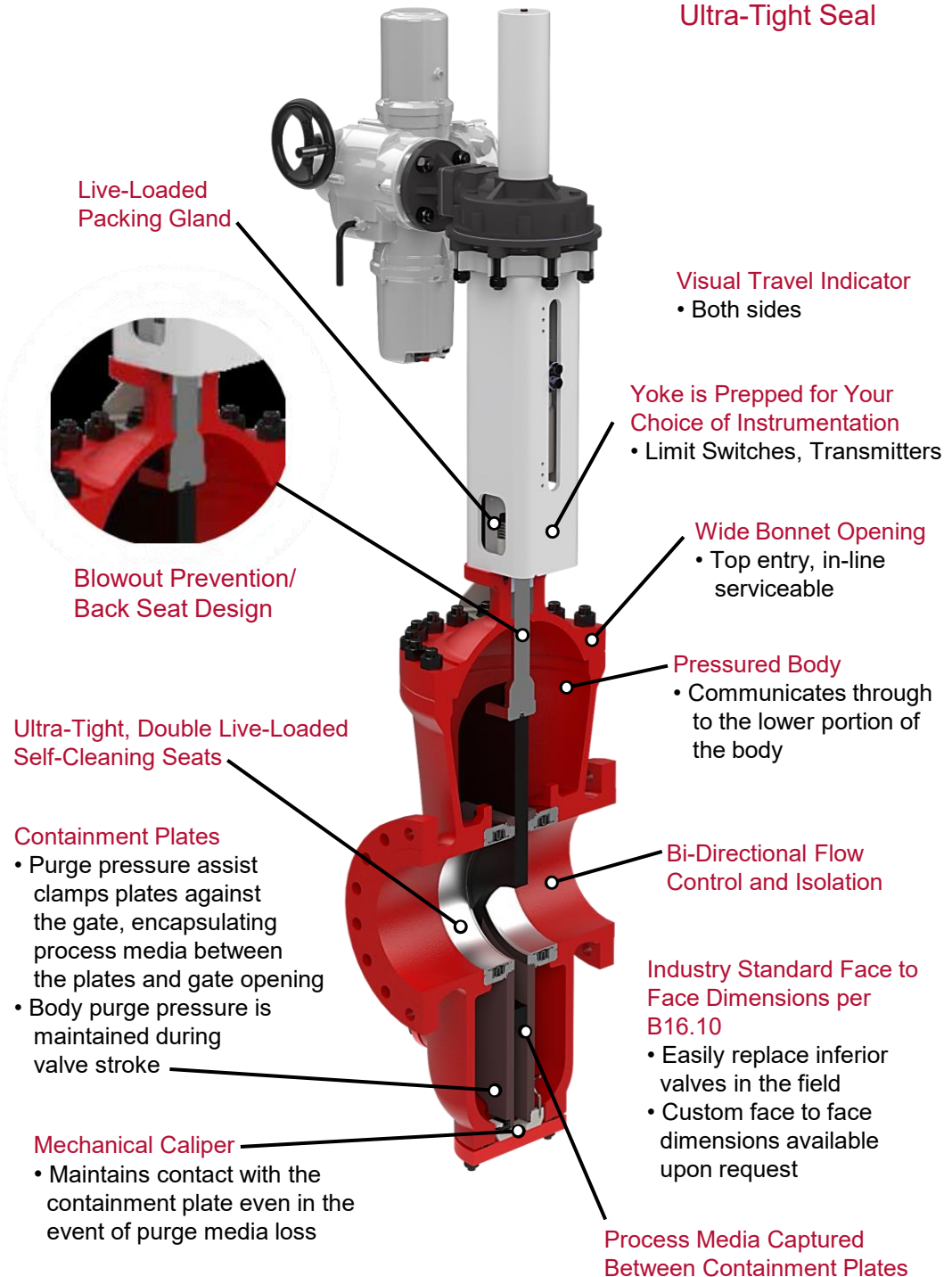


# KEY DESIGN FEATURES

**Actuation Options per Customer Requirement**  
See a TapcoEnpro representative for height restricted installations, and custom solutions



**Ultra-Tight Seal**



**Live-Loaded Packing Gland**

**Visual Travel Indicator**  
• Both sides

**Yoke is Prepped for Your Choice of Instrumentation**  
• Limit Switches, Transmitters

**Wide Bonnet Opening**  
• Top entry, in-line serviceable

**Pressured Body**  
• Communicates through to the lower portion of the body

**Ultra-Tight, Double Live-Loaded Self-Cleaning Seats**

**Containment Plates**  
• Purge pressure assist clamps plates against the gate, encapsulating process media between the plates and gate opening  
• Body purge pressure is maintained during valve stroke

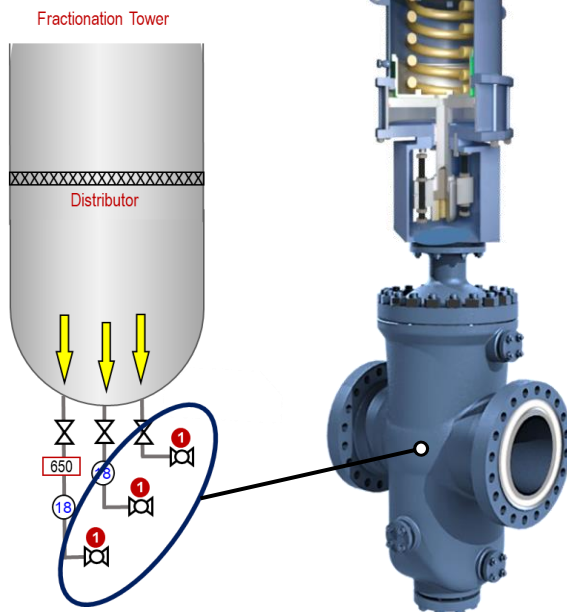
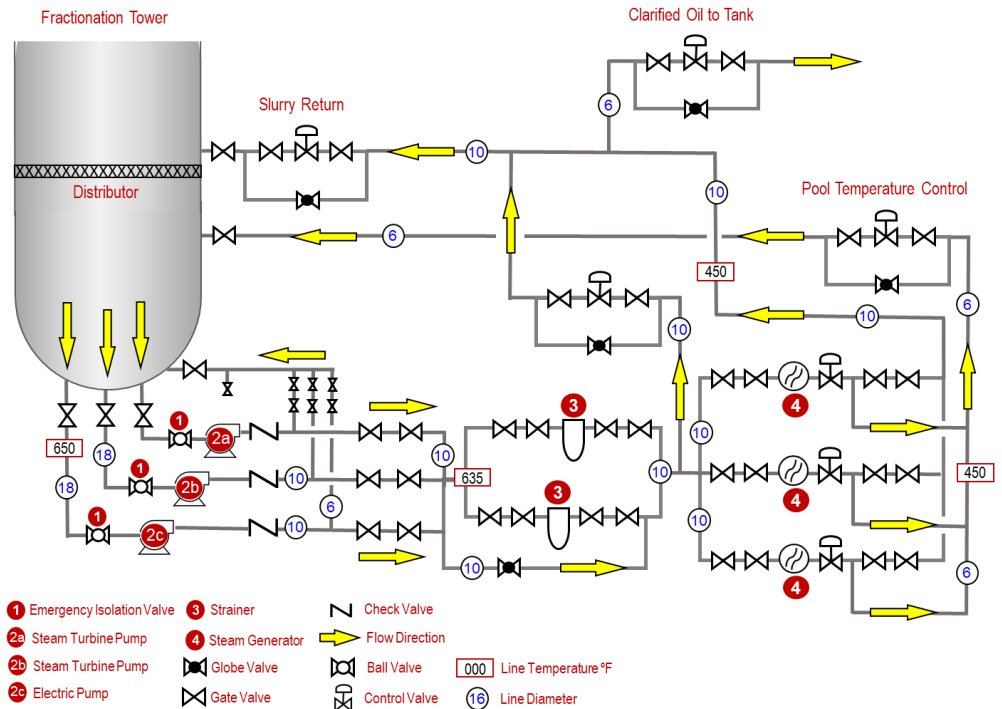
**Bi-Directional Flow Control and Isolation**

**Industry Standard Face to Face Dimensions per B16.10**  
• Easily replace inferior valves in the field  
• Custom face to face dimensions available upon request

**Mechanical Caliper**  
• Maintains contact with the containment plate even in the event of purge media loss

**Process Media Captured Between Containment Plates**

# TYPICAL FCCU FRACTIONATOR SLURRY SYSTEM



Slurry Isolation Valve with  
Emergency Shut Down  
(ESD) Actuation



## INSTALLATION SERVICES AND AFTERMARKET

### Turnkey Engineering & Design Solutions - From Concept to Installation

TapcoEnpro's Service Group is the standard for valve and actuator service. Our Service Division handles the needs of customers throughout the world with the ability and knowledge to perform a complete valve overhaul in the field with an emphasis on safety, quality and "on time" completion.

Our Field Services department oversees all TapcoEnpro equipment installations, commissions, maintenance/repair and onsite training for both valve and control systems. We are focused on attending to our customer's turnaround needs, maintenance and repair requirements.

Our philosophy is that each project requires unique solutions, and our approach is a diverse team with specialized engineering competencies, industry prominent quality control, pioneering research and development and superior field service personnel conducting themselves in accordance to the highest safety standards.



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