



Energy
Aerospace & Defense
Industrial

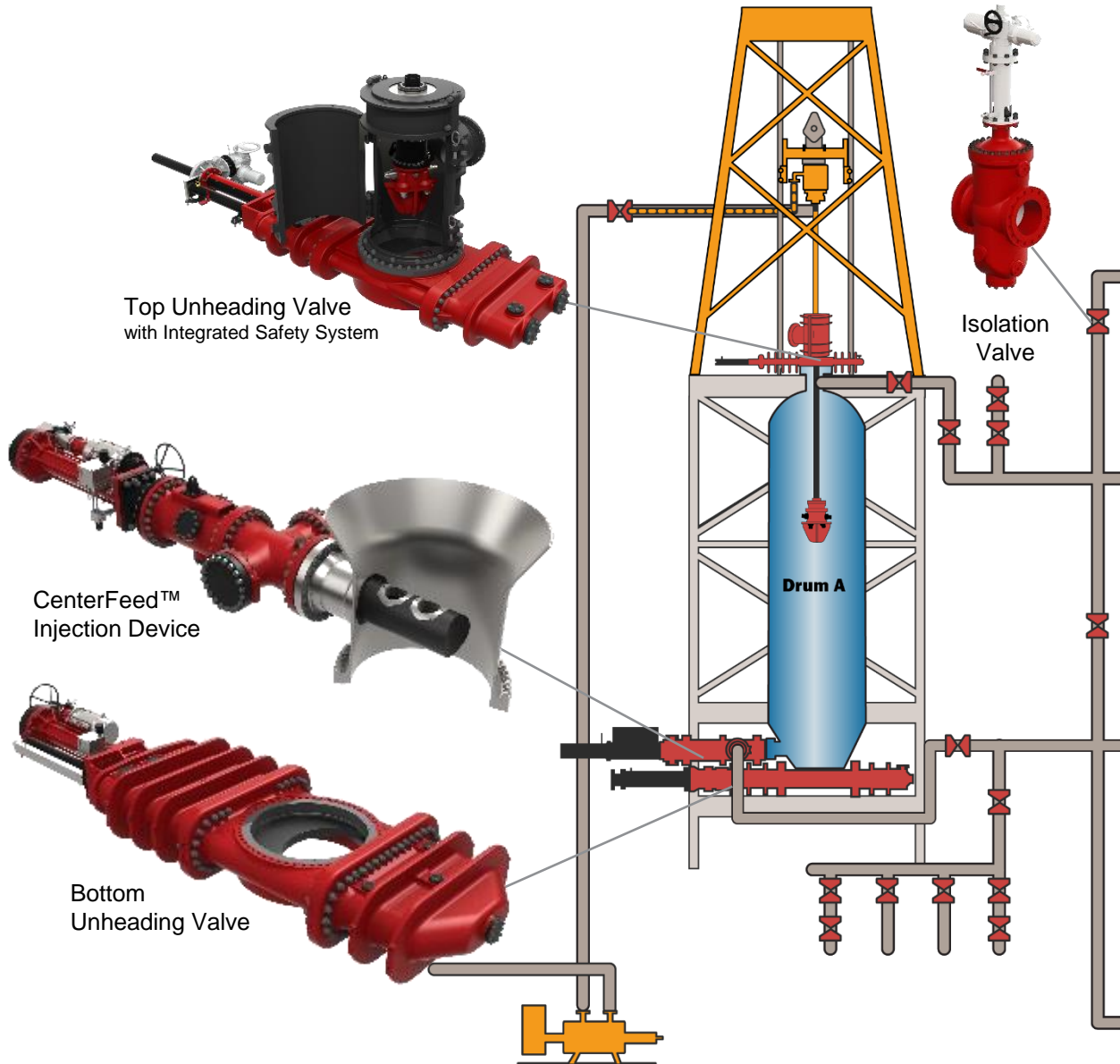
DeltaValve Services and Aftermarket Support

Glenn Mryglod
Director of Service and Support

November 2-6, 2020

Company Proprietary Turnaround – Not for Distribution

DeltaValve Innovation and Experience



**1,000+
Units Sold**

**100+
Refineries
Satisfied**

**25+
Countries
Served**

**Millions of
safe cycles**

**Leading
Global
Supplier**

DeltaValve aftermarket experience includes:

- **15+** years of onsite work in **50+** refineries in more than **15** countries
- **300+** bottom and top unheading valve rebuilds

Our team continues to improve processes as we expand our global aftermarket offering to provide innovative solutions for our customers



Pre-Installation / Installation Services



On-Site Training

- Maintenance and operations training for engineers and unit operators to maximize reliability

Site Acceptance Testing

- Testing activities to ensure equipment and controls are integrated properly and functioning

Installation Assistance

- Technical resources for turnkey installations
- Supervisory services for installations completed by 3rd party contractors

In response to current world events, digital technology has been utilized to support some of these services



On-Site Equipment Audits

- Periodic equipment evaluation
- Critical systems monitoring
- Review and plan for product upgrades



Turnaround Planning

- Coordinate asset maintenance and turnaround schedules
- Efficient and effective resource management ensures timely project completion



Field and Shop Service



Global Field Service

Continuing to build network of qualified technicians to support:

- Equipment removal and re-installation
- Maintenance and repair of mechanical, electrical, and hydraulic equipment
- Control systems programming and maintenance



In - Shop Service

Valve maintenance and repair:

- Disassembly, blasting, Non-Destructive Examination (NDE), weld repair, machining, painting, assembly and testing
- Hydraulic cylinder and electric actuation rebuild



Proposals / Service Agreements



Proposals

- Proposals include - firm project schedules, equipment bills of material, inspection and test plans, pricing for parts, labor rates by trade, etc.

Long-Term Service Agreements (LTSA)

- Ensure maintenance and services are performed at pre-determined intervals
- Pre-negotiated terms, work schedule, and project scope

Master Service Agreements (MSA)

- Pre-negotiated terms and conditions, labor rates, safety certifications, etc.
- Individual refinery or corporate refiner level agreements available



Spare Unheading Valve vs. In-Turnaround Rebuild

Potential Benefits:

- Removes the valves from critical path
- Valve replacement / rebuild timing flexibility
- Non-expedited valve rebuilds cost less
- No schedule impact from work found in discovery
- Great solution during an equipment or process emergency

ExxonMobil

BR PETROBRAS

SUNCOR
ENERGY


Canadian Natural



أرامكو السعودية
Saudi Aramco

CHS



How can we help meet your service needs?



- We understand each refinery is different
- We have experience in over 100 refineries in 25 countries
- We customize our service and part offering to each site
- We are continuously innovating new products and services
- We share lessons learned and best practices
- We want to earn your trust and your business

Thank you for your participation.

Stay Safe!

Glenn Mryglod
Director, Service & Support
glenn.mryglod@circor.com

CIRCOR
Refinery Valves
Brands
DeltaValve | TapcoEnpro | TapcoEnpro UK