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Traditional gate valves weren't engineered for modern thermal cycling.

That's why the Triple Offset is here.

High-temperature, high-pressure steam systems demand stable isolation under repeated thermal cycling. Traditional gate valve architecture introduces unnecessary footprint, weight, and maintenance exposure in these environments.

Triple Offset Design Advantages

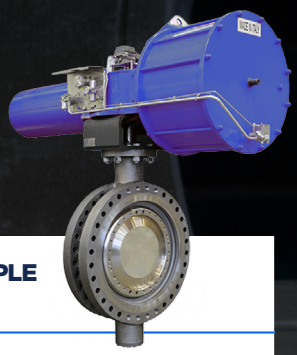
Designed for clean, non-abrasive steam and water service in demanding thermal environments, Vanessa™ TOVs utilize a precision-machined, triple-offset conical sealing system that eliminates sliding friction at the seat and delivers zero-leakage and metal-to-metal isolation.

- **Stellite® Grade 21 metal seat**
- **Exceptional high-temperature strength**
- **Superior corrosion resistance**
- **High resistance to thermal fatigue**
- **Engineered alignment for thermal expansion**

Vanessa™ Triple Offset Valves (TOVs)
for steam and water isolation are designed to displace traditional gate valves, delivering precision metal-to-metal shutoff, reduced footprint in new piping installations, and long-term reliability in extreme environments.
Each valve is engineered to the exact pressure class, temperature range, and service conditions of your application.

The Case for Gate Valve Replacement

Triple Offset technology delivers measurable performance advantages over traditional gate valves in steam and clean water isolation.



PERFORMANCE CRITERIA	TRADITIONAL GATE VALVE	VANESSA™ TRIPLE OFFSET VALVE
Sealing Mechanism	Sliding gate with packing and seat wear	Precision-machined metal-to-metal seal – No seat rubbing or wear
Leakage Control	Susceptible to packing degradation and seat damage	Zero-leakage shutoff capability
Thermal Cycling Performance	Prone to distortion and sealing loss	Geometry maintains seal integrity under thermal cycling
Operation	Multi-turn, high operating torque	Quarter-turn, lower torque
Footprint & Weight	Large, heavy body	Compact, lighter-weight design
Maintenance Profile	Packing adjustment and seat refurbishment	Seal ring is typically the only component requiring replacement
Field Serviceability	Complex disassembly	Easily field repairable
Lifecycle Cost	Higher cumulative maintenance expense	Lower total cost of ownership

Vanessa™ TOVs are also available in gate valve body face-to-face dimension for direct field replacement of leaking gate valves without having to modify field piping

Long-Term Reliability by Design

- Minimal routine maintenance
- Zero seat rubbing
- Reduced actuator torque requirements
- Smaller face-to-face dimensions for new piping
- Improved accessibility in constrained installations
- Predictable service intervals and improved uptime
- Engineered alignment for thermal expansion

Discuss Gate Valve Replacement for Your Steam System

If your facility is planning maintenance, upgrades, or expansion in steam or clean water service, now is the time to evaluate Triple Offset technology.

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Visit proconexdirect.com
or call us at 610.495.1835