**QuadroSphere™**

Simply better technology!

Trunnion Design • 2" thru 24" • ASME 150 thru 1500
Phone: 1.800.231.3505 • www.NewmansValve.com

**Benefits at a Glance**

- Self Cleaning
- Full Port
- Protects the Seats
- Flow Around Ball
- Low Operating Torque
- Hardened Surface Options
- Improved Throttling
- Easy to Service

**Protected Seating Surfaces**
The QuadroSphere™ trunnion ball valve protects its seats by minimizing fluid media velocity contacting upstream seating surfaces during cycles. As the QuadroSphere™ closes, fluid media applies pressure to the upstream seat ring urging it against the ball’s upstream sealing lip for leakproof performance. Features on the ball remove debris from the seats ensuring a clean, tight shut-off each time it cycles.

**Lower Torque Requirements**
The geometric shape of the ball greatly reduces ball-to-seat surface contact. This features creates less “drag” during cycles, requiring less torque to operate the QuadroSphere™.

**Self-cleaning Features** (See Flow Pattern Comparison)
Ordinary ball valves allow fluid media and debris to be trapped in the inner-body cavity. This can result in the accumulation of foreign debris around the ball that can result in damage to seating surfaces. As the QuadroSphere™ cycles, its unique geometric features allow foreign debris to be flushed from the inner-body cavity to prevent the accumulation of solid matter around the backside of the seat rings and bearings. Then, open or closed, once the ball engages the seats, line fluid cannot enter the inner-body cavity.

**Seventy Percent Less Wear**
Unlike ordinary ball valves, the QuadroSphere™ ball experiences a fraction of the drag across seating surfaces during cycles, reducing wear up to 70 percent and extending performance life.

As the QuadroSphere™ cycles, flow is split into five channels (over, under, around the sides, and through the ball port), preventing localized, high velocity impingement upon the downstream seat as with ordinary ball valves.
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Meet/exceeds CSA requirements. Fire Safe Design

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QuadroSphere™ Features
- 2” thru 24” full or standard bore
- ASME Classes 150 thru 1500
- Heavy-duty forged 3-piece body
- Trunnion design
- API 6D face-to-face
- Flanged or weld-end
- Self-cleaning technology to prevent solids accumulation
- Protected seating
- A105, LF2, or 316 SS body
- Hard chromed stainless steel ball
- Body vent or flush and drain
- Blow-out proof stem
- Corrosion resistant bearings
- Secondary stem & seat seal system
- Anti-static protection
- Independent seat rings
- Inconel seat springs
- Bi-directional seating
- Firesafe design
- Graphite gaskets and seals
- Lower operating torques
- Improved throttling
- Double block & bleed option
- ISO 5211 actuator mounting pad
- 100% tested in accordance to API 6D

QuadroSphere™ Heavy-duty Seat Rings
- Spring loaded/pressure energized
- Variety of inserts with metal back-up
- Metal-to-metal options
- Hardened surface options
- Field replaceable

Why Choose QuadroSphere™?
When high velocity abrasive flow leads you to think “premium priced” metal seated ball valves...
- QuadroSphere’s multiple flow path geometry reduces damaging velocity at a budget friendly price!
When standard ball valve cavities fill with media making operations difficult...
- QuadroSphere’s self-cleaning technology feature will keep the cavity clear!
When abrasive media damages your ball surface and seats during cycling...
- QuadroSphere’s unique ball geometry cleans seats and minimizes rubbing during cycling!
When gate and globe valve operations become difficult due to solids accumulation around the stem...
- QuadroSphere’s quarter-turn radial operation with self-flushing geometry keeps your valve turning!

See reverse side for additional features.