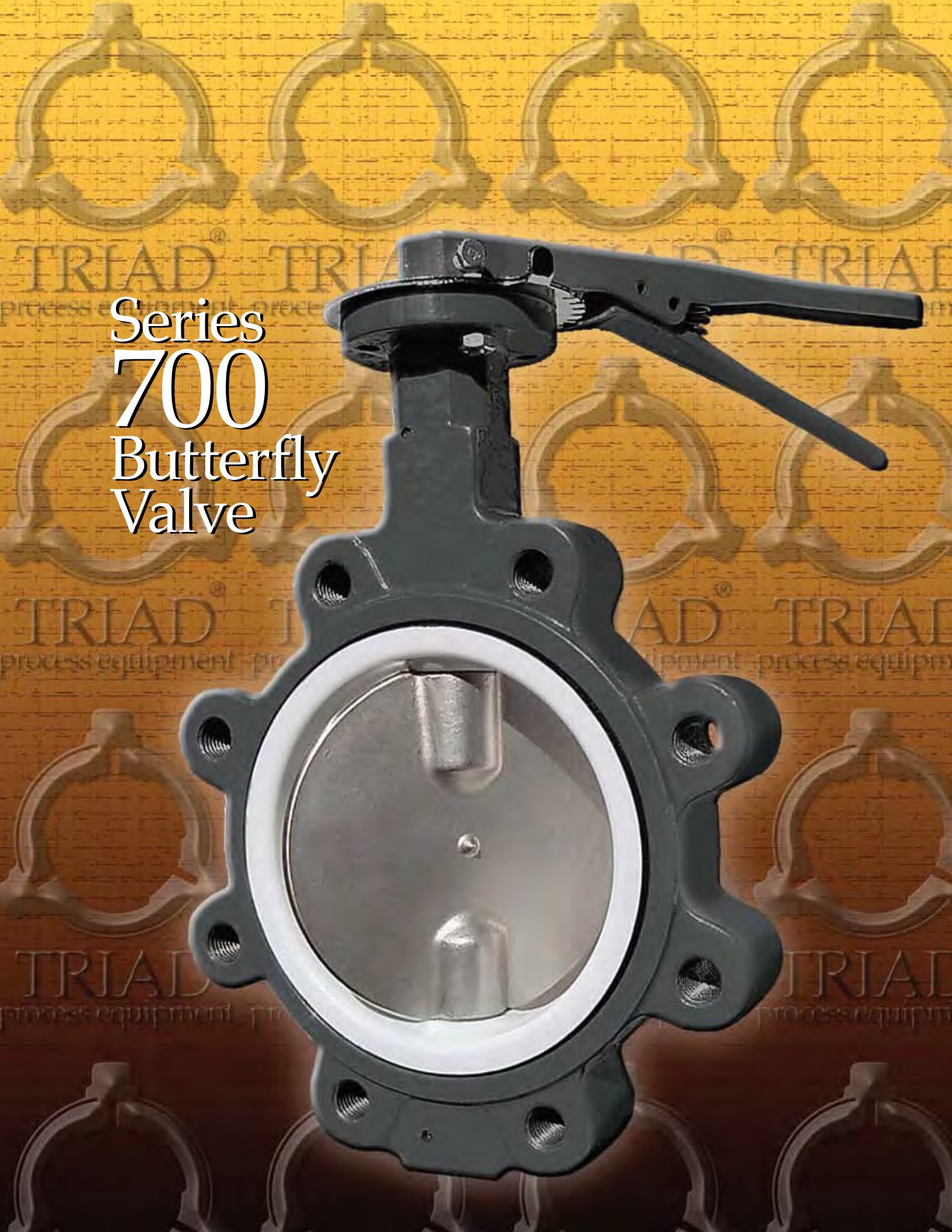
Series 700 Butterfly Valve



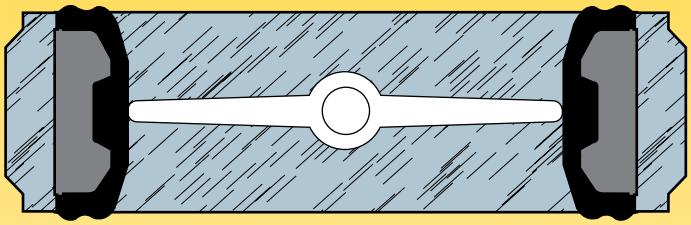
WHY TRIAD® VALVES ARE THE BETTER CHOICE

Triad® Process Equipment components have been installed in dozens of Automotive and Tier One paint shops all over the world. In many cases Triad® valves were the exclusive process ball valve in both the Phosphate/E-coat and the Paint circulating system including ancillary chemical feed and ultra filtration systems.
Our commitment to quality and durability at a competitive price are the mainstay of our philosophy.

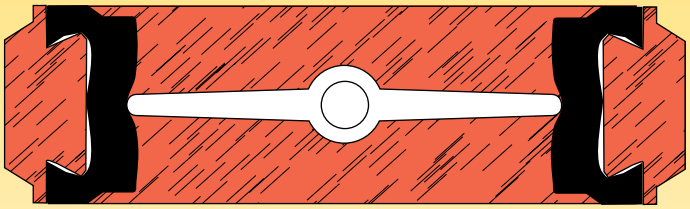
Many years of research have gone into the development of Triad products. Input from plant installations and design engineers have driven many of our product features. Choosing Triad® for your paint system will prove to be your advantage.

The most critical aspect of the Triad® butterfly valve is the cartridge seat design. It was introduced to alleviate installation problems associated with the "dove tail design" (booted) seats. The cartridge seat is a unified, rigid component that is formed by bonding an elastomer to a hard, dense phenolic composite ring, which is inserted into the valve body. The phenolic backing keeps the elastomer from shifting during installation, reducing seat tearing and fatigue caused by bunching. Installation is insensitive to all flange types and disc orientation is more forgiving, eliminating pinched seats and trapped discs.

Why the cartridge seat design is better!



Cartridge



Dovetail

Triad Cartridge Type Seat
(Phenolic Backed)

Elastomer is supported by hard phenolic backing which eliminates seat shifting during installation.

Seat to disc seal is independent of flange support and capable of full rated dead end service.

Static seat design allows disc to sweep into seat for lower, more consistent torque.

Smaller mass of elastomer minimizes seat swell.

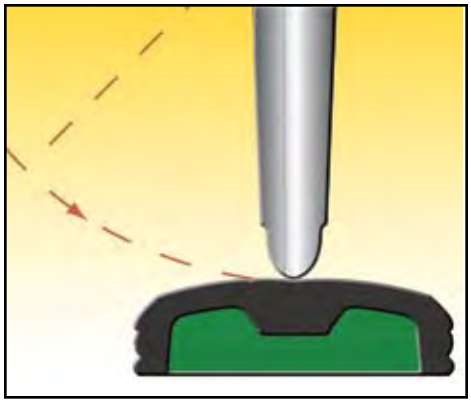
Common Booted Type Seat
(Dovetail Design)

Dynamics of seat based on being installed between two flanges making seat subject to distortion during installation.

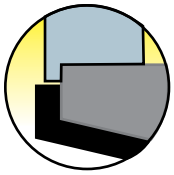
Standard seat design is not rated for full pressure on dead end service.

Disc is designed to push into seat causing distortion and inconsistent torque.

Overabundance of elastomer exaggerates any swelling.



Valve torque is lower and more consistent because the seat dynamics do not rely on being mated between two flanges. Precision machining of the disc and body allow the cartridge design to maintain a tighter disc to seat tolerance, providing a perfect low torque seal each and every time the valve is cycled.



Body of valve features a retainer lip for dead end service

TRIAD® PROCESS EQUIPMENT CO.

Series 700
Features and Benefits

Phenolic backed seat -
less field installation problems

Extended neck for insulation -
no fabricated extensions required

Machined flats attach disc/stem -
no pins

Low torques and ISO mounting -
easy automation

Silicone free from the factory -
no aftermarket cleaning required

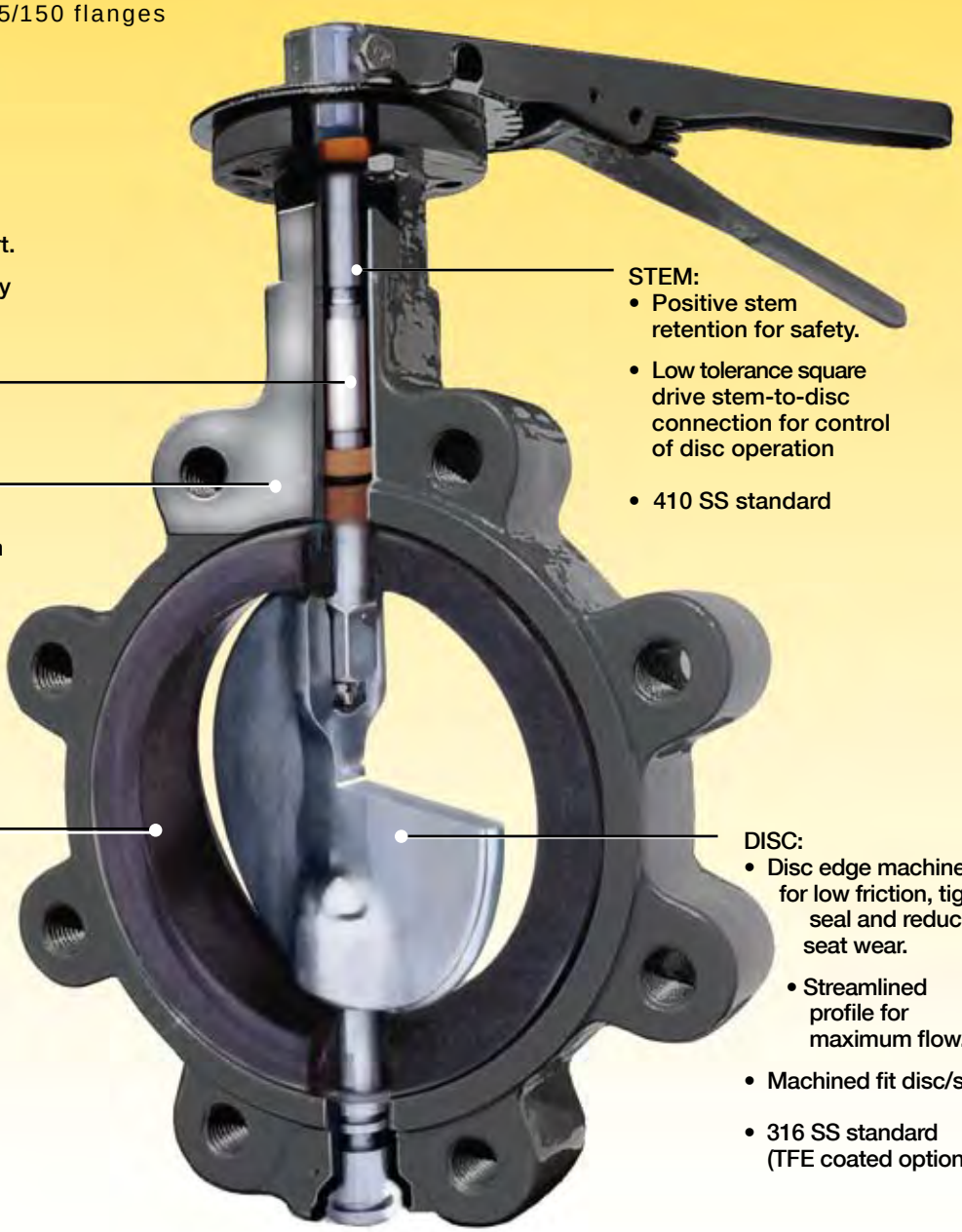
Process quality TFE seats and
TFE coated disc available

Standard with 316SS disc

Sizes to 40”

SPECIFICATIONS
- Design: MSS SP 67 / API 609
- Testing: API 598

Compatible with ANSI 125/150 flanges



BEARINGS & SEALS
- Low friction nylatron stem bearing for side-load support.
- Triple seal reduces possibility of external leakage.
- Upper and lower seals.

BODY:
- Extended neck for insulation clearance.
- Meets API-609 and MSS-SP-67 specifications for design and testing.
- ISO Mounting Pad
- Ductile Iron standard

SEAT:
- Phenolic backed cartridge seat design for extended service and ease of replace ment. Can be used for vacuum services.
- Seating area designed for low friction, tight seal.
- Molded-flange ribs for tight gasket sealing.
- Elastomer molded for primary stem sealing.
- EPDM standard (TFE Optional)

STEM:
- Positive stem retention for safety.
- Low tolerance square drive stem-to-disc connection for control of disc operation
- 410 SS standard

DISC:
- Disc edge machined for low friction, tight seal and reduced seat wear.
- Streamlined profile for maximum flow.
- Machined fit disc/stem.
- 316 SS standard (TFE coated optional)

Other options and accessories consult factory. Technical data subject to change.

ORDERING CODE

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STYLE
750 - Lug
751 - Wafer

SIZE
2" - 02
2½" - 2.5
3" - 03
4" - 04
5" - 05
6" - 06
8" - 08
10" - 10
12" - 12
14" - 14
16" - 16
18" - 18
20" - 20
24" - 24
30" - 30
36" - 36
40" - 40

BODY
D - Ductile Iron
S - Stainless Steel

DISC
S - 316 SS
P - PTFE Coated SS

SEAT
E - EPDM
P - PTFE
V - Viton
B - Buna

OPERATOR
BS - Bare Stem
GO - Gear Operator
LH - 10 Position Locking Handle

EPDM - 200 PSI AND -30° F to 250° F
PTFE over EPDM - 200 PSI AND -20°F TO 250°F
VITON - 200 PSI AND + 10°F TO 275°F
BUNA - 200 PSI AND + 10°F TO 180°F

TRIAD BUTTERFLY VALVE SEAT SELECTION TYPE

EPDM (E)
Rated for temperatures -30°F to 250°F. EPDM is an abbreviation of a compound called Ethylene Propylene Diene Monomer. It is also commonly called EPT, Nordel, and EPR. EPDM is used extensively in the HVAC industry due to its resistance to polar compounds such as water, phosphate, esters, ketones, alcohols, and glycols. The EPDM material is also applicable for handling concentrated sulfuric acid, 20% sodium hypochlorite (bleach), chlorinated water for swimming pools, and other alkaline solutions. EPDM is not resistant to hydrocarbon solvents and oils, chlorinated hydrocarbons, turpentine, or any other petroleum based oils.

BUNA-N (B)
Rated for temperatures 0°F to 180°F. Buna-N is also commonly identified as NBR, NITRILE, or HYCAR¨. It is an excellent general-purpose elastomer suitable for use with air, water as well as most petroleum oils and greases, automotive gasolines (except those which have additives), alcohols and glycols, L-P gases, propane and butane, fuel oils and many other fluids. It also exhibits good abrasion resistance, and excellent resistance to compression set.

PTFE (P)
Rated for temperatures -20°F to 250°F. The Teflon liner overlays EPDM which is bonded to a rigid phenolic ring on the outside seat perimeter. The PTFE extends over the seat faces and outsides flange seal diameter, completely covering the EPDM elastomer layer of the seat, which provides the resilience for sealing valve stems and the closed disc.

VITON (V)
Rated for temperatures 0°F to 275°F. Viton is an E.I. DuPont trademark. Flourel is 3M's trademark for the equivalent fluorocarbon elastomer. This material offers higher temperature resistance and outstanding chemical resistance. It is resistant to hydrocarbon products and mineral acids, both dilute and concentrated solutions. However, it is never to be used in steam applications and is relatively poor in water service.

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