



BULK STORAGE TERMINALS – TRICENTRIC® TRIPLE OFFSET

APPLICATION DETAILS

Bulk storage terminals require triple offset butterfly valves for isolation of matrix manifolds, loading and unloading stations, storage tank inlet and outlet valves, and for storage tank overflow lines.

In addition to being used as general on-off valves, triple offset butterflies serve as reliable emergency shutdown valves to mitigate the risk of contamination, product loss, and quick operation in the event of a system failure.

APPLICATION CONSIDERATIONS

High/Low Cycle	Valves used in loading stations may face high cycle demands; whereas, valves used in storage tank overflow lines may cycle infrequently
Temperature Fluctuations	May be subject to frequent and rapid temperature cycling from -40F (-40C) to 122F (+50C)
Pressure Fluctuations	May be subject to frequent and rapid pressure fluctuations
Erosion	May have general fluid entrained particulate or more media-specific abrasive fluid
Tight Shutoff	Tight shutoff is required for maintaining storage effectiveness, sealing against system upsets, and ensuring accurate custody transfer
Quick Open	Quick opening is required for storage tank overflow lines in the event of tank overfill
Fugitive Emissions	Low emissions required for safety, environmental and health considerations
Corrosion	Storage tanks may contain corrosive media
Limited Maintenance	Typically valves in this service are required to perform flawlessly for extended periods between maintenance cycles

TRICENTRIC® TRIPLE OFFSET

The TRICENTRIC® triple offset butterfly valve's non-rubbing, metal to metal, torque seated design and material selection combine to provide a custom, economical and compact solution to meet the extreme requirements of bulk storage applications while delivering high efficiency, reduced downtime and capital expenditure.

TRICENTRIC® TRIPLE OFFSET BULK STORAGE TERMINAL CONFIGURATION

The TRICENTRIC® triple offset butterfly valve can be customized to suit any bulk storage terminal application. The below description is an example of a typical configuration.

Can be designed for quick operation – less than 0.5 second open or close

Standard materials of construction include A216 WCB body, A216 WCB disc, 17-4 PH DH1150 shaft, 316 SS trim components optimized for media, pressure and temperature fluctuations.

Compact valve design is great for installations with space and weight restrictions

Duplex 2205 and graphite laminated seal stack for tight shutoff and abrasion resistance

Design considerations for material selection, dimensional clearances and tolerances are selected to meet the application temperature range and thermal transients

Inherent safety shutoff assistance for Fail Close or Fail Open applications

Inherently Fire Safe design

Optimized seat and seal design to minimize likelihood of jamming

ZERO leakage to API 598, resilient seat high and low pressure. shutoff

Graphite low emission packing (100 ppm) and optional live loading

Contact sales@scorevalves.com for more information.