

# Manway Nozzle Gasket

Industry leading sealing compression, longevity and ease of use



Following extensive industry feedback, independent FEA and real life testing, TransQuip's Manway Nozzle Gasket is the safest, most robust and cost efficient elastomeric gasket in the tank car industry.

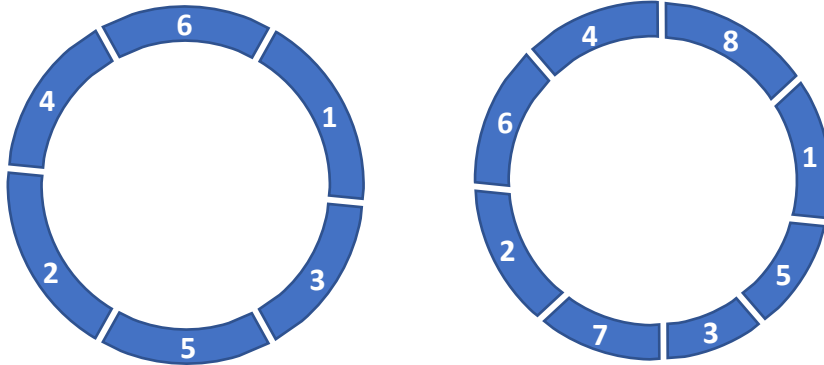
Four raised beads provide increased sealing compression and multiple sealing zones to reduce handling errors. Elongated legs provide for easy installation, alignment and removal. Engineered material development provides added resilience and durability.



## INSTALLATION INSTRUCTIONS

- Check the mating surfaces are clean (free of debris and corrosion)
- Install gasket (using correct elastomer for commodity) ensuring it lies flat and evenly on the nozzle
- Inspect bolts (MSRP-C-III App. D 6.4)

## BOLTING SEQUENCE



## TORQUE INSTRUCTIONS

- Snug Pass - Snug **(6 bolts / 8 bolts)**
- #1 Pass - Using manual wrench tighten to: 50 / 45 ft-lbs.
- #2 Pass - Using manual wrench tighten to: 90 / 70 ft-lbs.
- #3 Pass - Using manual wrench tighten to: 115 / 90 ft-lbs.

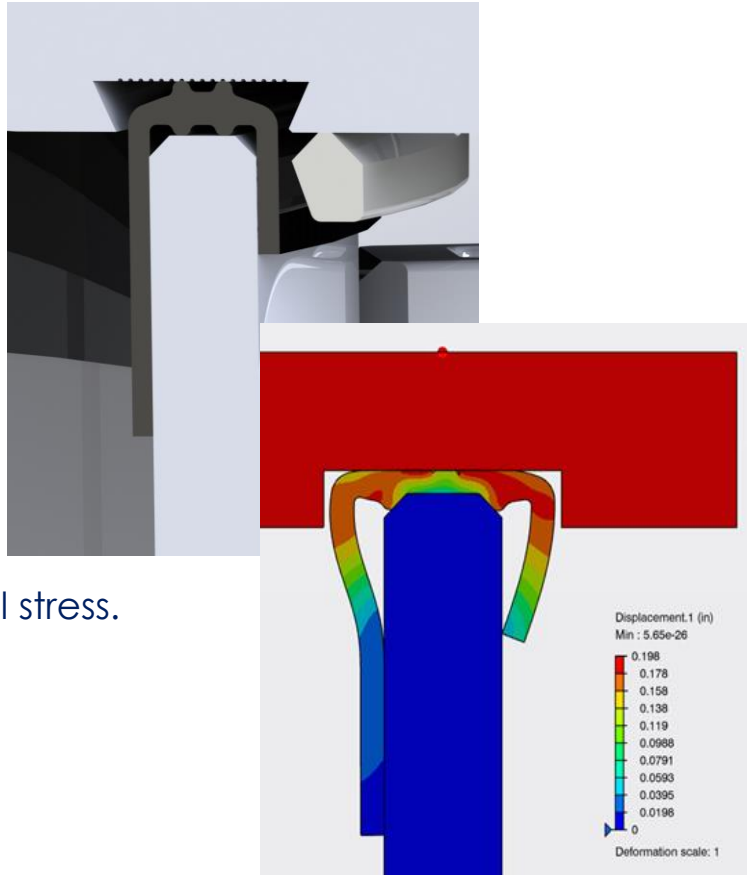
*\* In the event of leak during pressure testing, include a final 4<sup>th</sup> pass and using a manual torque wrench tighten not exceeding 150 ft-lbs (6 bolts) / 120 ft-lbs (8 bolts). Should leaking continue, remove gasket, reinspect the nozzle, gasket groove and gasket for debris and defects.*

# TESTING

TransQuip contracted independent 3<sup>rd</sup> party engineering/ testing facilities to perform Finite Element Analysis (FEA) and real life physical testing:

## FINITE ELEMENT ANALYSIS

Finite Element Analysis allowed for the optimal design and material characteristics. Testing showed nominal deformation under compression, superb loading across the entire sealing surface and exceptional sealing with minimal stress.



## LIVE TESTING:-

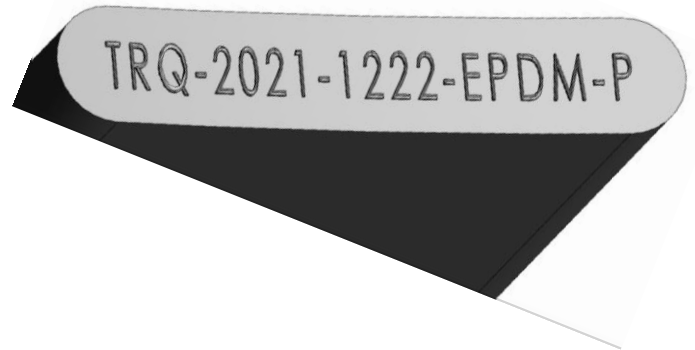
- Manway sealing surfaces left in simulated field conditions
- 6 bolt lid fastened using star pattern to 115 ft-lbs.
- 8 bolt lid fastened using star pattern to 90 ft-lbs.
- Pressurized to 50 psi and held for 5 minutes
- Final test (6-bolt) over-torqued to 150 ft-lbs./ 90psi/ 12 hours

**After 5 cycles - No damage observed to either sealing surface, no compression set.**

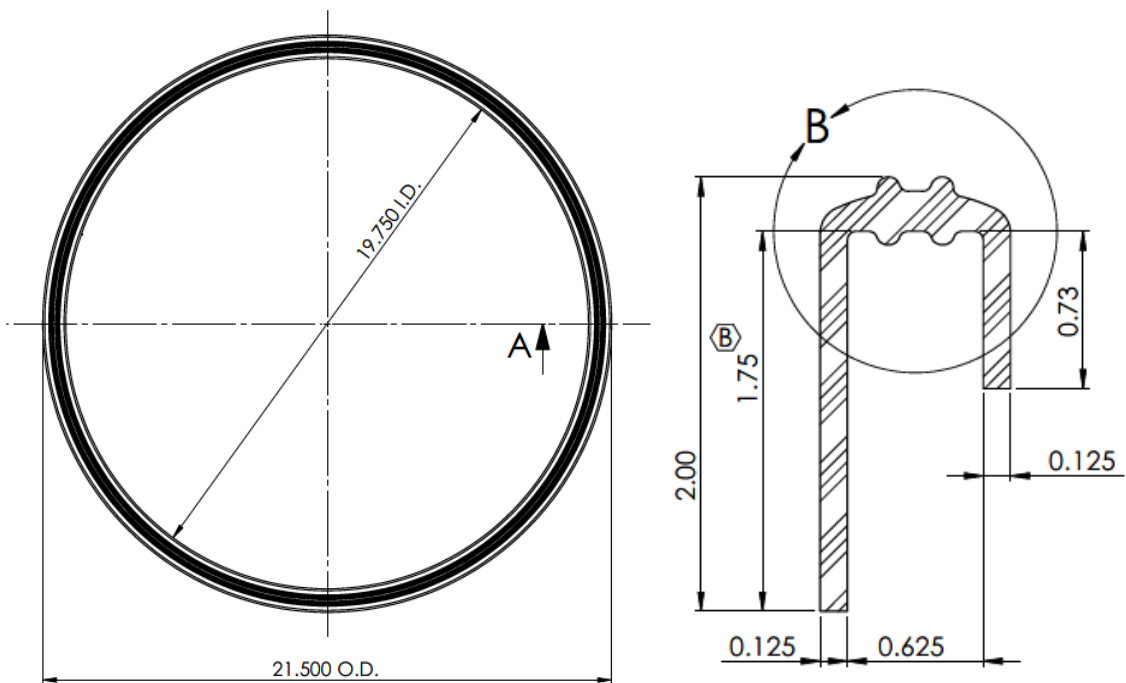
## ELASTOMERIC OPTIONS/ IDENTIFICATION:-

- BUNA
- EPDM (Peroxide Cured)
- FKM (Viton A & B)

Each gasket comes stamped with TransQuip's part number and material description to ensure loaders are installing the correct gasket.



## COMPREHENSIVE FIT



TransQuip's manway gasket is designed to fit an array of commonly used 20" manway designs including:

- AAR-1
- TRN-1
- Various ACF, GATX & UTC designs (*check lid/ nozzle dimensions*)

## LOCATIONS/ CONTACT:-



[www.transquip.com/contact](http://www.transquip.com/contact)

Phone: 904-388-6699

Email: [sales@transquip.com](mailto:sales@transquip.com)

**Valmet**   
JAMESBURY®

**FORT VALE**

**REGO**

**POLYPETROCHEM**