



## EMISSIONGUARD™ TR<sup>2</sup> Packing Ring

CPI's EMISSIONGUARD™ TR<sup>2</sup> packing ring is the only ring design that multiplies the benefits of a tangent to rod ring and a step tangent ring by combining the two rings into one, providing a more efficient seal, reduced friction and extended lifetime.



Single acting  
EMISSIONGUARD TR<sup>2</sup>  
packing ring

### DESIGN FEATURES

- Unique milled stop design eliminating pin breakage issues
- Increased end gaps of the step tangent ring compared to a conventional ring without the risk of breakage of the thin tangent sections, due to the ring being held captive inside the outer tangent to rod ring
- Outer tangent to rod ring covers the end gaps of the inner step tangent ring, effectively removing the leak path of the inner step tangent ring gaps

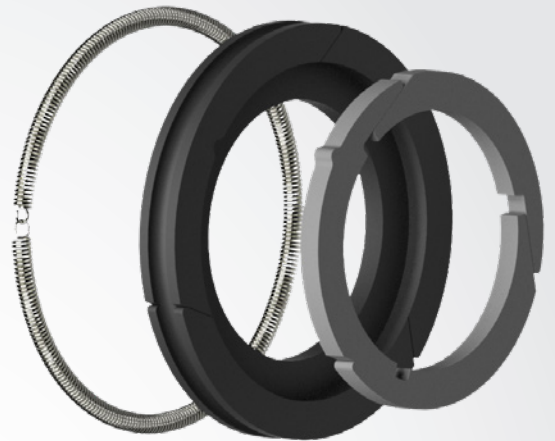


# EMISSIONGUARD™ TR<sup>2</sup> Packing Ring

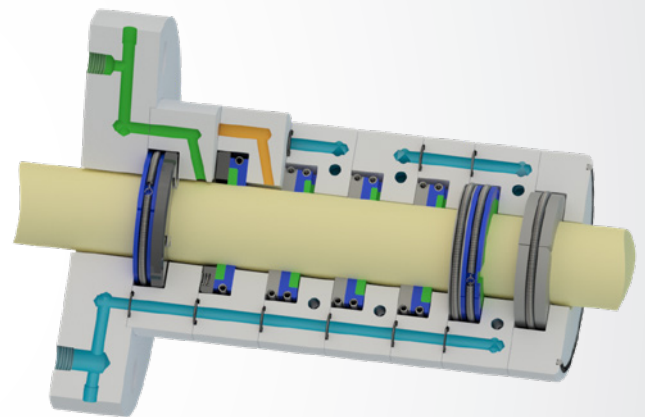
## FEATURES

- Double or single acting by use of face slots
- Suitable for all rod diameters and all gasses
- Inner step tangent ring keeps the assembly open, preventing the outer tangent to rod ring from closing in on itself
- Provides easy installation on the rod
- Radial load is shared between the inner and outer rings as the compressive gas force squeezes the outer tangent to rod ring resulting in:
  - Improved sealing performance
  - Lower friction
  - Reduced heat generation
  - Longer running life
- Controlled tests have shown the sealing performance to improve by at least 25% compared to conventional rings
- Available in mixed materials where the outer tangent to rod ring acts as an anti-extrusion ring
  - Depending on operating conditions it may be possible to avoid an additional anti-extrusion ring
  - Suitable for packing case designs with narrower seal grooves where axial length is limited

\*The CPI EMISSIONGUARD TR<sup>2</sup> is patent pending



Exploded view of a double acting EMISSIONGUARD TR<sup>2</sup> packing ring



EMISSIONGUARD TR<sup>2</sup> packing rings in a purged packing case



CPI, part of the Howden group, is an industry-leading manufacturer of precision-engineered components for reciprocating compressors used in petrochemical, refining, natural gas, and offshore industries. The CPI product range includes packing, piston and rider rings and a complete line of compressor valves designed to provide each customer with maximum performance and reliability for their application. In addition, CPI offers the highest quality lubrication system technology for further compressor efficiency and protection.