

42HPX HIGH PRESSURE RUBBER EXPANSION JOINTS

Eliminates Pressure Thrust Loads on your Piping System While Absorbing Lateral Movement

Expansion Joint Solutions

Thorburn's 42HPX Rubber Expansion Joints are specifically designed to provide strength, flexibility, movement and low spring rates at high pressures. This makes an ideal expansion joint for high pressure GRP & FRP piping systems.

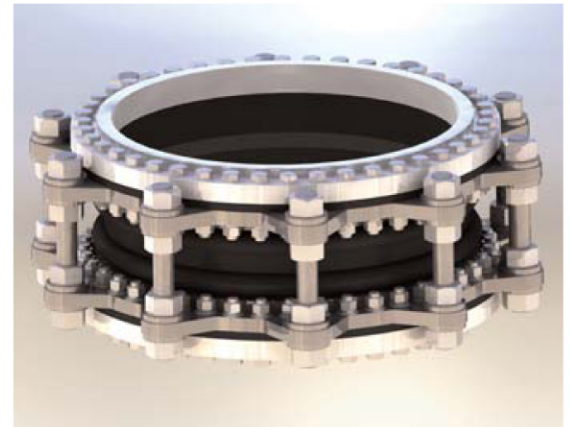
Thorburn's Integral Retaining Ring & Lug Plate System to reduce cracking in GRP & FRP Piping Systems

Under high pressure loads, the traditional retaining ring and lug plate system can crack GRP & FRP flanges. When the tie rod lug plates are on the back of the mating GRP/FRP flange system the pressure loads will impose bending loads on the tie rod lugs which can lead to cracking of the GRP/FRP mating flange.

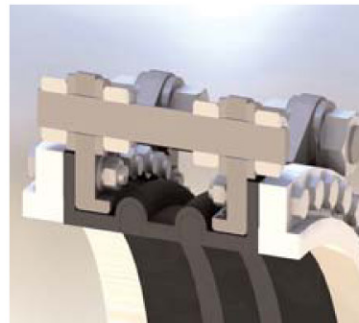
To address the challenges associated with containing pressure thrust in a GRP/FRP piping system, Thorburn has designed and developed an Integral Retaining Ring and Lug Plate System to reduce the possibility of flange cracking.

Thorburn's L-Shape Retaining Ring System to Improve Sealing Force & Arch Support

Thorburn's proprietary L-Shaped retaining ring provides improved compression load on the rubber flange to enhance sealing under high pressure loads. Thorburn's L-Shaped retaining ring system also provides the advantage of restraining the bellows arch against the annular longitudinal pressure loads. This will prevent the arch from blowing up like a balloon at high pressures.



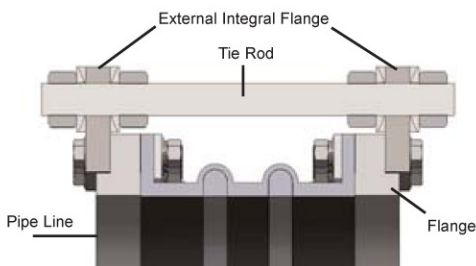
42HPX Rubber Expansion Joint with Integral Flange Design



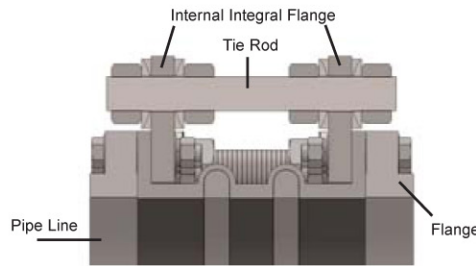
L-Shape Retaining Ring System



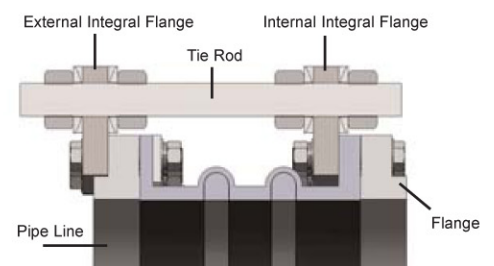
Integral Flange Design System



External Design



Internal Design



Combination Design

