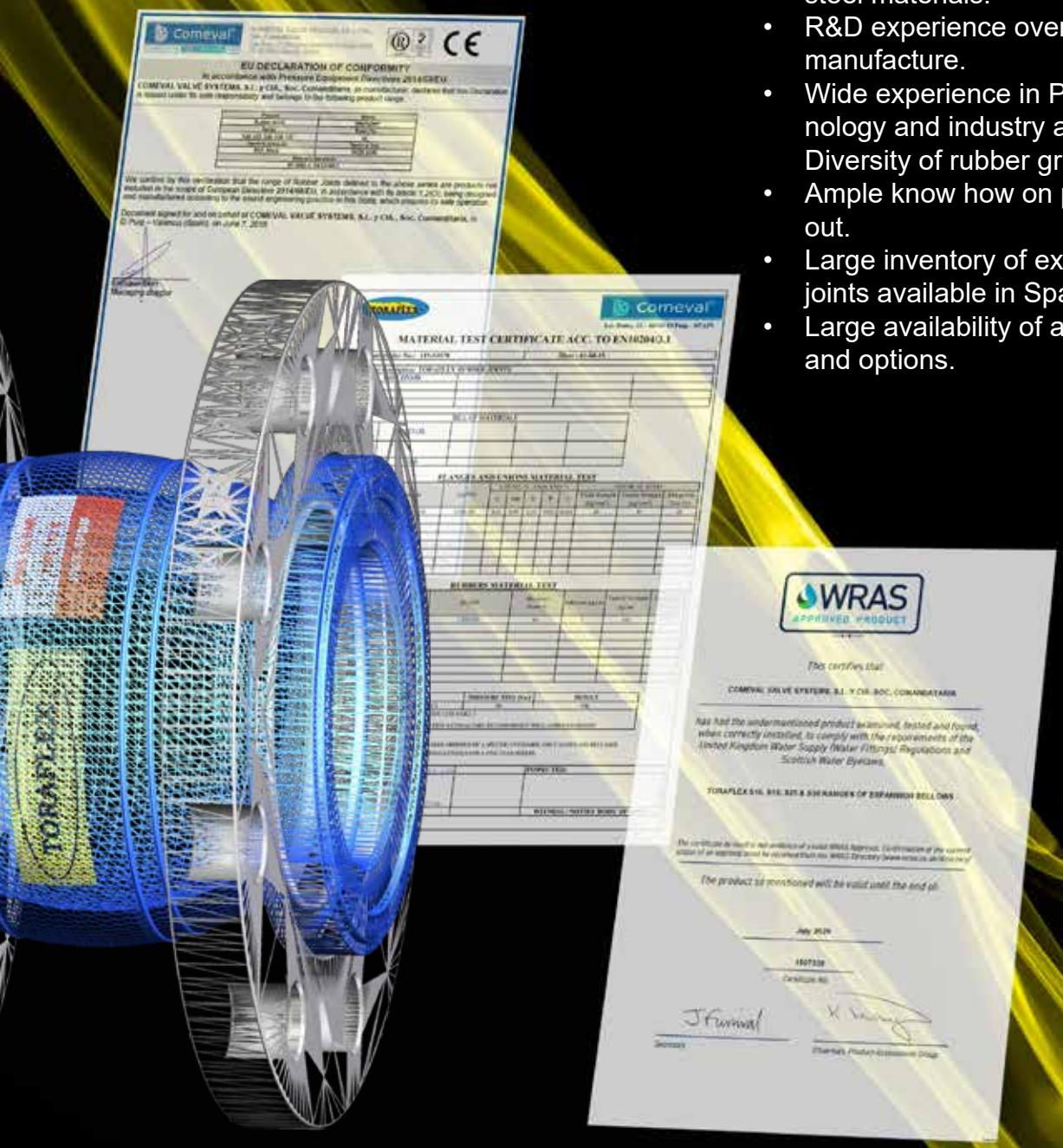
Rubber Joints

Toraflex®

Why choosing the Toraflex® range of Flexible Joints?

- Strictly compliant with legal regulations, safety and reliability.
- Stringent QC with vulcanized rubber shell tests and traceability of steel materials.
- R&D experience over 30 years of manufacture.
- Wide experience in Polymer technology and industry application. Diversity of rubber grades.
- Ample know how on pipework lay out.
- Large inventory of expansion joints available in Spain.
- Large availability of accessories and options.



Rubber Joints are excluded from the Pressure Equipment Directive PED 2014/68/EU, according to its article 1.2(O).
WRAS approval for drinking water, series S10, S15, S20 & S30, standard up to DN400!

Full turned rubber design, self-sealing, no aditional gaskets are required. It prevents electrolytic corrosion

Rubber material identification and maximum service pressure and temperature.

Inner Reinforcement placed in between the outer and inner layers. Made of nylon plaited fabrics as standard.

Toraflex ®- A comprehensive portfolio of flexible expansion joints for pipework systems

S10 Single sphere Expansion Joints

DN25 - DN1200 / PN10-16 / Flanged to EN1092-2 type 21/B, PN10/16 / Marking: EN19 / Pressure Tests: EN12266-1

- Loose flanges for easy assembly.
- Precision injection molded of synthetic rubber and nylon.
- 4 different allowable movements: axial compression and expansion, lateral and angular deflection.
- Outer layer protects the bellows surface form eventual ozone attack.
- Spherical design for better strength and efficiency.

S15 Single sphere Expansion joint, single length

DN25 - DN300 / PN10-16 / Flanged to EN1092-2 type 21/B, PN10/16 / Marking: EN19 / Pressure Tests: EN12266-1

- Loose flanges for easy assembly.
- Precision injection molded of synthetic rubber and nylon.
- 4 different allowable movements: axial compression and expansion, lateral and angular deflection.
- Outer layer protects the bellows surface form eventual ozone attack.
- Spherical design for better strength and efficiency.

S20 Double Sphere Eexpansion Joints

DN25 - DN600 / PN10-16 / Flanged to EN1092-2 type 21/B, PN10/16 / Marking: EN19 / Pressure Tests: EN12266-1

- Loose flanges for easy assembly.
- Precision injection molded of synthetic rubber and nylon.
- 4 different allowable movements: axial compression and expansion, lateral and angular deflection.
- Outer layer protects the bellows surface form eventual ozone attack.
- Spherical design for better strength and efficiency.
- Double sphere design allows greater axial, lateral and angular movements subject to less effort and material wearing down during movements.
- With optional root ring

S30 Threaded unions Expansion Joints

DN25 - DN1200 / PN10-16 / Threaded to EN10266-1, GAS-Rp-BSPP/ Marking: EN19 / Pressure Tests: EN12266-1

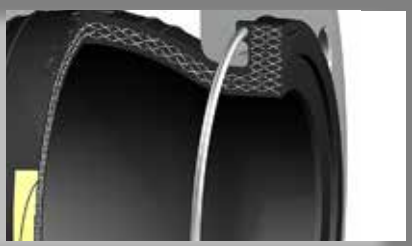
- Light and easy to install.
- Precision injection molded of synthetic rubber and nylon.
- Outer layer protects the bellows surface form eventual ozone attack.
- Spherical design for better strength and efficiency.
- Double sphere design allows greater axial, lateral and angular movements subject to less effort and material wearing down during movements.
- With root ring as standard.

Rubber materials

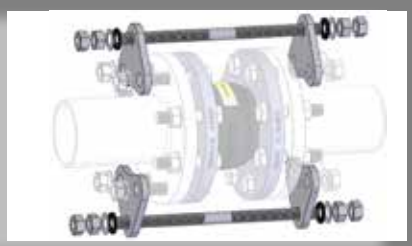
EPDM, NBR/CR, NBR, PTFE/EPDM, HYPALON, VITON, NEOPRENE

Applications

Marine: Fresh water generators, machine room equipment, marine engines, on deck systems, water cooling lines, lubricating circuits...
H.V.A.C: Heating, ventilating and air conditioned, specially absorbing vibrations and noise caused by pulsating pressure stations, cooling towers, condensers, chillers, compressors, rooters...
Power: Hydroelectric plants, turbine lines, cooling towers, condensate lines and deaireators...
Water Works and Environmental Services: Water treatment plants, pollution filters, strength balance in sewage lines, centrifugal rooters, sludge pumping lines...
Process Industry: slurries, solvents and other chemical compounds...



End Bellows Reinforcement. Hardened steel wires to provide a greater consistence to the bellows outer neck.



Limit rods can control joint bellow over-extension and/or over-compression. Limit rods can be used for vacuum service in combination with vacuum rings.

Root ring. for increasing strength.

Options within the Toraflex® range

Flanges
ANSI class 150# standard, Stainless Steel material, Hot dip galvanized.

Spool Joints
Special construction spools for civil construction and plant machinery

Metal Joints
S25 and S50 stainless steel bellows, double corrugated layer, inner sleeve for gaseous and higher temperature media.

Typical applications and allowable movements:

- EPDM rubber bellows:
- Fresh and sea water, hot water in HVAC installations.
- NBR rubber bellows:
- Kerosene, oils and fats.
- Hypalon® rubber bellows:
- Acids and alkalis, chloride
- Axial movement, angular movement and lateral movement only without limiting rods.

On site and Off site after market service and engineering support

We provide engineering application on installation and pipework layout upon request. Our support also includes general arrangement drawings, fluid compatibility tables, Operating and Maintenance Instructions and Certificates.

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Comeval®
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