In refineries, offshore oil installations or wherever hydrocarbons are transported, the pipes are flanged and held together with nuts and bolts. In case of fire, the flanges and pipes should maintain the same level of integrity to avoid escalation. Traditional protection is to capsule the whole valve and flanges in a fire-insulated metal box - a bulky, heavy and expensive solution. The box also creates challenges during inspection and maintenance. Trelleborg Offshore has developed a jet fire protection for bolted connections to extend service life in the event of a fire. It helps the bolts and flanges to maintain their level of integrity and avoid escalation.

The easy to install FireNut™ resists both jet fire and pool fire and is tailor made to accommodate almost any bolt size. The rigid and tough design means that FireNut™ has extremely good resistance to mechanical damage when installed.

FireNut™ is hand mounted by screwing it on to the bolt. It protects each bolt separately, allowing for easy inspection as well as lowering weight and occupying less space. The FireNut™ system simplifies installation, inspection and maintenance of flanges, increases efficiency and reduces costs. It can be re-used after disassembly and does not require certified personnel for installation.

FireNut™ is based on Trelleborg Offshore's Firestop™ material, which combines extreme fire protection with other unique rubber capabilities. Trelleborg Offshore has delivered Firestop™ based products to the offshore industry for more than 30 years.

**Benefits:**
- High resistance to blast, impact, ozone, UV, most solvents and seawater
- Jet fire tested according to ISO standard 22899-1
- Extends time to rupture up to 4 times
- Excellent protection from HISC, corrosion, and mechanical damage and wear
- Easy installation, no maintenance and easy to inspect
- Long service life
- No hot work
- Weight and space savings
- Tailor-made to accommodate almost any bolt size
- FireNut™ comes in a number of sizes and variations, to ensure they are easy to install in all environments
Applications:

• FireNut™ has been installed on a number of offshore constructions worldwide
• FireNut™ can be applied to both new and old bolts and flanges
• FireNut™ is a product that is not just restricted to offshore high pressure flanges, but can be used in any other context where bolt and nut protection is required.

Contact Us
Trelleborg Offshore delivers innovative and reliable offshore solutions that maximize business performance to meet your needs. Our dedicated and highly skilled staff are always on hand to provide seamless process support from initial idea, through to delivery and beyond.

Brazil: +55 22 2106 4040
France: +33 3 44 23 03 50
Malaysia: +603 2776 6804
Norway: +47 32 23 20 00
United Kingdom: +44 1695 712 000
United States: +1 832 456 8300
Email: Offshore@trelleborg.com