

Swellable O-rings

Downhole swellable sealing and zonal isolation

Swellable O-rings are designed to provide sealing and zonal isolation for a range of applications

Finding a solution for delivering reliable sealing and isolation calls for an understanding of specialist fields such as multiphase fluid dynamics and materials science.

Tendeka has the in-house capability to custom design a range of sealing solutions, from non-standard diameters to unique fluid parameters, ensuring the end result is a perfect fit for well projects.

Patented elastomer technology has been designed to deliver extremely reliable zonal isolation barriers across a range of temperature and salinity profiles.

With this in mind, Tendeka has designed Swellable O-rings, a patented sealing technology which is designed to effectively restore production where leaks were evident within isolated zones.

Designed to swell within available control line fluid and manufactured in either water or oil swelling compounds, O-rings can also be used alongside chevron stacks to utilise the seal space on the bore ID.

O-rings are easy to install as they slot into the required groove and swell once the fluid has come into contact.

Tendeka has the capability to design O-rings specific to customer requirements to ensure maximum sealing capability in the well.

Swellable O-rings can be used together with a chevron back-up system if there is enough length on the lock mandrel available to accommodate the assembly. For SSSVs with higher working pressures, a SwellStack design is Tendeka's recommended solution.

Features

- Rated for use in applications between 0-250°C

Benefits

- Cost-effective sealing solution to combat leakage
- Provides maximum reliability
- Easy to install
- Custom-made to suit a range of well types

