

DATASHEET

WIRESLINE RETRIEVABLE DHSV SWELLSTACK QUALIFIED TO 10,000PSI / GAS IN DAMAGED SEAL BORE WITH 1.65MM DEEP WIRE TRACKED GROOVE

FEATURES

- > Patented sealing technology
- > Qualified to 10,000psi / gas in 1.65mm wire tracked / damaged seal bore
- > Custom designed stack arrangement
- > Oil and water swell
- > Supplied ready for installation onto all OEM insert valves
- > Retrieved on wireline

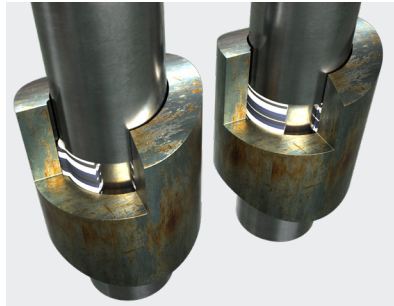
BENEFITS

- > Cost-effective solution to extend the life of the existing DHSV
- > Simplified deployment option
- > Maximum reliability for severely damaged and corroded sealbores
- > Maintained well integrity
- > Removes requirement for DHSV straddles and potential workovers

SWELLSTACK DATASHEET

PATENTED TECHNOLOGY

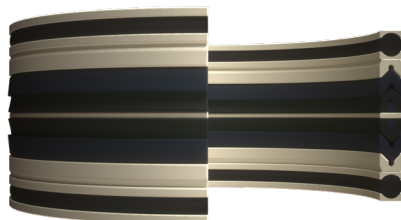
Tendeka's patented technology (patent No WO2006045794 A1) for swellable O-rings, covers the use of downhole swellable seals in applications where sealing is required within a landing nipple profile through the installation of plugs, straddles and insert safety valves.



BACKGROUND OVERVIEW

The smallest ID through a tubing retrievable safety valve is typically the upper and lower seal bore. As such, during operations whereby a protection sleeve has not been installed to protect the seal bores, they are prone to wire tracking during all wireline runs in and out of hole.

For insert valves that are installed with standard v-packing stacks, obtaining an effective seal often proves problematic as such packings are not designed for damaged bore applications and are typically only qualified in new polished and undamaged seal bores.



SOLUTION

Tendeka has worked with Wellvene to design, manufacture and qualify a new version of the Tendeka SwellStack that has been proven to seal in gas up to 10,000psi within damaged seal bores having a wire tracked groove up to 1.65mm in depth.

The introduction of the Tendeka / Wellvene SwellStack provides a cost-effective sealing solution that is compatible with all OEM insert safety valves. The use of the SwellStack ensures production can be reinstated to wells that are closed in due to failed sealing of an insert safety valve, thus eliminating any requirements to consider higher cost and long lead straddles and potential workovers.

SWELLSTACK QUALIFIED IN A 1.65MM WIRE TRACKED GROOVE / DAMAGED SEAL BORE TO 10,000PSI / GAS

ADDITIONAL INFO

The SwellStack design incorporates the knowledge gained from standard Tendeka swellable compounds which have been used in over 65,000 successful installations worldwide. The original SwellStack design has since been modified and improved to achieve a 10,000psi rating following extensive development and qualification programs in partnership with Wellvene.

Tendeka Swellable O-rings have been used since 2011, with over 11,200 O-rings supplied globally to date. The O-rings are designed, manufactured and rated specifically for each application and within a temperature range between 0-250°C to ensure maximum sealing capability throughout the life cycle of the well. All O-rings are manufactured from an oil or water swellable compound, designed to swell when in contact with control line fluid or produced well fluids.

EXAMPLE SPECIFICATIONS

LOCK MANDREL / WRDHSV OD
As per customer requirements

FLUID ACTIVATION
Oil or water

LENGTH OF STACK
Designed and supplied to suit all OEM lock and valve gland dimensions

PRESSURE RATING
Up to 10,000psi in 1.65 Seal Bore with Wire Tracked Groove

TRDHSV SEAL BORE ID
As per customer requirements

RETRIEVAL METHOD
Retrieved on Wireline

TEMPERATURE RATING
0°C - 250°C