

# SwellStack

## Downhole Safety Valve Swellable Sealing Systems

SwellStack is designed to seal inside damaged and corroded seal bores within downhole safety valves, restoring production and maintaining well integrity.

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.

Proprietary 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 SwellStack, a patented sealing technology which is devised to extend production life of the wireline insert downhole safety valves (DHSV). SwellStack is installed when a standard chevron seal fails, no longer offering reliable isolation. The SwellStack element replaces the original seal where it swells into the scored and corroded seal bores within the DHSV to restore production.

SwellStack is qualified to 5000psi in a 0.060" deep wireline cut.



### Features

- Patented sealing technology
- Custom chevron back-up rings
- Oil and water swell
- Supplied ready to run for installing on valve
- Less than 3000lbs to retrieve seal from a DHSV

### Benefits

- Cost-effective solution to extend the life of the existing DHSV
- Simplifies deployment
- Provides maximum reliability for the most severely damaged and corroded sealbores, maintaining well integrity
- Removes requirement to workover

### Example Specifications

|                    |  |
|--------------------|--|
| Lock Mandrel OD    | As per customer requirements                                       |
| Valve Seal Bore ID | As per customer requirements                                       |
| Length of Stack    | Back up system designed to fit in the space available in the valve |
| Temperature Rating | 0°C - 250°C  |
| Fluid Activation   | Oil or water   |
| Pressure Rating    | 5000psi in up to 0.060" deep wire cut                              |
| Retrieval Force    | Less than 3000lbs  |

