# STEELHAUS

# **TBL**

# Thermal liner packer

### **APPLICATIONS**

The TBL Thermal Liner Packer is designed for thermal applications when liner top pressure integrity is required throughout the life of the well, and the liner installation may require high torque and axial loads to position the liner into the wellbore. This packer is suitable for in-situ thermal environments such as SAGD, CSS and many other extreme temperature applications.

### **FEATURES & BENEFITS**

- Qualified to 343° C and 21 MPa
- Ability to rotate and circulate during deployment
- Beveled tieback sleeve with latching profile allows for:
  - Installation of a tieback packer with full bore access to the liner
  - Latching and anchoring of inner strings with pressure isolation
  - Attachment and retrieval of flow control at the liner top
  - Installation of warm up phase technology with open/closed positions and integral thermal expansion joint
- Fullbore access to liner
- Liner placement control (anchored liner top during thermal cycle loading)
- Adjustable surface setting pressures
- Tested and verified for well tractor transition from intermediate casing, through packer, and into liner without a slave string
- Large beveled upper seal bore
- One piece integral mandrel
- Integral clutch system
- Opposing 360° full circle slips
- Metal to metal seal with static element
- Matched liner strength
- NACE MR0175 compliant for environments containing H<sub>2</sub>S

## **Description**

The TBL Thermal Liner Packer is a hydraulically set liner hanger packer for use in thermal applications (injection or production). It is an engineered and tested product with a temperature rating of 343° C and pressure rating of 21 MPa. The TBL is designed with matching liner strength specifications, and is able to be rotated and circulated into position.

The design for this product includes no elastomers. It is engineered for harsh environments that exceed the temperature and pressure limits for elastomers, such as o-rings, packing and rubber compounds.

### Operation

7.000 x 9.625 [177.8 x 244.5]

The TBL Thermal Liner Packer is designed to be run and set utilizing a hydraulic setting tool which is engineered for producing high setting forces, torque rates and axial loads. Surface setting pressures are adjustable by manipulating the initial setup for the setting tool.

The TBL Thermal Liner Packer is conveyed with a hydraulic setting tool and set by dropping a ball, or utilizing a plugging system, and pressuring up on the work string. Once the thermal element is packed off, the setting tool hydraulically disconnects from the liner without work string manipulation, and is retrieved to surface.

TBL THERMAL LINER PACKER SPECIFICATIONS		
Size in [mm]	Weight Range lb/ft [kg/m]	Packer O.D. in [mm]
4.500 x 7.000 [114.3 x 177.8]	23.0 [34.2]	6.200 [157.5]
5.500 x 8.625 [139.7 x 219.1]	36.0 [53.6]	7.635 [193.9]

40.0 - 43.5 [59.5 - 64.7]

8.535 [216.8]

