

# NTP-TP – Premium Slipless Thermal Liner Top Packer

The Weatherford NTP-TP premium slipless thermal liner top packer is a high performance tool designed for high temperature applications that require liner top pressure integrity during initial setting, while allowing for tubing movement at the liner top. The tight tolerances between the casing and the packer element when set will prevent debris from the well bore entering the casing above the liner top.

The NTP-TP's innovative design uses wire-lock technology to anchor external components to the continuous casing mandrel ensuring a liner top packer with no welded joints. A field proven high-temperature element system energizes with low setting force, and is capable of providing a barrier for debris under rigorous operating conditions.

The NTP-TP packer is mechanically set with the mechanical force being provided by hydraulic or mechanical setting tools. The packer may be deployed with a variety of running tools, which will also allow for rotatable installation

## **Applications**

- High temperature wells such as SAGD and CSS
- Isolation of the annulus between liner and casing
- · Horizontal, deviated and vertical wells

## Features, Advantages and Benefits

- A spring system is incorporated in the element energization system to ensure that the element stays energized during thermal cycling allowing the element to maintain contact with the host casing ID, and continue to seal during casing expansion and contraction.
- Absence of O-rings eliminates potential leak paths in the liner string; therefore, prolonging operational life.
- Positive locking ratchet assembly keeps the element energized after packer is set maintaining a positive pack-off between the liner and the casing annulus aiding in the debris barrier characteristics of the packer.
- · Non-welded construction with a continuous single-piece mandrel ensures high performance with fewer moving parts thereby increasing reliability.
- High-temperature element system energizes with low setting forces eliminating unnecessary equipment thereby simplifying installations.

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## Features, Advantages and Benefits (cont'd)

- Compatible with a variety of running and setting tools that allow for rotatable deployment and greater operational flexibility.
- Can be pressure tested to 3,000 psi (20,000 kPa) at ambient well temperature after setting and before releasing the running tool to ensure that the element has been set

#### **Options**

- Tie-back barrel and re-entry guide is also available
- Standard materials are L-80. Other materials are available upon request
- Available in API or premium connections
- · Additional sizes available upon request

### **Specifications**

Casing		Liner		Differential Pressure Rating	Temperature Rating	*Burst Rating	*Collapse Rating	Maximum OD
Size (in./mm)	Weight (lb/ft, kg/m)	Size (in./mm)	Weight (lb/ft, kg/m)	(psi/MPa)	(°F/°C)	(psi/MPa)	(psi/MPa)	(in./mm)
9 - 5/8 244.5	36.0 - 40.0 53.57 - 59.53	7 177.8	20.0 29.76	2,200 15.2	650 340	5,162 35.6	2,420 16.7	8.500 215.9
			23.0 34.22			6,066 <i>41.8</i>	3,452 23.8	
			26.0 38.68			6,970 48.1	4,937 34.0	
			29.0 43.15			7,894 <i>54.4</i>	6,559 <i>45</i> .2	
			32.0 47.61			8,798 60.7	8,145 56.2	

<sup>\*</sup> Ratings are based on L-80 material

- Standard materials are L-80 and P-110. Other materials available upon request
- See authorized Weatherford representative for technical specifications