

# SwageSet Liner-Top Packer

Provides gas-tight, liner-top integrity in challenging wells

## Applications

- Cemented and uncemented liner applications
- Liner hangers with integrated liner packers
- Tieback packers
- High-pressure, high-temperature applications within the specified range
- Gas- and fluid-tight applications
- High-angle, horizontal, or extended-reach geometries
- Corrosive-environment wells

## Features and Benefits

- The packer element is bonded to an expandable steel ring to create a reliable seal that prevents gas migration.
- Patented swage technology forms an anti-extrusion barrier between the packer body OD and host casing ID.
- Aflas<sup>®</sup> elastomers provide reliability in high-temperature and corrosive environments.
- The packer design is highly resistant to swab-off, which enables high circulation rates past the liner-top packer assembly. This circulation aids the removal of debris during well cleaning for improved cement quality.
- The high-torque, one-piece mandrel is equipped with a premium connection that provides superior pressure integrity.
- The integral body-lock ring permanently locks the applied setting force into the element to ensure the packer does not unset.
- The liner-top packer has a profile that accepts the Weatherford WRSM retrievable cement packoff. The packer also has a profile for a type R, S, or HNG running tool.
- The high-torque, threaded connection makes up to the connection on the SwageSet tieback polished bore receptacle (PBR) to form a hydrostatically locked chamber that prevents backoff during vigorous liner rotation.
- The mechanical locking mechanism prevents premature setting and reduces associated nonproductive time. It is available in certain sizes that use the R running tool.
- The XYLAN<sup>®</sup>-coated cone reduces the setting force required to energize the packer element.



The SwageSet liner-top packer has proprietary swage technology that serves as an annular pressure barrier at the liner top.

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# SwageSet Liner-Top Packer

## Tool Description

The Weatherford SwageSet liner-top packer provides a reliable, high-integrity seal that isolates the annulus between the liner OD and the host casing ID. Run as an integral part of the liner-hanger assembly, the SwageSet packer prevents gas migration or flow while the cement sets.

The SwageSet liner-top packer has been engineered to meet the strictest sealing requirements specified by International Organization for Standardization (ISO) 14310 grade V0 and American Petroleum Institute (API) API11D1 test criteria. The standard packer rating is 12,500 psi (86.2 MPa) at 400°F (204°C), and the extended service rating is up to 15,000 psi (103 MPa) at 400°F (204°C).

The packer features proprietary swage technology that consists of ridge-shaped Aflas elastomers bonded to an expandable metal ring. Using applied drillpipe weight, the expandable metal ring is swaged out to the host casing ID to form a highly reliable seal.

The one-piece mandrel is equipped with a premium connection and includes a sealbore for the WRSM cementing packoff and a profile for the appropriate running tool.

Two design features make this packer ideal for drill-down applications:

- A high-torque connection with seals between the SwageSet tieback PBR and the packer that prevents PBR backoff while rotating
- A castellation profile compatible with high-torque running tools designed for reaming or drilling the liner into position

The packer is normally activated by setting down weight on the SwageSet tieback PBR, above the packer with the packer actuator, after the hanger is set and the running tool is released. Set-down weight transferred through the PBR to the packer sets the hold-down slips and the packer element. The unique design enables force to be continuously applied to the element after the hold-down slips have been set, thereby retaining the setting force within the element with body-lock rings.

## Options

- The SwageSet liner-top packer is available with a profile for the R, S, or HNG running tool.
- Standard metallurgies are L-80 and P-110 (125 ksi).

## Specifications

For more information, contact an authorized Weatherford representative.

