

Liner Hanger with Metal-to-Metal Tieback System

Incorporating the premium COLOSSUS CMT cemented liner hanger system tied back to surface



Rated to 8,000 psi
[55 MPa]



Rated to 300 degF
[150 degC]

APPLICATIONS

- Wells requiring a liner and tieback to
 - protect the parent casing string during high-pressure testing operations
 - accommodate a narrow window for the pore-pressure fracture gradient during installation
 - address tubing movement concerns
- Wells requiring a gas-tight seal between the tieback receptacle and tieback string
- Remedial applications such as scab or stub liners

BENEFITS

- Combines the flexibility of reaming and rotation during running in and cementing with the sealing integrity of a full casing string
- Improves ECD during cementing
- Anchors the upper casing to the liner for the life of the well using Metalmorphology* metal-to-metal sealing and anchoring technology
- Eliminates hydraulic anchors, midstring packers, and the need for cemented tiebacks

FEATURES

- No elastomers, slips, or hydraulic cylinders required for tieback
- Immediate annular seal on completion of liner cement job to prevent gas migration
- Compatible with the Schlumberger metal-to-metal load anchor
- Reinstatement of tieback string (if cut for casing repair or workover) using the Casing Reconnect* metal-to-metal, gas-tight casing repair system

Conventional options to tie back a liner to surface include cementing the tieback string in place or using hydraulic double-grip anchors, midstring packers, or floating seal assemblies. These solutions typically require

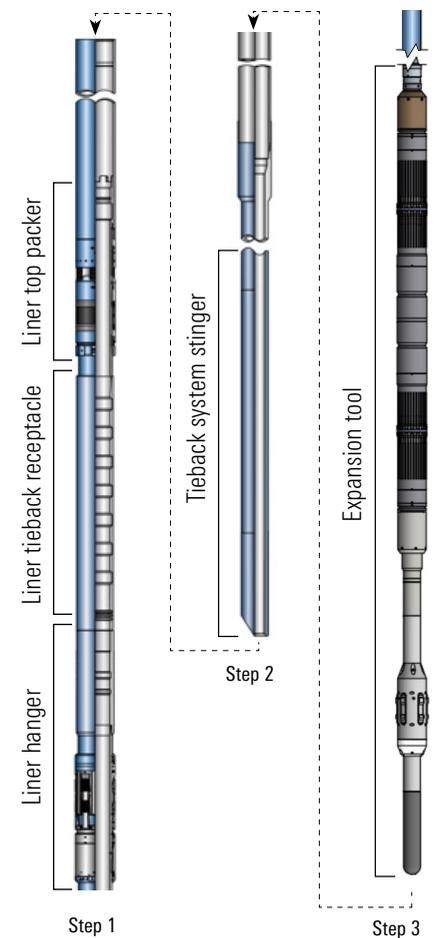
- elastomers, slips, packers, and hydraulic cylinders that introduce potential leak paths or axial loading issues
- a cement job that limits future sidetrack options.

Combine the advantages of a liner and full casing string

The fully integrated premium COLOSSUS CMT* cemented liner hanger system with metal-to-metal, gas-tight liner tieback eliminates these concerns while combining all the benefits of running a liner—ream-down capability, rotation during cementing, instant annular seal, and improved ECD—with the sealing integrity of a full casing string. The installation sequence is a simple three-step process.

- The liner is run in hole with the liner tieback system receptacle incorporating the metal-to-metal sealing elements and connected to the liner hanger. The liner is cemented in place.
- The tieback casing string is run in with the tieback system stinger on the bottom; the stinger is positioned within the receptacle.
- The stinger is expanded (morphed) into the receptacle with the expansion tool, simultaneously anchoring the tieback casing and providing a permanent metal-to-metal, gas-tight connection between the liner and the tieback string.

If the tieback string requires replacement at a later date (for example, because of casing damage or a workover), it can be cut above the permanently connected stinger. Subsequently, a new casing tieback string can be connected using the Casing Reconnect metal-to-metal, gas-tight casing repair system.



The system installation sequence is a simple three-step process.

Premium Liner Hanger with Metal-to-Metal Tieback System Specifications

Size, in [cm]	9 $\frac{5}{8}$ × 13 $\frac{3}{8}$ [24.44 × 33.97]
9 $\frac{5}{8}$ -in liner weight, lbm/ft [kg/m]	47–53.5 [70.08–79.78]
13 $\frac{3}{8}$ -in casing weight, lbm/ft [kg/m]	68–72 [101.04–107.37]
Max. system OD, in [cm]	12.100 [30.73]
Stinger OD, in [cm]	9 $\frac{5}{8}$ [24.44]
Max. internal and external pressure, psi [MPa]	8,000 [55.15]