



Introduction

TIW manufactures and sells a complete line of tools for setting and cementing liners over a wide range of depths, weights and sizes. Our equipment has been used around the world on some of the deepest and most difficult wells, on “state-of-the-art” horizontal completions, in deepwater applications, and on less challenging wells where the customer simply wanted the most reliable completion equipment available. We can recommend individual products or equipment combinations to meet the conditions of any well, anywhere in the world.

Liners are most frequently set in one of five ways:

- The liner is set on the bottom of the hole and extended up into the existing casing with a setting collar or packer positioned at the top of the liner.
- The liner is suspended from the lower end of the existing string of casing with a Hydro-Hanger or mechanical-set liner hanger.
- The liner is run to isolate a damaged section of casing and is commonly known as a “scab liner.”
- A tie-back string is used to case off an entire section of casing above the liner hanger by stabbing into a receptacle sleeve provided for on the liner hanger.
- A stub liner is used to extend an existing liner to some point up the hole for repairing damage to worn casing and/or for permitting the liner to be cemented in two stages.

Liner Hangers

Operators worldwide rely on TIW Liner Hangers for dependable performance in a number of applications: running long, heavy-wall casing strings in segments, particularly in deep wells; preventing circulation loss in upper zones when heavy drilling muds are needed; separating producing zones; injecting gas or water; sealing off casing leaks; secondary and tertiary recovery operations; and safely completing Arctic permafrost wells.

Superior Performance and Dependability

TIW Hangers are built to do the job right every time. Several important features set them apart from others:

Collapse resistance. An exclusive, full-circle slip cone adds strength to the hanger barrel at the point of maximum stress. This prevents distortion and damage to the hanger barrel.

Maximum fluid bypass area. Special channels in the slip cones allow maximum fluid bypass. This means faster running, free circulation and elimination of harmful pressure build-up.

Staggered slip alignment. Tandem-Cone Hangers deliver unmatched bypass and more slip area for additional hanging capacity.

Carburized serrated slip segments. Designed to lie snugly against the tool, slips are not damaged during run-in. When activated during setting, they move up and out to grip securely, even in the hardest casing.

Full-opening bore. For maximum production efficiency, TIW Hangers maintain the same bore as the liner.