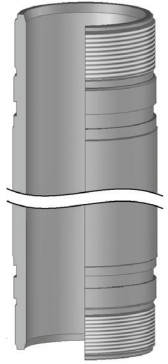
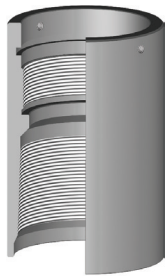


PERMAPAK ACCESSORIES



Seal Bore Extension

A **Seal Bore Extension** is used in installations where floating seals are required due to tubing contractions. This packer accessory allows for a continuous seal bore and is available in lengths up to twenty feet.



Seal Bore to Mill-Out Coupling

A **Seal Bore to Mill-Out Coupling** is used to connect mill-out extensions to seal bore extensions.



Concentric Bottom

A **Concentric Bottom** is used to connect a seal bore extension to a packer.



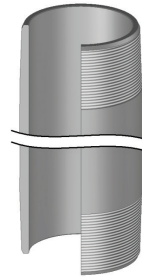
Knock-Out Plug Bottom

When a **Knock-Out Bottom** is run below the packer, the knock-out plug allows a packer to serve as a bridge plug holding pressure from above and below.



Knock-Out Plug

A **Knock-Out Plug** is knocked out when the production string is landed.



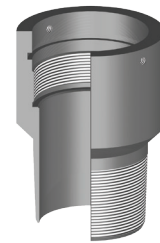
Mill-Out Extension

A **Mill-Out Extension** is used in installations where floating seals are required due to tubing contractions. In addition, this packer accessory provides a larger ID between a packer bore and a seal bore extension allowing a packer plucker when a packer is milled out.



Pump Out Plug

A **Pump-Out Plug** is available with a choice of threads allowing the pump-out plug to be attached to a packer, seal bore extension, mill-out extension or tailpipe and hold pressure from below after the packer is set. Once the production string is landed, pressure is applied to the tubing and the pump-out plug is removed to allow full opening.



Mill-Out Bottom

A **Mill-Out Bottom** is used to connect a mill-out extension to a packer.



Concentric Coupling

A **Concentric Coupling** is used to connect seal bore extensions to increase length.

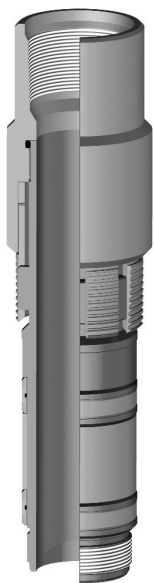


Wireline Re-Entry Bottom

A **Wireline Re-Entry Bottom** is used as the packer bottom when an extension below a packer is not required.

Permanent Packers

PERMAPAK ACCESSORIES



Anchor Latch Assembly

The **Anchor Latch Seal Assembly** is used when floating seals are not required. This assembly allows the tubing string to be in tension or compression. Upon set down the anchor latches into the packer and can be removed with eight to ten right-hand turns.



Snap Latch Assembly

The **Snap Latch Seal Assembly** latches into the packer upon set down (like our Anchor Latch Seal Assembly). It can be removed with straight pull of 10,000 to 12,000 lbs. above tubing weight. The Snap Latch Seal Assembly is used where a mechanical indication is required to verify the seal assembly is properly positioned in the packer bore.



Seal Unit

The standard **Seal Unit** is furnished with bonded nitrile rings and a 12-inch make-up length. These units may be ordered in various lengths and with severe service seal rings for high temperature and corrosive environmental conditions.



Locator Seal Assembly

The **Locator Seal Assembly** is used in installations which require floating seals. Once landed, the seal locator prevents downward movement of the tubing while allowing the seal to move with tubing contraction.



Half Mule Shoe Guide

The **Half Mule Shoe Guide** is standard with the Seal Assembly to allow for easy entry into the packer bore.

Permanent Packers