



WTSP4R3 Liner-Top Packer

Size 16- × 20-in.

Weatherford's WTSP4R3 liner-top packer is run as an integral part of the liner-hanger assembly to provide a reliable, high-integrity seal that isolates the gap between the liner outside diameter (OD) and the host-casing inside diameter (ID). This reliable liner-top packer isolates the cement, preventing gas migration or flow while the cement sets. The packer was specifically designed with a maximum 17.440-in. OD clearance to enable wellhead passthrough. The WTSP4R3 also incorporates profiles for Weatherford's retrievable seal mandrel (RSM) cementing packoff and the running tool that connects the RSM to the liner.

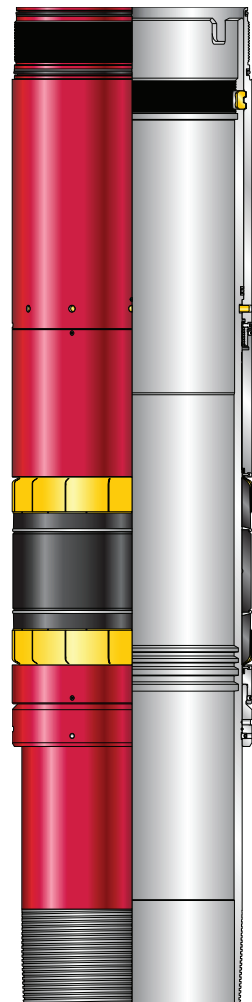
The packer is normally set by setting down weight on the WTSP4R3 tie-back polished-bore receptacle with the packer actuator after the running tool is released. The weight is transferred to the TSP4 liner-top packer, setting the element.

Applications

- Any cemented liners
- Uncemented liners for which a seal between the liner OD and the host casing ID is necessary or advantageous
- Tie-back packers

Features, Advantages and Benefits

- Maximum OD of 17.440 in. provides additional clearance, enabling the passage through standard 17.562-in. wellhead restrictions.
- A peroxide-cured highly saturated hydrogenated nitrile butadiene rubber (HNBR) packing element creates a reliable seal that prevents gas migration in the cement in most well conditions, saving the cost of a liner-top squeeze.
- The three-piece packing element resists swabbing to enable high circulation rates past the liner-top packer assembly, aiding removal of debris during well cleaning and improving the quality of cement displacement.
- The WTSP4R3 design is well below the drift ID of the parent casing, providing high-circulation capabilities for an enhanced cementing job.



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Features, Advantages and Benefits (continued)

- The high-torque, one-piece mandrel is equipped with premium connections that meet or exceed the torque of the liner connections, improving operational efficiency.
- A mechanical locking mechanism—available in most models—ensures that the liner-top packer cannot be set until the liner running tool has been released, dramatically reducing the potential for nonproductive time.
- An internal body lock-ring ratchet system positively locks in the applied setting forces, preventing the packer from unsetting.
- The WTSP4R3 liner-top packer incorporates the profile and sealbore for the RSM retrievable cement packoff, eliminating the need for—and cost of—a separate assembly while ensuring easy retrieval of the packoff because the packoff does not have to be retrieved through a premium connection.

Specifications

Contact an authorized Weatherford representative.

Options

- The WTSP4R3 liner-top packer is available with a running profile for the R running tool.
- P-110 (125 KSI) standard metallurgy is available. Other metallurgies are available on request.
- Standard connection is DINO VAM®; other connections are available on request.

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