



Weatherford's Premium Hydraulic-Set Static (WPHS) Liner Hanger

Weatherford's premium hydraulic-set static (WPHS) liner hanger is ideally suited for use in deep, highly deviated wells. The cone and slips section are designed to optimize bypass and, in addition to the protected slips, make the WPHS hanger an ideal choice for drill-down and reaming liner applications.

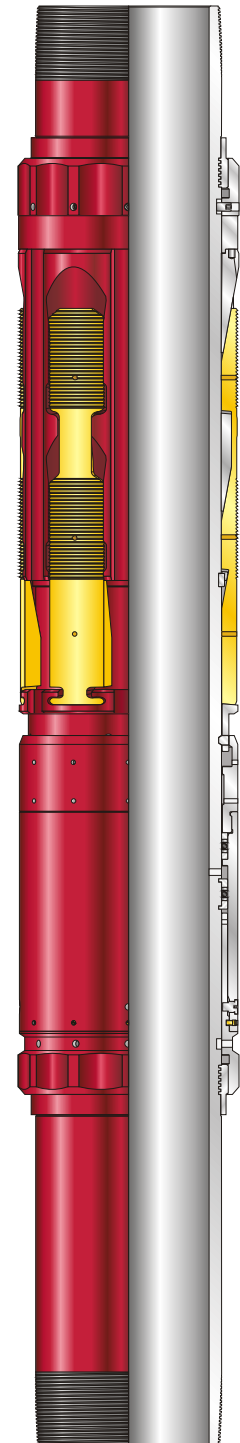
Differential pressure across the hydraulic cylinder activates the WPHS hanger. Setting down weight on the WPHS hanger then sets it, forcing the slips to bite into the host casing. The WPHS features a spacer ring and cannot be rotated after the hanger is set.

Applications

- Liners in deep and/or highly deviated wells
- Extended-reach liners
- Liners at any necessary depth
- Drill-down liners
- Liners that must be reamed down

Features, Advantages and Benefits

- Hydraulic activation removes the need for drillstring manipulation, making it possible to set the WPHS liner hanger in deep and/or highly deviated wells.
- Large slip contact area minimizes stress in the host casing, enabling the WPHS hanger to support extreme loads.
- One WPHS can be set inside host casings of the same size but varying weights. This design provides operational flexibility.





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Features, Advantages and Benefits (continued)

- High-torque, one-piece mandrel is equipped with premium connections that meet or exceed the torque of liner connections.
- Mechanical locking mechanism minimizes the risk of prematurely setting the hanger until it is hydraulically activated, reducing the potential for nonproductive time.
- Key screws rotationally lock the hydraulic cylinder to the mandrel. This feature prevents seal damage during rotation, ensuring that the hanger cylinder does not become a possible leak path in later well life.
- Nitrided slips ensure that the liner hanger can be set in the hardest grades of host casing.
- Non-tortuous bypass channels allow for high circulation rates past the hanger assembly to aid removal of debris during well cleaning and improve the quality of cement displacement.
- Premium designed aluminum shear screws ensure accurate predetermined setting pressures. With this advantage, hydraulic events can be planned accurately and with a high degree of safety.

Specifications

Contact an authorized Weatherford representative.

Options

- The standard WPHS liner hanger can be converted to a rotating model by replacing the spacer ring with a roller bearing.
- Standard metallurgies in most sizes are L-80 and P-110 (125 ksi). Other metallurgies are available on request.
- Standard connection is VAM® TOP® HT in most sizes. Other connections are available on request.

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