LINER SYSTEMS

XPRESS[™] LINER SYSTEM

Delivering top performance in a single unibody system

Weatherford*

The Xpress system leverages our experience with **30,000** liner runs globally

27 mm x 177.8 mm) 7 x 9 5/8-in 77.8 mm x 244.48 mm)

liner solution designed for commonly used sizes

THE LINER SOLUTION FOR CHALLENGING WELLS

The next-generation liner system for enhanced integrity, flexibility, and reliability

The Xpress[™] integrated liner-hanger and packer system provides a complete high-performance liner solution for most common well configurations. Its unibody construction consolidates liner hanger and packer technology on a single mandrel to enhance integrity and increase torque-handling capability through the liner system.

This accommodates common casing sizes to increase operational flexibility. It can be customized as a drilldown or rotating system, and can run field-proven mechanical- or hydraulic-release running tools. Our interchangeable packing elements can be adapted for each application. We also provide blanks to match threads to customer requirements. For enhanced reliability, our Xpress liner system meets or exceeds the new API 19LH standard to withstand the pressures of downhole applications. This robust system achieved the highest API qualification for liner hangers, earning a VS1 rating with absolutely no leakage during rigorous gas testing at temperatures up to 350°F (176°C) and pressures up to 10,000 psi (68.94 MPa).

API 19LH STANDARD VS1 RATING-NO GAS LEAKAGE at 350°F (176°C) and 10,000 psi (68.94 MPa)

Xpress System Technology Overview:

Weatherford liner experts designed reliability and performance into one easy-to-install system that can handle long liners in deep or high-angle wells. This integrated liner hanger and packer system can accommodate reaming to bottom as well as rotating during cementing for enhanced cement bonding.

- Three-piece packing elements create a reliable se that isolates gas migration in the cement below th packer from the annulus above, saving the cost of liner-top squeeze.
- One-piece mandrel design eliminates internal connections and removes the risk of associated leaking connections, to improve production performance.
- Its high-torque mandrel accommodates premium connections that meet or exceed the torque of the liner connections, to aid in getting the liner to tota depth (TD).
- Its large slip-contact area minimizes stress in the host casing, enabling the Xpress hanger to suppor extreme loads from long liners and hydraulic loads from fracking.
- Hold-down slips and an integral body lock-ring ratchet system positively lock in the applied settir forces, so that the packer remains set.
- An optional heavy-duty bearing enables rotation o the liner after the hanger has been set and during cementing operations, to enhance the quality of th cement bond.

SYSTEM SPECIFICATIONS

Liner Size*	Liner Weights	Parent Casing Size	Parent Casing Weight	Standard Metallurgy
5 in. (127 mm)	15 to 18 lb/ft	7 in. (177.8 mm)	26 to 32 lb/ft	L-80 and P110 (125 KSI)
7 in. (177.8 mm)	26 to 32 lb/ft	9-5/8 in. (244.48 mm)	47 to 53.50 lb/ft	

*Other sizes are currently under development

eal ne a	• Key screws rotationally lock the hydraulic cylinder to the mandrel to prevent seal damage during rotation.
	• A locking feature in the connector ring prevents liner hangers from setting while tripping in the wellbore, to get the liner to TD in harsh environments.
	 Nitrided slips ensure that the liner hanger can be set in the hardest grades of host casing, to boost reliability.
e al	 Non-tortuous bypass channels allow for high circulation rates past the hanger assembly, to aid in removing debris and improving cement displacement.
rt s	• Premium-designed aluminum shear screws ensure accurate, predetermined setting of pressures, enabling hydraulic events to be planned accurately and with a high degree of safety.
٦g	 System design and performance meet or exceed the new API 19LH standard.
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GET MORE OUT OF YOUR LINER SOLUTION

We combined multi-tool functionality into one system so that you can do more with less. Our Xpress liner system components stand up to your toughest wells. The polished bore receptacle (PBR) optimizes burst, collapse, and sealing integrity without sacrificing flow-by area. A cementing packoff in the hangerpacker body delivers a positive seal during cementing operations. The result is more reliability when running in the hole, reaming, or circulating at high flow rates during well cleanup or cementing.

LARGE, MULTISLIP FOOTPRINT

minimizes stress and helps to support extreme loads.

XPRESS PACKER ELEMENT

resists swabbing and enables high circulation rates.

CONE-AND-SLIPS SECTION

optimizes circulation rates and protects slips when running in the hole.

RUNNING TOOLS

release after the hanger is set, prior to cementing, which ensures tool retrieval.

HIGH PERFORMANCE HIGH DESIGN

Building on the success of premium hydraulic-set rotating liner-hangers, Weatherford developed the Xpress liner-hanger system by combining a highperformance packer and a hydraulic-set hanger in a common body. The major liner-system componentsincluding the unibody packer and hanger, PBR, and running tools—all run together as a single integrated package.

Our streamlined design eliminates variables that lead to time-wasting errors. A single hookup procedure and a single stabbing and testing process expedite installation while reducing nonproductive time and associated costs.

PERFORMANCE UNDER PRESSURE

The Xpress liner system provides a durable gasand fluid-tight seal that exceeds the latest industry standards. The enhanced capabilities and simplicity of this system deliver reliable sealing technology for high-pressure and high-temperature wells. You can count on the solid performance of our liner system to increase efficiency, enhance safety, and reduce costs.



Cement forms a protective barrier between the formation and wellbore. Your liner provides an additional barrier to protect the wellbore. By selecting the optimal liner system for downhole conditions, you can significantly enhance well integrity.

Identify drilling challenges and objectives in conventional, deepwater, shale, and HPHT applications

Design out risk; design in lower well-construction costs and longer productive life



Casing centralization

• Casing accesories

Centralizers

• Placement software services

Casing installation

Reach total depth safely and efficiently

• Float equipment

- Surge reduction systems
- Torque-and-drag reduction
- Liner systems



Integrity confirmation Measure cement bond quality • Cement-bond-logging tools • Liner-top packers

Select reliable Weatherford technology to meet product design requirements

Increase stand-off, prevent differential sticking, and eliminate channeling





Wellbore isolation

Prevent fluid migration and reduce well construction costs

- Inflatable packers
- Isolation systems
- Swellable packers



Cement placement

Ensure effective cement slurry displacement

- Stage cementing tools
- Wiper plugs and darts
- Plug locator system
- Cement heads



The Weatherford Xpress[™] liner system is designed for efficiency and reliability. To learn how our liner technology can work for you, connect with us at Weatherford.com.

WEATHERFORD.COM

CONNECT WITH WEATHERFORD



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