Liner Systems



AXIOM[™] Series Liner-Hanger System

Weatherford's *AXIOM* series liner-hanger system is a reliable solution for mature-field developments with basic well geometries and moderate temperature/pressure profiles, requiring short- to medium-length liners. Streamlined to optimize performance, the *AXIOM* hanger is a nonwelded design that includes a unique hydraulic-set liner hanger, mechanical-set liner-top packer, and polished bore receptacle (PBR), adding reliability and versatility.

The *AXIOM* series is certified under International Organization for Standardization (ISO) 14310 V3 and features a one-piece body that is integral to both the hanger and the packer, eliminating potential leak paths. The unique body design makes the *AXIOM* hanger shorter and more compact than its conventional counterparts, reducing cost and maximizing performance. To support liner loads, the hanger incorporates a single-cone design with six slips—the same number found on typical tandem-cone hangers.

Applying differential pressure to the hydraulic cylinder activates the *AXIOM* hanger, enabling the liner weight to be suspended in the host casing. The running tools are then released and the packer is mechanically set with the packer actuator. Weight is transferred through the actuator down the PBR to the liner-top packer, setting the element.

Applications

- · Oil and gas wells requiring short- to medium-length liners
- Basic well geometries with moderate temperatures and pressures
- · Cemented liners that do not require rotation during cementing
- Uncemented liners requiring a seal between the liner outside diameter (OD) and the host-casing inside diameter (ID)
- · Wells that require isolation above screens or slotted liners

Features, Advantages and Benefits

 The AXIOM packer was designed and tested to ISO 14310 standards and V3 qualified at 5,000 psi (34.4 MPa) and a temperature range from 100 to 250°F (37.7 to 121°C), providing performance reliability in these downhole conditions.



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Features, Advantages and Benefits

- The one-piece body design integrates a hydraulic-set hanger and liner-top packer, eliminating a potential leak path.
- The single-cone design has six slips—the same number found on tandem-cone hangers, enabling the *AXIOM* hanger to support exceptional loads.
- The nonwelded, NACE-compliant construction can endure a variety of well conditions, providing application flexibility.
- The hydraulic cylinder activates the slips with differential pressure, setting the hanger.
- The nitrile packing element, equipped with a metal backup system, creates a reliable seal that prevents gas migration in most well conditions, saving the cost of a liner-top squeeze.
- The AXIOM hanger is compatible with Model S and Model R* running tools, providing operational flexibility.

*Depending on the application, a 10-foot PBR may be required.

Size (in./ <i>mm</i>)	Liner	7.000 178
	Casing	9.625 244
Weight range (lb/ft, <i>kg/m</i>)	Liner	23.0 38.7 (and heavier)
	Casing	36.0 to 53.5 48.0 to 79.6
Tie-back extension (ft/m)	6 2	
Maximum hanging capacity (lb/mt)	200,000 <i>90.</i> 7	
Element pressure rating (psi/MPa)	5,000 34.47	
Temperature rating (°F/°C)	250 121	
Materials	L-80	
Threads	LTC, Blank	

Specifications

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