Hydraulic Reaming Shoe

Reams at high speeds to land completion liners at the target depth

Applications

- Reaming while running completion liners

Features and Benefits

- Provides turbine-powered reaming
- Reduces or eliminates wiper trips
- Lowers circulation pressures while reaming
- Enables stress-free casing connections
- Enhances faster casing of troubled zones
- Reduces well construction risks
- Eliminates the need for string rotation
- Provides a low flowrate on startup

Tool Description

The hydraulic reaming shoe provides high-speed reaming to land completion liners at target depth. The rugged, reliable system provides reaming while running in the hole without the need to rotate the liner or completion. The reaming shoe helps to eliminate wiper trips and, as a result, run the completion sooner.

The unique design combines turbine-powered reaming with lower circulation pressures. This combination protects the completion from vibrations, reactive torque, and pressure spikes that could prematurely set the liner hanger or packers.

The hydraulic reaming shoe provides high-speed reaming to land completions at target depth.

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Hydraulic Reaming Shoe

Specifications

	Tool Size	
Tool specifications	**TRS500**	**TRS700**
Stabilizer	6.5, 6.25, 6, 5.875, or 5.75 in. (164.30, 158, 152.4, 149.23, or 146.05 mm)	8.25 in., up to 10.5 in. on request (209.55 mm, up to 266.7 mm on request)
Body size outside diameter (OD)	6.469, 5.844, 5.969, 5.719, or 5.969 in. (148.4 mm or as specified with reamer)	8.219 in. (208.7 mm) or as specified with reamer
Drill-thru diameter	—	
Length	9.410 ft (2.87 m)	9.030 ft (2.75 m)
Weight	344 lb (156 kg)	712 lb (323 kg)
Burst disc options	1,200 or 1,800 psi (83 or 125 MPa)	
Max. dogleg severity	32 to 100°/ft (32°/30m)	39 to 100° /ft (30°/30m)
Turbine stages	50	40
Top sub strainer total flow area	27.29 $in.^2$ (17,067 mm^2)	31.67 $in.^2$ (20,435 mm^2)
Reamer ports total flow area	2.15 $in.^2$ (1,385 mm^2)	3.80 $in.^2$ (2,454 mm^2)
Burst disc total flow area	1.49 $in.^2$ (962 mm^2)	
Max-operating setdown weight	62,000 lb (28 metric ton)	150,000 lb (68 metric ton)
Material grade (body)	L80 or equivalent	

Notes:

- The material grade of the body can be changed on request. Lead times vary.
- Performance charts are given out separately because they are dependent on the fluid weight being used on a casing/completion run.
- Patent Number: GB 2520187