

PrecisionHydraulic Shifting tool

Precision Mechanical Applications

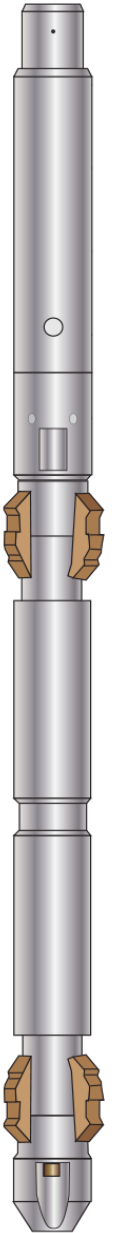
Applications

- Shifting of sliding sleeves and completion valves

Features and Benefits

- Two sets of shifting dogs per tool
- Deployed slick, and shifting dogs extended at required depth
- Multiple, fast response activation and deactivation functionality
- Improved profile engagement through spring-loaded dogs (in search mode)
- Run in conjunction with PrecisionStroker, offering downhole stroke force and position control (± 1 mm)
- Optional back up mechanical system to limit applied force
- Interchangeable shifting dog sets available for most common sleeves/valves
- High operational efficiency; unlimited number of shifting sequences
- Real-time confirmation of the sleeve/valve movement
- Electrical feed-through allowing E-Line tools to confirm real-time impact of component maneuverer

The PrecisionHydraulic Shifting Tool (HST) is a bi-directional shifting tool used in combination with the PrecisionStroker for selective opening or closing of sliding sleeves and completion valves.



Service Name	HST 250	HST 338	HST 354	Hst 441
Tool body outer diameter	2.500 in. (63.5 mm)	3.382 in. (85.9 mm)	3.543 in. (90.0 mm)	4.409 in. (112.0 mm)
Shifting profile ID	2.81 in. (71.4 mm)	3.50 in. (88.9 mm)	3.69 in. (93.7 mm)	4.56 in. (115.8 mm)
Length	5.71 ft. (1.74 m)	4.92 ft. (1.5 m)	6.16 ft. (1.88 m)	4.92 ft. (1.5 m)
Number of shifting dogs up/ down	3/3	3/3	5/5	3/3
Pressure rating	15,000 psi (1,034 bar)	15,000 psi (1,034 bar)	15,000 psi (1,034 bar)	15,000 psi (1,034 bar)
Temperature rating	177°C (350°F)	177°C (350°F)	177°C (350°F)	177°C (350°F)
Bi-directional	Yes	Yes	Yes	Yes
Electrical feed through ¹	No	No	No	No