

D-Set

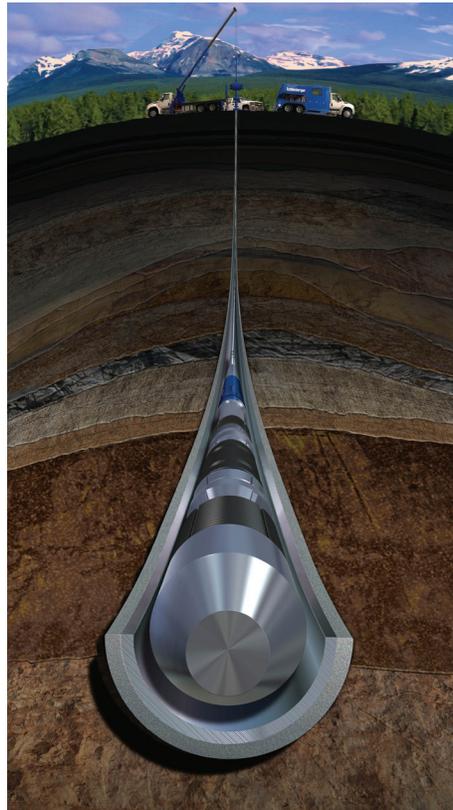
Digital electrohydraulic setting tool

APPLICATIONS

- Nonexplosive setting of plugs, packers, or cement retainers in tubing or casing
- Plug or packer setting with accurate depth control
- Single-run isolation and test with combined DSL* digital slickline pressure gauge

ADVANTAGES

- Electrohydraulic, nonexplosive device. No licensing requirements for storage, transport, or usage of explosives
- Accurate depth control with associated digital correlation cartridge (gamma ray and casing collar locator), for correlation to reference log or completion tally
- Available in three sizes as needed for application in tubing or casing
- Configured for all industry standard adapter kits
- Applied force measured in real time providing a setting sequence “fingerprint” for each plug
- Combinable with other digital slickline sensors such as digital pressure gauge (DPG) for real-time, in-situ testing of plug after set
- Incorporates an emergency mechanical release mechanism to release the setting sequence controlled and monitored from surface



D-Set.

The D-Set* digital electrohydraulic setting tool provides a nonexplosive solution to setting plugs, packers, or cement retainers with accurate depth control in downhole tubulars. Available in three different sizes as required for tubing or casing application, the D-Set tool is battery-powered and compatible with industry standard devices.

Run on digital slickline in combination with a digital correlation tool (DCC), wireline equivalent depth accuracy is achieved with correlation to a reference log or well completion tally. Tool setting is initiated by the operator command from surface.

A battery-powered hydraulic power unit delivers pressure to the setting cylinders to create tool stroke. Delivered force and tool head tension are recorded during the setting operation to provide a real-time fingerprint of the setting sequence.

Combinable digital slickline sensors such as the DPG, can provide in-situ testing of the plug following the set. An emergency release mechanism is incorporated in the device to allow retrieval of the tool in the event of a setting problem.

Technical Specification

Temperature rating, degF [degC]	302 [150]
Pressure rating, kpsi [MPa]	15 [103.4 MPa]
Service	H ₂ S service

Parameter	D-Set1	D-Set2	D-Set3
Max body OD, in [mm]	1 ¹ / ₁₆ [43]	2 ¹ / ₁₆ [69]	3 ¹ / ₈ [98]
Pull, lb [kg]	13,000 [5,900]	33,000 [15,000]	55,000 [25,000]
Stroke, in [mm]	6.38 [162]	10.24 [260]	10.43 [265]
Length, ft [m]	12.84 [3.915]	11.20 [3.415]	11.77 [3.589]
Weight, lb [kg]	52.9 [24.0]	99.2 [45.0]	154.3 [70.0]
Setting time (approximate), min	10	25	45