

Downhole Power Unit (DPU®) – Intelligent Series Tool

Real-time feedback, so you know without any doubt, the quality of the set

Halliburton's Downhole Power Unit (DPU®) Intelligent series tool provides unsurpassed reliability and quality assurance in setting wellbore devices such as plugs and packers. The DPU-I tool is a rig-safe, non-explosive electro-mechanical tool that is expanding well intervention capabilities beyond the conventional tools. By generating a slow, precisely controlled linear force with real-time feedback, the DPU-I tool optimizes setting and ensures maximum performance of a well completion even in the most hostile well environments.

The subsurface device (plug, packer, etc.) is attached to the DPU-I tool, which can be deployed on e-line, slickline*, or coiled tubing*. The stroke length, setting force, and the rate at which the force is applied during the setting operation, are displayed in real-time for quality assurance purposes. The slow, controlled setting motion maximizes sealing and anchoring of the wellbore device especially in hostile and high-angle wells. When the designated setting force is achieved, the DPU-I tool separates from the subsurface device and can be retrieved from the well.

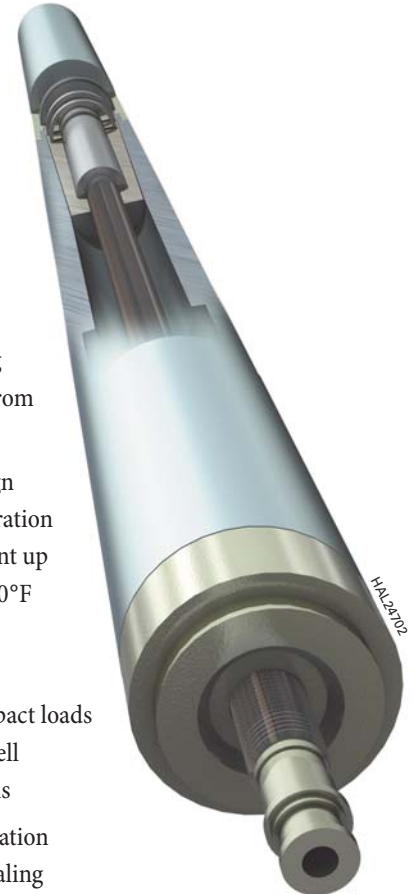
The DPU-I tool's motion control and high linear force provides an alternative to jointed pipe or coiled tubing well interventions. At the well site, the tool can be easily adapted to set or retrieve devices based on intervention requirements.

Benefits

- Improves safety and reliability through non-explosive operation
- Helps reduce completion costs by saving time:
 - single flight heli-lift compliant for rapid deployment
 - radio silence operations not required
 - disruption of the Cathodic protection system during operations is not required
 - military, or governmental escort not required
 - offshore explosive storage magazine not required
 - redressing between operations is not required
- Assurance on quality of setting wellbore devices provided by real-time feedback of setting force, stroke length, and displacement rate
- Intervention versatility enabled by dual setting and retrieving capability
- Conveyance flexibility with solutions on e-line, slickline, and coiled tubing
- Setting force and hydrostatic pressure rating meet ultra deepwater well completion requirements

Features

- Offers more setting force (up to 100,000 lbf) over conventional explosive setting tools without the added danger of using explosives
- Multiple tubing/casing intervention options from 2-3/8 in. to 13-3/8 in.
- Industry-leading design offers dependable operation in any well environment up to 30,000 psi and 400°F
- Robust hardware and electronics capable of withstanding high-impact loads encountered during well intervention operations
- Slow, controlled application of force enables the sealing elements and anchoring devices to conform to the wellbore

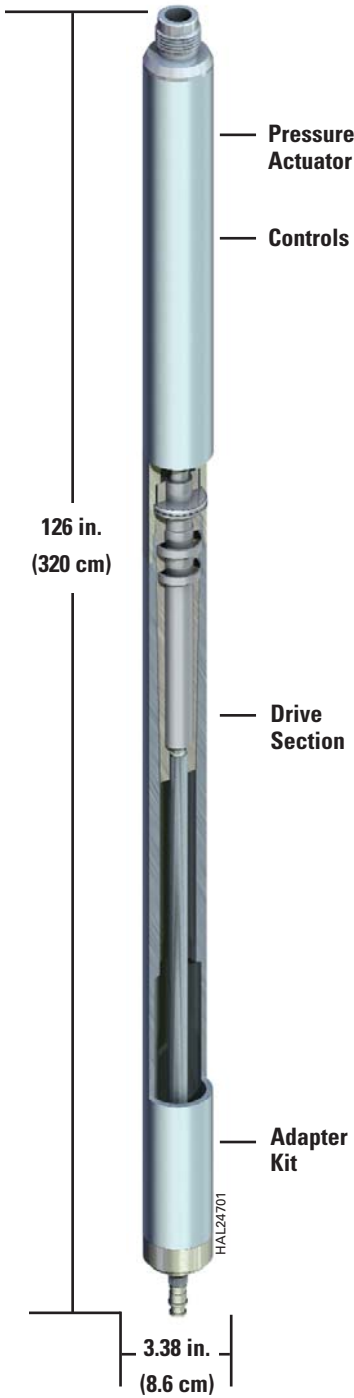


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Applications

- New completions, or workover operations requiring setting or retrieval of wellbore devices such as packers, sand control sump packers, bridge plugs, whipstocks, retrievable bridge plugs, subsea tree plugs, straddles, patches, and cement retainers
- Plug and abandonment or pipe recovery operations on e-line or slickline
- Mechanically punching holes in tubing for circulating kill fluid or installing remedial through-tubing gas lift capabilities
- Mechanical intervention with sub-surface flow control or completion devices such as circulating sleeve or internal control valves
- Adaptable to wireline tractor conveyance for deepwater and/or high-angle well interventions

* Memory version in development



DPU- I Specifications				
Tool	DPU-I 4.5	DPU-I 3.38	DPU-I 2.5	DPU-I 1.75
OD	4-1/2 in. (114.3 mm)	3-3/8 in. (85.7 mm)	2-1/2 in. (63.5 mm)	1-3/4 in. (44.5 mm)
Pressure Rating	30,000 psi (2,068 bar)	30,000 psi (2,068 bar)	30,000 psi (2,068 bar)	20,000 psi (1,379 bar)
Temperature Rating*	350°F/400°F (177°C/204°C)	350°F/400°F (177°C/204°C)	350°F/400°F (177°C/204°C)	350°F (177°C)
Set/Retrieve Force	100,000 lbf (445 kN)	70,000 lbf (311 kN)	40,000 lbf (178 kN)	15,000 lbf (66.7 kN)
Stroke Length	13 in. (33 cm)	13 in. (33 cm)	13 in. (33 cm)	13 in. (33 cm)
Internal GR/CCL	yes	yes	yes	yes
Length	16.4 ft (5 m)	14.36 ft (4.38 m)	18.98 ft (5.79 m)	16.83 ft (5.13 m)
Weight	490 lb (222 kg)	300 lb (126 kg)	202 lb (92 kg)	92.5 lb (42 kg)

* 400°F/200°C available with flask

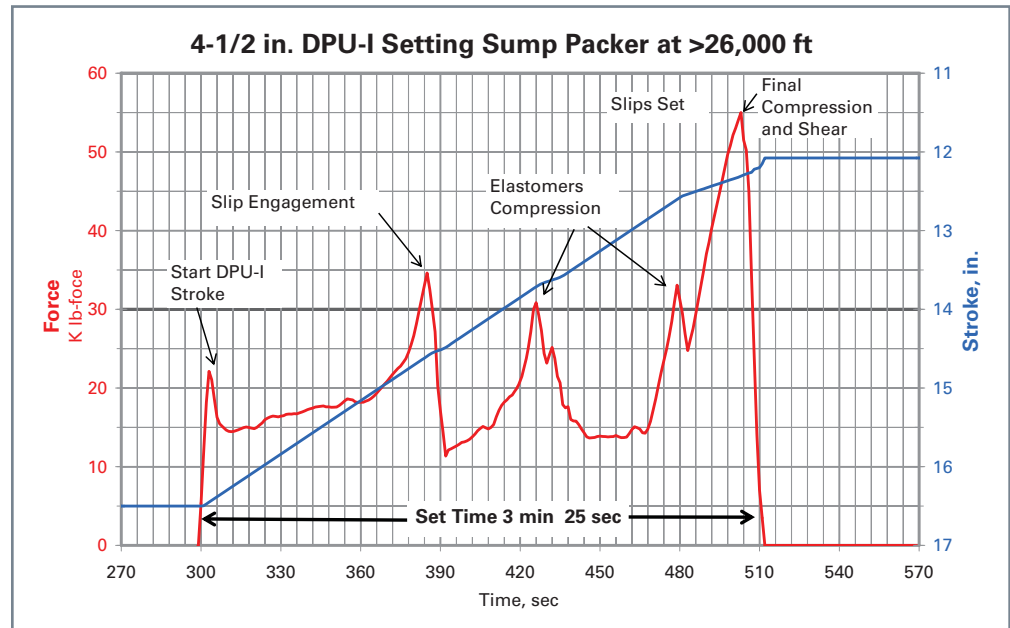


Chart of setting an EZSV with the 4 1/2-in. DPU-I Tool. Time is displayed on the X-axis, Stroke and Force are displayed on the Y-axis

For more information, contact your Halliburton representative.