



Surge Frac System

Weatherford's Surge Frac coiled-tubing system is a multi-set, monobore, selective isolation and stimulation tool. Actuated by hydraulic pressure via a surface pump flow rate to pack off and straddle wellbore perforations, this system stimulates a formation and is especially effective for deviated and horizontal wells.

Applications

- Selective fracturing
- Selective acidizing
- Selective polymer and nitrogen treatments

Features, Advantages and Benefits

- With this system, packers can be set multiple times, moved to different locations between each setting cycle, and then returned to the surface, resulting in cost savings by eliminating the need for multiple trips with packer and plug.
- Since packers are set at low differential pressure created by fluid velocity moving through the Surge Frac valve, the need for pipe movement to set the packers is eliminated.
- The system's patent-pending internal pressure-limiting valve (PLV) controls overpressure of the packing elements, resulting in increased element performance through multiple sets.
- The Surge Frac valve directs treatment fluids to the target zone between packers, providing an adjustable injection rate that can be tailored to the well's requirements.
- Packers are released by stopping pumps or by activating the set-down unloader at the top of the system, eliminating the need for pipe movement to release the packers, making the Surge Frac approach the system of choice for deviated and horizontal wells.





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Specifications

Tubing Size (in./mm)	Weight Range (lb/ft, kg/m)	Setting ID (in./mm)	Tool OD (in./mm)	Standard Gauge Ring Sizes (in./mm)	Standard Connection	Temperature and Pressure Rating
4-1/2 114.30	9.5 to 18.9 14.1 to 28.1	3.826 to 4.090 97.181 to 103.886	3.50 88.90	3.500 88.900	2.375 in. WTS-8	5,000 psi at 275°F 34.474 MPa at 135°C
				3.630 92.202		
				3.750 95.250		
5 127.00	15.0 to 24.1 22.3 to 35.9	4.000 to 4.408 101.600 to 111.963		3.875 98.425		
				4.000 101.600		
				4.125 104.775		
5-1/2 139.70	17.0 to 23.0 431.8 to 584.2	4.670 to 4.802 118.6 to 122.0		4.500 144.300		
				4.630 117.602		
				4.750 120.650		