

Ratek Frac Sleeve System

Enables unlimited multistage stimulation and maintains stage-by-stage control throughout the well lifecycle

Applications

- Deepwater and offshore multistage stimulation wells requiring cemented fracturing systems with unlimited stage access
- High-angle and extended-reach offshore wells requiring mechanical sleeve shifting and repeatable stage re-entry
- Production wells requiring stage-by-stage stimulation and long-term reservoir management capability
- Compaction- and subsidence-prone reservoirs requiring cementable stimulation sleeves with compaction resistance

Features and Benefits

- Multicycle sleeve operation to support repeatable stage access and dependable life-of-well operation
- Unlimited-stage capability to accommodate evolving stimulation strategies and future well management requirements
- Mechanical opening and closing through the frac isolation assembly to enable precise stage-by-stage stimulation management
- Integrated mechanical sand control to help prevent proppant inflow after stimulation
- High-pressure, high-temperature construction to support dependable operation in demanding offshore environments
- Debris-tolerant mechanical location and shift-frac-close operation to reduce intervention steps during sleeve activation and closure

Tool Description

The Ratek™ frac sleeve system is a cementable multicycle sleeve that brings onshore multistage efficiency to high-angle offshore wells. It supports an unlimited number of fracturing stages and is mechanically located, opened and closed with the Ratek frac isolation assembly (FIA), deployed on coiled or jointed tubing. Built for long-term, stage-by-stage wellbore production management, Ratek sleeves let operators return to any mode at any stage throughout the life of the well.



Ratek Frac Sleeve System

Specifications

Mechanical

	Ratek sleeve		Ratek CSR sleeve	
Casing size	4.5 in [114.3 mm]	5.5 in [139.7 mm]	4.5 in [114.3 mm]	5.5 in [139.7 mm]
Casing weight	12.6–15.1 lbm/ft	20.0–23.0 lbm/ft	21.5 lbm/ft	32.6 lbm/ft
Casing grade	Any	Any	Q125	Q125
OD	5.76 to 5.83 in [146.3 to 148.1 mm]	7.25 in [184.2 mm]	5.80 in [147.3 mm]	7.250 in [184.1 mm]
ID	Varies by weight	Varies by weight	3.410 in [86.6 mm]	4.165 in [105.8 mm]
Length	7.27 ft [2.216 m]	7.27 ft [2.22 m]	7.26 ft [2.214 m]	7.27 ft [2.216 m]
Flow port area	16.6 in ² [107.3 cm ²]	17.9 in ² [115.5 cm ²]	12.33 in ² [79.5 cm ²]	14.5 in ² [93.5 cm ²]
Tensile rating	607,000 lbf [270,000 daN]	1,017,000 lbf [452,384 daN]	785,000 lbf [349,185 daN]	1,017,000 lbf [452,384 daN]
Torque rating	33,000 ft-lbf [44,742 N·m]	56,000 ft-lbf [75,925 N·m]	31,000 ft-lbf [42,030 N·m]	54,000 ft-lbf [73,214 N·m]
Burst strength	16,380 psi [112.9 MPa]	16,510 psi [113.8 MPa]	15,000 psi [103.4 MPa]	15,000 psi [103.4 MPa]
Collapse strength	15,830 psi [109.1 MPa]	16,060 psi [110.7 MPa]	15,000 psi [103.4 MPa]	15,000 psi [103.4 MPa]
Max temperature	365 degF [185 degC]	365 degF [185 degC]	302 degF [150 degC]	257 degF [125 degC]

