

i-Frac CEM

The i-Frac CEM is a ball-drop-activated multistage fracturing sleeve designed for cemented horizontal completions. The system is installed as an integrated part of the lower completion string. Multiple stages can be installed in a wellbore, with each stage containing 1 to 20 sliding sleeves. Once installed, the system is cemented in place as a normal casing string, and a specially designed wiper dart is pumped from surface to ensure that the pipe inside diameter (ID) and ball seats are wiped free of cement. For each stage, one ball is pumped from surface to open all sleeves in the given stage. The fracturing job can be carried out in a continuous pumping operation with no preparation time between stages.



Features

- Ball-drop operated
- Designed for cemented applications
- Configurable nozzles and shear pressures
- Optimized seat increments
- Multiple sleeves per stage
- No explosives required on location
- Drillable cast iron ball seats for easy millout
- Proven field success globally
- Compatible with dissolvable frac ball technology
- Maximum number of stages:
 - 45 stages for 4.5 in.
 - 53 stages for 5.5 in.

Benefits

- Increased time and cost efficiency compared with traditional plug-and-perf methods
- Ability to employ continuous pumping operations
- Excellent zonal isolation
- Optimized fracture initiation
- Able to stimulate in clusters
- Maximizes reservoir contact
- Reduced HSE risk by eliminating need for dedicated wireline operations
- Decreases amount of water used compared to traditional plug-and-perf methods
- Features millable seats for future full-bore applications

Applications

- Fracturing/stimulation
- Production
- Injection
- Acidizing

Specifications

i-Frac CEM	Seat	OD mm (in.)	ID ¹ mm (in.)	Length ² mm (in.)	Working pressure kPa (psi)	Material	Temperature °C (°F)	Threads
450	Flex	142.2 (5.600)	99.1 (3.900)	1,102.11 (43.390)	69,000 (10,000)	P110	177 (350)	API and premium available
450	Flex	149.9 (5.900)	99.1 (3.900)	1,102.11 (43.390)	103,400 (15,000)	Q125	177 (350)	API and premium available
450	Flex	142.2 (5.600)	99.1 (3.900)	1,102.11 (43.390)	50,350 (7,300)	L80	177 (350)	API and premium available
S450	Fixed	142.2 (5.600)	99.1 (3.900)	909.07 (35.790)	69,000 (10,000)	P110	177 (350)	API and premium available
S450	Fixed	149.9 (5.900)	99.1 (3.900)	909.07 (35.790)	103,400 (15,000)	Q125	177 (350)	API and premium available
S450	Fixed	142.2 (5.600)	99.1 (3.900)	909.07 (35.790)	50,350 (7,300)	L80	177 (350)	API and premium available
550	Flex	171.0 (6.732)	118.1 (4.650)	1,055.12 (41.540)	69,000 (10,000)	P110	177 (350)	API and premium available
550	Flex	175.3 (6.900)	118.1 (4.650)	1,220.72 (48.060)	103,400 (15,000)	Q125	177 (350)	API and premium available
S550	Fixed	171.0 (6.732)	115.6 (4.550)	938.02 (36.930)	69,000 (10,000)	P110	177 (350)	API and premium available
S550	Fixed	175.3 (6.900)	115.6 (4.550)	1,103.63 (43.450)	103,400 (15,000)	Q125	177 (350)	API and premium available
550 FB	Flex	177.8 (7.000)	123.6 (4.867)	1,118.4 (44.03)	80,000 (11,600)	P110	177 (350)	API and premium available
550 FB	Flex	177.8 (7.000)	123.6 (4.867)	1,118.4 (44.03)	58,000 (8,400)	L80	177 (350)	API and premium available
S550 FB	Fixed	177.8 (7.000)	122.7 (4.830)	1,001.27 (39.420)	58,000 (8,400)	L80	177 (350)	API and premium available

¹Milled out diameter

²Lengths may vary depending on end sub threading

Note: Premium connections available upon request.