

# OptiStriker straddle packer system

Hit every target—every time

The **OptiStriker™ straddle packer system** enables aggressive, targeted restimulation of individual perforation clusters in existing wells to boost production—efficiently and effectively. Unlike other re-stimulation techniques, the OptiStriker system's targeted stimulation technique uses only the amount of fluid and horsepower needed to treat each cluster, minimizing operational requirements and costs by more than 30% compared to other restimulation techniques, such as diverters, expandable liners, plug-and-perf methods, and more traditional coiled tubing (CT) systems.

## Reduce waste and eliminate treatment uncertainty

During well re-stimulations, you can waste a lot of time and money if you don't know where your treatments are going. The OptiStriker system offers a reliable CT straddle packer system to deliver precise treatment volumes—exactly where you want them to go—reducing waste and increasing the effectiveness of your restimulations for maximum return-on-investment (ROI). The OptiStriker system is also commonly run on 2 $\frac{3}{8}$  in. or 2 $\frac{7}{8}$  in. tubing strings.

## Increase treatment effectiveness

The OptiStriker system features a large inside diameter (ID) and two rugged and resettable coiled tubing (CT) packers, offering an industry-leading pump rate of 20 barrels per minute (bbl/min) and a differential pressure rating of 10,000 psi (689 bar) to enable high-rate, high-volume treatments that optimize well restimulations and maximize production.

During cased hole operations, the two packers work in unison to straddle and isolate individual clusters within the wellbore, ensuring that fluids are directed to areas that may have been untreated or undertreated during the initial stimulation.

After the packers are set in the wellbore, a controlled volume of fluid and proppant can be pumped through the CT or workover tubulars and delivered to specific areas, precisely delivering only the prescribed amount of fluid and proppant directly into the intended area.

Fluids may enter the formation through the original perforations, or additional perforations can be created using the system's sand-jet perforator, eliminating the need for a dedicated

## Applications

- Formation diagnostics and mini-fracs
- Fluid and gel injection
- Unconventional oil and gas wells
- Cased hole wellbores
- Underperforming frac zones in existing vertical wells

## Benefits

- Delivers fluid and proppant volumes precisely into targeted clusters
- Reduces screenout NPT through on-demand coiled tubing cleanouts
- Permits on-the-fly treatment adjustments
- Improves production and recovery and maximizes restimulation ROI
- Eliminates the need for dedicated tubing-conveyed perforating runs

tubing-conveyed-perforating run. This allows the target and delivery of efficient and effective restimulation treatments reliably for maximum ROI without altering your existing completion design.

### Ensure reliable operations

Unlike other targeted stimulation systems that use swab cups to isolate zones, the OptiStriker system is the industry's first fully mechanical straddle system enabling operations in virtually all well conditions. The mechanical packers do not rely on applied pressure for activation—they only contact the casing wall when they are set. This prolongs system life by eliminating damage and wear caused by rubbing against the casing wall as the assembly is moved in the well.

High-expansion capabilities ensure the packers establish a complete seal—regardless of erosion damage from previous operations or casing

irregularities, enabling higher treatment pressures and eliminating fluid leak-off. Risks associated with plugged hydraulic conduits are eliminated because the packers are actuated and released using only linear movement. Circulation ports above the bottom packer enable quick and easy cleanouts and prevent the system from becoming stuck in the hole.

In cases where damage to the casing or OptiStriker system occur, the BHA incorporates a shear-out contingency release system to remove the top packer slips enabling easy retrieval with standard fishing tools. Since the mechanical packers were designed to reliably set and unset numerous times, elastometer wear that is seen with cup style packers is eliminated, increasing system reliability and the number of sets that can be achieved in one run. This process allows the system to be operated safely even at low bottomhole pressures.

CT packers also offer easy circulation and wellbore cleanouts, enabling quick recoveries from screenouts. When the near wellbore requires cleaning to enhance conductivity, acid can be spotted via the CT and treatments can be pumped through it, enabling wellbore treatment—even when—casing integrity is a challenge.

Because the entire OptiStriker system is removed after operations are complete, original production ID is maintained, simplifying future access. When combined with Baker Hughes **EasyReach™ lubricant**, which reduces the coefficient of friction in cased hole wells, horizontal reach capabilities almost double—making successful CT applications in lateral lengths greater than 10,000 ft (3,048 m) routine.

Contact a Baker Hughes representative, to learn how the OptiStriker straddle packer system can maximize restimulation efficiency and boost production in your existing shale wells.

### Available sizes and specifications

| Casing  | Casing weight      | Differential pressure rating                  | Maximum outside diameter   | Temperature rating | Minimum inside diameter | Maximum pump-through rate |
|---------|--------------------|---|--|--------------------|-------------------------|---------------------------|
| 4 ½ in. | 13.5 to 15.1 lb/ft | 8,000 psi<br>(552 bar positive and negative)  | 3.66 in.   | 200°F (93°C)       | 1.70 in.                | 20 bpm                    |
| 5 ½ in. | 15.5 to 23 lb/ft   | 10,000 psi<br>(689 bar) positive and negative | 4.53 in.<br>(20.0 to 23.0 lb/ft casing)<br>4.72 in.<br>(15.5 to 17.0 lb/ft casing) | 200°F (93°C)       | 2.41 in.                | 35 bpm                    |

