The Baker Hughes OptiStriker™ straddle packer system enables aggressive, targeted restimulation of individual perforation clusters in existing wells to boost production—efficiently and effectively. The system features a large ID and two rugged and resettable coiled tubing (CT) packers, offering an industry-leading pump rate of 20 barrels per minute (bpm) 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. This ensures 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 the desired areas. This 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, while maximizing the speed and effectiveness of treatments. 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 tubing-conveyed-perforating run.

The OptiStriker system’s mechanical-set packers are designed to reliably set and unset numerous times, enabling flexible and thorough wellbore coverage in a single trip. When used with CT sizes of 5-1/2”, 6-3/4”, 7-5/8” or 7-7/8”, the system’s packers are designed to reliably set, unset and repeat with no impact on the ID of the host liner. The OptiStriker system allows for cost-effective restimulation of unconventional oil and gas wells and can be used to maximize production from existing wells.

Applications
- Restimulation operations
- Formation diagnostics and mini-fracs
- Fluid and gel injection
- Unconventional oil and gas wells
- Cased hole wells
- Vertical and horizontal wells

Features and Benefits
- Targeted stimulation
  - Ensures precise delivery of treatments to desired areas
  - Enables pre- and post-stimulation testing to eliminate treatment uncertainty
  - Delivers controlled treatment volumes
  - Reduces fluid and horsepower requirements
  - Decreases operational footprint and simplifies onsite logistics
- Rugged resettable packers
  - Enable treatment of multiple zones in a single trip
  - Support aggressive treatments with enhanced ratings
  - Improve reliability through fully mechanical operation
  - Maintain the ID of host liner without post-frac intervention
  - Provide a cost-effective alternative to other mechanical isolation methods
- Enlarged packer ID
  - Enables delivery of high-sand-concentration slurries at high pump rates and volumes
  - Supports deployment on coiled tubing or workover tubulars
- Dual unloader design
  - Enables circulation at the top of the tool
  - Simplifies cleanout and equalization
  - Supports quick, easy self-recovery from screenouts
of up to 2¼ in., the tool does not create any flow restrictions, allowing operators to confidently pump high-volume, high-sand-concentration slurries at up to 20 bpm to enhance fracture network complexity and to increase production potential.

Unlike other targeted stimulation systems that use swab cups to isolate zones, OptiStriker packers 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—to enable higher treatment pressures and to eliminate fluid leak-off. And risks associated with plugged hydraulic conduits are eliminated because the packers are actuated and released using only linear movement. The system incorporates a contingency release feature that can be used if needed.

When the near wellbore requires cleaning to enhance conductivity, acid can be spotted via the CT. CT also offers easy circulation and wellbore cleanouts, enabling quick recoveries from screenouts through a purpose-built cleanout mechanism. Pumping treatments through the CT also enables treating wellbores where casing integrity is a challenge. Because the entire OptiStriker assembly is removed after operations are complete, the original production inside diameter (ID) is maintained, helping simplify future access. When combined with Baker Hughes EasyReach™ lubricant—which reduces the coefficient of friction in cased hole wells—horizontal reach capabilities almost double, helping make successful CT applications in lateral lengths greater than 10,000 ft (3048 m) routine.

Before any restimulation job, Baker Hughes experts can review historical production data, analyze the well’s production contribution profile, and perform diagnostics—such as injectivity testing, mini-fracs, and flowback testing—to ensure optimal program design. Monitoring and analysis can be performed during and after the job to confirm treatment effectiveness.

Visit bakerhughes.com/optistriker to learn how our OptiStriker straddle packer system can maximize restimulation efficiency and boost production from your existing shale wells.

### OptiStriker Straddle Packer System Specifications

<table>
<thead>
<tr>
<th>Casing</th>
<th>Casing Weight</th>
<th>Differential Pressure Rating</th>
<th>Maximum Outside Diameter</th>
<th>Temperature Rating</th>
<th>Minimum Inside Diameter</th>
<th>Maximum Pump-through Rate</th>
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</thead>
<tbody>
<tr>
<td>5½ in.</td>
<td>15.5 to 23 lb/ft</td>
<td>10,000 psi (689 bar) positive and negative</td>
<td>4.53 in. (20 to 23 lb/ft casing)</td>
<td>300°F (149°C)</td>
<td>2.41 in.</td>
<td>20 bpm</td>
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<td></td>
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<td>4.72 in. (15.5 to 17 lb/ft casing)</td>
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