

Offshore Stimulation



Reduce rig time, NPT, and risk

For nearly three decades, Baker Hughes has been helping operators reliably perform stimulation treatments in offshore environments in a variety of water depths. We employ a highly effective combination of offshore stimulation technology, fit-for-purpose products and services, and talented experts to ensure the best outcome the first time. Regardless of the stimulation challenge, Baker Hughes provides the tools to unlock your well's value while reducing rig time, nonproductive time (NPT), and risk.

Improve offshore stimulation efficiency and reliability

Baker Hughes currently operates the youngest fleet of offshore stimulation vessels, offering operators the highest offshore pumping pressures in the world (up to 20,000 psi). This enables us to provide extremely reliable and safe stimulation services, such as acid fracturing, proppant fracturing, sand control, large-matrix acid treatments, and well control.

Built to meet demanding requirements while providing maximum service efficiency and reliability, our fleet combines rugged and innovative treatment equipment with built-in redundancy and the latest data collection, analysis, and treatment-monitoring technology. A robust design and a dynamic positioning system with DP-2 certification ensure accurate station-keeping even in the roughest weather.

The vessel's control centers feature multiple, real-time graphic displays for maximum treatment transparency so you know the status of your stimulation treatment at the same time we do. A secure satellite communication system facilitates decision-making and operational efficiency from anywhere in the world.

Innovations such as closed acid-mixing systems, automated acid-blending, remote operation high-pressure equipment, programmable pressure relief valves, and complete stimulation plant automation further enhance operational efficiency and safety.

Minimize the unknown

We recognize every reservoir is different and every well has unique challenges, so before any well service is recommended, we identify the geomechanical and petrophysical factors that can affect your well's performance using the Baker Hughes Understand the Reservoir First™ process.

This process accurately measures reservoir quality. Our staff chemists, engineers, and geologists perform a wide range of laboratory tests and data analyses to ensure fluid compatibility and effectiveness. They also assess formation chemistry, geology, lithology, and mineralogy to determine acid solubility, damage mechanisms, and well conditions.

This information, combined with proprietary pre-job design software, enables us to collaborate with you to design optimized stimulation treatment recommendations that combine proppants, fluids, and pumping technologies with efficient workflow and knowledge management systems to maximize your well's production over its lifetime.



Collaborate for better results

As production and depth capabilities increase, so does the complexity of the stimulation job. Our knowledgeable offshore and deepwater stimulation experts engineer reliable, application-specific products and services to deliver a customized solution based on your well's specific needs and challenges.

Our crews are experienced with both equipment operation and fluid systems. Operating around the clock, they can perform multiple jobs in a single mobilization, which provides increased reliability, better efficiency, and reduced cost.

Teamwork is integral when designing and delivering innovative, reliable customer- and reservoir-driven treatments. This approach builds better relationships, leverages best practices, and helps you achieve better results. With this level of collaboration, you will have the peace of mind that comes with being able to completely trust us as your offshore stimulation partner.

Gain flexibly to meet your operational needs

For smaller treatment programs in offshore environments, Baker Hughes was first to design and deliver modular stimulation systems that combine the capabilities of a dedicated stimulation pumping vessel with the versatility of modular skid units. Our *StimFORCE™* modular systems provide on-demand stimulation and sand control services to enhance reservoir productivity and profitability.

The systems are shipped and reassembled on a platform supply vessel, barge, or offshore rig and reduce costs without reducing efficiency or service quality. The *StimFORCE* systems are engineered to decrease health, safety, and environmental hazards with a high level of protection for personnel, equipment, and reservoirs.

For offshore stimulation, you can rely on our legacy of technological innovation, experienced people, and customized technologies to lower rig time, NPT, and risk while enhancing production and profits. To find out how we can help you with your particular stimulation challenge, contact a Baker Hughes representative.



The *StimFORCE* modular systems.



Offshore stimulation treatments—flexible solutions in challenging environments:

- Comprehensive equipment redundancy
- Process-controlled equipment to deliver maximum treatment flexibility
- Onboard laboratory for quality assurance and control
- High-technology stimulation data collection, analysis, and treatment monitoring
- Well Stimulation Vessel classification
- Closed acid mixing systems
- Automated acid blending
- Remote operation of high-pressure pumping equipment
- Programmable pressure relief valves
- Fit-for-purpose fracturing fluid systems, acid systems, proppants, and Baker Hughes *StimPlus™* services and products

StimFORCE modular stimulation systems—efficient completions that match your operational needs:

- Flexible fluids management with high-speed mixing capabilities
- Collaborative participation on projects through remote monitoring
- Instant quality control using fully equipped field lab
- Compatible with most large platform supply vessels for efficient mobilization

