DynaStage™ Perforating Gun System

Essential Systems to Optimize Your Next Completion Design

Fully Factory-Assembled, Performance Assured™

Well designs and fracture complexity are constantly evolving, but traditional plug-and-perf technologies have, at times, limited the completion engineer’s ability to design the best solution. Weight, length and number of shot restrictions can interfere with their ability to optimally connect with the reservoir.

The DynaEnergetics DynaStage™ system gives engineers more creativity and flexibility when designing perforating programs, especially in extended-reach lateral operations. This perforating solution offers various configurations to help overcome your completion challenges, including shorter and lighter strings, more guns per stage and/or tighter perforation clusters.

**ENABLE MORE UNIQUE COMPLETION PROGRAMS**
Should you require an "out-of-the-box" completions program, the DynaStage system has an easy, flexible design. Our team can collaborate with your completions group to determine the right configuration for your stimulation program to optimize production.

The system is truly length-optimized to reduce dead space above, below and in between the guns. The result is a standalone gun, with no traditional add-on subs required, making it the shortest system available today. Because we're able to accommodate more guns in a shorter string, you can increase the number of clusters without increasing the length of the lubricator. Using this system, you can reduce hoisting crane capacity requirements and improve safety by decreasing the workload.

**IMPROVE RELIABILITY AND EFFICIENCY**
All elements within the DynaStage system are designed in-house and manufactured to strict quality standards to ensure full system compatibility. Each gun is fully factory assembled and tested before it arrives at your wellsite to ensure ultimate performance.
Every component is again tested on location before running into the hole. Our truly modular design allows each component to be tested, including the gun system, detonator and igniter, to ensure optimal reliability downhole.

The DynaStage system can be tested anywhere on location—horizontally waiting for rigup, in the lubricator or anytime while downhole. There are no testing distance limits from the wellhead like you find with older, less advanced systems. Your perforating job runs like clockwork with better predictability, leading to a more efficient, time-saving and productive operation.

The system is designed to virtually eliminate misruns by aiming to achieve greater than 99.9% operating efficiency. The DynaStage system employs an improved mechanical design and addressable firing system that eliminates potential human error during assembly and testing.

Electrical connections and component functions can be checked during pumpdown with a communications verifier, proving the gun is fully functional. The modular configuration also eliminates port plugs in the gun body typically used to access wiring connections, removing another potential failure point.

**REACH BOTTOM FASTER**

In long, extended laterals, every minute spent getting perforating tools to bottom drives up the cost of your completion program. DynaStage systems are easy to use, reducing field assembly and disassembly times by up to 80%. The gun strings are 40% shorter and 40% lighter than conventional strings, allowing for more manageable sections and faster rigup.

The DynaStage perforating system is also length-optimized to reach depth quickly. Designed to run in hole faster without getting hung up, the system minimizes the need to work the string. This reduces wireline service times and improves your ability to pump perforating guns to the toe of the well.

**DELIVER THE IDEAL PERFORATION**

At DynaEnergetics, downhole shaped charge performance and ballistics are core to our business. Our DPEX™, HaloFrac™ and FracTune™ formation-tuned shaped charges have been proven time and again to deliver the ideal perforation based on your completion program.

An iterative process of engineering, testing and refinement results in shaped charge designs with superior fracturing performance across a wide range of formations, giving you the best in stimulation efficiency.

**ELEVATE WELLSITE SAFETY**

The DynaStage system’s simple plug-and-go detonator enables API RP 67 compliant surface testing and greatly reduces the chance of an unintentional detonation. It is the industry’s first and only perforating gun with an intrinsically safe design. Exceeding RF-safe standards, our addressable system is designed for immunity to high voltage and current levels and initiates only when required.

The DynaStage system marks a whole new era in perforating solutions. It extends your completion design capability, is easier to test, safer to use and more efficient to operate. Contact your local DynaEnergetics sales representative to learn more about optimizing the completion design and performance on your next perforating job. For more information, visit [www.dynastage.com](http://www.dynastage.com).