

StimCommander Pumps

Automated and intelligent rate and pressure control

APPLICATIONS

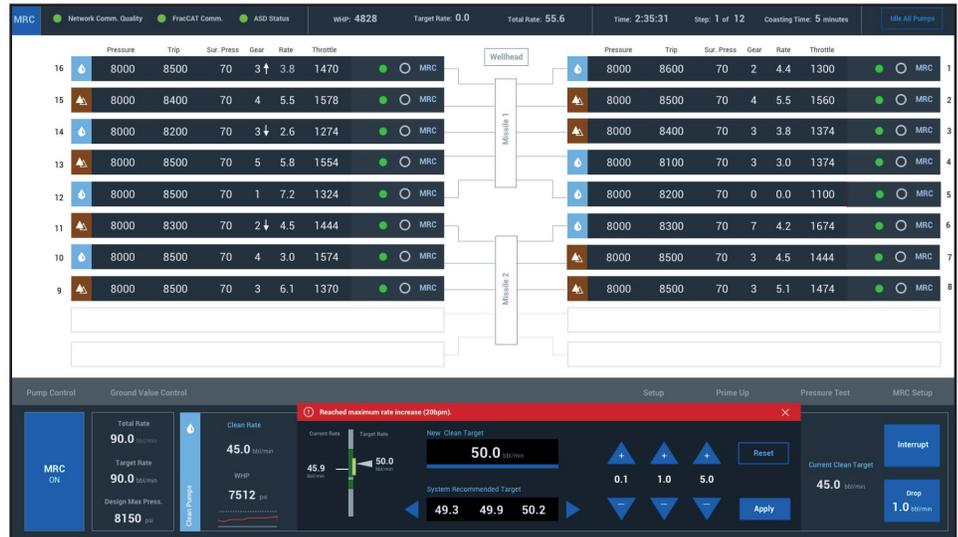
- High-volume stimulation
- Surface efficiency optimization

BENEFITS

- Customized rate ramping with increased stage-to-stage consistency
- Precise control of rate and pressure
- Optimized fracturing pump operation for improved equipment reliability and overall efficiency
- Reduction in overpressure and high-pressure HSE incidents
- Minimized equipment failure through condition-based operation

FEATURES

- Fully automated orchestration of high-pressure stimulation pump fleet
- Automated pressure control to maintain pressure by dynamically adjusting rate
- Condition-based operation of pumps
- Closed valve detection and interlocks to reduce high-pressure HSE incidents



StimCommander Pumps control user interface.

StimCommander Pumps* automated and intelligent rate and pressure control was developed to address many of the problems in today's high-intensity hydraulic fracturing market. By fully automating all high-pressure pumps, rate control is more efficient, consistent, and safe. This operation is optimized to increase pump efficiency, minimize equipment failures, and reduce downtime on location. In addition to maximizing pump reliability, the automation enables pressure as a direct input and feedback to the system. This pairing reduces dependency on individual operator decisions while delivering desired rates more quickly and consistently. StimCommander Pumps control uses inputs from reservoir evaluation tools including the Schlumberger Kinetix* stimulation software suite to enable real-time optimization of the treatment.

Optimized treatments

StimCommander Pumps control enables further automation of the pumping fleet and uses feedback from real-time measurements as a control source. These measurements allow the pumping fleet to autonomously chase a target pressure, rate, or both. By removing the quick decision-making requirement from the pump operator, StimCommander Pumps control can maintain desired rate and pressure more accurately within a tighter threshold.

Condition-based operations

By operating the pumps optimally and based on real-time equipment health, the reliability of pumps is improved, with critical equipment failures reduced. This drive toward proper operation improves efficiency on location and reduces delays due to pump health.