

ValveCommander

Automated control and advisory platform

APPLICATIONS

Zipper fracturing operations

BENEFITS

- Verify the valve position in real time
- Eliminate cut wireline
- Digitize well control workflow to eliminate or reduce risk
- Mitigate overpressuring and accidental closing of valves during high-pressure well stimulation
- Centralize decision making inside the fracturing van to reduce foot traffic across the wellsite and work in the high-pressure zone
- Improve communication regarding operation of valves or operation in incorrect sequence
- Take advantage of postjob or incident data logging to evaluate job efficiency

FEATURES

- Position sensors on all valves (manual and actuated) to give true indication of valve open or close status
- Instrumentation and software interlocks that prevent accidental cutting of wireline
- Mobile tree and manifold configuration tool to validate proper installation of the hydraulic valves to the hydraulic power unit (HPU) and control panel
- Automation and control software to remotely monitor and operate valves
- Frac tree status advisor that embeds the customer workflow into the software
- Built-in safety interlocks that prevent overpressuring of equipment

Cameron ValveCommander* automated control and advisory platform enables operators to increase productivity by a stage per day by eliminating NPT associated with operating valves.

Standard workflows in multiwell fracturing operations require wireline and fracturing crews to constantly alternate operations between wells to isolate the well and rig up wireline or to open the well to begin pumping fracturing fluids into the formation. Opening and closing valves on the frac tree and manifold are necessary steps that must be carried out accurately and in proper sequence. Operating the wrong valve at the wrong time can have catastrophic consequences in terms of NPT, cost, and HSE.

Improving operational integrity and productivity

ValveCommander platform brings the valve control mechanism to the operator to streamline the process of operating valves during multiwell frac operations. With this solution, operators can control frac valves with the click of a button from inside the command center, where they have the ability to monitor the position of the valves in real time, throughout the operation. This makes the process of functioning valves nearly instantaneous.

To mitigate the risk of losing control of the well by operating the wrong valve, a standard workflow is embedded in the software and user interface. It includes an advisor to ensure the workflow is executed according to the job plan. Safety interlocks between the well stimulation and well control equipment have been implemented to prevent overpressuring or washing out frac valves. Additional instrumentation enables detection of whether the wireline toolstring has cleared the frac tree valves and indicates that it is unsafe to shut in the well until this condition is satisfied.

Having this type of viewer, advisor, and interlocks available in real time is a step-change improvement in operational integrity.



ValveCommander platform provides remote access and control of valve position.