



Get simpler, more versatile, efficient zonal control

SureCONTROL Plus electric intelligent completion system

The SureCONTROL™ Plus electric single-line, interval control valve (ICV) reduces completion deployment and response time by reducing the number of control lines and connections during completion operations, for simpler, more versatile, efficient zonal control.

The SureCONTROL Plus valve enables electrical remote operation and reliable, high resolution, selective control of production or injection flow rates in wells without costly or intrusive interventions in commingled flow applications.

SIMPLER

The SureCONTROL Plus valve features an electrically powered digital telemetry system, and enables digital analytics and control, for:

- Increased reliability
- Diagnostics/performance tool trending
- Accurate tool positioning by enabling position sensor on board of valves
- Continuous two-way communication with downhole equipment
- Shorter response time
- Higher count of zones or controlled intervals

The valve only requires one spooling unit during completion operations, and one electric penetrator/feedthrough system in the tubing hanger tree system, greatly simplifying operations compared to competitor and traditional hydraulic systems. Monthly, bi-annual, and annual preventive maintenance programs for surface infrastructure can be eliminated, substantially saving time and costs. The single line system also greatly improves Health, Safety, and Environment programs by:

- Eliminating hydraulic high-pressure systems at surface or subsea and their maintenance personnel mobilization requirements
- Removing environmental risk of hydraulic or production fluids discharge
- Reducing risk of production fluids migration through control lines to surface

And, because SureCONTROL Plus only requires one single electric Tubing Encased Conductor (TEC) across the entire well, complexities can be eliminated to:

- Reduce completions operation time and testing
- Reduce the number of connections needed, for faster deployment and fewer leak paths
- Bring the well to production sooner

APPLICATIONS

- Commingled production
- Drawdown control
- Deepwater wells
- Selective shut off
- Stacked gravel/frac pack completions
- Water injection
- Auto or natural gas lift
- Dump flood
- Well testing

BENEFITS

- Eliminates costly, intrusive interventions with selective control of production or injection flow rates
- Reduces number of connections needed and shortens testing time
- Reduces rig time and installation complexity
- Provides real-time production optimization
- Eliminates hydraulic high-pressure equipment at surface
- Operators can react quicker to unexpected events
- Accelerates valve position adjustments
- Enables the electrification of subsea production systems

MORE VERSATILE

The valve features an electrohydraulic actuator and modular design allowing integration with many of our tools/valves with one single cable (ball valves, flapper valves, sliding sleeves, packers). A custom range of tool sizes can also be quickly developed and qualified for new applications with minimal testing requirements.

The valve also incorporates bi-directional movement. This advanced functionality allows:

- Movement from any position to any other position without having to follow a specific sequence or logic
- A large number of controlled zones with only one TEC
- Better and faster flow control and production optimization

Because the gauges and the flow control tools are connected to the same electrical line, the system easily integrates with Baker Hughes SureSENS™ QPT ELITE downhole gauges.

Reservoir production optimization and management can also be performed more easily through multiple zones (up to 10) that can be controlled downhole with just one electric line across the wellbore.

MORE EFFICIENT

The SureCONTROL Plus valve offers one of the most efficient valves on the market. Its real-time production optimization through multiple bi-directional actuation system lets you make better decisions, faster. And, with real-time system diagnostics and performance monitoring, you can quickly make proactive maintenance decisions without guesswork.

Because you only have one electrical connection to make, long and variable response time is also eliminated. There is no need to consider things like:

- Valve setting depth
- Hydraulic fluid properties
- Surface and bottom hole pressures
- Control line size

The SureCONTROL valve also helps you reduce CAPEX and OPEX through:

- Reduced topside and subsea control systems footprint
- Smaller and lighter umbilicals
- Improved reliability and uptime
- Faster completion installation and well commissioning

Because you can control a higher number of zones in one well, well count and respective CAPEX can also be further reduced (average cost of a deepwater well: \$50M+).

And, chemical consumption, waste, and disposal are reduced through elimination of hydraulics, lowering carbon footprint.

HOW IT WORKS

SureCONTROL Plus is an adjustable flow regulator that integrates with SureSENS QPT ELITE downhole gauges and SureFLO flow meters, all powered from the surface through a single TEC cable.

The SureCONTROL Plus enables adjustment of the local inflow/outflow characteristics without the use of conventional intervention methods. Multiple SureCONTROL Plus valves may be installed providing complete zonal control and monitoring. Each SureCONTROL Plus is independently addressable, giving the operator the ability to adjust any of the zones in the well on command. Data is then sent from on-board sensors and diagnostic systems back to the surface control system over the same TEC line.

Contact your Baker Hughes representative to discuss SureCONTROL Plus can provide more versatile, efficient zonal control, or visit www.bakerhughes.com/surecontrol.

