

SSV & CHOKE CONTROL SYSTEM

Control your SSV and CHOKE with improved safety, reliability, and performance of production well and flow control.

The mSmartWing control system enhances well safety, increases operational efficiency, lowers maintenance costs and maximizes production.

- Manual, remote and automated operations
- Implement condition-based monitoring and maintenance using valve status data communicated via SCADA, telemetry or downloaded from onboard memory

ELECTRONICALLY ASSISTED HYDRAULIC CONTROL

The mSmartWing is a revolutionary solution that combines well and flow control on a production flowline.

The mSmartWing integrates an EOH fail-close ESD valve and an electric actuated adjustable choke simultaneously. The solution integrates pressure sensors with high/low set points to provide surface well control. Utilizing the electric actuated adjustable choke allows the mSmartWing to increase/decrease flow.

The mSmartWing comes with optional full 2-way telemetry that allows remote visibility to the status of the valve and choke as well as command control to open/close ESD and adjust choke settings.

Safety, reliability, and user-friendly operations are the design principles of the mSmartWing solution.



Environmental-Social-Governance



BENEFITS

- Monitors and regulates ESD actuator pressure
- UL 508A Listed and NEMA 1, 3R, 4 and 12 Encloser
- Reduce wellsite visits
- Hydraulic fluid leak detection system
- Partial stroke test
- Full SCADA capability and 2-way telemetry ability
- Optimize flow rates with prompt choke adjustments
- Available in sizes 2¹/₁₆" 5K to 3¹/₁₆" 10K

SSV & CHOKE CONTROL SYSTEM

Condition Based Monitoring

The mSmartWing controller's ability to acquire and communicate precise data on even small changes in hydraulic pressure supports condition-based monitoring and maintenance in many ways:

PREDICTIVE VALVE MAINTENANCE

Predictive maintenance is enabled by early detection of small operational anomalies. Partial stroke testing allows diagnosis of potential valve failure without stopping production and with zero emissions. Maintenance is reduced and easier to schedule, and production delays are minimized.



ACTUATOR PRESSURE STABILIZATION

Pressure stabilization eliminates progressive valve closure and associated wear with mSmartWing monitoring and automatically compensating for temperature-induced variations.

LINE BREAK DETECTION

Identifies gradual losses in pressure over time preventing hydraulic releases. Deviation from the pressure gradient prompts an mSmartWing programmable alarm or valve closure.

SPECIFICATIONS

Base: 36x32 inches (91x81 cm)

Height: 69 inches (175 cm)

Weight: 400 lbs. (181 kg)

Hydraulic outlet pressure: 300 to 2,000 PSI (1 to 138 Bar)

Oil volume: 2 gallon (7.57 L)

Operating temperature: -40°F to 185°F (-40°C to 85°C)

Electric power required: 120VAC

Communications: Modbus RS485 protocol

Accuracy of measurement: +-1%

Response time: +-1%

Internal memory capacity: 6 months minute by minute

