

PowerChokes®

Automatic Back Pressure (ABP) System

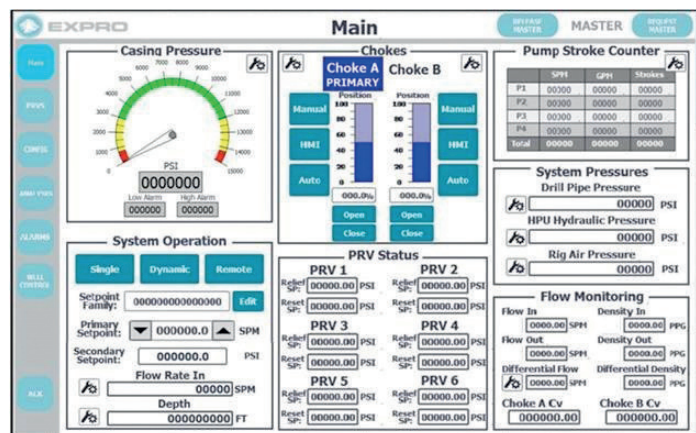
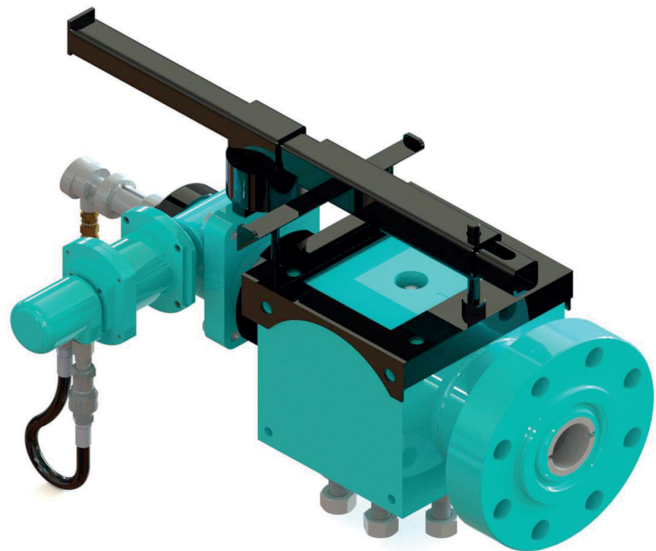
PowerChokes® ABP system uses field-proven Expro PowerChokes® technology and proprietary software for positioning accuracy, stability and reliability.

Features

- Touch screen HMI. Capable of mounting anywhere on the rig for complete control
- Drilling connection mode feature for maintaining a constant pressure profile on the reservoir
- ABP can be used with Expro's PowerChokes – 1" to 4"
- Integration to rig systems and well modelling software
- Dual pressure sensor technology for safe operations
- Configurable with rig-up without the requirements for software updates
- Expro PRV system integration
- Electric and hydraulic choke options
- Flow meter integration
- Permanent installation or portable system design options
- Ramp tables available to automate drilling processes
- Manual or auto choke control

Benefits

- Faster connection time
- Reduces mud costs
- Mitigates and detects influxes and kicks
- Can increase the rate of penetration
- Fast response to system pressure fluctuations
- Accurate control over the entire flow range
- Extended drill equipment life (bit)
- Avoids well control issues
- Can reduce choke plugging during sand and debris producing wells
- Can manage surging and swab effects
- Training available for the end user to work with the system on their own
- Field proven technology since 2012 with an ethos of continuous improvement of the system



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ABP conforms to:

- ATEX Zone 2
- IECEX, US and Canada – available on request
- Zone 1 / class 1 division 1 – available on request

Choke models:

- Size 1-4" trim
- API 6A 16C
- ABS, DNV type approved and PED
- ATEX and IECEX Zone 1
- API 5,000 – 20,000 psi
- Electric or hydraulic actuation available

Conforms to:

Hydraulic controls

- Electric or hydraulic pump
- Designed for use in extreme high and low temperatures
- Blind panels, local gauge, push button and lever control and HMI control available
- Zone 1 certification

Electric controls

- Compact and low maintenance
- Minimum IP65
- Zone 1 certification
- Local and remote electrical controls available

Material information:

- Chokes – H₂S service – NACE MR0175
- API material class up to EE-NL and temperature class PX
- 625 Inconel clad ring grooves and seal areas optional solid tungsten carbide trim and wear sleeve
- HPU and electric control panels 316SS enclosure, NEMA 4X, IP 65 ingress protection

