

PowerChokes®

Managed Pressure Drilling (MPD) / Underbalanced Drilling (UBD) Services

Expro offers a cost effective multi-tiered, solutions based approach for MPD/UBD services, while providing expertise and exceptional service quality.

Expro provides equipment ranging from a single hydraulic choke, which is manually operated, to a full blown MPD solution. Each includes well model engineering services; and brings together a wealth of experienced technicians and well supervisors.

Expro designs and manufactures chokes, Pressure Relief Valves (PRVs) and automated control systems such as Automatic Back Pressure (ABP) system, all of which deliver a cost effective, quality solution. Expro equipment is designed modularly, allowing packages to be tailored for the customer, resulting in a reduced footprint and cost reduction.

Over 1,000 wells have been drilled using the Automatic Back Pressure (ABP) system during an eight year period, and throughout a variety of global locations. Expro's systems are reliable, and most importantly are very user friendly. The system is used to mitigate or reduce well issues, including lost circulation and stuck pipe. Our tailored solution can acquire data for further analysis or it can be integrated into the rig system to enable the sharing of data.

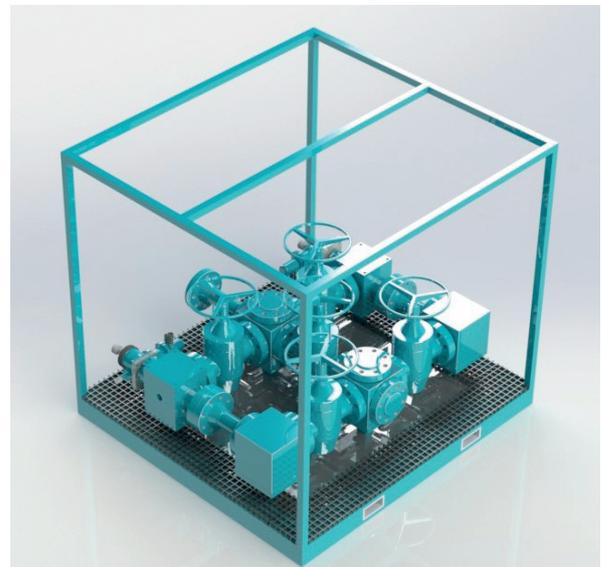


Applications

- Chokes and controls for manual operations
- Setpoint choke systems
- Full MPD services
- Coriolis and data acquisition services
- Well modelling services
- MPD and UBD operator and supervisors
- Training rig crew to run setpoint choke systems

Features and Benefits

- Automation of drilling processes
- Ramp tables
- Pressure Relief Valve (PRV) integration
- Single or dual choke options
- Well modelling services
- Dual sensor technology
- Data acquisition
- Rig integration
- Coriolis integration
- Experienced MPD operators
- Dual choke modes



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Technical specifications			
Chokes	Hydraulic Power Unit (HPU)	ABP	Coriolis
Application Programme Interface (API) 6A & 16C	ATEX Zone 1, class 1, division 1	15" touch screen Human Machine Interface (HMI) with optional additional remote HMIs	2", 3" and 4" as standard
1" to 4" trim	Dual choke operation	ATEX and IECEX Zone 2	Various systems for data acquisitions
Application Programme Interface (API) 5,000 to 20,000psi	API 16C	Dual choke operation	Small footprint standalone manifold
H2S service	Back-up gauges provided as required		
ABS, DNV, ATEX IECEX, NEC and CEC approvals			

Note: Other sizes, configurations and pressure ratings are available to meet most applications, for more information contact your local Expro representative or email expro.powerchokes@exprogroup.com

Expro can provide solutions for the following:

- Managed Pressure Drilling (MPD)
- Underbalanced Drilling (UBD)
- MPD cementing
- Drilling with casing
- Tight drilling window between the frac and pore pressure
- Drill bit/BHA lifetime extension
- Increasing ROP
- Lost circulation
- Connection gas
- Wellbore stability issues
- Non Productive Time (NPT) associated with well control issue
- Stuck pipe
- Flaring restrictions
- Ballooning
- Surge and swab effects
- Tripping pressure control issues
- Choke plugging issues
- Frac hits (offset)
- Mud cost reduction
- Longer laterals can be drilled
- Formation mapping