PressurePro® CONTROL SYSTEM
Empowering your onshore drilling operations with accessible and accurate pressure-management technology
TAKE CONTROL OF YOUR ONSHORE DRILLING OPERATIONS

Our PressurePro® control system puts simple, precise pressure management in your hands.

The technology that tamed deepwater drilling has landed. Based on our decades of leadership in offshore managed-pressure drilling (MPD) technologies, we can now help to deliver safer, faster operations in each land well that you drill.

The Weatherford PressurePro control system—comprised of our state-of-the-art SafeShield® Model 7825 rotating control device (RCD) and PressurePro electric set-point choke—closes the loop and opens up your onshore drilling capabilities. Purpose-built for land applications, the system maintains wellbore pressures within the required window with minimal supervision during managed pressure, underbalanced, and flow drilling.

A single, user-friendly platform facilitates easy system operation. Adaptive logic gives you reliable pressure control while reducing the manpower typically needed. As a result, you can take charge of your onshore drilling application with confidence.

The PressurePro Advantage

- Enhances personnel and asset protection
- Reduces nonproductive time and mud costs
- Controls nuisance gas
- Delivers precise drilling control
- Provides a detailed well monitoring and event breakdown (optional)
- Aggregates the engineering dashboard (optional)
LEVERAGE THE EXPERIENCE OF THE MPD LEADERS

With a nearly five-decade legacy, Weatherford leads the industry in MPD technology. We offer quality service, engineering support, and a worldwide infrastructure to help you with any need, anywhere that you operate.

Our background proves it. We’ve delivered reliable RCDs longer than any other provider, and our advanced Microflux® automated pressure management is unparalleled. The PressurePro control system, our most recent development, takes the knowledge we gained in critical, high-pressure/high-temperature (HPHT), and deepwater environments and perfects it for the challenges and scale of land operations.

Part of our comprehensive and scalable portfolio of closed-loop technologies, the PressurePro system is just one means of providing the right tools to match your objectives.
COMMAND PRESSURE CONTROL WITH EFFICIENT AND REPEATABLE PRECISION

PressurePro® Control System

Incorporate our system into your onshore drilling operations and take off running. The PressurePro system delivers all the benefits of MPD—such as eliminating pressure spikes, improving hole stability, optimizing drilling plans, manipulating effective mud weights, and increasing rates of penetration (ROP)—and adds unique enhancements to this land-based system.

SMOOTH FUNCTIONALITY THROUGH SEAMLESS INTEGRATION

Other providers offer discrete chokes and RCDs that require time-consuming configuration to work together. We are the first company to take these two critical components from the initial design concept to the commercial market as a unified system. This unique pairing results in integrated controls and open communication for an enhanced user experience.

SIMPLE OPERATION USING A SINGLE PLATFORM

Our system uses a single human-machine interface (HMI) to control both the RCD and the choke. Displayed on a laptop in the doghouse or on the driller’s console, the HMI enables you to control each component virtually rather than manually and keep your eye on important drilling parameters.

PRECISE CONTROL WITH INSTANT ADAPTATIONS

A key component of the system, the PressurePro set-point choke uses electric operation for repeatable and precise pressure management within ±5 psi (34.5 kPa) of the pressure point set. The choke self-adjusts automatically and instantaneously to variances in downhole pressure for quick, reliable recovery from surge and swab.

AUTOMATED INTELLIGENCE THROUGH ADVANCED SOFTWARE

Our OneSync® drilling software platform injects intelligence into your PressurePro operation. The software lets you control the choke and RCD, conduct measurements, and maintain pressures within the window you need. A proprietary control algorithm enables automatic choke adjustments that eliminate manual adaptations and inputs.

ENHANCED RIG SAFETY

Unlike other RCD and choke combinations, our system is independent from the rig well-control system. The two systems stand apart and each acts as a separate line of defense, which enables confidence in challenging flow-drilling applications.
FREE YOUR FOCUS WITH SEMIAUTOMATED ADJUSTMENTS

PressurePro® Set-Point Choke

Get set for enhanced drilling performance. A key piece of the system that is its namesake, our PressurePro set-point choke provides efficient and precise pressure control.

The user inputs the pressure set point, and then the system automatically maintains it by applying constant bottomhole pressure during drilling and connections. Compared to conventional manual and hydraulic chokes, this electric system provides more efficient and precise pressure control—within ±5 psi (34.5 kPa) of the pressure point set.

SET FOR CONTROL

• Makes automatic adjustments to maintain pressures within the critical parameters of the drilling system
• Reduces the risk of exceeding the mud-gas separator capacity for safe drilling in narrow or unknown windows
• Easily integrates with existing flowline equipment to enable equivalent-circulating-density management of wellbore fluids
• Quickly and precisely opens and closes the choke through the use of electric stepper technology
• Incorporates ramp schedule for precise pressure control during connections
• Protects against pressure surges during various drilling modes including circulation of pills
AUGMENT YOUR ABILITIES WITH A HIGHER PRESSURE LIMIT

SafeShield® Model 7825 RCD

Next-generation technology takes your drilling operation to the next level. An integral part of the PressurePro system, our SafeShield Model 7825 RCD improves upon our previous industry-leading RCD design.

With enhanced safety and operational features—including a shorter stack height, larger through-bore diameter, and higher pressure ratings—the RCD creates a closed-loop system that improves pressure management. This model bears the API 16RCD monogram and suits both liquid and pure-gas drilling environments.

BUILT TO PERFORM

- Provides the highest RCD pressure rating up to 5,000 psi (34.5 MPa)
- Fits any drilling rig with a shorter stack height
- Offers a large through-bore diameter of 8-1/4 in. (210 mm)
- Facilitates installation and removal of the bearing assembly using a remote latching system
- Eliminates the need for an external hydraulic lubrication or lubrication lines with a self-lubricating bearing assembly
- Reduces overall installation time and eases configuration on the rig with a rotating flange
- Adapts to a range of flange configurations with an interchangeable lower flange assembly
PERFORM UNDER PRESSURE

Our PressurePro® control system is just one part of our complete and scalable MPD portfolio, which covers broad capabilities ranging from basic wellbore pressure management to fully automated pressure response. To learn how our PressurePro control system or other options can work for you, please contact us.

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