

## New system provides accurate wellbore pressure control

The Low Pressure AutoChoke Console (LPAC) from M-I Swaco, a Schlumberger company, provides accurate control during managed pressure drilling, underbalanced drilling, and other low-surface pressure operations. It allows operators to directly set and maintain the desired backpressure on the well and allows adjustments to be made using a touch-screen human-machine interface (HMI) on either the local console or a standard remote HMI near the driller. The LPAC and AutoChoke units combine to provide precise, accurate wellbore pressure control.

Primary components include the local hydraulic power unit (HPU) console, which provides hydraulic power that drives two AutoChoke units to the required set-point pressures that directly control the backpressure held on the well. The HMI on either the HPU console or the remote version allows operators to control and adjust the set-point pressures on two units and displays other operating parameters, including casing and drillpipe pressures, pump rates and strokes, and diagnostics.

The LPAC system includes backup power storage devices – an internal air tank, hydraulic accumulator, and an uninterruptable power supply. It can maintain power for more than two hours after loss of rig air and up to one hour after loss of rig power. The backup devices work seamlessly, enabling the choke operator to continue operation without interruption in control.

[www.slb.com/lpac](http://www.slb.com/lpac)

**The LPAC local HPU console provides hydraulic power that drives two AutoChoke units to the required set-point pressures. (Image courtesy of M-I Swaco)**

