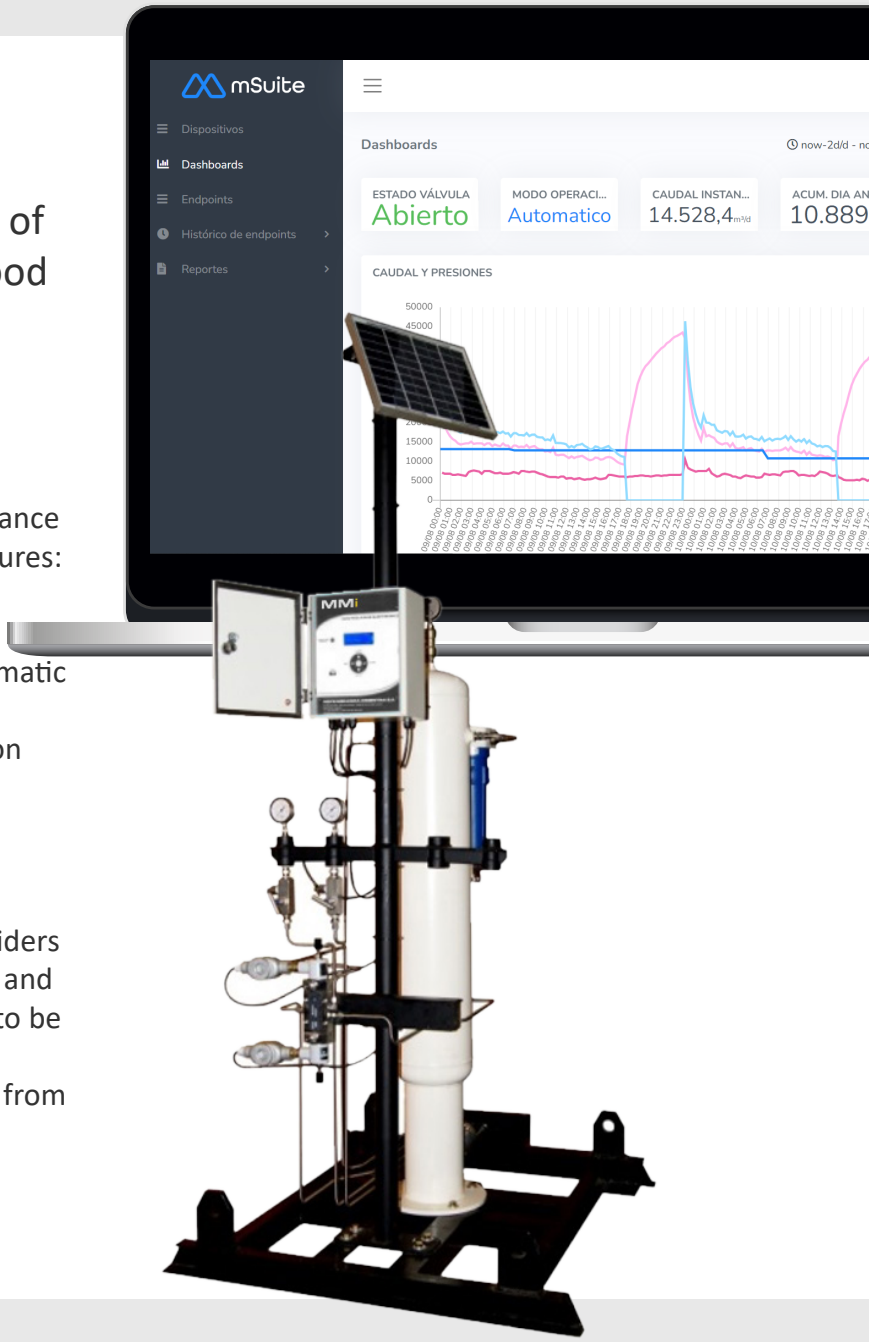
CNE Plus

Pneumatic cycling system for mature wells

The CNE Plus electronic pneumatic controller improves the performance of wells located in mature fields with good pressure recovery, cycling a Choke ON/OFF pneumatic system with calibrated orifice.

Increases operational efficiency, reduces maintenance costs and maximizes production thanks to its features:



- **Open, close and monitor Choke ON/OFF** pneumatic in a timed manner, by pressures, differential pressure, flow, Turner and OPTIPRO optimization mode, or at the well site.
- **By implementing OPTIPRO mode, the system commands autonomously based on historical variables from the well itself.** The system considers different pressures, minimum critical velocities and flow rates, communicated via satellite or GSM to be displayed on our web monitoring and control platform, through SCADA or to be downloaded from the memory card via USB.Z

85-90% reduction in location visits

5-20% improvement in production

22K USD savings monthly per well

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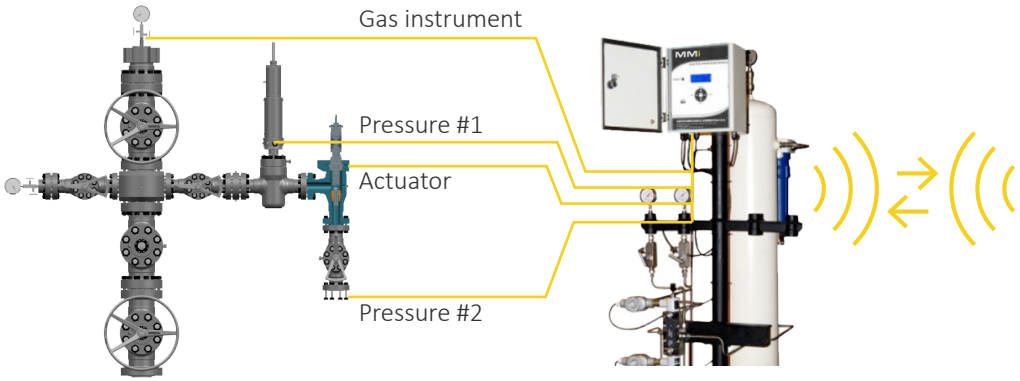

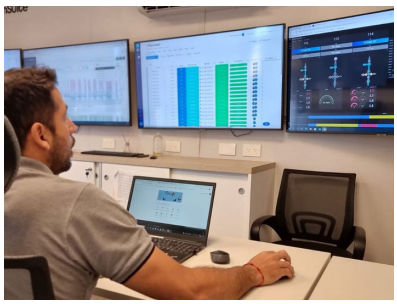

Control room

FIG 1: APPLICATION EXAMPLE

Field proven in Latin and North America, the CNE integrates electronic control and a pneumatic ON/OFF choke to ensure well opening/closing operation, improve production and optimize operation. The controller accurately and reliably manages the ON/OFF choke position by sensing pressures upstream and downstream of the flow control elements.

Real-time and historical **valve data** are transferred using the well's SCADA system (RS 485, TCP/IP using modbus or Hart communication protocols). Monthly data is also stored in the on-board memory and is downloadable via USB. Data visualization and analysis is performed using mSuite, an intuitive web application software.

Flexible deployment. The energy-efficient, battery-operated control system is easily charged using power from the well or solar panels.

The CNE controller's ability to acquire and communicate accurate data on small changes in pneumatic pressure supports monitoring and maintenance in many ways.

To decide how long to shut in the well (tc), the CNE seeks to find the tc corresponding to the maximum daily production value. It uses an adaptive “Hill-climbing” optimization algorithm that seeks to find production optimization by making incremental changes based on the performance of the well's historical cycles.

SPECS	
User Interface	Display 4 x 20 c/backlight
Communication interfaces	1 port USB 2 portss RS232 Modem GSM/GPRS/satellite RS485
Communication protocol	Modbus - RTU Modbus - TCP (GSM/GRPS)
Entries	6 Analog Inputs 4-20mA 10 Digital inputs
Outputs	8 Solid State Outputs 3A 12Vdc
Control methodologies available	Control by min. and max. levels pressure/temperature Timer, pressure, pressure differential, flow, Turner
Remote monitoring and control	SCADA Modbus Protocol
Event log	+ 6.000 eventos
Environmental conditions of operation	-30° a +60°C C Humidity 0 a 95% non-condensing
Feeding	11,5 a 35 VDC

To buy or for more information, please contact us:

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