

AUTOMATED BLOW DOWN SYSTEM

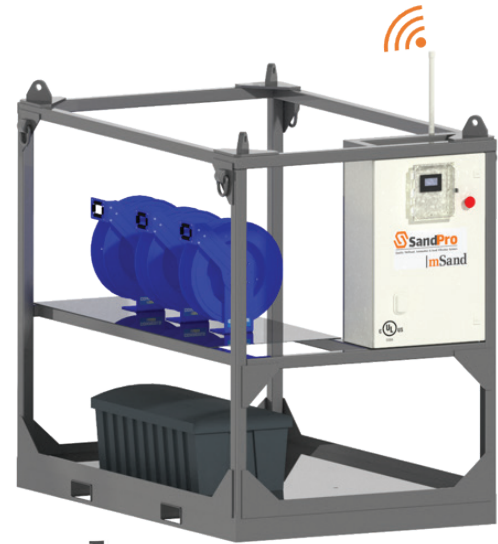
The mSand system is Designed to Reduce Wellsite Exposure and Increase Efficiencies During Blow Down Operations.

FEATURES:

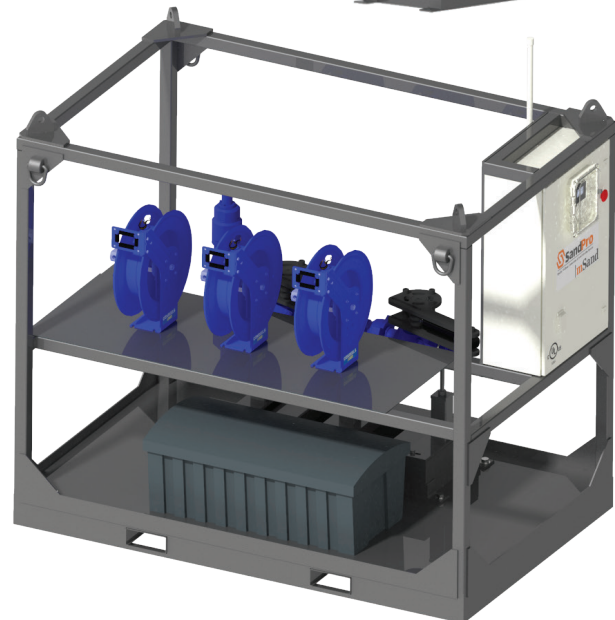
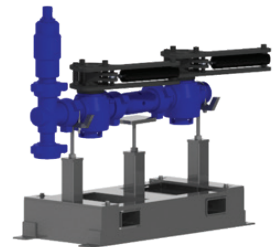
- Manual, remote and automated operations.
- Suitable for Temporary or Permanent applications.
- Sequential operation of opening/closing of complete system.
- Sensor monitored dual isolation leak detection.
- Compatible with SSV/ESD valve solutions.
- UL 508A Listed and NEMA 1, 3R, 4 and 12 Encloser
- Communication: SCADA (ModBus Protocol) and 2-way Telemetry.
- Available in Standard or NACE Service

ADVANTAGES:

- Reduced personnel exposure.
- Reduced OPEX by fewer well visits.
- Reduced maintenance costs by protecting the integrity of the valves.
- Easy installation, predictive operation with low operator training times.
- Traceability of the entire operation through internal data storage.
- Customized dump valve to minimize wear and reduce replacement costs.



mSand



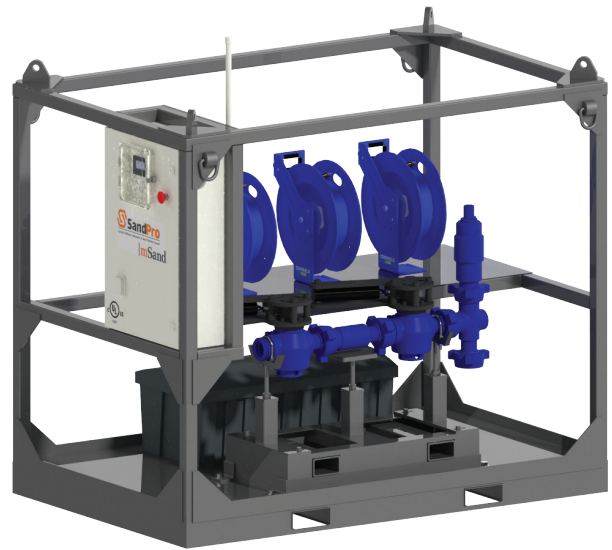
Environmental-Social-Governance

AUTOMATED BLOW DOWN SYSTEM

All-In-One Blow Down System

COMPONENTS IDENTIFICATION:

- Electro-hydraulic mSand Panel.
- PV 1/2: 2" or 3" Pressure Transducers Class 1 Div.1
- PV 1/2: 2" or 3" Plug/ball valves Hydraulic actuated with position switches (Standard).
- CV-3 (CPO ON/OFF): Calibrated orifice ON/OFF Choke, hydraulic actuated with position switches (Included in the basic equipment).



DESCRIPTION OF OPERATION MODES:

AUTONOMOUS

- High Inlet Pressure (PT3)
- Differential Pressure (PT3-PT2)
- Time Between Dumps
- Dump Holding Period
- Valve Seat Test (PV1/PV2)

MANUAL

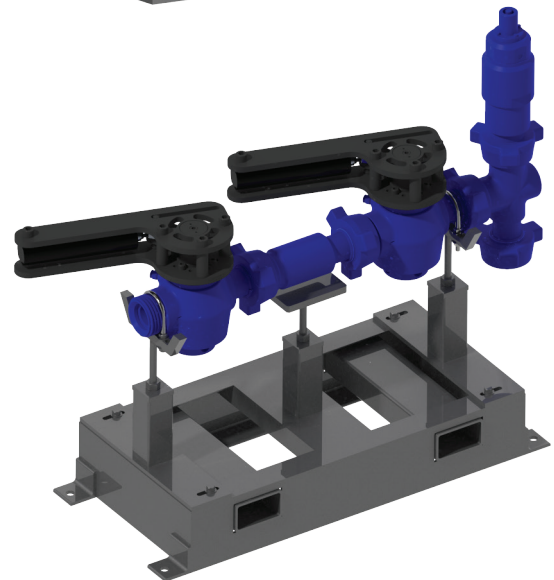
- Manual locally from the panel:
Double-button operation sequence.

REMOTE

- Operation through SCADA
(ModBus Protocol/Telemetry)

FAILSAFE

- *In the event of detection of a non-system fault, mSand will send a shutdown signal for well closing.*



SPECIFICATIONS

Hydraulic outlet pressure: 2,000 PSI

Oil Volume: 2 gallon (7.57 L)

Electric Power Required: 120VAC

Temperature: -40°F to 185°F (-40°C to 85°C)

Communications: Modbus RS485 protocol