

## Horizontal Separator

**The Expro Horizontal Separator is a skid mounted and portable pressure vessel which processes produced well effluent, breaking it down into individual phases of gas, oil and water for accurate measurement.**

The separator is more efficient for oil wells, where the higher volume and surface area aid the separation process.

The vessel internals are designed to maximise the efficiency of the separation process. An inlet device deflects the effluent initiating the first stage of the separation process. A high-efficiency mist extractor and coalescing vanes are in place for reduced liquid carryover. A weir plate at the bottom of the vessel separates the liquid phases.

Oil and water volumes are accurately measured with turbine meters or coriolis meters and the gas rate is metered by an orifice plate or coriolis meter.

Automatic controllers are fitted to allow individual adjustment of the oil and water levels in the vessel. A separate gas controller (Back Pressure Valve) maintains back pressure in the vessel, which combined with liquid level control optimises separation of the well fluid phases.

The unit is protected from overpressure by safety valves and rupture discs mounted directly on top of the vessel. High level alarms and automatic shutdowns eliminate liquids spilling over into the gas flare and gas blow-by to surge tank.



### Features and benefits

- Accurately determines oil, gas, and water volumes
- Wide range of applications
- Compact for quick installation
- Third-party certified
- Coriolis meter option available for gas and liquids
- DNV and CSC skid design for improved portability

### Applications

- Onshore & offshore well testing
- Exploration development
- Clean-up operation
- Extend well testing
- Production and inline testing

### Technical specifications

<b>Working pressure psi (bar)</b>	600 psi (41 bar) heliportable	1440 psi (99 bar)		2000 psi (138 bar)
<b>Vessel size</b>	30" x 10ft	42" x 10ft	42"x 15ft	42"x15ft
<b>Temperature rating °F (°C)</b>	-20° to 100°F (-29° to 38°C)	1440psi @ 100°F (99bar @38°C) 1350psi @200°F (93bar @93°C)	1440psi @ 100°F (99bar @38°C) 1350psi @200°F (93bar @93°C)	-20°F TO 200°F (-29°C to +93°C)
<b>Service</b>	H <sub>2</sub> S	H <sub>2</sub> S	H <sub>2</sub> S	H <sub>2</sub> S
<b>Design code*</b>	ASME VIII Div 1 NACE MR0175 ASME B31.3	ASME VIII Div 1 NACE MR0175 ASME B31.3	ASME VIII Div 1 NACE MR0175 ASME B31.3	ASME VIII Div 1 NACE MR0175 ASME B31.3
<b>Liquid capacity**</b>	6,000 bpd (953 m3/d)	12,000 bpd (1,908 m3/day)	15,000 bpd (2,386 m3/day)	15,000 bpd (2,386 m3/day)
<b>Gas capacity**</b>	40 MMscf/d (1.1 MM m3/d)	60 MMscf/d (1.7 MM m3/d)	92 MMscf/d (2.6 MM m3/d)	115 Mscf/d (3.3 MM m3/d)

Note: Other sizes, configurations and pressure ratings are available to meet most applications. For more information contact your local Expro representative or email [welltesting@exprogroup.com](mailto:welltesting@exprogroup.com)