

Well Flow Management

Well Testing | Disposal

Produced Water Treatment

The Expro produced water treatment system removes oil from produced water during development well testing and clean-up.

Water produced during well testing and clean-up will often contain oily emulsions, requiring further treatment before it can be safely discharged.

Expro treats these difficult to separate emulsions using compact vessels containing oil adsorption filter cartridges. These can be configured to handle a range of process contaminants.

The vessels are mounted in a self-contained compact skid. Each skid has two vessels for either parallel or series operation, depending on the required clean-up duty.

Each vessel can remove up to 72kg of oil at 90-95% separation efficiency, achieving oil-in-water levels as low as 5 mg/l. Periodic measurement using an industry leading oil content analyzer enables efficiency monitoring of the unit.

The Expro compact system reduces the environmental impact of well testing and clean-up operations, the impact on operators' existing process systems, chemicals usage and overall water clean-up and reclamation costs.

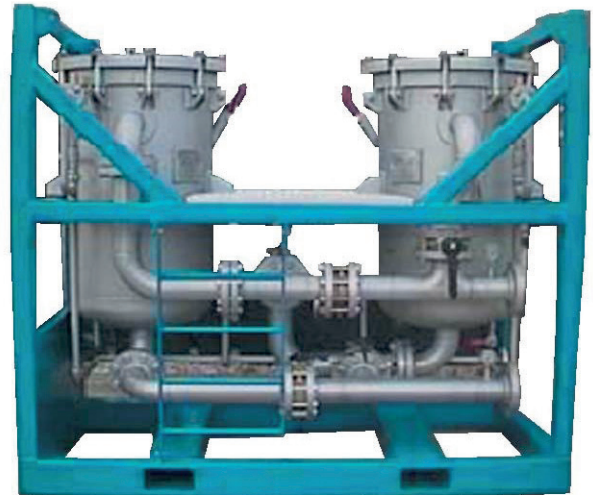
The flexible arrangement and system characteristics provide a reliable solution to operators' produced water clean-up.

Applications

- Onshore and offshore oil and gas well testing and clean-up operations

Features and benefits

- Reliable oily water emulsion treatment
- Small footprint size
- No moving parts
- Proven technology
- Removable filter elements
- 0-100% turndown
- Operation in parallel or series
- Low cost solution





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Technical specifications	
Design pressure psi (bar)	100 (6.9)
Temperature rating °F (°C)	-4 to 212 (-20 to 100) (cartridges are rated to 176 (80))
Connections	
Inlet	4" fig 206 hammer union, female
Outlet	4" fig 206 hammer union, male
Drain	1" NPT Port
Materials	316 SS, vessels and piping
Water rate	4,770 bbl/day for 24 hours @ 100 mg/l oil-in-feed
	477 bbl/day for 24 hours @ 1000 mg/l oil-in-feed
	238 bbl/day for 24 hours @ 2000 mg/l oil-in-feed
	Piping designed for maximum 13,400 bbl/day @ 3 m/s
	Cartridges maximum 28,800 bpd per vessel (based on flux rate)
Operating range	0 to 100% of flow range
Inlet concentration	300 to 400 mg/l (recommended maximum 500 mg/l)
Efficiency	90 to 95% (single stage operation)
Outlet concentration	5 to 30 mg/l
Filter cartridges	50 oil adsorption cartridges per vessel

Note: Designed and manufactured to ASME VIII Div 1, ANSI B31.3, NACE MR-01-75, SI 289, SI 913, EN 12079, BS 449

Other sizes, configurations and pressure ratings are available to meet most applications. For more information contact your local Expro representative or email: welltesting@expro.com