

Well Flow Management

Well Testing | Measurement

Surge Tank

The pressure containing surge tank allows more versatility within the test installation than atmospheric designs.

The pressure rating of the vessel is useful during handling of sour crudes and when used as a holding vessel or for proving meters during the test. No venting to the atmosphere takes place under normal conditions. The units contain required valves for flow and bypass applications and all required pressure relief and control devices.

Surge tanks are designed for three working pressures with added features to ensure versatility for various process applications. They are manufactured for various volumes, and they may be made with twin compartments. Both compartments of the surge tank are equipped with sight glasses and calibration strips.

The tanks are equipped with steam heat coils to provide the required heat for heavy crude processing. They may also be used as a second stage, two-phase separator with the addition of necessary gas, liquid metering and control valves.

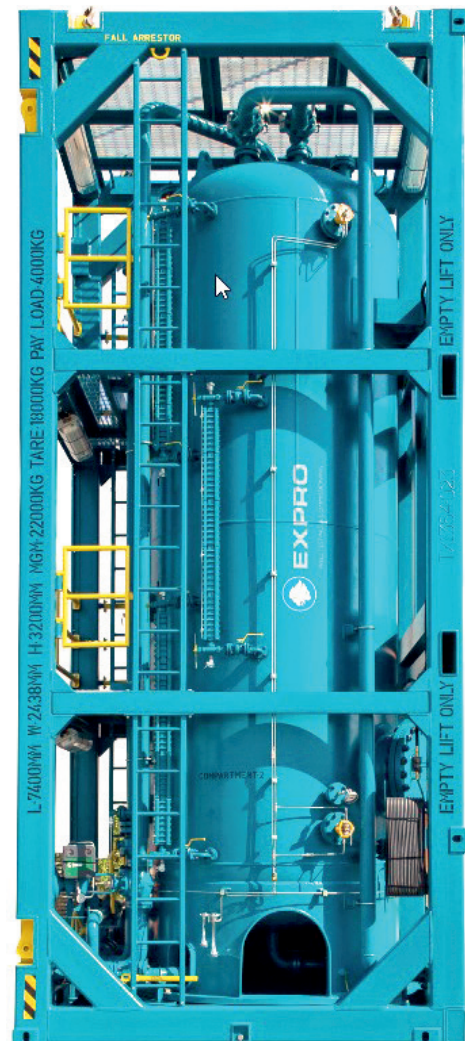
The surge tank is very effective where a longer retention time is needed for improved separation of gas and liquids.

Applications

- Onshore & offshore well testing
- Production optimization
- Extended well test

Features and benefits

- Single or dual compartment
- Steam heated coils in each compartment
- Tank is pressurized, so no gases are vented to the atmosphere near the well test equipment
- Assists in additional separation and can be used as a 2nd stage separator
- Standardized box beam frame design incorporates ISO corner blocks and DNV-compliant lift points
- Conforms to all industry standards related to vessel, piping, valves, and service
- High- and low-level alarm on each compartment





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Technical specifications			
	Working pressure psi (bar)		
	50 (3.5)	150 (10.3)	250 (17.2)
Capacity bbl (m3)	50 per compartment – total 100 (8 per compartment – total 16)		
Working temperature °F (°C)	-20 to 100 (-29 to 38)	-20 to 100 (-29 to 38)	-20 to 250 (-29 to 212)
Weight (dry) lbs (kgs)	14,300 (6,486)	30,100 (13,653)	30,100 (13,653)
Dimensions (L x W x H) ft. (m)	9.9 x 8.0 x 18.8 (3.0 x 2.5 x 5.7)	11.0 x 9.0 x 18.8 (3.4 x 2.8 x 5.7)	11.0 x 9.0 x 18.8 (3.4 x 2.8 x 5.7)
Connections; Inlet/bypass: Outlet – gas: Outlet – oil: Drain: Relief:	4" 600 # Flange 4" 150 # Flange 3" 150 # Flange 2" 150 # Flange 6" 150 # Flange	4" 600 # Flange 3" 150 # Flange 3" 150 # Flange 2" 150 # Flange 6" 150 # Flange	4" 600 # Flange 4" 150 # Flange 3" 600 # Flange 2" 150 # Flange 4" 150 # Flange
Special features	Fitted with one or two relief valves and pressure rated sight glasses.	Fitted with one or two relief valves, pressure rated sight glasses and 2" steam heated coils.	Fitted with one or two relief valves, pressure rated sight glasses and 2" steam heated coils.

Note: Designed and manufactured to ASME VIII Div.1, ASME B31.3 and NACE MR-01-75 (H2S)

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