

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.

Expro surge tanks are equipped with steam heat coils to provide the required heat for the heavy crude.

The surge tank can be used as a second stage, two-phase separator with the addition of necessary gas, fluid meter, and control valves. It is very effective where a longer retention time is needed for good separation of gas and fluids.



Features and benefits

- Single or dual compartment
- Steam heated coils in each compartment
- Tank is pressurised, 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
- Standardised 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

Applications

- Onshore and offshore well testing
- Production/extended well test

Technical specifications

	Working pressure		
	50 psi (3.5 bar)	150 psi (10.3 bar)	250 psi (17.2 bar)
Capacity	2 x 50 bbls (2 x 8 m3)	2 x 50 bbls (2 x 8 m3)	2 x 50 bbls (2 x 8 m3)
Working temperature	-20 to 100°F (-29 to 38°C)	-20 to 100°F (-29 to 38°C)	-20 to 250°F (-29 to 212°C)
Weight (dry)	14,300 lbs (6,486 kg)	30,100 lbs (13,653 kg)	30,100 lbs (13,653 kg)
Dimensions h x l x w	18.8' x 9.9' x 8' (5.7m x 3m x 2.5m)	18.8' x 11' x 9' (5.7m x 3.4m x 2.8m)	18.8' x 11' x 9' (5.7m x 3.4m x 2.8m)
Connections	Inlet/bypass: 4" 600 flange Outlet: 4" 150 flange (gas) & 3" 150 flange (oil) Drain: 2" 150 flange Relief: 6" 150 flange	Inlet/bypass: 4" 600 flange Outlet: 3" 150 flange (gas) & 3" 150 flange (oil) Drain: 2" 150 flange Relief: 6" 150 flange	Inlet/bypass: 4" 600 flanges Outlet: 4" 150 flange (gas) & 3" 600 flanges (oil) Drain: 2" 150 flange Relief: 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
Design code and service	ASME VIII Div.1 ASME B31.3 NACE MR-01-75	ASME VIII Div.1 ASME B31.3 NACE MR-01-75	ASME VIII Div.1 ASME B31.3 NACE MR-01-75

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