

Surge Tank

The surge tank is used to store produced liquids before disposal. The tank can also be used as an additional stage of separation and metering.

Expro surge tanks are designed and manufactured for various volumes and pressures. These vessels usually consist of single or twin compartments.

The units contain the required piping and manifolds for inlet/bypass, control devices, and safety relief systems. The tanks are also equipped with sight glasses and calibration strips.

The pressure rating of the surge tank provides a closed system while well testing under normal conditions. It is particularly beneficial during H₂S production since no venting to the atmosphere takes place. Noxious and flammable vapours are vented to a designated safe area, flare pit or burner booms for disposal. This is also useful when using the tank as a holding vessel or for proving meters during a test.

The design of the surge tank also makes it possible to use as a second stage, two phase separator with the addition of gas and fluid metering. The unit is very effective where a longer retention time is required for good separation of gas and fluids.

Another advantage of the surge tank is that the design allows the operator to keep back pressure on transfer pumps for production disposal.

Applications:

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

Flow back after stimulation operations and workovers

HPHT

Features & Benefits:

Single or twin compartment

Tank is pressurised so no gases are vented to atmosphere near the test area

Fitted with sample point and pressure and temperature ports

Can be used as second stage separator

Measures liquid flow rates, shrinkage and meter factors

Sight glasses or magnetic level indicators

Fitted with a bypass manifold to enable isolation

Fitted with access man-ways for internal inspection and debris removal



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Technical Specifications:						
Capacity bbls (m³)	Working press. psi (bar)	Working temp. °F (°C)	Weight (dry) lbs (kg)	Dimensions h x l x w ft (m)	Sample point	Design Code and Service
2 x 50 (16)	50 (3.5)	-20 / 100 (-29/38)	14300 (6486)	18.8 x 9.9 x 8 (5.7 x 3 x 2.5)	Yes, each side	ASME VIII Div.1, ANSI B31.3,NACE MR-01-75
2 x 50 (16)	125 (8.6)	-20 / 100 (-29/38)	15950 (7235)	18.8 x 9.9 x 8 (5.7 x 3 x 2.5)	Yes, each side	ASME VIII Div.1, ANSI B31.3,NACE MR-01-75
2 x 50 (16)	150 (10.3)	-50 / 250 (-45/121)	17000 (7711)	18.8 x 9.9 x 8 (5.7 x 3 x 2.5)	Yes, each side	ASME VIII Div.1, ANSI B31.3,NACE MR-01-75
1 x 100 (16)	250 (10.3)	-20 / 100 (-29/38)	28000 (12727)	19.9 x 9.5 x 8 (6.1 x 2.9 x 2.45)	Yes	ASME VIII Div.1, ANSI B31.3,NACE MR-01-75
2 x 50 (16)	250 (10.3)	-20 / 100 (-29/38)	30100 (13682)	19.9 x 9.5 x 8 (6.1 x 2.9 x 2.45)	Yes, each side	ASME VIII Div.1, ANSI B31.3,NACE MR-01-75

NOTE: The above referred design codes are for guideline purposes only. Other sizes, configurations, and pressure ratings are available to meet most applications. For specific information and any additional codes applicable to comply with region specific standards please consult your local Expro representative.