

SURGE TANK

Oiltest surge tanks are designed for three working pressures with added features to ensure versatility for various process applications.

The pressure containing Surge Tank allows more versatility within the test installation than atmospheric designs. The pressure integrity of the vessel is useful during handling of sour crudes when using as a holding vessel or for proving meters atmosphere takes place under normal conditions. The units contain required valving for flow and bypass applications and all required pressure relief and control devices.

Both compartments of the surge tank are equipped with sight glasses.

This design of tank can be used as a second stage, two phase separator with slight additions to gas and fluid metering. The unit is highly successful where a longer retention time is required for good separation due to foaming or poor G.O.R's

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



Specifications

Maximum Allowable W.P.:	150 psig
Test pressure:	225 psig
Design Temperature:	-50 to 250°F
Service:	Sour Gas (H ₂ S)
Vessel diameter:	96"
Vessel length:	Vertical unit, 10 ft height

Capacity:	2 x 50 bbl compartments
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MATERIALS

Shell & Heads:	BS1501-224-490 LT50
Saddle & Skirt:	BS1501-224-490 LT50
Flanges:	ASTM A350 LF2
Nozzle necks:	ASTM A333 GR 6
Piping:	ASTM A333 GR 6
Compensation plates:	BS1501-224-490B LT 50
Skid frame:	BS4360 Gd 43 A /50D
Hardness requirements (for wetted surface parts)	22 Hrc Max Average
Impact toughness:	Charpy values at minimum design temperatures.
Corrosion allowance:	1/8"

SAFETY DEVICES

Pressure Relief valve:	6" 150# RF SRZ- G rupture disc
High Liquid level alarm:	Pneumatic level control, x 3" 150# RF flange
Low Liquid level alarm:	Pneumatic level control, x 3" 150# RF flange

NOZZLES/FLANGES & FLOWLINE

Gas Outlet:	6" 150# RF flange, 6" Sch 40 line,
Oil Inlet:	4" 150# RF flange, 4" Sch 80 line,
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Relief Outlet:	6" 150# RF flange, 6" Sch 40 line,
Liquid Drain Outlet:	2" 150# RF flange, 2" Sch 40 line,
Manway:	18" 150# TB Closure,
Hi-Level gauge flange:	3" 150# RF flange,
Low Level gauge flange:	3" 150# RF flange,

VALVES

Fluid Inlet:	3" 600# RF flange BalonBall Valve
Oil Outlet:	3" 600# RF flange BalonBall Valve
Drain line:	2" 150# RF flange BalonBall Valve

CONNECTIONS

Fluid Inlet:	4" # 150 RF flange x 4" Fig 602 female
Gas Outlet:	6" # 150 RF flange x 6" Fig 206 male
Relief line:	6" # 150 RF x 6" Fig 206 male
Oil Outlet:	4" # 150 RF flange x 4" Fig 602
Drain line:	2" # 150 RF flange x 2" fig 602 female

MISCELLANEOUS

Air supply for Instrumentation	
Temperature Indicator points,	3/4" NPT female x 3000# TDL
Fluid sampling points,	1/2" NPT female x 3000# TDL

DIMENSIONS

Weight:	5500 kgS (Skid & Empty Vessel)
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