

Three Phase Test Separator

Three-Phase Test Separator is a pressurized vessel designed to efficiently separate well effluent into oil, gas and water to enable to measure effluent components individually and take pressurized oil and gas samples.

Three-Phase Test Separator is a self-contained modular unit containing the valves and pneumatic controllers needed to regulate the vessel pressure and fluid levels.

APPLICATIONS

- ▶ Drill-stem testing
- ▶ Well cleanups
- ▶ Production/well testing
- ▶ Early-production facilities



FEATURES & BENEFITS

- ▶ Fitted with deflector plate, coalescing plates, foam and vortex breaker, weir plate, and mist extractor to ensure efficient separation
- ▶ Nuflo Turbine flow-meter and Daniel Senior Orifice Fitting are utilized to ensure accurate measurement
- ▶ Preset safety relief valves and rupture disc assembly are utilized to protect against overpressure
- ▶ The skid and lifting system is designed according to ISO and DNV 2.7-3
- ▶ Conforms to all industry standards related to vessel, piping, valves and service

Three-Phase Test Separator

Typical Specification (42"x10' 1,440 psi)

Design Pressure	1,440 psi @50deg. C.(122F)	
Temperature	-28.g. eg C(-20eg. F)~50 deg. C(122 deg. F)	
Gas Capacity	56 MMSCFD at 1,440 psi operating pressure	
Liquid Capacity	6,960 BPD total liquid with 2.0 minutes retention	
Design code	API Spec. 12J ASME Section VIII, Div. 1 ASME B31.3 & B31.8 ASME B 16.5 NACE MR 0175 DNV 2.7-3	
Vessel		
Vessel Size	42"IDx10' Long Seam to Seam	
Vessel Internals	Deflector plate Steel plater Foam breaker Weir plate Mist Extractor Element Vortex breaker	
Main component brand	Control Valve(Gas/Oil/Water)	Fisher
	Oil and Interface Controller	Fisher
	Liquidated LCV	Fisher
	Gas Flow Orifice Meter	Daniel
	Gas Flow Recorder	Barton
	Liquid Turbine Flow Meter	Nuflo
Connection		
Well Fluid Inlet	3" Fig 602 Hammer Union	
Gas Outlet	4" Fig 602 Hammer Union	
Oil Outlet	3" Fig 602 Hammer Union	
Water Outlet	3" Fig 602 Hammer Union	
Vent	4" Fig 206 Hammer Union	

Note: other size of Test Separators(Three-Phase & Four-Phase) are available, we can design suitable separators according to your demands, instrument brands can be appointed.