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
### Typical Specification (42”x10’ 1,440 psi)

<table>
<thead>
<tr>
<th>Design Pressure</th>
<th>1,440 psi @50deg. C.(122°F)</th>
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<tbody>
<tr>
<td>Gas Capacity</td>
<td>56 MMSCFD at 1,440 psi operating pressure</td>
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<tr>
<td>Liquid Capacity</td>
<td>6,960 BPD total liquid with 2.0 minutes retention</td>
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#### 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.*