



Oil Production

Heater Treater



Definition

Heater Treater offers a reliable and cost-effective solution to heat crude and accelerate the separation of produced water and crude oil. Our Heater Treaters come with the options of mechanical separation using our high efficiency Colaescer Plate Packs or separation using electrostatic forces to meet stringent guarantees. These units are designed to process crudes ranging from Light Condensate to Heavy Opportunity Crudes.

Product Application:

- Oil and Gas Processing Facilities
- Early Production Facilities (EPF)

Process Description

As the name suggests, these units have two sections as listed below:

- Heating Section
- Separation Section

Heating Section: In this section, crude oil enters the unit and is heated by fired tubes. Based on Head Duty we offer either U-tube or Multi-return Fired Tube design. The fuel which can be either gas, diesel, or heavy oil is burned inside the fired tubes using high efficiency burners. Our Heater Treater can be designed with Natural Draft or Forced Draft burners for efficient combustion. The heat breaks the oil-water emulsion and reduces the viscosity of crude oil. This enhances the efficacy of downstream separation section.

Separation Section: The crude from Heating Section flows to next section, separated by a baffle. As per process requirement, the separation section is offered with either a mechanical coalescer or Electrostatic grids. Crude oil and water get separated due to mechanical or electrostatic forces and leave the unit.

The unit is provided with Gas Boot to enable associated gas to get separated and released out of the unit.



The unit will include following internals/equipment:

- Pressure Vessel
- Fired Tubes
- Burner
- Electrode Grids (In CS/ SS316L/ Alloy 625)
- Spring Contactor
- Copper Cable (for transformer)
- Inlet & Outlet Header
- Transformer
- Mixing Valve
- Piping and Valves
- Suspension Insulator
- Entrance Bushing (for transformer)
- Level Gauge (for transformer)
- Sand Washing Header (Optional)
- Control Panel with Burner Management System
- Wash water Pumps and Heat exchanger

Technology Advantage:

- Option to use different fuels (Gas/ Diesel/ Dual Fired)
- Forced Draft Burner to ensure efficient combustion to meet environmental emission norms
- Separation section with option of plate packs/ electrode grids for AC or AC/ DC technology

- Advanced Three Phase Power Transformer to simplify Clients power distribution
- Proprietary Inlet Distribution to ensure uniform distribution and efficient separation
- Advanced Control Modules to ensure hassle free operation and high safety standard

Capability:

- 20+ years of field performance
- Compact Footprint
- Simple and Robust design
- Meets Stringent Performance Guarantee
- Ideal for Early Production and Central production Facilities
- Modular Solution for Offshore and FPSO
- Rich industry expertise for fast track delivery of units

Our Services:

- Supply of internals and Process Design/Complete packaged assembly
- FEED Study Services
- Custom Built/ Standard design
- Fast Track Delivery
- Rental Services
- Troubleshooting & Optimization of units

DELIVERING CONFIDENCE

WITH CLEAN AND SAFE ENERGY SOLUTIONS

