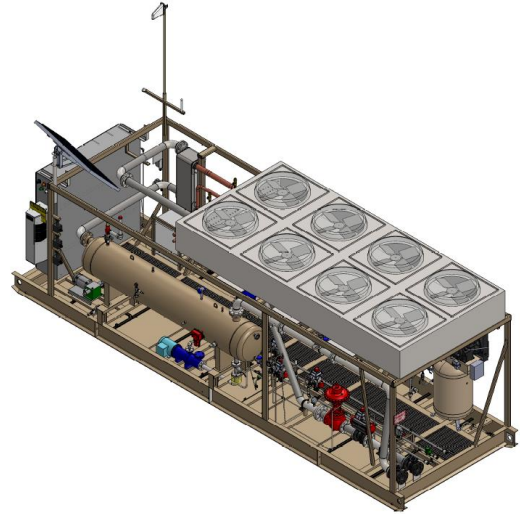


- 10,000 MSCF / day processing capacity
- Refrigeration & separation removes water and condensable hydrocarbons
- Can be used for gas conditioning and tank vapor capture applications
- Rapidly deployed and redeployed
- Scalable via paralleled units
- Extreme turndown – no minimum flow rate requirement
- Fully autonomous with 24/7/365 remote monitoring

Description

The **Dew Point Suppression 10000** is a modular gas processing plant that processes liquid-rich associated gas and tank battery vapors at the wellsite or at central processing facilities. It separates out water, condensable hydrocarbons, and conditioned gas. The conditioned gas is ideal for use as fuel in equipment such as compressors. When injecting into a raw gas gathering line, use of the system results in lower gas injection temperature, reduced pooling due to terrain and reduced likelihood of hydrate formation. In vapor capture applications, emissions are reduced when flaring or combusting the conditioned gas, which helps enable oil production while producing valuable condensate.

The Dew Point Suppression system operates at a modest process pressure of 80 to 400 PSIG. This means that if the producer can provide raw gas at this pressure, no front-end compression is required. Lower pressure gas streams can be accommodated by adding separate compression equipment. A mechanical refrigerator cools the gas to as cold as +3°C, liquefying water and heavy hydrocarbon components. An onboard three phase separator then dissociates the gas into **unstabilized condensate, produced water, and conditioned gas**.



Dew Point Suppression 10000 Characteristics

GAS PROCESSING CAPACITY	Up to 10,000 MSCFD of capacity at 1,300 BTU / cu ft gas input. Up to 8,000 MSCFD of capacity at 1,550 BTU / cu ft gas input.
PRESSURE RATINGS	450 PSI MAWP 80 – 400 PSI typical inlet operating pressure
REFRIGERATION	Semi-hermetic screw compressor Oil-separators, filter-driers, suction-accumulators used to improve reliability and performance Plate-heat-exchangers 304SS Air-cooled condensing units with floating-coils Configurable output temperature for conditioned gas
SEPARATION	Carbon steel construction Three-Phase Separator: Produces separate produced water, unstabilized condensate and conditioned gas streams Transfer Pumps: Mag-coupled regenerative turbine
FILTRATION	Inlet gas strainers to remove particulate contamination
CONTROLS	Wireless cellular communications protocol used with satellite back-up Opto22 controllers, mGuard security firewall All control valves pneumatically actuated (via onboard instrument air) Control valves equipped with limit-switches to report valve position
SKID DIMENSIONS	40-ft long x 8.5-ft wide x 10-ft tall Est. Weight: 28,000 lbs.
POWER REQUIREMENTS	~250 kWe, 480V 3phase 60Hz. Optionally available in 415V 3phase 50Hz configuration. Power can be provided via grid power or by use of a natural gas genset which can be fueled by the conditioned gas
SAFETY & COMPLIANCE	UL 508 Electrical; Class-1 Division-2 Group-D / ATEX Zone 2 ASME Stamped Pressure Vessels Pressure relief valves and rupture-disks Automatic blow-down system to quickly and safely empty system of all liquid hydrocarbons Redundant instrumentation used in critical areas Compliant with EPA OOOO/VVa

Equipment Pictures



Typical Site Configuration

