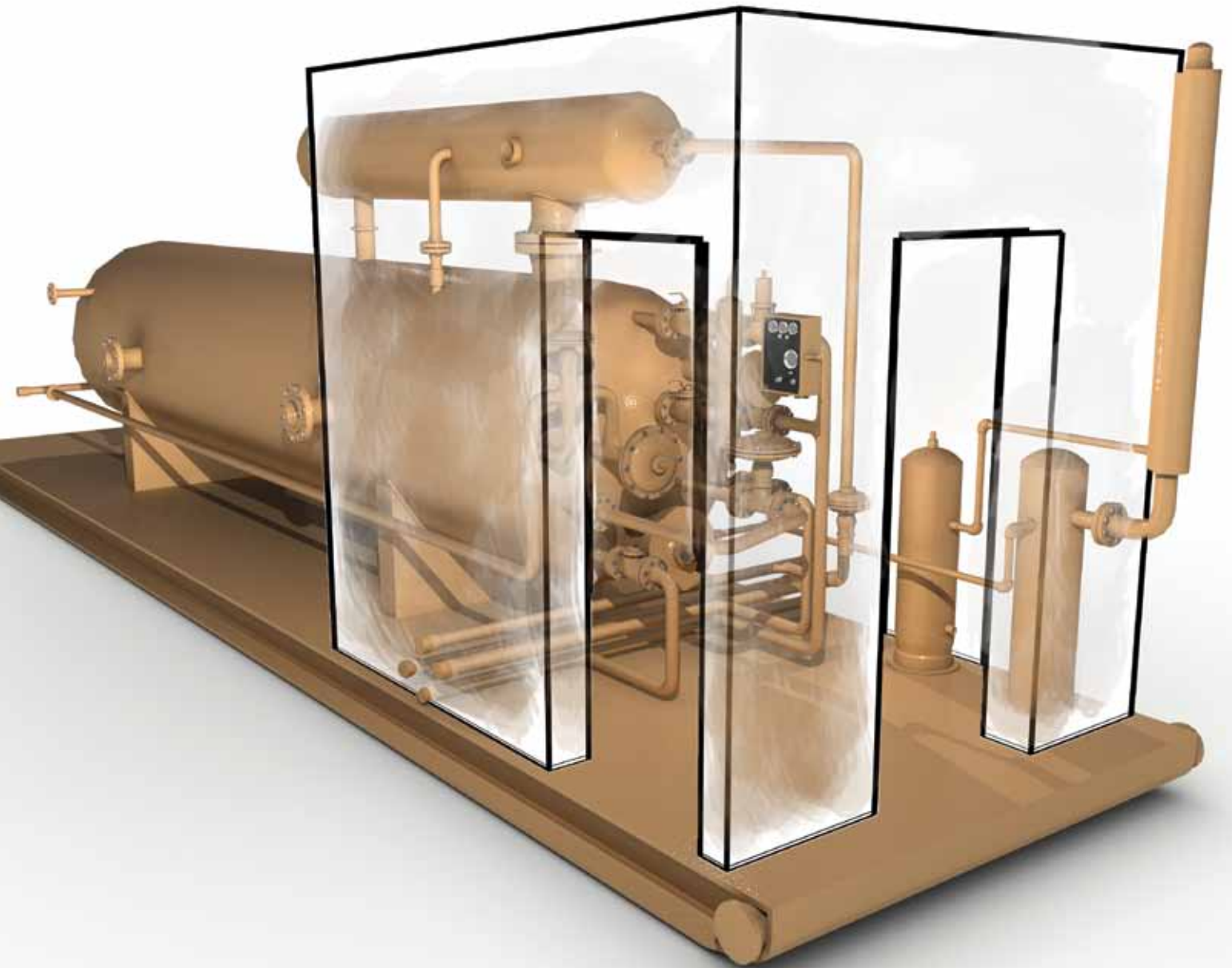


# Engineered Concepts, LLC

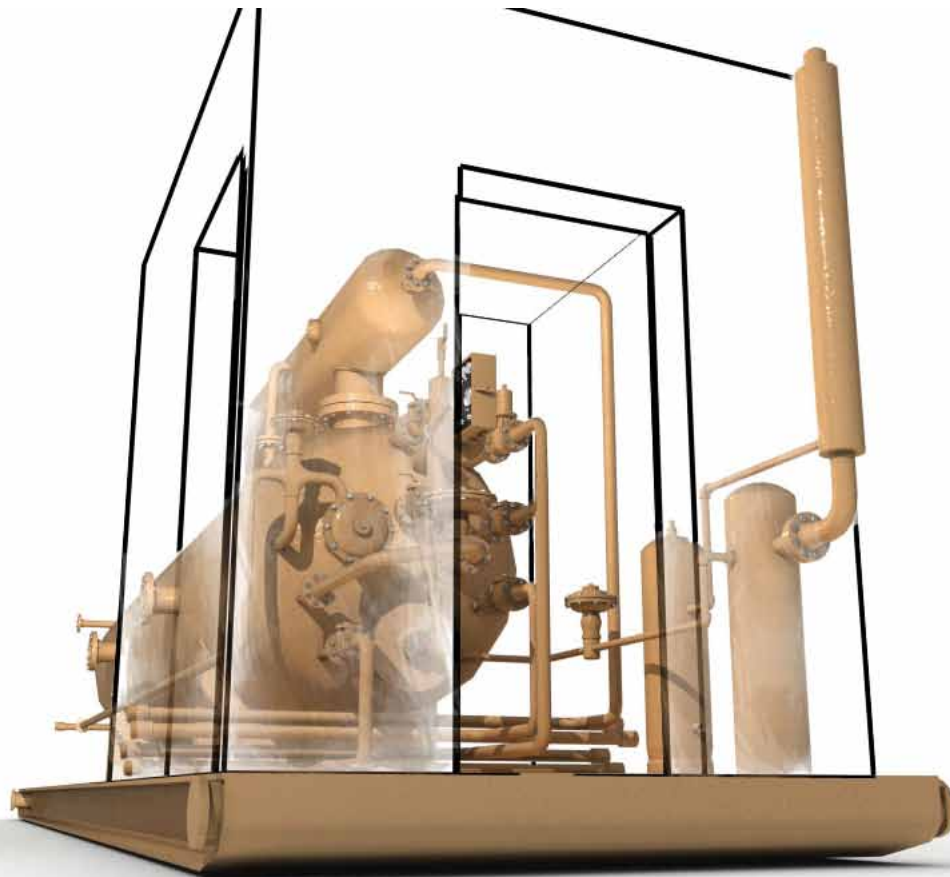
## Emission Free Technologies



**TREATER-COMBO**

## CUT PROCUREMENT, LOGISTICS AND INSTALLATION TIME/ EXPENSES

The Engineered Concept's Treater-Combo puts your well into production in record time. The unit can be hauled anywhere without an over width or over height permit and is designed for both oil field truck tail board loading or crane loading and setting.



*The Treater-Combo greatly simplifies installation and operation by combining all of the functions of a two-phase high-pressure horizontal separator, line heater and horizontal treater on a single skid.*

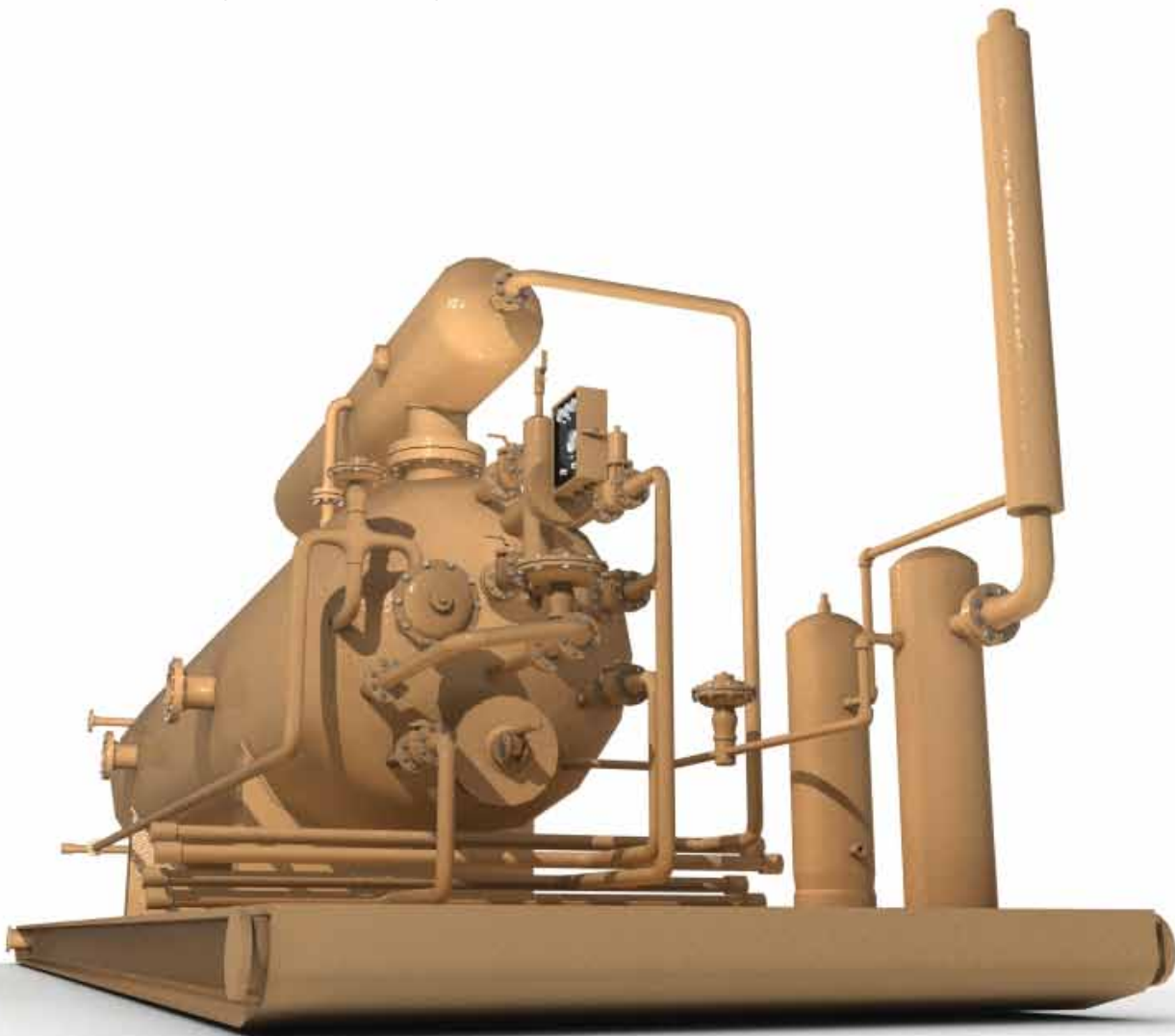
Treater-Combo skid mounted units combine all the functions of a two-phase high-pressure horizontal separator, line heater and horizontal heater treater on a single skid. The unitized package is also equipped with a gas dryer that supplies clean gas under all operating conditions including severe cold. Best of all the Engineered Concepts Treater Combo is simple to operate.

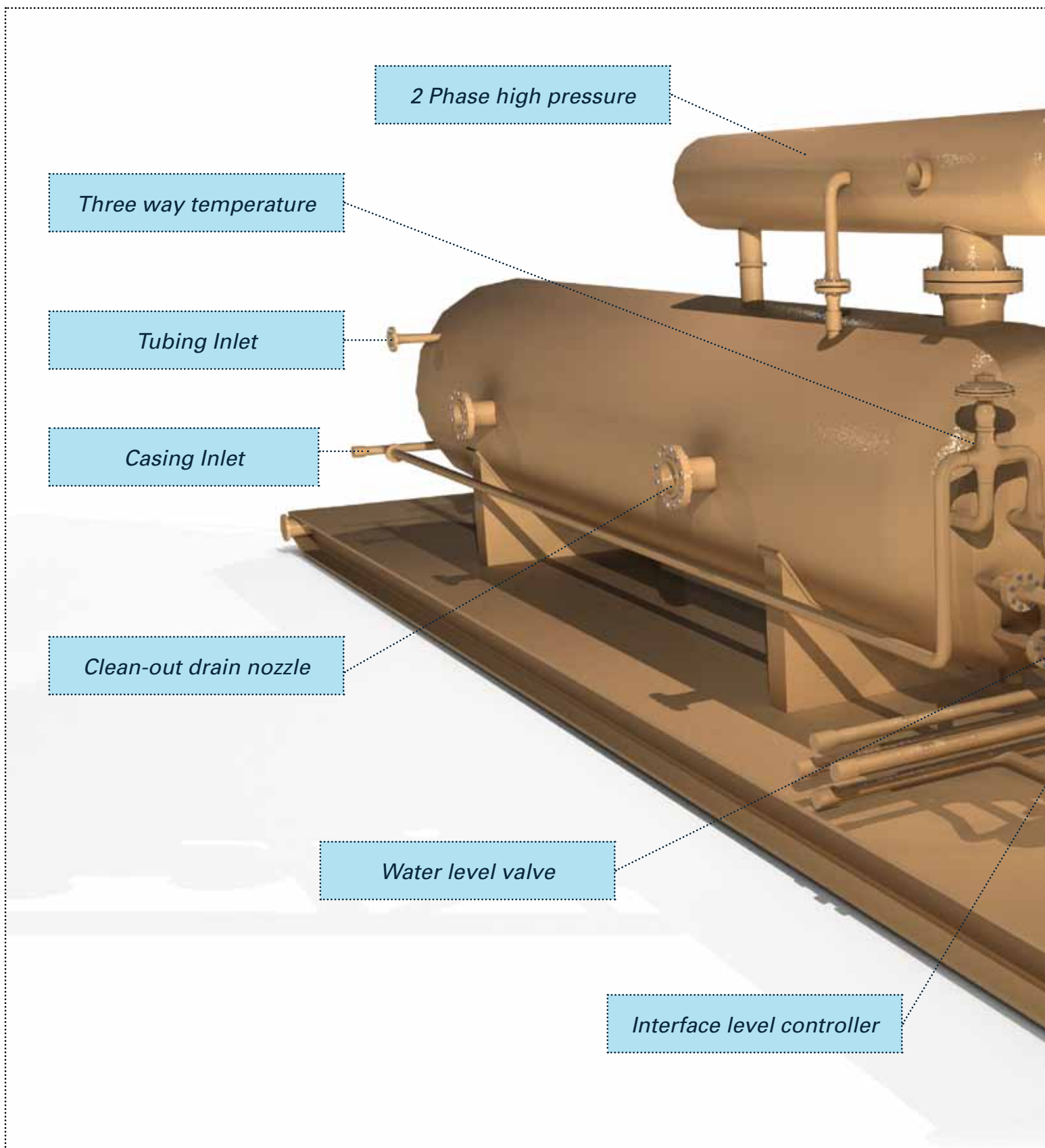
## **SIMPLY LEVEL THE SKID, MAKE SIX CONNECTIONS AND START PRODUCING.**

Hook up in the field is simplified. For a typical artificial lift application, the liquid from the tubing is brought to the treater vessel, the casing gas to the heating coil and then on to the HP separator. There is an oil outlet line, a water outlet line, a HP sales gas outlet line, and a low pressure flash gas line to a VRU. Hook up six (6) lines to the unit and the whole location is handled in one unit.

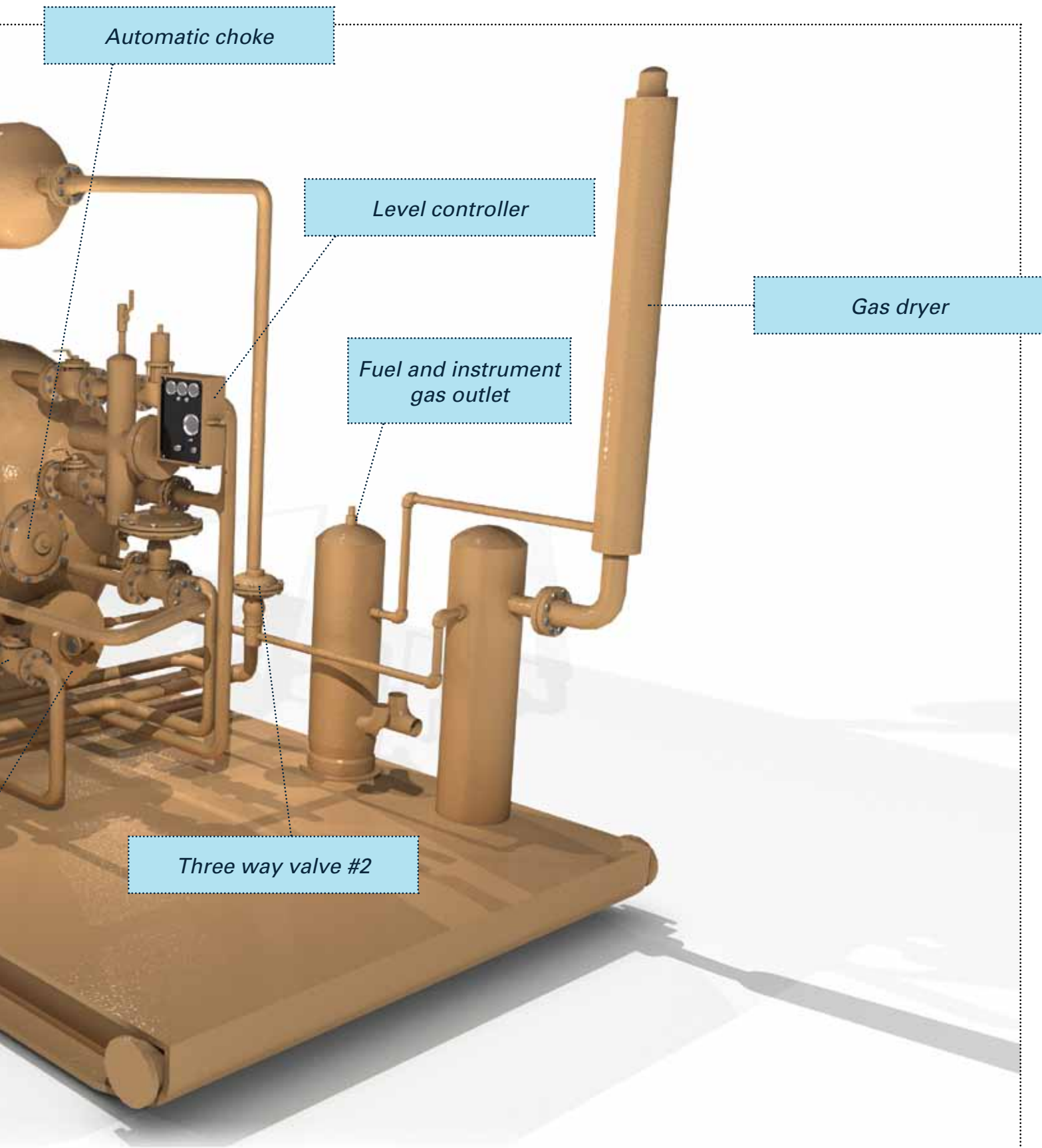
## **SUPERIOR SEPARATION ADVANTAGES**

It has been known for years that horizontal vessel orientations offer superior separations efficiency. The horizontal orientation of this dual function skid affords much greater gas/oil/water surface area combined with a longer more effective firetube. The horizontal orientation enables the entire package to be set onsite without a crane. Insulating, guy wires, piping, welding, leveling, manpower, equipment rental and all of their required logistics are all eliminated or significantly reduced. Integral housing eliminates building construction altogether.









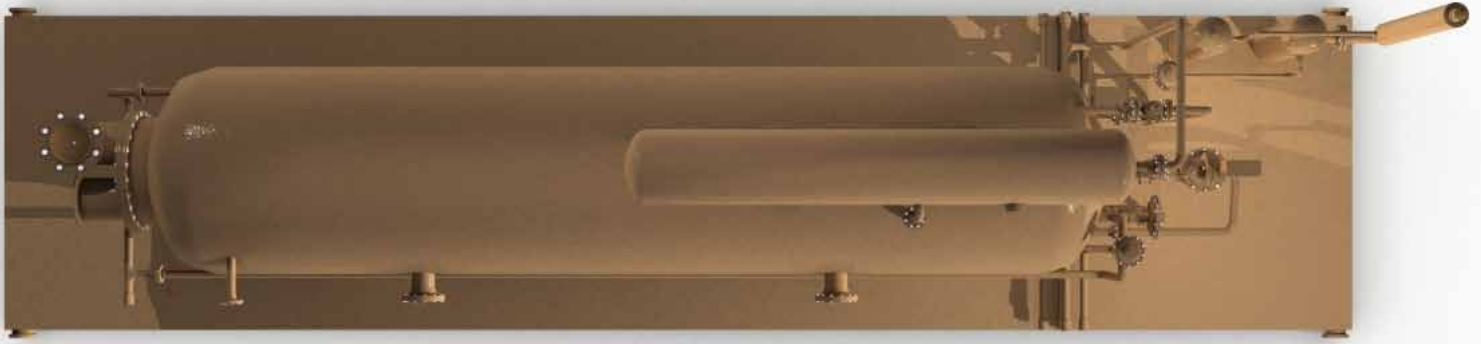
*Automatic choke*

*Level controller*

*Gas dryer*

*Fuel and instrument  
gas outlet*

*Three way valve #2*

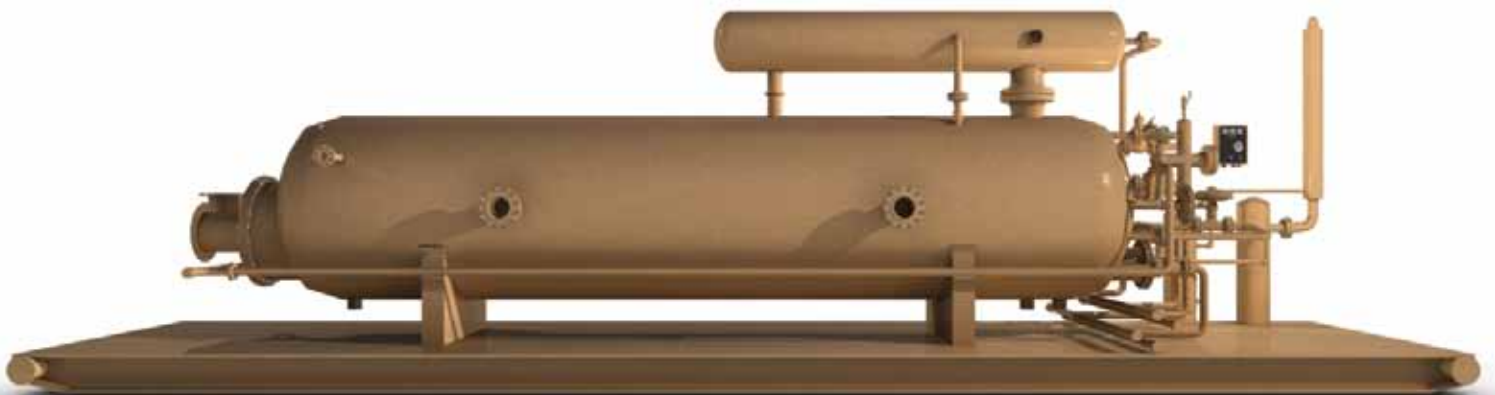


## **EASY ACCESS CENTRALIZED CONTROL**

Engineered Concepts Treater-Combo packages can be designed to accommodate a wide range of operating pressures and production volumes. During winter operators do not have to visit each separate piece of equipment around the well pad. All high pressure separator, heater treater and gas dryer operations are monitored and controlled inside a single insulated housing for comfort and protection during extreme cold temperatures. To simplify maintenance, the Treater Combo features a removable fire tube and coil and clean out/drain nozzles.

## **OVER 50 YEARS OF INNOVATION**

When it comes to engineering, designing and fabricating production equipment that operates reliably in adverse conditions like the Bakken, you will be hard pressed to find a more experienced company than Engineered Concepts. After 50 years of experience and 40 patents and patents pending, we have earned our reputation for solving field-operating problems in some of the nation's coldest and most harsh environments. Read about our history @ [www.engineeredconcepts.com](http://www.engineeredconcepts.com)



## TREATER COMBO SYSTEM FEATURES

Engineered Concepts Treater-Combo units are designed and fabricated to meet your specific production and capacity requirements. Standard systems will include:

2 phase HP separator with 10 ¾" OD liquid boot immersed in the treater

75 psig, 3 phase treater 750 Mbtu/hr fire tube, 3000# heating coil with 3-way temperature control valve and automatic choke.

Removable fire tube and coil assembly.

The treater is designed to accept a larger fire tube assembly through the fire tube nozzle without additional modifications.

The treater comes insulated with 2" insulation. The enclosure is also insulated with 2" rigid board insulation, foil both sides.

Both the treater and HP separator have clean-out/drain nozzles for washing out any accumulated solids. The treater has two (2) flanged inspection/wash nozzles.

All of the controls, valves, and instruments are housed within the insulated enclosure. The enclosure will have three (3) man doors and adequate room for easy access and maintenance.

All weather fuel gas system not effected by extreme cold weather conditions

[www.engineeredconcepts.com](http://www.engineeredconcepts.com)



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