

CLAYTON  
SCANDINAVIA

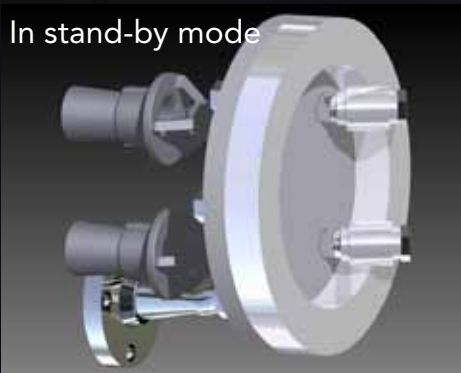
INNOVATIVE HEATING SOLUTIONS

# ORO tank heating system

In operation mode



In stand-by mode



## Method for Heating of Recovered Oil

Steam to be injected directly into the recovered oil via eductor nozzles mounted on fixed or hinged hatchways. The eductor nozzles force the recovered oil into movement and create a stirring effect, which gives an efficient heat transfer to the emulsion.

The nozzles can also be directed against the emulsion suction pipe.

## Applications

The ORO tank heating system is suitable for various tank designs, circular, rectangular or other shapes.

The tank heating equipment is complying with NOFO requirements for Heating of Recovered Oil.

The system can easily meet other Operators requirements.

# Electric heated steam and hot water boiler

## Advantages and main features

Lowest possible dimensions in comparison with conventionally heated and designed boilers of same capacity.

Applies ideally to limited spaces due to compact design.

No lines connected for fuel supply and flue gas outlet.

No fuel storage tanks needed.

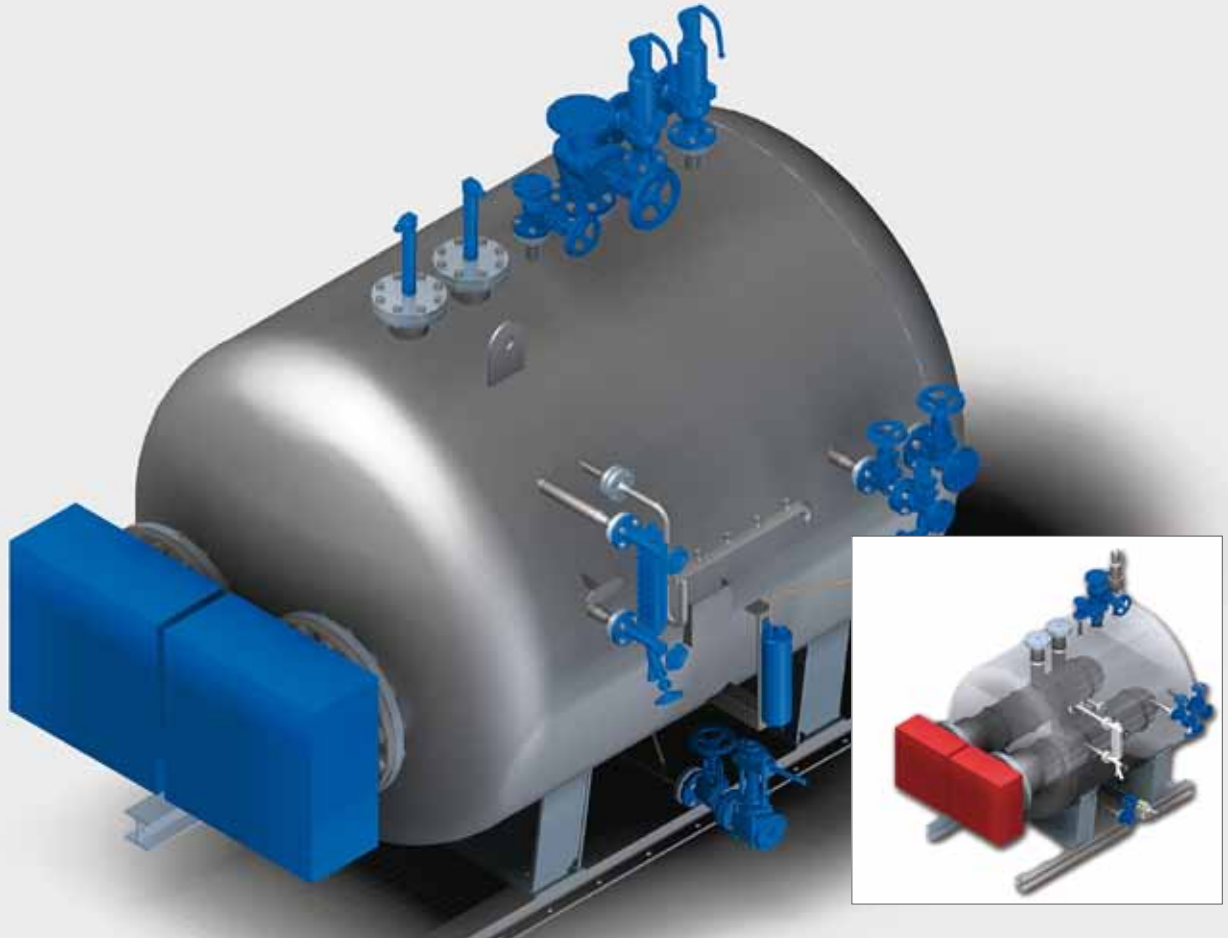
No environmental pollution or explosion risk as existing when utilizing liquid or gaseous fuels.

Minimized operation costs / service, maintenance, repair in comparison with conventionally heated boiler. Less leakage possibilities of faulty welding in comparison with conventionally heated boilers.

72 hours operation without permanent supervision because of state-of-the-art self controlling and redundant electronic safety systems.

Prefabricated and preinstalled package. Boiler including electrically installed control box, feed pumps, auxiliary fittings etc. delivered on site ready for operation.

For marine and offshore applications.



# Clayton Steam Generator

## Steam Systems

Clayton Steam Systems design the most compact, reliable and efficient steam plant available today and are flexible enough to be supplied in many different forms.

- Containerised boiler house
- Skid-packaged systems
- Mobile Units
- Multiple Systems
- Offshore Versions
- Marine Specifications
- Turnkey Installations

These are exciting times for Clayton Steam Systems since many new applications are being demanded worldwide and the Clayton technology is being used for emerging applications where outdated equipment is no longer suitable for the modern world.



Multiple steam systems



## Available models

The range of Clayton Steam generators is being constantly developed and expanded.

As well as special designs Clayton has a range of standard steam generators to suit most applications.

### STANDARD MODELS

E10 TO E2004

### SUPER EFFICIENT MODELS

SE SSE SSSE

### RATINGS

100 kW to 20MW

### OUTPUTS

150 to 32,000 kg/h

### PRESSURES

Up to 200 barg

### TEMPERATURES

Saturated & Superheated



# Company information

Clayton Scandinavia is a Norwegian company established in 1982. We have more than 30 years experience in engineering, production and supplying of heating systems for offshore, marine and land based installations.

The company has delivered Steam and ORO Heating Systems for more than 50 vessels during the last five years, being built in Norway, Europe, The Far East and South America.

Our company is considered a leading supplier of such equipment for marine and offshore applications

Our Tank Heating System for ORO operations is in accordance with the Norwegian Clean Sea for Operating Companies (NOFO). The system will also meet other operator's requirements.

Our main marine customers and cooperating partners are shipyards, ship-owners and naval architect worldwide.

For land based industries our customers are breweries, chemical industry, food and beverage, power plants and the fishing industry.

Clayton Scandinavia is proud of being your supplier of  
**INNOVATIVE HEATING SOLUTIONS**



**Exhaust Gas Boilers**  
**ORO Tank Heating Systems**  
**Oil and Gas Fired Boilers**  
**Electric heated steam and hot water boiler**  
**Steam Generators**  
**Complete Heating Systems for all kind of vessels**  
**Containerised Steam Plants**  
**Service and Spare Parts World-Wide**



Clayton Scandinavia AS  
Stensrudveien 11B, NO-2335 Stange, Norway  
Tel.: +47 62 58 59 30 • E-mail: [clayton@clayton.no](mailto:clayton@clayton.no)

Dep. Ålesund: Kongensgate 3,  
NO-6002 Ålesund, Norway  
Tel.: +47 62 58 59 30 • E-mail: [lidvar.sperre@clayton.no](mailto:lidvar.sperre@clayton.no)

[www.clayton.no](http://www.clayton.no)