Clayton Steam Master

Advantages

The forced circulation coil design concept of the Clayton Steam Generator produces outstanding benefits to the user

High efficiency

Very high efficiency is the most obvious benefit that comes from small sizes because of low radiation and convection heat losses, which results in low running costs.

Small size

Compact design means that minimal space is required for a complete Clayton boiler house. For a new installation building costs are reduced and in an existing factory a Clayton system can easily be fitted into the available area and the low weight even permits location on an upper floor level.

Rapid Start

Start up from a completely cold condition in five minutes. The warm up time is minimized and the unit can be switched off when the operator leaves at the end of the working day. The Clayton Steam Master is therefore also ideal when used as an auxiliary or standby boiler.

Safety

No risk of a steam explosion. This is a danger associated with low water level in other types of boilers that store a large volume of hot water. The Clayton Steam Generator does not have a water level and does not store a large volume of water so the risk is completely eliminated.

5 Year Warranty

The Clayton Steam Master is of an extremely robust construction suitable for industrial environments. This is why we are able to offer a five year guarantee on pressure parts.

Rapid Response

Extremely rapid response to changes in the demand for steam is inherent in the forced circulation design. A Clayton Steam Generator will speedily ramp up and run at maximum steam output continuously without faltering.

Low Blowdown

Blowdown which is necessary to prevent the buildup of impurities in all boiler systems is extremely small with the Clayton design. This saves fuel, saves chemicals and saves water.

Easy Operation by Touch Screen

Very easy handling by touch screen panel, where appear operating instructions, functional trends & history and maintenance indications.

Unattended Operation

Because of the inherent safety and automatic systems all gas fired Clayton CSM Steam Generators can run without permanent supervision for up to a period of one week. To make the whole boiler room suitable for unattended operation, the Unattended Boiler Room Package is available.

Low Maintenance

One of the practical benefits of the simple design concept is that maintenance requirements are minimal. In addition all of the components have been developed and improved over many years to make the Clayton Steam Master the most reliable steam boiler available today.

Clayton's success is built on the expertise of staff who are committed to providing exceptional levels of customer service and support. The Clayton lifetime customer care is second to none and our dedicated service team is available 24 hours a day - 7 days a week to assist with immediate technical support.





CLAYTON OF BELGIUM nv

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Clayton Steam Master



CSM15 from 60 to 235 kg/h 4 to 7 barg



CSM30 from 120 to 470 kg/h 4 to 16 barg



CSM45 from 175 to 703 kg/h 4 to 16 barg



CSM75 from 350 to 1175 kg/h 4 to 25 barg

friendly touch screen gives operator prompts and

self-diagnostics with immediate visual indication of

status. Information is clearly displayed to show that

your steam supply is working perfectly. The units are

fitted with safeguards to permit unattended operation

for up to 1 week (except for the oil fired 15)

Open steam valve

Close drain valve

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CSM100 from 470 to 1565 kg/h 4 to 25 barg



CSM125 from 585 to 1956 kg/h 4 to 25 barg

Clayton Steam Master

The Clayton Steam Master represents progress achieved after operating experience with advanced steam boiler technology since 1930.

This is the latest product of our progressive research and development programs and is the next generation Clayton Steam Generator for steam duties in the range up to 1956 kg/h.

Technical Description

All sizes of Clayton Steam Master can run on either oil or gas. Gas fired units have fully modulating output control and oil fired units have the Clayton three step modulating control. Electrical supply for the 3 smaller units required is 230V single phase. Larger units require 3-phase power supply.

Steam is produced by a heated, once-through, water tube coil that is the heart of the design. An additional feature is the unique Clayton glandless, packless water pump that has been proven to give outstanding performance, response and reliability. The Clayton Steam Master is of an extremely robust construction suitable for industrial environments. This is why we are able to offer a five year guarantee on pressure parts.

STEAM MASTER The Clayton 'easy start' system is a straightforward Easy to Operate means of putting the unit into service. The user-

Touchscreen Control

High Efficiency

Five Year Warranty

Fully Modulating

Low Emissions

Runs Without Permanent Supervision

Short Start- up Time

Reliable

Low Maintenance

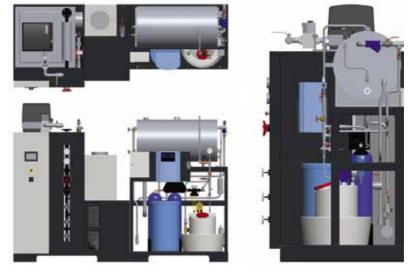
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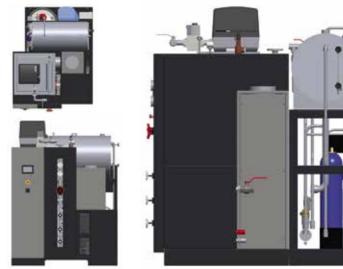
Approximate Overall Dimensions

		CSM15	CSM30	CSM45	waterskid
Length	mm	1600	1800	1800	1525
Width	mm	1172	1350	1350	1030
Height	mm	1710	2237	2460	2265
Transport height without burner and safety valve	mm	1710	1936	2058	-
Maintenance height above burner	mm	250	250	250	-

		CSM75	CSM100	CSM125	waterskid
Length	mm	2100	2100	2100	2500
Width	mm	1600	1600	1600	1500
Height	mm	2200	2200	2200	2500
Height with economizer	mm	2497	2497	2497	-

Positioning of Water Preparation Package





Option Packages

The Six option packages are available for configuration of the Clayton Steam Master to suit your particular needs.

To reduce fuel consumption and significantly lower annual running costs, by adding an economizer section.

Integrated high efficiency steam separator, steam trap and automatic blowdown valve. This package can be supplied with the unit or easily fitted at a later date.

Skid mounted horizontal hotwell, chemical dosing, blowdown cooling, twin water softener and sample cooler. To be positioned beside the Clayton Steam Master. Including flexible hoses for connection between Clayton Steam Master and Water Preparation package.

Jnattended Boiler Room Package

For operation of the boiler room for up to one week without permanent supervisions the Unattended Boiler Room Package includes a conductivity monitor and hardness monitor mounted on the water preparation package.

For additional peace of mind, the Remote Communication Package is a major benefit. You can choose to have messages on the running status sent to a mobile device or Ethernet communication for data exchange with a remote control system.

Automatic start/stop

Package

Includes a back pressure regulator and uses a steam trap or a motor valve for unloading. This option also requires the 'Steam Quality Package' (see above).

