

TECHNICAL SPECIFICATIONS

CLAYTON STEAM GENERATORS

SAVES FUEL

The unique counter flow design provides higher fuel-to-steam efficiency than traditional boilers.

SAFE

The Clayton design eliminates any possibility of a steam explosion.

RAPID RESPONSE

The Clayton design responds rapidly to sudden or fluctuating load demands.

FAST START

cold start within five to ten minutes, without thermal stress.

COMPACT AND LIGHTWEIGHT

The Clayton design typically occupies one-third of the floor space and is 75% lighter than a traditional boiler.

HIGH-QUALITY STEAM

Clayton provides a 99.5% quality steam separator to minimize moisture and carryover.

FUEL VERSATILITY

Natural gas, propane, biofuels, light oil and heavy oil burners available singularly or in combination.

ADVANCED CONTROLS

Most units are equipped with a Programmable Logic Controller (PLC) for accurate and reliable operation.

LOW NO_x

Industry-leading Low NO_x burners are available for added environmental protection.

FACTORY SERVICE

Expert service is available 24 hours a day direct from factory in the U.S., Canada, Mexico, Europe and Asia; and worldwide through our service distributors.

STEAM MASTER CSM-30



CLAYTON
STEAM MASTER

Clayton
SigmaFire™

CLAYTON E-SERIES

 **Clayton**
INNOVATIVE STEAM SOLUTIONS

TECHNICAL SPECIFICATIONS

Advanced Steam Boiler Technology that is Safe, Efficient and Reliable

MODEL CSM30	MODEL CSM-30 Standard	MODEL CSM-30 with Super Economizer
BOILER HORSEPOWER	30	30
HEAT INPUT, BTU/hr		
Oil	1,195,536	1,141,193
Gas	1,239,815	1,181,471
NET HEAT OUTPUT, BTU/hr	1,004,250	1,004,250
EQUIVALENT OUTPUT (from and at 212°F feedwater and 0 PSIG steam)	1,035 lbs/hr	1,035 lbs/hr
DESIGN PRESSURE (see note 1)	150 psig	150 psig
STEAM OPERATING PRESSURE	65-125 psig	65-125 psig
OIL CONSUMPTION	8.5 gph	8.1 gph
at maximum steam output (see note 2)		
GAS CONSUMPTION	1,240 cfh	1,182 cfh
at maximum steam output (see note 3)		
BURNER CONTROLS		
step-fired (oil)	100% / 50% / Off	100% / 50% / Off
modulating (gas)	4 to 1 Turndown	4 to 1 Turndown
EFFICIENCY		
oil-fired efficiency %	84%	88%
gas-fired efficiency %	81%	85%
ELECTRIC MOTORS, HP (see note 4)		
design pressure 150 psig	Blower Pump 0.67 0.75	Blower Pump 0.67 0.75
ELECTRIC FLA, based on 230 V (see note 5)	11	11
GAS SUPPLY PRESSURE REQUIRED	2 psig	2 psig
WATER SUPPLY REQUIRED	265 gph	265 gph
HEATING SURFACE	141 sq.ft.	199.1 sq.ft.
EXHAUST STACK CONNECTION, o.d.	10 in.	10 in.
APPROXIMATE OVERALL DIMENSIONS		
length	71 in.	71 in.
width	53 in.	53 in.
height	88 in.	88 in.
WEIGHT		
installed - wet	3,328 lbs	3,548 lbs
shipping	3,152 lbs	3,350 lbs

1) Design Pressure currently limited to 150 psig.

2) Based on No. 2 fuel oil with a High Heat Value (HHV) of 140,600 BTU/Gal.

3) Based on Natural Gas with a High Heat Value (HHV) of 1,000 BTU/Ft.³

4) Oil fired units also use a separate motor driven fuel oil pump - 1/2 HP

5) Continuous running. 230Vac/1/60Hz power supply required.

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The description and specifications shown were in effect at the time this publication was approved for printing. Clayton Industries' policy is one of continuous improvement and Clayton reserves the right to discontinue models at any time and/or change specifications or design without notice and without incurring obligation.