

# 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 NOx

Industry-leading Low NOx 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-15



CLAYTON E-SERIES

Clayton  
SigmaFire™

 **Clayton**  
INNOVATIVE STEAM SOLUTIONS

# TECHNICAL SPECIFICATIONS

Advanced Steam Boiler Technology that is Safe, Efficient and Reliable

MODEL CSM15	MODEL CSM-15 Standard	MODEL CSM-15 with Super Economizer
<b>BOILER HORSEPOWER</b>	15	15
<b>HEAT INPUT, BTU/hr</b>		
Oil	597,768	570,597
Gas	619,907	590,735
<b>NET HEAT OUTPUT, BTU/hr</b>	502,125	502,125
<b>EQUIVALENT OUTPUT (from and at 212°F feedwater and 0 PSIG steam)</b>	518 lbs/hr	518 lbs/hr
<b>DESIGN PRESSURE (see note 1)</b>	150 psig	150 psig
<b>STEAM OPERATING PRESSURE</b>	65-125 psig	65-125 psig
<b>OIL CONSUMPTION</b>	4.3 gph	4.1 gph
at maximum steam output (see note 2)		
<b>GAS CONSUMPTION</b>	620 cfh	591 cfh
at maximum steam output (see note 3)		
<b>BURNER CONTROLS</b>		
step-fired (oil)	100% / 50% / Off	100% / 50% / Off
modulating (gas)	4 to 1 Turndown	4 to 1 Turndown
<b>EFFICIENCY</b>		
oil-fired efficiency %	84%	88%
gas-fired efficiency %	81%	85%
<b>ELECTRIC MOTORS, HP (see note 4)</b>		
design pressure 150 psig	Blower   Pump 0.67   0.5	Blower   Pump 0.67   0.5
<b>ELECTRIC FLA, based on 230 V (see note 5)</b>	10	10
<b>GAS SUPPLY PRESSURE REQUIRED</b>	2 psig	2 psig
<b>WATER SUPPLY REQUIRED</b>	133 gph	133 gph
<b>HEATING SURFACE</b>	78.6 sq.ft.	110.9 sq.ft.
<b>EXHAUST STACK CONNECTION, o.d.</b>	8 in.	8 in.
<b>APPROXIMATE OVERALL DIMENSIONS</b>		
length	63 in.	63 in.
width	46 in.	46 in.
height	67 in.	67 in.
<b>WEIGHT</b>		
installed - wet	2,502 lbs	2,689 lbs
shipping	2,424 lbs	2,601 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.<sup>3</sup>
- 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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**(800) 423-4585**

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.