M O

Specifications

Advanced Steam Boiler Technology that is Safe, Efficient and Reliable

CLAYTON STEAM GENERATORS OFFER:

COMPACT SIZE

Clayton steam generators will normally fit in any available area while also reducing construction costs on new building installations.

FUEL EFFICIENT

High efficiency which is inherent with the clayton design translates into lower operating costs and improved overall system operation

RESPONSIVE

Very rapid response to changing steam loads. Clayton steam generator will automatically modulate to match your steam load profile while maintaining system steam pressure

SAFE

Our once through design eliminates the possibility of a steam or water side explosion. The Clayton steam generator is simply the safest steam boiler on the market.

LESS WATER WASTE

Clayton's design concentrates TDS blow down significantly which reduces wasted fuel, water and chemical costs.

FAST START

Full steam pressure and output in minutes from a cold start- up saves fuel and labor cost over conventional designs. Eliminates wasted fuel from idling.

AUTOMATIC

Operation is automatically controlled and the Clayton steam generator can be started from a single switch or remotely using an automatic start option.

LOW WEIGHT

The relatively light weight means that all sizes of Clayton steam generators can be easily moved and installed even in areas with limited structural support.

RELIABLE

Reliability of the Clayton steam generator is field proven and unsurpassed. This results in greatly reduced maintenance and attendance.

HIGH QUALITY STEAM

Steam Quality in excess of 99.5% dry is assured at all times. This is the highest steam quality of any competitive design. Less water and impurities further increase your energy efficiency.

MODEL E154 STEAM GENERATOR 150 BHP







MODEL E154								MODEL SEG154-FMB			
	MODEL	. E154	MODEL	MODEL SE154		MODEL EG154-FMB			with Low NOx FMB Burner		
	Stand	Standard		with Super Economizer		with Low NOx FMB Burner			and Super Economizer		
BOILER HORSEPOWER	150		150		150			150			
HEAT INPUT, BTU/hr Oil	6,049,699		5,838,663		NA		NA				
Gas	6,123,476		5,907,353		6,199,074		5,907,353				
NET HEAT OUTPUT, BTU/hr	5,021,250		5,021,250		5,021,250		5,021,250				
EQUIVALENT OUTPUT (from and at 212°F											
feedwater and 0 PSIG steam)	5,175 lbs/hr		5,175 lbs/hr		5,175 lbs/hr			5,175 lbs/hr			
DESIGN PRESSURE (see note 1)	15 - 500 psig		15 - 500 psig		15 - 500 psig			15 - 500 psig			
STEAM OPERATING PRESSURE	13 - 450 psig		13 - 450 psig		13 - 450 psig			13 - 450 psig			
(determined by design pressure)											
OIL CONSUMPTION	43.0 gph		41.5 gph		N/A			N/A			
at maximum steam output (see note 2)			l								
GAS CONSUMPTION	6,123 cfh		5,907 cfh		6,199 cfh		5,907 cfh				
at maximum steam output (see note 3)								•			
BURNER CONTROLS											
modulating	5 to 1 Turndown		5 to 1 Turndown		4 to 1 Turndown		4 to 1 Turndown				
EFFICIENCY											
oil-fired efficiency %	83%		86%		NA		NA				
gas-fired efficiency %	82%		85%		81%		85%				
ELECTRIC MOTORS, HP (see note 4)	Blower	Pump	Blower	Pump	Blower	Pump	Cooling	Blower	Pump	Cooling	
design pressure 15-300 psig	7.5	5	7.5	5	7.5	5	5	7.5	5	5	
design pressure 301-500 psig	7.5	7.5	7.5	7.5	7.5	7.5	5	7.5	7.5	5	
ELECTRIC FLA, based on 460 V (see note 5)				•	· '		•		•	•	
design pressure 15-300 psig	24		24		32		35				
design pressure 301-500 psig	28		28		35			35			
GAS SUPPLY PRESSURE REQUIRED	5 to 10 psig		5 to 10 psig		5 to 10 psig			5 to 10 psig			
ATOMIZING AIR REQUIRED (see note 6)											
Capacity	25 scfm		25 scfm		NA			NA			
Minimum pressure	70 psig		70 psig		NA			NA			
AIR SUPPLY REQUIRED (FMB - see note 7)	N/A		N/A		5 scfm @ 3 to 150 psig		5 scfm @ 3 to 150 psig				
WATER SUPPLY REQUIRED	795 gph		795 gph		795 gph		795 gph				
HEATING SURFACE	473 sq.ft.		610 sq. ft.		473 sq.ft.		610 sq. ft.				
EXHAUST STACK CONNECTION, o.d.	18 in.		18 in.		18 in.		18 in.				
APPROXIMATE OVERALL DIMENSIONS											
length	117 in.		117 in.		114 in.		114 in.				
width	101 in.		101 in.		108 in.		108 in.				
height	102 in.		121 in.		111 in.		128 in.				
WEIGHT											
installed - wet	8,407 lbs		9,611 lbs		8,607 lbs			9,811 lbs			
shipping	7,390 lbs		8,360 lbs		7,590 lbs			8,560 lbs			
FW pump skid	850 lbs		850 lbs			850 lbs		850 lbs			

- 1) Design pressures are available up to 3000 psig. Consult factory for details.
- 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 1/3 HP
- 5) Continuous running. For 575 V multiply by 0.8; for 380 V multiply by 1.1; for 230 V multiply by 2.0; for 208 V multiply by 2.2.
- 6) Atomizing air required for oil burner.
- 7) Compressed air required for FMB.

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



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