SteamGen Series III

Steamgen Series III is a packaged, three-pass smoke tube, with fully wet back boiler. It can also be customized to a completely skid mounted unit on customer demand. When fitted with a special burner, these boilers are ideal for burning waste gases like biogas from decomposition of organic matter in distilleries, corex gas from the steel manufacturing process and liquid fuels.

Product Features

- **Plug and Play boiler**
- **Multi-fuel option - light oils/heavy oils/gases**
- **High efficiency of about 94%**
- **High dryness fraction steam increases usable heat**
- **Comes with mono-block/ dual block/steam burners**
- **Large water holding capacity**
- **Corrugated furnaces for boilers above 6 TPH capacity**

Operating Range

- **Capacities : Standard 1 to 16 TPH, customized designs available upto 34 TPH**
- **Pressure : Standard – 10.54 to 17.54 Kg/cm² , customized designs for higher pressures available**
- **Temperature : Standard – Saturated, customized designs available**
- **Firing fuels : Standard – LDO, FO, LSHS & Natural gas.**
- **Efficiency: Overall efficiency of up-to 95 % with sensible heat recovery units.**

NOTE: We are using In-House Manufactured, Level Controls, Reflex Level Gauges and Gauge Glass Assemblies.

Technical specications

Description	Unit	S3-10	S3-15	S3-20	S3-30	S3-40	S3-50	S3-60	S3-80	S3-100	S3-120	S3-140	S3-160
Capacity (F&A 100°C)	kg / hr	1000	1500	2000	3000	4000	5000	6000	8000	10000	12000	14000	16000
Design pressure (SVLOP)	kg / cmg	10.54 / 17.5											
Efciency		As Per BS 845 Part 1 NCV Basis											
Furnace oil / Natural gas	%	89 (without HRU), 92 (with APH - for FO), 94 (with Economiser - for NG)											
Fuel		Furnace Oil / Natural Gas											
Fuel Firing System		Pressure Jet, Duo Bloc											
Fuel consumption		Without HRU / With HRU											
Furnace Oil	kg / hr	63/61	94/91	126/122	189/182	251/243	314/304	377/365	503/487	629/608	754/730	880/852	1006/973
Natural Gas	Nm³/ hr	71/69	107/104	143/138	214/207	286/276	338/357	428/406	571/541	714/676	857/811	999/946	1142/1081
Connected Electrical Load		10.54/17.5											
Furnace Oil (With APH)	kW	16/17	16/17	18/19	26/28.5	28/30	37/40	40/44	50/59	58/67	71/75	78.5/86	86/93.5
Natural Gas (With Economiser)	kW	-	-	-	-	-	19.5/23	23/26.5	28/37.5	41.5/45.5	49/53	49/56.5	56.5/64
Dimensions & Weight													
A	mm	4221	4721	4971	5221	5822	6322	6894	7769	8419	8886	9509	10002
B	mm	2937	3027	3027	3160	3415	3415	3560	3713	3885	3995	4708	5049
C	mm	3273	3353	3353	3473	3773	3773	3923	4023	4223	4323	4573	4823
D	mm	1400	1850	2100	2200	2700	3200	3700	4350	4750	4700	5200	5200
E	mm	3280	3780	4045	4290	4830	5330	5880	6680	7180	7530	8130	8630
F	mm	1912	2042	2042	2090	2360	2360	2510	2610	2810	2910	3160	3290
G	mm	2160	2180	2180	2303	2660	2660	2812	2950	3112	3252	3537	3794
A1	mm	7411	7922	8196	8693	9517	10280	11064	12018	13678	14008	15087	15904
B1	mm	3478	3541	3530	3829	4115	4425	4708	4965	5235	4147	4660	4840
C1	mm	3559	3559	3604	3742	3951	4221	4642	4786	5027	5300	5820	6223
Chimney Top Diameter	mm	350	400	450	450	500	600	650	700	800	850	950	1000
Dry Weight (10.54 / 17.5)	tonne	4.6/5.6	5.5/6.8	6/7.5	6.8/8.9	9.3/12	10.3/13.2	12.1/15	15/19	18.5/22.5	20.8/26	26/33	31/40
Flooded Weight (10.54 / 17.5)	tonne	8.5/9.5	11/12.5	11.6/13	13.7/15.6	19.5/21.9	21.1/24	25.6/28.3	30.8/34.5	38.6/42.6	43.2/48.5	54.2/61.2	66.2/75.2

Note : Design Standard-IBR.Efficiency is calculated based on NCV of Furnace Oil as 9650 kcal/kg and Natural Gas as 8500 kcal/Nm³.Air Preheater (APH) is recommended for FO/ Firing and Economiser is recommended for NG firing. In case of Dual fuel burner option, Heat Recovery Unit (HRU) shall be selected on the basis of primary fuel. If economiser is selected for HRU, it is to be bypassed for FO firing Option. Above mentioned weight and dimensions may vary with actuals. Please refer to offer document for more details.