

DATA COLLECTION

Room temperature = 34°C

Initial feed water gauge reading = 5360.3

Room Pressure = 66.5

Time	Feed water flow rate $\dot{V}(\text{m}^3/\text{s}) \times 10^4$	Feed water temperature ($^{\circ}\text{C}$)	Steam gauge Pressure (bar)	Fuel flow rate $\dot{V}(\text{m}^3/\text{s}) \times 10^2$	Fuel temperature ($^{\circ}\text{C}$)	Steam temperature ($^{\circ}\text{C}$)	Exhaust (flue) gas temperature ($^{\circ}\text{C}$)
0	21 204	27	12	11.5	32	—	—
10	21 207	28	12	11.0	30	40	299
20	21 207	29	12	10.8	31	102	224
30	21 207	28	12	10.5	31	123	210
40	21 208	27	12	10.4	31	137	215
50	21 209	28	12	10.2	31	140	214
60	21 210	27	12	10.0	32	142	200

SPECIFICATIONS

Density of fuel (Diesel oil) = 810 kg/m^3

Calorific value of fuel = 46 MJ/kg

Density of water at r.t.p. = 1000 kg/m^3

Dryness fraction of saturated steam (at gauge pressure 7.8 bar) = 0.96