Enemalta plc.
Delimara Power Station

Fire Tube Boiler (Part of Phase 1 Plant Construction)

Type: Steambloc 600 R (Fire Tube Horizontal Type)
Fuel: Diesel Oil
Output: 6 tonnes per hour of Dry Saturated Steam at 13 bar gauge.

From Steam Tables,

the Enthalpy of Dry Saturated Steam (h_g) at 13 bar gauge is equal to 2790 kJ/kg,

therfore,

$$2{,}790\left[\frac{kJ}{kg}\right] \text{ x } 6{,}000\left[\frac{kg}{hr}\right] \text{x } \frac{1}{3600}\left[\frac{hr}{s}\right] = 4{,}650\left[\frac{kJ}{s}\right] = \text{ 4.65 MW}_{TH}$$

Boiler Steam Output is equivalent to 4.65 MW_{TH}.

Enthalpy of water at inlet to boiler (assuming 20°C) is 0.5MW_{TH}

Hence Thermal output of Phase 1 Aux boiler is 4.65MW - 0.5MW = **4.15MW_{TH}**