Boiler RATINGS

Ratings may be expressed in the following units:

BHP = Boiler Horsepower. One BHP is the evaporation of 34.5 lbs. of 212° F water per hour into dry saturated steam at the same temperature.

BHP = $\frac{\text{33,475 BTU}}{\text{hr.}}$

BTU = British Thermal Units: that quantity of heat required to raise one (1) lb. of water one (1) degree on the Fahrenheit scale.

MBH = 1,000 BTU/hr.

PPH = Pounds of steam per hour.

Gross Rating – The full output of a boiler actually available to the heating or process system at the outlet nozzle.

Net Ratings – The net connected design load that can be supplied with heat by a boiler of given output, allowing for normal system piping losses and pickup from a cold start. Since steam system piping losses may be expected to be larger than for water systems, and steam boilers require greater heat input from a cold start than water boilers before heat flows to the system, steam net ratings for automatic fired boilers are slightly lower in relation to gross output than water net ratings.

MBH Net Water = Gross Output - Water (MBH) / 1.15

MBH Net Steam = Gross Output - Steam (MBH) / X.
Where X is between 1.288 and 1.333 depending on the boiler gross output.

Square Feet Net Steam = $\frac{\text{Steam Net MBH}}{\text{0.24 MBH/sq.ft}}$

BURNHAM® Commercial Boilers

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