Nationwide™ Boiler Incorporated

Boiler Rentals & Sales • Environmental Solutions • Control Solutions

Rentals • Sales • Service
24/7 • (800) 227-1966
www.nationwideboiler.com

1,500 HP FIRETUBE BOILER

Maximum BTU/hr Input (ie: Rated Input @ High Fire / 100% Input Rating)	1,500 x 42,000 = 63,000,000 BTU
Cubic Feet of Natural Gas Required	63,000,000 ÷ 1,000 = 63,000 Cu Ft
Cubic Feet of Vaporized Propane Required	63,000,000 ÷ 2,500 = 25,200 Cu Ft
Gallons of Liquid Propane Required	63,000,000 ÷ 91,600 = 687.8 Gallons
Gallons of #2 Diesel Oil Required	63,000,000 ÷ 140,000 = 450 Gallons
Minimum BTU/hr Input at a 4:1 Turndown Ratio (Low Fire)	63,000,000 ÷ 4 = 15,750,000 BTU
Cubic Feet of Natural Gas Required	15,750,000 ÷ 1,000 = 15,750 Cu Ft
Cubic Feet of Vaporized Propane Required	15,750,000 ÷ 2,500 = 6,300 Cu Ft
Gallons of Liquid Propane Required	15,750,000 ÷ 91,600 = 171.9 Gallons
Gallons of #2 Diesel Oil Required	15,750,000 ÷ 140,000 = 112.5 Gallons
Maximum Steam Production in lbs/hr (High Fire)	1,500 x 34.5 = 51,750 lbs/hr
Maximum Water Evaporation Rate	1,500 x .069 = 103.5 GPM
Minimum Feedwater Pump Flow (on / off pump strategy)	103.5 x 2 = 207.6 GPM
Minimum Feedwater Pump Flow (modulating pump strategy)	103.5 x 1.5 = 155.25 GPM
Minimum Feedwater Tank Storage Requirement	1,035 Gallons
Steam Temperature at 235 psi Saturated	401 °F
BTU/hr Output, Based on 80% Efficiency at High Fire	63,000,000 x .80 = 50,400,000 BTU
BTU/hr Output, Based on 80% Efficiency at Low Fire	15,750,000 x .80 = 12,600,000 BTU
Square Feet Heating Surface (sq. ft. HS) at 5 sq. ft. per HP	1,500 x 5 = 7,500 Sq Ft
Minimum Steam Safety Relief Valve Capacity at Boiler Design	51,750 x 1.10 = 56,925 lbs/hr
Minimum Water Softener Flow Capacity at High Fire (always based upon 100% input)	103.5 x 2 = 207.6 GPM

HQ - Fremont, CA (510) 490-7100 **- Visalia, CA** (559) 623-9318
Washougal, WA (360) 335-1443 / **Alvin, TX** (800) 227-1966
True Nationwide Coverage & Beyond. Representatives Located Worldwide.

*For general use only, please contact Nationwide Boiler for equipment specific information.