

Work sheet to calculate required oil flow for boiler size listed

<i>Input info</i>		<i>Input info</i>		<i>Results</i>	
Boiler Size in Lbs. per Hour	Times 1,000 btu/lb = Total BTU output	BTU per gallon of oil	Approximate Boiler Horsepower	Divided by .7 for efficiency loss and flow buffer.	Total GPM required
25,000	25,000,000	<i>* See Info Below</i>	725	Total Input GPH required	
		145,000		246	4
More Information about boiler					
				Total SCFH of Natural Gas Needed	Total GPH Feedwater Valve Flow Required
				31,250,000	4,282

** Note:* Information to Input above

#2 oil is approximately 145,000 btu/gal	#5 oil is approximately 147,500 btu/gal	#6 oil is approximately 152,500 btu/gal
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Note: All calculations are based of a boiler efficiency of 80%

This is a simple calculation to determine the *approximate* amount of fuel oil flow for a given size boiler to allow for calculation of the control valve. The final result in the right hand columns are for Gallons per hour (GPH) and Gallons per minute (GPM). The cells are locked except for the ones that will need to be changed for the size of the boiler and type of oil consumed.

This is also good for sizing a fuel oil meter for a given size boiler, like the Fluidic Flowmeter.

This table also gives you the *approximate* SCFH of natural gas required and GPH of Feedwater the valve will need to be able to pass so you can size any control valves properly. The only other thing you will need would be the upstream and downstream pressures (DP) that the valve will see.