

MULCAHY MINUTE

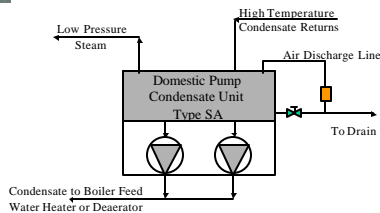
Volume 2, Issue 4
October 2001



Flash Steam Problems Have You All Steamed Up?



By: Dan Dietz



Here is a simple high temperature condensate reclaim system. This simple system prevents flash losses in combination high and low-pressure steam systems. High temperature condensate flows directly into the Domestic™ Pump Type SA Condensate Unit which functions as a combination flash tank and transfer unit operating of pressures of say 15 psig. Flash steam goes directly to a low pressure main. Condensate is usually pumped to a feed water heater or deaerator. Reclaimed energy can be significant. With a steam load of 10,000 lb/hr at 100 psig, approximately 13%, or 1,300 lb/hr,

re-evaporates when entering a return system at atmospheric pressure. With 70° F. make-up water, the following calculation shows the BTUs required to replace the lost steam:

1,189 BTU/lb Heat content of saturated steam @ 100 psig

-38 BTU/lb Heat content of water @ 70 °F

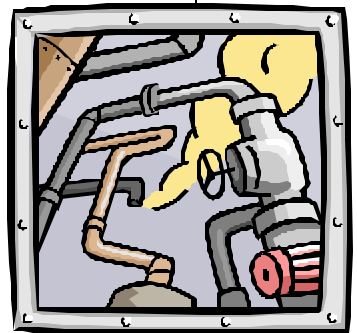
1,151 BTU required to generate one pound of steam, or 1,496,000 BTU/hr for 1300 lb/hr steam

At 80% boiler efficiency, assuming oil currently costs \$1.50 per gallon and each gallon produces 140,000 BTU, each gallon will provide 140,000 x .8 or 112,000 BTU. The minimum savings would then be:

$\frac{1,496,000}{112,000} = 13.35$ gallons/hr x \$1.50 = **\$20/hour;**

\$480/day;
\$175,400/year.

While these total savings are based on continuous operation, significant savings can be realized for intermittent service applications. In addition, the cost of treating make-up water was not included and boiler blowdown rates are usually lower when make-up water needs are reduced.



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2700 Blue Water Road, Suite #100
Eagan Minnesota 55121

Phone: 651-686-8580
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Thanks for your support!

On Thursday September 6, 2001 the B.J. Mulcahy Company hosted it's first open house at their new Eagan facility. Along with the Open House festivities the B.J. Mulcahy Company offered a total of 35 separate seminars on 15 different subjects. Seminars started at 7:30 a.m. and we closed the doors at 8:00 p.m. Approximately 300 people from the engineering, manufacturing, construction, wholesale, site management, and mechanical contractor communities visited, shared stories and experiences. Lunch & Dinner was served along with beverages & snacks.

Our manufacturers all contributed considerable door prizes! Check out our website to see if you have won. You will be contacted by your salesperson as well.



Chatter By Chud

Wisdom from Chud:

Chud's Chatter Sessions

For those of you that have been living in a cave the last 6 months, you've

missed out on a lot of free training, conducted here at BJM.

Just about every Thursday, I've been conducting 2 - 3 hour educational sessions at our updated training center. The topics have included, Steam Basics, Air Control/Expansion Tank Sizing, Primary Secondary Pumping, Radiant Heating, and Service and Maintenance. The training is open to all of our customers and as I stated before, is totally free. Because these are technical sessions, many people attend to fulfill their continuing education requirements. Check out our web site for more information or to sign up for a Chatter Session. Set something up for just your company—contact me or Laura for more information.