

## Failed Steam Traps

It was about 1977 when the refinery purchased dozens of steam traps from our office. They bought them to replace ones a competitor's brand that had failed. The failed traps were blowing live steam into the return line. We figured that we would save them a LOT of fuel dollars.

The steam going out of the boiler room decreased by about 20,000 #/Hr after the installation.

That good news sounds like there should have been a tremendous energy savings.

### THERE WASN'T

There was no savings. The condensate coming back to the boiler plant was lowered to the point that the deaerating feedwater heater steam load increased by about 20,000 #/Hr. But that wasn't the worst part.

The steam trap replacement cost them tens of thousands of dollars because several condensate lines froze and broke!

The moral of the story is that failed steam traps are not necessarily a bad thing. The entire system has to be examined.

For example: In a large school there are typically several condensate receiver tanks with pumps scattered about. Perhaps there is only one in a small school. If there is no steam coming out of the vent then the failed steam traps are not wasting a bit of energy.\*

Our engineers have over 100 years of combined, hands-on, design experience with steam systems - from the small school to the large industrial complex.

We know how to efficiently and affectively utilize steam.

\* True, there the tank might be hotter than it might be and that causes a hotter boiler room. But if unit heaters don't need to run because of that and the temperature isn't excessive – that is not a waste. If the added temperature causes the pumps to prime there is surely a problem caused by the failed steam trap(s) but that is a problem other than a “waste of energy” problem.