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# STEAM USERS' MONTHLY

From **Natale Enterprises**

A National Distributor for Enercon Systems since 1995

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POSITIVE ENVIRONMENTAL IMPACT



Discharge from kilns with Enercon Systems units (foreground). Discharge from bucket traps (background)

"We currently do not have a condensate return system to the boilers, so the condensate flows directly to our firewater pond. The photo shows two drain pipes discharging hot condensate to the pond. The steam plume from the old kilns with bucket traps vs the more liquid flow from the new 104' double track kilns (with Enercon Systems units) during low temperature startup.

Engineering Manager
Major Pulp and Lumber Mill

Currently the big push is to have a company's activities cause as little environmental impact as possible. The problem is most "Green" projects cost more to implement than any reasonable return on investment, making the decision to go ahead a difficult one.

However there are exceptions.

Converting to one-piece Venturi steam traps by Enercon Systems has immediate and lasting benefits, such as:

Fuel Economy - Venturi users are seeing a 15 to 25 % reduction in the fuel used to operate their boilers, because of the Venturi's ability to more effectively remove condensate, the energy (steam) to mass (condensate) ratio is improved. This results in an increase of BTU's per cubic foot in the system requiring fewer pounds of steam to be produced. _

Powering Down, most plants can then lower the operating steam pressure to match the process temperatures required. They can do this because Venturi units maintain a consistent pressure within the system, unlike mechanical traps that have an erratic and unpredictable cycle which can lead to fluctuations in steam pressure. These fluctuations require operating at higher pressures to insure the system never goes below specified levels. Environmentally this reduction in fuel usage, by definition, means a corresponding reduction in air pollution emitted by the powerhouse. _

Energy "Dumping"- Enercon units will never fail, unlike mechanical steam traps, that would allow large amounts of steam to be released into the atmosphere. This not only requires more fuel to make up for the losses but the thermal pollution that would result could have unfortunate consequences for the area surrounding the facility.

Replacement - Enercon Venturi units never need replacement or repair. Compare this to the almost constant rebuilding or substitution program that must be done with mechanical traps. Over the years the amount of steam trap material requiring deposal becomes significant, not to mention the cost involved in parts and labor. In addition, drier steam would extend the life of steam-related equipment such as solenoids, control valves, steam coils, heat exchangers, soot houses, etc. from the effects of "Water Hammer". On the condensate return side, the elimination of any appreciable live steam would protect items such as condensate return pump assemblies.

Alternative Sources - By optimizing steam production, Venturi steam traps improve the viability of using other energy sources, such as Solar, Geothermal, Agricultural or Landfill, giving designers more choices in determining which resource is best utilized for a specific locality.

As you can see, each of these environmental benefits have an immediate and substantial money- saving component as soon as the Enercon units are installed. Let one of our technicians review with you just how much savings are possible. Go "Greener" while you go "Green"

Complimentary Phone Consultations

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Would you like to discuss your steam system needs and challenges? Complimentary phone consultations are available. Call **518-584-0282** or email [natalent@yahoo.com](mailto:natalent@yahoo.com) to set up a date and time that fits your schedule.

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