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Interesting Facts

- Nondairy creamer is flammable.
- The largest living thing on earth is a mushroom in Oregon. It covers 2200 acres.
- Early golf balls were made of leather and filled with feathers.



April Dates to Remember

- April 1 - April Fools Day
- April 10 - ASHRAE Seminar/Meeting
- April 18 - ASPE Meeting
- April 18 - Goodin Hydronic Symposium
- April 26 - ASHRAE Rochester Seminar

NEW Products



Lochinvar Power Fin Extended Series

The Power Fin Extended Series has been upgraded with a new control system and includes the following features:

- Built-In Sequencer - Controls up to 8 Units
- Modulation with 5:1 Turndown
- Boiler or Water Heater Version
- Models - 1500, 1700 & 2000 MBH Input
- Up to 87% Efficient



Schebler Model PAL - AL29-4C Venting

Schebler has introduced a Cat IV vent to their product line and includes the following features:



- AL29-4C Stainless Steel Inner Liner
- Aluminized Steel Outer Shell (Optional 304 or 316 Stainless Steel)
- 1" Air Space Between Inner Liner & Outer Shell
- Liner & Shell Pieces are Continuously Welded
- Tested to 40" Positive Pressure
- UL Listed

What is AL29-4C?

AL29-4C is simply a type of stainless steel. It was designed by Allegheny Ludlum Corporation (<http://www.alleghenyludlum.com/ludlum/>) for extreme resistance to chloride ion pitting, crevice corrosion and stress corrosion cracking.

Category II & IV vented appliances require an exhaust vent material that will withstand the corrosive effects of condensation. In most cases, manufacturers of condensing equipment recommend a vent made of AL29-4C.

Many vent manufacturers offer an AL29-4C product, but Schebler has superior features as listed above.

Steam to Hot Water Conversion - Not So Fast

More owners of buildings with steam heat are considering converting their systems to hydronic heat. While hydronic heat is arguably more efficient, one must consider all factors prior to the conversion. Here are just a few:

- **Venting changes.** Higher efficiency water boilers can rarely be vented into existing steam boiler chimneys. High efficiency boilers require special stainless flues, while most existing steam boilers use a steel flue and chimney.
- **Piping changes.** Steam return lines are usually too small to be used as return water lines.
- **Heating Terminal Units.** Some steam radiators may be used with hot water, but will only radiate 2/3 of the heat as compared to steam.
- **Higher Electrical Use.** 24/7 use of multi-horsepower hydronic pumps will increase electrical costs as compared to fractional HP boiler feed pumps.
- **Leaks.** Some steam systems operate as low as 2# while multi-story hydronic systems may run in excess of 20#. Old piping systems may be susceptible to leaks at these high pressures.
- **Boiler Operation.** Some owners may manually operate their steam boilers so efficiently that energy savings using hydronic boilers and

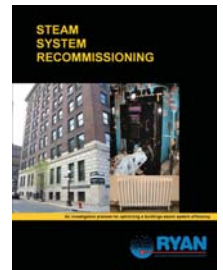
automatic controls maybe small.

- **Interruptible Fuel Rate.** Steam boilers may receive interruptible fuel rates if able to burner a second fuel (oil or LP). Few higher efficiency hydronic boilers are capable of burning fuel oil. (See Fulton Vantage below)

However, converting to a hydronic system may be a good idea for owners who convert steam to hot water with heat exchangers in the mechanical room near the boilers.

One could also consider adding a base load boiler to the system. This smaller boiler would handle a majority of the load and prevent the large boiler from cycling repetitively, especially in the warmer months. This will increase system efficiency and prolong the life of the older large boiler. (See Base Loading below)

Perhaps, a more economical solution to increasing efficiency would be to recommission the existing steam system. Or in other words give the existing steam system a tune-up. This alone can increase your efficiency and reduce your energy usage by up to 30%.



Feel free to contact us regarding conversions, base load boilers or steam system recommissioning.



Fulton Vantage

- Up to 99% Eff
- Linkageless Controls
- No Min RWT
- No Min/Max Flow Rates
- **Dual Fuel!**
 - Natural Gas & Oil
 - Natural Gas & LP



Base Loading

- Small boiler handles majority of load
- Large boiler handles high demand
- Reduces cycling
- More closely matches load
- Increases efficiency
 - Prolongs life of large boiler
 - Applicable to Steam or Hot Water systems



English



Aldrich

