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### Interesting Facts



- At a London brewery on Oct 16, 1814 a huge wooden storage vat burst open, flooding the streets with a 25ft high wave of beer. Eight people drowned in the flood, while dozens of others ran to swoop up free beer.
- In 1242, the English scientist Roger Bacon wrote the first known recipe for gunpowder. He was so frightened by the danger of his mixture that he disguised the recipe in a nearly indecipherable anagram.
- House fires caused by rats is estimated as high as 25%.  
Taken from Modern Marvels

### Oct Dates to Remember

Oct 10 - Columbus Day

Oct 31 - Halloween



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## Cast Iron, Carbon Steel, & Copper Are Not Suitable For Condensing Boilers

There are various aspects to take into account when selecting or specifying a boiler. The most important consideration for condensing boilers is material construction. Below are two excerpts from ASHRAE Handbook - HVAC Systems and Equipment.

*“For maximum reliability and durability over the extended product life, condensing boilers should be constructed from corrosion resistant materials throughout the fireside combustion chamber and heat exchangers.”* - ASHRAE HVAC Systems & Equipment

*“The condensing portion of these boilers requires special material to resist the corrosive effects of the condensing flue gases. Cast iron, carbon steel and copper are not suitable materials for the condensing section of a boiler.”* - ASHRAE HVAC Systems & Equipment

For maximum boiler life, use a corrosion resistant material like stainless steel or Cor-Ten (bridge grade steel) as found in all Ryan Company Condensing Boilers.



## Venting with PVC/CPVC - Not So Fast

Even though a majority of boiler manufacturers do not approve PVC or CPVC for venting, there are some smaller condensing boilers that do approve its use. Before you make the decision to use this material, please consider the following.

- PVC/CPVC is not UL 1738 listed (UL category for Condensing boiler flues)
- PVC/CPVC has a max temp of about 180°F vs 550°F for stainless steel
- PVC/CPVC has a relatively large thermal expansion rate (3-4 times more than stainless steel)

Click [Here](#) for an article on this subject



## Bryan Triple Flex

- » UL Guaranteed 90% Eff at 160°F Return
- » Up to 99% Eff
- » Stainless Steel Tubes
- » 1500-3000 MBH Input
- » Natural Gas or LP



Click [Here](#) For More Info



## Fulton Vantage Boiler

- Up to 99% Efficiency
- Linkageless Controls
- No Min Return Water Temp
- No Min/Max Flow Rates
- Duplex Stainless Steel Tubes
- **2.0 - 6.0 Million Btu/Hr**
- Multiple Fuel Options!
  - Natural Gas
  - LP
  - #2 Fuel Oil
  - (Natural Gas or LP) & Oil
  - Natural Gas & LP
  - B100 Biodiesel or Digester Gas



Click [Here](#) For more info on Vantage  
Click [Here](#) for more info on Biodiesel

## Fulton Pulse Boiler

- Up to 99% Efficiency
- No Min Return Water Temp
- No Min/Max Flow Rates
- 300 - 2000 MBH
- Runs on less than **0.5 Amps**
- Multiple Fuel Options!
  - Natural Gas
  - LP
  - Natural Gas & LP



[More Pulse Info](#)

## Synex ModSync

Multiple Boiler  
Sequencer

[More ModSync Info](#)



## Lochinvar Crest

- Up to 99% Eff.
- Modulation with up to **25:1 Turndown**
- Stainless Steel Heat Exchanger
- Wave™ Firetube
- Smart Touch Controller
  - \* Touchscreen
  - \* Cascading Sequencer
  - \* Outdoor Reset
  - \* 3 Pump Control
  - \* Mod Bus Communication
- 1.5 to 3.5 Million BTU/HR
- Flexible Flow Rates
- **Single or Dual Fuel (Nat/LP)**

Click [Here](#) for more info on the Crest

