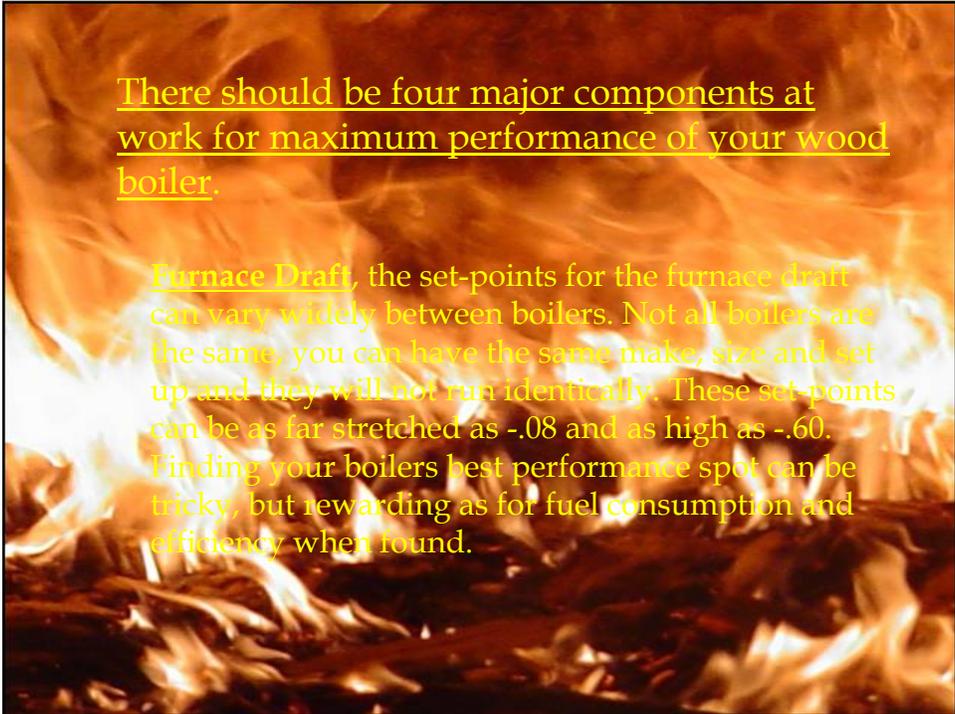


WOOD FIRED BOILERS

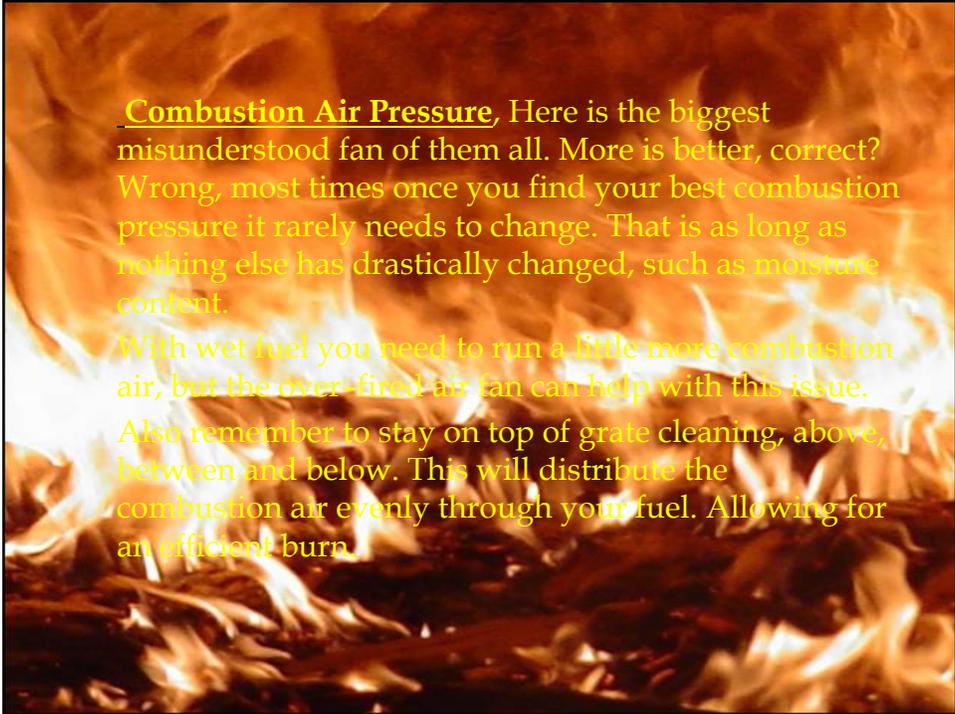
What makes a fire?

- A) Oxygen
- B) Fuel
- C) Heat
- D) Igniter



There should be four major components at work for maximum performance of your wood boiler.

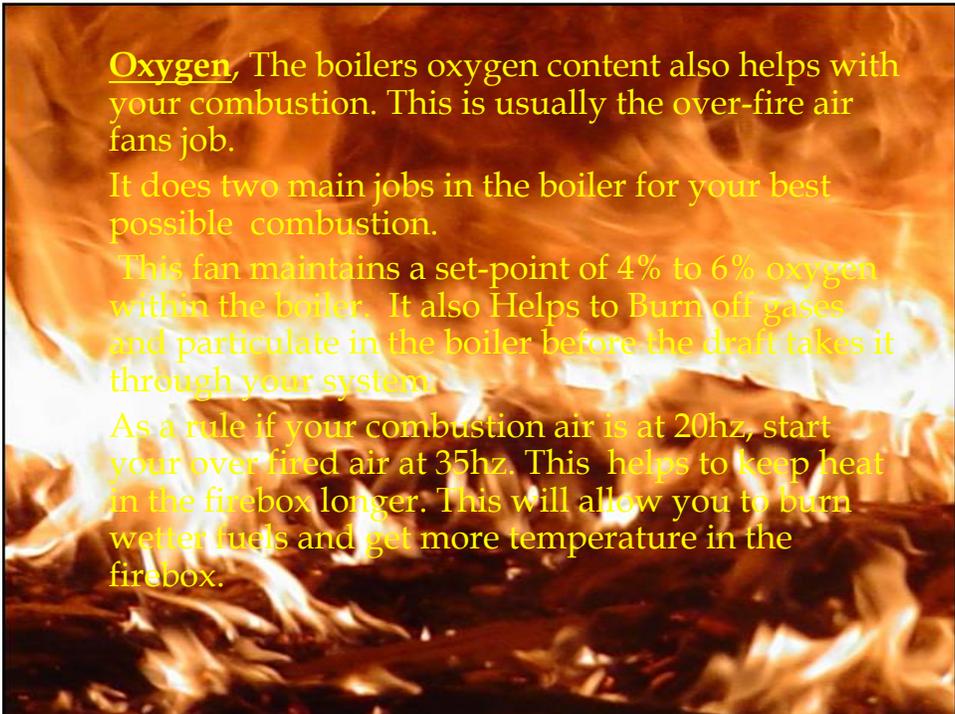
Furnace Draft, the set-points for the furnace draft can vary widely between boilers. Not all boilers are the same, you can have the same make, size and set up and they will not run identically. These set-points can be as far stretched as -.08 and as high as -.60. Finding your boilers best performance spot can be tricky, but rewarding as for fuel consumption and efficiency when found.



Combustion Air Pressure, Here is the biggest misunderstood fan of them all. More is better, correct? Wrong, most times once you find your best combustion pressure it rarely needs to change. That is as long as nothing else has drastically changed, such as moisture content.

With wet fuel you need to run a little more combustion air, but the over-fired air fan can help with this issue.

Also remember to stay on top of grate cleaning, above, between and below. This will distribute the combustion air evenly through your fuel. Allowing for an efficient burn.



Oxygen, The boiler's oxygen content also helps with your combustion. This is usually the over-fire air fan's job.

It does two main jobs in the boiler for your best possible combustion.

This fan maintains a set-point of 4% to 6% oxygen within the boiler. It also helps to burn off gases and particulate in the boiler before the draft takes it through your system.

As a rule if your combustion air is at 20hz, start your over-fired air at 35hz. This helps to keep heat in the firebox longer. This will allow you to burn wetter fuels and get more temperature in the firebox.

