



Information BULLETIN

IMPORTANT INFORMATION ON OPERATING A GASIFICATION BOILER

It cannot be stressed enough on how important it is to tend the boiler properly rather than viewing the process as loading the boiler.

The fuel must be allowed to burn down to ash and coals on a daily basis, not just coals. It is understood that this may not be possible every day but it is something that must be strived for. Try to only add as much wood as is needed in order to burn down to the next time the stove will be tended to.

For example, you are going to be back in 4 hours and then gone for 8 - 10 hours. With a traditional furnace it would be normal to fill the firebox and then in 4 hours top it up. With a gasification boiler only put in as much wood as needed to last the first 4 hours, so that when you return it has burnt down to coal and ash. At that time the boiler would then be loaded for the next 8 - 10 hours.

Firewood must be approximately 20% moisture (this is very important in a gasification boiler). That means that a 20 pound piece of wood can have 4 pounds of water in it. The moisture that is evaporating out of the wood as it is burning is keeping the temperature of the firebox from getting excessively hot. As the wood burns the water evaporates and leaves the firebox allowing the temperature in the box to rise and make enough heat to burn the creosote that has accumulated on all surfaces in the chamber.

Every time wood is added to the fire there is more water being added. This is keeping the fire cool which allows the creosote to build up. This is why allowing the wood to burn down is so important. Do not be tempted to add more wood when checking the fire and raking the coals and charcoal away from the perimeter of the firebox. Let it burn down and come back in an hour or two; the surfaces will be much drier.