

The Wood Gasification Process

Gasification process occurs as follows:

1. Drying and heating wood until the release of gases (hydrogen and carbon monoxide).
2. Burning of gas mixture in lower chamber at 2200°F.
3. Transfer of the flue gases to heat exchanger on the back of the boiler.
4. Ejecting the gases through the chimney pipe.

The best indicator of successful wood gasification is the lack of smoke exiting the chimney.

Wood As A Fuel

Wood is a renewable resource like solar, water or wind power. They are all energy sources, which never become depleted, unless improperly managed. Wood is also a fuel, which may be stored and preserved without energy loss. Wood storing reduces its moisture and simultaneously increases its heating value (energy volume, which may be used up during burning process).

Modern boilers utilizing wood in gasification processes use energy contained in wood with efficiency that is three times higher than traditional boilers. Smoke and other emissions are cut to a very low level, making our boilers very nature friendly.

BioMax™ Gasification Boilers are adapted for burning of any kind of wood ranging from sawdust to chunks of wood. The best way to achieve recommended wood moisture is to cut timber during the springtime, and let it season in a shed or under a tarp.