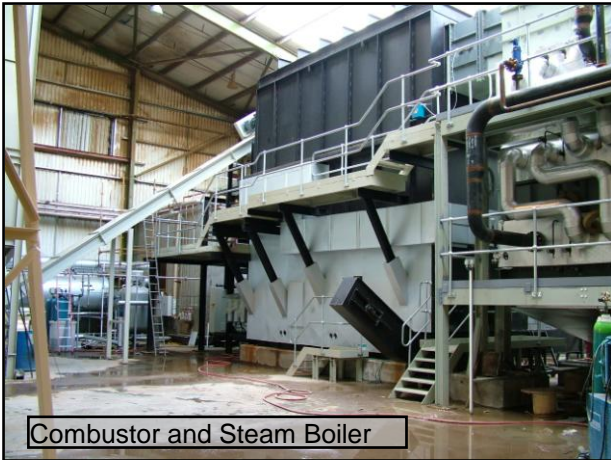


Case Study – Norbord Biomass Fired Thermal Oil Heater



Combustor and Steam Boiler

Talbot's Biomass energy has supplied a biomass combustion plant to a board mill in Scotland. The combustion plant will use various biomass residues from the manufacturing facilities as fuel from which energy will be recovered. The biomass fuel will include particle board (PB) residues, medium density fibreboard (MDF) residues, wood, bark and possibly other plant-source materials. All fuel will be prepared to the required particle size and moisture content before entering the equipment within Talbot's scope.

Biomass, whether in the form of energy crops produced for use as fuel or residues from a production process, is a

sustainable and renewable energy source. In addition, although the combustion of biomass generates carbon dioxide (CO₂), the process is considered 'carbon neutral' because the amount of CO₂ emitted is approximately equivalent to the amount of CO₂ imbibed by the biomass fuel plants during their life. Energy is recovered from the combustion process in the form of 300°C 10MW hot oil and up to 10 tonne of steam via a Steam Generator.

In addition, energy is recovered in a combustion air Pre-heater economiser in order to maximise the efficiency of the biomass plant. This also enables very wet fuels to be burnt.



Economiser, Multi-cyclone & I.D. Fan

Key Figures

- Throughput – 4,000kg/hr
- Steam Production – 17 tonnes per hour
- Gas Saving - £25,000/week



Buffer Fuel Store

Key Points

This installation was designed, sold and project managed through to completion by Talbot's Biomass Power.

They needed a bespoke plant to suit their own certain set of requirements, Talbot's BPL facilitated their needs throughout.