



be biomass engineering

PROJECT:

AURA LEITRIM LEISURE CENTRE, CARRICK ON SHANNON, CO. LEITRIM



System Specification

Fröling Turbomat 320kW
3000l buffer tank with low loss thermal insulation

Fuel

Locally sourced woodchip

Fuel Consumption

350 Tonnes per annum

Fuel Delivery Method

Trailer delivery which is transported into the fuel store in short space of time using the low noise conveyor installed onsite

CO2 Saving

240 Tonnes per annum

Financial Saving

Support Scheme for Renewable Heat

A building with a similar heat profile would expect to receive annual payments of approx. €38,000 per annum for 15 years under the support scheme.

Projected payback on capital expenditure for full turnkey system 4-5 years.



About the Renewable Energy System

Fröling 320kW Turbomat equipped with high temperature cast iron step grate inside the combustion chamber. Combustion is efficiently controlled from the Fröling H3000 Lambdatronic PLC control system. Primary, Secondary and Tertiary air are injected at separate combustion areas via rotary slide valves and modulating actuators. Combustion air is drawn from between the outer panels and the insulation of boiler casing reducing the heat losses from the boiler and preheating the combustion air. The air then circulates around the outside of the fire brick preventing the outside of the fire brick from overheating and further preheating the combustion air for higher efficiency combustion before it's injected into the combustion chamber.

The heat exchanger of the Fröling Turbomat is a vertical 4 pass exchanger with integrated dust separator. The heat exchanger is equipped with automatic cleaning system. Automatic ash removal via auger transports fly ash from below the heat exchanger to 2 30 litre ash storage containers.

Fuel feed system

The system consists of spring agitator system and feed auger from where the boiler control unit adjusts the rate of feeding into the combustion chamber.

About the Client

Aura Leitrim Leisure Centre offers excellent and state of the art facilities for health and fitness.

With Leitrim's only 25 metre swimming pool, the centre offers the best facilities in which all ages can learn to swim.