

# This is how it works:



1. All the dust from the wood machines is extracted and collected centrally.



2. Waste wood is recycled into wood chips. JC Atkinson only use FSC or similar accredited sustainable wood.



3. Using a Waste wood chipper the wood is broken into small pieces.



4. These are transferred into a wood chip silo, for bulk storage.



5. They are then fed into the combustion unit using a screw feed system.



6. These burn in a special combustion unit at around 600 degrees.



7. The unit is heavily insulated, to conserve the heat for use.



8. The cold air is forced into the unit using the turbine. This is then heated and expands massively and is thus forced out spinning a turbine installed in its path.



9. Driving this turbine generates electricity. There is enough electricity to power the factory and Green Energy UK puts any surplus into the National Grid. After the turbine the heat goes through a water boiler, heating the pressurised water to 150 degrees.



10. The electricity is linked to the National Grid using a special inverter. This synchronises the voltage and frequency. The hot water is pumped to the product drying line.



11. Finally the waste gases left pass up through the combustion chamber and the flue finally to atmosphere, these are tested to ensure they are EPA compliant.



12. The hot water is exchanged to make hot air to use in the drying line. This will force dry JC Atkinson's coffins, allowing them to use solvent VOC free polishes on their coffins. VOCs are 15 times more harmful to the environment than CO<sub>2</sub>.