

Solid future ahead for Kerry Die biomass technology firm

By Leslie Faughnan

Biomass is set to be one of the fuels of the future and a Kerry engineering company has the technology to produce it.

Kerry Die Products has been in business for three decades and, for most of that time, has been manufacturing equipment to make animal feed pellets, principally for the Irish and British markets. In the last ten years, it has turned its expertise to the production of biomass fuel pellets from wood and forestry waste through specialist company Kerry Biomass Technology.

"We have the expertise in pellet technology but we found that we did not have – and few others had – the depth of knowledge of wood science that is needed," said Liam O'Connor, managing director of Kerry Die.

The company has been working with researchers in universities in Umea, Sweden, and Vienna, Austria, for the past three years.

"Essentially, it is about the specific properties of the wide range of potential woods for use in fuel pelletisation projects," O'Connor said. "We have unique expertise in the mechanical technology required but we needed to add the relevant wood science. That was to be found in countries with centuries of forestry product traditions."

The new Kerry Die inte-



Liam and Hugh O'Connor of Kerry Die Products

grated wood pellet production system is designed to meter the properties of the milled wood raw material and continuously adjust the temperature and moisture to their optimum values for pelleting. High quality pellets are produced with a much-reduced specific power requirement compared with conventional systems.

An output of six to ten tonnes per hour is possible from a range of wood biomass inputs that extends from sustainable timber to chippings, shavings and sawdust.

"The new generation of ma-

chines will be built to order for specific customers such as forestry product plants and sawmills," said O'Connor.

"Anywhere there is an extensive wood-based industry, our technology can offer a profitable by-product with sound environmental credentials."

The fuel pellets produced can be used to generate heat or energy on site, especially in combined heat and power (CHP) plants, or sold on as a fuel. Each machine will cost more than €1 million.

The Kerry biomass wood pelleting machines are de-

signed and developed in its Killarney plant using Autodesk Inventor as the computer-aided design system, including 3D modelling and simulation. The first unit was assembled and fully tested last month before being stripped down again for shipping.

"A unique feature of our technology is that we can give customers a remote diagnostic service," said O'Connor.

"We can check all aspects of performance and fault-finding remotely, instructing local maintenance if replacement parts of other physical intervention is required."