

Transcript

Straw goes global

Date : 21/10/2007

Reporter: Jayne Edwards

JAYNE EDWARDS, REPORTER: Traditionally, straw is viewed as the unfashionable, low margin end of cereal crops, that's either burnt or used as bedding for livestock.

But with a bit of lateral thinking and a dash of technology, its been bundled up into a global building product that's being used for everywhere from airports to homes.

DEREK LAYFIELD, MD, ORTECH INDUSTRIES: Over the last six years there's been an increasing acceptance of our products. We're going from major project to major project and I would say that we've reached a critical mass now

JAYNE EDWARDS: Derek Layfield has been working with Durra panel for half his life, buying up the right to manufacture straw building panels back in 1991, when the technology was dodgy and the economy was even dodgier.

DEREK LAYFIELD: We were hoping that the economy would bounce back in 1991,1992 and the economy flatlined
Indeed we were forced into a stage of rapid innovation. We were forced into a stage of re-engineering our product so that it was a mainstream construction material.

The Durra manufacturing process is unique. We take a renewable annual resource, wheat straw or rice straw, which is usually burnt after harvest, we then clean it, we heat it, and during our manufacturing process we extract a natural polymer in that straw which fuses the straw core together. That is a beautiful manufacturing process that produces zero toxic waste, we use no gas, we use no water and we use no other chemical binding agents.

JAYNE EDWARDS: The finished product is heat and sound resistant.

DEREK LAYFIELD: Our manufacturing process produces at around about 100 square metres per hour. From one tonne of wheat straw or rice straw fibre we produce 50 square metres of Durra panel. It's a very efficient conversion ratio.

JAYNE EDWARDS: But the availability of straw is affecting the bottom line.

DEREK LAYFIELD: The drought has had a significant impact on our costing, mainly because we've got to travel further to get the raw material.

We have contingency plans in place. We're working actively with farmers, with straw contractors and we see no issue with regard to the supply of material for the next 12 months.

The big advantage with our panel, besides the fact that it's green, is the fact that it compresses build times. We're going from convention centre, to arena, to convention centre because of the building systems that we've developed.

JAYNE EDWARDS: Its suitability for building low cost housing also led to an export boom to developing countries.

DEREK LAYFIELD: That was our introduction to export and we exported school buildings, infant welfare centres, low cost housing and also we got involved with complete technology transfers into developing countries

JAYNE EDWARDS: Ortech now has licensed manufacturers in the United States, Sri Lanka and the Phillipines, while products from its Bendigo plant are also sent to Asia and Europe.

DEREK LAYFIELD: For example we can put six housing units into one 40ft container and then send them off anywhere in the world and assemble them in a week for each housing unit.

JAYNE EDWARDS: To escape the pressures of the factory, he heads for the water.

DEREK LAYFIELD: There's probably not much else you can think about other than try and keep the boat upright, so that's probably why we find it rather relaxing.

That's... I guess that's my special place.

JAYNE EDWARDS: And he's expecting fairly smooth sailing into the future.

DEREK LAYFIELD: Back in the 80s and 90s there was not a lot of thought given to green products. There's a depletion now of timber on a global scale, there's issues with petrochemical based products and you look at the technology that we've developed, and it's fair to say that it's very much a right product at the right time technology. And I think this has been one of the major reasons for our success.

ALAN KOHLER, PRESENTER: Jayne Edwards reporting.