Haswell Moulding Technologies

Case Study

Haswell achieves WEEE recycling advance and new market opportunities

The EU’s 2007 Waste Electrical & Electronic Equipment (WEEE) Directive making electronics manufacturers responsible for the recycling of their products prompted Essex-based Haswell Moulding Technologies to approach the Integrated Products Manufacturing KTN.

Convinced that its injection moulding and electro-polymeric expertise could play a role in the innovations industry was now seeking, the company asked the KTN to assess its ideas. Within months Haswell had the concept confirmation and key collaborators it needed to develop a closed loop product manufacturing system and to apply successfully for EU funding.

The WEEE waste stream is one of the fastest growing in the European Union, increasing by up to 18% every five years.

www.integratedproducts.ktn.org.uk
Finding ways of disassembling WEEE cost effectively at the end of its life is a technological challenge compounded by the diversity of devices on the market. Haswell decided to focus on high technology electro-polymeric consumer products with short life spans, such as mobile phones, personal digital assistants, digital cameras, toys and laptop computers. The company’s expectation was that its work would also be applicable to contactless smartcards, RFID tags, SIM cards and store loyalty cards. In total, these segments make up about 60% of WEEE products.

Initial discussions between Haswell and Pera, which undertook the feasibility study on behalf of the Integrated Products Manufacturing KTN, highlighted the need to develop a complete suite of novel processing and reclamation techniques. Pera very quickly identified the relevance of an advance recently made by another of its clients, PVAXX. ‘PVAXX had developed a breakthrough water soluble polymer and was looking for applications,’ explains technologist Angela Stewart. ‘This technology turned out to be perfect for Haswell’s plans as it meant that electronics could be embedded in a water soluble, biodegradable polymer shell.’

In its bid for Framework Six funding as part of a consortium, Haswell outlined its proposal for concept designs and novel manufacturing processes for key components, including memory sticks. At the conclusion of the two-year SEPARATE project, Haswell had accrued the tools, technology, prototypes and testing data for a cost-effective recycling route for combined electro-polymeric products.

‘Access to Pera’s network of European SMEs was one of the factors critical to the project’s success, enabling it to deliver a holistic approach to recycling, which can provide OE electronic device manufacturers with a generic route to WEEE compliance,’ says Haswell’s Managing Director Geoff Haswell. ‘Without Pera’s considerable technical input and contacts this project could not have been realised and we would not now be in a position to seek customers wishing to apply the technology to new and existing products.’

For further information about Haswell Moulding Technologies, please call +44 (0)7809 745982. Information about PVAXX Ltd can be found at www.pvaxx.co.uk

To find out more about the SEPARATE project please visit http://pera.projectcoordinator.net/~separate

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Geoff Haswell
Managing Director,
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