

## Hexagon Metrology Award for Sustainable Manufacturing

# Brother Industries (UK) Ltd **WINNER**



**I**nkjet printer maker Brother Industries (UK) has become so adept at the recycling of its toner cartridges that its Japanese parent company has started to use it as a global exemplar of re-manufacturing in action.

The Wrexham-based company put in place a free toner cartridge returns scheme in 2005. In the first year of operation, 80,000 cartridges were sent back by customers. In 2013, that figure rose to more than 1.6 million. Over time, the percentage of components that Brother reuses has risen to more than 95%, meaning that it now avoids sending any waste to landfill.

This performance hasn't gone unnoticed. Brother's UK arm now regularly advises the Japanese parent company on how to 'design for life', effectively giving more thought to how products are put together to enable them to be more easily taken apart. Japanese engineers regularly come to the UK to take guidance on how this might be done. On one particular cartridge, the ink filling hole was being sealed after manufacture. This was a problem when it came to recycling, so production methods were changed.

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Interestingly, Brother has even started employing academics at a local university who specialise in psychology to study how it might be possible to encourage consumers to send back even larger numbers of cartridges. The company thinks that it can take advice in this area and alter the way it markets its recycling scheme to consumers, encouraging further uptake.

Sustainability performance is carefully managed across the business through key performance indicators. Brother recognises the importance of continually improving

the sustainability of its products, and is currently in the process of doing a carbon footprint assessment of toner manufacturing. Early results show that for certain cartridge models, it has reduced associated CO<sub>2</sub> output by

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41% through components reuse.

Sustainability audits have looked at waste reduction and management, smarter packaging, energy use and logistics. The audit process is managed by a designated quality assurance specialist whose job it is to ensure that the company is fully compliant.

The company follows ISO standard 14001 and conducts quarterly environmental steering group meetings to update on progress.

Outreach is also important. Brother oversees two employee volunteer projects in the local area each year, along with factory tours for local schools to ensure that students get a better understanding of how it goes about its business.

The Manufacturing Excellence judges noted the comprehensive nature of Brother Industries' sustainability efforts. They had no hesitation in giving the company the Hexagon Metrology Award for Sustainable Manufacturing.

## Finalists

### Building Adhesives Ltd

Tiling adhesive manufacturer has been successful in cutting to zero the amount of waste it sent to landfill.

### Cummins Inc.

Diesel engine maker has reduced energy and water consumption, and has introduced several innovative recycling schemes such as the reuse of pallets with sister plants in the US.

