

Design MADE simple

Shedding light on the BS 8887 series of standards and their influence on sustainable design in the UK and beyond

Since publication of the first part of the design for manufacture BS 8887 series in 2006 (*Design for Manufacture, Assembly, Disassembly and End-of-life processing MADE – Part 1: General concepts, process and requirements)*, the BSI committee with responsibility for the work in this area has focused on developing standards that support the sustainable design agenda and the need for designers to consider the whole life cycle of products.

Most of a product's environmental impact during its life cycle is determined at the design stage. "The BS 8887 series of standards helps designers to make informed choices about a product's function and use, the materials from which it is made, manufacturing processes and ability to recycle or reuse the product at the end of its life," explains Committee Chairman, Professor Brian Griffiths. "Materials and energy used during production can be used more efficiently if the aim to re-use and recycle is built into the design philosophy." BS 8887-1 specifies requirements for the preparation, content and structure of design output and related technical product documentation for MADE products. It describes appropriate methodologies and conventions for the preparation of documentation to transfer a design concept to manufacture.

Griffiths continues: "In 2012, BS 8887-1 was put forward to the ISO [the International Organization for Standardization] and it has been accepted onto the work programme of the ISO committee with responsibility for technical product documentation. A new working group is being set up, which will be led by the UK, and work to convert BS 8887-1 into an international standard."

Various other parts of the BS 8887 series apply to processes that can be specified for the re-use of products. "BS 8887-220 on remanufacture was the first process-specific part of the series," explains Griffiths. "It outlines the steps required to change a used product into an 'as-new' product, with at least equivalent performance and warranty of a comparable new replacement product." BS 8887-211, published in 2012, is the series' first sector-specific standard. It focuses on the information and communication technology sector, more specifically on computer hardware. It was created to provide the vocabulary and procedures for 'remarketed products' (ie products that cannot be sold as new).

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The UK team now plans to develop a generic remarketing standard for use by all sectors, using BS 8887-211 as a template, while a review is underway to establish the need for new standards in areas such as design for manufacturing systems.

To find out more about the range of BS 8887 standards please visit the BSI Shop **shop.bsigroup.com** and search BS 8887.

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