

Eco-design standards for the automotive industry



British Standards Online (BSOL) is a comprehensive database of over 90,000 internationally recognized standards. It can help support your compliance management regime with comprehensive access to all the standards you need including key end-of-life standards.

The product lifecycle does not end when goods leave the factory. Products can remain for a long time, even after their useful life is over.

Eco-design means thinking about the full life cycle from the design stage to end-of-life. Standards can help businesses to manage the cycle and benefit from legislative compliance, reduction in resource usage, wastage and cost saving whilst improving their organizational profile and brand reputation.

Key end of life standards for the automotive industry

BS 8887-1:2006 Design for manufacture, assembly, disassembly and end-of-life processing (MADE) – Part 1: General concepts, process and requirements.

BS 8887-1:2006 specifies requirements for technical product documentation for the manufacture, assembly, disassembly and end-of-life processing (MADE) of products.

BS 8887 is appropriate to all types of manufacturing and has the primary purpose of identifying and specifying the use of ISO Standards relevant to the design for manufacture. It is structured to provide the designer with a framework for the selection, preparation and presentation of appropriate documentation.

BS 8887-2:2009 Design for manufacture, assembly, disassembly and end-of-life processing (MADE) – Part 2: Terms and definitions.

BS 8887-2 defines terms used in the design for manufacture, assembly, disassembly and end-of-life processing (MADE).

Standard terminology can help transfer a design concept to manufacture in a way that is most efficient, cost effective and environmentally aware. BS 8887-2 aims to remove any ambiguity surrounding design terminology, thereby reducing possible confusion for industry and end users.

Definitions cover a number of terms brought into common industry use as the result of Waste Electrical and Electronic Equipment (WEEE) Directive, Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) Regulations 2008 and other legislation.

BS 8887-220:2010 Design for manufacture, assembly, disassembly and end-of-life processing (MADE) – Part 220: The process of remanufacture. Specification.

BS 8887-220 specifies requirements for the process of remanufacture.

It lists 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. This remanufacturing process can include parts or components to be used in subsequent assembly.

BS 8887-240:2011 Design for manufacture, assembly, disassembly and end-of-life processing (MADE) – Part 240: Reconditioning.

This part of BS 8887 specifies requirements for the process of reconditioning, i.e. returning a used product to a satisfactory working condition by rebuilding or repairing major components that are close to failure, even where there are no reported or apparent faults in those components.

The standard is applicable to manufactured products. It is not applicable to certain transient products or consumables (e.g. food); digital media and commodity materials (e.g. base chemical substances or minerals).

BS 8887-211:2012 Design for manufacture, assembly, disassembly and end-of-life processing (MADE) – Part 211: Specification for reworking and remarketing of computing hardware.

BS 8887-211:2012 specifies the process for reworking and remarketing used computing hardware by the following categories of organizations: OEMs (tier 1), OEM-contracted and authorized service providers (tier 2) and Independent remarketing companies and service providers.

A remarketed product can also be sold direct by the original or current user to a new user, generally with no reworking, or assurances or warranty offered. Such arrangements are not within the scope of this part of BS 8887.

This part of BS 8887 is applicable to the reworking and remarketing of hardware and, where relevant, the operating system software and firmware. This does not apply to application software or personal productivity tools.

PD CEN/TS 16524:2013 Mechanical products. Methodology for reduction of environmental impacts in product design and development.

This Technical Specification is intended to give enterprises, in particular SMEs, a pragmatic methodology to consider environmental aspects during their product design. It allows them to identify the environmental aspects of a product, including but not limited to energy aspects; be able to make progress in product design,

taking into account capabilities of the enterprise; promote to clients and public authorities the environmental improvement approach on a mechanical product with this methodology (environmental claim).

It addresses enterprises which have decided to integrate an eco-design approach to optimize environmental impacts within the product life cycle. This includes in relation to the other product aspects, such as functionality, quality, costs, etc.

This document targets persons who are directly involved in the design and development of mechanical products, as well as managers responsible for defining corporate policies, and decision-makers.

BS 7000-2:2015, Design management systems. Guide to managing the design of manufactured products.

This part of BS 7000 gives guidance on managing the design of all types of manufactured products. It deals with every stage of the design process from product concept through to delivery, use and end-of-life processing.

This standard recognizes that small enterprises or those specializing in one-off products or special purpose end-of-life equipment often need to adapt the process to suit their method of operation.

It is intended for use by all relevant levels of management, from board level to individual project level, in all types of organizations involved in the design of manufactured products.

Guidance is given on the application of general principles and techniques to the management of design, raising awareness of management issues and emphasizing the need for an integrated approach to the design of products.

BS EN 62430:2009, Environmentally conscious design for electrical and electronic products.

The goal of environmentally conscious design (ECD) is the reduction of adverse environmental impacts of a product throughout its entire life cycle. Environmentally conscious design is not a separate design activity; rather, it is an integral part of the existing design process.

BS EN 62430 specifies requirements and procedures to integrate environmental aspects into the design and development processes of electrical and electronic products.

BS EN 62430 is intended for use by all those who design or develop electrical and electronic products. This includes all parties in the supply chain, regardless of organization type, size, location and complexity.

BS EN 62542:2013, Environmental standardization for electrical and electronic products and systems. Glossary of terms.

This International Standard specifies generic terms and definitions that are related to environmental standardization within the IEC. It serves as a glossary of terminology to be considered for environmental aspects of relevant work in IEC.

The terms cover environmental issues that are relevant for electro technical products across all product life cycle stages, including but not limited to design and supply chain aspects in general, use and declaration of materials, analytics of environmentally relevant substances, aspects relating to climate protection, power consumption and energy efficiency, environmental information and end of life treatment.

This horizontal standard is primarily intended for use by technical committees in the preparation of standards in accordance with the principles laid down in IEC Guide 108.

PAS 3100:2014, Remanufactured automotive parts. Specification for a process control system.

This PAS specifies a process management system for the remanufacturing of reclaimed automotive parts and also includes requirements for their preparation for sale or reinstallation in a vehicle.

Following the correct application of this PAS it will be the remanufacturing process, not the vehicle remanufacturer or the remanufactured part, for which conformity with the requirements of this PAS can be claimed.

BS ISO 22628:2002, Road vehicles. Recyclability and recoverability. Calculation method

This international standard specifies a method for calculating the recyclability rate and the recoverability rate of new road vehicle, each expressed as a percentage mass (mass fraction in percent) of the road vehicle, which can be potentially recycled, reused or both (recyclability rate) or recovered, reused or both (recoverability rate).

BS EN ISO 14040:2006, Environmental management. Life cycle assessment. Principles and framework

Life cycle interpretation is the final phase of the LCA procedure, in which the results of an LCI or an LCIA, or both are summarized and discussed as a basis for conclusions, recommendations and decision-making in accordance with the goal and scope definition.

This international standard covers two types of study: life cycle assessment studies (LCA studies) and life cycle inventory studies (LCI studies).

16/3034:2022 DC, BS 8001, Framework for implementing the principles of the circular economy in organizations. Guide.

This British Standard provides guidance on implementing the principles of the circular economy within organizations. This guidance is intended to apply to any organizations regardless of their location, size, sector and type. The move to a 'circular economy' has been identified as a significant opportunity for business. It will contribute towards a resource efficient and low-carbon economy, reducing costs and supply chain risks, while generating economic and social value. BS 8001 will enable organizations to take action practical action to realize these benefits.



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