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# Earth-moving machinery — Sustainability —

## Part 2: Remanufacturing

*Engins de terrassement — Durabilité —*

*Partie 2: Réfection*



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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 127, *Earth-moving machinery*.

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## Introduction

Sustainability has become a concern in relation to earth-moving machinery, as for so many other products. Customers buying the machines are requesting information that can be used to promote sustainability for their work projects. With the increased interest in sustainability, many organizations are preparing sustainability guidelines and manufacturers are providing general sustainability information.

Sustainability covers a wide range of areas related to social, environmental and economic considerations for the development, manufacturing, useful life and end-of-life phases for earth-moving machines.

Remanufacturing can result in the reuse of the end-of-life products and reduce the consumption of resources and environmental pollution. It can also result in energy savings and reduction of greenhouse gas emissions and other harmful substances. Remanufacturing has become an important part of recycling in a low-carbon economy. It is now one of the key aspects of sustainability and is expected to continue as such in the future. The utilization of used parts of earth-moving machines can reach 80 % or more of the part numbers.

Remanufacturing is performed by the original equipment manufacturer or its associates or by a formally authorized entity.

The development of International Standards on earth-moving machine remanufacturing can help remanufacturers to establish a common understanding about technical specifications for remanufacturing and thereby improve the quality of the remanufactured products.

The objectives of this document are to

- provide general guidance and requirements for remanufacturing of components of earth-moving machines,
- enhance the quality of remanufactured products,
- achieve the sustainable application of remanufactured products, and
- promote the conservation of social resources.