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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).

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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.

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

A list of all parts in the ISO 10987 series, published under the general title, *Earth-moving machinery — Sustainability*, can be found on the ISO website.

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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.

In addition to large and increasing numbers of new earth-moving machines, many thousands (perhaps hundreds of thousands) of used earth-moving machines are resold worldwide each year. The safety, emissions, noise, energy consumption, working performance and other characteristics of used machines can have problems which could cause potential risks to personal safety and the environment and which cannot be identified by buyers of used machines.

The development of an International Standards can help establish international, scientific, rational, feasible and economic specifications for used earth-moving machines and ensure that used machines meet established technical specifications when resold.

The main purpose and significance of developing this document are the following:

a) to offer a technical guide for evaluating used earth-moving machines to

   — boost the normative, healthy and orderly development of the used-machine market for earth-moving machines,

   — improve and protect the rights of both sellers and buyers,

   — reduce the customers' purchase and operation costs, and

   — bring the customers more added value;

b) improve the quality of used machines by

   — increasing the value of those machines,

   — enhancing the sustainable use of earth-moving machines in their lifetime,

   — promoting the application of remanufactured products, and

   — promoting the reasonable utilization of social resources.

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Earth-moving machinery — Sustainability —

Part 3: Used machines

1 Scope

This document gives requirements and relevant information for evaluating used earth-moving machines.

It provides the means to evaluate a used machine, relative to the information provided by the manufacturer in the operator's manual, in order to verify that the used machine is functional as intended by the manufacturer.

This document is applicable to earth-moving machines as defined in ISO 6165 that are used and are planned to be resold.

NOTE The used machine might not meet all current standards and regulations (e.g. roading and hazardous environments).

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 6165, *Earth-moving machinery — Basic types — Identification and terms and definitions*

ISO 10987, *Earth-moving machinery — Sustainability — Terminology, sustainability factors and reporting*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 6165, ISO 10987 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at http://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1
used machine
earth-moving machine that enters the market for resale after it has been used

3.2
warranty
commitment of the guaranteed period for the quality and service of *used machines* (3.1)

Note 1 to entry: The period of warranty begins on the delivery date after the signing of the contract.

3.3
abnormal noise
unusual sound which can indicate that part of the machine is no longer functioning properly

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