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Anläggningsmaskiner – Stöldsäkerhetssystem – Klassificering och prestanda (ISO 22448:2010, IDT)

Earth-moving machinery – Anti-theft systems – Classification and performance (ISO 22448:2010, IDT)

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The International Standard ISO 22448:2010 has the status of a Swedish Standard. This document contains the official version of ISO 22448:2010.

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Denna standard är framtagen av kommittén för Anläggningsmaskiner, SIS/TK 225.

Har du synpunkter på innehållet i den här standarden, vill du delta i ett kommande revideringsarbete eller vara med och ta fram andra standarder inom området? Gå in på www.sis.se - där hittar du mer information.

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 22448 was prepared by Technical Committee ISO/TC 127, *Earth-moving machinery*, Subcommittee SC 3, *Machine characteristics, electrical and electronic systems, operation and maintenance*.

Earth-moving machinery — Anti-theft systems — Classification and performance

1 Scope

This International Standard specifies, and classifies at seven levels, systems for the protection against theft of earth-moving machinery as defined in ISO 6165, and gives performance criteria for each level.

It also gives recommendations for managing critical documentation and theft-sensitive spare parts in protection against theft.

It is not applicable to tracking systems that monitor the location of a machine.

2 Normative references

The following referenced documents are indispensable for the application 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 10264, *Earth-moving machinery — Key-locked starting systems*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

immobilizer

device that is intended to prevent normal operation of the machine

3.2

authentication device

device which allows identification of authorized user(s)

EXAMPLE Radio, satellite, cell phone, keypad, ultrasonic, magnetic wave, electronic key.

3.3

electronic control unit

electronic control module

ECU

ECM

electronic device (electronic programmable controller) used in a control system on earth-moving machinery

3.4

electronic key

wireless device used to aid authentication of the operator

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- 3.5**
token
unique and distinguishing code exchanged between ECM/ECUs
- 3.6**
immobilizer software
software elements integrated into at least one machine ECM/ECU that require authentication before enabling operation of one or more machine functions
- 3.7**
password
pass code, presented by means of, e.g. a keypad combination, electronic key ID or token
- 3.8**
password process
means of providing a password through a human or an electronic interface

4 Classification

Theft protection systems for earth-moving machines are classified into seven levels, I to VII, as follows.

4.1 Level I — Universal key (with no combination)

A mechanical key, provided by the manufacturer, required by the user to start and operate the machine. This key is not unique to a particular machine and may operate other machines produced by the same manufacturer.

4.2 Level II — Mechanical restraint

A lockable mechanical device

- that restricts normal activation of one or several machine controls such as the power transmission, gear-shift and steering control, or
- that restricts normal movement of the machine or part of the machine by means of, for example, a steering cylinder lock, ground chains, cables or padlocks.

NOTE The mechanical restraint can be an aftermarket device.

4.3 Level III — Unique key

A mechanical key, matched specifically to a machine, required by the user to start and operate the machine.

4.4 Level IV — Add-on authentication system

An original equipment manufacturer's or third party add-on attachment that prevents unauthorized start-up or movement of the machine and which requires

- an authentication device, and
- a password process in order to be unlocked.