



SLOVENSKI STANDARD
oSIST prEN ISO 20500-3:2020
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Premični stroji za gradnjo cest - Varnost - 3. del: Posebne zahteve za stroje za stabiliziranje tal in stroje za obnavljanje (ISO/DIS 20500-3:2020)

Mobile road construction machinery - Safety - Part 3: Specific requirements for soil-stabilising machines and recycling machines (ISO/DIS 20500-3:2020)

Bewegliche Straßenbaumaschinen - Sicherheit - Teil 3: Besondere Anforderungen an Bodenstabilisierungsmaschinen und Recyclingmaschinen (ISO/DIS 20500-3:2020)

Machines mobiles pour la construction de routes - Sécurité - Partie 3: Prescriptions spécifiques pour engins de stabilisation de sol et machines de recyclage (ISO/DIS 20500-3:2020)

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ICS:

93.080.10 Gradnja cest Road construction

oSIST prEN ISO 20500-3:2020 **en,fr,de**

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Mobile road construction machinery — Safety —

Part 3: Specific requirements for soil-stabilising machines and recycling machines

*Machines mobiles pour la construction de routes — Sécurité —**Partie 3: Prescriptions spécifiques pour engins de stabilisation de sol et machines de recyclage*

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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).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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For an explanation of 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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 195, *Building construction machinery and equipment*.

ISO 20500 consists of the following parts, under the general title *Mobile road construction machinery — Safety*:

- *Part 1: Common requirements*
- *Part 2: Specific requirements for road-milling machines*
- *Part 3: Specific requirements for soil-stabilising machines and recycling machines*
- *Part 4: Specific requirements for compaction machines*
- *Part 5: Specific requirements for paver-finishers*
- *Part 6: Specific requirements for mobile feeders*
- *Part 7: Specific requirements for slip form pavers and texture curing machines*

A list of all parts in the ISO 20500 series can be found on the ISO website.

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Introduction

This International Standard is a type C standard as stated in ISO 12100.

The machinery concerned and the extent to which hazards, hazardous situations and events are covered are indicated in the scope of this International Standard.

When provisions of this type C standard are different from those which are stated in type A or B standards, the provisions of this type C standard take precedence over the provisions of the other standards for machines that have been designed and built according to the provisions of this type C standard.

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Mobile road construction machinery — Safety —

Part 3: Specific requirements for soil-stabilising machines and recycling machines

1 Scope

This part of ISO 20500, together with part 1, deals with all significant hazards for soil-stabilising machines and recycling machines when they are used as intended and under the conditions of misuse which are reasonably foreseeable by the manufacturer associated with the whole life time of the machine (see Annex C).

The requirements of this part are complementary to the common requirements formulated in ISO 20500-1.

This document does not repeat the requirements from ISO 20500-1, but adds or replaces the requirements for application for soil-stabilising machines and recycling machines.

The following significant and relevant hazards are not covered in this document:

— Lightning.

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 3744:2010, *Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Engineering methods for an essentially free field over a reflecting plane*

ISO 9244:2008+Amd 1:2016, *Earth-moving machinery — Machine safety labels — General principles; Amendment 1*

ISO 10263-4:2009, *Earth-moving machinery — Operator enclosure environment — Part 4: Heating, ventilating and air conditioning (HVAC) test method and performance*

ISO 11201:2010, *Acoustics — Noise emitted by machinery and equipment — Determination of emission sound pressure levels at a work station and at other specified positions in an essentially free field over a reflecting plane with negligible environmental corrections*

ISO 12100:2010, *Safety of machinery — General principles for design — Risk assessment and risk reduction*

ISO 13857:2008, *Safety of machinery — Safety distances to prevent hazard zones being reached by upper and lower limbs*

ISO 20500-1, *Mobile road construction machinery — Safety — Part 1: Common requirements*

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3 Terms and definitions

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

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

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

soil stabilizer

machine, either self-propelled or towed, with the function of pulverizing, breaking-up, aerating, homogenizing, and loosening existing and/or imported soil and optionally mixing them together with water and/or binders, e.g. cement or lime

Note to entry: The main purpose of a soil stabilizer is to improve the mechanical and physical properties of the soil material by mixing it with binders (cement, lime, etc.) or filler.

3.2

recycling machines

machine used for the rehabilitation of road structures using reclaimed materials, additionally mixed with binders (e.g. bitumen or cement) and reapplied in situ

3.3

mixing equipment/mixing drum (standards.iteh.ai)

power-driven cylindrical bodies which rotate during the mixing operation. The surface of the cylindrical bodies is equipped with tools for the mixing process

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4 Safety requirements and/or protective/risk reduction measures

4.1 General

Soil-stabilising machines and recycling machines shall comply with the safety requirements and/or protective/risk reduction measures of this clause. In addition, the machines shall be designed according to the principles of EN ISO 12100:2010 for relevant but not significant hazards which are not dealt with by this document.

Soil-stabilising machines and recycling machines shall comply with the requirements of ISO/DIS 20500-1, as far as not modified or replaced by the requirements of this part.

4.2 Visibility

4.2.1 General

4.2 of ISO 20500-1 applies with the following additions.

4.2.2 Visibility performance criteria

The machine meets the requirements of this International Standard if the measurement results show no maskings or maskings smaller than or equal to the performance criteria with direct or indirect view as specified in Table 1.