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## Mobile road construction machinery — Safety —

### Part 7: Specific requirements for slipform paver and texture curing machines

*Machines mobiles pour la construction de routes — Sécurité —  
Partie 7: Prescriptions spécifiques pour finisseurs*

ICS: 93.080.10

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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)).

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](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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](http://www.iso.org/iso/foreword.html).

This document ISO 20500-7 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 slipform paver and texture curing machines

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

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

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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 7:

## Specific requirements for slipform paver and texture curing machines

### 1 Scope

This part of ISO 20500, together with part 1, deals with all significant hazards for slipform paver and texture curing 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 D).

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 paver-finisher.

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

— Lightning.

### 2 Normative references

[ISO/DIS 20500-7](https://standards.iteh.ai/catalog/standards/sist/e13057dd-547a-442e-a59f-bda3b0d8ea63/iso-dis-20500-7)

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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, *Earth-moving machinery — Machine safety labels — General principles*

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

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

### 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

#### **slipform paver**

machine intended to move and to guide a mould that extrudes pre-vibrated concrete to make continuous works, such as barriers, curb and gutter, parapet, glare-screen, variable height median barrier, pavements, or canal ditches

Note to entry: see Figures B.1 and B.2

### 3.2

#### **texture curing machine**

machine that gives freshly laid concrete surfaces the desired surface texture by applying a texturing device and sprays a dispersion on the concrete surface to prevent premature drying (see Figure C.1)

Note to entry: a texturing device is for example a broom, a jute garment or other foils

### 3.3

#### **trimmer**

power-driven cylindrical body on which the trimming tools are fitted, the cylindrical bodies rotate during the trimming operation

Note to entry: Trimmers are used to level the surface in front of the offset mould

### 3.4

#### **Concrete Mix Distributor**

either a spreader auger or a diverter plough placed in front of the mould of a slipform paver with road mould to spread concrete mix evenly before it enters the mould

### 3.5

#### **Tie-Bar inserter**

device which drives the tie bars into the concrete mix during the paving process

Note 1 to entry: See Figure B.3.

Note 2 to entry: There are several locations for tie-bar inserters: centerline, edge of pavement and shoulder line.

### 3.6

#### **Dowel Bar Inserter (DBI)**

device which places multiple load-transfer dowel bars (transverse contraction joint) in the freshly paved concrete

Note 1 to entry: See Figure B.3.

Note 2 to entry: This device is located at the rear of the mould, or on the lateral formwork, or in the mould structure itself.

## 4 Safety requirements and/or protective/risk reduction measures

### 4.1 General

Slipform paver and texture curing 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.

Slipform paver and texture curing machines shall comply with the requirements of FprEN 474-1:2019, as far as not modified or replaced by the requirements of this part.

### 4.2 Visibility

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

#### 4.2.1 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 2.

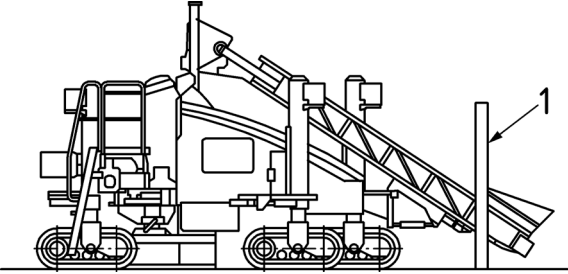
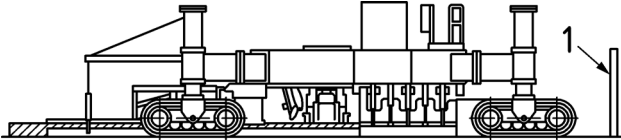
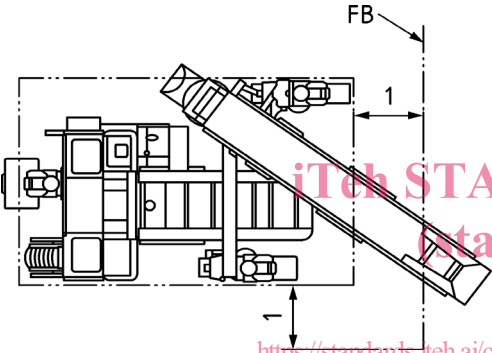
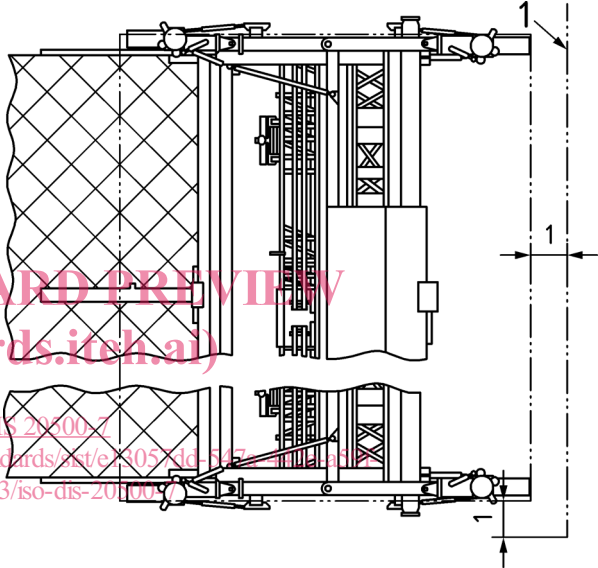
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Table 1 — Setup of machines

Dimension in metres

Offset slipform pavers	Inset slipform pavers
	
	
<b>Key</b> 1 FB	

4.2.2 Visibility performance criteria for the front boundary FB

The machine meets the requirements of this document if the measurement results show no maskings or maskings smaller or equal to 300 mm when evaluated using the eye spacing of 405 mm and using a FB test object height of 1.5 m.

NOTE The 12 m circle and the RB are not relevant for slipform pavers and texture curing machines.

4.3 Operation and handling

4.3 of ISO 20500-1 applies with the following exception:

4.3.2.2 does not apply for Slipform pavers and texture curing machines