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Irish Standard
I.S. EN 500-4:2011

Mobile road construction machinery - Safety - Part 4: Specific requirements for compaction machines

I.S. EN 500-4:2011

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Mobile road construction machinery - Safety - Part 4: Specific requirements for compaction machines

Machines mobiles pour la construction de routes - Sécurité
- Partie 4: Prescriptions spécifiques pour compacteurs

Bewegliche Straßenbaumaschinen - Sicherheit - Teil 4:
Besondere Anforderungen an Verdichtungsmaschinen

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Foreword

This document (EN 500-4:2011) has been prepared by Technical Committee CEN/TC 151 Building material construction machinery and equipment — Safety”, the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2011, and conflicting national standards shall be withdrawn at the latest by August 2011.

This document supersedes EN 500-4:2006+A1:2009.

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

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive.

For relationship with EU Directive, see informative Annex ZA which is an integral part of this document.

The following changes have been introduced during the revision of EN 500-4:2006+A1:2009:

- exclusion of machines for seated ride-on operated rollers with a drum width less than nominal 0,8 m;
- addition of warnings and instructions regarding use of machines with a drum width less than nominal 1 m;
- vibrating rollers, irrespective whether they are intended for ride-on operation, pedestrian- or remote-controlled are measured on a cushion/elastic underlay;
- non-vibrating rollers, irrespective whether they are intended for ride-on operation, pedestrian- or remote-controlled are measured on a rigid reflecting plane without load and engine operating at nominal power-output;
- vibratory rammers are measured on the gravel-track;
- vibratory plates are measured on the gravel-track;
- for pragmatic reasons the deletion of explosion rammers and non-vibrating towed rollers/equipment is suggested ancillary, because today explosion-rammers cannot be found in the market any longer and non-vibrating towed rollers/equipment represent a passive attachment without any power-source and a function based on static-load only.

EN 500 “Mobile road construction machinery — Safety” comprise the following parts:

- 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 6: Specific requirements for paver-finishers.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Introduction

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

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

1 Scope

This part of EN 500 specifies the safety requirements for compaction machines as defined in Clause 3 and deals with all significant hazards, hazardous situations and events relevant to compaction machines, when they are used as intended and under conditions of misuse which are reasonably foreseeable.

This document specifies additional requirements to and/or exceptions from EN 500-1 "Common requirements".

This part of EN 500 is not applicable for seated ride-on operated rollers with a drum width less than nominal 0,8 m.

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.

EN 500-1:2006+A1:2009, *Mobile road construction machinery — Safety — Part 1: Common requirements*

EN 954-1:1996, *Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design*

EN 60204-1:2006, *Safety of machinery — Electrical equipment of machines — Part 1: General requirements (IEC 60204-1:2005, modified)*

EN 60664 (all parts), *Insulation coordination for equipment within low-voltage systems*

EN ISO 3164:2008, *Earth-moving machinery — Laboratory evaluations of protective structures — Specifications for deflection-limiting volume (ISO 3164:1995)*

EN ISO 3450:2008, *Earth-moving machinery — Braking systems of rubber-tyred machines — Systems and performance requirements and test procedures (ISO 3450:1996)*

EN ISO 3471:2008, *Earth-moving machinery — Roll-over protective structures — Laboratory tests and performance requirements (ISO 3471:2008)*

EN 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 3744:2010)*

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