



**NSAI**  
Standards

Irish Standard  
I.S. EN 12111:2014

# Tunnelling machines - Road headers and continuous miners - Safety requirements

**I.S. EN 12111:2014**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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NSAI  
1 Swift Square,  
Northwood, Santry  
Dublin 9

T +353 1 807 3800  
F +353 1 807 3838  
E standards@nsai.ie  
W NSAI.ie

Sales:  
T +353 1 857 6730  
F +353 1 857 6729  
W standards.ie

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English Version

## Tunnelling machines - Road headers and continuous miners - Safety requirements

Machines pour la construction de tunnels - Machines à  
attaque ponctuelle et mineurs continus - Prescriptions de  
sécurité

Tunnelbaumaschinen - Teilschnittmaschinen und  
Continuous miners - Sicherheitstechnische Anforderungen

This European Standard was approved by CEN on 20 March 2014.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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## EN 12111:2014 (E)

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## EN 12111:2014 (E)

### Foreword

This document (EN 12111:2014) has been prepared by Technical Committee CEN/TC 151 "Construction equipment and building material machines - 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of an identical text or by endorsement, at the latest by November 2014 and conflicting national standards shall be withdrawn at the latest by November 2014.

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 supersedes EN 12111:2002+A1:2009.

The main technical changes compared to EN 12111:2002+A1:2009 are the following:

- modification of the scope, "impact rippers" deleted;
- update of normative references;
- improvement of requirements on access systems;
- requirements on control systems improved;
- revision of requirements on audible and visual warning signs;
- improvement of noise test code.

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(s).

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

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## **Introduction**

This document 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 document.

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.

Annex A is normative and contains the “Noise Test Code” and Annex B is informative and contains “Figures”.

## EN 12111:2014 (E)

### 1 Scope

This European Standard deals with all significant hazards, hazardous situations and events relevant to road headers and continuous miners as defined in Clause 3 (hereinafter called machines) when they are used as intended and under conditions of misuse which are reasonably foreseeable by the manufacturer (see Clause 4).

NOTE 1 Within the intended use, overturning of the road header or continuous miner is not a significant hazard.

Excavators are out of the scope of this standard and are covered by EN 474-1:2006+A4:2013 and EN 474-5:2006+A3:2013.

The following items and applications are not covered by this European Standard:

- the supply of electricity up to the switch box;
- use of the machine in potentially explosive atmospheres;
- use of the machine under hyperbaric conditions;
- loading and transport equipment which is not an integral part of the machine.

This European Standard covers incorporation of monitoring devices for hazardous atmospheres.

This European Standard is not applicable to machines manufactured before the date of publication of this European Standard by CEN.

NOTE 2 Directive 94/9/EC concerning equipment and protective systems intended for use in potentially explosive atmospheres can be applicable to the type of machine or equipment covered by this European Standard. The present standard is not intended to provide means of complying with the essential health and safety requirements of Directive 94/9/EC. For the application in potentially explosive atmospheres see EN 1710:2005+A1:2008.

### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 3-7:2004+A1:2007, *Portable fire extinguishers - Part 7: Characteristics, performance requirements and test methods*

EN 474-1:2006+A4:2013, *Earth-moving machinery - Safety - Part 1: General requirements*

EN 617:2001+A1:2010, *Continuous handling equipment and systems - Safety and EMC requirements for the equipment for the storage of bulk materials in silos, bunkers, bins and hoppers*

EN 618:2002+A1:2010, *Continuous handling equipment and systems - Safety and EMC requirements for equipment for mechanical handling of bulk materials except fixed belt conveyors*

EN 620:2002+A1:2010, *Continuous handling equipment and systems - Safety and EMC requirements for fixed belt conveyors for bulk materials*

EN 894-1:1997+A1:2008, *Safety of machinery - Ergonomics requirements for the design of displays and control actuators - Part 1: General principles for human interactions with displays and control actuators*

EN 953:1997+A1:2009, *Safety of machinery - Guards - General requirements for the design and construction of fixed and movable guards*

EN 981:1996+A1:2008, *Safety of machinery - System of auditory and visual danger and information signals*



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