

Zariadenia na vŕtanie a základové práce. Bezpečnosť. Časť 5: Zariadenia na diafragmové steny.

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Drilling and foundation equipment - Safety - Part 5: Diaphragm walling equipment

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

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**English Version** 

# Drilling and foundation equipment - Safety - Part 5: Diaphragm walling equipment

Machines de forage et de fondation - Sécurité - Partie 5: Machines pour parois moulées Geräte für Bohr- und Gründungsarbeiten - Sicherheit - Teil 5: Geräte für Schlitzwandarbeiten

This European Standard was approved by CEN on 6 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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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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### **Foreword**

This document (EN 16228-5:2014) 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of an identical text or by endorsement, at the latest by November 2014 and conflicting national standards shall be withdrawn at the latest by November 2014.

This document supersedes EN 791:1995+A1:2009, EN 996:1995+A3:2009.

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(s), see informative Annex ZA, which is an integral part of this document.

This European Standard is divided into several parts and covers drilling and foundation equipment.

Part 1 contains requirements that are/may be common to all drilling and foundation equipment. Other parts contain additional requirements for specific machines that supplement or modify the requirements of part 1. Compliance with the clauses of part 1 together with those of a relevant specific part of this standard giving requirements for a particular machine provides one means of conforming with the essential health and safety requirements of the Directive concerned.

When a relevant specific part does not exist, part 1 can help to establish the requirements for the machine, but will not by itself provide a means of conforming to the relevant essential health and safety requirements of the Directive.

This European Standard, EN 16228, *Drillling and foundation equipment – Safety*, consists of the following parts:

- Part 1: Common requirements
- Part 2: Mobile drill rigs for civil and geotechnical engineering, quarrying and mining
- Part 3: Horizontal directional drilling equipment (HDD)
- Part 4: Foundation equipment
- Part 5: Diaphragm walling equipment
- Part 6: Jetting, grouting and injection equipment
- Part 7: Interchangeable auxiliary equipment

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

The machinery concerned and the extent to which hazards are covered are indicated in the scope of this 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 drilling and foundation equipment that have been designed and built according to the provisions of this type C standard.

## 1 Scope

This European Standard, together with part 1, deals with all significant hazards for diaphragm walling equipment 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 Clause 4).

The requirements of this part are complementary to the common requirements formulated in EN 16228-1:2014.

This document does not repeat the requirements from EN 16228-1, but adds or replaces the requirements for application for diaphragm walling equipment.

#### 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 474-5:2006+A3:2013, Earth-moving machinery — Safety — Part 5: Requirements for hydraulic excavators

EN 474-12:2006+A1:2008, Earth-moving machinery — Safety — Part 12: Requirements for cable excavators

EN 16228-1:2014, Drilling and foundation equipment — Safety — Part 1: Common requirements

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

ISO 6395:2008, Earth-moving machinery — Determination of sound power level — Dynamic test conditions

ISO 6396:2008, Earth-moving machinery — Determination of emission sound pressure level at operator's position — Dynamic test conditions

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