

DIN EN 16228-2



ICS 93.020

Supersedes
DIN EN 16228-2:2014-10

**Drilling and foundation equipment –
Safety –
Part 2: Mobile drill rigs for civil and geotechnical engineering, quarrying
and mining;
English version EN 16228-2:2014+A1:2021,
English translation of DIN EN 16228-2:2022-07**

Geräte für Bohr- und Gründungsarbeiten –
Sicherheit –
Teil 2: Mobile Bohrgeräte für Tiefbau, Geotechnik und Gewinnung;
Englische Fassung EN 16228-2:2014+A1:2021,
Englische Übersetzung von DIN EN 16228-2:2022-07

Machines de forage et de fondation –
Sécurité –
Partie 2: Machines mobiles de forage de génie civil, de géotechnique, de puits d'eau,
d'exploration de sol, d'énergie géothermique dans le sol ou mélange roche et sol;
Version anglaise EN 16228-2:2014+A1:2021,
Traduction anglaise de DIN EN 16228-2:2022-07

Document comprises 36 pages

Translation by DIN-Sprachendienst.

In case of doubt, the German-language original shall be considered authoritative.

A comma is used as the decimal marker.

National foreword

This standard includes safety requirements.

This document (EN 16228-2:2014+A1:2021) has been prepared by Technical Committee CEN/TC 151 “Construction equipment and building material machines — Safety” (Secretariat: DIN, Germany).

The responsible German body involved in its preparation was *DIN-Normenausschuss Maschinenbau* (DIN Standards Committee Mechanical Engineering), Working Committee NA 060-13-03 AA “Drilling and foundation equipment” of Section “Construction equipment and building material machines”. Representatives of manufacturers and users of “drilling and foundation equipment”, and of the employers’ liability insurance associations contributed to this standard.

This standard contains specifications which give detail to the essential requirements set out in Annex I of the “Machinery Directive”, Directive 2006/42/EC, and which apply to machines that are either first placed on the market or commissioned within the EEA. This standard serves to facilitate proof of compliance with the essential requirements of that directive.

Once this standard is cited in the Official Journal of the European Union, it is deemed a “harmonized” standard, and, thus, a manufacturer applying this standard may assume compliance with the requirements of the Machinery Directive (“presumption of conformity”).

For current information on this document, please go to DIN’s website (www.din.de) and search for the document number in question.

Amendments

This standard differs from DIN EN 16228-2:2014-10 as follows:

a) the Scope has been modified:

The following machines are excluded from the Scope of this document:

- tunnelling machines, unshielded tunnel boring machines and rodless shaft boring machines for rock according to prEN 16191;
- raise boring machines;
- drill rigs used in oil and gas industry;
- specialized mining machinery and equipment for opencast mining (e.g. rock drill rigs, blast hole drills) (under the Scope of CEN/TC 196);
- all underground mining machinery and equipment for the extraction of solid mineral substances (e.g. rock drill rigs, raise boring machines, shaft boring machines, mining auger boring machines, jumbos) as well as machinery and equipment for underground mine development (under the Scope of CEN/TC 196);
- core drilling machines on stand covered by EN 12348;
- hand-held machines (in particular machines covered by ISO 11148-5).

- b) normative references have been updated and adapted throughout the text;
- c) Clause 3 “Terms and definitions” has been modified;
- d) Table 1 “List of significant hazards and associated requirements” in Clause 4 has been replaced;
- e) 5.2 “Boom mounted working platforms for underground use” has been modified;
- f) 5.5 “Guards and sensitive protective devices” has been replaced;
- g) 5.6 “Supplementary trip device” has been included;
- h) 5.6.1 “General” has been modified and renumbered as 5.7.1;
- i) 5.6.3 “Drill jumbo” has been removed;
- j) 5.7.3 “Suspended drill rigs” has been included;
- k) 5.12 “Noise” has been included;
- l) 5.13 “Special protective mode” has been included;
- m) Table 2 in Clause 6 “Verification of safety requirements and/or protective measures” has been replaced;
- n) 7.3 “Suspended drill rigs” has been included;
- o) 7.4 “Special protective mode” has been included;
- p) in Annex B “Brake test for mobile drill rigs excluding truck and tractor mounted drill rigs”, several cross references have been updated;
- q) Annex ZA has been replaced;
- r) the Bibliography has been updated.

Previous editions

DIN 24096: 1987-06
 DIN EN 791: 1996-01, 2010-01
 DIN EN 996: 1996-04, 2010-02
 DIN EN 996/A1: 2000-03
 DIN EN 996/A2: 2003-11
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