

Irish Standard I.S. EN 15571:2020

Machines and plants for mining and tooling of natural stone - Safety -Requirements for surface-finishing machines

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I.S. EN 15571:2020

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National Foreword

I.S. EN 15571:2020 is the adopted Irish version of the European Document EN 15571:2020, Machines and plants for mining and tooling of natural stone - Safety - Requirements for surface-finishing machines

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EUROPEAN STANDARD

EN 15571

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2020

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Supersedes EN 15571:2014

English Version

Machines and plants for mining and tooling of natural stone - Safety - Requirements for surface-finishing machines

Machines et installations d'extraction et d'usinage des pierres naturelles - Sécurité - Prescriptions relatives aux machines de finition de surface Maschinen und Anlagen zur Gewinnung und Bearbeitung von Naturstein - Sicherheit -Anforderungen an Flächenschleifmaschinen

This European Standard was approved by CEN on 28 September 2020.

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European foreword

This document (EN 15571:2020) 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of an identical text or by endorsement, at the latest by May 2021, and conflicting national standards shall be withdrawn at the latest by month year of May 2021.

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

This document supersedes EN 15571:2014.

The following major changes were introduced:

- list of the significant hazards has been moved from Clause 4 to Annex A, according to 6.10.3.1 of CEN Guide 414;
- normative references have been modified and updated to Clause 2;
- terms and definitions have been introduced to Clause 3 (e.g. control power on, telecontrol, teleservice);
- requirements related to position of controls have been added or modified to 4.2.2.1;
- requirements related to hand-held control sets have been added to 4.2.2.2;
- requirements related to starting have been added or modified to 4.2.3;
- requirements related to normal stop have been added or modified to 4.2.4;
- requirements related to emergency stop have been added or modified to 4.2.5;
- requirements related to operational stop have been added or modified to 4.2.6;
- requirements related to teleservice have been added to 4.2.10;
- requirements related to transport and installation of machine have been added to 4.3.1;
- requirements related to stability have been added to 4.3.2;
- requirements related to prevention of access to moving parts and safeguards to minimize the effect of ejection have been added or modified to 4.3.4;
- specific requirements related to surface-finishing machines with fixed table and mobile transversal bridge (track machines) have been modified to 4.3.5;
- requirements related to tool changing have been added or modified to 4.3.6;
- requirements related to noise have been added or modified to 4.4.2 and Annex C;
- requirements related to electrical hazards have been added or modified to 4.4.3;

- requirements related to unintended movements have been added to 4.4.7;
- requirements related to information for use have been added or modified to Clause 5;
- requirements related to rigid guards on machines and impact test method have been added to Annex
 B:
- Annex ZA has been modified according to the last edition of CEN Guide 414.

This document has been prepared under a standardization request 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 organisations 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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

This document has been prepared to be a harmonized standard to provide one means of conforming to the essential health and safety requirements of the Machinery Directive and associated EFTA Regulations.

This document is a type-C standard as stated in EN ISO 12100.

This document is of relevance, in particular, for the following stakeholder groups representing the market players with regard to machinery safety:

- machine manufacturers (small, medium and large enterprises);
- health and safety bodies (regulators, accident prevention organizations, market surveillance, etc.).

Others can be affected by the level of machinery safety achieved with the means of the document by the above-mentioned stakeholder groups:

- machine users/employers (small, medium and large enterprises);
- machine users/employees (e.g. trade unions, organizations for people with special needs);
- service providers, e.g. for maintenance (small, medium and large enterprises);
- consumers (in case of machinery intended for use by consumers).

The above-mentioned stakeholder groups have been given the possibility to participate at the drafting process of this document.

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

When requirements of this type-C standard are different from those which are stated in type-A or type-B standards, the requirements of this type-C standard take precedence over the requirements of the other standards for machines that have been designed and built according to the requirements of this type-C standard.

1 Scope

This document applies to stationary surface-finishing machines with stationary work piece (see 3.1) or with moving work piece (see 3.2) which are used to grind or polish horizontal surfaces of slabs, strips or tiles of natural stone and engineered stone (e.g. agglomerated stone) as defined by EN 14618:2009.

This document deals with all significant hazards, hazardous situations and events relevant to surface-finishing machines, when they are used as intended and under conditions of misuse which are reasonably foreseeable by the manufacturer (see Clause 4).

This document specifies the appropriate technical measures to eliminate or reduce risks arising from the significant hazards.

This document deals with the foreseeable lifetime of the machinery including the phases of transport, assembly, dismantling, disabling and scrapping.

This document does not deal with:

- hand-held grinding machines;
- machines intended for operation in a potentially explosive atmosphere;
- operation in severe environmental conditions (e.g. extreme temperatures, corrosive environment);
- machines intended for outdoor operation.

This document is not applicable to machinery which is manufactured before the date of publication of this document by CEN.

2 Normative references

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.

EN 166:2001, Personal eye-protection — Specifications

EN 1005-2:2003+A1:2008, Safety of machinery — Human physical performance — Part 2: Manual handling of machinery and component parts of machinery

EN 1005-4:2005+A1:2008, Safety of machinery — Human physical performance — Part 4: Evaluation of working postures and movements in relation to machinery

EN 14618:2009, Agglomerated stone — Terminology and classification

EN 50370-1:2005, Electromagnetic compatibility (EMC) — Product family standard for machine tools — Part 1: Emission

EN 50370-2:2003, Electromagnetic compatibility (EMC) — Product family standard for machine tools — Part 2: Immunity

EN 60204-1:2018, Safety of machinery — Electrical equipment of machines — Part 1: General requirements (IEC 60204 1:2016, mod.)

EN 60529:1991, Degrees of protection provided by enclosures (IP Code) (IEC 60529:1989)



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