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NSAI Standards

Irish Standard
I.S. EN 16564:2020

Machines and plants for mining and tooling of natural stone - Safety - Requirements for bridge type sawing/milling machines, included numerical control (NC/CNC) versions

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I.S. EN 16564:2020

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National Foreword

I.S. EN 16564:2020 is the adopted Irish version of the European Document EN 16564:2020, Machines and plants for mining and tooling of natural stone - Safety - Requirements for bridge type sawing/milling machines, included numerical control (NC/CNC) versions

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 16564

November 2020

ICS 25.080.20; 25.080.60; 73.120

Supersedes EN 16564:2014

English Version

Machines and plants for mining and tooling of natural stone - Safety - Requirements for bridge type sawing/milling machines, included numerical control (NC/CNC) versions

Machines et équipements pour l'exploitation et l'usinage de pierres naturelles - Sécurité - Prescriptions relatives aux machines à scier/fraiseuses de type pont, y compris les versions à commande numérique (NC/CNC)

Maschinen und Anlagen zur Gewinnung und Bearbeitung von Naturstein - Sicherheit - Anforderungen an Brücken-Säge-/Fräsmaschinen einschließlich numerischer Steuerungsversionen (NC/CNC)

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

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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COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN 16564:2020) 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 16564:2014.

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 hand-held control sets have been added or modified to 4.2.2.2;

— requirements related to starting have been added or modified to 4.2.3;

— 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 4.3.5;

— requirements related to noise have been added or modified to 4.4.2 and Annex D;

— requirements related to electrical hazards have been added or modified to 4.4.3;

— requirements related to unintended movements have been added to 4.4.8;

— requirements related to information for use have been added or modified to Clause 5;

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

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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.

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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 or 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.

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1 Scope

This document deals with all significant hazards, hazardous situations and events which are relevant to:

— bridge sawing machines;

— bridge sawing and milling machines;

— numerical control bridge sawing/milling machines.

These machines are designed to saw and mill natural stone and engineered/agglomerated stone as defined by EN 14618:2009, 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 also applies to machines fitted with the following facilities/devices:

— mechanical, pneumatic, hydraulic or vacuum workpiece clamping;

— automatic tool change;

— loading and unloading conveyor system;

— tilting and/or rotating head axis;

— rotating workpiece support(s);

— tilting workpiece support(s) when loading;

— lathe unit;

— undercut grooving unit;

— axes operating in accordance with an NC work programme.

This document does not apply to:

— machines intended for operation in a potentially explosive atmosphere;

— machines operating in severe environmental conditions (e.g. extreme temperatures, corrosive environment);

— machines intended for outdoor operation;

— machines which are manufactured before the date of their publication as EN.

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*

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