SLOVENSKI STANDARD
SIST EN ISO 23062:2023

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Nadomešča:
SIST EN 710:2000+A1:2010
SIST EN 710:2000+A1:2010/AC:2013

Livarski stroji - Varnostne zahteve za stroje za oblikovanje in izdelavo jeder ter pripadajočo opremo (ISO 23062:2022)

Foundry machinery - Safety requirements for molding and coremaking machinery and associated equipment (ISO 23062:2022)

Sicherheit von Maschinen - Sicherheitsanforderungen an Gießereimaschinen und -anlagen der Form- und Kernherstellung und dazugehörige Einrichtungen (ISO 23062:2022)

Machines de fonderie - Prescriptions de sécurité pour les machines et équipements associés de moulage et de noyautage (ISO 23062:2022)

Ta slovenski standard je istoveten z: **EN ISO 23062:2022**

ICS:

25.120.30	Livarska oprema	Moulding equipment
77.180	Oprema za metalurško industrijo	Equipment for the metallurgical industry

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 23062

December 2022

ICS 13.110; 25.120.30; 77.180

Supersedes EN 710:1997+A1:2010

English Version

Foundry machinery - Safety requirements for molding and coremaking machinery and associated equipment (ISO 23062:2022)

Machines de fonderie - Prescriptions de sécurité pour les machines et équipements associés de moulage et de noyautage (ISO 23062:2022)

Sicherheit von Maschinen - Sicherheitsanforderungen an Gießereimaschinen und -anlagen der Form- und Kernherstellung und dazugehörige Einrichtungen (ISO 23062:2022)

This European Standard was approved by CEN on 27 June 2022.

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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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Ref. No. EN ISO 23062:2022 E

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European foreword

This document (EN ISO 23062:2022) has been prepared by Technical Committee ISO/TC 306 "Foundry machinery" in collaboration with Technical Committee CEN/TC 202 “Foundry machinery” 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 June 2023, and conflicting national standards shall be withdrawn at the latest by June 2023.

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 710:1997+A1:2010.

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) / Regulation(s).

For the relationship with EU Directive(s) / Regulation(s), see informative Annex ZA, which is an integral part of this document.

Any feedback and questions on this document should be directed to the users’ national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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, 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, Türkiye and the United Kingdom.

Endorsement notice

The text of ISO 23062:2022 has been approved by CEN as EN ISO 23062:2022 without any modification.

Annex ZA
(informative)

Relationship between this European Standard and the essential requirements of EU Directive 2006/42/EC aimed to be covered

This European Standard has been prepared under a Commission's standardization request "M/396 Mandate to CEN and CENELEC for Standardisation in the field of machinery" to provide one voluntary means of conforming to essential requirements of Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery, and amending Directive 95/16/EC (recast).

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding essential requirements of that Directive, and associated EFTA regulations.

Table ZA.1 — Correspondence between this European Standard and Directive 2006/42/EC

The relevant Essential Requirements of Directive 2006/42/EC	Clause(s)/sub-clause(s) of this EN	Remarks/Notes
1.1.3. Materials and products	5.1.7; 5.1.16	
1.1.5. Design of machinery to facilitate its handling	5.1.11; 5.1.19	
1.1.6. Ergonomics	5.1.11	
1.2.1. Safety and reliability of control systems	5.1.5	
1.3. Protection against mechanical hazards	5.1.1; 5.1.2; 5.1.3; 5.1.4; 5.1.5; 5.1.6; 5.1.7;5.1.11;5.1.13; 5.1.14; 5.1.15; 5.1.16; 5.1.18; 5.1.19	
1.5.1. Electricity supply	5.1.7; 5.1.14	
1.5.13. Emissions of hazardous materials and substances	5.1.7; 5.1.16	
1.5.14. Risk of being trapped in a machine	5.1.2; 5.1.6	
1.5.5. Extreme temperatures	5.1.1; 5.1.2; 5.1.3; 5.1.6; 5.1.14; 5.1.17	
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1.5.8. Noise		Not covered
1.5.9. Vibrations		Not covered
1.6.1. Machinery maintenance	5.1.4, 5.1.5, 5.1.7; 5.1.14	
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WARNING 1 — Presumption of conformity stays valid only as long as a reference to this European Standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

WARNING 2 — Other Union legislation may be applicable to the product(s) falling within the scope of this standard.

INTERNATIONAL STANDARD

ISO 23062

First edition
2022-07

Foundry machinery — Safety requirements for molding and coremaking machinery and associated equipment

Machines de fonderie — Prescriptions de sécurité pour les machines et équipements associés de moulage et de noyautage

Reference number
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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 306, *Foundry machinery,* in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 202, *Foundry machinery,* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This document is a type C standard as stated in ISO 12100:2010.

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.

Foundry machinery — Safety requirements for molding and coremaking machinery and associated equipment

1 Scope

This document deals with foreseeable significant hazards, hazardous situations and events relevant to molding and coremaking machinery and associated equipment when used as intended and under conditions of misuse which are reasonably foreseeable by the manufacturer (see Clause 5). It provides the requirements to be met by the manufacturer to ensure the safety of persons and property during the life-cycle phases in accordance with ISO 12100:2010, 5.4, as well as in the event of foreseeable failures or malfunctions that can occur in the equipment.

This document applies to the following equipment:

a) machinery constructed to condition and/or reclaim foundry sands for mold and coremaking (including related moldable granular materials);

b) molding machinery;

c) coremaking machinery;

d) knock-out equipment;

e) other directly associated equipment.

This document does not apply to:

— ladles and pouring equipment;

NOTE This equipment is covered within the European Union (EU) by EN 1247:2010.

— wax and lost foam pattern production and wax removal equipment;

— additive manufacturing equipment;

— dust and/or gaseous emissions reduction equipment;

— crane installations;

— winches;

— continuous conveyors or handling systems which can be an integral part of the equipment covered by this document;

— sand and casting separation systems.

This document does not explicitly deal with electrical hazards. These hazards are covered by IEC 60204-1: 2016.

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.

ISO 3864-1:2011, *Graphical symbols — Safety colours and safety signs — Part 1: Design principles for safety signs and safety markings*