

**Betoonist ja kaltsiumsilikaadist
konstruktsioonielementide valmistamiseks mõeldud
masinad. Ohutus. Osa 1: Ühtsed nõuded
KONSOLIDEERITUD TEKS**

Machines for the manufacture of constructional products
from concrete and calcium-silicate - Safety - Part 1:
Common requirements CONSOLIDATED TEXT

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 12629-1:2000+A1:2010 sisaldab Euroopa standardi EN 12629-1:2000+A1:2010 ingliskeelset teksti.

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English Version

Machines for the manufacture of constructional products from
concrete and calcium-silicate - Safety - Part 1: Common
requirements

Machines pour la fabrication de produits de construction en
béton et silico-calcaire - Sécurité - Partie 1: Exigences
communes

Maschinen für die Herstellung von Bauprodukten aus Beton
und Kalksandsteinmassen - Sicherheit - Teil 1:
Gemeinsame Anforderungen

This European Standard was approved by CEN on 12 May 2000 and includes Amendment 1 approved by CEN on 5 August 2010.

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Foreword

This document (EN 12629-1:2000+A1:2010) 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of an identical text or by endorsement, at the latest by March 2011, and conflicting national standards shall be withdrawn at the latest by March 2011.

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

This document includes Amendment 1, approved by CEN on 2010-08-05.

This document supersedes EN 12629-1:2000.

The start and finish of text introduced or altered by amendment is indicated in the text by tags **A1** **A1**.

This European Standard 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 standard.

A1 The series "*Machines for the manufacture of constructional products from concrete and calcium – silicate – Safety*" consists of the following parts:

Part 1: Common requirements

Part 2: Block making machines

Part 3: Slide and turntable machines

Part 4: Concrete roof tile making machines

Part 5.1: Pipe making machines manufacturing in the vertical axis

Part 5.2: Pipe making machines manufacturing in the horizontal axis

Part 5.3: Pipe prestressing machines

Part 5.4: Concrete pipe coating machines

Part 6: Stationary and mobile equipment for the manufacture of precast reinforced products

Part 7: Stationary and mobile equipment for long line manufacture of prestressed products

Part 8: Machines and equipment for the manufacture of constructional products from calcium silicate (and concrete) **A1**

A1 *deleted text* **A1**

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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and 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, hazardous situations and events 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 machines that have been designed and built according to the provisions of this type C standard.

Reference to pertinent standards mentioned above is made where requirements of such standards are relevant.

1 Scope

1.1 This European Standard applies to machines for the manufacture of constructional products from concrete and/or calcium silicate examples of which are listed in annex A of this part. It gives concepts and general and common requirements for the design, operation and maintenance of such machines.

1.2 This European Standard deals with hazards listed in Clause 4 which can arise during the operation and maintenance, including the interfaces, of the machines for the manufacture of constructional products from concrete and calcium silicate, when carried out as intended and under conditions of misuse which are reasonably foreseeable by the manufacturer.

Part 2 to 8 of this standard give additional specific requirements and therefore have to be applied together with this part.

1.3 The preparation of concrete and/or calcium-silicate mixture and the transport from the mixer to the manufacturing plant are not part of this European Standard (see **EN 12151:2007**). The equipment for the transport and handling of formed products, other than the integrated transport system, is not covered by this standard.

EN 12629-2 deleted text

1.4 At the time of drafting, machine specific noise test codes for **EN 12629-2** to -8 are not available to fulfill the requirements of 5.7.2 and 7.4.2. When they are available, they will be incorporated in these standards.

1.5 This document is not applicable to machines for the manufacture of constructional products from concrete and/or calcium silicate, which are manufactured before the date of publication of this document by CEN.

2 Normative references

The following referenced documents are indispensable for the application 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 349:1993+A1:2008, *Safety of machinery — Minimum gaps to avoid crushing of parts of the human body*

EN 457:1992, *Safety of machinery — Auditory danger signals — General requirements, design and testing*

EN 547-1:1996+A1:2008, *Safety of machinery — Human body measurements — Part 1: Principles for determining the dimensions required for openings for whole body access into machinery*

EN 547-2+A1:2008, *Safety of machinery — Human body measurements — Part 2: Principles for determining the dimensions required for access openings*

EN 547-3:1996+A1:2008, *Safety of machinery — Human body measurements — Part 3: Anthropometric data*

EN 574, *Safety of machinery — Two hand control devices — Functional aspects — Principles for design*

EN 614-1:2006+A1:2009, *Safety of machinery — Ergonomic design principles — Part 1: Terminology and general principles*

EN 626-1:1994+A1:2008, *Safety of machinery — Reduction of risks to health from hazardous substances emitted by machinery — Part 1: Principles and specifications for machinery manufacturers*

EN 894-1, *Safety of machinery — Ergonomics requirements for the design of displays and control actuators — Part 1: General principles for human interactions with displays and control actuators*

EN 894-2, *Safety of machinery — Ergonomics requirements for the design of displays and control actuators — Part 2: Displays*

EN 894-3, *Safety of machinery — Ergonomics requirements for the design of displays and control actuators — Part 3: Control actuators*

EN 953:1997+A1:2009, *Safety of machinery — Guards — General requirements for the design and construction of fixed and movable guards*

EN 954-1:1996, *Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design*

EN 982:1996+A1:2008, *Safety of machinery — Safety requirements for fluid power systems and their components — Hydraulics*

EN 983:1996+A1:2008, *Safety of machinery — Safety requirements for fluid power systems and their components — Pneumatics*

EN 999, *Safety of machinery — The positioning of protective equipment in respect of approach speeds of parts of the human body*

EN 1037:1995+A1:2008, *Safety of machinery — Prevention of unexpected start-up*

EN 1088, *Safety of machinery — Interlocking devices associated with guards — Principles for design and selection*

EN ISO 3746:2009, *Acoustics — Determination of sound power levels of noise sources using sound pressure — Survey method using an enveloping measurement surface over a reflecting plane (ISO 3746:1995, including Cor 1:1995)*

EN ISO 11204:2010, *Acoustics — Noise emitted by machinery and equipment — Determination of emission sound pressure levels at a work station and at other specified positions applying accurate environmental corrections (ISO 11204:2010)*

EN ISO 11688-1:2009, *Acoustics — Recommended practice for the design of low-noise machinery and equipment — Part 1: Planning (ISO/TR 11688-1:1995)*

EN ISO 12100-1:2003, *Safety of machinery — Basic concepts, general principles for design — Part 1: Basic terminology, methodology (ISO 12100-1:2003)*

EN ISO 12100-2:2003, *Safety of machinery — Basic concepts, general principles for design — Part 2: Technical principles (ISO 12100-2:2003)*

EN ISO 13850:2008, *Safety of machinery — Emergency stop — Principles for design (ISO 13850:2006)*

EN ISO 13857:2008, *Safety of machinery — Safety distances to prevent hazard zones being reached by upper and lower limbs (ISO 13857:2008)*

EN ISO 14122-1:2001, *Safety of machinery — Permanent means of access to machinery — Part 1: Choice of fixed means of access between two levels (ISO 14122-1:2001)*

EN ISO 14122-2:2001, *Safety of machinery — Permanent means of access to machinery — Part 2: Working platforms and walkways (ISO 14122-2:2001)*

EN ISO 14122-3:2001, *Safety of machinery — Permanent means of access to machinery — Part 3: Stairs, stepladders and guard-rails (ISO 14122-3:2001)*

EN ISO 14122-4:2004, *Safety of machinery — Permanent means of access to machinery — Part 4: Fixed ladders (ISO 14122-4:2004)*

EN 60204-1:2006, *Safety of machinery — Electrical equipment of machines — Part 1: General requirements (IEC 60204-1:2005, modified)*

EN 61310-1:2008, *Safety of machinery — Indication, marking and actuation — Part 1: Requirements for visual, acoustic and tactile signals (IEC 61310-1:2007)*

EN 61496-1:2004, *Safety of machinery — Electro-sensitive protective equipment — Part 1: General requirements and tests (IEC 61496-1:2004, modified)* ^{A1}

3 ^{A1} Terms and definitions ^{A1}

^{A1} For the purposes of this document, the terms and definitions given in EN ISO 12100-1:2003 apply. Additional definitions specifically needed for EN 12629 series are given below: ^{A1}

3.1

products

constructional items manufactured from concrete or calcium silicate

3.1.1

blocks [bricks]

generally cuboid product made from concrete or calcium silicate. They are used in the construction of buildings for example, and can be solid or hollow

3.1.2

concrete kerbs unit

unit of precast concrete ^{A1} (see EN 1340:2003) ^{A1}, intended to separate surfaces of the same or different level to provide:

- physical or visual declination or containment;
- drainage channels, either on their own or in combination with other units
- separation between surfaces submitted to different kinds of traffic

3.1.3

concrete flag

precast concrete unit ^{A1} (see EN 1340:2003) ^{A1} used as a surfacing material that satisfies the following conditions:

- overall length does not exceed 1 m;
- overall length divided by its thickness is greater than four

3.1.4

element

generally cuboid product of calcium silicate bigger than a block used in the construction of buildings

3.1.5

constructional element

generally large product that is manufactured from concrete or calcium silicate, with or without reinforcement material forming an integral part used in the construction of buildings, bridges, roads