

## საქართველოს სტანდარტი

მანქანები სამშენებლო ნაკეთობების წარმოებისათვის ბეტონისა და  
სილიკატებისაგან-უსაფრთხოება-ნაწილი 4: ბეტონის სახურავის მკეთებელი  
მანქანები

საქართველოს სტანდარტებისა და მეტროლოგიის  
ეროვნული სააგენტო  
თბილისი

სსტ ენ 12629-4:2001+A1:2010/2016

საინფორმაციო მონაცემები

1 დამტკიცებულია და შემოღებულია სამოქმედოდ საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს 2016 წლის 1 აპრილის № 26 და 2016 წლის 1 თებერვლის № 7 განკარგულებებით

2 მიღებულია გარეკანის თარგმნის მეთოდით სტანდარტიზაციის ევროპული კომიტეტის სტანდარტი ენ 12629-4:2001+A1:2010 „მანქანები სამშენებლო ნაკეთობების წარმოებისათვის ბეტონისა და სილიკატებისაგან-უსაფრთხოება-ნაწილი 4: ბეტონის სახურავის მკეთებელი მანქანები“

3 პირველად

4 რეგისტრირებულია საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 2016 წლის 1 აპრილი №268-1.3-8538

აკრძალულია ამ სტანდარტის გადაცემა მესამე პირებისათვის ან/და მისი სხვა ფორმით გავრცელება

საინფორმაციო ნაწილი. სრული ტექსტის სანახავად შეიძინეთ სტანდარტი.

English Version

Machines for the manufacture of constructional products from  
concrete and calcium-silicate - Safety - Part 4: Concrete roof tile  
making machines

Machines pour la fabrication de produits de construction en  
béton et silico-calcaire - Sécurité - Partie 4: Machines pour  
la fabrication de tuiles en béton

Maschinen für die Herstellung von Bauprodukten aus Beton  
und Kalksandsteinmassen - Sicherheit - Teil 4: Beton-  
Dachsteinmaschinen

This European Standard was approved by CEN on 1 January 2001 and includes Amendment 1 approved by CEN on 5 August 2010.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

## Contents

Foreword.....	3
Introduction .....	4
1 Scope .....	4
2 Normative references .....	5
3 <b>A1</b> Terms and definitions <b>A1</b> .....	5
4 List of significant hazards .....	6
4.1 Mechanical Hazards .....	6
4.1.1 Crushing hazards .....	6
4.1.2 Shearing hazards.....	6
4.1.3 Cutting and severing hazards .....	6
4.1.4 Entanglement hazards .....	6
4.1.5 Drawing - In or trapping hazards .....	7
4.1.6 Impact hazards.....	7
4.1.7 High pressure fluid ejection .....	7
4.1.8 Ejection of parts or materials .....	7
4.1.9 Slip, trip and fall hazards .....	7
4.2 Noise Hazards .....	7
4.3 Hazards from materials used .....	7
4.3.1 Contact or inhalation.....	7
4.3.2 Fire or explosion.....	7
4.4 Hazards generated by neglecting ergonomic principles in design.....	7
4.4.1 Neglected use of personal protective equipment .....	7
4.4.2 Inadequate local lighting .....	7
4.4.3 Human error .....	7
5 <b>A1</b> Safety requirements and/or protective measures <b>A1</b> .....	8
5.1 General .....	8
5.2 Mechanical hazards.....	8
5.2.1 Propulsion unit and cutting unit and extrusion unit.....	8
5.2.2 Press unit and its interfaces.....	8
5.2.3 Slip, trip and fall hazards .....	8
5.2.4 Contact .....	8
5.2.5 Control panel.....	8
6 <b>A1</b> Verification of safety requirements and/or protective measures <b>A1</b> .....	8
7 <b>A1</b> Information for use <b>A1</b> .....	9
8 Warnings .....	9
9 Marking.....	9
Annex A (informative) First typical concrete tile manufacturing plant.....	10
Annex B (informative) Second typical concrete tile manufacturing plant.....	11
Annex ZA (informative) <b>A1</b> Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC <b>A1</b> .....	12
Bibliography .....	13

საინფორმაციო ნაწილი. სრული ტექსტის სახსრავად შეიძინეთ სტანდარტი.

## Foreword

This document (EN 12629-4:2001+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 12629-4:2001.

The start and finish of text introduced or altered by amendment is indicated in the text by tags  $\boxed{A_1}$   $\triangleleft A_1$ .

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 document.

$\boxed{A_1}$  *deleted text*  $\triangleleft A_1$

$\boxed{A_1}$  The series "*Machines for the manufacture of constructional products from concrete and calcium – silicate – Safety*" consists of 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: Concrete pipe machines manufacturing in the vertical axis

Part 5.2: Concrete pipe 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 the benching manufacture of prestressed products

Part 8: Machines and equipment for the manufacture of constructional products from calcium silicate (and concrete).  $\triangleleft A_1$

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

**A1** This European Standard is a Type C-standard as stated in EN ISO 12100.

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

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

This document specifies the additional requirements to and/or the deviations from EN 12629-1:2000+A1:2010 specific for the concrete roof tile making machines as described in 1.1.

With the aim of clarifying the intentions of the document it should be noticed that the following assumptions were made when producing it:

- specific conditions of use or environmental conditions out of the scope of the document shall be the subject of negotiations between the manufacturer and the user/owner,
- the equipment will only be used by competent and designated persons,
- the place of use/installation is adequately lit,
- all operations are carried out by specially trained operators. **A1**

## 1 Scope

**A1**

**1.1** This part of EN 12629, taken together with EN 12629-1:2000+A1:2010, applies to concrete roof tile making machines.

EN 12629-1:2000+A1:2010 specifies general requirements applicable to machines for the manufacture of constructional products from concrete and calcium–silicate.

This document specifies the additional requirements to and/or the deviations from EN 12629-1:2000+A1:2010 specific to the machines it covers. **A1**

### 1.2 Limits of the machine

The tile making machine is considered to begin at the point where moulds and/or the concrete are delivered to the fixed part of the machine and ends after the tile cutting process where products on their moulds are delivered on to an outfeed conveyor (see Annexes A and B). Moulds and concrete may be delivered to and removed from the machine by hand.

The preparation of the concrete mixture and the transport from the mixer to the machine are not covered by this standard.

The equipment for the transport and handling of formed products is not covered by this standard.