

საქართველოს სტანდარტი

მიწის მთხრელი მანქანა-უსაფრთხოება-ნაწილი 12: მოთხოვნები საკაბელო
ექსკავატორებისათვის

საქართველოს სტანდარტებისა და მეტროლოგიის
ეროვნული სააგენტო
თბილისი

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 474-12:2006+A1:2008 „მიწის მთხრელი მანქანა-უსაფრთხოება-ნაწილი 12: მოთხოვნები საკაბელო ექსკავატორებისათვის“

3 პირველად

4 რეგისტრირებულია საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 2016 წლის 1 აპრილი №268-1.3-8482

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

საინფორმაციო ნაწილი. სრული ტექსტის სანახავად შეიძინეთ სტანდარტი.

English Version

Earth-moving machinery - Safety - Part 12: Requirements for cable excavators

Engins de terrassement - Sécurité - Partie 12: Prescriptions applicables aux pelles à câbles

Erdbaumaschinen - Sicherheit - Teil 12: Anforderungen für Seilbagger

This European Standard was approved by CEN on 17 April 2006 and includes Amendment 1 approved by CEN on 18 August 2008.

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, 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: rue de Stassart, 36 B-1050 Brussels

Contents

Page

Foreword.....4

Introduction5

1 Scope6

2 Normative references6

3 Terms and definitions, symbols and abbreviated terms7

4 List of additional significant hazards7

5 Safety requirements and/or measures7

5.1 General.....7

5.2 Access7

5.3 Operator's station8

5.3.1 General.....8

5.3.2 Roll-over protective structures (ROPS).....8

5.3.3 Operator's protective guard.....8

5.3.4 Operator's seat, vibrations8

5.4 Operator's controls and indicators8

5.4.1 Controls for driving and steering.....8

5.4.2 Warning indicator8

5.5 Steering.....8

5.6 Swing brakes.....8

5.7 Lift system9

5.7.1 Force controlled operation (lifting, lowering)9

5.7.2 Free fall operation.....9

5.7.3 Switch-over.....9

5.7.4 Boom.....9

5.7.5 Ropes9

5.7.6 Rope drum, rope pulley.....10

5.8 Limiting devices.....10

5.8.1 Load moment limiting device10

5.8.2 Lift limiting switch10

5.8.3 Limit switch for the boom hoist system10

5.9 Calculation of the lift capacity.....10

5.9.1 Calculation method.....10

5.9.2 Rated lift capacity table in object handling application.....11

5.10 Requirements of safety related parts of the control system.....11

5.11 Stability11

5.11.1 General.....11

5.11.2 Stability in different applications11

5.11.3 Dragline bucket.....11

5.11.4 Grab and front shovel12

5.11.5 Object handling application.....12

5.12 Cable excavator with electrical power source.....12

6 Verification of safety requirements/measures.....12

7 Information for use12

7.1 Operation manual12

Annex A (normative) List of additional significant hazards – Cable excavators.....14

Annex B (normative) Requirements for cable excavator swing brakes15

B.1 General.....15

B.2 Terms and definitions15

B.3 Minimum performance16

საინფორმაციო ნაწილი. სრული ტექსტის სახსრავად შეიძინეთ სტანდარტი.

B.3.1	Swing drive system	16
B.3.2	Swing service brake	16
B.3.3	Swing parking brake.....	17
B.4	Conditions for testing the swing service brake	17
B.5	Test report	17
Annex C	(informative) Illustrations.....	18
C.1	Standard applications	18
C.1.1	Crawler type cable excavator with lifting equipment.....	18
C.1.2	Crawler type cable excavator with dragline equipment	19
C.1.3	Crawler type cable excavator with grab equipment.....	19
C.2	Special applications	20
C.2.1	Crawler type cable excavator with hole drilling equipment (casing oscillator).....	20
C.2.2	Crawler type cable excavator with piling equipment (hydraulic or diesel hammer)	21
C.2.3	Crawler type excavator with wall cutter equipment (diaphragm wall grab)	21
C.3	Wheel type cable excavator in transport position for road travelling.....	22
Annex ZA	(informative) Relationship between this European Standard and the Essential Requirements of EU Directive 98/37/EC	23
Annex ZB	(informative) A1 Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC A1	24
Bibliography	25
Figures		
Figure B.1	— Swing service brake	16
Figure C.1.1	— Crawler type cable excavator with lifting system	18
Figure C.1.2	— Crawler type cable excavator with dragline equipment	19
Figure C.1.3	— Crawler type cable excavator with grab equipment	19
Figure C.2.1	— Crawler type excavator with hole drilling equipment (casing oscillator).....	20
Figure C.2.2	— Crawler type cable excavator with piling equipment (hydraulic or diesel hammer).....	21
Figure C.2.3	— Crawler type excavator with wall cutter equipment (diaphragm wall grab).....	21
Figure C.3	— Wheel type cable excavator in transport position for road travelling	22
Tables		
Table 1	— Safety factors of ropes.....	9
Table A.1	— List of additional significant hazards	14