

Pingsarruse süstmört. Tsementeerimismeetodid

Grout for prestressing tendons - Grouting
procedures

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 446:2007 sisaldab Euroopa standardi EN 446:2007 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 22.11.2007 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 446:2007 consists of the English text of the European standard EN 446:2007.</p> <p>This document is endorsed on 22.11.2007 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This European Standard gives the procedures to be used for grouting of tendons in post-tensioned prestressed concrete. It is applicable to all types of structures including bridges and buildings. This standard also covers suitability testing and inspection testing for grouts and their component materials used on a project.</p>	<p>Scope:</p> <p>This European Standard gives the procedures to be used for grouting of tendons in post-tensioned prestressed concrete. It is applicable to all types of structures including bridges and buildings. This standard also covers suitability testing and inspection testing for grouts and their component materials used on a project.</p>
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Võtmesõnad: injekteerimine, kvaliteedi kontroll, pingbetoon, sarruskimbud, teimid, trossid, tsementeerimine

English Version

Grout for prestressing tendons - Grouting procedures

Coulis pour câble de précontrainte - Procédures d'injection
de coulis

Einpressmörtel für Spannglieder - Einpressverfahren

This European Standard was approved by CEN on 21 June 2007.

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.



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Foreword

This document (EN 446:2007) has been prepared by Technical Committee CEN/TC 104 "Concrete and related products", 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 April 2008, and conflicting national standards shall be withdrawn at the latest by April 2008.

This document supersedes EN 446:1996.

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, 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

In post-tensioned prestressed concrete construction, the grouting of tendons is an important operation. The intention of this European Standard is to provide a specification for grouting, compliance with which will satisfy the requirements in prEN 13670.

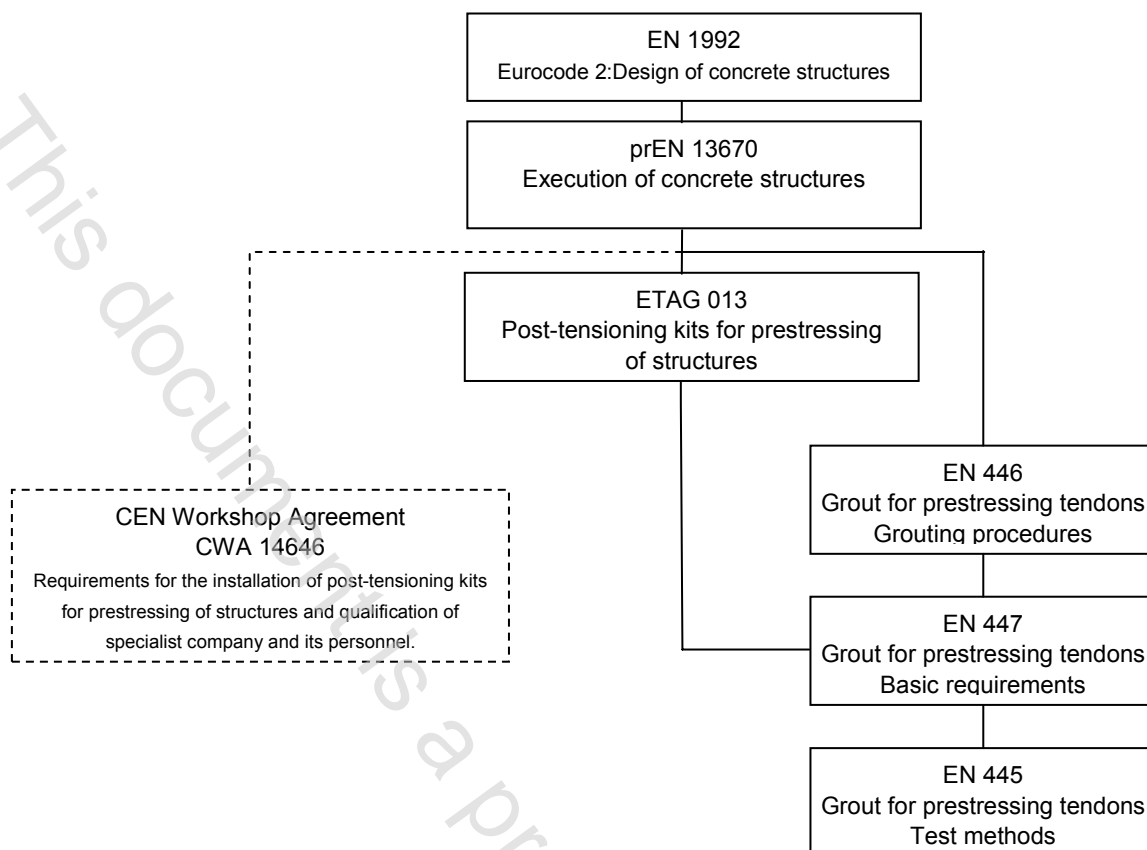
The main function of grouting is to

- Provide protection to the prestressing steel against corrosion;
- Provide a bond between the prestressing steel and the ducts where required for the design of the structure;
- Allow the transfer of compressive stresses in the structure in a direction transverse to the internal tendons;
- Fill all voids where water may accumulate and cause frost damage.

The testing regimes anticipated by this European Standard include three levels:

- (1) Initial type and audit testing in accordance with EN 447;
- (2) Suitability testing for confirmation of the selected grout for a specific project in accordance with this standard;
- (3) Inspection during the production of grout on a specific project in accordance with this standard.

The test methods for each of the regimes are given in EN 445.



System of CEN and EOTA documents as basis for design, execution and materials selection for protective measures of prestressing systems (only main modules).

1 Scope

This European Standard gives the procedures to be used for grouting of tendons in post-tensioned prestressed concrete. It is applicable to all types of structures including bridges and buildings.

This standard also covers suitability testing and inspection testing for grouts and their component materials used on a project.

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 445, *Grout for prestressing tendons – Test methods*

EN 447, *Grout for prestressing tendons – Basic requirements*

prEN 13670, *Execution of concrete structures*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

grout

homogeneous mixture of cement and water, it may contain admixtures and additions

3.2

grouting

injection of grout into ducts in a continuous operation

3.3

tendon

assembly of prestressing steel and sheath with anchorages and all necessary auxiliary components to permit grouting, either placed internally or externally to the concrete structure

3.4

specialist contractor

contractor or construction enterprise which carries out grouting of tendons

4 Documentation

4.1 Execution specification

Before starting any part of the grouting works, the execution specification relevant to that part of the works shall be complete and available.

The following items shall be included in the execution specification:

— reference to this European standard;