EESTI STANDARD EVS-EN 582:1999

This document is a preview generated by EVS

Termopihustamine. Nakketugevuse määramine tõmbeteimil

Thermal spraying - Determination of tensile adhesive strength

EESTI STANDARDIKESKUS

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 582:1999 sisaldab Euroopa standardi EN 582:1993 ingliskeelset teksti. Käesolev dokument on jõustatud 12.12.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 582:1999 consists of the English text of the European standard EN 582:1993. This document is endorsed on 12.12.1999 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: Termopihustatud kihtide nakketugevuse määramise tõmbeteimis rakendatakse teimikehale tõmbejõudu. teimi käigus määratakse katte ja/või pihustatud kihi ning alusmetalli vahelise nakke tugevus.	**Scope:**

ICS 25.220.20

Võtmesõnad: adhesioon, mehaaniline tugevus, metalli pihustamine, metallkatted, määramine, tõmbeteim

This document is a preview generated by EVS

Standardite reprodutseerimis- ja levitamisõigus kuulub Eesti Standardikeskusele

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 582

October 1993

UDC 621.793.7:620.172.25

Descriptors: Metal coating, thermal spraying, tensile tests, determination, mechanical strength, adhesion.

This document is a preview generated by EVS

English version

Thermal spraying
Determination of tensile adhesive strength

Projection thermique; mesure de l'adhérence par essais de traction

Thermisches Spritzen; Ermittlung der Haftzugfestigkeit

This European Standard was approved by CEN on 1993-10-01.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

© 1993. Copyright reserved to all CEN members.

Contents list

This document is a preview generated by EVS

Foreword

This European Standard was prepared by CEN/TC 240 'Thermal spraying and thermally sprayed coatings', 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, and conflicting national standards withdrawn, by April 1994 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard:

Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

In the test to determine the tensile adhesive strength of thermally sprayed deposits, the specimen is loaded in tension.

The test is conducted to determine the strength of the coating and/or the strength of the bond between the spray deposit and the parent metal.

The test is used to evaluate the effects of parent metal and spray deposit material, preparation of the surface of the workpiece, and the spraying conditions on the bond and adhesive strength of thermally sprayed coatings, or for routine supervision of the spray works.

Comparative statements are to be based in the test report.

NOTE: The tensile adhesive strength test method is not recommended for very thin and porous deposits. In this case, a bend test has proved to be more appropriate.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 10002-2 Metallic materials - Tensile testing - Part 2: Verification of the force measuring system of the tensile testing machines

3 Definition

For the purpose of this standard the following definition apply.

Tensile adhesive strength:

The tensile adhesive strength R_H is the strength obtained in the tension test, calculated from the quotient of the maximum load F_m and the cross-section of the specimen at the fractured face.

4 Equipment

A tensile testing machine in accordance with EN 10002-2, class 1 and a clamping system are to be used, to ensure concentric clamping and loading of the specimens (see figure 1).

This document is a preview generated by EVS