

Thermal spraying – Determination of tensile adhesive strength

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Swedish Standards corresponding to documents referred to in this Standard are listed in "Catalogue of Swedish Standards", annually issued by SIS. The Catalogue lists, with reference number and year of Swedish approval, International and European Standards approved as Swedish Standards as well as other Swedish Standards.

Termisk sprutning – Bestämning av vidhäftning genom dragprovning

Den europeiska standarden EN 582:1993 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN 582:1993 med svensk översättning.

Motsvarigheten och aktualiteten i svensk standard till de publikationer som omnämns i denna standard framgår av "Katalog över svensk standard", som årligen ges ut av SIS. I katalogen redovisas internationella och europeiska standarder som fastställts som svenska standarder och övriga gällande svenska standarder.

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 582

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Descriptors: Metal coatings, metal spraying, tension tests, determination, mechanical strength, adhesion

English version

Thermal spraying — Determination of tensile adhesive strength

Projection thermique — Mesure de l'adhérence par essais de traction

Thermisches Spritzen — Ermittlung der Haftzugfestigkeit

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CEN

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

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

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Nyckelord: Metalbeläggningar, metallsprutning, dragprovning, bestämning, mekanisk hållfasthet, vidhäftning

Svensk version

**Termisk sprutning – Bestämning av vidhäftning
genom dragprovning**

Projection thermique – Mesure de
l'adhérence par essais de traction

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of tensile adhesive strength

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der Haftzugfestigkeit

Denna standard utgörs av den svenska språkversionen av europastandarden EN 582. Den har översatts av SIS.

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Aktuella förteckningar och bibliografiska referenser rörande sådana nationella standarder kan på begäran erhållas från CENs centralsekretariat eller från någon av CENs medlemmar.

Denna europastandard finns i tre officiella versioner (engelsk, fransk och tysk). En version på något annat språk, översatt under ansvar av en CEN-medlem till sitt eget språk och anmäld till CENs centralsekretariat har samma status som de officiella versionerna.

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 240, Thermal spraying and thermally sprayed coatings, of which the secretariat is held by DIN.

This draft European Standard was submitted to the formal vote and accepted by CEN as a European Standard.

The 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 1994, and conflicting national standards shall be withdrawn at the latest by April 1994.

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, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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Förord

Denna europastandard har utarbetats av den tekniska kommittén CEN/TC 240 "Thermal spraying and thermally sprayed coatings" med sekretariat vid DIN.

Förslaget till europastandard sändes ut till formell omröstning och antogs av CEN som Europastandard.

Denna europastandard skall ges status som nationell standard antingen genom publikation av en identisk text eller genom ikraftsättning senast i april 1994. Motstridande nationella standarder skall dras in senast i april 1994.

Enligt CEN/CENELECS interna bestämmelser är följande länder förpliktigade att införa denna europastandard: Belgien, Danmark, Finland, Frankrike, Grekland, Irland, Island, Italien, Luxemburg, Nederländerna, Norge, Portugal, Schweiz, Spanien, Storbritannien, Sverige, Tyskland och Österrike.

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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 applies.

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).

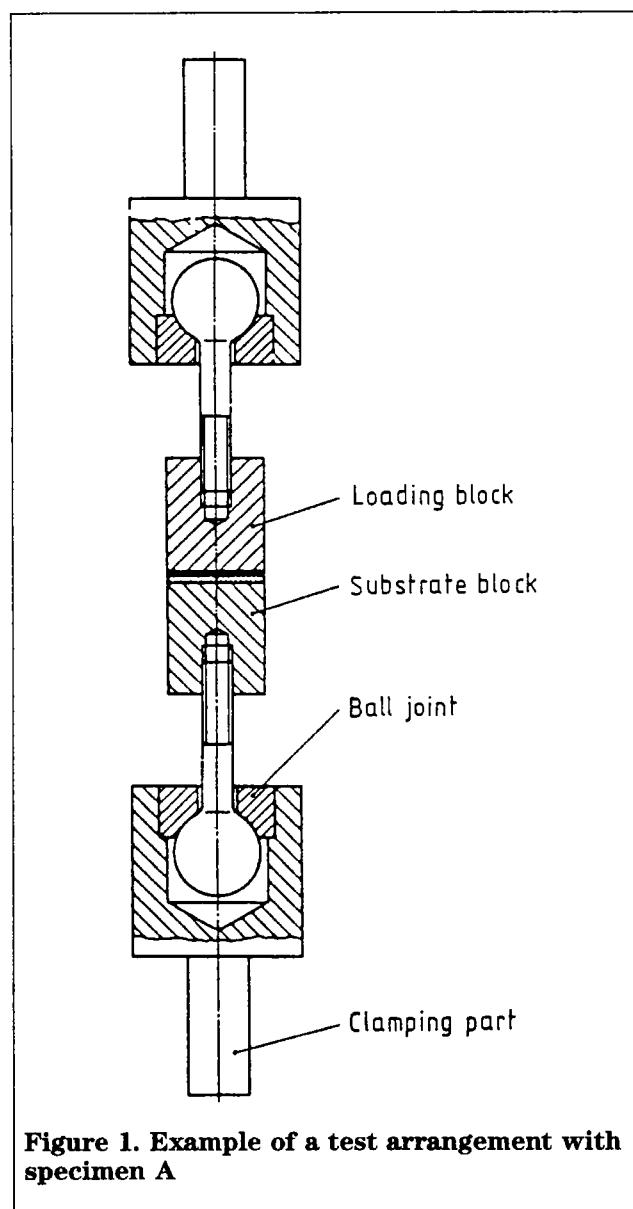


Figure 1. Example of a test arrangement with specimen A