



SLOVENSKI STANDARD
SIST EN 2497:2001

01-junij-2001

Aerospace series - Dry abrasive blasting of titanium and titanium alloys

Aerospace series - Dry abrasive blasting of titanium and titanium alloys

Luft- und Raumfahrt - Trockenstrahlen von Titan und Titanlegierungen

Série aérospatiale - Sablage sec du titane et des alliages de titane

Ta slovenski standard je istoveten z: EN 2497:1989

[SIST EN 2497:2001](https://standards.iteh.ai/catalog/standards/sist/8eb75c1b-8a99-4143-baac-bff30bc23d6e/sist-en-2497-2001)

<https://standards.iteh.ai/catalog/standards/sist/8eb75c1b-8a99-4143-baac-bff30bc23d6e/sist-en-2497-2001>

ICS:

49.040	Prevleke in z njimi povezani postopki, ki se uporabljajo v letalski in vesoljski industriji	Coatings and related processes used in aerospace industry
--------	---	---

SIST EN 2497:2001

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 2497:2001

<https://standards.iteh.ai/catalog/standards/sist/8eb75c1b-8a99-4143-baac-bff30bc23d6e/sist-en-2497-2001>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 2497

January 1989

UDC : 621.924.9 : 621.795 : 669.295 : 629.7

Key words : Aircraft industry, titanium, titanium alloys, surface treatment, sanding

English version

Aerospace series
Dry abrasive blasting
of titanium and titanium alloys

Série aérospatiale
Sablage sec
du titane et des alliages de titane

Luft- und Raumfahrt
Trockenstrahlen von Titan
und Titanlegierungen

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 2497:2001

<https://standards.iteh.ai/catalog/standards/sist/8eb75c1b-8a99-4143-baac-bff30bc23d6e/sist-en-2497-2001>

This European Standard was accepted by CEN on 1988-03-17. CEN members are bound to comply with the requirements of CEN 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 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 CEN Central Secretariat has the same status as the official versions.

CEN members are the national standards organizations of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxemburg, 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 Bréderode 2, B—1000 Bruxelles

Brief History

This draft European Standard has been prepared by the European Association of Aerospace Manufacturers (AECMA).

After enquiries and votes carried out in accordance with the rules of this Association, this draft has successively received the approval of the National Associations and the Official Services of the member countries of AECMA, prior to its presentation to CEN.

In accordance with the Common CEN/CENELEC Rules, the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxemburg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

SIST EN 2497:2001

<https://standards.iteh.ai/catalog/standards/sist/8eb75c1b-8a99-4143-baac-bf30bc23d6e/sist-en-2497-2001>

1 Scope and field of application

This standard specifies the process schedule and requirements for dry abrasive blasting of titanium and titanium alloys used in aerospace constructions.

The method specified is applicable to the pretreatment of titanium and titanium alloys and to qualification tests of adhesives on these materials.

2 Process schedule

2.1 General remark

Air used for drying, blasting or other process operations shall be dry and free from oil.

During and after blasting specimens ¹⁾ and parts shall only be handled with dry clean gloves.

2.2 Precleaning

The specimens and parts shall be emulsion cleaned, or alkaline cleaned with subsequent rinsing and drying, or non-halogenated solvent cleaned (do not use methyl alcohol).

2.3 Dry blasting

Immediately after cleaning specimens and parts shall be blasted (as long as necessary) to produce a uniform matt surface finish.

2.3.1 Abrasives

Aluminium oxide (Al_2O_3) grit shall have a purity of at least 99,3% with less than 0,25% FeO.

Grit size : 40 to 50 μm .

Abrasives used for dry blasting shall be free from contaminants such as grease, oil and silicones and shall not be used for any material except titanium and its alloys.

2.3.2 Blasting parameters

- Blasting pressure : 140 kPa
- Nozzle to work distance : 200 to 250 mm
- Blasting angle : 45° nominal.

1) Dimensions of specimens depend upon the parts and qualification testing of adhesives

2.3.3 Apparatus

Caution : The dry abrasive blaster shall have provisions to prevent fire hazards.

2.4 Post cleaning

Cleaning after blasting consists of compressed air blasting followed by non-halogenated solvent cleaning.

NOTE - Adhesives or bonding primers shall be applied within one hour after abrasive blasting and its post cleaning.

3 Inspection and testing

Specimens and parts processed according to this standard shall meet the following requirements :

3.1 Surfaces shall have a uniform matt finish and shall be free of scale, blasting debris, discolouration, grease-like materials, fingerprints or other contaminants.

3.2 After immersion in pure water having a resistivity of not less than 50 Ω m for some seconds and after removal from the water, the surfaces shall show no water breaks.

If these occur, cleaning shall be repeated.

3.3 Specimens and parts shall not be distorted.

3.4 Abrasives used for blasting shall be regularly inspected to ensure that it complies with the requirements of clause 2.3.1.