



SLOVENSKI STANDARD

SIST EN 3114-004:2009

01-junij-2009

Aeronavtika - Preskusne metode - Mikrostruktura gnetenih izdelkov iz titanove zlitine (Ů + É) - 004. del: Mikrostruktura ploč evine za superplastil' no oblikovanje

Aerospace series - Test method - Microstructure of (Ů + †) titanium alloy wrought products - Part 004: Microstructure of sheet for superplastic forming

Luft- und Raumfahrt - Prüfverfahren - MikrogefÁge Knetzeugnisse von Titanlegierung (Ů + É) - Teil 004: MikrogefÁge von Blechen fÁr superplastisches Umformen

S°rie a°rospatiale - M°thode d'essai - Microstructure des produits corroy°s en alliage de titane (Ů + É) - Partie 004 : Microstructure des t»les pour formage superplastique

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Ta slovenski standard je istoveten z: EN 3114-004:2006

ICS:

49.025.30 Titan Titanium

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 3114-004

December 2006

ICS 49.025.30

English Version

**Aerospace series - Test method - Microstructure of ($\alpha + \beta$)
titanium alloy wrought products - Part 004: Microstructure of
sheet for superplastic forming**

Série aérospatiale - Méthode d'essai - Microstructure des
produits corroyés en alliage de titane ($\alpha + \beta$) - Partie 004 :
Microstructure des tôles pour formage superplastique

Luft- und Raumfahrt - Prüfverfahren - Mikrogefüge
Knetzeugnisse von Titanlegierung ($\alpha + \beta$) - Teil 004:
Mikrogefüge von Blechen für superplastisches Umformen

This European Standard was approved by CEN on 18 October 2006.

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, 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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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document (EN 3114-004:2006) has been prepared by the Aerospace and Defence Industries Association of Europe - Standardization (ASD-STAN).

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

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 June 2007, and conflicting national standards shall be withdrawn at the latest by June 2007.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, 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 the United Kingdom.

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EN 3114-004:2006 (E)**1 Scope**

This standard contains pictures of the microstructure of ($\alpha + \beta$) titanium alloy sheet for superplastic forming.

It shall be used in conjunction with EN 3114-001.

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 3114-001, *Aerospace series — Microstructure of ($\alpha + \beta$) titanium alloy wrought products — Part 001: General requirements.*

3 Micrographs

4L1A to 4L12A ($\alpha + \beta$) structure, longitudinal section, annealed.

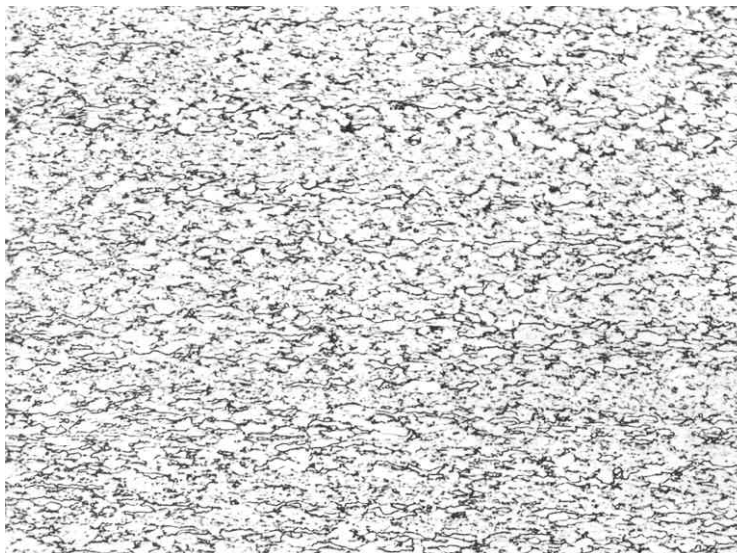
4L1B to 4L12B ($\alpha + \beta$) structure, longitudinal section, 930 °C / t = 30 min / WQ.

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($\alpha + \beta$) structure, longitudinal section



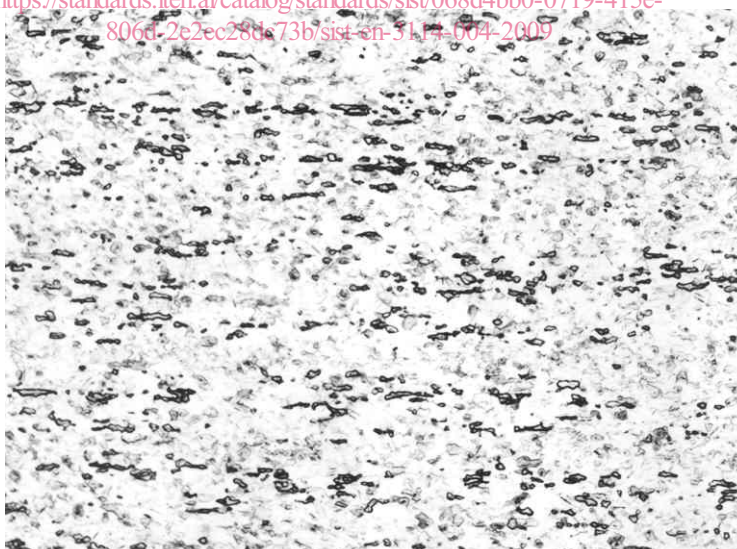
200 : 1

Annealed

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4L1A
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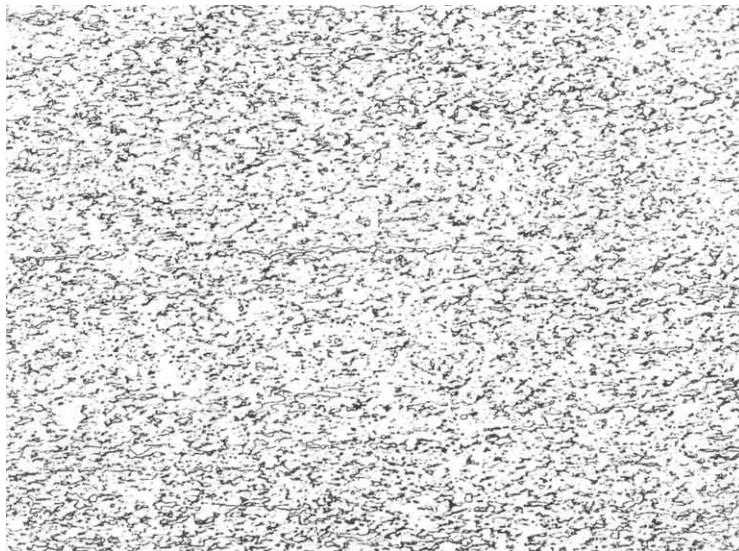


200 : 1

930 °C / t = 30 min / WQ

4L1B

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 $(\alpha + \beta)$ structure, longitudinal section

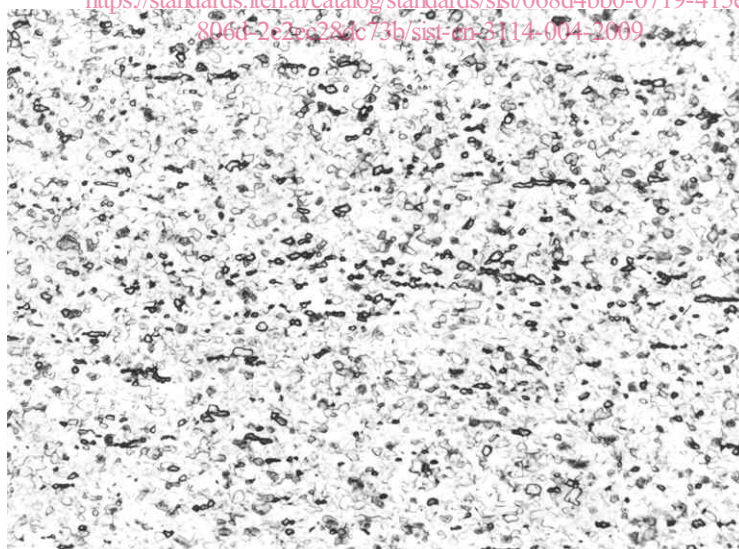
200 : 1

Annealed

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4L2A
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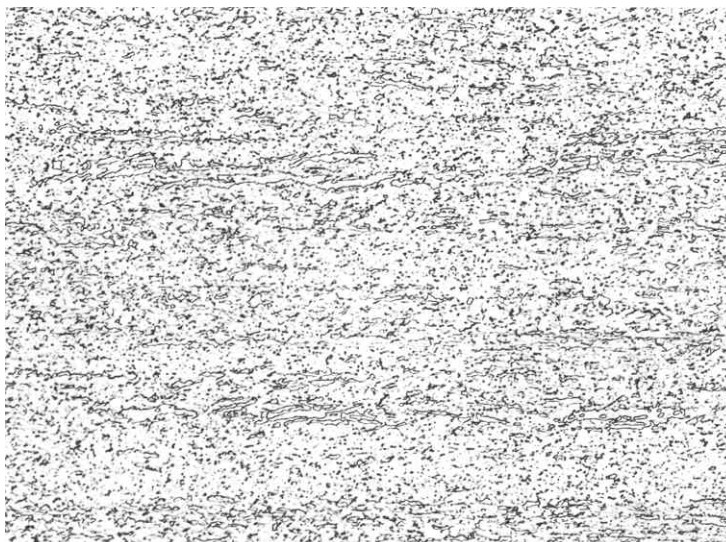


200 : 1

930 °C / t = 30 min / WQ

4L2B

($\alpha + \beta$) structure, longitudinal section



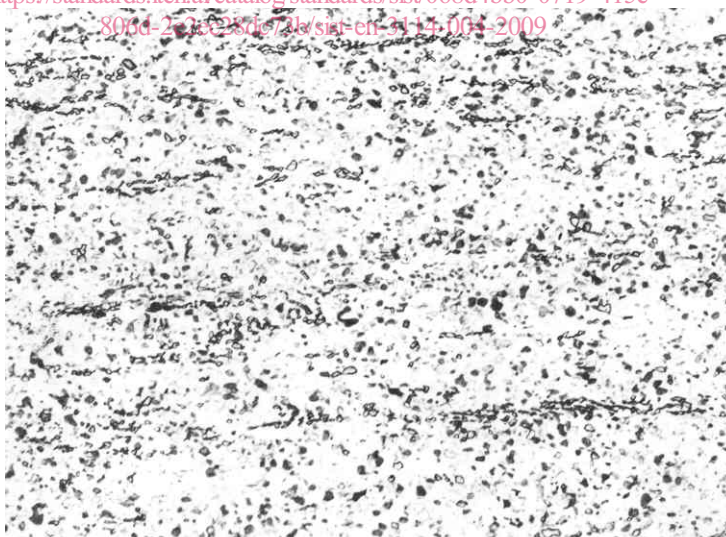
200 : 1

Annealed

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200 : 1

930 °C / t = 30 min / WQ

4L3B