

Aerospace series — Test method — Microstructure of ($\alpha + \beta$) titanium alloy wrought products —

Part 003: Microstructure of plate

The European Standard EN 3114-003:2006 has the status of a British Standard

ICS 49.025.30

National foreword

This British Standard was published by BSI. It is the UK implementation of EN 3114-003:2006.

The UK participation in its preparation was entrusted by Technical Committee ACE/61, Metallic materials for aerospace purposes, to Panel ACE/61/-/49, Titanium and its alloys.

A list of organizations represented on ACE/61/-/49 can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 January 2007

© BSI 2007

ISBN 978 0 580 50079 4

Amendments issued since publication

Amd. No.	Date	Comments

English Version

**Aerospace series - Test method - Microstructure of ($\alpha + \beta$)
titanium alloy wrought products - Part 003: Microstructure of
plate**

Série aérospatiale - Méthode d'essai - Microstructure des
produits corroyés en alliage de titane ($\alpha + \beta$) - Partie 003 :
Microstructure des plaques

Luft- und Raumfahrt - Prüfverfahren - Mikrogefüge
Knetzeugnisse von Titanlegierung ($\alpha + \beta$) - Teil 003:
Mikrogefüge von Platten

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.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents		Page
Foreword.....		3
1	Scope	4
2	Normative references	4
3	Micrographs	4

Foreword

This document (EN 3114-003:2006) 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.

1 Scope

This standard contains pictures of the microstructure of ($\alpha + \beta$) titanium alloy plate.

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

See Table 1.

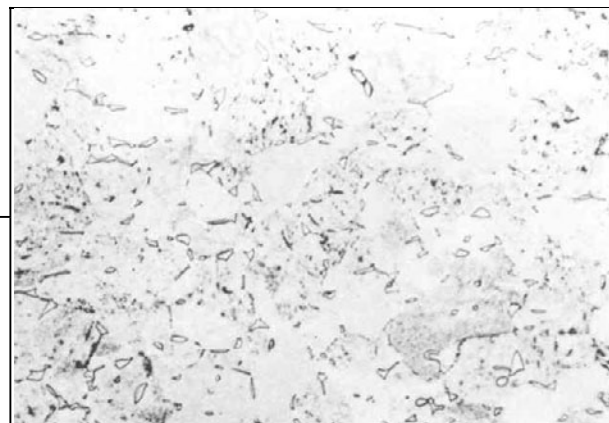
Table 1

Photo micrograph No.	Description
3T1 to 3T38	($\alpha + \beta$) structure, globular/lamellar, transverse section LT-ST.
3T100 to 3T106	($\alpha + \beta$) structure, with local blocky α and α stringers, transverse section LT-ST.
3A1 to 3A8	($\alpha + \beta$) structure, with lean α areas.
3T200 to 3T202	β transformed structure, transverse section LT-ST.

$(\alpha + \beta)$ structure, globular/lamellar, transverse section LT-ST

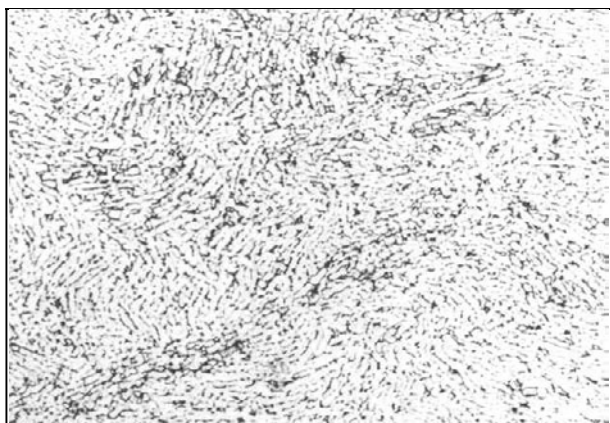


100 : 1

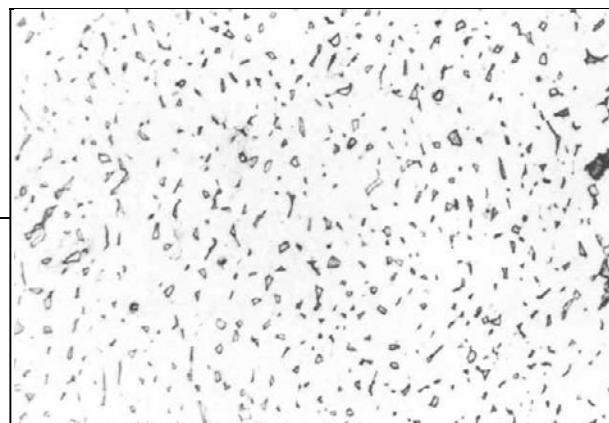


500 : 1

3T1

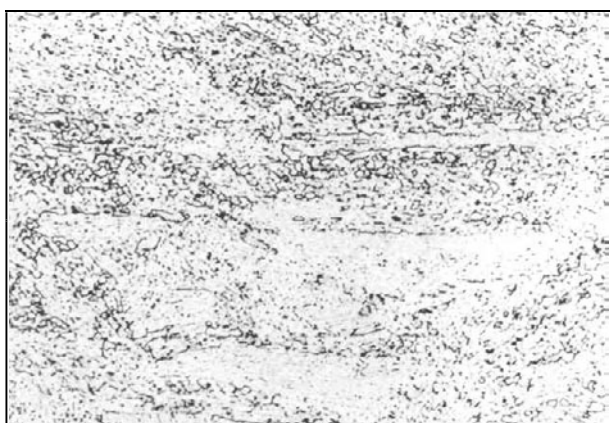


100 : 1

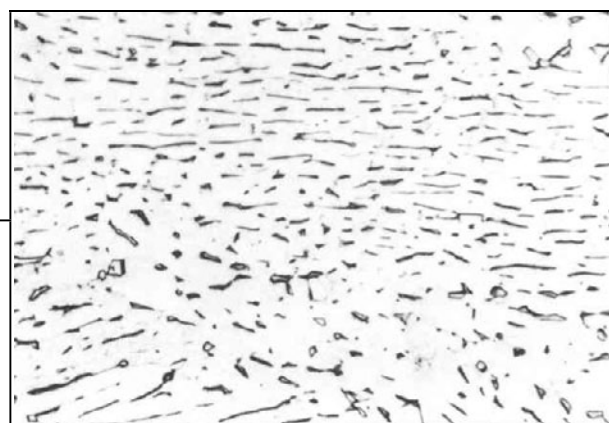


500 : 1

3T2



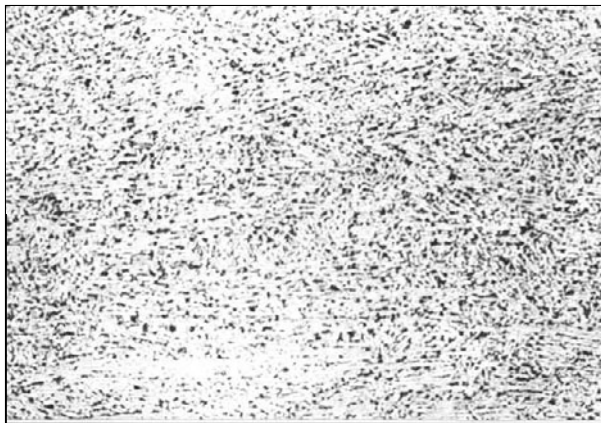
100 : 1



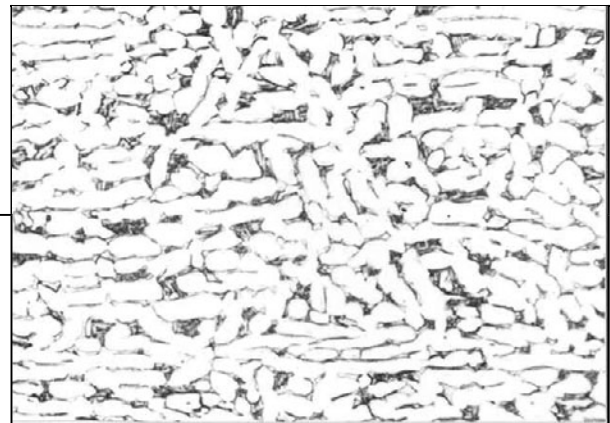
500 : 1

3T3

($\alpha + \beta$) structure, globular/lamellar, transverse section LT-ST

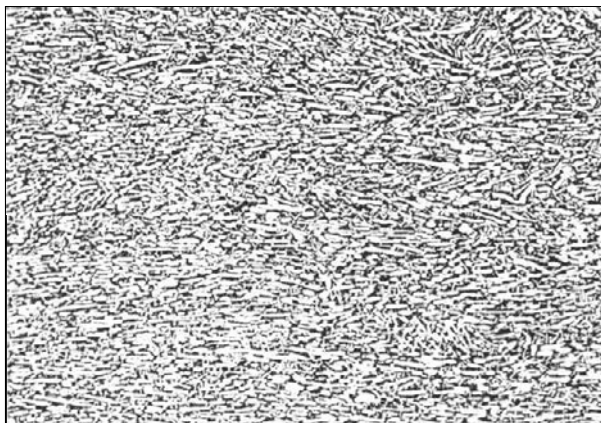


100 : 1

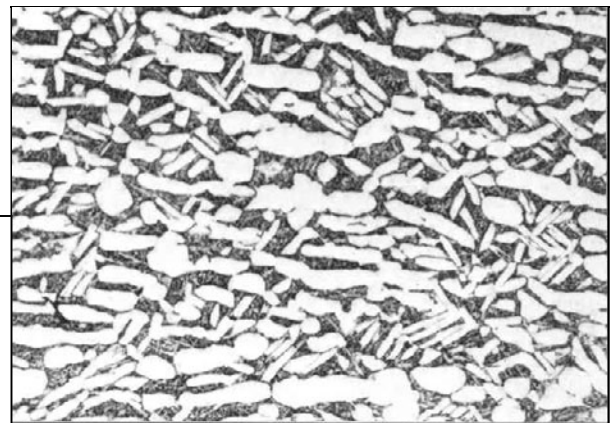


500 : 1

3T4

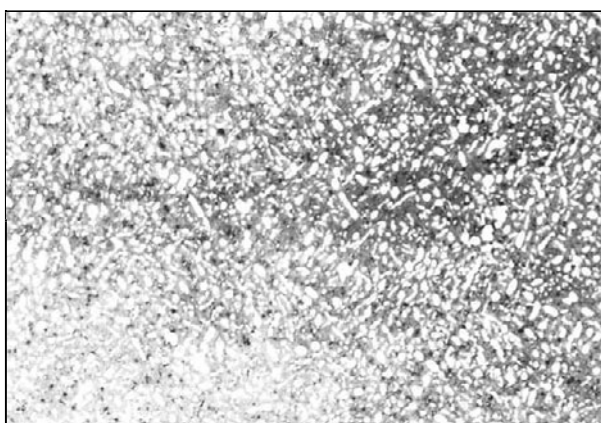


100 : 1

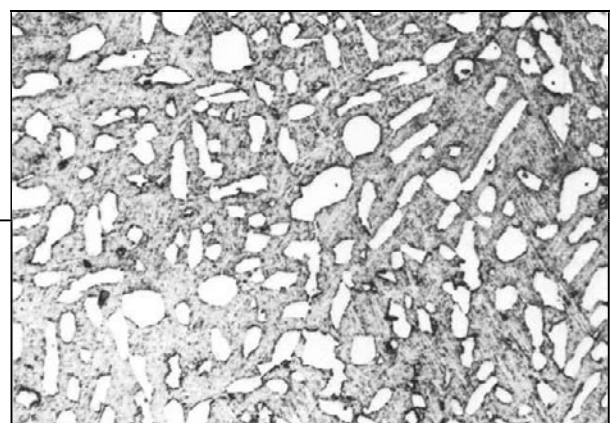


500 : 1

3T5



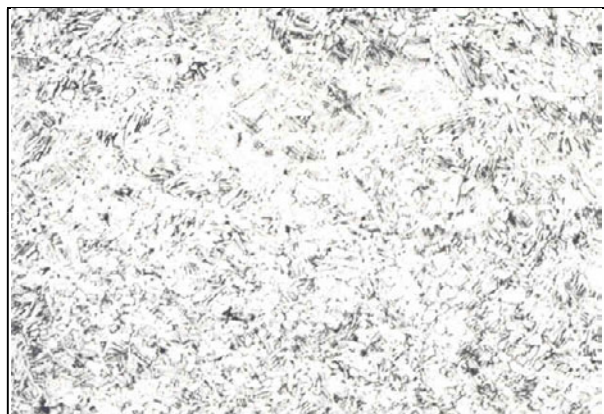
100 : 1



500 : 1

3T6

($\alpha + \beta$) structure, globular/lamellar, transverse section LT-ST

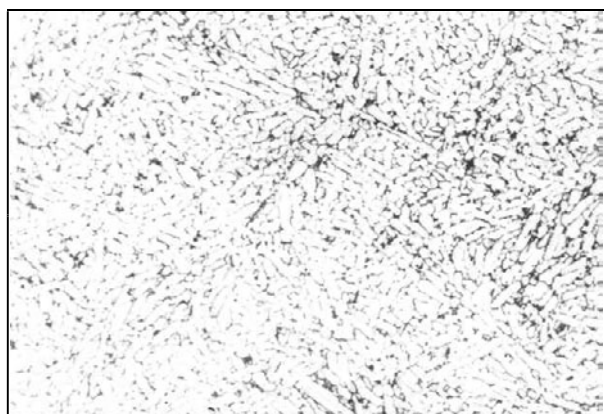


100 : 1

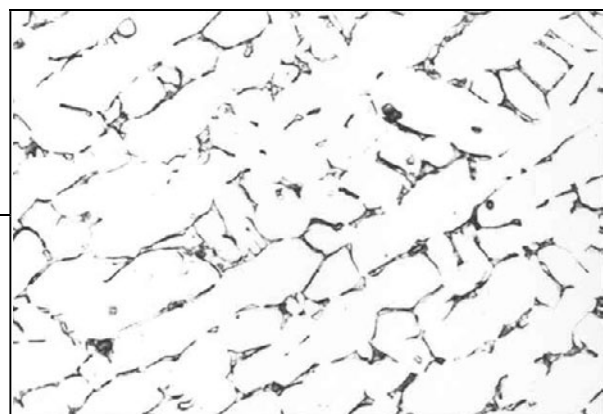


500 : 1

3T7

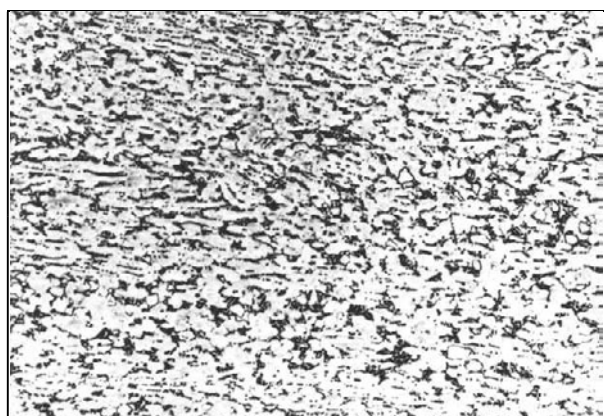


100 : 1

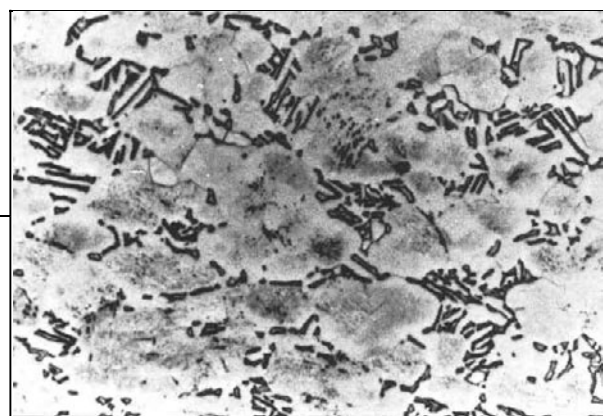


500 : 1

3T8



100 : 1



500 : 1

3T9