

SLOVENSKI STANDARD

SIST EN 2954-002:2010

01-maj-2010

Aeronavtika - Makrostruktura gnetenih izdelkov iz titana in titanovih zlitin - 002.
del: Makrostruktura palic, profilov, materiala za kovanje in izkovkov

Aerospace series - Macrostructure of titanium and titanium alloy wrought products - Part 002: Macrostructure of bar, section, forging stock and forgings

Luft- und Raumfahrt - Makrostruktur von geschmiedeten Erzeugnissen aus Titan und Titanlegierungen - Teil 002: Makrostruktur von Stangen, Profilen, Schmiedevormaterial und Schmiedestücken

Série aérospatiale - Macrostructure de produits corroyés en titane et en alliages de titane - Partie 002: Macrostructure des barres, profils, pièces destinées à la forge et pièces forgées

Ta slovenski standard je istoveten z: EN 2954-002:2010

ICS:

49.025.30	Titan	Titanium
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SIST EN 2954-002:2010	en
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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 2954-002

March 2010

ICS 49.025.30

English Version

**Aerospace series - Macrostructure of titanium and titanium alloy
wrought products - Part 002: Macrostructure of bar, section,
forging stock and forgings**

Série aérospatiale - Macrostructure de produits corroyés en
titane et en alliages de titane - Partie 002: Macrostructure
des barres, profilés, pièces destinées à la forge et pièces
forgées

Luft- und Raumfahrt - Makrostruktur von geschmiedeten
Erzeugnissen aus Titan und Titanlegierungen - Teil 002:
Makrostruktur von Stangen, Profilen, Schmiedevormaterial
und Schmiedestücken

This European Standard was approved by CEN on 6 February 2010.

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 CEN Management Centre 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 CEN Management Centre has the same status as the official versions.

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

EN 2954-002:2010 (E)**Foreword**

This document (EN 2954-002:2010) 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 September 2010, and conflicting national standards shall be withdrawn at the latest by September 2010.

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, Bulgaria, Croatia, 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 2954-002:2010 (E)**1 Scope**

This European Standard contains pictures of the macrostructure of bar, section, forging stock and forgings for titanium and titanium alloy wrought products.

This European Standard shall be used in conjunction with EN 2954-001.

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 2954-001, *Aerospace series — Macrostructure of titanium and titanium alloy wrought products — Part 001: General requirements.*

3 Macrographs

All macrographs are shown at actual size ($\times 1$ magnification) when printed without any magnification or reduction. See Annex A (normative).

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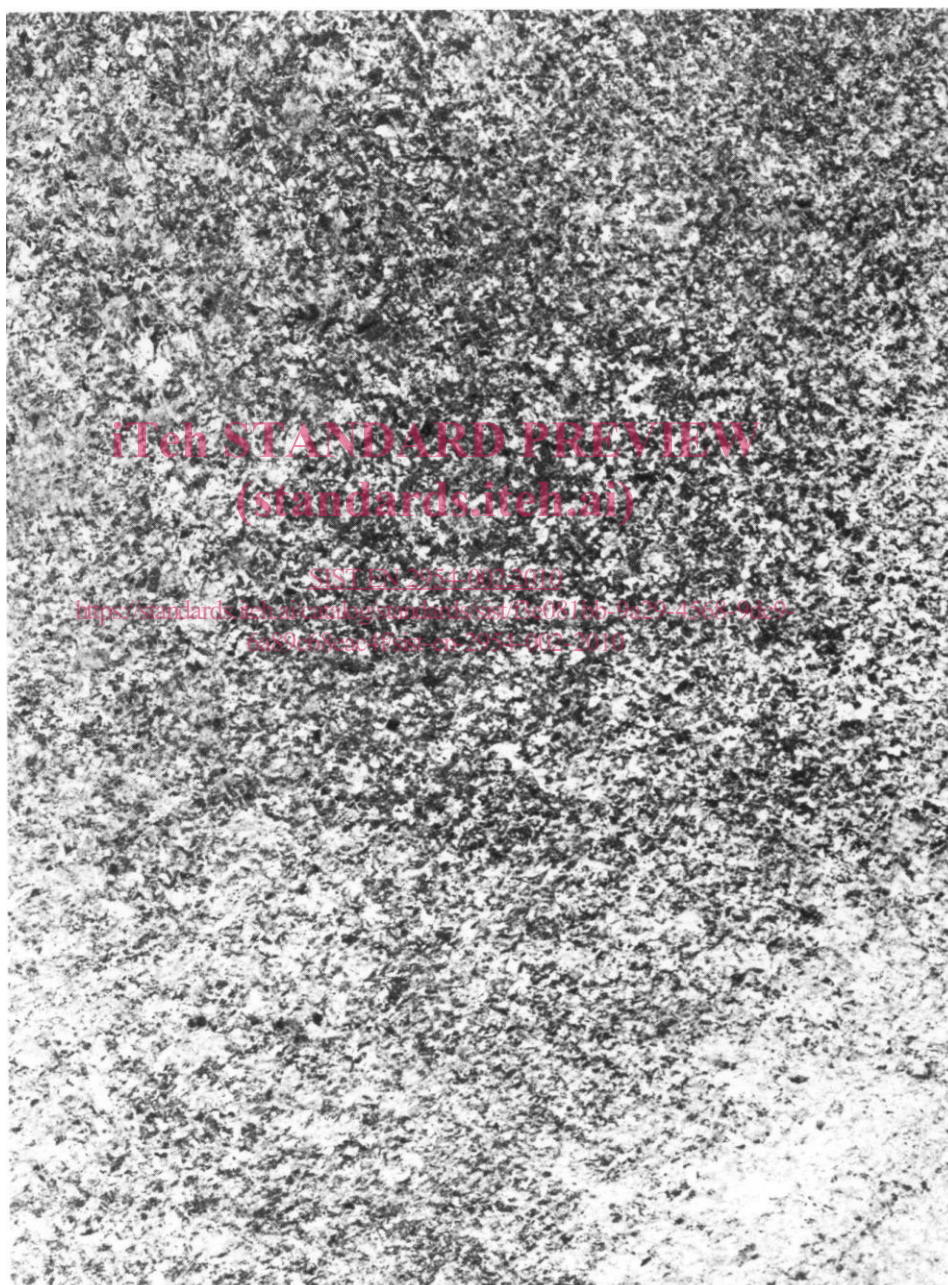
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Annex A (normative)

Atlas of macrographic references

A.1 Macro grain size

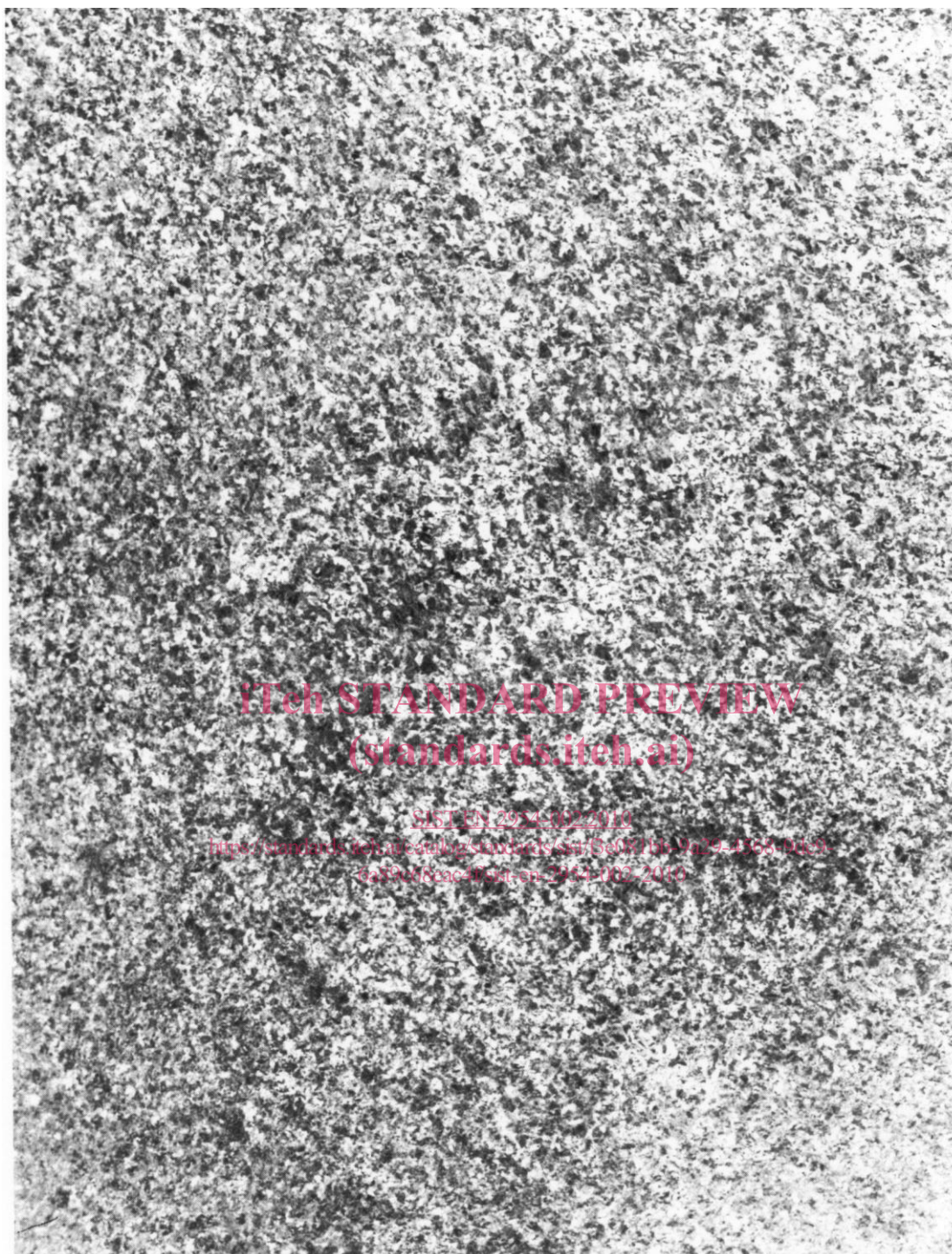
See Figure A.1 (2MA1 to 2MA6). ¹⁾



2MA1

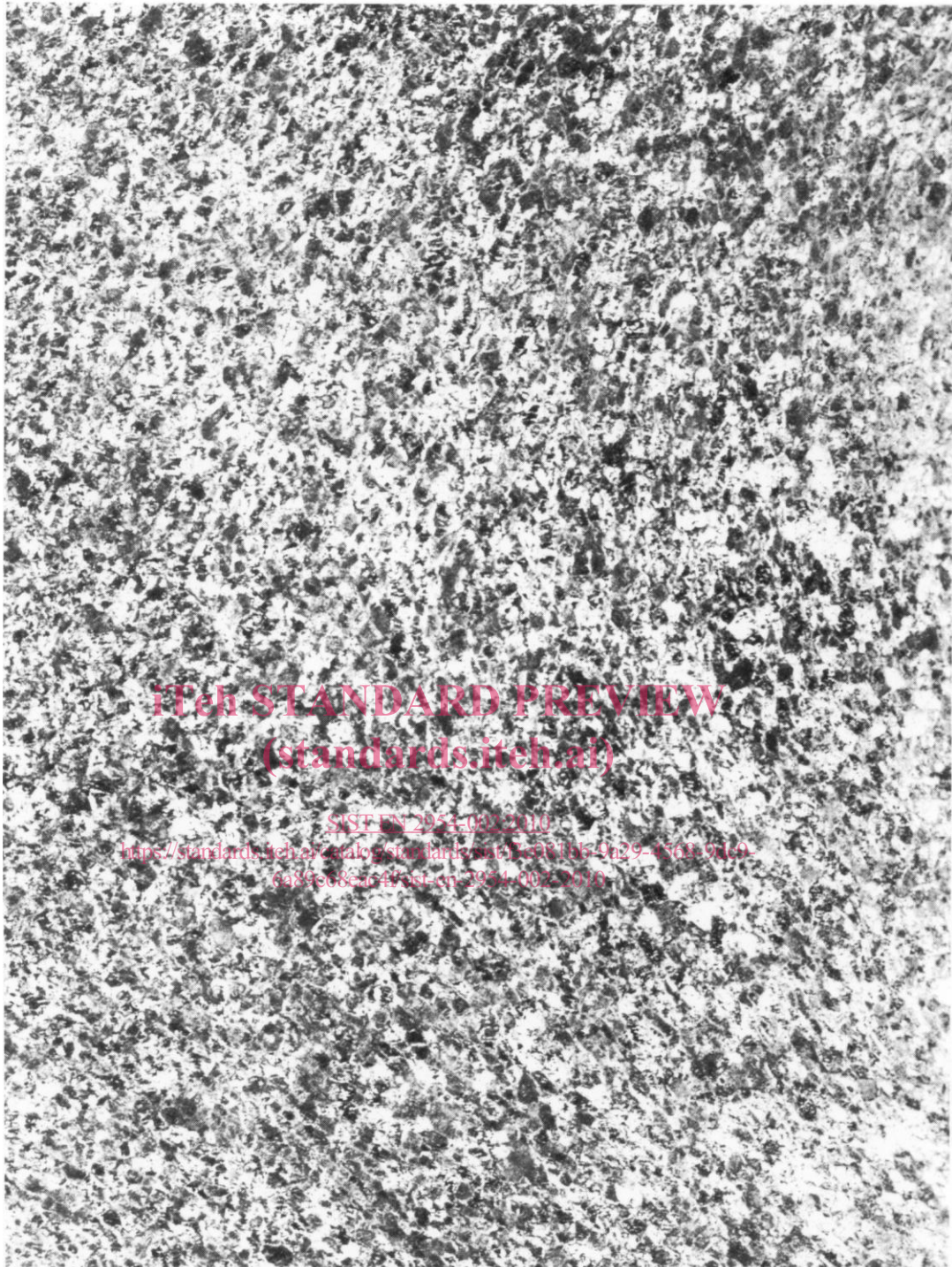
Level 10

1) Additional indication from publication ETTC 3.



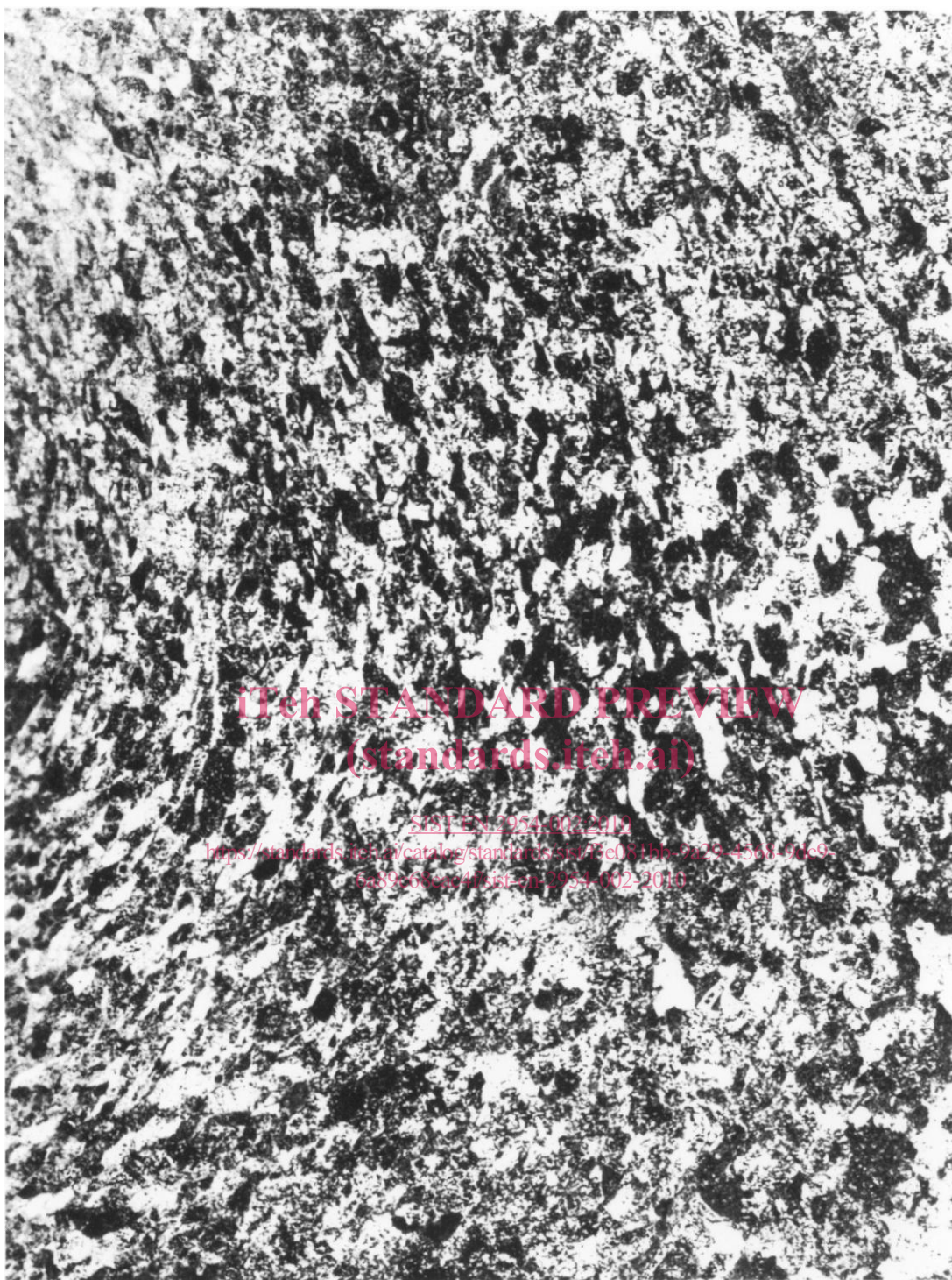
2MA2

Level 20



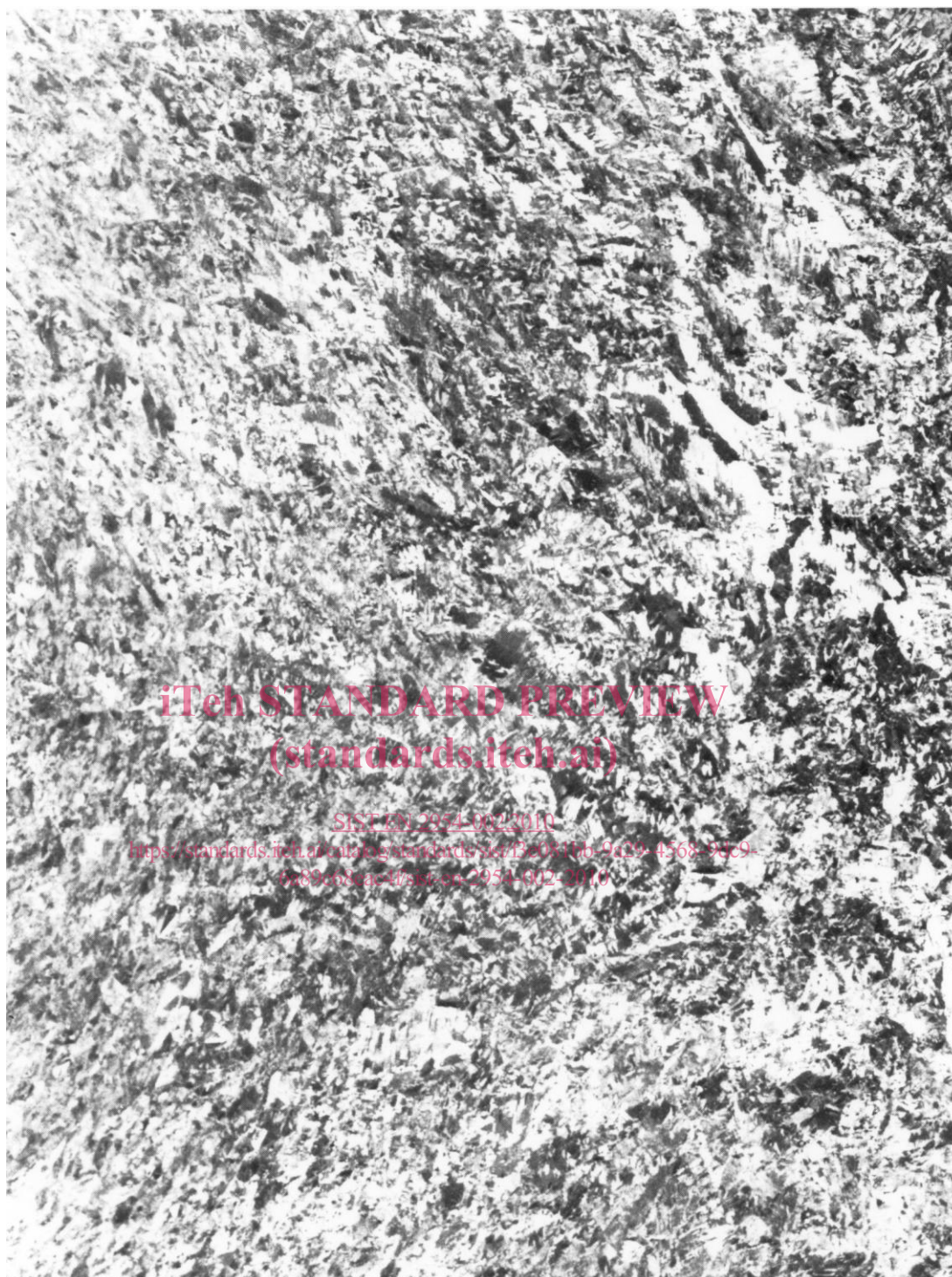
2MA3

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2MA4

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2MA5

Level 50