



**NSAI**  
Standards

Irish Standard  
I.S. EN 16602-70-45:2014

## Space product assurance - Mechanical testing of metallic materials

**I.S. EN 16602-70-45:2014**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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English version

## Space product assurance - Mechanical testing of metallic materials

Assurance produit des projets spatiaux - Essais  
mécaniques des matériaux métalliques

Raumfahrtproduktsicherung - Mechanische Tests von  
metallischem Material

This European Standard was approved by CEN on 18 October 2014.

CEN and CENELEC 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-CENELEC Management Centre or to any CEN and CENELEC member.

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## Foreword

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This document (EN 16602-70-45:2014) has been prepared by Technical Committee CEN/CLC/TC 5 "Space", the secretariat of which is held by DIN.

This standard (EN 16602-70-45:2014) originates from ECSS-Q-ST-70-45C.

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of an identical text or by endorsement, at the latest by April 2015, and conflicting national standards shall be withdrawn at the latest by April 2015.

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.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

This document has been developed to cover specifically space systems and has therefore precedence over any EN covering the same scope but with a wider domain of applicability (e.g. : aerospace).

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

# 1 Scope

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This Standard specifies requirements for mechanical testing of metallic materials to be used in the fabrication of spacecraft hardware.

This Standard establishes the requirements for most relevant test methods carried out to assess the tensile, fatigue and fracture properties of metallic materials. It does not give a complete review of all the existing test methods for the evaluation of mechanical properties of metallic materials.

Furthermore, this Standard specifies requirements for the evaluation, presentation and reporting of test results.

This standard may be tailored for the specific characteristic and constrains of a space project in conformance with ECSS-S-ST-00.



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