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BS EN 16602-70-06:2014



BSI Standards Publication

Space product assurance

Particle and UV radiation testing for space materials

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The UK participation in its preparation was entrusted to Technical Committee ACE/68, Space systems and operations.

A list of organizations represented on this committee can be obtained on request to its secretary.

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ICS 49.140

English version

Space product assurance - Particle and UV radiation testing for space materials

Assurance produit des projets spatiaux - Essais d'irradiation aux particules et aux ultraviolets pour matériaux d'un projet spatial

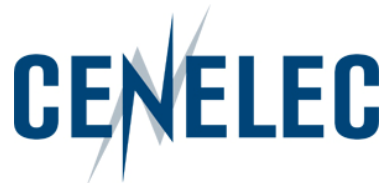
Raumfahrtproduktsicherung - Teilchen- und UV-Strahlungstests für Raumflugmaterialien

This European Standard was approved by CEN on 20 March 2014.

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Foreword

This document (EN 16602-70-06:2014) has been prepared by Technical Committee CEN/CLC/TC 5 "Space", the secretariat of which is held by DIN.

This standard (EN 16602-70-06:2014) originates from ECSS-Q-ST-70-06C.

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of an identical text or by endorsement, at the latest by April 2015, and conflicting national standards shall be withdrawn at the latest by April 2015.

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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).

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1 Scope

Materials used in space applications need to be evaluated for their behaviour under Particle and UV Radiation. As part of this evaluation often an exposure to a simulated space environment is performed that can raise questions regarding its accuracy and representativeness. The role of this Standard is to establish a baseline for the testing specification.

NOTE The environments covered are electromagnetic radiation and charged particles.

This Standard defines the procedures for electromagnetic radiation and charged particles testing of spacecraft materials.

These materials include for instance thermal control materials, windows, coatings, and structural materials.

The procedures include simulation of the environment and the properties to be verified.

This Standard excludes electronic components.

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