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Space product assurance - Materials, processes and their data selection

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 02/17

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English version

Space product assurance - Materials, processes and their data selection

Assurance produit des projets spatiaux - Matériaux, procédés et les données pour leur sélection

Raumfahrtproduktsicherung - Werkstoffe, Prozesse und Angaben zu ihrer Auswahl

This European Standard was approved by CEN on 22 May 2016.

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**CEN-CENELEC Management Centre:
Avenue Marnix 17, B-1000 Brussels**

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European Foreword

This document (EN 16602-70-71:2016) has been prepared by Technical Committee CEN-CENELEC/TC 5 “Space”, the secretariat of which is held by DIN.

This standard (EN 16602-70-71:2016) originates from ECSS-Q-ST-70-71C.

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of an identical text or by endorsement, at the latest by February 2017, and conflicting national standards shall be withdrawn at the latest by February 2017.

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.

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Scope

This Standard specifies the requirements applicable to materials, processes and their data selection to satisfy the mission performance requirements.

This Standard covers the following:

- selection criteria and rules;
- utilization criteria and rules.

The provisions of this Standard apply to all actors involved at all levels in the production of space systems. These can include manned and unmanned spacecraft, launchers, satellites, payloads, experiments, electrical ground support equipment, mechanical ground support equipment, and their corresponding organizations.

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

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Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this ECSS Standard. For dated references, subsequent amendments to, or revisions of any of these publications do not apply. However, parties to agreements based on this ECSS Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references the latest edition of the publication referred to applies.

EN reference	Reference in text	Title
EN 16601-00-01	ECSS-S-ST-00-01	ECSS system - Glossary of terms
EN 16603-20-06	ECSS-E-ST-20-06	Space engineering - Spacecraft charging
EN 16603-32-08	ECSS-E-ST-32-08	Space engineering - Materials
EN 16602-20	ECSS-Q-ST-20	Space product assurance - Quality assurance
EN 16602-70	ECSS-Q-ST-70	Space product assurance - Materials, mechanical parts and processes
EN 16602-70-02	ECSS-Q-ST-70-02	Space product assurance - Thermal vacuum outgassing test for the screening of space materials
EN 16602-70-04	ECSS-Q-ST-70-04	Space product assurance - Thermal testing for the evaluation of space materials, processes, mechanical parts and assemblies
EN 16602-70-07	ECSS-Q-ST-70-07	Space product assurance - Verification and approval of automatic machine wave soldering
EN 16602-70-08	ECSS-Q-ST-70-08	Space product assurance - Manual soldering of high-reliability electrical connections
EN 16602-70-10	ECSS-Q-ST-70-10	Space product assurance - Qualification of printed circuit boards
EN 16602-70-11	ECSS-Q-ST-70-11	Space product assurance - Procurement of printed circuit boards
EN 16602-70-12	ECSS-Q-ST-70-12	Space product assurance - Design rules for printed circuit boards
EN 16602-70-18	ECSS-Q-ST-70-18	Space product assurance - Preparation, assembly and mounting of RF coaxial cables
EN 16602-70-26	ECSS-Q-ST-70-26	Space product assurance - Crimping of high-reliability electrical connections

EN 16602-70-28	ECSS-Q-ST-70-28	Space product assurance - Repair and modification of printed circuits board assemblies for space use
EN 16602-70-30	ECSS-Q-ST-70-30	Space product assurance - Wire wrapping of high-reliability electrical connections
EN 16602-70-31	ECSS-Q-ST-70-31	Space product assurance - Application of paints on flight hardware
EN 16602-70-38	ECSS-Q-ST-70-38	Space product assurance - High-reliability soldering for surface-mount and mixed technology
EN 16602-70-39	ECSS-Q-ST-70-39	Space product assurance - Processing and quality assurance requirements for welding of metallic materials for flight hardware
	ESCC 3901	Generic specification - Wires and cables, electrical, 600V, low frequency
	ESCC 3902	Generic specification - Cables, coaxial, radio frequency, flexible
	ESCC 3903	Generic specification - Solid wires, electrical 350 V, for wire wrapping

koniec náhľadu – text ďalej pokračuje v platenej verzii STN