SLOVENSKI STANDARD
SIST EN 4650:2027

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Aeronavtika - Postopek označevanja žic in kablov z UV-laserjem

Aerospace series - Wire and cable marking process, UV Laser

Luft- und Raumfahrt - Leitungs- und Kabelkennzeichnungsverfahren durch UV-Laser

Série aérospatiale - Procédé de marquage des fils et câbles par laser UV

Ta slovenski standard je istoveten z: **EN 4650:2026**

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ICS:

49.060	Letalska in vesoljska električna oprema in sistemi	Aerospace electric equipment and systems

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EUROPEAN STANDARD

NORME EUROPÉENNE

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EN 4650

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Aerospace series - Wire and cable marking process, UV Laser

Série aérospatiale - Procédé de marquage des fils et câbles par laser UV

Luft- und Raumfahrt - Leitungs- und Kabelkennzeichnungsverfahren durch UV-Laser

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European foreword

This document (EN 4650:2026) has been prepared by ASD-STAN.

After enquiries and votes carried out in accordance with the rules of this Association, this document has received the approval of the National Associations and the Official Services of the member countries of ASD-STAN, prior to its presentation to CEN.

This document shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2027, and conflicting national standards shall be withdrawn at the latest by May 2027.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 4650:2023.

EN 4650:2026 includes the following significant technical changes with respect to EN 4650:2023:

— major revision of Clause 5 “Requirements”:

  o requirements expanded and updated, for laser scanning marking systems including applied laser fluence and dot overlap;

  o new section added for wire manufacturer’s mark;

— consolidated dot measurement and dot overlap for high and low overlap in Annex A.

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Introduction

Ultraviolet (UV) laser wire marking was developed in 1987 to provide a safe, permanent means of marking thin wall insulations; it is now the aerospace industry standard method for marking wire identification codes on to the surface of electrical wires and cables. It provides a simple, convenient, environmentally friendly, cost-effective means of marking and identifying wires and jacketed cables. While a few larger airframe manufacturers have developed process standards and specifications for their own use during the introduction of this technology, there has been variability in the issues covered within these specifications and there has been no comprehensive standard process document developed for general use. The intended use of this document is to serve directly as a process standard for use by laser wire marking concerns. It can also serve as a model set of comprehensive requirements for use by organizations who intend to develop in-house laser marking process specifications or serve as a means for evaluating the adequacy and completeness of such specifications by procuring activities.

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