



# SLOVENSKI STANDARD

**SIST EN 50176:2025**

**01-maj-2025**

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## Avtomatska oprema za elektrostatični nanos vnetljivih tekočih premazov - Varnostne zahteve

Automatic electrostatic application systems for ignitable liquid coating materials - Safety requirements

Automatische elektrostatische Beschichtungssysteme für entzündbare  
Beschichtungsstoffe - Sicherheitsanforderungen

Systèmes automatiques d'application électrostatique de matériaux de revêtement  
inflammables - Exigences de sécurité

**Ta slovenski standard je istoveten z:** **EN 50176:2025**

[SIST EN 50176:2025](#)

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**Automatic electrostatic application systems for ignitable liquid  
coating materials - Safety requirements**

Systèmes automatiques d'application électrostatique de  
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sécurité

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entzündbare Beschichtungsstoffe -  
Sicherheitsanforderungen

This European Standard was approved by CENELEC on 2024-12-30. 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 CENELEC 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 CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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**EN 50176:2025 (E)****European foreword**

This document (EN 50176:2025) has been prepared by CLC/SC 31-8 “Electrostatic painting and finishing equipment” of CLC/TC 31 “Electrical apparatus for potentially explosive atmospheres”.

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2026-02-28
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2028-02-29

This document supersedes EN 50176:2009 and all of its amendments and corrigenda (if any).

The significant technical changes between this document and EN 50176:2009 are given in Annex G, Table G.1.

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

This document has been prepared under a standardization request addressed to CENELEC by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annexes ZZA and ZZB, which are integral parts of this document.

**Document Preview**

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

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## **Introduction**

During the electrostatic coating process, the ignitable liquid coating material is transported to a spraying device where it is atomised by mechanical forces and/or by the influence of an electric field. The generated spray cloud is charged by high voltage of some 10 kV, is attracted by and is applied to the earthed workpiece.

Spray clouds which are not applied to the workpiece (overspray) are removed by a suction device or by other means.

The coating material is cured at room temperature or by heating.

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