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Application equipment for coating materials - Safety requirements

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. 04/25

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English Version

**Application equipment for coating materials - Safety
requirements**

Équipements d'application pour produits de
revêtement - Exigences de sécurité

Applikationsgeräte für Beschichtungsstoffe -
Sicherheitsanforderungen

This European Standard was approved by CEN on 22 December 2024.

CEN 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 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 CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN 1953:2025 (E)**Contents**

Page

European foreword.....	4
Introduction.....	5
1 Scope	6
2 Normative references	6
3 Terms and definitions.....	7
4 Safety requirements and/or protective/risk reduction measures.....	9
4.1 Mechanical	9
4.1.1 Mechanical strength	9
4.1.2 Ejection of pressurized fluids	10
4.1.3 Ejection of fluids or parts	11
4.1.4 Cutting	12
4.2 Electrical	12
4.3 Temperature	12
4.4 Noise.....	12
4.5 Explosion	13
4.5.1 Electrostatic ignition sources	13
4.5.2 Electrical ignition sources.....	13
4.5.3 Non-electrical ignition sources	13
4.6 Hazardous materials and substances	13
4.6.1 Contact with coating materials or cleaning liquids.....	13
4.6.2 Inhalation of aerosols and solvent vapours.....	14
4.7 Ergonomic design	14
4.8 Malfunction.....	14
4.8.1 General	14
4.8.2 Trigger function	14
5 Verification of safety requirements and/or protective/risk reduction measures.....	14
5.1 Mechanical	14
5.1.1 Mechanical strength	14
5.1.2 Ejection of pressurized fluids	15
5.1.3 Ejection of fluids or parts	15
5.1.4 Cutting	15
5.2 Electrical	15
5.3 Temperature	16
5.4 Noise.....	16
5.5 Explosion	16
5.5.1 Electrostatic ignition sources	16
5.5.2 Electrical ignition sources.....	17
5.5.3 Non-electrical ignition sources	17
5.6 Hazardous materials and substances	17
5.6.1 Contact with coating materials or cleaning liquids.....	17
5.6.2 Inhalation of aerosols and solvent vapours.....	17
5.7 Ergonomic design	17
5.8 Malfunction.....	17
5.8.1 General	17
5.8.2 Blockage of the trigger	17
6 Information for use.....	17
6.1 General	17
6.2 Instructions for use.....	17
6.2.1 General	17

6.2.2	Information on installation	18
6.2.3	Information on operation.....	19
6.2.4	Information on maintenance and inspection.....	20
6.3	Marking.....	20
6.3.1	General.....	20
6.3.2	Supplementary marking for ATEX equipment	20
6.3.3	Marking of very small equipment	21
6.4	Sales literature	21
	Annex A (informative) List of significant hazards	22
	Annex B (informative) Significant technical changes between this European Standard and the previous edition	26
	Annex ZA (informative) Relationship between this European Standard and the essential requirements of Directive 2006/42/EC aimed to be covered.....	27
	Annex ZB (informative) Relationship between this European Standard and the essential Health and Safety requirements of Directive 2014/34/EU aimed to be covered	29
	Bibliography	31

EN 1953:2025 (E)**European foreword**

This document (EN 1953:2025) has been prepared by Technical Committee CEN/TC 271 “Surface treatment equipment - safety”, the secretariat of which is held by DIN.

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 August 2025, and conflicting national standards shall be withdrawn at the latest by August 2026.

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 1953:2013.

See Annex B, Table B.1 for the technical modifications which have been made in comparison with EN 1953:2013.

This document has been prepared under a standardization request addressed to CEN 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 ZA and ZB, which are an integral part of this document.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

Introduction

This document is a type-C standard as stated in EN ISO 12100:2010.

This document is of relevance in particular for the following stakeholder groups representing the market players with regard to machinery safety:

- machine manufacturers (small, medium and large enterprises);
- health and safety bodies (regulators, accident prevention organizations, market surveillance, etc.).

Others can be affected by the level of machinery safety achieved with the means of the document by the above-mentioned stakeholder groups:

- machine users/employers (small, medium and large enterprises);
- machine users/employees (e.g. trade unions);
- service providers, e. g. for maintenance (small, medium and large enterprises).

The above-mentioned stakeholder groups have been given the possibility to participate at the drafting process of this document.

The machinery concerned and the extent to which hazards, hazardous situations or hazardous events are covered are indicated in the Scope of this document.

When requirements of this type-C standard are different from those which are stated in type-A or type-B standards, the requirements of this type-C standard take precedence over the requirements of the other standards for machines that have been designed and built according to the requirements of this type-C standard.

EN 1953:2025 (E)

1 Scope

This document deals with all significant hazards, hazardous situations and hazardous events which are relevant to hand-held and automatic application equipment for coating material, when used as intended and under the conditions foreseen by the manufacturer, including reasonably foreseeable misuse.

See Annex A for significant hazards.

Together with this document, EN 50050-1:2013, EN 50050-2:2013, EN 50050-3:2013, EN 50059:2025, EN 50176:2025, EN 50177:2009¹, EN 50223:2015 or EN 50348:2010 give requirements for electrostatic application equipment.

The specific significant risks related to the use of application equipment with foodstuffs and pharmaceutical products are not dealt with in this document.

This document is not applicable to:

- application equipment designed for pneumatic working pressure above 15 bar;
- application equipment with rotating bell/disc designed for hydraulic working pressures above 25 bar;
- non-atomizing application equipment (e.g. extruding equipment, dispenser);
- fluidised bed powder coating machinery;
- application equipment covered by EN 50580:2012⁵;
- supply hoses;
- airbrushes for graphic and artistic works;
- machinery for the supply and circulation of coating materials (see EN 12621:2025).

This document is not applicable to application equipment manufactured before the date of its publication.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 14462:2015, *Surface treatment equipment - Noise test code for surface treatment equipment including its ancillary handling equipment - Accuracy grades 2 and 3*

EN 50050-1:2013, *Electrostatic hand-held spraying equipment - Safety requirements - Part 1: Hand-held spraying equipment for ignitable liquid coating materials*

EN 50050-2:2013, *Electrostatic hand-held spraying equipment - Safety requirements - Part 2: Hand-held spraying equipment for ignitable coating powder*

EN 50050-3:2013, *Electrostatic hand-held spraying equipment - Safety requirements - Part 3: Hand-held spraying equipment for ignitable flock*

EN 50059:2025, *Electrostatic hand-held spraying equipment — Safety requirements — Hand-held spraying equipment for non-ignitable coating materials*

EN 50176:2025, *Stationary electrostatic application equipment for ignitable liquid coating material — Safety requirements*

EN 50177:2009¹, *Stationary electrostatic application equipment for ignitable coating powders — Safety requirements*

EN 50223:2015, *Stationary electrostatic application equipment for ignitable flock material - Safety requirements*

EN 50348:2010, *Stationary electrostatic application equipment for non-ignitable liquid coating material - Safety requirements*

EN 60204-1:2018, *Safety of machinery - Electrical equipment of machines - Part 1: General requirements (IEC 60204-1:2016, modified)*

EN IEC 60079-0:2018,² *Explosive atmospheres — Part 0: Equipment — General requirements (IEC 60079-0:2017)*

EN ISO 4414:2010, *Pneumatic fluid power - General rules and safety requirements for systems and their components (ISO 4414:2010)*

EN ISO 11688-1:2009, *Acoustics - Recommended practice for the design of low-noise machinery and equipment - Part 1: Planning (ISO/TR 11688-1:1995)*

EN ISO 12100:2010, *Safety of machinery - General principles for design - Risk assessment and risk reduction (ISO 12100:2010)*

EN ISO 13732-1:2008, *Ergonomics of the thermal environment - Methods for the assessment of human responses to contact with surfaces - Part 1: Hot surfaces (ISO 13732-1:2006)*

EN ISO 13849-1:2023, *Safety of machinery - Safety-related parts of control systems - Part 1: General principles for design (ISO 13849-1:2023)*

EN ISO 80079-36:2016,³ *Explosive atmospheres — Part 36: Non-electrical equipment for explosive atmospheres — Basic method and requirements (ISO 80079-36:2016)*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN

¹ As impacted by EN 50177:2009/A1:2012.

² As impacted by EN IEC 60079-0:2018/AC:2020-02 and EN IEC 60079-0:2018/A11:2024.

³ As impacted by EN ISO 80079-36:2016/AC:2019.