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COMMISSION IMPLEMENTING DECISION (EU) 2022/1668

of 28 September 2022

on harmonised standards for equipment and protective systems intended for use in potentially explosive atmospheres drafted in support of Directive 2014/34/EU of the European Parliament and of the Council

(Text with EEA relevance)

(OJ L 251, 29.9.2022, p. 6)

Amended by:

		Official Journal		
		No	page	date
► <u>M1</u>	Commission Implementing Decision (EU) 2023/601 of 13 March 2023	L 79	176	17.3.2023
► <u>M2</u>	Commission Implementing Decision (EU) 2023/1587 of 1 August 2023	L 194	134	2.8.2023

**COMMISSION IMPLEMENTING DECISION (EU) 2022/1668****of 28 September 2022****on harmonised standards for equipment and protective systems intended for use in potentially explosive atmospheres drafted in support of Directive 2014/34/EU of the European Parliament and of the Council****(Text with EEA relevance)***Article 1*

The references of harmonised standards for equipment and protective systems intended for use in potentially explosive atmospheres in support of Directive 2014/34/EU, listed in Annex I to this Decision, are hereby published in the *Official Journal of the European Union*.

Article 2

Implementing Decision (EU) 2019/1202 is repealed.

Article 3

Communication 2018/C 371/01 is repealed. However, it shall continue to apply in respect of the references of harmonised standards listed in Annex II to this Decision until the dates of withdrawal of those references.

Article 4

This Decision shall enter into force on the day of its publication in the *Official Journal of the European Union*.



ANNEX I

No	Reference of the standard
1.	EN 1010-1:2004+A1:2010 Safety of machinery – Safety requirements for the design and construction of printing and paper converting machines – Part 1: Common requirements
2.	EN 1010-2:2006+A1:2010 Safety of machinery – Safety requirements for the design and construction of printing and paper converting machines – Part 2: Printing and varnishing machines including pre-press machinery
3.	EN 1127-1:2019 Explosive atmospheres – Explosion prevention and protection – Part 1: Basic concepts and methodology
4.	EN 1127-2:2014 Explosive atmospheres – Explosion prevention and protection – Part 2: Basic concepts and methodology for mining
5.	EN 1755:2015 Industrial Trucks – Safety requirements and verification – Supplementary requirements for operation in potentially explosive atmospheres
6.	EN 1834-1:2000 Reciprocating internal combustion engines – Safety requirements for design and construction of engines for use in potentially explosive atmospheres – Part 1: Group II engines for use in flammable gas and vapour atmospheres
7.	EN 1834-2:2000 Reciprocating internal combustion engines – Safety requirements for design and construction of engines for use in potentially explosive atmospheres – Part 2: Group I engines for use in underground workings susceptible to firedamp and/or combustible dust
8.	EN 1834-3:2000 Reciprocating internal combustion engines – Safety requirements for design and construction of engines for use in potentially explosive atmospheres – Part 3: Group II engines for use in flammable dust atmospheres
9.	EN 1839:2017 Determination of the explosion limits and the limiting oxygen concentration (LOC) for flammable gases and vapours
10.	EN 1953:2013 Atomising and spraying equipment for coating materials – Safety requirements
11.	EN 12581:2005+A1:2010 Coating plants – Machinery for dip coating and electrodeposition of organic liquid coating material – Safety requirements
12.	EN 12621:2006+A1:2010 Machinery for the supply and circulation of coating materials under pressure – Safety requirements
13.	EN 12757-1:2005+A1:2010 Mixing machinery for coating materials – Safety requirements – Part 1: Mixing machinery for use in vehicle refinishing

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No	Reference of the standard
14.	EN 13012:2021 Petrol filling stations – Construction and performance of automatic nozzles for use on fuel dispensers
15.	EN 13237:2012 Potentially explosive atmospheres – Terms and definitions for equipment and protective systems intended for use in potentially explosive atmospheres
16.	EN 13616-1:2016 Overfill prevention devices for static tanks for liquid fuels – Part 1: Overfill prevention devices with closure device
17.	EN 13617-1:2021 Petrol filling stations – Part 1: Safety requirements for construction and performance of metering pumps, dispensers and remote pumping units
18.	EN 13617-2:2021 Petrol filling stations – Part 2: Safety requirements for construction and performance of safe breaks for use on metering pumps and dispensers
19.	EN 13617-3:2021 Petrol filling stations – Part 3: Safety requirements for construction and performance of shear valves
20.	EN 13617-4:2021 Petrol filling stations – Part 4: Safety requirements for construction and performance of swivels for use on metering pumps and dispensers
21.	EN 13760:2021 LPG equipment and accessories – Automotive LPG filling system for light and heavy duty vehicles – Nozzle, test requirements and dimensions
22.	EN 13852-1:2013 Cranes – Offshore cranes – Part 1: General-purpose offshore cranes
23.	EN 13852-3:2021 Cranes – Offshore cranes – Part 3: Light offshore cranes Notice 1: The normative references referred to in clause 2 of harmonised standard EN IEC 60079-0:2018 shall be read as EN IEC 60079-0:2018 corrected by EN IEC 60079-0:2018/AC:2020-02 Notice 2: The normative references referred to in clause 2 of harmonised standard EN ISO 80079-36:2016 shall be read as EN ISO 80079-36:2016 corrected by EN ISO 80079-36:2016/AC:2019 Restriction: this publication does not cover the following part of the standard: column 'Remarks/Notes' of Table ZB.1
24.	EN 14034-1:2004+A1:2011 Determination of explosion characteristics of dust clouds – Part 1: Determination of the maximum explosion pressure p_{max} of dust clouds
25.	EN 14034-2:2006+A1:2011 Determination of explosion characteristics of dust clouds – Part 2: Determination of the maximum rate of explosion pressure rise $(dp/dt)_{max}$ of dust clouds
26.	EN 14034-3:2006+A1:2011 Determination of explosion characteristics of dust clouds – Part 3: Determination of the lower explosion limit LEL of dust clouds

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No	Reference of the standard
27.	EN 14034-4:2004+A1:2011 Determination of explosion characteristics of dust clouds – Part 4: Determination of the limiting oxygen concentration LOC of dust clouds
28.	EN 14373:2021 Explosion suppression systems
29.	EN 14460:2018 Explosion resistant equipment
30.	EN 14491:2012 Dust explosion venting protective systems
31.	EN 14492-1:2006+A1:2009 Cranes – Power driven winches and hoists – Part 1: Power driven winches EN 14492-1:2006+A1:2009/AC:2010
32.	EN 14492-2:2006+A1:2009 Cranes – Power driven winches and hoists – Part 2: Power driven hoists EN 14492-2:2006+A1:2009/AC:2010
33.	EN 14522:2005 Determination of the auto ignition temperature of gases and vapours
34.	EN 14591-1:2004 Explosion prevention and protection in underground mines – Protective systems – Part 1: 2-bar explosion proof ventilation structure EN 14591-1:2004/AC:2006
35.	EN 14591-2:2007 Explosion prevention and protection in underground mines – Protective systems – Part 2: Passive water trough barriers EN 14591-2:2007/AC:2008
36.	EN 14591-4:2007 Explosion prevention and protection in underground mines – Protective systems – Part 4: Automatic extinguishing systems for road headers EN 14591-4:2007/AC:2008
37.	EN 14677:2008 Safety of machinery – Secondary steelmaking – Machinery and equipment for treatment of liquid steel
38.	EN 14678-1:2013 LPG equipment and accessories – Construction and performance of LPG equipment for automotive filling stations – Part 1: Dispensers
39.	EN 14681:2006+A1:2010 Safety of machinery – Safety requirements for machinery and equipment for production of steel by electric arc furnaces
40.	EN 14797:2006 Explosion venting devices

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No	Reference of the standard
41.	EN 14973:2015 Conveyor belts for use in underground installations – Electrical and flammability safety requirements
42.	EN 14983:2007 Explosion prevention and protection in underground mines – Equipment and protective systems for firedamp drainage
43.	EN 14986:2017 Design of fans working in potentially explosive atmospheres
44.	EN 14994:2007 Gas explosion venting protective systems
45.	EN 15089:2009 Explosion isolation systems
46.	EN 15188:2020 Determination of the spontaneous ignition behaviour of dust accumulations
47.	EN 15198:2007 Methodology for the risk assessment of non-electrical equipment and components for intended use in potentially explosive atmospheres
48.	EN 15233:2007 Methodology for functional safety assessment of protective systems for potentially explosive atmospheres
49.	EN 15268:2008 Petrol filling stations – Safety requirements for the construction of submersible pump assemblies
50.	EN 15794:2009 Determination of explosion points of flammable liquids
51.	EN 15967:2022 Determination of maximum explosion pressure and the maximum rate of pressure rise of gases and vapours
52.	EN 16009:2011 Flameless explosion venting devices
53.	EN 16020:2011 Explosion diverters
54.	EN 16447:2014 Explosion isolation flap valves
55.	EN ISO 16852:2016 Flame arresters – Performance requirements, test methods and limits for use (ISO 16852:2016)
56.	EN 17077:2018 Determination of burning behaviour of dust layers
57.	EN 50050-1:2013 Electrostatic hand-held spraying equipment – Safety requirements – Part 1: Hand-held spraying equipment for ignitable liquid coating materials

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No	Reference of the standard
58.	EN 50050-2:2013 Electrostatic hand-held spraying equipment – Safety requirements – Part 2: Hand-held spraying equipment for ignitable coating powder
59.	EN 50050-3:2013 Electrostatic hand-held spraying equipment – Safety requirements – Part 3: Hand-held spraying equipment for ignitable flock
60.	EN 50104:2010 Electrical apparatus for the detection and measurement of oxygen – Performance requirements and test methods

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60a.	EN 50104:2019 Electrical equipment for the detection and measurement of oxygen – Performance requirements and test methods EN 50104:2019/A1:2023
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61.	EN 50176:2009 Stationary electrostatic application equipment for ignitable liquid coating material – Safety requirements
62.	EN 50177:2009 Stationary electrostatic application equipment for ignitable coating powders – Safety requirements EN 50177:2009/A1:2012
63.	EN 50223:2015 Stationary electrostatic application equipment for ignitable flock material – Safety requirements
64.	EN 50271:2018 Electrical apparatus for the detection and measurement of combustible gases, toxic gases or oxygen – Requirements and tests for apparatus using software and/or digital technologies
65.	EN 50281-2-1:1998 Electrical apparatus for use in the presence of combustible dust – Part 2-1: Test methods – Methods for determining the minimum ignition temperatures of dust EN 50281-2-1:1998/AC:1999
66.	EN 50303:2000 Group I, Category M1 equipment intended to remain functional in atmospheres endangered by firedamp and/or coal dust
67.	EN 50381:2004 Transportable ventilated rooms with or without an internal source of release EN 50381:2004/AC:2005
68.	EN 50495:2010 Safety devices required for the safe functioning of equipment with respect to explosion risks
69.	EN IEC 60079-0:2018 Explosive atmospheres – Part 0: Equipment – General requirements (IEC 60079-0:2017)
70.	EN 60079-1:2014 Explosive atmospheres – Part 1: Equipment protection by flameproof enclosures ‘d’ (IEC 60079-1:2014)

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No	Reference of the standard
71.	EN 60079-2:2014 Explosive atmospheres – Part 2: Equipment protection by pressurized enclosure ‘p’ (IEC 60079-2:2014) EN 60079-2:2014/AC:2015
72.	EN 60079-5:2015 Explosive atmospheres – Part 5: Equipment protection by powder filling ‘q’ (IEC 60079-5:2015)
73.	EN 60079-6:2015 Explosive atmospheres – Part 6: Equipment protection by liquid immersion ‘o’ (IEC 60079-6:2015)
74.	EN 60079-7:2015 Explosive atmospheres – Part 7: Equipment protection by increased safety ‘e’ (IEC 60079-7:2015) EN IEC 60079-7:2015/A1:2018
75.	EN 60079-11:2012 Explosive atmospheres – Part 11: Equipment protection by intrinsic safety ‘i’ (IEC 60079-11:2011)
76.	EN 60079-15:2010 Explosive atmospheres – Part 15: Equipment protection by type of protection ‘n’ (IEC 60079-15:2010)
77.	EN 60079-18:2015 Explosive atmospheres – Part 18: Equipment protection by encapsulation ‘m’ (IEC 60079-18:2014) EN 60079-18:2015/A1:2017
78.	EN 60079-20-1:2010 Explosive atmospheres – Part 20-1: Material characteristics for gas and vapour classification – Test methods and data (IEC 60079-20-1:2010)
79.	EN 60079-25:2010 Explosive atmospheres – Part 25: Intrinsically safe electrical systems (IEC 60079-25:2010) EN 60079-25:2010/AC:2013
80.	EN 60079-26:2015 Explosive atmospheres – Part 26: Equipment with Equipment Protection Level (EPL) Ga (IEC 60079-26:2014)
81.	EN 60079-28:2015 Explosive atmospheres – Part 28: Protection of equipment and transmission systems using optical radiation (IEC 60079-28:2015)
82a.	EN 60079-29-1:2016 Explosive atmospheres – Part 29-1: Gas detectors – Performance requirements of detectors for flammable gases EN 60079-29-1:2016/A1:2022 EN 60079-29-1:2016/A11:2022

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No	Reference of the standard
83.	EN 60079-29-4:2010 Explosive atmospheres – Part 29-4: Gas detectors – Performance requirements of open path detectors for flammable gases (IEC 60079-29-4:2009, (Modified))
84.	EN 60079-30-1:2017 Explosive atmospheres – Part 30-1: Electrical resistance trace heating – General and testing requirements (IEC/IEEE 60079-30-1:2015, (Modified))
85.	EN 60079-31:2014 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure ‘t’ (IEC 60079-31:2013)
86.	EN 60079-35-1:2011 Explosive atmospheres – Part 35-1: Caplights for use in mines susceptible to firedamp – General requirements – Construction and testing in relation to the risk of explosion (IEC 60079-35-1:2011) EN 60079-35-1:2011/AC:2011
87.	EN ISO/IEC 80079-20-2:2016 Explosive atmospheres – Part 20-2: Material characteristics – Combustible dusts test methods (ISO/IEC 80079-20-2:2016) EN ISO/IEC 80079-20-2:2016/AC:2017
88.	EN ISO/IEC 80079-34:2011 Explosive atmospheres – Part 34: Application of quality systems for equipment manufacture (ISO/IEC 80079-34:2011)
89.	EN ISO 80079-36:2016 Explosive atmospheres – Part 36: Non-electrical equipment for explosive atmospheres – Basic method and requirements (ISO 80079-36:2016)
90.	EN ISO 80079-37:2016 Explosive atmospheres – Part 37: Non-electrical equipment for explosive atmospheres – Non-electrical type of protection constructional safety ‘c’, control of ignition sources ‘b’, liquid immersion ‘k’ (ISO 80079-37:2016)
91.	EN ISO/IEC 80079-38:2016 Explosive atmospheres – Part 38: Equipment and components in explosive atmospheres in underground mines (ISO/IEC 80079-38:2016) EN ISO/IEC 80079-38:2016/A1:2018

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92.	EN 17348:2022 Requirements for design and testing of vacuum cleaners for use in potentially explosive atmospheres
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ANNEX II

No	Reference of the standard	Date of withdrawal
1.	EN 13012:2012 Petrol filling stations – Construction and performance of automatic nozzles for use on fuel dispensers	3.9.2023
2.	EN 13617-1:2012 Petrol filling stations – Part 1: Safety requirements for construction and performance of metering pumps, dispensers and remote pumping units	3.9.2023
3.	EN 13617-2:2012 Petrol filling stations – Part 2: Safety requirements for construction and performance of safe breaks for use on metering pumps and dispensers	3.9.2023
4.	EN 13617-3:2012 Petrol filling stations – Part 3: Safety requirements for construction and performance of shear valves	3.9.2023
5.	EN 13617-4:2012 Petrol filling stations – Part 4: Safety requirements for construction and performance of swivels for use on metering pumps and dispensers	3.9.2023
6.	EN 13760:2003 Automotive LPG filling system for light and heavy duty vehicles – Nozzle, test requirements and dimensions	19.11.2023
7.	EN 14373:2005 Explosion suppression systems	19.11.2023
8.	EN 15188:2007 Determination of the spontaneous ignition behaviour of dust accumulations	27.11.2022
9.	EN 15967:2011 Determination of maximum explosion pressure and the maximum rate of pressure rise of gases and vapours	29.3.2024