



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

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**Explosive atmospheres - Part 30: Equipment and components
in explosive atmospheres in underground mines**

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Foreword

This Document was drafted in accordance with the rules in GB/T 1.1-2020 Directives for Standardization - Part 1. Rules for the Structure and Drafting of Standardizing Documents.

This Document is Part 30 of GB/T 3836 Explosive Atmospheres. GB/T 3836 has published the

following parts.

- Part 1. Equipment - General Requirements;
- Part 2. Equipment Protection by Flameproof Enclosure "d";
- Part 3. Equipment Protection by Increased Safety "e";
- Part 4. Equipment Protection by Intrinsic Safety "i";

- Part 5.Equipment Protection by Pressurized Enclosure "p";
- Part 6.Equipment Protection by Liquid Immersion "o";
- Part 7.Equipment Protection by Powder Filling "q";
- Part 8.Equipment Protection by Type of Protection "n";
- Part 9.Equipment Protection by Encapsulation "m";
- Part 11.Material Characteristics for Gas and Vapor Classification - Test Methods and Data;
- Part 12.Material Characteristics for Combustible Dusts - Test Methods;
- Part 13.Equipment Repair, Overhaul, Reclamation and Modification;
- Part 14.Classification of Areas - Explosive Gas Atmosphere;
- Part 15.Electrical Installations Design, Selection and Erection;
- Part 16.Electrical Installations Inspection and Maintenance;
- Part 17.Equipment Protection by Pressurized Room "p" and Artificially Ventilated Room "v";
- Part 18.Intrinsically Safe Electrical Systems;
- Part 20.Equipment with Equipment Protection Level (EPL) Ga;
- Part 21.Application of Quality Systems for Equipment Manufacture;
- Part 22.Protection of Equipment and Transmission System Using Optical Radiation;
- Part 23.Group I, Category EPL Ma Equipment Intended to Remain Functional in Atmospheres Endangered by Firedamp and/or Coal Dust;
- Part 24.Equipment Protection by Special Protection "s";
- Part 25.Requirements for Process Sealing between Flammable Process Fluids and Electrical Systems;
- Part 26.Electrostatic Hazards - Guidance;
- Part 27.Electrostatic Hazards - Test;
- Part 28.Non-Electrical Equipment for Explosive Atmospheres - Basic Method and Requirements;
- Part 29.Non-Electrical Equipment for Explosive Atmospheres - Constructional Safety

"c", Control of Ignition Source "b", Liquid Immersion "k";

--- Part 30.Equipment and Components in Explosive Atmospheres in Underground Mines;

--- Part 31.Equipment Dust Ignition Protection by Enclosure "t";

--- Part 32.Intrinsically Safe Systems with Electronically Controlled Spark Duration Limitation;

--- Part 33.Equipment in Adverse Service Conditions;

--- Part 34.Equipment Assemblies;

--- Part 35.Classification of Areas for Explosive Dust Atmospheres.

This Document adopts the re-drafting method in the modification and adoption of ISO/IEC 80079-38.2016 Explosive Atmospheres - Part 38.Equipment and Components in Explosive Atmospheres in Underground Mines.

This Document makes the following structural adjustments.

---Due to the deletion of the term 3.1 "Protection against Firedamp Explosions" in ISO/IEC 80079-38.2016, the sequence of other terms is adjusted;

---The sequence of appendixes is adjusted. The previous Appendix E is adjusted to Appendix A; the previous Appendix D is adjusted to Appendix B; the previous Appendix A is adjusted to Appendix C; the previous Appendix B is adjusted to Appendix D; the previous Appendix C is adjusted to Appendix E.

In comparison with ISO/IEC 80079-38.2016, the technical differences and the causes for these

differences are as follows.

---In terms of Normative References, this Document makes adjustments with technical differences to adapt to the technical conditions of China. The adjustments are intensively reflected in Chapter 2 "Normative References". See the specific adjustments below.

? GB/T 3685, which modifies and adopts international standard, is used to replace ISO 340 (see 6.2);

? GB/T 3836.1, which modifies and adopts international standard, is used to replace IEC 60079-0 (see Chapter 1);

- ? GB/T 3836.18, which modifies and adopts international standard, is used to replace IEC 60079-25 (see 4.4.6.3);
- ? GB/T 3836.28-2021, which modifies and adopts international standard, is used to replace ISO 80079-36.2016 (see Chapter 1);
- ? GB/T 3836.29-2021, which modifies and adopts international standard, is used to replace ISO 80079-37.2016 (see 5.3.1.4);
- ? GB/T 4208, which equivalently adopts international standard, is used to replace IEC 60529 (see 5.3.2);
- ? GB/T 5226.1, which equivalently adopts international standard, is used to replace IEC 60204-1 (see 4.4.3.1);
- ? GB 5226.3, which equivalently adopts international standard, is used to replace IEC 60204-11 (see 4.4.3.1);
- ? GB/T 8642, which modifies and adopts international standard, is used to replace ISO 14916 (see A.2);
- ? GB/T 9239.1, which equivalently adopts international standard, is used to replace ISO 1940-1 (see 5.3.1.6);
- ? GB/T 16855.1, which equivalently adopts international standard, is used to replace ISO 13849-1 (see 5.1.1);
- ? GB/T 18380.11, GB/T 18380.12 and GB/T 18380.13, which equivalently adopt international standard, are used to replace IEC 60332-1 (all parts) (see 6.5);
- ? GB 28526, which equivalently adopts international standard, is used to replace IEC 62061 (see 5.1.1);
- ? GB/T 31523.1, which modifies and adopts international standard, is used to replace ISO 7010 (see 7.1);
- ? GB/T 34560.5, which modifies and adopts international standard, is used to replace ISO 630-5 (see 5.3.1.1);
- ? SH/T 0785, which modifies and adopts international standard, is used to replace ISO 14935 (see 6.3);