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PEOPLE'S REPUBLIC OF CHINA**

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**Explosive atmospheres - Part 21: Application of quality
management systems for Ex Product manufacture**

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Foreword

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

This Document is Part 21 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 Enclosures "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. Explosive Gas Atmospheres - Classification of Hazardous Areas;
- 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 Management Systems for Ex Product 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;
- Part 36. Electrical Safety Devices for the Control of Potential Ignition Sources from Ex Equipment.

This Document replaced GB/T 3836.21-2017 Explosive Atmospheres - Part 21. Application of

Quality Systems for Equipment Manufacture. Compared with GB/T 3836.21-2017, the major technical changes of this Document are as follows besides the structural adjustments and editorial modifications.

- Modify the content of each Clause of the full text to coordinate with GB/T 19001-2016; and list the corresponding content in GB/T 19001-2016;
- Add the requirements for changing planning (see 6.3 of this Edition);
- Added the requirements of personnel (see 7.1.2 of this Edition);
- Add the requirements of personnel consciousness (see 7.3 of this Edition);
- Add requirements for design and development planning (see 8.3.2 of this Edition).

This Document modified and adopted ISO/IEC 80079-34:2018 Explosive Atmospheres - Part

34 Application of Quality Management Systems for Ex Product Manufacture.

Compared with ISO/IEC 80079-34:2018, this Document made the following structural adjustments.

- Annex A corresponds to Annex D of ISO/IEC 80079-34:2018;
- Annex B corresponds to Annex A of ISO/IEC 80079-34:2018;
- Annex C corresponds to Annex B of ISO/IEC 80079-34:2018;
- Annex D corresponds to Annex C of ISO/IEC 80079-34:2018.

The technical differences and their causes between this Document and ISO/IEC 80079-34:2018

are as follows.

- Use GB/T 2900.35 in the normative references to replace IEC 60050-426 (see Clause 3) to adapt to China's technical conditions and increase operability;
- Use GB/T 3836.1 in the normative references to replace IEC 60079-0 (see Clause 3) to adapt to China's technical conditions and increase operability;
- Use GB/T 19000 in the normative references to replace ISO 9000 (see Clause 3) to adapt to China's technical conditions and increase operability.