# NATIONAL STANDARD OF THE

# PEOPLE'S REPUBLIC OF CHINA

# GB/T 3836.21-2022

## 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.