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

GB 3836.16-2024

Replacing GB/T 3836.16-2022

**Explosive atmospheres - Part 16: Specification of electrical
installations inspection and maintenance**

爆炸性环境 第16部分：电气装置检查与维护规范

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part

1. Structure and drafting rules for standardization documents" Drafting. This document is part 16 of GB (GB/T) 3836 "Explosive atmospheres". GB (GB/T) 3836 has published the following parts. Parts 15 and 16 are mandatory, and the other parts are recommended.

1. General requirements for equipment;

- 2. Equipment protected by flameproof enclosure "d";
- 3. Equipment protected by increased safety "e";
- 4. Equipment protected by intrinsic safety type "i";
- 5. Equipment protected by a positive pressure enclosure "p";
- 6. Equipment protected by liquid immersion type "o";
- 7. Equipment protected by sand-filled mold "q";
- 8. Equipment protected by "n" type;
- 9. Equipment protected by encapsulation type "m";
- 11. Test methods and data for classification of properties of gases and vapors;
- 12. Test methods for characteristics of combustible dust materials;
- 13. Repair, overhaul, restoration and modification of equipment;

1 Scope

GB 3836.16-2024 is the Chinese national standard on explosive atmospheres - part 16: specification of electrical installations inspection and maintenance, in the field of electrical engineering. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 24 July 2024 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 August 2025. Classification: ICS 29.260.20, CCS K35. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This document specifies general requirements for the inspection and maintenance of electrical installations in hazardous areas with explosive atmospheres. This document applies to mixtures of explosive gases or explosive (combustible) dust and air, or combustible powder under atmospheric conditions. Locations where dust layers may occur causing hazards. This document does not apply to.

---Underground coal mines (the inspection and maintenance of electrical equipment in underground coal mines can refer to this document);

Note. For specific requirements, see the Coal Mine Safety Regulations.

---Explosive dust;

--- Spontaneous combustion substances.

2 Normative references

The contents of the following documents constitute essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

GB/T 3836.1 Explosive atmospheres Part

3 Terms and definitions

The terms and definitions defined in GB/T 3836.1 and the following apply to this document.

Note. For other terms and definitions applicable to explosive atmospheres, see GB/T 2900.35.

3.1 Hazardous area Explosive atmospheres occur or are expected to occur so frequently that special precautions are required in the construction, installation and use of equipment. Place.

Note. The area described in this document is a three-dimensional area or space.

3.2 Non-hazardous area Locations where explosive atmospheres are not expected to occur in such a large quantity that no special precautions are required for the construction, installation and use of equipment.

3.3 inspection To obtain the conclusion that the equipment is safe and reliable, the equipment should not be disassembled or only partially disassembled as needed, supplemented by some measurements. A careful inspection activity was carried out.