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

GB/T 20105-2026

Replacing GB/T 20105-2006

Coated fabrics for air ducts

风筒涂覆布

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1. Structure and Drafting Rules of Standardization Documents". Drafting. This document replaces GB/T 20105-2006 "Coated Fabric for Air Ducts". Compared with GB/T 20105-2006, the main differences are structural adjustments and editorial changes. Aside from the modifications, the main technical changes are as follows:

- a) A "Terms and Definitions" section has been added (see Chapter 3);
- b) The classification, model number, and representation methods have been changed (see Chapter 4, Chapter 3 of the 2006 edition);
- c) The requirements have been changed (see Chapter 5, Chapter 4 of the 2006 edition);
- d) The test method was changed (see Chapter 6, Chapter 5 of the 2006 edition);
- e) Changes were made to the markings, packaging, transport, and storage (see Chapter 8, Chapter 7 of the 2006 edition);

f) Added test methods for lead and arsenic limits (see Appendix D). Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed and is under the jurisdiction of the China National Coal Association. This document was drafted by: Chongqing Anbiao Testing & Research Institute Co., Ltd., Chengdu Yuanjian Composite Materials Co., Ltd., and Huainan Dongchen Rubber & Plastics Co., Ltd. Limited Liability Company, Chengdu Sanchuan Composite Materials Co., Ltd., Anbiao National Mining Product Safety Marking Center Co., Ltd., Shaoxing Suyi Ventilation Equipment Co., Ltd. Equipment Co., Ltd., Shandong Heqing Environmental Protection Technology Co., Ltd., Jincheng City Taiyangshi Industrial Co., Ltd., Jiangsu Sulong Environmental Protection Technology Co., Ltd. Shanghai Coal Science Testing Technology Co., Ltd., and Shendong Coal Branch of China Shenhua Energy Co., Ltd. The main drafters of this document are: Kong Linggang, Li Shaohui, Zhang Zhigang, Wang Fanshu, Ju Guanggang, Zhou Zhipeng, He Hongjun, Yuan Ye, Wang Wei, and Lian Bo. Li Bingjing, Zhang Suyuan, Chen Li, Qian Feng, Jia Nannan, Zhang Zhihui, Zhou Jiandong, Yang Huayun, Xu Xiaoyun, Zhang Lihui, Yuan Kailiang, Li Pan, Zhang Hao Yang Liang, Yang Sen, Cheng Bo, Deng Peng, Yan Wenxue, Qin Yubing, Peng Minghui, Wang Wei, Li Yufu, Liu Jianyu. This document was first published in 2006, and this is its first revision. Air duct coating cloth

1 Scope

GB/T 20105-2026 is the Chinese national standard covering the coated fabric of a mine ventilation duct - the flexible ducting that carries fresh air to a working face, required to be flame retardant, antistatic and strong enough to hold its pressure over hundreds of metres underground. It replaces GB/T 20105-2006 and has been in force since 1 October 2026, under the China National Coal Association. It was issued on 31 March 2026 and takes effect on 1 October 2026, replacing GB/T 20105-2006. The document is under the responsibility of the China National Coal Association. This page is published from the official record of the 2026 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This document specifies the classification, model and designation methods, requirements, inspection rules, marking, packaging, transportation and storage of duct coating fabric, and describes... The experimental method was established. This document applies to the production of ventilation duct coating fabric (hereinafter referred to as "coating fabric") for mine and tunnel ventilation ducts.

4 Classification, Model Numbers and Representation Methods

4.1 Classification The coated fabrics are classified as follows:

a) Coated fabrics are classified by shape into flat coated fabrics and tubular coated fabrics;

- b) Coated fabrics are classified into impact-resistant coated fabrics and non-impact-resistant coated fabrics according to their usage characteristics;
- c) Non-impact coated fabrics are classified into Grade I and Grade II according to their physical and mechanical properties; impact-resistant fabrics are not classified.
- d) Coated fabrics are classified into rubber-coated fabrics and plastic-coated fabrics according to the coating material;
- e) Coated fabrics are classified into flame-retardant and antistatic coated fabrics and flame-retardant coated fabrics according to their safety performance.

4.2 Model Number and Representation Method The model number and representation method of the coated fabric are as follows: Shape, P indicates flat, T indicates cylindrical Nominal size, width or diameter, in millimeters (mm). Physical and mechanical property grades, I represents grade I, II represents grade II. Coating material, S represents plastic, X represents rubber Safety performance. S indicates flame retardant and antistatic type, D indicates flame retardant type. Using characteristic classification, C indicates shock-resistant type, and non-shock-resistant type is the default. Example 1.T1000ISS indicates a cylindrical plastic duct coating fabric with a nominal diameter of 1000mm, Class I strength, and flame retardant and antistatic properties. Example 2.P1300SDC indicates a flat plastic duct coating fabric with a nominal width of 1300mm, which is impact-resistant and only has flame-retardant properties.

5.1 Specifications and Dimensions

5.1.1 Width Tolerance The width of the flat-width coated fabric shall be determined by negotiation between the supplier and the buyer, and the tolerance shall be 0mm~10mm.

5.1.2 Diameter and Tolerances The recommended diameter and tolerances for tubular coated fabrics should conform to the specifications in Table

1.Other diameters and tolerances shall be determined through negotiation between the supplier and the buyer.

5.1.3 Thickness The thickness of impact-resistant coated fabric should not exceed 1.2 mm; the thickness of non-impact-resistant coated fabric should not exceed 0.8 mm.

5.2 Appearance Quality

5.2.1 The base fabric should be free of breaks and creases; the coated fabric should be free of coating peeling and missing covering film.

5.2.2 On a 1m² area of coated fabric, the presence of non-detachable covering film lumps, non-broken bubbles, and areas not exceeding 3mm in diameter is permitted. Impurities no

larger than 1 mm² should not exceed 5 in total, of which no more than 2 should be non-broken air bubbles.

5.2.3 It should be odorless, and the surface should be uniform in color, clean, dry, and free of obvious oil stains.

5.3 Physical and mechanical properties

5.3.1 Tensile force The tensile strength should meet the requirements of Table 2.

5.3.2 Tear strength The tear strength should conform to the specifications in Table 2.

5.3.3 Adhesion The adhesion should conform to the specifications in Table 2.

5.4 Flame retardancy Flame retardancy should meet the requirements of Table 3.

5.5 Antistatic properties The surface resistivity of the flat-width coated fabric (top and bottom surfaces) and the surface resistivity of the tubular coated fabric (outer and inner surfaces) should not exceed [value missing]. $3 \times 10^8 \Omega$.

5.6 Heat resistance After the heat resistance test, the surface of the coated fabric should be free of cracks and stickiness.

5.7 Cold resistance After the cold resistance test, the surface of the coated fabric should be free of creases, cracks, or other defects.

5.8 Impact resistance After the impact resistance test, the coated fabric should not show any signs of puncture.

5.9 Smoke density The maximum specific optical density measured after the coated fabric is burned should not exceed 650.

5.10 Smoke Toxicity Index The toxicity index of the flue gas measured after the coated fabric is burned should not be greater than 0.64.

5.11 Limits for Lead and Arsenic The lead and arsenic content of the coated cloth should not exceed 1000 mg/kg.

6.1 Specifications and Dimensions

6.1.1 Width Tolerance Lay the coated fabric flat on a smooth, level measuring platform and measure it using a measuring instrument with a graduation of no more than 1 mm. Measure at both ends and the middle. Measure once, take the arithmetic mean as the width of the coated fabric, and round it to 1 mm.

6.1.2 Diameter and Tolerances Lay the tubular coated fabric flat on the measuring platform, measure the width of the coated fabric according to 6.1.1, calculate the diameter of the tubular coated fabric, and round it to the nearest whole number. 1mm.