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

GB/T 10822-2014

Replacing GB/T 10822-2003

**Flame retardant conveyor belts of textile construction for
general use**

一般用途织物芯阻燃输送带

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Table of Contents

- 1 Scope
- 2 Normative references
- 3 Marking
 - 3.1 Belt marking according to the following conveyor belt properties
- 4 Technical requirements...
- 5 Test methods...
- 6 Inspection rules
 - 6.1 Inspection items

1 Scope

GB/T 10822-2014 is the Chinese national standard on flame retardant conveyor belts of textile construction for general use, in the field of materials handling equipment. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 22 December 2014 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 October 2015. Classification: ICS 53.040.20, CCS G42. 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 Standard specifies the marking, technical requirements, inspection, marks, packaging, storage and transportation for flame retardant conveyor belts of textile construction for general use with rubber coverings (hereinafter referred to as belts). This Standard applies to flame retardant conveyor belts of textile construction for general use used in chemical, coal, metallurgy and electric power industries. This Standard applies to flame retardant conveyor belts of textile construction for general use with a working environment temperature of -20°C~45°C. This Standard does not apply to flame retardant conveyor belts used in coal mines. It is also inapplicable to flame retardant conveyor belts with metal skeletons.

2 Normative references

The following referenced documents are indispensable for the application of this document.

For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

GB/T 528, Rubber, vulcanized or thermoplastic - Determination of tensile stress-strain properties (GB/T 528-2009, ISO 37:2005, IDT)

GB/T 3512, Rubber, vulcanized or thermoplastic - Accelerated ageing and heat resistance tests - Air-oven method (GB/T 3512-2001, eqv ISO188:1998)

GB/T 3684, Conveyor belts - Electrical conductivity - Specification and test method (GB/T 3684-2006, ISO 284:2003, IDT)

GB/T 3685, Conveyor belts - Laboratory scale flammability characteristics - Test method (GB/T 3685-2009, ISO 2340:2004, IDT)

GB/T 3690, Textile conveyor belts - Full thickness tensile strength, elongation at break and elongation at the reference load - Test method (GB/T 3690-2009, ISO 283:2007, IDT)

GB/T 4490, Conveyor belts with textile carcass - Widths and lengths (GB/T 4490- 2009, ISO 251:2003, IDT)

GB/T 5752, Conveyor belts - Marking (GB/T 5752-2013, ISO 433:1991, MOD)

GB/T 6759-2013, Conveyor belts - Adhesion between constitutive elements - Test methods (ISO 252:2007, IDT)

GB/T 7983, Conveyor belts - Transverse flexibility (troughability) - Test method (GB/T 7983-2013, ISO 703:2007, MOD)

GB/T 9867-2008, Rubber, vulcanized or thermoplastic - Determination of abrasion resistance using a rotating cylindrical drum device (ISO 4649:2002, IDT)

HG/T 2194, Canvas conveyor belt plies joint provision (HG/T 2194-2006, ISO 432:1989, MOD)

HG/T 3046, Conveyor belts with fabric carcass - Specification for appearance quality

HG/T 3056, Conveyor belts - Guidelines for storage and handling (HG/T 3056-2006, ISO 5285:2004, IDT)

3.1 Belt marking according to the following conveyor belt properties

- a) Refer to this Standard, namely GB/T 10822;
- b) Required length, in meters (m);
- c) Required width, in millimeters (mm);
- d) Fiber type of core warp and weft, for example, polyester (E) (warp) nylon (P) (weft), (EP);
- e) Through-thickness tensile strength, in Newtons per millimeter (N/mm) (see Table 3);

f) Number of layers or type of conveyor belt;

g) Thickness of the upper covering layer, in millimeters (mm);

h) Thickness of the lower covering layer, in millimeters (mm); For conveyor belts made of synthetic fiber fabrics, type B specimens shall be used. For conveyor belts containing natural fiber fabrics as belt cores, type C specimens shall be used.

5.9 The interlayer adhesive strength of the belt shall be tested according to the provisions of Method A in GB/T 6759-2013.

5.10 The combustion performance of the belt shall be tested according to the provisions of GB/T 3685.

5.11 The electrostatic conductivity of the belt shall be tested according to the provisions of GB/T 3684.

5.12 The troughability of the belt shall be tested according to the provisions of GB/T 7983.

5.13 Belt straightness measurement: Unfold the belt on a flat surface. Straighten a 7m long wire along any part of the belt edge, so that the ends of the wire are on the edge of the belt. The maximum vertical distance from the measured belt edge to the straight line is the straightness. Pull a 5m-long wire with a belt width not greater than 500mm or a belt length not greater than 20m.

6.1 Inspection items

6.1.1 During the exit-factory inspection, the length, width, total thickness, entire thickness tensile strength and elongation of the belt, physical properties of the covering layer (excluding aging properties), interlayer bonding strength, straightness and safety performance shall be inspected.

6.1.2 Type inspection shall not be less than once a year during normal production. When major changes occur, type inspection shall be carried out. Inspect all technical requirements specified in Chapter 4 (except 4.10).