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

MT/T 914-2019

**Textile fire resistant conveyor belting for coalmine
(English Translation)**

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1 Scope

This standard specifies the terms and definitions, product classification, models and specifications, technical requirements, test methods and inspection rules, marking, packaging, storage, transportation of textile fire resistant conveyor belting for coalmine (hereinafter referred to as fire retardant belts).

This standard applies to textile fire resistant conveyor belting for coalmine.

2 Normative references

The following documents are essential to the application of this document. For the dated documents, only the versions with the dates indicated are applicable to this document;

for the undated documents, only the latest version (including all the amendments) is applicable to this standard.

GB/T 338 Industrial methanol

GB/T 394.1 Ethanol for industrial use

GB/T 528-2009 Rubber, vulcanized or thermoplastic - Determination of tensile stress-strain properties

GB/T 3512 Rubber, vulcanized or thermoplastic - Accelerated ageing and heat resistance tests - Air-oven method

GB/T 3690 Textile conveyor belts - Full thickness tensile strength, elongation at break and elongation at the reference load - Test method

GB/T 5752 Conveyor belts - Marking

GB/T 6759-2013 Conveyor belts - Adhesion between constitutive elements - Test methods

3 Terms and definitions

The following terms and definitions apply to this standard.

3.1

Fire-resistant properties

The properties of conveyor belts that meet the requirements of 5.13.

3.2

Rated force

The force obtained by multiplying 10% of the overall longitudinal rated tensile strength of the fire retardant belt by the width of the middle part of the specimen.

3.3

Rubber cover

The covering layer of the fire retardant belt which contains more than 80% of the rubber content of the rubber and plastic.

3.4

Peak

The position on the curve where the slope changes from positive to negative.

3.5

Whole curve

The curve segment from the first peak to the last peak of the normal tear segment.

The normal tear segment is the rest of the curve excluding the peak increment segment that may occur at the beginning of the tear.

4.1 Product classification

The textile fire retardant conveyor belt for coal mines is divided into. solid woven fire retardant conveyor belt for coal mines, textile laminated fire retardant conveyor belt for coal mines, aramid textile fire retardant conveyor belt for coal mines, according to the textile tensile strength characteristics.

4.2.1 Solid belt model

The solid belt product model is divided into 680S, 800S, 1000S, 1250S, 1400S, 1600S, 1800S, 2000S, 2240S, 2500S, 2800S, 3100S, 3400S according to the overall longitudinal tensile strength of the solid belt.

4.2.2 Laminated belt model

The laminated belt product model is divided into 680S F, 800S F, 1000S F, 1250S F, 1400S F, 1600S F, 1800S F, 2000S F, 2240S F, 2500S F, 2800S F, 3150S F, 3400S F according to the longitudinal tensile strength.

4.3.1 Width

See Table 1 for the width of the fire retardant belt.

4.3.2 Length

The length of a single roll of fire retardant belt can be agreed upon by both the supplier and the buyer; its limit deviation is $\pm 5\%$; the limit deviation of the total length of the belt is $-0.5\% \sim +2.0\%$.

5.1 Appearance quality

The surface of the solid belt shall be flat, without obvious scars, lack of glue, cracks that affect the use requirements. The fabric core shall be closed.

5.2 Width limit deviation

The width limit deviation of the fire retardant belt shall comply with the provisions of Table 2.

5.5 Tensile strength

5.5.1

The full-thickness tensile strength of the solid belt shall comply with the provisions of Table 4.

5.5.2

The full-thickness tensile strength of the laminated belt shall comply with the provisions of Table 5.

5.6 Elongation at break

The full-thickness longitudinal elongation at break of the solid belt shall not be less than 15%; the full-thickness transverse elongation at break shall not be less than 18%.

The full-thickness longitudinal elongation at break of the laminated belt shall not be less than 10%.

5.13.1 Roller friction performance

When the fire retardant belt is subjected to the roller friction test, no part of it shall have flaming or flameless combustion; the roller surface temperature shall not be greater than 325 °C.

5.13.2 Blowtorch combustion performance

The fire retardant belt shall meet the following requirements after the blowtorch combustion test.

5.14.1 Classification

The joint strength of fire retardant belts is divided into mechanical joint strength and adhesive joint strength, according to the joint method. The solid belt and laminated belt can be selected for assessment. Aramid belts are assessed by adhesive joints.

5.16.1 Fabric joints of solid belt and aramid belt

The core of solid belt and aramid belt shall not have transverse and longitudinal joints.

Solid belt supplied in rolls shall not have spliced joints.

5.16.2 Fabric joints of laminated belt

Fabric joints of laminated belt shall comply with the provisions of GB/T 7984.

6.1 Sample collection method

Take samples 24 hours after the fire retardant belt is made.

6.2 Appearance quality inspection

Visual inspection.