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Replacing GB/T 22869-2008

Interleaving Paper for Cold Rolled Metal Sheets

冷轧金属板衬纸

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China.

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Interleaving Paper for Cold Rolled Metal Sheets

1 Scope

This Standard specifies the requirements, test methods, inspection rules, marking, packaging, transportation and storage of interleaving paper for cold rolled metal sheets.

This Standard is applicable to protective papers for cold rolled metal sheets.

2 Normative References

The following documents are indispensable to the application of this document. In terms of references with a specified date, only versions with a specified date are applicable to this document. In terms of references without a specified date, the latest version (including all the modifications) is applicable to this document.

GB/T 450 Paper and Board - Sampling for Testing and Identification of Machine and Cross Direction Wire Side and Felt Side

GB/T 451.1 Paper and Board - Determination of Size and Deviation

GB/T 451.2 Paper and Board - Determination of Grammage

GB/T 455 Paper and Board - Determination of Tearing Resistance

GB/T 456 Paper and Board - Determination of Smoothness (Bekk method)

GB/T 462 Paper and Board - Determination of Moisture Content

GB/T 1540 Paper and Board - Determination of Water Absorption - Cobb Method

GB/T 1541 Paper and Board - Determination of Dirt

GB/T 1545-2008 Paper Board and Pulp - Determination of Acidity or Alkalinity

GB/T 2678.2-2008 Paper Board and Pulp - Determination of Water Soluble Chlorides

GB/T 2678.6 Paper, Board and Pulp - Determination of Water Soluble Sulphates (conductimetric titration method)

GB/T 2828.1 Sampling Procedures for Inspection by Attribute - Part 1: Sampling Schemes Indexed by Acceptance Quality Limit (AQL) for Lot-by-lot Inspection

GB/T 10342 Paper - Package and Mark

GB/T 10739 Paper, Board and Pulps - Standard Atmosphere for Conditioning and Testing

GB/T 12914 Paper and Board - Determination of Tensile Properties - Constant Rate of Elongation Method (20 mm/min)

GB/T 22837 Paper and Board - Determination of Surface Strength (wax method)

3 Requirements

3.1 The technical indexes of the interleaving paper for cold rolled metal sheets shall comply with the stipulations of Table 1.

3.2 The paper surface shall be flat; the fiber structure shall be uniform. There shall be no appearance defects, such as: folds, pulp mass, sand, oil stains and holes, etc.

3.3 The interleaving paper for cold rolled metal sheets is roll paper; the width deviation of the roll shall not exceed $^{+3}_{0}$ mm; the roll diameter and length shall comply with the stipulations of the contract.

3.4 The end face of the paper roll shall be neat and clean; the banner shall have a consistent degree of tightness; the paper core shall not be deformed. The deviation between the end face of the paper core and the end face of the paper roll shall not exceed ± 3 mm.

3.5 The joints of the interleaving paper for cold rolled metal sheets shall be firm and flat, and there shall be no phenomenon of bonding layer. The joints shall be clearly marked. In each batch of products, the number of rolls with joint(s) shall not exceed 10% of the total number of rolls of that batch of products, and the number of joints per roll shall not exceed 2.

4.2 Grammage, Grammage Deviation and Banner Quantitative Difference

The grammage, grammage deviation and banner quantitative difference shall be determined in accordance with GB/T 451.2. When determining the banner quantitative difference, the width of 1,000 mm is used as the benchmark.

4.3 Tensile Strength and Elongation

The tensile strength and elongation shall be determined in accordance with GB/T 12914.

4.4 Tearing Resistance

The tearing resistance shall be determined in accordance with GB/T 455.

4.5 Surface Oil Absorption

The surface oil absorption shall be determined in accordance with GB/T 1540. The medium shall adopt FX-50C rolling oil; the oil absorption time shall be 60 s.

4.6 Tearing Retention Rate after Hot-pressing

The tearing retention rate after hot-pressing shall be determined in accordance with Appendix A.

4.7 Smoothness

The smoothness shall be determined in accordance with GB/T 456.

4.8 Surface Strength

The surface strength shall be determined in accordance with GB/T 22837.

4.9 Water Extract pH

The water extract pH shall be determined in accordance with the pH meter method in GB/T 1545-2008; the cold extraction shall be adopted.

4.10 Water Soluble Chlorides

The water soluble chlorides shall be determined in accordance with GB/T 2678.2-2008; the mercury nitrate method shall be adopted.

4.11 Water Soluble Sulphates

The water soluble sulphates shall be determined in accordance with GB/T 2678.6.

4.12 Moisture Index for Delivery

Appendix A

(normative)
Determination of Tearing Retention Rate after Hot-pressing

A.1 Principle

Under certain temperature and pressure, conduct hot-pressing treatment on the specimen; test the tearing resistance of the specimen after the hot-pressing treatment and the tearing resistance of the control specimen; calculate the tearing retention rate of the specimen.

A.2 Instruments and Materials

A.2.1 Hot-pressing testing machine

The maximum working pressure is 16 MPa; the highest set temperature may reach 300 °C. The size (length × width) of the hot-pressing plate is 400 mm × 400 mm.

A.2.2 Stainless steel plate

Quantity: 7 pieces; surface processing type: 2B; designation: 304; specifications (length × width × thickness): 350 mm × 350 mm × 0.5 mm.

A.3 Preparation of Specimens

A.3.1 Along the paper web, horizontally stack two pieces of sample with the length of the paper roll banner width and the width of 800 mm into three layers. Then, along the longitudinal direction, uniformly cut two stacks of 320 mm × 320 mm specimen. A total of 12 specimens are taken, in which, 6 specimens are used for the hot-pressing resistance test, and the other 6 specimens are used as control specimens.

A.3.2 Prepare 7 clean stainless steel plates (A.2.2). Firstly, place a specimen flatwise on the first stainless steel plate; use the second stainless steel plate to cover it. When covering the second stainless steel plate, maintain the plate and the edge of the plate aligned. Then, place the second specimen flatwise on the second stainless steel plate; use the third stainless steel plate to cover it, until the 6^{th} specimen is placed flatwise on the 6^{th} stainless steel plate, then, use the 7^{th} stainless steel plate to cover it. Thus, a combination of stainless steel plate - specimen is formed.

A.4 Test Procedures

A.4.1 Switch on the power of the hot-pressing testing machine (A.2.1); set the temperature to 170 °C and the working pressure to 8.0 MPa.

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