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

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Methods for determination of surface oil on electrolytic tinplate

电镀锡钢板表面涂油量试验方法

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Foreword

This standard solvent extraction method and elliptically polarized reference ASTMA623M-08 "Standard Specification for General tinplate" Appendix A6 system Set, increasing the hydrophilic balance method. This standard compared ASTMA623M-

08 Appendix A6, the main changes are.

- No automatic delete function ellipsometer tone given program;
- Increasing the terms and definitions;
- Test device portion of the solvent extraction method increases the balance and distillation apparatus;
- Increasing the distillation apparatus, structural principle volume sampling device, such as an ellipsometer schematic;
- Calculation of the test results complement rounding off content. This standard by the National Steel Standardization Technical Committee (SAC/TC183) centralized. This standard was drafted. Wuhan Iron and Steel (Group) Corporation, Metallurgical Industry Information Standards Institute. The main drafters of this standard. Kay single army, Zhaoyun Zhi, Liu gems, ancient soldiers flat, Hou Jie, Guan Yun, Chen Xiaohong. Test methods for oil plated steel sheet coated with tin

1 Scope

China's national methods for determining the surface oil on electrolytic tinplate. A very thin film of oil - dioctyl sebacate or a similar ester - is applied to tinplate as it leaves the line, and it is there for one purpose: the sheets must slide over one another without scratching as they are stacked, transported and fed into the press that forms them into cans. The quantity is a few milligrams per square metre, and both directions are failures. Too little and the sheets scuff and stick in the feeder; too much and the lacquer will not wet the surface, so the internal coating of the can is defective in a way that is only discovered after filling.

Measuring a film that thin over a large area is the problem the standard solves. It specifies the principles, reagents, apparatus, samples, conditions, procedures, calculation and reporting for three methods - solvent extraction, the hydrophilic balance determination and ellipsometry - and applies to the determination of surface oil on electrolytic tinplate.

This standard specifies the use of solvent extraction method, determination of hydrophilic balance method, elliptical polarization method Test principle Tinplate coated in oil, again Agents, test equipment, samples, test conditions and procedures to calculate the test results, test reports. This standard applies to the determination of plating tin plate surface painted oil for chrome plating (TFS) coated with oil can also be measured with reference to this standard Quasi. Solvent extraction as the Arbitration Law.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated edition applies to this article Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 8170 represents rounding off rules and limit values and judgment

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 Oil surface oil on electrolytic tinplate Tinplate surface To improve lubrication and coating of tin plating plate disposed at the rear of the oil coating step tin plating unit, the plating layer of tin plate attached to the surface electrode Thin, uniform film.

4 Solvent Extraction

4.1 Principle The Tinplate samples immersed in boiling chloroform (or equivalent reagent), and wait until all the oil dissolved in chloroform surface (or Equivalent reagent) in the future, so that the chloroform was evaporated to dryness, the residue of oil extraction; oil consumption divided by the surface area of the sample, that is obtained per unit Painted on the oil product.

4.2 Reagents Chloroform (CHCl_3) or equivalent reagents, analytical distillation for testing.

4.3.1 scales, accurate to 0.1mg.

4.3.2 distillation apparatus (see Figure 1).

4.3.3 Sample volume device (see Figure 2), on the central axis of a mandrel, a slot open at one end, the shaft is equipped with a handle diameter of 13mm Mandrel for winding harder Tinplate sample; 26mm diameter mandrel for winding softer Tinplate sample.

4.4 Sample

4.4.1 Sampling Straight cut or extracted sample plate, it is recommended the sample is sandwiched between two tin-plated tin plate from the plating production line plating or tin plate package, and

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