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

GB/T 31567-2015

**Regenerative, enamelled and packed panels for air-gas and
gas-gas heat exchangers**

用于空气-烟气、烟气-烟气再生式热交换器的搪瓷换热元件

(English Translation)

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Foreword

This standard was drafted in accordance with the rules of GB/T 1.1-2009 and GB/T 20000.2-2009 given.

This standard uses redrafted Law Amendment uses ISO 28763:2008 "enamel for air - smoke, smoke - smoke regenerative heat exchanger the enamel heat transfer element specification "(in English).

This standard and ISO 28763. Compared to 2008, the main differences are as follows.

--- Standard name changed to "for air - smoke, smoke - smoke enamel heat regenerative heat exchanger element";

--- The "this International Standard" be replaced by "this standard";

--- Remove the ISO 28763:2008 foreword, preface this standard increases and directories;

--- For the ISO 28763:2008 normative international documents referenced file instead of using the applicable country, where there is no applicable text of Member, direct technical content into normative appendix of this standard;

--- Adjust the structure of the text, and ISO 28763:2008 corresponding to the structure of

the table in Appendix A.

The standard proposed by China Machinery Industry Federation.

This standard layer Standardization Technical Committee (SAC/TC57) administered by the National Metal and non-metal cover.

This standard was drafted. Kelvin Zhejiang New Material Co., Ltd., Donghua University, the National Optical glass enamels Quality Supervision, Inspection Center, Wuxi Bakeduer Technology Co., Ltd. Kunshan Smith Barney enamel, Shenyang exact Glaze Manufacturing Co., Ltd., Ningbo Jiang Feng aluminum lining Products Co., Ltd.

1 Scope

This standard specifies the regenerative heat exchanger with a heat exchanger element enamel before and after the minimum requirements set installed.

This standard applies to wet dipping, flow enamelling wet, wet spray, wet electrostatic spraying, electrophoretic enamelling of wet and dry electrostatic spray Various enamelling process of heat transfer components enamel coating.

2 Normative references

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

GB/T 4956 on a non-magnetic substrate magnetic coatings Measurement of coating thickness - Magnetic method (GB/T 4956-2003, ISO 2178. 1982, IDT) GB/T 8424.3 Textiles Tests for color fastness color difference calculation (GB/T 8424.3-2001, eqv ISO 105-J03.1995) GB/T 13790-2008 enameling cold-rolled carbon steel sheet and strip (EN10209:1996, MOD) GB/T 16920 Determination of the average linear thermal expansion coefficient of the glass of the (GB/T 16920-1997, eqv ISO 7991. 1987) GB/T 23460.1 ceramic glaze performance test methods - Part 1. High-temperature flow test melt flow method (GB/T 23460.1-2009, ISO 4534. 1980, MOD) Determination of GB/T 9989.2-2015 enamel resistant to chemical attack - Part 2. Resistance to boiling acids, boiling neutral liquids and their vapors Chemical Determination of erosion (ISO 28706-2:2008, IDT) GB/T 31565 enamel steel plate heat exchanger edge coverage determination (GB/T 31565-2015, ISO 28723:2008, IDT)

3 Terms and Definitions

The following terms and definitions apply to this document.

Bubble blister

Grain porcelain layer internal projections bubble escaping gas containing not appear.

Focal spot burn-off

Bottom or side of the glaze layer is too thin glaze layer locally formed after firing at the slag-like scars.

Chipping

Cooling after firing small piece of porcelain layer surface blasting off.

Copper head copperheads when firing steel melt out of the iron oxide in the bottom of the base it is supersaturated and precipitated reddish-brown spots.