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YS

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

YS/T 119.7-2014

Replacing YS/T 119.7-2004

**Determination and calculation of heat balance of special
equipments for alumina production. Part 7: Tube digestion
system**

氧化铝生产专用设备热平衡测定与计算方法 第7部分：管道化溶出系统
(English Translation)

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Foreword

This section drafted in accordance with GB/T 1.1-2009 given rules.

The partial replacement of YS/T 119.7-2004 "alumina production thermal balance determination and calculation methods - Part 7 special equipment. Pipe Digestion system. " This portion of YS/T 119.7-2004 main changes are as follows.

--- Increase the computational side of GB/T 11062 natural gas calorific value, density, relative density and Wobbe index of normative reference documents France, GB/T 17820 natural gas;

--- Remove heavy oil project in the determination of measurement methods and salt furnace section, the measured increase of natural gas;

--- Adding new steam and steam condensate was measured in the measurement items and methods;

--- Increases the thermal equilibrium calculations to steam as the heating medium tube digestion system in thermal equilibrium calculations.

The non-ferrous metal part by the National Standardization Technical Committee (SAC/TC243) centralized.

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This Part replace the standard previously issued as follows.

--- YS/T 119.7-2004.

Alumina production equipment Determination and calculation of heat balance Part 7. tube digestion system

1 Scope

YS/T 119 This part provides thermal balance determination and calculation of the reference alumina production tube digestion system, measurement conditions, measured Project and calculation methods.

This section applies to the determination and calculation of heat balance of alumina production indirectly heated tube digestion system.

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 2587 General Thermal Energy Balance GB/T 2588 General Equipment Thermal efficiency calculation GB/T 11062 natural gas calorific value, density, relative density and Wobbe index calculation method GB/T 16157 stationary source emission of particulates and gaseous pollution measurement sampling methods GB/T 17820 natural gas

3.1 Reference temperature

Reference temperature using 0 °C.

3.2 Reference pressure

Reference pressure using 101325Pa.

Calorific value of natural gas 3.3 Calorific value of natural gas is calculated using the net calorific value.

3.4 Units

Material balance and heat balance are 1m³ original pulp calculated as a benchmark.

3.5 Determination of the scope and calculation of heat balance system

Heat balance measurement range and computing systems, including tube digestion system and salt furnace tube digestion in two parts, each part of the heat balance measurement Given the scope and computing architecture, shown in Figure 1, shown in dashed line in

Figure 2.