

ICS 71.100.10
CCS Q 52

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

YS/T 587.14-2010

**Calcined coke for carbon anode. Part 14: Determination of
Hardgrove Grindability Index (HGI)**

炭阳极用煅后石油焦检测方法 第14部分：哈氏可磨性指数（HGI）的测定
(English Translation)

Issued on: November 22, 2010

Implemented on: March 1, 2011

Issued by: Ministry of Industry and Information Technology

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Foreword

YS/T 587 "carbon anode with calcined petroleum coke detection method," a total of 14 parts.

- Part 1. Determination of ash content;
- Part 2. Determination of moisture content;
- Part 3. Determination of volatile content;
- Part 4. Determination of sulfur content;
- Part 5. Determination of trace elements;
- Part 6. Determination of powder resistivity;
- Part --- Article 7. CO₂ reactivity was measured by mass loss method;
- Part 8. Determination of the reactivity to air mass loss method;
- Part 9. Determination of true density;
- Part 10. Determination of tapped bulk density method;
- Part 11. Determination of particle stability;
- Part 12. Determination of particle size distribution;
- Part 13. Determination of Lc (crystallite size) values;
- Part 14. Hastelloy grindability index (HGI) measurement.

This is Part 14.

This section referring ASTM D5003-2006 "petroleum coke Hardgrove grindability index (HGI) Standard Test Method for" the preparation of the present and the degree of consistency ASTM D5003-2006 part of non-equivalent.

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

This part of the Aluminum Corporation of China Zhengzhou Research Institute, China Nonferrous Metals Industry Institute of Standards Metrology and Quality is responsible for drafting.

This section Shandong Chenyang Carbon Co., Ltd., Shandong Nanshan Aluminum Co., Ltd. participated in the drafting.

1 Scope

YS/T in this part 587 specifies the method for determination of carbon anode Calcined petroleum coke Hastelloy grindability index (HGI) of.

This section applies to the carbon anode with calcined petroleum coke Hastelloy grindability index (HGI) measurement.

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 26297.6 carbonaceous materials used in aluminum sampling methods - Part 6. calcined petroleum coke

3 PRINCIPLE OF THE METHOD

After a certain size range and quality calcined petroleum coke, conditions after grindability tester ground in a predetermined sieve, sieve material weighing quality. Obtained from a standard sample after grindability index curve calcined petroleum coke grindability index.

4 Definitions

Hastelloy grindability index (HGI) Hardgrove grindability index After relatively easy to determine the pulverized calcined petroleum coke grindability index by comparing the standard curve. HGI higher the value, after calcined petroleum the easier coke mill.

5.1 Grindability tester

5.2 Test sieve. sieve test round, diameter 200mm, height 50mm, including the cover and sieve bottom. Cover, sieve, sieve bottom can be composed of a A screening test systems. Mesh size of 4.76mm, 1.19mm, 0.59mm, 0.074mm.

5.3 vibration sieve machine. hit the top sieve shaker, oscillating frequency 221 times/min, rapping frequency 147 times/min.

5.4 Balance. a sense of the amount of 0.01g.

5.5 Second splitter.

5.6 protection screen. Can set in the test sieve pore size 13mm ~ 19mm.

6 Sampling

After carbon anode calcined petroleum coke according to GB/T 26297.6 sampled.