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YS

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

YS/T 210-2009

Replacing YS/T 210-1994

**Pelleted catalyst of platinum for diesel engine exhaust gases
purification**

柴油机排气净化球型铂催化剂

(English Translation)

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Foreword

Instead of the standard YS/T 210-1994 "Diesel exhaust gas purifying spherical platinum catalyst." Compared with this standard YS/T 210-1994, the main changes are as follows.

- The specific surface area of the carrier by a $7\text{m}^2/\text{g} \sim 12\text{m}^2/\text{g}$ upgraded to $\geq 80\text{m}^2/\text{g}$;
- Will be under positive pressure by the strength 20Kgf/pcs modify $\geq 196\text{N/teeth}$;
- The bulk density of the --- $1.0 \pm 0.05\text{kg/L}$ to $600\text{g/L} \sim 1000\text{g/L}$;
- Add to hydrocarbon purification temperature and purification rate requirements;
- New regulations the maximum conversion rate of carbon monoxide requirements;
- Starting temperature of the purification of carbon monoxide by 90% claim to no higher than 270°C is not higher than 260°C ;
- Modify vector determination method specific surface area;
- Provisions of the catalytic activity evaluation methods.

Appendix A of this standard is a normative appendix.

This standard by the National Standardization Technical Committee of non-ferrous metals and centralized.

This standard was drafted. Kunming Institute catalyst limited liability company, your research Platinum Limited.

1 Scope

This standard specifies the diesel exhaust gas purifying catalyst of platinum ball requirements, test methods, inspection rules and signs, packaging, transportation and storage and orders (or contract) content.

This standard applies to mine underground diesel mining, transportation and other mechanical exhaust purifying spherical ceramic platinum catalyst; medium and large Diesel generator exhaust purifying spherical ceramic platinum catalyst.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 8190 Reciprocating internal combustion engines - Exhaust emission measurement
GB/Determination of solid material surface area BET gas adsorption method T 19587

3.1 Shape

Alumina ceramic products should platinum pellet.

Grade 3.2

Depending on the amount of platinum-containing products, divided into the following grades.

Table 1

Grades platinum content /% QPt1 0.1 ± 0.01 QPt2 0.2 ± 0.02 QPt3 0.3 ± 0.03

3.3 Appearance

Product appearance is gray and black beads.

3.4 Physical properties

The physical properties of the product shall be in accordance with Table 2.

Table 2

Physical property requirements Specifications 5mm $\pm$ 1mm spherical particles the specific surface area $\geq 80\text{m}^2/\text{g}$ Bear positive strength $\geq 196\text{N}/\text{pcs}$ A bulk density of 600g/L ~ 1000g/L

3.5 Catalytic performance

The maximum purification rate of carbon monoxide at 90%, 50% purification starting temperature of not higher than 180 deg.] C, 90% purification temperature not higher than the starting 260 °C.