

HJ

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**Technical specifications for waste gas control of copper
smelting**

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Foreword

In order to implement the Law of the People's Republic of China on Environmental Protection and the Law of the People's Republic of China on Prevention and Control of Atmospheric Pollution, etc.

Environmental pollution, standardize the construction and operation management of copper smelting waste gas treatment projects, and develop this standard.

This standard specifies the technical requirements for copper smelting waste gas treatment engineering design, construction, acceptance and operation and maintenance.

This standard is a guiding standard.

This standard is the first release.

This standard was formulated by the Science and Technology and Finance Department of

the Ministry of Ecology and Environment.

This standard is mainly drafted by. Beijing Mining and Metallurgical Technology Group Co., Ltd.

This standard is approved by the Ministry of Ecology and Environment on December 28, 2018.

This standard has been implemented since March 1, 2019.

This standard is explained by the Ministry of Ecology and Environment.

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Copper smelting waste gas treatment engineering technical specification

1 Scope of application

This standard specifies the technical requirements for the design, construction, acceptance, operation and maintenance of copper smelting waste gas treatment engineering.

This standard is applicable to the construction of copper smelting waste gas treatment project with copper concentrate as the main raw material and co-processing of waste copper.

And operation management, can be used as environmental impact assessment of copper smelting waste gas treatment project construction project, environmental protection facility design, construction, Reference basis for acceptance and operation management.

This standard does not apply to recycled copper smelting waste gas treatment projects.

2 Normative references

The contents of this standard refer to the terms in the following documents. Valid versions of undated references, including modifications Single) Applicable to this standard.

GB 5085.1 Identification of hazardous wastes Corrosion identification GB 5085.3
Identification criteria for hazardous wastes GB 5086.1 Solid waste leaching toxicity leaching
method flip method GB 12348 industrial enterprise boundary environmental noise emission
standards GB/T 16157 Determination of particulate matter in fixed source exhaust and
gaseous pollutant sampling method GB 20424 Limit specification for harmful elements in
heavy metal concentrates GB/T 22580 Special environmental conditions Technical
requirements for plateau electrical equipment Low-voltage switchgear and control
equipment GB 25467 Copper, nickel and cobalt industrial pollutant discharge standards GB
50009 Building Structure Load Specification GB 50011 seismic design code for buildings
GB 50015 Building Water Supply and Drainage Design Code GB 50016 Building Design
Fire Code GB 50019 Industrial building heating ventilation and air conditioning design

specification GB 50052 design specification for power distribution system GB 50053 20kV and below substation design specifications GB 50054 Low Voltage Distribution Design Specification GB 50057 lightning protection design code for buildings GB 50059 35~110kV substation design specification GB 50057 lightning protection design code for buildings GB 50093 automatic instrument construction acceptance specification GB 50141 Water supply and drainage structure engineering construction and acceptance specification GB 50168 Electrical installation engineering cable line construction and acceptance specifications GB 50169 Electrical installation engineering grounding device construction and acceptance specifications HJ -----201-GB 50187 General Plan for Design of Industrial Enterprises GB 50194 Construction site safety requirements for construction and supply of electricity GB 50204 Concrete structure engineering construction quality acceptance specification General specification for construction and acceptance of GB 50231 mechanical equipment installation engineering GB 50236 Field equipment, industrial pipeline welding engineering construction specifications GB 50243 Ventilation and air conditioning engineering construction quality acceptance specification GB 50254 Electrical installation engineering Low-voltage electrical installation and acceptance specifications GB 50257 Electrical Installation Engineering Explosion and Fire Hazardous Environment Electrical Installation Construction and Acceptance Specifications GB 50268 Water supply and drainage pipeline engineering construction and acceptance specifications GB 50275 Fan, compressor, pump installation engineering construction and acceptance specifications GB 50544 Non-ferrous metal enterprise general plan transportation design specification GB 50630 Non-ferrous metal engineering design fire protection specification GB 50753 Non-ferrous metal smelter dust removal design specification GB 50880 Smelting flue gas acid production process design specification GB 50988 Non-ferrous metal industry environmental protection design technical specifications GB J 22 factory mine road design specification GB J 87 Industrial Enterprise Noise Control Design Specification GB J 141 Water supply and drainage structures construction and acceptance specifications GBZ 1 industrial enterprise design hygiene standard GBZ 2.1 Occupational exposure limits for workplace hazards Part 1. Chemically harmful factors GBZ 2.2 Occupational exposure limits for workplace hazards Part 2. Physical factors HJ/T 48 soot sampler technical conditions Continuous monitoring technology for HJ 75 fixed pollution source flue gas (SO₂, NO_x, particulate matter) General technical specification for HJ 179 limestone/lime-gypsum wet flue gas desulfurization project HJ/T 322 Environmental Protection Products Technical Requirements Electrostatic Precipitator HJ/T 328 Environmental Protection Products Technical Requirements Pulse Injection Bag Type Dust Collector HJ/T 330 Environmental Protection Product Technical Requirements Chamber Backflush Bag Filter HJ/T 373 Fixed source pollution monitoring quality assurance and quality control technical specifications HJ/T 397 Fixed Source Exhaust Gas Monitoring Technical Specification Technical specification for HJ 462 industrial boiler and kiln wet flue gas desulfurization engineering HJ 544 Determination of Sulfuric Acid Fog of Fixed Pollution Sources by Ion Chromatography HJ 819 General Guidelines for Self-Monitoring Technical Units of Sewage Units HJ 863.3 Sewage permit application and

issuance technical specification Non-ferrous metal industry - copper smelting General technical specifications for HJ 2020 bag dust removal project HJ -----201-HJ 2028 General technical specification for electric dust removal engineering Technical specification for safety, design, commissioning, operation and maintenance of JB/T 6407 electrostatic precipitator Technical Requirements for Standardized Remediation of Sewage Discharges (Trial) (Environmental Supervision [1996] No. 470) Measures for Completion and Acceptance of Construction Projects (Engineering) (Project Construction [1990] No. 1215) Measures for the Administration of Environmental Protection Acceptance for Completion of Construction Projects (Order No. 13 of the State Environmental Protection Administration) National Directory of Hazardous Wastes (Order No. 39 of the Ministry of Environmental Protection) Interim Measures for Environmental Protection Acceptance of Construction Project Completion (Guohuan Environmental Impact Assessment [2017] No. 4) "Technical Guidelines for Environmental Protection Acceptance of Completion of Construction Projects" (Eco-Environmental Department Announcement No. 9 of 2018)

3 Terms and definitions

The following terms and definitions apply to this standard.

3.1 Copper smelting waste gas of copper smelting

Refers to various types of gases containing harmful substances produced during the copper smelting process.

3.2 Environmental smoke collecting

Refers to the process design, the feeding port, the discharge port, the slag discharge port, the electrode hole, the chute, the bun room, etc. of the metallurgical furnace the process of collecting the leaked flue gas.

3.3 Fire method copper smelting process waste gas of copper pyrometallurgy

Refers to the process waste gas produced in each production process in the process of extracting metallic copper or its compound from copper sulfide concentrate at high temperature.

3.4 Wet copper smelting process waste gas of copper hydrometallurgy

Refers to the work produced in each production process during the process of leaching ore or roasting ore with solvent or bacteria under normal temperature and pressure or high pressure.

Art exhaust.