

HJ

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**Technical specifications for ceramic industry exhaust gas
treatment**

(English Translation)

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Foreword

In order to implement the "Environmental Protection Law of the People's Republic of China" and "The Air Pollution Prevention Law of the People's Republic of China" and other laws and regulations, Prevent and control environmental pollution, improve the quality of the ecological environment, standardize the construction and operation management of the ceramic industry waste gas treatment project, and formulate the standard.

This standard specifies the technical requirements for the design, construction, acceptance and operation management of waste gas treatment projects in the ceramic industry.

This standard is a guiding standard.

This standard is issued for the first time.

This standard was formulated by the Department of Science, Technology and Finance, and the Department of Regulations and Standards of the Ministry of Ecology and Environment.

Drafting organizations of this standard. Changsha Vocational and Technical College of Environmental Protection, Hunan Province Eco-Environmental Affairs Center, Hunan Xiangniuhuan Bao Industrial Co., Ltd., Environmental Standard Research Institute of Ministry of Ecology and Environment, Hengyang Ecological Environment Monitoring Center of Hunan Province.

This standard was approved by the Ministry of Ecology and Environment on January 13, 2020.

This standard will be implemented on January 14, 2020.

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

Technical Specification for Waste Gas Treatment Engineering in Ceramic Industry

1 Scope of application

This standard specifies the overall requirements, process design, testing and process control, construction acceptance, and Technical requirements such as operation and maintenance.

This standard applies to the industrial production process of daily-use and furnishing artistic porcelain, architectural ceramics, sanitary ceramics and special ceramics (not including (Including fuel coal gas system) waste gas treatment project can be used as the environmental impact assessment and feasibility study of ceramic industry construction projects, the basis for the design, construction, acceptance, operation and management of environmental protection facilities.

This standard does not apply to waste gas treatment in the production process of ceramic coating materials and glazes.

For the waste gas treatment projects of water gas stations, coal water slurry stations and other public works of ceramic enterprises, refer to the "Code for Design of Producer Gas Stations" (GB 50195) and other related technical specifications.

2 Normative references

The content of this standard refers to the terms in the following documents. For undated reference documents, the effective version is applicable to this standard.

GB/T 6719 Technical requirements for bag filter GB 12348 Environmental Noise Emission Standard at the Boundary of Industrial Enterprises GB/T 12801 General Principles of Safety and Health Requirements for Production Process GB 13691 Technical Regulations for Dust Prevention in Ceramic Production GB 15562.1 Environmental protection graphic sign discharge outlet (source) GB/T 16157 Determination of particulate matter in exhaust from stationary sources and sampling method for gaseous pollutants GB/T 16483 Chemical safety technical specification content and item sequence GB 18597 Pollution Control Standard for Hazardous Waste Storage GB 18599 Pollution control standard for general industrial solid waste storage and disposal sites GB 25464 Pollutant Emission Standard for Ceramic Industry GB/T 28001 Occupational Health and Safety Management System Specification GB 50007 Code for Design of Building Foundation GB 50009 Building structure load code GB 50010 Code for Design of Concrete Structures GB 50014 Outdoor

Drainage Design Code GB 50015 Code for Design of Building Water Supply and Drainage
GB 50016 Code for fire protection of building design GB 50017 Steel Structure Design
Code GB 50019 Design Code for Heating, Ventilation and Air Conditioning of Industrial
Buildings GB 50033 Building Lighting Design Standard GB 50034 Architectural Lighting
Design Standard GB 50046 Code for anti-corrosion design of industrial buildings GB 50051
Chimney Design Code GB 50052 Code for Design of Power Supply and Distribution
System GB 50054 Low Voltage Power Distribution Design Code GB 50055 General Electric
Equipment Power Distribution Design Code GB 50057 Code for lightning protection design
of buildings GB/T 50087 Industrial Enterprise Noise Control Design Code GB 50116 Design
Code for Automatic Fire Alarm System GB 50168 Code for Construction and Acceptance of
Cable Lines of Electrical Installation Engineering GB 50169 Code for construction and
acceptance of grounding devices for electrical installations GB 50187 General Layout
Design Specification for Industrial Enterprises GB 50191 Code for seismic design of
structures GB 50194 Safety Code for Power Supply and Use at Construction Site GB
50195 Code for design of producer gas station GB 50195 Code for design of producer gas
station GB 50204 Code for Acceptance of Construction Quality of Concrete Structure
Engineering GB 50231 General specification for construction and acceptance of
mechanical equipment installation engineering GB 50236 Code for construction and
acceptance of welding engineering of field equipment and industrial pipelines GB 50243
Ventilation and air conditioning engineering quality acceptance code GB 50252 Uniform
Standard for Construction Quality Acceptance of Industrial Installation Engineering GB
50254 Low-voltage electrical construction and acceptance specification for electrical
installation engineering GB 50257 Code for construction and acceptance of electrical
installations in explosive and fire hazardous environments for electrical installations GB
50275 Compressor, fan, pump installation engineering construction and acceptance
specification GB 50300 Unified Standard for Construction Quality Acceptance of Building
Engineering GBZ 1 Hygienic Standard for Design of Industrial Enterprises GBZ 2.1
Occupational exposure limit for hazardous factors in industrial sites Chemical hazardous
factors GBZ 2.2 Occupational Exposure Limits for Hazardous Factors in Industrial Sites
Physical Factors JB/T 11638 Machinery Industry Standard for Wet Electrostatic Precipitator
HJ 75 Technical specification for continuous monitoring of emission of stationary pollution
source flue gas (SO₂, NO_x, particulate matter) HJ 76 Technical requirements and testing
methods for continuous monitoring system for emission of stationary pollution source flue
gas (SO₂, NO_x, particulate matter) HJ 179 Limestone/lime-gypsum wet flue gas
desulfurization engineering general technical specifications HJ/T 251 Technical
Requirements for Environmental Protection Products Roots Blower HJ/T 283 Technical
Requirements for Environmental Protection Products, Chamber Filter Press and Plate and
Frame Filter Press HJ/T 288 Technical requirements for environmental protection products
Wet exhaust gas desulfurization and dust removal device HJ/T 319 Technical requirements
for environmental protection products, granite type wet exhaust gas desulfurization and
dust removal device HJ/T 328 Technical requirements for environmental protection products

pulse jet bag filter HJ/T 330 Technical Requirements for Environmental Protection Products HJ/T 397 Fixed source exhaust gas monitoring technical specification HJ 562 Technical Specification for Waste Gas Denitration Engineering in Thermal Power Plants Selective Catalytic Reduction Method HJ 563 Technical Specification for Waste Gas Denitration Engineering in Thermal Power Plants Selective Non-catalytic Reduction Method HJ.2000 Technical Guidelines for Air Pollution Control Engineering HJ.2016 Environmental Engineering Terminology HJ 2020 General Technical Specification for Bag Dust Removal Engineering HJ 2028 General Technical Specification for Electrostatic Precipitation Engineering HJ 2050 Environmental Engineering Design Document Preparation Guide HJ 2523 Technical Requirements for Environmental Protection Products Ventilation Muffler "Technical Requirements for Standardized Remediation of Sewage Outlets" (formerly the National Environmental Protection Agency Environmental Supervision [1996] No. 470) "Administrative Measures for Automatic Monitoring of Pollution Sources" (Formerly Order of the State Environmental Protection Administration [2005] No. 28) "Interim Measures for Environmental Protection Acceptance of Construction Projects Completed" (Guo Environmental Guidance and Environmental Assessment [2017] No. 4) "Construction Project Completion Environmental Protection Acceptance Technical Guidelines Pollution Impact Category" (Ministry of Ecology and Environment Announcement No. 9 of 2018) "Emergency Management Measures for Environmental Emergencies" (formerly Ministry of Environmental Protection Order No. 34, 2015) "Administrative Measures for the Recordation of Emergency Response Plans for Environmental Incidents of Enterprises and Institutions (Trial)" (Huanfa [2015] No. 4)

3 Terms and definitions

The following terms and definitions defined by GB 25464 apply to this standard.

3.1 Ceramic industry

Refers to the use of clay, other mineral raw materials or industrial raw materials to make various ceramics through the process of crushing, molding, and calcination.

The porcelain product industry mainly includes daily-use porcelain and furnishing art porcelain, architectural ceramics, sanitary ceramics and special ceramics.

3.2 Spray drying tower exhaust gas

Refers to the waste gas discharged during the process of drying slurry into powder by spray drying tower.

3.3 Furnace exhaust gas

Refers to the waste gas produced by the drying and firing process of the green body in kilns such as roller kilns, tunnel kilns or batch kilns in ceramic production.