

ICS 25.120.30

CCS J 61



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 22341.2-2008

Cupolas - Part 2: Technical requirements

冲天炉 第2部分：技术条件

Issued on: August 11, 2008

Implemented on: February 1, 2009

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine;
Standardization Administration of the PRC**

Table of Contents

- 1 Scope
- 2 Normative references
- 3 Technical requirements
- 3.1 General requirements

Foreword

GB/T 22341 "Cupola" is divided into two parts.

--- Part 1. Types and basic parameters;

--- Part 2. Technical requirements. This section GB/T 22341 Part 2. This part is proposed by China Machinery Industry Federation. This part of the National Foundry Machinery Standardization Technical Committee (SAC/TC186) centralized. This section is drafted. Jinan Foundry and Metalforming Machinery Research Institute, Jiangyin City, casting plant, Qingdao Green Environmental Protection Equipment Co., Ltd., Green Island Zhongzhida Environmental Protection Equipment Co., Ltd. smelting. The main drafters of this section. Lu Jun, Xiaru Ming, Ren first, gold segment quite. Cupola Part 2. Technical requirements

1 Scope

China's national technical requirements for cupola furnaces. It is Part 2 of GB/T 22341 and specifies the technical requirements, the test methods, the inspection rules, and the marking, packaging, transport and storage for cupolas melting cast iron, applying to coke-fired cupolas. Where Part 1 defines what a cupola is and how it is sized, this part states what one has to be. A cupola is a simple machine surrounded by difficult conditions: it contains molten iron at fifteen hundred degrees, it is charged from above by crane or skip, it runs continuously for a shift and is dropped and relined at the end of it, and it emits a hot dirty gas that must be cleaned before release. Each of those generates requirements. The shell, the lining and the water-cooling system have to survive the campaign, and the standard sets the materials, the construction and the wall thickness accordingly. The blast system - blower, windbox, tuyeres and the measurement of blast volume and pressure - determines the melting rate and the metal temperature and is specified with them. The charging equipment and the platform have to be safe with a furnace running beneath them. The bottom doors have to drop the residual charge reliably at the end of the campaign, since a bottom that does not release leaves a furnace full of hot material. And the gas cleaning and the spark arrest are requirements rather than options: cupola gas carries carbon monoxide, dust and unburnt coke. The performance requirements - melting rate,

metal temperature, coke ratio, iron loss - and the tests that verify them close the document. Issued on 11 August 2008 and in force since 1 February 2009.

This section GB/T 22341 specifies the technical requirements for cast iron melting cupola, test methods, inspection rules and signs, packaging, Transport, storage and so on. This section applies to coke-fired cupola (hereinafter referred to as the cupola).

2 Normative references

The following documents contain provisions which, through reference

GB/T 22341 in this section constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 191 Packaging - Pictorial signs (GB/T 191-2008, eqv ISO 780.1997)

GB/T 985.1 gas welding, arc welding, gas welding and beam welding Recommended groove (GB/T 985.1-2008, ISO 9692-1.2003, MOD)

GB/T 985.2 SAW recommended groove (GB/T 985.2-2008, ISO 9692-2.1998, MOD)

GB/T 1804-2000 General tolerances for linear and angular dimensions without individual tolerance tolerance (eqv ISO 2768-1. 1989)

GB/T 3323-2005 Metal fusion welded joints radiography

GB/T 3098.1-2000 Mechanical properties of fasteners Bolts, screws and studs (idt ISO 898-1.1999)

GB 5226.1 Safety of Machinery Industry machinery electrical equipment Part 1. General requirements (GB 5226.1-2002, IEC 60204-1.2000, IDT)

GB/T 11345-1989 steel welds manual ultrasonic testing and classification of testing results

GB/T 13306 signs Foundry machinery - Safety requirements GB 20905-2007

GB 21501 Cupola and cupola charging machine safety requirements Determination of

JB/T 6331.2 casting machinery noise sound pressure level measurement

3.1 General requirements

3.1.1 Cupola shall comply with the provisions of this section, in accordance with prescribed procedures approved manufacturing drawings and technical documents.

3.1.2 Cupola furnace equipped with electrical equipment shall comply with the provisions of GB 5226.1.

3.1.3 Cupola signs should be consistent with GB/T 13306 regulations, signs placed under the cupola of the bridge was 90 ° along the bellows at the signs Include at least.

- a) the product name;
- c) melting rate;
- d) manufacturer's name;
- e) the date of manufacture.

3.1.4 Random technical documents should contain the product manual, product certification preparation and packing slips, random technical documentation shall comply with the relevant Standards.