

ICS 25.120.30

CCS J 61



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

GB/T 25714.2-2010

Molten iron ladles - Part 2: Technical requirements

铁液浇包 第2部分：技术条件

Issued on: December 23, 2010

Implemented on: July 1, 2011

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

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Foreword

GB/T 25714 "liquid iron ladle" is divided into two parts.

--- Part 1. Type and parameters;

--- Part 2. Technical requirements. This section GB/T 25714 Part 2. This section drafted in accordance with GB/T 1.1-2009 given rules. 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. Qingdao Green Environmental Protection Equipment Co., Ltd., Qingdao Environmental Protection cupola furnace power plant, foundry machinery Weihai workers have Limited, Qingdao VWIN Metal Structure Co., Ltd., Qingdao Environmental Protection Zhongzhida Melting Equipment Co., Ltd. Qingdao Machinery Co., Ltd. Han and Tang Dynasties. The main drafters of this section. Ronny first, Qin Yuqi, Chi Yingjie, Wang Hui, DUAN Jin Ting, in Guohua. Liquid iron ladle Part 2. Technical requirements

1 Scope

China's national technical requirements for molten iron ladles. It is Part 2 of GB/T 25714 and specifies the requirements, the test methods, the inspection rules and the marking, packaging, transport and storage of ladles used to hold and pour molten iron. Part 1 defines the ladle; this part states what it must be, and its requirements are shaped by a fact that distinguishes iron founding from steelmaking: the ladles are handled by people. A hand ladle is carried by an operator walking across a foundry floor with a kilogram of liquid iron in it; a shank ladle is carried by two; and even the crane ladles are positioned by hand over a mould. So the ergonomics and the handling are safety requirements in a way they are not for a ladle that only a crane ever touches - the handle and its insulation, the balance of the ladle full and empty, the security of the tipping mechanism, and the self-locking of the tilting gear so that a ladle cannot run away and empty itself. The other requirements follow the metal. The shell and its material and welding; the lining and its installation, drying and preheating, since a lining that still contains water will spit violently when iron is poured into it, and a cold lining chills the metal and cracks; the lining thickness and the criterion for

taking a ladle out of service; and the freeboard, because a ladle filled beyond it will slop as it is carried. The standard also covers the covers and pouring lips, the inspection of ladles in service, and the marking - which for a ladle includes its capacity, since overfilling is the commonest way a foundry ladle causes an injury. Issued on 23 December 2010 and in force since 1 July 2011.

This section GB/T 25714 specifies the liquid iron ladle technical requirements, test methods, inspection rules, packaging, labeling, storage and transportation. This section applies to the production of liquid iron foundry ladle (hereinafter referred to as a ladle).

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 699 high-quality carbon structural steel

GB/T 700 carbon structural steel

GB/T 985.1 gas welding, arc welding, gas welding and beam welding Recommended groove

GB/T 985.2 SAW recommended groove

GB/T 1184-1996 shape and position tolerances without individual tolerance value

GB/T 1804-2000 General tolerances Tolerances for linear and angular dimensions without individual tolerance GB/T 3077 alloy steel

GB 5226.1 mechanical and electrical safety of machinery - Electrical equipment - Part 1. General requirements

GB/T 9439 Gray Iron Castings

GB/T 9969 General Instructions industrial products

GB/T 11352 Carbon steel castings for general engineering purposes GB/T 13306 signs

GB/T 16938 Fasteners Bolts, screws, studs and nuts conditions

GB/T 25714.1 liquid iron ladle Part 1. Basic parameters

JB/T 1644-2005 Foundry machinery - General requirements

3.1 General requirements

3.1.1 ladle shall comply with the provisions of this standard and JB/T 1644, and was manufactured in accordance with prescribed procedures approved by the drawings and technical documents.

3.1.2 ladle parameters should be given priority according to the provisions of GB/T 25714.1 selection; special types and parameters determined by the technical agreement.

3.1.3 ladle model should be the preparation and JB/T 3000's.

3.1.4 configuration of the electrical system shall comply with the provisions of GB 5226.1.

3.1.5 ladle signs shall comply with GB/T 13306, the signs outside or boom mounted on the outside envelope unbreakable obvious place. Content label should include.

a) the product name;