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**Metallurgical equipment - Welding lugs - Technical
specifications**

冶金设备 焊接吊耳 技术规范

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard was proposed and managed by the National Metallurgical Equipment Standardization Technical Committee (SAC/TC409). This standard was drafted by Changzhou Baoling Heavy Industry Machinery Co., Ltd., China Heavy-Duty Machinery Research Institute and Changzhou Campus of Hohai University. The main drafters of this standard. Kong Nianrong, Zhu Guomin, Su Jing, Ding Kun, He Bi. Metallurgical equipment welding lug technical specifications

1 Scope

China's national specification for welded lifting lugs used on metallurgical equipment. It specifies the structural forms, the technical requirements, the test methods, the inspection rules and the acceptance. A lifting lug is a plate welded to a load so that a crane can pick it up, and it is one of those components whose simplicity is the danger. In a steelworks the loads are ladles, moulds, rolls, covers and machine assemblies weighing tens or hundreds of tonnes, they are lifted repeatedly through their service life, and they are often hot. A lug that has been sized by eye, welded by whoever was available, and never inspected is the beginning of a dropped load - and a dropped ladle is among the worst accidents that can happen in heavy industry. Standardising the forms, the weld details, the load rating and the inspection is what turns a fabricated bracket into a rated lifting accessory, which is the status it has always deserved and rarely had.

This standard specifies the structural form, technical requirements, test methods, and inspection rules for the welding lugs for metallurgical equipment (hereinafter abbreviated as "lifting lugs"). Acceptance and management requirements, identification, use requirements. This standard is applicable to the production of welding lugs for metallurgical equipment, including the equipment lifting lugs, equipment mounting lugs and equipment manufacturing process Lifting lug.

2 Normative references

The following documents are indispensable for the application of this document. For dated

references, only dated versions apply to this article Pieces. For undated references, the latest version (including all amendments) applies to this document.

GB/T 223 (all parts) Steel and alloy chemical analysis method

GB/T 228.1 Tensile test of metallic materials Part 1. Test method at room temperature

GB/T 700 carbon structural steel

GB/T 1591 low alloy high strength structural steel

GB/T 2970-2016 Ultrasonic inspection method for thick steel plate

GB/T 4336 Determination of multi-element content of carbon steel and low-alloy steels by spark discharge atomic emission spectrometry (conventional method)

GB/T 11345-2013 Non-destructive testing of welds Ultrasonic testing technology, testing grades and assessment

GB/T 14977-2008 General requirements for surface quality of hot rolled steel plates

JB/T 5000.2-2007 General technical specifications for heavy machinery - Part 2. Flame cutting

JB/T 5000.3-2007 General technical conditions for heavy machinery Part 3. Weldments

JB/T 5000.14-2007 General technical specifications for heavy machinery - Part 14. Nondestructive testing of steel castings

JB/T 5000.15-2007 General technical specifications for heavy-duty machinery - Part 15. Nondestructive testing of forged steel parts

JB/T 8112 Lifting shackle D-type shackle and bow shackle

3 Structure

3.1 Ear structure The structure of the lug structure is shown in Table 1. The type of lug should be selected according to the application and force conditions. A type lug should be used under normal conditions.