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CCS J04



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

GB/T 15830-2008

Replacing GB/T 15830-1995

**Non-destructive testing - Practice for ultrasonic testing of
circumferential butt welds in steel pipes and tubes**

无损检测 钢制管道环向焊缝对接接头超声检测方法

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Foreword

This standard replaces GB/T 15830-1995 "ring of steel pipe butt weld ultrasonic testing grade and test results." This standard and GB/T 15830-1995 compared to the main changes are as follows:

- Increased terms and definitions (see Chapter 3);
- Modify the testing organization and staff qualifications (1995 Edition Chapter 3; Chapter 4 of this edition);
- Adjusted Detection System (1995 Edition 4 and 5; Chapter 5 of this edition). Appendix A of this standard is a normative appendix, Appendix B is an informative annex. The standard proposed by China Machinery Industry Federation. The standard non-destructive testing by the National Standardization Technical Committee (SAC/TC56) centralized. This standard was drafted. Tianjin integrity of Metal Detection Technology Limited. The main drafters. Zhang Ping, Yan Dong column, Song Kui. This standard replaces the standards previously issued as follows:
 - GB/T 15830-1995. Non-destructive testing of steel pipe girth weld Butt joints ultrasonic testing method

1 Scope

GB/T 15830-2008 is the Chinese national standard on non-destructive testing - practice for ultrasonic testing of circumferential butt welds in steel pipes and tubes, in the field of testing. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 30 July 2008 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's

Republic of China; Standardization Administration of China, and has been in force since 1 February 2009. Classification: ICS 19.100, CCS J04. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the method for ultrasonic testing and quality steel pipe girth butt welded joints classification. This standard applies to wall thickness greater than or equal to 15mm ~ 120mm, nominal diameter greater than or equal to 159mm of steel pressure pipe ring Butt welded joints ultrasonic testing. This standard does not apply to steel, austenitic stainless steel pipe ring ultrasonic testing butt welded joints.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 5616 NDT Applications Guide

GB/T 9445 NDT personnel qualification and certification (GB/T 9445-2008, ISO 9712:2005, IDT)

GB/T 12604.1 Terminology for nondestructive testing Ultrasonic testing (GB/T 12604.1-2005, ISO 5577:2000, IDT)

GB/T 18852 Non-destructive testing - Ultrasonic examination measuring the contact probe beam characteristics Reference blocks and test methods (GB/T 18852- 2002, ISO 12715:1999, IDT)

GB/T 20737 Non-destructive testing - General terms and definitions (

GB/T 20737-2006, ISO /T S18173:2005, IDT)

JB/T 8428 NDT ultrasonic testing with test block

JB/T 9214 A pulse reflection type ultrasonic flaw detection system performance test method

3 Terms and Definitions

Terms and definitions GB/T 12604.1 and GB/T 20737 apply to this standard established.

4 Testing organizations and personnel qualifications

4.1 Institutional Requirements According to the present embodiment standard testing agency or unit should be consistent with GB/T 5616 requirements or equivalent standards and regulations.

4.2 personnel qualifications Staff by implementation of this standard test, should be GB/T 9445 or contractual parties agreed system for Qualification and certification by the employer Master or agent job professional training and authorization to operate.

5.1 Instrument

5.1.1 Detector performance should be the method JB/T 9214 provisions for testing, the operating frequency range of at least 1MHz ~ 5MHz.

5.1.2 The combination of sensitivity and instrument oblique probe reaches the workpiece is detected at the detection beam path, the effective sensitivity margin of not less than 10dB.

5.1.3 Resolution combination. should be able to JB/T 8428 on the CSK-IA test block 50mm separated from the reflected signal 44mm two holes, when