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

GB/T 16957-2012

Replacing GB/T 16957-1997

Clad teel plats - Mechanical technical tests on welded joints

复合钢板 焊接接头力学性能试验方法

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules. This standard replaces GB/T 16957-1997 "composite steel welded joints mechanical performance test method." The revision of this standard for GB/T 16957-1997 The following main elements were modified.

--- Normative references removed JJG139 seven standards, increasing the GB/T 8165 nine standards;

--- Remove the GB/T 6396, GB/T 10623, GB/T 2650, GB/T 2651, GB/T 2652, GB/T 2653 and GB/T 2654 terms have been defined;

--- The term positive bend to curved surfaces;

--- Added "test board size, the interception of the pilot project site and samples shall execute the relevant standards, such as the relevant standard does not specify When, according to the standards ";

--- Remove For arc plate and a lead plate test panels, both ends of the discarded portion may be less abandoned or not abandoned;

Note. The choice of samples shall be in accordance with the requirements of the relevant product selection, generally included in the design strength of the coating to decide whether mining Take that kind ";

--- The width of the specimen to specimen width $b \geq 25\text{mm}$ to 25mm;

--- Removed all "insufficient capacity tester"

--- For pure tensile specimen substrate to "general all-thickness of the substrate sample, when the composite steel plate thickness $T_b \geq 30\text{mm}$, can According to GB/T 2651 standard uniform in the thickness direction of stratified sampling, the final result of such a combination of multi-chip samples instead of one Full thickness of the test results ";

--- Added "Unless otherwise specified, the test shall be at an ambient temperature of 23 ± 5 under conditions";

--- Bending test results to assess "after the end of the curved outer side surface of the sample and should be tested, if desired can be checked The extent of binding at the surface cracking." This standard by the National Standardization Technical Committee welded (SAC/TC55) and focal points. This standard was drafted. Explosion Dalian Shipbuilding Industry Group Co., Ltd. Processing Research Institute, Dalian Shipbuilding Industry Group Co., Ltd., China Shipbuilding Technology and Economy Research Institute, Shanghai Institute of Materials, Equipment Co., Ltd. Dalian hope. The main drafters of this standard. Wang Yong, Zhang Liyan, Yan Jun, Sun Yiming, Wu Jing, Wang Bin, Yin Jianjun. This standard replaces the standards previously issued as follows:

--- GB/T 16957-1997. Composite steel plate welded joints Mechanical tests

1 Scope

GB/T 16957-2012 is the Chinese national standard on clad teel plats - mechanical technical tests on welded joints, in the field of manufacturing engineering. 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 31 December 2012 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 October 2013. Classification: ICS 25.160.40, CCS J33. 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 composite steel plate welded joints (hereinafter referred to as welded joints) tensile, bending, impact and hardness test methods. This standard applies to pressure vessels, reactors, tanks and ships and other uses in the steel substrate, stainless steel or non-ferrous metal For the covering material, the total thickness of not less than 8mm rolling, explosion, welding, casting, explosion rolling, rolling and welding casting and rolling complex of single and double sided Combined steel welded joints and process performance test. The total thickness of less than 8mm of composite steel and other metal composite plate welded joints Mechanical tests may enforce this standard.

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 150.2 pressure vessels - Part 2. Materials

GB 150.4 Pressure Vessels Part 4. fabrication, inspection and acceptance

GB/T 228.1 tensile testing of metallic materials - Part 1. room temperature test methods (GB/T 228.1-2010, ISO 6892-1. 2009, MOD)

GB/T 229 metal Charpy pendulum impact test method (GB/T 229-2007, ISO 148-1.2006, MOD)

GB/T 232 metallic materials - Bend test (GB/T 232-2010, ISO 7438.2005, MOD)

GB/T 2650 welded joint impact test method (GB/T 2650-2008, ISO 9016.2001, IDT)

GB/T 2651 welded joint tensile test method (GB/T 2651-2008, ISO 4136.2001, IDT)

GB/T 2652 and deposited weld metal tensile test method (GB/T 2652-2008, ISO 5178.2001, IDT)

GB/T 2653 welded joint bending test method (GB/T 2653-2008, ISO 5173.2000, IDT)

GB/T 2654 welded joint hardness test method (GB/T 2654-2008, ISO 9015-1.2001, IDT)

GB/T 4340.1 metallic materials - Vickers hardness test - Part 1. Test method (GB/T 4340.1-2009, ISO 6507-1.2005, MOD)

GB/T 6396 composite steel mechanical and process performance test method

GB/T 8165 stainless steel composite plate and strip