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JJG

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

JJG 113-2013

Replacing JJG 113-2003

**Verification Regulation of Metallic Rockwell Hardness
Reference Blocks (Scales A, B, C, D, E, F, G, H, K, N, T)
(English Translation)**

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Introduction

The regulations drafted in accordance with the rules JJF1002-2010 "national verification procedures write rules" given.

The procedures in place JJG 113-2003 "standard metal Rockwell hardness blocks (A, B, C, D, E, F, G, H, K, N, T ruler). " Compared with JJG 113-2003, this procedure is mainly technical changes are as follows.

--- Modify the standard hardness block uniformity requirements (see Table 2);

--- Increasing the standard block special shape required, but not less than the prescribed working face surface area of 2400mm² (See Table 3);

--- Increasing the standard hardness block flatness and parallelism of the test methods (see 6.2.2.2);

--- Remove the standard requirements of hardness machine, put it into JJG 112-2013 "Metallic Rockwell hardness Meter "in;

--- Test force is applied to modify the primary time (1 ~ 8) s (see 6.2.2.7).

The procedures in the development process to fully consider the GB/T 230.1-2009 "metallic materials Rockwell hardness test Test - Part 1. Test methods (A, B, C, D, E, F, G, H, K, N, T scale) ", GB/T 230.3-2002 "metallic materials Rockwell hardness test - Part 3. Standard hardness block (A, B, C, D, E, F, G, H, K, N, T ruler) calibration ", ISO 6508-1:2005" Rockwell hardness of metallic materials Test Part 1. Test methods "(A, B, C, D, E, F, G, H, K, N, T scale) [a Me-tallicmaterials-Rockwelhardnesstest-Part 1. Testmethod (scalesA, B, C, D, E, F, G, H, K, N, T)], ISO 6508-3. "Part 3 of metallic materials Rockwell hardness test 2005 Point. calibration standard block "(A, B, C, D, E, F, G, H, K, N, T scale) [Metalicmateri-als-Rockwelhardnesstest-Part 3. Calibrationofreferenceblocks (scalesA, B, C, D, E, F, G, H, K, the term N, T)] and other metal standard Rockwell hardness block the relevant documents, and symbols set Justice, as well as technical requirements, technical specifications and test methods.

--- Previous release version JJG 113-2003 case.

JJG 113-1984; JJG 113-1991.

Standard metal Rockwell hardness blocks (A, B, C, D, E, F, G, H, K, N, T scale) test procedures

1 Scope

The order applies to standard metal Rockwell hardness blocks (A, B, C, D, E, F, G, H, K, N, T standard Feet) of the initial verification, use and subsequent verification check.

2. References

This procedure references the following documents.

JJG 21-2008 micrometer JJG 28-2000 flat crystal for dated references, only the dated edition applies to this procedure; undated reference documents Member, the latest edition (including any amendments) applies to this procedure.

3 Overview

Standard metal Rockwell hardness block (hereinafter referred to as the standard block) is a metal Rockwell hardness indirect test standards Appliances, Rockwell hardness scale and is calculated in Table 1.

Table 1 Rockwell hardness scale

hardness

Staff

Hardness unit

symbol

Indenter type

Initial test force F0 Main test force F1 Total test force F Hardness value calculation formula
A HRA Diamond cone B HRBW phi1.5875mm ball C HRC Diamond cone D HRD diamond
cone E HREW phi3.175mm ball F HRFW phi1.5875mm ball G HRGW phi1.5875mm ball H
HRHW phi3.175mm ball K HRKW phi3.175mm ball 98.07 490.3 588.4 100- h0.002 882.6
980.7 130- h0.002 1373 1471 100- h0.002 882.6 980.7 100- h0.002 882.6 980.7 130-
h0.002 490.3 588.4 130- h0.002 1373 1471 130- h0.002 490.3 588.4 130- h0.002 1373
1471 130- h0.002