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

GB/T 15822.2-2024

Replacing GB/T 15822.2-2005

**Non-destructive testing - Magnetic particle testing - Part 2:
Detection media**

无损检测 磁粉检测 第2部分：检测介质

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part

1. Structure and drafting rules for standardization documents" Drafting. This document is part 2 of GB/T 15822 Non-destructive testing - magnetic particle testing. GB/T 15822 has been published in the following parts.

2. Detection media;

3. Equipment. This document replaces GB/T 15822.2-2005 "Non-destructive testing - Magnetic particle testing - Part

2. Test media" and is compatible with GB/T 15822.2- Compared with.2005, in addition to structural adjustments and editorial changes, the main technical changes are as follows:

a) The magnetic particle inspection size requirements have been changed (see 7.3.2,

7.3.3 of the.2005 edition);

b) Added type test methods (see 7.5.1.1,

7.5.1.1 of the.2005 edition);

c) Added short-term test steps for mechanical stability (see

7.10.2.2 and Appendix B,

7.10.2.2 of the.2005 edition);

d) The inspection requirements for type testing and batch testing have been changed (see Table 1, Table 1 of the.2005 edition);

e) The evaluation of type test and batch test has been changed (see A.4.2, A.4.2 of the.2005 edition);

1 Scope

GB/T 15822.2-2024 is the second part of the Chinese magnetic particle testing standard and it covers the detection media: the magnetic particles themselves, the carrier fluid, the suspension and the contrast aid. Magnetic particle testing finds surface and near-surface cracks in ferromagnetic components, and the whole sensitivity of the method rests on the medium, on the particle size and shape, the magnetic properties, the fluorescence where fluorescent particles are used, and the concentration and condition of the suspension in the tank. The standard sets the classification of the media, the requirements on the particles, on the carrier fluid and on the ready-mixed and concentrated suspensions, the requirements on the contrast aid and on the demagnetising and cleaning products, the test methods by which each requirement is verified including the sensitivity check on reference blocks, the requirements on the marking and the safety data, and the in-service checks on the suspension. The 2024 edition replaces GB/T 15822.2-2005. For an NDT service provider, a consumables supplier or an inspection body in China, this is the acceptance text.

This document specifies the main characteristics of magnetic particle testing products (including magnetic suspensions, dry magnetic particles, carrier fluids and contrast enhancers) and their performance verification method.

2 Normative references

The contents of the following documents constitute essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document. Copperstrip test)

GB/T 8034-2009 Coking benzene products - Determination of copper corrosion (ISO 2160.1998, MOD) ISO 2591-

3 Equipment (

ISO 9934-3.2015, IDT) Vocabulary

GB/T 12604.5-2020 Non-destructive testing terminology Magnetic particle testing (

ISO 12707.2016, IDT) EN1330-