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

JB/T 6063-2006

Replacing JB/T 6063-1992

Non-destructive testing - Materials for magnetic particle testing

无损检测 磁粉检测用材料

(English Translation)

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1 Scope

This document specifies the classification, technical requirements and inspection methods for materials for magnetic particle testing (or testing medium, including magnetic suspension, dry magnetic particle, carrier liquid, contrast enhancer).

This Standard applies to type inspection and batch inspection of testing medium.

This Standard can also be used as the basis for acceptance of user orders.

2 Normative references

The provisions in following documents become the provisions of this Standard through reference in this Standard. For dated references, the subsequent amendments (excluding corrigendum) or revisions do not apply to this Standard, however, parties who reach an agreement based on this Standard are encouraged to study if the latest versions of these documents are applicable. For undated references, the latest edition of the referenced document applies.

GB/T 265, Petroleum products - Determination of kinematic viscosity and calculation of dynamic viscosity

GB/T 699, Quality carbon structure steels

GB/T 2007.7, General rules for the sampling and sample preparation of minerals in bulk - The method for determination of size by manual sieving (GB/T 2007.7-1987, neq ISO 2591:1982)

GB/T 5097, Non-destructive testing - Penetrant testing and magnetic particle testing
- Viewing conditions (GB/T 5097-2005, ISO 3059:2001, IDT)

GB/T 6368, Surface active agents - Determination of pH of aqueous solution - Potentiometric method (GB/T 6368-1993, eqv ISO 4316:1977)

GB/T 8034, Benzol products of coal carbonization - Corrosiveness to copper - Copper strip test (GB/T 8034-1987, eqv ISO 2160:1972)

GB/T 12604.5, Non-destructive testing terminology magnetic particle testing

GB/T 15822 (all parts), Non-destructive testing - Magnetic particle testing (GB/T 15822.1~3-2005, ISO 9934-1, 2001, ISO 9934-2~3:2002, IDT)

JB/T 7523-2004, Non-destructive testing - Materials for penetrant testing

3 Terms and definitions

For the purposes of this document, the terms and definitions defined in GB/T 12604.5 apply.

4 Safety precautions

Materials for magnetic particle testing and chemicals used for their testing may be hazardous, flammable and/or volatile. It is therefore advisable to observe the prescribed

precautions. All national and local regulations on safety, health and environmental protection requirements shall be followed.

5.1 Overview

Magnetic particle testing materials covered by this Standard shall be classified as follows.

5.2 Magnetic suspension

The magnetic suspension shall be composed of colored magnetic particle or fluorescent magnetic particle and a suitable carrier liquid. It shall be in a uniform suspension when stirring.

Magnetic suspension can be prepared from the purchased concentrated products (including magnetic paste and dry magnetic particle) or can be used directly.

5.3 Dry magnetic particle

The dry magnetic particle used in the dry method shall be subdivided into color and/or fluorescent magnetic particle.

6.1 Batching rules

Each batch consists of a number of magnetic particle material products with the same properties, and all marked with a specific symbol that is put into production at one time.

6.2.1 Type inspection

Type inspection shall be carried out in one of the following situations:

- a) When resuming production after new production, conversion or suspension of production;
- b) When materials or workmanship change;
- c) When the contract stipulates;
- d) When it has been more than six months since the last type inspection.

The type inspection of magnetic particle materials shall be carried out in accordance with the requirements of GB/f 15822. Type inspection is carried out to demonstrate the suitability of the product for the intended use. This inspection shall be performed by an independent laboratory

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The independent laboratory shall issue an inspection report for the implementation of this