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

GB/T 18838.4-2008

**Preparation of steel substrates before application of paints and
related products -- Specifications for metallic blast-cleaning
abrasives -- Part 4: Low-carbon cast-steel shot**

涂覆涂料前钢材表面处理 喷射清理用金属磨料的技术要求 第4部分: 低碳铸钢丸

(English Translation)

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Foreword

GB/T 18838 "Technical Requirements for Metal Abrasives for Blast Cleaning of Steel Surface Treatment before Coating" is divided into the following parts.

---Part 1: Guidelines and Classification;

---Part 2: Chilled iron sand;

---Part 3: High carbon cast steel shot and sand;

---Part 4: Low-carbon cast steel shot;

---Part 5: Steel wire section.

This part is Part 4 of GB/T 18838.

This part is equivalent to ISO 11124-4.:1993 "Technical requirements for metal abrasives for blast cleaning of steel surface treatment before coating Part 4: Low Carbon Cast Steel Shot" (English version).

This part is equivalent to translation ISO 11124-4.:1993.

For ease of use, this section has made the following editorial changes.

--- "This International Standard" is changed to "This Part";

--- Use a decimal point "." to replace the comma "," as a decimal point;

---Use a comma "," instead of a comma ",";

---Added the title of Table 2;

---The foreword of the international standard is deleted.

Appendix A and Appendix B of this section are informative appendices.

This part was proposed by China State Shipbuilding Corporation.

This part is under the jurisdiction of the National Coatings and Pigments Standardization Technical Committee before painting metal surface treatment and painting process technical subcommittee.

Drafting organizations of this section. The Eleventh Research Institute of China Shipbuilding Industry, China Shipbuilding Industry Comprehensive Technology and Economic Research Institute, Shandong Kaitai Metal Abrasives Co., Ltd., Shandong University.

1 Scope

This part of GB/T 18838 specifies the technical requirements for 12 grades of low carbon cast steel shot abrasives for blast cleaning, including hardness, Density, defects and structural requirements, chemical composition, etc.

The requirements specified in this part of GB/T 18838 only apply to unused abrasives, not to used abrasives.

For the test methods of metal abrasives for blast cleaning, see the various parts of GB/T 1981.

Low-carbon cast steel shots are recyclable and reusable abrasives, which can be used for both fixed and on-site injection equipment.

Note 1: Refer to Appendix A and Appendix B for the world standards of metal abrasives commonly referred to and their relationship with this section.

Note 2: Although this part of GB/T 18838 is specially formulated to meet the surface treatment requirements of steel structures, the specified characteristics are generally applicable to Surfaces or parts of other materials treated with blast cleaning technology. These requirements have been in ISO 8504-2:2001) "The surface of steel before coating Surface treatment methods Part 2: Abrasive Blast Cleaning is given in.

2 Normative references

The clauses in the following documents become clauses of this part through the reference of this part of GB/T 18838. All dated quotations all subsequent amendments (excluding errata content) or revisions do not apply to this section, however, it is encouraged to reach the parties to the agreement study whether the latest versions of these documents can be used. For undated references, the latest version is applicable to this section.

GB/T 19816.1-2005 Steel surface treatment before coating. Test method for metallic abrasives for blast cleaning. Part 1.

Sampling (ISO 11125-1.:1993, IDT) GB/T 19816.2-2005 Steel surface treatment before coating. Test method for metallic abrasives for blast cleaning. Part 2.

Determination of particle size distribution (ISO 11125-2.:1993, IDT) GB/T 19816.3-2005 Steel surface treatment before coating. Test method for metallic abrasives for blast cleaning. Part 3.

Determination of hardness (ISO 11125-3.:1993, IDT) GB/T 19816.4-2005 Steel surface

treatment before coating. Test method for metallic abrasives for blast cleaning. Part 4.

Determination of apparent density (ISO 11125-4.:1993, IDT) GB/T 19816.5-2005 Steel surface treatment before coating. Test method for metallic abrasives for blast cleaning. Part 5.

Determination of the percentage of defective particles and microstructure (ISO 11125-5.:1993, IDT) GB/T 19816.6-2005 Steel surface treatment before coating. Test method for metallic abrasives for blast cleaning. Part 6.

Determination of foreign impurities (ISO 11125-6.:1993, IDT) GB/T 19816.7-2005 Steel surface treatment before coating. Test method for metallic abrasives for blast cleaning. Part 7.

Determination of water content (ISO 11125-7.:1993, IDT)

1) This standard is ISO 8504-2:1992 in ISO 11124-4:1993. GB/T 18839.2-2002 adopts ISO 8504-2:2000 for modification.

GB/T 18838.4-2008/ISO 11124-4.:1993