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**INDUSTRY STANDARD OF THE
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High amplitude vibrating screen

高幅振动筛 清晰版

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009 "Guidelines for Standardization Work Part 1: Standard Structure and Compilation".

Please note that certain contents of this document may involve patents. The issuing agency of this document is not responsible for identifying these patents.

This standard was proposed by the China Electricity Council.

This standard is under the jurisdiction of the Electric Power Industry Standardization Technical Committee for Coal-fired Machinery.

The organization responsible for drafting this standard. Henan Weimen Vibration Equipment Co., Ltd., Sichuan Baima Circulating Fluidized Bed Demonstration Power Plant Co., Ltd.

Division, Power Industry Product Quality Standard Research Institute.

1 Scope

This standard specifies the classification, technical requirements, test methods, inspection regulations, marking, packaging and transportation of high-amplitude vibrating screens.

This standard applies to the design, manufacture and acceptance of high-amplitude vibrating screens.

2 Normative references

The following documents are indispensable for the application of this standard. For dated reference documents, only the dated version applies to this document.

For undated references, the latest version (including all amendments) applies to this document.

GB/T 191 Packaging, storage and transportation pictorial signs GB/T 699 High-quality carbon structural steel GB/T 700 carbon structural steel GB/T 1184 shape and position tolerance without tolerance value GB/T 1231-2006 Technical requirements for high-strength large hexagon head bolts, large hexagon nuts and washers for steel structures GB/T 5226.1 Electrical Safety of Machinery Electrical Equipment of Machinery Part 1: General Technical Conditions GB/T 5817 Classification of hazard degree of productive dust operation GB/T 6388 Receipt and Delivery Marks for Transport Packaging GB/T 8163 Seamless steel pipe for conveying fluid GB/T 8923.1-2011 Visual assessment of surface cleanliness of steel surface treatment before coating-Part 1: Uncoated steel the corrosion grade and treatment grade of the surface and the steel surface after the original coating has been completely removed GB/T 9969 General Rules for the Use of Industrial Products GB/T 11384 General technical conditions for packaging of mechanical and electrical products GB/T 13306 signs GB/T 23934 Hot-wound cylindrical coil spring compression spring technical conditions JB/T 4042 Vibrating screen test method JB/T 5000 General technical conditions for heavy machinery JB/T 5496 General technical conditions for vibrating screen manufacturing JB/T 9032 Mining metal weaving screen

3 Terms and definitions

The following terms and definitions apply to this standard.

High amplitude vibrating screen the vibration exciter at the lower part of the screen surface is driven by the motor, and a circular orbit vibration screening equipment with a diameter of 15-25mm is made on the vibration damping device.

The motor can be installed on the left or right, and is mainly used for particle size classification of coal-burning materials such as electricity, coal, and chemical industries. see picture 1.

Vibrator

The eccentric mass rotates to generate exciting force, and this exciting force can be applied to other structures and equipment to produce regular vibration devices.

Bin under screen

The silo is a funnel-shaped shell that accepts and transfers materials.

Eccentric mass

The unbalanced mass that generates periodic simple harmonic vibration through rotation.

Amplitudes

One half of the vibration stroke of the screen surface. When the vibration track is circular, the amplitude is equal to the radius of the circular track.

Vibrating frequency

The number of vibrations of the screen surface per second.

Screening efficiency the sum of the positive mixing efficiency of coarse particles and the positive mixing efficiency of fine particles is reduced by 100.

4 Basic requirements for product classification

The high-amplitude vibrating screen is divided into coarse screen and fine screen according to the discharge particle size.

4.1 Model

High-amplitude vibrating screen model.

4.2 Structure

The structure of the high-amplitude vibrating screen is shown in Figure 1.

4.3 Basic parameters

The basic parameters of high-amplitude vibrating screen are shown in Table 1 and Table 2.

5 Technical requirements

5.1

The manufacturing technology of the high-amplitude vibrating screen shall meet the requirements of JB/T 5496, and shall be carried out in accordance with the drawings and technical documents approved by the prescribed procedures.

manufacture.

5.2

The structure of the high-amplitude vibrating screen should meet the following requirements.

a) The wearing parts of the same model of high-width vibrating screen should be interchangeable.

- b) The joint surfaces and soft joints are tightly sealed and no dust should leak.
- c) The vibration exciter bearing is sealed reliably and should be able to prevent dust from entering the bearing without oil leakage.
- d) The eccentric block of the exciter is equipped with an adjustable weight, and the excitation force is adjustable.
- e) Vibrate the screen through the vibration exciter, and the screen box does not participate in the vibration.
- f) The top cover can be opened for easy maintenance.
- g) The processing capacity should meet the label requirements.

5.3

High-quality carbon structural steel parts should meet the requirements of GB/T 699.

5.4

Ordinary carbon structural steel parts should meet the requirements of GB/T 700.

5.5

Cast iron parts should meet the requirements of JB/T 5000.6.

5.6

Welding shall comply with the requirements of JB/T 5000.3, and the surface shall be smooth and free of defects such as pores, slag inclusions, and cracks.

5.7

When there are no special regulations in the product drawings or design documents, the surface treatment before painting should meet the Sa2.5 specified in GB/T 8923.1-2011 the coating should meet the requirements of JB/T 5000.12.

5.8

The main shaft of the exciter should be made of 40Cr material, which should be quenched and tempered and subjected to non-destructive testing.

5.9

The thickness of the box steel plate shall not be less than 6mm.

5.10

The wall thickness of the middle tube beam of the exciter shall not be less than 16mm.

5.11

Before assembling the high-width vibrating screen, all parts shall be inspected to be qualified. The purchased parts and standard parts shall have a certificate of conformity or