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NATIONAL METROLOGY TECHNICAL SPECIFICATION OF THE

PEOPLE'S REPUBLIC OF CHINA

JJF 1911-2021

Calibration specification for weighing device of large-scale bulk material silo

大量程散料料仓称重装置校准规范

(English Translation)

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Preview: page 1 of 4 shown, 10 in the full document. Complete English PDF, instant download:
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Table of Contents

1 Scope(1)
2 References (1)
3 Terms and units of measurement(1)
3.1 Terminology (1)
3.2 Units of measurement (1)
4 Overview(1)
5 Metrology Characteristics(2)
6 Calibration Conditions(2)
6.1 Environmental conditions (2)
6.2 Standard device for calibration (2)
6.3 Installation requirements for hydraulic cylinders and force-bearing frames (2)
7 Calibration items and calibration methods (2)
7.1 Pre-calibration check(2)
7.2 Calibration items and calibration methods(3)
8 Expression of calibration results (3)
9 Recalibration interval(4)
Introduction

9 Recalibration interval(4)

Appendix A Calibration Record Format(5)

Appendix B Indication Error Measurement Result Uncertainty Evaluation Example(6)

Appendix C Structure of a Typical Large-Scale Bulk Material Silo Weighing Device(10)

Introduction

JJF 1071 "Rules for the Compilation of National Metrology Calibration Specifications", JJF 1001 "General Metrology Terms and Definitions" and JJF 1059.1 "Assessment and Representation of Measurement Uncertainty" together constitute the basic series supporting the formulation of this specification.

In the formulation process of this specification, it is considered that the weighing range of the calibrated weighing device is large, and it is difficult to use standard weights to carry out Therefore, the load cell is used as the load conversion measurement unit, and the standard

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load measurement device is used to measure the large range of bulk materials.

The weighing characteristics of the bin weighing device are calibrated.

This specification is published for the first time.

Specification for calibration of weighing devices for large-capacity bulk silos

1 Scope

This specification applies to the use of standard load measuring devices for groups consisting of large silos, load cells, weighing indicators, etc.

The calibration of the finished bulk weighing device (hereinafter referred to as the weighing device).

2 Reference documents this specification references the following documents.

JJG539 Digital Indicating Scale JJG669 Load Cell JJF 1059.1 Evaluation and representation of measurement uncertainty JJF 1181 Weighing Instrument Measurement Terms and Definitions for dated references, only the dated version applies to this specification; for undated references the latest version (including all amendments) applies to this specification.

3 Terminology and units of measurement

3.1 Terminology

The terms and definitions defined in JJF 1181 and the following apply to this specification.

A device for determining the mass value of bulk materials, usually having a carrier which is carried by a it is composed of silos exceeding 100t (including 100t).

A device that applies a standard load to a carrier with the force generated by a hydraulic cylinder.

3.2 Units of measurement the measurement unit used by the weighing device shall adopt the legal measurement unit, including. kilogram (kg) and ton (t).

4 Overview

Large-scale bulk material silo weighing device is a special type of fixed non-automatic scale, and its maximum weighing capacity is usually greater than 100t (including 100t).

Uses. Mainly used in the weighing and measurement of bulk materials, is the weighing and measurement of bulk materials in thermal power plants, ports, etc.

one of the main equipment.

Principle. The bulk material is placed in the carrier (hopper), and the electrical signal generated by the load cell is processed through data the device converts and calculates,

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and the weighing result is displayed by the indicating device.

Structure. The structure of the weighing device is mainly composed of a carrier (hopper), a load cell, and a weighing indicator.

Preview: page 4 of 4 shown, 10 in the full document. Complete English PDF, instant download:
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