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JJG

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

JJG 1142-2017

**Dynamic Pressure Standards
(English Translation)**

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7.5 Certification Period (10)

Appendix A Verification Record Format (11)

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Introduction

JJF1002 Rules for the Preparation of National Metrological Verification Rules, JJF1001 General Survey Terms and Definitions, JJF1008 "Pressure Measurement Terminology and Definition" together constitutes the basic series supporting the establishment of this regulation.

specification.

This regulation stipulates first and second shock tube pressure standards, quick opening valve pressure standards, and sinusoidal pressure standards the main technical indicators, verification requirements, and verification methods for pulse pressure standards.

This regulation is issued for the first time.

Dynamic Pressure Tester Verification Procedure

1 Scope

This procedure is applicable to the first verification, subsequent verification and in-use inspection of first and second dynamic pressure standards.

2 references

JJG 624-2005 Dynamic Pressure Sensor JJG 860 Pressure Sensor (Static) JJF1008-2008 Pressure Measurement Terminology and Definition for dated references, only the dated version applies to this procedure; any undated references the latest version (including all amendments) is applicable to this procedure.

3 Terms and units of measure

3.1 Terms

3.1.1 dynamic measurement to determine the measured instantaneous value and/or measured value over time during the measurement (or other influence) Change the measurements made.

[JJF1008-2008, 10.5] 3.1.2 dynamic pressure in the field studied, pressures change over time.

[JJF1008-2008, 1.9]

3.1.3 Dynamic response characteristics the dynamic characteristics of the output of a pressure sensor or pressure measurement system when excited by periodic or aperiodic signals.

[JJF1008-2008, 10.7]

3.1.4 Rise time when the pressure sensor is excited by the step pressure, its output value transitions from 10% of the step response amplitude value to 90%.

time needed.

[JJF1008-2008, 10.16]

3.1.5 Resonant frequency resonant frequency the pressure sensor outputs the frequency of the measured pressure signal with the maximum amplitude response.

[JJF1008-2008, 10.12]

3.1.6 Platform pressure duration steppressureduration the duration of the step pressure amplitude remains stable.

3.1.7 phase shift