

JJF

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

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**Calibration Specification for Test Apparatus for Theoretical
Maximum Specific Gravity of Asphalt Mixtures
(English Translation)**

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Introduction

JJF 1071-2010 "Rules for the Preparation of National Measurement and Calibration Specifications", JJF 1001-2011 "General Measurement Terms and Definitions", JJF 1008-2008 "Terms and Definitions of Pressure Measurement" and JJF 1059.1-2012 "Measurement Uncertainty" "Quality Assessment and Representation" together constitute the basic series of specifications for the formulation of this specification.

This specification is published for the first time.

Asphalt mixture theoretical maximum relative density meter Calibration Specifications

1 Scope

This specification applies to the calibration of asphalt mixture theoretical maximum relative density meters.

2 References

This specification references the following documents.

JJG875-2019 Digital Pressure Gauge JJF 1008-2008 Pressure measurement terms and definitions JT/T 834-2012 Asphalt mixture theoretical maximum relative density instrument for any referenced document with a date, only the version with the date is applicable to this specification; for any referenced document without a date, the latest version (including all amendments) shall apply to this specification.

3 Terminology and units of measurement

3.1 Terminology

asphaltnmixtures

The ratio of the density of asphalt mixture under ideal conditions with zero void ratio to the density of water.

[Source. JT/T 834-2012, 3.1]

3.1.2 Absolute pressure the pressure with complete vacuum as reference point.

[Source. JJF 1008-2008,1.3] 3.1.3 degreeofvacuum an idiomatic expression for the rarefaction of a gas in a vacuum state, expressed as a pressure value in Pa.

[Source. JJF 1008-2008, 11.2]

3.2 Units of measurement the measurement unit of the theoretical maximum relative density of asphalt mixture is Pascal (symbol. Pa), or its Decimal multiple unit; time is second (symbol. s).

4 Overview

Asphalt mixture theoretical maximum relative density meter (hereinafter referred to as density meter) is a kind of asphalt mixture mix proportion setting A pre-processing device used to calculate void ratio, compaction degree, etc. during road condition survey or road construction quality management.

It is mainly composed of three parts. vacuum device, vacuum container and oscillating device. The vacuum device includes vacuum pump, vacuum gauge and Inspection port (optional), pressure regulating device, drying or water collecting device, absolute pressure digital pressure gauge and its inspection port. Vacuum container Usually one or two.

The working principle of the density meter is. a certain mass of loose asphalt mixture is placed in a vacuum container and immersed in water.