

ICS 17.100
CCS A 53

JJF

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

JJF 1450-2014

**Program of Pattern Evaluation of Portable Induction
Anemometer
(English Translation)**

Issued on: February 14, 2014

Implemented on: May 14, 2014

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine**

Table of Contents

Introduction (III)

1 Scope (1)

2. References (1)

3 Overview (1)

4 Legal management requirements (1)

4.1 Units of measurement (1)

4.2 The maximum permissible error (1)

4.3 Legal metrology marking and identification of measuring instruments (1)

4.4 Test Prototype (2)

5 Measurement requirements (2)

5.1 Wind represents error (2)

5.2 Meter wind measuring range (2)

5.3 Start vane wind speed (2)

5.4 Winds indicates error (2)

5.5 Anemometer measurement error (2)

5.6 Anemometer measurement range (2)

5.7 Wind speed swing pointer (2)

5.8 Start up wind speed wind cup (2)

6 General Requirements (2)

6.1 Appearance (2)

6.2 Mechanical properties (3)

4.1 Units of measurement (1)

4.2 The maximum permissible error (1)

6.2 Mechanical properties (3)

Storage temperature 6.3 (3)

9 Type evaluation results to determine (9)

Appendix A portable magnetic induction wind anemometer type evaluation original record format (10)

B portable magnetic induction wind anemometer measurement error calculation appendix
(15) Appendix C portable magnetic induction wind anemometer measurement equipment
manufacturing license examination prerequisites (16)

Introduction

JJF 1016 "Measuring Instruments type evaluation outline guidelines for the preparation",
JJF 1015 "Measuring Instruments type evaluation and type Ratify general specification",
JJF 1246" measurement equipment manufacturing license evaluation general specification",
JJF 1001" universal cytometry Language and Definitions "and JJF 1059" Evaluation and
Expression of Uncertainty in Measurement "together constitute the fundamental
norm-setting series specification.

The specification for the specific test methods and technical indicators refinement, additions
and modifications.

This specification is the first release.

Portable magnetic induction wind anemometer type evaluation outline

1 Scope

This type of evaluation framework applies to portable magnetic induction wind anemometer
(hereinafter referred to as magnetic induction wind meter) of pattern evaluation.

2. References

JJG515-1987 portable magnetic induction wind anemometer (Trial) JJG431-1986 DEM6
type light wind anemometer cups those documents by reference the terms of this syllabus
constitute provisions of this outline. For dated references, all subsequent amendments (not
including errata content) or revisions do not apply in this outline, however, encourage the all
parties that this outline agreement to use the latest versions of these documents. For
undated reference documents Member, the latest versions apply to this outline.

3 Overview

Magnetic induction wind meter is a measure of the instantaneous wind direction and speed
instruments, mainly for field observation, by the anemometer and wind direction table
composition. The key member includes a wind vane and wind cups.

Vane by wind vane shaft is rotated around to drive the wind direction pointer on the
compass direction. Wind cup Wind cup shaft is rotated around by wind, driven by the wind
cup shaft lower end of the magnet is rotated to form a rotating magnetic field around the
magnet the induction coil generates eddy currents in a changing magnetic field. Induction
coil under the action of the electromagnetic force, the magnet rotates along the square to
deflect. Induction coil deflected to a certain angle after reaching the torque balance and
gossamer. Winds pointer The induction line Deflection angle in the circle indicates the wind

speed wind speed dial.

4 legal management requirements 4.1 units of measurement Magnetic induction wind table should respectively "m/s" and "(°)" as wind speed and direction units.

4.2 The maximum permissible error Wind direction magnetic induction meter maximum permissible error of $\pm 22.5^\circ$, wind speed maximum permissible error of $\pm (0.5\text{m/s } 0.05v)$.

Note: v standard wind speed, m/s.

4.3 legal metrology marking and measuring instruments logo 4.3.1 legal metrology flags include the following.

--- Measurement equipment manufacturing license logo and number (test prototype should stay out of the corresponding position);

--- Induction wind flags and table type approval number (test prototype should stay out of the corresponding position; this entry is not mandatory provisions set);

--- Product certification (with magnetic induction wind provided separately from the main unit).

4.3.2 measuring instruments identified include the following.

--- Name induction wind table specification (model);