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JJG

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

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**Verification Regulation of Ammonia Gas Detectors
(English Translation)**

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5.6 Test cycle (5)

Appendix A test recording format (6)

Appendix B test certificates/test results in the notice page format (7)

Introduction

This procedure is based on JJF1002-2010 "national verification procedures write rules", JJF1001 "general purpose Volume terms and definitions "and JJF1059.1" Evaluation and Expression of Uncertainty in Measurement "basis and developed.

This procedure was first formulated.

Ammonia detector test procedures

1 Scope

The order applies to the measurement of ammonia content in the air or nitrogen gas analyzer and detector alarm (hereinafter referred to as analysis Instrument and alarm, collectively referred to as the instrument) initial verification, subsequent verification and the use of checks.

2 Overview

Instrument detection principle electrochemical, infrared sound and light, non-dispersive infrared chemiluminescence, UV and the like. Sampling Method There are two kinds of inhaled and diffusion, use is divided into fixed and portable. General Instrument by the sensor chamber, the sampling Components, electronic circuits, monitors and other components.

3 metering performance requirements

3.1 Indication error Indication error to meet the requirements of Table 1.

Specified in Table 1 the maximum permissible error Measuring range/($\mu\text{mol/mol}$) analyzer alarm $0 \leq C \leq 50 \pm 10\% \pm 10\%$ $50 \leq C \leq 1000 \pm 6\% \pm 10\%$

3.2 Repeatability

Analyzer, the alarm repeatability relative standard deviation of not more than 2% and 3%.

3.3 Response Time

Inhaled Sampling Method instrument response time of less than 120s; diffusion Sampling Method instrument response time Room is not greater than 180s.

3.4 Stability

3.4.1 Zero Drift

Analyzer, the alarm zero drift does not exceed $\pm 1\% \text{ FS}$, $\pm 2\% \text{ FS}$.

3.4.2 Span drift

Analyzers, alarm span drift does not exceed respectively $\pm 2\% \text{ FS}$, $\pm 3\% \text{ FS}$.

4 General technical requirements

4.1 Appearance and structure

4.1.1 The instrument shall not affect the appearance of their normal work injury. Surface of the new instrument should be made smooth, paint Color uniform coating, no rust flaking phenomenon.