Chinastandards.org

ICS 17.020

JJG

NATIONAL METROLOGY VERIFICATION REGULATION OF THE PEOPLE'S REPUBLIC OF CHINA

JJG 1093-2013

Detectors of Mining Carbon Monoxide

矿用一氧化碳检测报警器检定规程

(English Translation)

Issued on: November 28, 2013 **Implemented on: February 28, 2014**

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

Preview: page 1 of 3 shown, 14 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/jjg-1093-2013

Chinastandards.org

Table of Contents

Introduction (II)

1 Scope (1)

2 Overview (1)

3 Metering performance requirements (1)

3.1 Measuring range and indication error (1)

3.2 Repeatability (1)

3.3 Response Time (1)

3.3 Response Time (1)

Drift 3.4 (2)

4.5 Adaptive power supply voltage (2)

Transmission distance 4.6 (2)

5.5 Test cycle (7)

Appendix A portable mine carbon monoxide detector alarm test records (8)

Appendix B Fixed mine carbon monoxide detection alarm test records (10)

Appendix C calibration certificate/test results of notice under section 2 format (13)

Appendix D calibration certificate Chapter 3 format (14)

Appendix E test results notice under section 3 format (15)

Introduction

This procedure based on JJF1002-2010 "national verification procedures writing rules" and JJF1001-2011 "Tong Metering terms and definitions "to develop, technical specifications and test methods referenced MT703-2008" Mine Portable Electrochemical carbon monoxide measuring device ", AQ6205-2006" Mine electrochemical carbon monoxide sensor type " JJG (coal) 09-98 "carbon monoxide detection alarm", JJG 915-2008 "carbon monoxide detector alarm" Wait. The regulations focus on the development of the process of verification method operability, and with current industry standards and effective terrestrial Similar product test procedures coordination and consistency.

This procedure was first formulated.

Preview: page 2 of 3 shown, 14 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/jjg-1093-2013

Chinastandards.org

Mine carbon monoxide detector alarm verification procedures

1 Scope

The order applies to the mine using electrochemical principles carbon monoxide detector alarm (hereinafter referred to as detection alarm Device) initial verification, use and subsequent verification check.

2 Overview

Detection alarm for mine detection and alarm concentration of carbon monoxide gas in the operating environment.

Mainly composed of carbon monoxide detection alarm electrochemical sensors, electronic components and display section and other components, electrochemical Sensors convert the carbon monoxide gas concentration in the environment into electrical signals, then processed by an electronic component, and a concentration of Value displayed.

Depending on use, the detector alarm can be divided into portable (mining industry, known as alarm or measured Device) and fixed (known as sensors mining industry). Fixed detection alarm also has a value corresponding to the concentration of the letter no output function.

3 metering performance requirements 3.1 measuring range and indication error Detection alarm measurement range is divided into the following. (0 ~ 100) μmol/mol, (0 ~ 500) μmol /mol, (0 ~ 1000) μmol/mol, (0 ~ 2000) μmol/mol, (0 ~ 10000) μmol/mol, the unit is μmol/mol.

Display values detector alarm, fixed detector alarm output signal values (concentration of carbon monoxide in terms of value) and the standard deviation of the gas concentration (ie indication error detector alarm) shall comply with the requirements in Table 1.

Table 1 shows the value of the error detection alarm limit requirements

Measurement section, x μmol/mol Indication error Absolute error μmol/mol Relative error 0 \u003cx<=20 ±2 --20 \u003cx<=100 ±4 --100 \u003cx<=500 -- ±5 x > 500 -- ± 6

3.2 Repeatability

Repeatability should <=2%.

3.3 Response Time

Detection alarm response time of less than 45s.

Preview: page 3 of 3 shown, 14 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/jjg-1093-2013