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JJG

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

JJG 1169-2019

Flue Gas Samplers

烟气采样器检定规程

(English Translation)

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5.5 Verification period (6)

Appendix A Verification Record Format of Flue Gas Sampler (7)

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Introduction

This regulation is based on JJF1002-2010 "Rules for Compiling National Measurement Verification Regulations", JJF1001-2011 "Tong Written in "Terms and Definitions of Measurement" and JJF1059.1-2012 "Measurement Uncertainty Evaluation and Representation".

This regulation refers to GB/T 16157 "Measurement of Particulate Matter in Exhaust from Fixed Pollution Sources and Sampling Method for Gaseous Pollutants" Law "and HJ/T 47" Technical Conditions of Flue Gas Sampler "related technical requirements and methods.

This regulation is issued for the first time.

Verification Regulation of Flue Gas Sampler

1 Scope

This regulation is applicable to the collection of gaseous pollutants in the exhaust of fixed pollution sources such as flues, chimneys and exhaust pipes and the sampling flow the first verification, follow-up verification and in-use inspection of the flue gas sampler whose volume is not more than 2.0L/min.

2 Overview

The flue gas sampler is used to collect harmful components (SO2, NOx, NH3, Hg, etc.) dedicated sampling instruments, mainly by flow measurement and control system, air pump, sampling tube Road and absorption device.

The working principle of the flue gas sampler (hereinafter referred to as the instrument) is to use the suction pump to pass the sample gas through the set flow rate.

The sampling pipeline is drawn into the absorption device, and the measurement control system according to the flow, pressure and temperature detected by various sensors Calculation of other parameters, control the suction pump to maintain the corresponding sampling flow, and complete the quantitative sampling according to the set sampling time Set requirements.

3 Measurement performance requirements

3.1 Flow indication error ± 5%.

3.2 Flow repeatability <=2%.

3.3 Flow stability

3.4 Timing error

3.5 Temperature indication error in front of the flowmeter ± 2 °C.

3.6 Indication error of pressure in front of the flowmeter ± 0.5kPa.

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3.7 Atmospheric pressure indication error ± 0.5kPa.

4 General technical requirements

4.1 Appearance and power-on inspection

4.1.1 The instrument should have a complete structure, complete components and reliable connections, without external damage that would affect the normal operation of the instrument.

4.1.2 After the instrument is turned on, the buttons and switches should be adjusted flexibly, and the digital display should be clear and complete.

4.1.3 The nameplate of the instrument shall have the name, model, factory number, date of manufacture, measuring range, maximum allowable error,

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