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Program of Pattern Evaluation of Total Suspended Particulates Samplers

总悬浮颗粒物采样器型式评价大纲

(English Translation)

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Introduction

This type evaluation outline is the technical specification for type evaluation of the total suspended particulate sampler, referring to JJG943-2011 "Verification Regulations of Total Suspended Particulate Sampler", based on JJF 1015-2014 "General Evaluation of Measuring Instrument Type "Code" and "JJF 1016-2014" Guidelines for the Compilation of Type Appraisal Guidelines for Measuring Instruments "were prepared.

This type evaluation outline is released for the first time.

Outline of Type Evaluation of Total Suspended Particulate Sampler

1 Scope

This type of evaluation outline is applicable to the total suspended particulate sampler with classification code 46280000 (hereinafter referred to as sampling Device), including large flow (operating point flow is 1.05m3/min) and medium flow (working point flow is 100L/min)

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Type evaluation of class samplers.

Samplers using other flow points can be implemented by reference.

2 Reference documents this specification refers to the following documents.

JJG943-2011 Verification Regulation of Total Suspended Particulate Sampler GB/T 11606-2007 Environmental testing methods of analytical instruments HJ/T 368-2007 Technical requirements for environmental protection products Calibrate the orifice for the total suspended particulate sampler Flowmeter HJ/T 374-2007 Technical requirements and detection methods of total suspended particulate sampler for dated reference documents, only the dated version applies to this outline; for those without date references the latest version (including all amendments) is applicable to this outline.

3 Overview

3.1 The working principle of the sampler A certain volume of air is passed through the sampler cutting head at a constant speed through the filter membrane of known mass, and the particles suspended in the air the object is retained on the filter membrane, and the total suspended particles in the air are determined according to the increased mass of the filter membrane and the volume of air passing through the filter membrane the concentration of particulate matter.

3.2 Structure of the sampler the key components are sampling head, filter material sampling clamp, exhaust power device, flow sensor, temperature sensor and Time controller and other components.

3.2.1 Large flow sampler

3.2.1.1 The dimensions of the high-flow sampler are shown in Figure 1.

3.2.1.2 The width of the sampling port of the large-flow sampler is required to be (4 ± 0.1) cm, the direction of the sampling port is downward, Evenly distributed around the main body.

3.2.1.3 The high-flow sampler should have good sealing performance, and the frame where the filter membrane clip is placed should be flat and no air leakage.

There should be fastening devices between the top cover and the main body. The filter holder should be attached with a protective cover to protect the filter. Each sampler should provide two Set of filter clips.

3.2.2 Medium flow sampler

3.2.2.1 The sampling port of the medium flow sampler is oriented downwards and distributed evenly around the main body of the sampler.

The sampling head size is shown in Figure 2.

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