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JJF 1786-2019

Program of Pattern Evaluation of On-line Automatic Determinators for Chemical Oxygen Demand (COD)

化学需氧量（COD）在线自动监测仪型式评价大纲

(English Translation)

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13 Type evaluation record format (10)

Appendix A COD Standard Solution Preparation and Value Determination Method and Chloride Interference Test Solution Preparation Method (11)

Appendix B. Chemical Oxygen Demand (COD) Online Automatic Monitor Type Evaluation Record Format (12)

Introduction

This type evaluation outline is based on JJF 1016-2014 "Guidelines for Compiling Type Evaluation Outline of Measuring Instruments", JJF 1015-2014 "General Specification for Type Evaluation of Measuring Instruments" was written.

The technical indicators of this type evaluation outline refer to JJG1012-2019 "Chemical Oxygen Demand (COD) Online Self Dynamic monitor ", GB/T 32208-2015" chemical oxygen demand (COD) measuring instrument ", GB/T 11606-2007 Technical regulations and standards such as "Analytical Instruments Environmental Test Method".

This type evaluation outline is released for the first time.

Chemical oxygen demand (COD) online automatic monitor Type evaluation outline

1 Scope

This type of evaluation outline is applicable to the measurement equipment classification code of 46361500 and measurement range (16 ~ 1000) mg/L the evaluation of the type of chemical oxygen demand (COD) online automatic monitor.

2 Reference documents this specification refers to the following documents.

GB/T 11606-2007 Environmental testing methods of analytical instruments HJ828-2017 Water quality - Determination of chemical oxygen demand - Dichromate method for dated reference documents, only the dated version applies to this specification; for those without date references the latest version (including all amendments) is applicable to this specification.

3 Terminology

3.1 Chemical oxygen demand, COD Under the condition of strong acid and heating, the amount of oxidant consumed when the water sample is treated with potassium dichromate as the oxidant.

The concentration (mg/L) to express.

3.2 memory effect

Also known as the residual effect, the effect of the instrument on the next measurement

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result after the determination of a standard solution or water sample.

4 Overview

The chemical oxygen demand (COD) online automatic monitor (hereinafter referred to as the instrument) is mainly used to detect domestic sewage, the detection method of COD in industrial waste water and surface water is generally divided into potassium dichromate oxidation-redox drop Determination method, potassium dichromate oxidation-spectrophotometry, potassium dichromate oxidation coulometric titration method, etc. The instrument consists of an automatic sampling unit, it consists of oxidation reaction unit, detection unit, data processing unit and data transmission.

The key parts and materials of the instrument are shown in Table 1.

Table 1 Key parts and materials table

Remarks on the main performance indicators of the serial number project

1 Sampling unit -- according to design requirements

2 Digestion unit -- according to design requirements

3 Testing unit -- according to design requirements

5 Legal management requirements

5.1 Measurement unit requirements the instrument should use the legal unit of measurement.

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