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Methods of performance testing for filters-Part 2: Vacuum filter

过滤机性能测试方法 第2部分：真空过滤机

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Table of Contents

Preface	III
Introduction	IV
1 Scope	1
2 Normative references	1
3 Terms and Definitions	1
4 Test conditions	1
4:1 General requirements	1
4:2 Test site requirements	1
4:3 Requirements for test instruments, meters and measuring tools	2
4:4 Document Check	2
5 Test Method	2
5:1 Speed	2
5:2 Noise	3
5:3 Sealing performance	3
5:4 Vacuum	3
5:5 Number of cycles per unit time/single cycle time	3
5:6 Nondestructive testing	3
5:7 Temperature and temperature rise	3
5:8 Filtrate solid content	4
5:9 Liquid content of filter cake (filter residue)	4
5:10 Production capacity/processing capacity	4
5:11 Insulation resistance	5
5:12 Reliability of each cycle action	5
5:13 Energy consumption index	5
5:14 Hydraulic system cleanliness	5

Foreword

This document is in accordance with the provisions of GB/T 1:1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents"

Drafting:

This document is part 2 of GB/T 30177 "Test methods for filter performance": GB/T 30177

has been published in the following parts:

- Part 1: Pressure filter;

- Part 2: Vacuum filters:

Please note that some of the contents of this document may involve patents: The issuing organization of this document does not assume the responsibility for identifying patents:

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Introduction

In the field of solid-liquid separation, filter products are the most diverse and largest type of solid-liquid separation equipment:

The performance test of filter products is carried out to promote the standardization and progress of the design, manufacture and inspection of filter products, and to improve the technical level of filter products in China:

GB/T 30177 "Filter Performance Test Method" describes the performance test method of the filter, aiming to standardize the performance test method of the filter in China:

Performance test of various solid-liquid separation filter products in production: GB/T 30177 is divided into 3 parts:

- Part 1: Pressure filter: The purpose is to specify the performance test of industrial pressure filters suitable for separating suspensions:

Test conditions, describing the test methods for testing various performances of pressure filters:

- Part 2: Vacuum filters: The purpose is to specify the performance test of industrial vacuum filters suitable for separating suspensions:

Test conditions, describing the test methods for various performance tests of various types

of vacuum filters:

- Part 3: Filter press: The purpose is to specify the performance test of industrial filter presses suitable for separating suspensions:

Test conditions, describing the test methods for testing various performances of filter presses:

Filter is an important category of separation machinery products: According to the different filtering power, it can be divided into pressure filter, vacuum filter, pressure filter, There are four types of vacuum filters: pressure filter and gravity filter: There are many types of vacuum filters: According to the filter medium, there are mainly belt vacuum filters, disc vacuum filters, Vacuum filters, rotary drum vacuum filters, and rotary table vacuum filters, as well as other types of vacuum filters, are widely used:

It basically covers all types of vacuum filter products currently available in China:

This document describes the test methods for various performances of vacuum filters, and provides information on the performance determination, quality inspection and technical level of vacuum filters:

This document is based on the data of relevant domestic and foreign manufacturers and the relevant product standards of China:

The test methods for the various performances of vacuum filters currently in mass production in the Chinese market have been formulated:

There are great differences in the structure of each model and there are many types: Not all models will use all the performance test methods in this document:

This document does not specify the performance test method specific to a vacuum filter:

The proposal shall be carried out in accordance with the provisions of product standards or relevant documents:

Filter performance test method Part 2: Vacuum filters

1 Scope

This document specifies the test conditions for vacuum filter performance testing and describes the test methods for various performance tests of vacuum filters:

This document applies to the performance testing of industrial vacuum filters for separating suspensions:

2 Normative references

GB/T 2589

GB/T 4774

GB/T 6422

GB/T 10894

GB 17167

GB 40161

3 Terms and definitions

The terms and definitions defined in GB/T 4774 apply to this document:

4 Test conditions

4:1 General requirements 4:1:1 According to the different test purposes, the tests of various vacuum filters (hereinafter referred to as "filters") are divided into empty-running test and load-running test:

The former is usually used for factory inspection or specified inspection items of filters, while the latter is usually used for type inspection:

4:1:2 Before the filter is put into operation, the equipment and accessories should be installed completely and correctly: The load operation test of the filter should be carried out in accordance with the relevant The filter should be operated according to the operating conditions specified in the product standards or technical documents of the filter:

4:1:3 The test filter and electrical equipment shall comply with the requirements of GB 40161:

4:1:4 The filter should be used by professionals who are familiar with the operation of the filter: 4:2 Test site requirements 4:2:1 The test filter should be installed on a solid floor or a dedicated test bench that complies with the product standards of the filter:

During the test, the test site should also comply with the relevant provisions of GB/T 10894: