

ICS 73.040
CCS D 27



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 30046.1-2013

Froth flotation testing -- Part 1: Laboratory procedure

Issued on: December 17, 2013

Implemented on: May 1, 2014

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China, Standardization
Administration of the People's Republic of China**

Table of Contents

Foreword

Introduction

1 Scope

2 Normative references

3 Test Process

4 flotation

4.1 Collector

4.2 frother

5 Test equipment and appliances (products)

5.1 Test Equipment

Foreword

GB/T 30046 "pulverized coal (mud) flotation test" is divided into three parts.

--- Part 1. test procedure;

--- Part 2. Test method for evaluating the order;

--- Part 3. Release evaluation test methods.

This section GB/T Part of 130,046.

This section drafted in accordance with the rules of GB/T 1.1-2009 and GB/T 20000.2-2009 given.

This part redrafted Law Amendment uses ISO 8858-1.1990 "hard coal froth flotation testing - Part 1. Laboratory over

Cheng. "

This part of ISO 8858-1.1990, compared with more adjustment in the structure, listed in Appendix A of this part and ISO 8858-1.1990

The reg number control list.

This part of ISO 8858-1.1990 as compared to the existence of technical differences between the terms of these differences has been involved through its outer margins

Vertical single-line position (I) have been marked, in Appendix B gives the corresponding list of technical differences and their causes.

This section also made the following editorial changes.

- Name to "pulverized coal (mud) flotation testing - Part 1. Test Procedures";
- Remove the ISO 8858-1.1990 Foreword;
- The ISO 8858-1.1990 Introduction Introduction The conversion of this Part;
- Added Appendix A and B;
- The ISO 8858-1.1990 Appendix Appendix A conversion of this Part C.

This part is proposed by the China Coal Industry Association.

This part of the National Coal Standardization Technical Committee (SAC/TC42) centralized.

This in part by the Tangshan Coal Science Research Institute is responsible for drafting, the world (Tangshan) Mining Technology Co., Ltd. participated in the drafting.

Introduction

Sorting flotation is widely used in pulverized coal (mud), and pulverized coal (mud) floatability is determined by laboratory tests.

This section provides the main laboratory parameters, test conditions and test procedure and other flotation machine. Its purpose is to guide the pulverized coal (mud) can

Experimental study on floating and assessment.

Pulverized coal (mud) flotation

Part 1. Test procedure

1 Scope

GB/T 30046 provisions of this part of the pulverized coal (mud) test process flotation process, flotation reagents, test equipment and appliances (goods),

And preparation of coal sample, test conditions, test procedures and test the allowable difference test report.

This section applies to bituminous coal and anthracite.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein

Member. For undated references, the latest edition (including any amendments) applies to this document.

GB /Determination of total moisture in coal of T 211 (GB/T 211-2007, ISO 589.2003, NEQ)

GB/T 212 industrial analysis of coal (GB/T 212-2008, ISO 11722.1999, ISO 1171.1997, ISO 562.

1998, NEQ)

GB 474 coal sample preparation method (GB 474-2008, ISO 18283.2006, MOD)

GB/T 477 coal screening test method (GB/T 477-2008, ISO 1953.1994, MOD)

GB/T 4757 pulverized coal (mud) Standard Test Method for Laboratory flotation unit

3 Test Process

Test coal and water in a flotation tank with stirring to form a slurry, adding collector and frother, turn pneumatic valves, flotation process and elect

Tailings and ash content and yield were measured.

4.1 Collector

N-dodecyl, AR, density 0.748g/cm³ ~ 0.751g/cm³.

4.2 frother

4-methyl-2-pentanol (methyl isobutyl carbinol (MIBC)), AR, density 0.807g/cm³.

5.1 Test Equipment

Test equipment schematically shown in Figure 1, includes the following components.

- a) tank volume of 3.5L of mechanical flotation machine;
- b) flotation tank with plexiglass or stainless steel tank dimensions shown in Figure 2, the volume of 3.5L, tank side engraved with the first marking