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Hard coal — Froth flotation testing — Part 1: Laboratory procedure

*Houille — Essais de flottation —
Partie 1: Méthode de laboratoire*



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Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Principle	2
5 Reagents	2
6 Apparatus	2
7 Sampling	3
8 Flotation conditions	4
8.1 Operating temperature	4
8.2 Water	4
8.3 Solids content	4
8.4 Pulp level	4
8.5 Collector	4
8.6 Frother	4
8.7 Air flow rate	4
9 Procedure	4
10 Expression of results	6
11 Test report	6
Annex A (informative) Recommended layout of a form for a test report	13
Bibliography	14

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 27, *Solid mineral fuels*, Subcommittee SC 1, *Coal preparation: Terminology and performance*.

This second edition cancels and replaces the first edition (ISO 8858-1:1990), of which it constitutes a minor revision. It also incorporates the Technical Corrigendum ISO 8858-1:1990/Cor.1:2001.

A list of all parts in the ISO 8858 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Introduction

The froth flotation of coal has widespread application for the concentration and separation of fine coal particles from mineral matter. The response of coal to the froth flotation process is initially measured by a laboratory scale test. Although the principles used for the laboratory tests are generally similar, the precise type of equipment and techniques used vary considerably.

The procedure for the laboratory froth flotation test sets out, in detail, the type of equipment to be used and the methods to be adopted. The purpose of this procedure is to provide a standard method of test by which a preliminary evaluation of the froth flotation characteristics of a coal can be compared. This need is particularly important for exploration programmes. This document also serves as an introduction for operators who are not familiar with the techniques (and problems) associated with the laboratory froth flotation of coals.

[Annex A](#) of this document is for information only.