
**Hard coal — Determination of
Hardgrove grindability index**

Houille — Détermination de l'indice de broyabilité Hardgrove

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[ISO 5074:2015](https://standards.iteh.ai/catalog/standards/sist/739c358c-5b16-487a-8a6e-32320ee19cb4/iso-5074-2015)

<https://standards.iteh.ai/catalog/standards/sist/739c358c-5b16-487a-8a6e-32320ee19cb4/iso-5074-2015>



iTeh STANDARD PREVIEW
(standards.iteh.ai)

[ISO 5074:2015](https://standards.iteh.ai/catalog/standards/sist/739c358c-5b16-487a-8a6e-32320ee19cb4/iso-5074-2015)

<https://standards.iteh.ai/catalog/standards/sist/739c358c-5b16-487a-8a6e-32320ee19cb4/iso-5074-2015>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2015, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Principle	1

iTeh STANDARD PREVIEW (standards.iteh.ai)

[ISO 5074:2015](https://standards.iteh.ai/catalog/standards/sist/739c358c-5b16-487a-8a6e-32320ee19cb4/iso-5074-2015)

<https://standards.iteh.ai/catalog/standards/sist/739c358c-5b16-487a-8a6e-32320ee19cb4/iso-5074-2015>

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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 27, *Solid mineral fuels*, Subcommittee SC 5, *Methods of analysis*.

This third edition cancels and replaces the second edition (ISO 5074:1994), which has been technically revised.

Introduction

The Hardgrove grindability test and test machinery are designed and developed to characterize the relative grindability of coals. The Hardgrove grindability index represents a composite physico-mechanical property of the coal, embracing a number of specific properties such as hardness, strength, tenacity and fracture, and is a function primarily of coal rank and secondarily of coal type. Two of the important variables that can influence the result of this determination are the method of sample preparation, which involves selective grinding of the coal, and the moisture content of the coal. The Hardgrove grindability index is used empirically to estimate the capacity and power consumption of a pulverizer, given a specified product fineness.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[ISO 5074:2015](https://standards.iteh.ai/catalog/standards/sist/739c358c-5b16-487a-8a6e-32320ee19cb4/iso-5074-2015)

<https://standards.iteh.ai/catalog/standards/sist/739c358c-5b16-487a-8a6e-32320ee19cb4/iso-5074-2015>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[ISO 5074:2015](#)

<https://standards.iteh.ai/catalog/standards/sist/739c358c-5b16-487a-8a6e-32320ee19cb4/iso-5074-2015>

Hard coal — Determination of Hardgrove grindability index

1 Scope

This International Standard specifies the method for determining the grindability index of hard coal using the Hardgrove machine. It also specifies the procedure for calibrating the test machine and for preparing the standard reference coal samples.

NOTE In this International Standard, the term “hard coal” is used as an indication of maturity or rank in the coalification sequence and is not related to the physical properties of the coal.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 13909, *Hard coal and coke — Mechanical sampling*

ISO 18283, *Hard coal and coke — Manual sampling*

ASTM D409, *Standard Test Method for Grindability of Coal by the Hardgrove-Machine Method*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

hard coal

coal having a gross calorific value of more than 24 MJ/kg on a moist, ash-free basis

4 Principle

Samples shall be collected and prepared using ISO 13909 and ISO 18283.

Treatment of a prepared sample of coal of limited size range under defined conditions in a laboratory apparatus of standardized design (calibrated Hardgrove machine). Derivation of the grindability index from sieve analysis of the ground product and by reference to a calibration chart prepared from standard reference material.

For all related equipment requirements, sample preparation, test procedure and reporting shall be in accordance with ASTM D409.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[ISO 5074:2015](https://standards.iteh.ai/catalog/standards/sist/739c358c-5b16-487a-8a6e-32320ee19cb4/iso-5074-2015)

<https://standards.iteh.ai/catalog/standards/sist/739c358c-5b16-487a-8a6e-32320ee19cb4/iso-5074-2015>