Irish Standard
I.S. EN 15400:2011

Solid recovered fuels - Determination of calorific value

I.S. EN 15400:2011

Incorporating amendments/corrigenda/National Annexes issued since publication:

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SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces:
CEN/TS 15400:2006

This document is based on:
EN 15400:2011

Published:
18 March, 2011

This document was published under the authority of the NSAI and comes into effect on:
18 March, 2011

ICS number:
75.160.10

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Údarás um Chaighdeáin Náisiúnta na hÉireann

I.S. EN 15400:2011

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 15400

March 2011

ICS 75.160.10

Supersedes CEN/TS 15400:2006

English Version

Solid recovered fuels - Determination of calorific value

Combustibles solides de récupération - Détermination du pouvoir calorifique

Feste Sekundärbrennstoffe - Bestimmung des Brennwertes

This European Standard was approved by CEN on 22 January 2011.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Ref. No. EN 15400:2011: E

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Foreword

This document (EN 15400:2011) has been prepared by Technical Committee CEN/TC 343 “Solid recovered fuels”, the secretariat of which is held by SFS.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2011, and conflicting national standards shall be withdrawn at the latest by September 2011.

This document supersedes CEN/TS 15400:2006.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

This document differs from CEN/TS 15400:2006 mainly as follows:

a) specification respectively recommendation regarding repeatability and reproducibility limits deleted;

b) results of interlaboratory tests informatively added in Annex I;

c) whole document editorially revised.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Introduction

WARNING — Strict adherence to all of the provisions specified in this document should ensure against explosive rupture of the bomb, or a blow-out, provided that the bomb is of proper design and construction and in good mechanical condition.

This European Standard is based on ISO 1928 and EN 14918 and modified to solid recovered fuels with some additions and alterations specific to solid recovered fuels properties.

The result obtained is the gross calorific value of the sample analysed at constant volume with all the water of the combustion products as liquid water. In practice, solid recovered fuels are burned at a constant (atmospheric) pressure and the water is either not condensed (removed as vapour with the flue gases) or condensed. Under both conditions, the operative heat of combustion to be used is the net calorific value of the fuel at constant pressure. The net calorific value at constant volume can also be used; equations are given for calculating both values.

General principles and procedures for the calibrations and the solid recovered fuels experiments are presented in the normative text, whereas those pertaining to the use of a particular type of calorimetric instrument are specified in Annexes A to C. Annex D contains checklists for performing calibration and fuel experiments using specified types of calorimeters. Annex E gives examples to illustrate some of the calculations.