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ICS 75.160.10

SOLID BIOFUELS - FUEL QUALITY ASSURANCE

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TECHNICAL SPECIFICATION
SPÉCIFICATION TECHNIQUE
TECHNISCHE SPEZIFIKATION

CEN/TS 15234

March 2006

ICS 75.160.10

English Version

Solid biofuels - Fuel quality assurance

Biocombustibles solides - Assurance qualité du
combustible

Feste Biobrennstoffe - Qualitätssicherung von Brennstoffen

This Technical Specification (CEN/TS) was approved by CEN on 13 September 2005 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

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Contents	Page
Foreword.....	3
Introduction	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Symbols and abbreviations	7
5 Principle.....	8
6 Quality Assurance measures	9
7 Quality control measures.....	12
Annex A (Informative) Guidance for Quality Assurance of Solid Biofuels.....	18
Annex B (Informative) Examples on documentation for compliance with sub-clause 6.2 Production requirements	22
Annex C (Informative) Examples of Fuel Quality Declarations.....	36
Annex D (Informative) Example of a template for documentation of nonconformity.....	40
Annex E (Informative) Calculation of the net calorific value in different basis and energy density as received	41
Bibliography.....	44

Foreword

This Technical Specification (CEN/TS 15234:2006) has been prepared by Technical Committee CEN/TC 335 “Solid biofuels”, the secretariat of which is held by SIS.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this Technical Specification: Austria, Belgium, 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

The overall aim of this Technical Specification is to guarantee the solid biofuel quality through the whole supply chain, from the origin to the delivery of the solid biofuel and provide adequate confidence that specified quality requirements are fulfilled.

The solid biofuel supply chain usually consists of the main stages described in Figure 1.

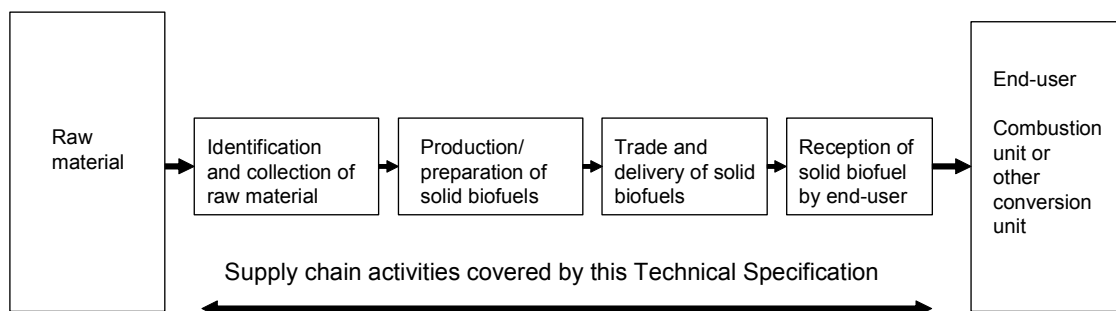


Figure 1—Solid biofuel supply chain

The objective of this Technical Specification is to serve as a tool to enable the efficient trading of biofuels. Thereby:

- [1] the end-user can find a biofuel that corresponds to his needs;
- [2] the producer/supplier can produce a biofuel with defined and consistent properties and describe the biofuel to the customers.

Quality assurance measures should establish confidence in the biofuel through systems that are simple to operate and do not cause undue bureaucracy.

Solid biofuels are specified according to CEN/TS 14961—Solid Biofuels, Fuel Specification and Classes. Each property specification requirement refers to a CEN Standard or a CEN Technical Specification. With a proper quality assurance procedure and specification of origin and source (i.e. kind of biofuel) in the whole production chain, it is possible to reduce or eliminate the parameters that need analysing.

According to the terminology of EN ISO 9001^[1] a Quality Management system generally consist of Quality Planning, Quality Control, Quality Assurance and Quality Improvement. This Technical Specification covers Fuel Quality Assurance and Quality Control.

The users of this Technical Specification may integrate the CEN—Solid biofuels, Fuel Quality Assurance Technical Specification in their general quality assurance scheme, e.g. the EN ISO 9000 series ^[1, 2, 3]. If the company does not have a quality management system, this Technical Specification can be used on it's own to help the supplier in documenting fuel quality and creating adequate confidence between the supplier and the end-user.

In parallel to the preparation of this Technical Specification a Guide for Quality Assurance of Solid Biofuels has produced as a CEN Technical Report ^[8].

This Technical Specification for Fuel Quality Assurance is only concerned with the fuel part. To ensure the efficient use of solid biofuels, the relationship between the fuel and the combustion unit is also important to consider. It is recommended that the end-users ensure that the combustion technology used and the solid biofuels are compatible to achieve an optimised burning process. In addition to high efficiency, the environmental impact is reduced when the combustion process is optimised (e.g. unburnt carbon in the ash will be reduced; the emissions from the flue gases are reduced, etc.).

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