SCC WORKING DOCUMENT – NOT FOR REFERENCE - February 2004



EUROPEAN COMMISSION ENTERPRISE DIRECTORATE-GENERAL SCC 04/636 Rev.1

Conformity and standardisation, new approach, industries under new approach Construction

Brussels, 3 May 2004 G5/PB D(2003)

AMENDMENT TO:

MANDATE TO CEN/CENELEC CONCERNING THE EXECUTION OF STANDARDISATION WORK FOR HARMONISED STANDARDS ON

M 128 "Products related to concrete, mortar and grout"

Explanatory note

a) Fly ash issued from co-combustion

The Mandate M128 "products related to concrete, mortar and grout" includes the products so-called "Fly ash" which are used as active addition (type II) for production of concrete, mortar and grout. In the mandate, the term "fly ash" is used without any limitation.

However, CEN/TC 104 have limited the scope of the harmonised standards, to deal only with "siliceous fly ash". It exist other types of fly ash, in particular so-called "calcareous fly ash" which are used in a few European countries to product concrete, and which are not covered by the standards in preparation.

In addition, the definition of fly ash included in the harmonised standard prEN 450-1 covers products produced by co-combustion of hard coal with another material. But this standard limits the fly ash issued from co-combustion to the following definition: the minimum percentage of coal (Kc) shall not be less than 80% and the maximum proportion of fly ash derived from co-combustion materials (M) shall not be grater than 10%". It seems that some countries, which have a limited experience to use co-combustion products which are outside of these limits, are reluctant, then opposed, to include them in the harmonised standards in preparation (EN 450-1, EN 450-2)¹. Others countries, which are used to use these products and which have got a sufficient experience do not accept to see these products excluded from CE marking. Indeed, this exclusion could be susceptible to introduce a distortion of competition with the other types of fly ash which are usually used in many countries.

With the agreement of CEN and EOTA, it has been agreed that ETAs could be granted for this product (CPD article 8.2).

Consequently, it should be clarified in the mandate M 128 that fly ash produced with other types than those covered by EN 450-1 and fly ash produced with a percentage of co-combustion material

¹ Some Countries are forbidding the use of fly ash containing products issued from co-combustion process in their territory, e.g. Spain, Portugal and Sweden.

SCC WORKING DOCUMENT – NOT FOR REFERENCE - February 2004

outside the limits defined in EN 450, can be subject to ETAs, in order to allow these products to be CE marked.

CEN should be kept informed by EOTA on the ETAs developments. If appropriate, the subject could be re-introduced in the standardisation system in some years, on the basis of an agreement between EOTA to CEN taking into consideration the duration of validity of the ETAs possibly issued.

b) characteristics not covered by the current mandate

The CEN/TC 104 has asked to add three further requirements which are not mentioned in the current version of the mandate:

- *Particle density*, which is necessary to secure uniformity and which has been in force in most of the European countries that have introduced the previous version of EN 450,
- *Initial setting time*, which is relevant for fly ash obtained from co-combustion (the one covered by the standard),
- *Water requirement*, which is necessary for the description of very fine ashes (category S of the harmonised standards) produced and used in some Countries (e.g. UK) who has practiced this requirement and the corresponding test method, for years.

CEN/TC 104 is of the opinion that these characteristics are essential, because new types of siliceous fly ashes have been now incorporated in the standard EN 450.

This amendment modifies the original mandate in the following manner:

In Annexes 1 and 2, it should be explicitly indicated that the mandate covers only siliceous fly ashes and fly ash obtained from co-combustion, which are within certain limits of use of co-combustion materials, in order to clarify the domain for which ETAs may be granted.

In the annexe 2, three characteristics proposed by CEN/TC 104 in the table 2 should be added.

This amendment does not need to change the decision concerning Attestation of Conformity Level.

SCC WORKING DOCUMENT – NOT FOR REFERENCE - February 2004 <u>ANNEX A</u>

AMENDMENT to the mandate M128 "products related to concrete, mortar and grout"

Amendment to the Annex 1

In the column "material" replace "Fly ash" by the following definition "Fly ash including fly ash obtained from co-combustion of co-combustion materials, within limited percentages of co-combustion materials".

Amendment to the Annex 2

The table 2 "Addition for concrete, mortar and grout" will be amended as the follow:

(a) the definition of the product "Fly ash" for materials of type II (active additions) will be replaced by the following: "Fly ash including fly ash obtained from co-combustion of co-combustion materials, for which the minimum percentage of coal (Kc) shall not be less than 80% and the maximum proportion of fly ash derived from co-combustion materials (M) shall not be grater than 10%".

(b) Performance characteristics of the ADDITIONS to be covered by the harmonised standard are:

<u>Note</u> : not all of the characteristics shown in the following tables will be relevant for every product in a particular family or sub-family. CEN/CENELEC should select the subset of characteristics applicable to a particular product from the full set provided.

ER	Performance characteristics	Durability
1	Activity index (compressive strength) Effects on concrete properties (e.g. on setting time, workability, shrinkage, strength, durability,, as relevant) Fineness Soundness	Y (Against alkali, weathering, heat, as relevant)
	 Loss on ignition Composition/ content (e.g. silicon dioxide, free silicon, magnesium oxide, chloride, free calcium oxide, carbon, sulphide, sulphate, halogens, water soluble substances,, as relevant) Particle density Initial setting time (for fly ash obtained from co-combustion) Water requirement (for very fine ashes) 	
2		
3	Emission of radioactivity Release of other dangerous substances *	
4		
5		
6		

* In particular, those dangerous substances defined in Council Directive 76/769/EEC, as amended.
