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Vrednotenje skladnosti agregatov

Evaluation of conformity of aggregates

Bewertung der Konformität von Gesteinskörnungen

Évaluation de la conformité des granulats

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Évaluation de la conformité des granulats

Bewertung der Konformität von Gesteinskörnungen

This draft European Standard is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/TC 154.

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

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Foreword

This document (FprEN 16236:2011) has been prepared by Technical Committee CEN/TC 154 "Aggregates", the secretariat of which is held by BSI.

This document is currently submitted to the Unique Acceptance Procedure.

This European Standard is one of a series of standards as listed below.

EN 12620, Aggregates for concrete

EN 13043, Aggregates for bituminous mixtures and surface treatments for roads, airfields and other trafficked areas

EN 13139, Aggregates for mortar

EN 13242, Aggregates for unbound and hydraulic bound materials for use in civil engineering work and road construction

EN 13383-1, Armourstone — Part 1: Specification

EN 13450, Aggregates for railway ballast

This European Standard will replace Annex H (normative) of EN 12620:2002+A1:2008, Annex B (normative) of EN 13043:2002, Annex E (normative) of EN 13139:2002, Annex C (normative) of EN 13242:2002+A1:2007, Annex D (normative) of EN 13383-1:2002 and Annex I (normative) of EN 13450:2002.

Introduction

This European Standard has been written as the system for the evaluation of conformity of aggregates. It is designed to be used in conjunction with the aggregate product standards: EN 12620, EN 13043, EN 13139, EN 13242, EN 13383-1 and EN 13450 and is called up by these standards.

Evaluation of conformity comprises initial type testing (ITT) and factory production control (FPC).

The initial type testing and factory production control procedures are designed to be applied to European Standards for aggregates whether or not regulatory marking is to be applied.

When the appropriate "conformity" clauses are applied it forms part of the system for attestation of conformity as required by the Construction Products Directive. It provides the minimum level of ITT and FPC for CE Marking.

The type testing procedures, using the reference test methods, have the function of providing assurance that a particular aggregate product complies with each of the selected specified requirements in the product standard. The type testing procedure is designed to be applied to all harmonised elements of European Harmonised Standards for aggregates whether or not regulatory marking is to be applied. The system can also be extended to non-harmonised elements.

The factory production control system requires control of the sourcing and processing of the aggregate combined with routine sampling and testing to provide ongoing assurance that the aggregates product continues to conform to those properties determined through ITT. Testing within FPC may use either the standard reference tests or other test procedures which have been shown to correlate with those tests.

For commercial and/or contractual reasons manufacturers can choose to perform more testing and inspection than the minimum specified.

1 Scope

This European Standard specifies both initial type testing and factory production control requirements for use during the evaluation and production of aggregates.

Additional testing carried out within contracts is beyond the scope of this standard.

The evaluation of conformity is to be applied to European Standards for aggregates if regulatory marking of conformity is to be applied. It is also a necessary part of evaluation of conformity in situations where regulatory marking does not apply.

This European Standard is applicable to the control of aggregates within the scope of EN 12620, EN 13043, EN 13242, EN 13139, EN 13383-1 and EN 13450.

2 Normative references

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

EN 932-1, Tests for general properties of aggregates — Part 1: Methods for sampling

EN 932-5, Tests for general properties of aggregates — Part 5: Common equipment and calibration

EN 12620, Aggregates for concrete

EN 13043, Aggregates for bituminous mixtures and surface treatments for roads, airfields and other trafficked areas

EN 13242, Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction

EN 13139, Aggregates for mortar

EN 13383-1, Armourstone — Part 1: Specification

EN 13450, Aggregates for railway ballast

3 Terms and definitions

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

3.1

initial type tests

complete set of tests or other procedures, determining the performance of samples of aggregates representative of the product type

3.2

factory production control

permanent internal control of production exercised by the manufacturer where all the elements, requirements and provisions adopted by the manufacturer are documented in a systematic manner in the form of written policies and procedures

NOTE This production control system documentation should ensure a common understanding of quality assurance and enable the achievement of the required product characteristics and the effective operation of the production control system to be checked.

3.3

technical specifications

European standards and European technical approvals (for aggregates)

4 Initial type tests

The aggregates shall be subject to initial type tests relevant to the intended end use to show conformity with the relevant product standard in the following circumstances:

- a) a new source of aggregates is to be used;
- b) there is a major change in the nature of the raw materials or in the processing conditions that may affect the properties of the aggregates.

All samples used in type testing shall be representative of the material in question and shall be taken in accordance with EN 932-1. The results of the initial type tests shall be documented as the starting point of the factory production control for that material.

This shall particularly include the identification of any components likely to emit radiation above normal background levels, any components likely to release polyaromatic carbons or other dangerous substances. If the content of any of these components exceeds the limits in force according to the provisions valid in the place of use of the aggregate, the results of the initial tests shall be declared.

5 Factory production control

5.1 General

The producer shall have in place a system of factory production control that complies with the requirements of this clause.

The records held by the producer shall indicate what quality control procedures are in operation during the production of the aggregate.

The performance of the factory production control system shall be assessed according to the principles used in this clause.

NOTE The form of control applied to any aggregate depends upon its intended use and the regulations relating to that use.

5.2 Organization

5.2.1 Responsibility and authority

The responsibility, authority and the interrelation between all personnel who manage, perform and check work affecting quality shall be defined, including personnel who need organizational freedom and authority to:

- a) initiate action to prevent the occurrence of product non-conformity;
- identify, record and deal with any product quality deviations.