

DIN EN 197-2:2020-10 (E)

Cement - Part 2: Assessment and verification of constancy of performance

Contents		Page
European foreword		4
1	Scope	5
2	Normative references	5
3	Terms and definitions	5
4	Factory production control	7
4.1	General requirements	7
4.1.1	Concept	7
4.1.2	Works' quality documentation	7
4.1.3	Quality management system	8
4.1.4	System of documentation	8
4.2	Internal quality control	9
4.2.1	Process control	9
4.2.2	Measuring and testing	9
4.2.3	Handling, storage, packaging and delivery	9
4.3	Autocontrol testing of samples	9
4.3.1	Sampling and testing	9
4.3.2	Corrective action	10
4.3.3	Measuring and test equipment for autocontrol testing	10
4.3.4	Quality records	10
5	Tasks for the purpose of certification	10
5.1	Assessment of the performance of the cement	10
5.2	Initial inspection of the manufacturing plant and of factory production control	11
5.2.1	Inspection of a new factory	11
5.2.2	Inspection of an existing factory	11
5.2.3	Criteria for the assessment of the production equipment	11
5.2.4	Criteria for the assessment of laboratories	11
5.3	Continuing surveillance, assessment and evaluation of factory production control	12
5.3.1	Inspection of the factory and the factory production control	12
5.3.2	Evaluation of the results of autocontrol testing of samples	12
5.4	Audit-testing of samples taken at the factory/depot	12
5.4.1	Sampling	12
5.4.2	Testing	13
5.4.3	Evaluation of test results	13
5.5	Reports	13
5.6	Actions to be taken in the event of non-conformity	14
5.6.1	Following inspection of the factory production control and evaluation of the results of autocontrol testing	14
5.6.2	Following evaluation of the results of the audit-testing	14
6	Procedure for certification of constancy of performance of the product	14
Annex A(normative) Evaluation of the representativeness and the accuracy of the 28 day strength test results		17
A.1	General	17
A.2	Sets of results considered	17
A.3	Evaluation procedure	17

A.3.1	Introduction	17
A.3.2	Symbols	17
A.3.3	Evaluation of whether set A and set B belong to the same population (sampling error check)	18
A.3.4	Comparison between set B and set C in order to check the accuracy of the autocontrol testing (testing error check)	19
A.3.5	Masonry cement	19
A.3.6	Calcium aluminate cement	19
	Annex B(informative) Procedure for certification of constancy of performance of cement	20
	Bibliography	21