

DIN EN 13383-2:2019-12 (E)

Armours tone - Part 2: Test methods

Contents		Page
European foreword		4
1	Scope	5
2	Normative references	5
3	Terms and definitions	5
4	Methods for sampling	7
4.1	General	7
4.2	Principles of sampling	8
4.3	Sampling plan	8
4.4	Apparatus	8
4.5	Sampling methods	9
4.6	Sample reduction	12
4.7	Sample preparation for Micro-Deval test where the appropriate particle size is not available	13
4.8	Marking, packaging and dispatch of samples	14
4.9	Sampling registration	14
5	Determination of the particle size distribution of coarse gradings	15
5.1	Principle	15
5.2	Apparatus	15
5.3	Preparation of test portion	15
5.4	Procedure	16
5.5	Calculation and expression of results	16
5.6	Test report	17
6	Determination of the mass distribution of light and heavy gradings	17
6.1	Principle	17
6.2	Apparatus	17
6.3	Preparation of test portion	18
6.4	Procedure	18
6.5	Calculation and expression of results	18
6.6	Test report	19
7	Determination of the percentage of pieces of armourstone with a length-to- thickness ratio greater than 3	20
7.1	Principle	20
7.2	Apparatus	20
7.3	Preparation of test portion	21
7.4	Procedure	22
7.5	Calculation and expression of results	22
7.6	Test report	23
8	Determination of particle density and water absorption	24
8.1	Principle	24
8.2	Apparatus	24
8.3	Materials	24
8.4	Preparation of test portion	25
8.5	Test procedure	25
8.6	Calculation and expression of results	25

8.7	Test report	26
9	Determination of resistance to freezing and thawing	26
9.1	Principle	26
9.2	Apparatus	26
9.3	Materials	28
9.4	Test portions	28
9.5	Procedure	29
9.6	Calculation and expression of results	30
9.7	Test report	30
10	Determination of signs of "Sonnenbrand" and disintegration of steel slags	31
10.1	Principle	31
10.2	Apparatus	31
10.3	Materials	31
10.4	Preparation of test portions	32
10.5	Procedure	32
10.6	Calculation and expression of results	33
10.7	Test report	33
	Annex A (informative) Example of a sampling registration	34
	Annex B (informative) Example of a particle size distribution of a coarse grading	36
	Annex C (informative) Example of a mass distribution: reference method	37
	Annex D (informative) Example method for determination of mass distribution (employing bulk weighing)	39
D.1	Principle	39
D.2	Apparatus	39
D.3	Preparation of test portion	39
D.4	Procedure	39
D.5	Calculation and expression of results	39
D.6	Test report	40
	Annex E (informative) Density of water	43
	Annex F (informative) Precision for determination of particle density and water absorption (see Clause 8)	44
	Annex G (informative) Guidance on sampling for testing	45
	Annex H (informative) Guidance on sampling from floating plant	50
H.1	General	50
H.2	Sampling scheme 1	50
H.3	Sampling scheme 2	52
	Bibliography	55