

DIN EN 196-2:2026-03 (E)

Methods of testing cement - Part 2: Chemical analysis of cement

Contents		Page
European foreword		3
Introduction		5
1	Scope	6
2	Normative references	6
3	Terms and definitions	6
4	General requirements for testing	7
4.1	Number of tests	7
4.2	Repeatability and reproducibility	7
4.3	Expression of masses, volumes, factors and results	7
5	Analysis by wet chemistry	8
5.1	General	8
5.2	Reagents	9
5.3	Apparatus	21
5.4	Analysis procedure	27
5.5	Determination of major elements	35
6	Chemical analysis by X-ray fluorescence	60
6.1	Reagents and reference materials	60
6.2	Apparatus	62
6.3	Flux	63
6.4	Determination of loss on ignition and the change in mass on fusion of the cement	64
6.5	Factoring test results and correcting total analyses for presence of sulfides and halides	66
6.6	Preparation of fused beads and pressed pellets	68
6.7	Calibration and validation	70
6.8	Calculation and expression of results	80
6.9	Performance criteria (repeatability, accuracy and reproducibility limits)	81
7	Chemical analysis by inductively coupled plasma optical emission spectroscopy (ICP-OES)	81
7.1	Determination of SO ₃ - alternative method	81
Annex A (informative) Examples of fluxes		84
Annex B (informative) Sources of certified reference materials		85
Annex C (informative) Examples of calibration standards and monitor beads and pellets		86
Annex D (informative) Guidance on preparation of standard calibration solutions		87
D.1	Stock solutions	87
D.2	Blank calibration solution	87
Bibliography		88