

Aggregates

List of aggregate tests carried out by Mota-Engil Engenharia's Central Laboratory:

Test	Internal Standard / Method
Particle size analysis	LNEC E 233
Specific weight and water absorption	JA E P.6-53
Lamination and elongation index	BS812-105.1 and BS812-105.2
Los Angeles machine abrasion test	LNEC E 237
Bitumen Adhesion - Inert	JA E P.9-53
Compacting aggregates	LNEC E 197
Methylene blue	NF P 18-592
Degradability test	NF P94-067
Fragmentability test	NF P94-066
Particle size analysis with washing	Internal Instruction
Particle size analysis. Sieving method	EN 933-1
Determination of particle shape. Flattening index	EN 933-3
Determination of particle shape. Shape index	EN 933-4
Determining the percentage of crushed and broken surfaces in coarse aggregates	EN 933-5
Determination of shell content. Percentage of shells in coarse aggregates	EN 933-7

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Determination of fine content. Sand equivalent test	EN 933-8
Determination of fine content. Methylene blue test	EN 933-9
Determination of resistance to fragmentation. Los Angeles" method	EN 1097-2
Determining baricity and void volume	EN 1097-3
Determination of density and water absorption	EN1097-6
Determination of moisture content by drying in a ventilated oven	EN 1097-5
Determination of wear resistance (Micro-Deval)	EN 1097-1
Magnesium sulphate test	EN 1367-2
Determination of drying shrinkage	EN 1367-4
Determination of thermal shock resistance	EN 1367-5
Granulometric analysis of rockfill	EN 13383-2 (Section 5)
Determining the percentage of rockfill with a length/thickness ratio >3	EN 13383-2 (Section 7)
Determination of density and water absorption	EN 13383-2 (Section 8)
Determining the length of ballast particles	EN 13450 (Section 6.7)
Mass distribution of rockfill	EN 13883-2 (Section 6)
Harmful elements (Ballast)	Internal Instruction
Proctor Compaction Test	EN 13286-2
CBR test	EN 13286-47
Variable Load Permeability Tests	IT.GEO.006

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Granulometry of the fillers (air blast)	EN 933-10
Density of the filler. Pycnometer method	EN 1097-7
Determining the voids in compacted dry filler	EN 1097-4
Proctor Compaction Test (modified)	ASTM D 1557
Determination of baricity "in situ" - Gamadensimeter method	ASTM D6938
Density and water absorption of aggregates	NP 581 / NP 954
Aggregate Compaction	LNEC E 197

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