







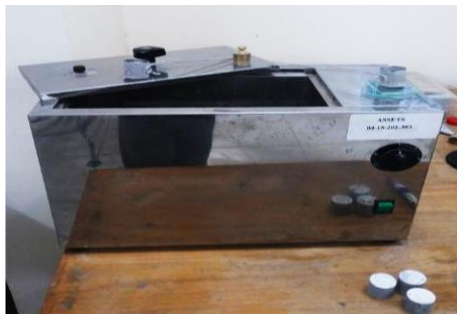





❖ Cement and Aggregate Lab



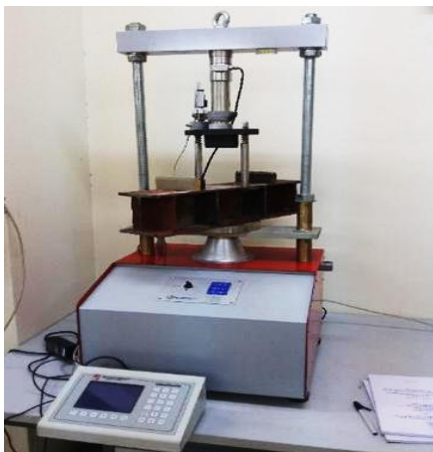
No	Device name	Device photo	Description of the Equipment
1	Concrete Compression Machine (3000 KN)		The compression testing machine is used for determine compressive strength of samples Bricks, cement & gypsum pastes, and concrete specimens.
2	Reducing Field Sample Apparatus		To obtain laboratory samples of aggregates from stockpiles, by split samples of aggregate random.
3	Los Angeles Machine		This test method covers test sizes of coarse for resistance to degradation using the Los Angeles testing machine, also it used to calculate abrasion of coarse aggregate.









No	Device name	Device photo	Description of the Equipment
4	Mechanical Sieve Shaker		To determination of particle size distribution of coarse and fine aggregates by sieving or screening and determination the fineness of hydraulic cement by No.100 or No. 200 sieve.
5	Aggregate Crushing Test Apparatus		This method of test covers the procedure for determining the aggregate crushing value of coarse aggregate.
6	Unit Weight Measures		This test method covers the determination of unit weight in a compacted or loose condition and calculation of voids in Concrete or fine and coarse aggregates.





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7	Laboratory Oven		Laboratory oven is convection appliances for general purposes. Applications include sterilization, experiment management, drying, processing, and testing of concrete, soil.
8	Vicat's Apparatus		Vicat's apparatus is used to find out the consistency, initial setting time and final setting time of the cement.
9	Soundness of Cement by Le-Chatelier Method Apparatus		Le Chatelier water bath is used with Le Chatelier moulds for the determination of the soundness of cement paste.



No	Device name	Device photo	Description of the Equipment
10	Vibration Machine to Cement Mortar		This machine is used to compact the cement mortar samples in the cube mold.
11	Cement Mortar Molds		The cement mortar molds use to casting cement mortar for preparing the samples to compression test.
12	Mill Balls Apparatus		A ball mill is a type of grinder used to grind and blend materials for use in minerals concrete and cement minerals additives.

No	Device name	Device photo	Description of the Equipment
13	Cutting Machine		The cutter machine is used to cut the solid samples of concrete, rocks, and bricks.
14	Core Machine		The core machine is used to take the solid core samples of concrete, rocks, asphalt and bricks.
15	Flexural Strength Test Machine		Machine of flexural strength test is generally used to determine the flexural modulus or flexural strength of material.


No	Device name	Device photo	Description of the Equipment
16	Mechanical Mixer for Concrete		The mechanical mixer for concrete generally used to mix concrete materials.
17	Concrete Molds		The molds for concrete generally used for casting the concrete samples depending on specimen test, compressive, tensile and flexural strength.
18	Vibration Machine for Concrete		The vibration machine for concrete generally used to compacting concrete in the molds.

No	Device name	Device photo	Description of the Equipment
19	Slump Test Apparatus		The slump test apparatus for concrete generally used to determine the relative consistency of freshly mixed concrete.
20	Compacting Factor Apparatus		Freshly mixed concrete by the use of Compacting.
21	Schmidt Hammer		Schmidt hammers or concrete test hammers, is used to determine in-place strength of concrete.

No	Device name	Device photo	Description of the Equipment
22	Ultrasonic Pulse Velocity		Ultrasonic pulse velocity test is an in-situ, non-destructive test to check the quality of concrete and natural rocks. In this test, the strength and quality of concrete or rock is assessed by measuring the velocity of an ultrasonic pulse passing through a concrete.
23	Rebar Detection		Rebar detection is a sophisticated device for the non-destructive location of rebars and for the measurement of concrete cover and bar diameter.
24	Apparatus Cement Flow Table		This apparatus is used to determine the flow of hydraulic cement, mortars and cement pastes. A test specimen is molded on the table to a specified volume and shape. Then, with the mold removed, leaving the test specimen on the table.
25	Concrete Thermometer		Concrete thermometer is used to determine temperature of freshly mixed concrete in site or lab.

No	Device name	Device photo	Description of the Equipment
26	L-Box test Apparatus		The apparatus of L-box test is used to measure the filling and passing ability of self-compacting concrete.
27	V-Funnel Test Apparatus		V-Funnel apparatus is used to evaluate the flow time of freshly mixed self-compacting concrete.



No	Device name	Device photo	Description of the Equipment
28	Concrete Curing Tank		Concrete curing tank is used to cure concrete samples