

CONCRETE MIXURE

BE 65

A laboratory concrete mixer machine is a specialized piece of equipment designed for preparing small batches of concrete, mortar, cement, grout, or asphalt in controlled environments like research labs or quality control facilities. Unlike large-scale construction mixers, these are compact, precise tools used for mix design testing, specimen preparation, and evaluating material properties (e.g., strength, consistency, and additives) to ensure compliance with standards such as ASTM C109, C227, C305, AASHTO T 106, EN, and ISO. They provide uniform mixing for reproducible results, often with features like adjustable speeds, digital controls, and easy discharge mechanisms.

FOLLOWING STANDARD

ISO 18650-1:2004 (Part 1)

DISCRIPTION

Laboratory mixers come in various designs, each suited to specific batch sizes and materials. Here's a comparison table of common types based on popular models:-

MODEL	TYPE	CAPACITY (BATCH/MIXING)	KEY FEATURES	TYPICAL USE CASES
BE 65-01	Pan Mixer	5-130 L Mixing	Planetary gearing for quiet operation; interchangeable paddles; wheels for portability.	Mortar/cement testing; low-slump concrete.
BE 65-02	Drum Mixer	40-125 L Yield	Tilting drum with blades; manual rotation option; galvanized steel for durability.	Mix design trials; small asphalt batches.
BE 65-03	Twin-Shaft Batch Mixer	60 L scaled-down	High-shear mixing for uniform blends; emulates production-scale results.	Research on demanding concretes; quality control.
BE 65-04	Portable/Bucket Mixer	5-38	Rugged metal build; 1/6-1/2 HP motor; adjustable speeds (140-285 RPM)	Field/lab portability; soil/cement mixing.
BE 65-05	Intensive/Ring-Pan Mixer	Varies 60 L	Whirling system for homogenizing tough mixes; digital controls.	High-performance concrete R&D.

