Planetary Ball Mill PB-100

LT-M0610 | High-energy fine grinding and mechanical alloying

Planetary motion • Single grinding station • Safety switch



1:-2

PLATE / JAR ROTATIONAL RATIO

1 station

GRINDING CONFIGURATION

Approx. 90 kg • 220 V, 50-60 Hz • Colloidal sample preparation

LT-M0610

Photographs and Components

Opening cover, grinding station, control panel and cover supports

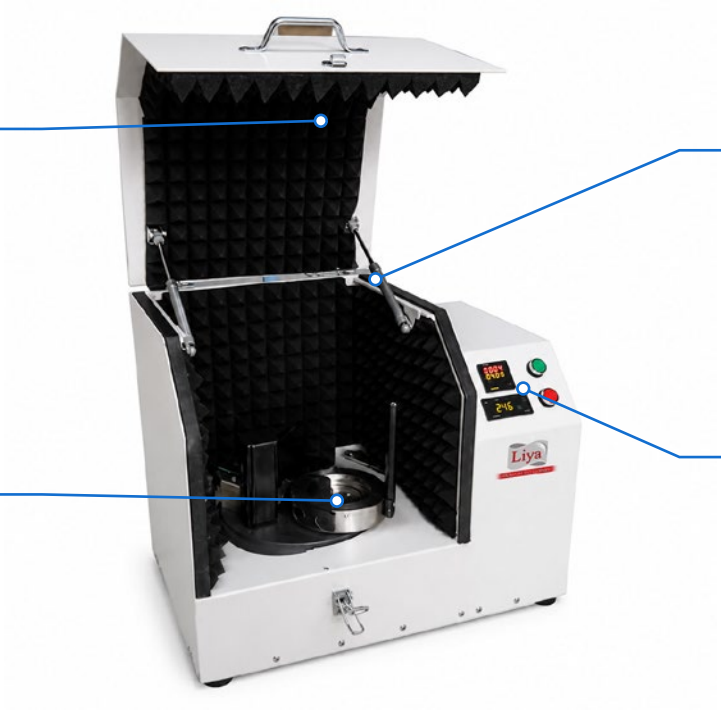
The PB-100 grinds laboratory samples using a single-station planetary system. Opposing rotation of the supporting plate and jar generates intensive impact and friction between the balls and sample.

OPENING COVER

The upper cover provides access for placing and removing the jar.

GRINDING STATION

One jar position provides the working area for the sample and balls.



COVER SUPPORTS

Supports on both sides assist the movement of the opening cover.

CONTROL PANEL

Digital displays and front operating buttons are grouped here.



Single grinding station and jar seat



Digital displays and operating buttons

LT-M0610

Planetary Motion and Grinding Principle

Opposing rotation • 1:-2 ratio • Ball impact and friction

Two Superimposed Rotations

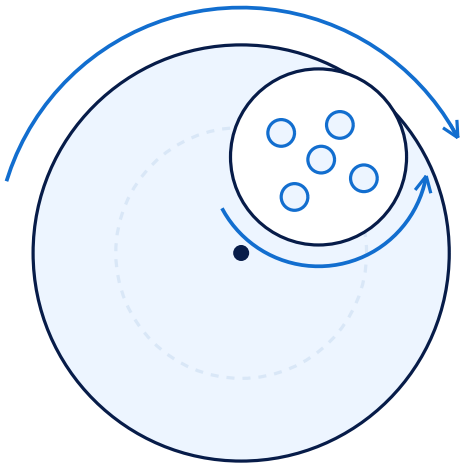


Plate: 1 revolution

Supporting Plate

1 revolution

Grinding Jar

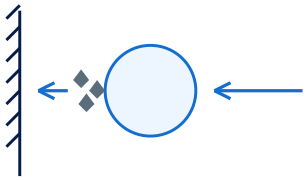
2 opposite revolutions

Rotational Ratio

1:-2

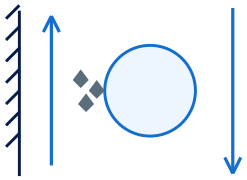
The jar moves eccentrically on the rotating plate while turning about its own axis in the opposite direction. The combined motion accelerates the balls; repeated collisions and friction reduce particle size.

Impact Action



Ball collisions with the sample and jar surface support particle fracture.

Friction Action



Contact between the balls, sample and jar supports fine grinding and mixing.

Technical Data and Sample Workflow

LT-M0610 • PB-100 • Single-station high-energy grinding

Technical Specification	Value
Product Code	LT-M0610
Model	PB-100
Motion System	Planetary / opposing rotation
Number of Grinding Stations	1
Plate / Jar Rotational Ratio	1:-2
Safety Equipment	Safety switch
External Dimensions	63 × 46 × 41 cm
Approximate Weight	90 kg
Power Supply	220 V, 50-60 Hz

Colloidal Sample Preparation

Very fine particle preparation and homogenisation studies.

Mechanical Alloying

Repeated impact and mixing support materials research.

Sample Preparation Workflow

01

Prepare Sample

Select a jar and balls suited to the sample.

02

Load and Secure

Load the sample; secure the jar in the station.

03

Close and Grind

Close the cover; use conditions suited to the method.

04

Collect Sample

After motion stops, remove the jar and collect the sample.

Product Page | liyatest.com.tr/en/urun/planet-ball-mill-pb-100/