Bond Grinding Test Mill

LT-CE0025 | Controlled laboratory grinding cycles

AISI 304 chamber • Variable speed • Programmable revolution counter



22 L

GRINDING CHAMBER CAPACITY

0-100 rpm

ADJUSTABLE ROTATIONAL SPEED

Ø305 × 305 mm chamber • 0-9999 revolution control • Primary and spare ball charges

LT-CE0025

Photographs and Components

Stainless steel drum, hinged lid, controls and sample collection area

The Bond Grinding Test Mill evaluates the grindability of ore and mineral samples. Controlled speed and revolution count support repeatable grinding cycles used in Bond Ball Mill Work Index testing.

GRINDING DRUM

The 22 L cylindrical chamber is made of AISI 304 stainless steel.

COLLECTION AREA

The lower section is used to collect samples and separate them from the balls.



HINGED LID

The upper lid provides access to the drum and grinding area.

CONTROL PANEL

Speed and revolution control, start, stop and emergency stop are grouped together.



AISI 304 stainless steel grinding drum



Revolution control and operating panel

LT-CE0025

Speed, Revolution Control and Grinding

Continuously variable speed and cycles controlled by total revolutions

0-100

rpm

Continuously adjustable chamber speed.

0-9999

revolutions

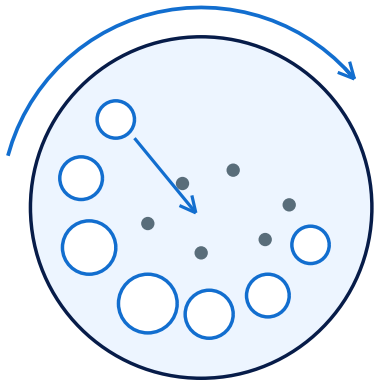
The digital counter manages each cycle.

~70

rpm

Typical reference speed for Bond testing.

Grinding by Impact and Friction



Ø305 × 305 mm

Stainless Steel Chamber

Ø305 × 305 mm internal dimensions and 22 L volume.

Grinding Media

Heat-treated chrome-alloy balls reduce sample size.

Controlled Cycle

Speed and total revolutions determine the grinding motion.

Cycle Control by Revolution Count

Enter Target

Set the total revolutions for the cycle.

→

Start Grinding

The counter tracks chamber revolutions.

→

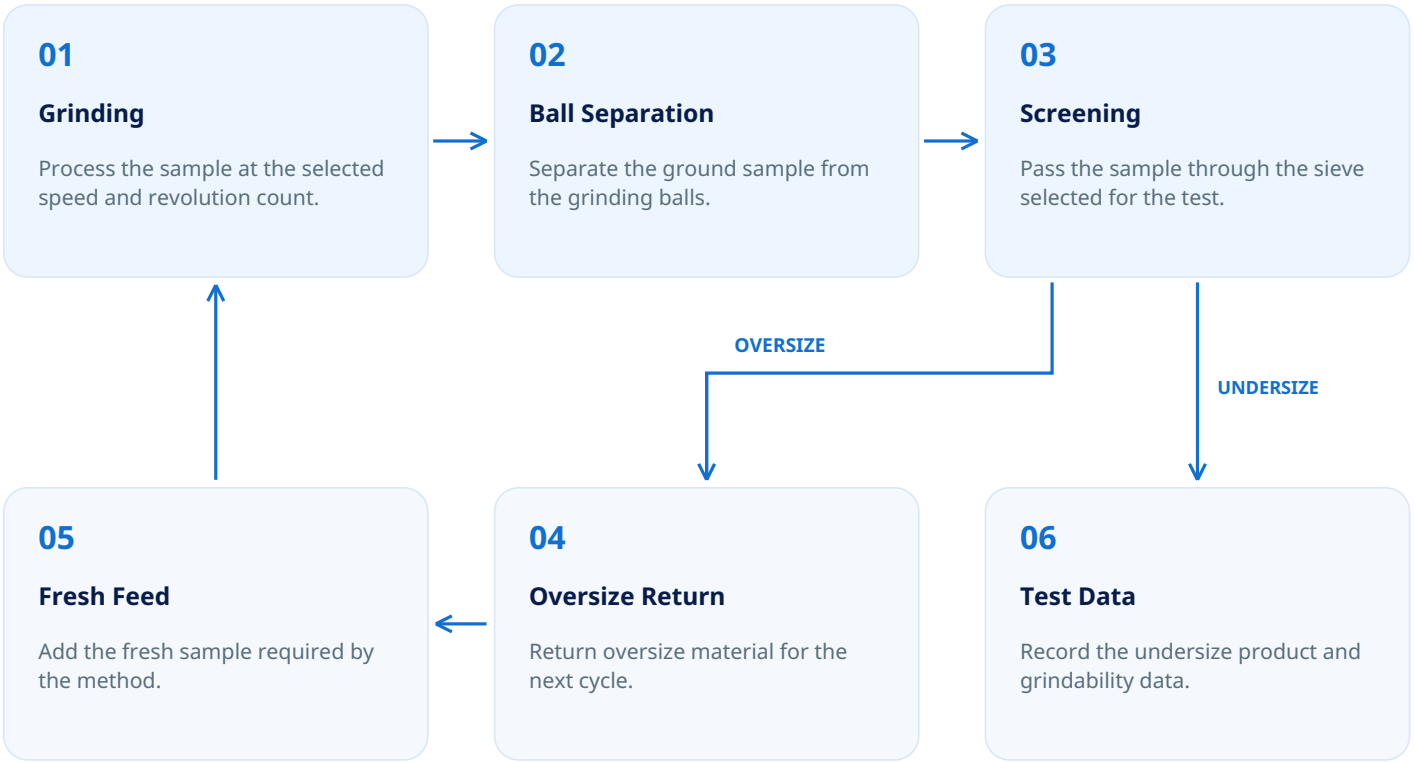
Complete Cycle

The system stops at the target count.

Sample Cycle in Bond Testing

Repeated laboratory cycles of grinding, screening and fresh-feed addition

After each grinding cycle, the sample is separated from the balls and passed through the test sieve. Oversize returns to the mill with the required fresh feed; undersize contributes to the test data.



Repeat cycles until the steady condition required by the selected Bond method is reached.

Mining and Ore

Compare the grindability of different ores.

Cement Raw Materials

Evaluate raw-material grinding behaviour.

Mineral Research

Controlled grinding and sample-preparation studies.

LT-CE0025

Technical Data and Included Components

LT-CE0025 • Chamber, speed, feed and motor specifications

Technical Specification	Value
Product Code	LT-CE0025
Chamber Capacity	22 L
Internal Chamber Dimensions	Ø305 × 305 mm
Chamber Material	AISI 304 stainless steel
Rotational Speed	0-100 rpm
Programmable Revolution Count	0-9999 revolutions
Feed Size	<8 mm
Feed Volume	2500-3500 ml
Product Fineness	<40 µm*
Motor Power	1.5 kW
Motor Speed	1400 rpm
Power Supply	220 V, 50 Hz, 3 phases
Grinding Options	Wet / dry

* Product fineness depends on sample properties, speed, cycle and grinding-media charge.

Included Components

Primary and Spare Ball Charges

Chrome-alloy grinding balls hardened by heat treatment.

Collection and Ball Separation

One primary and one spare product collection / ball-separation container.

Product Page | liyatest.com.tr/en/urun/bond-grinding-test-mill/