

Multi-Deck Roller Jar Mill

Reliable Construction: Made from M.S. body with a powder-coated finish for durability and long-lasting use.

Multi-Tier Arrangement: Supports simultaneous operation of multiple jars to maximize efficiency.

Adjustable Rollers: Accommodates jar sizes ranging from 2" to 10" in diameter. Made with high-quality neoprene or polyurethane coating for superior resistance to wear and chemicals.

Continuous Operation: Designed for 200 hours of unmanned, continuous operation with smooth, reliable performance.

No Cross Contamination: Designed to ensure no contamination between sample batches.

Powerful Drive System: Features a sealed ball-bearing roller chain drive, allowing speeds from 30 to 300 rpm with variable frequency drive (VFD)



Multideck Two Tier Jar Mill
(Polyuruthene Rollers)



Multideck Two Tier Jar Mill
(Polyuruthene)

Feature	Details
Construction	M.S. body with powder-coated finish for durability and protection
Arrangement	Multi-Tier system for simultaneous operation
Roller Coating Options	Neoprene or Polyurethane-coated rollers for superior resistance to chemicals and wear
Motor Capacity	1.0 HP, 415V AC, 50 Hz
Speed Control	Variable speed (30–300 RPM) via VFD
Jars	Up to 4 porcelain jars, with options for Alumina, SS, Zirconia, Tungsten Carbide, and Plastic
Grinding Media	Options for SS, Zirconia, Polymer, Tungsten Carbide, and Alumina grinding balls
Timer and Programmable	Programmable forward/reverse operation with timing options from 1 minute to 200 hours
Automation	PLC control with HMI interface and touch screen for easy programming and operation monitoring
Dimensions	Approx. 1500 (L) x 500 (W) x 1000 (H) mm
Power Supply	415V AC, 50Hz
Control System	PLC, HMI, VFD for precise control over operation parameters

Optional Customization:

Tiers: Choose from Single, Two, or Three-tier configurations to suit your production needs.

Soundproofing: Available option to reduce noise levels during operation for a quieter workspace.

Roller Coating: Select from Neoprene or Polyurethane coatings for the rollers, ensuring durability and chemical resistance.

Jar Options: Available jars include Alumina, Stainless Steel (SS), Zirconia, Tungsten Carbide, Plastic, and Porcelain in sizes from 100ml to 100L.

Grinding Balls: Choose from Stainless Steel (SS), Zirconia, Polymer, Tungsten Carbide, or Alumina grinding media for optimal performance.



Multideck Three Tier Jar Mill
(Neoprene)

Multi-Deck Roller Jar Mill

Automation System Highlights:

Programmable Logic Controller (PLC): Provides intelligent control and automation, allowing easy programming of operation cycles and parameters.

Human-Machine Interface (HMI): 7" touchscreen interface for intuitive operation, with control over program settings, including forward/reverse timings, speed, and total run time.

Variable Frequency Drive (VFD): Allows adjustable speeds from 30 to 300 RPM for precise grinding or mixing operations.



Multideck Three Tier Jar Mill
(Neoprene)

Applications:

The Multi-Deck Roller Pot Mill is perfect for:

- Ceramic slurry preparation
- Mineral processing
- Chemical mixing and grinding
- Paint and pigment production
- Research and development laboratories



Multideck Two Tier Jar Mill
(Soundproof Model)



Multideck Two Tier Jar Mill
(Soundproof Model)

Planetary Ball Mill (Mono Mill)

Planetary Motion for Optimal Collision Rate

The unique planetary rotation generates a high collision frequency, ensuring intensive grinding and mixing.

Ideal for applications that require ultra-fine grinding, capable of reducing particle sizes down to the nano scale.

Versatile Grinding Options

Offers a selection of jars and variable ball diameters for customizable grinding setups.

Planetary motion ensures uniform particle size distribution for optimal blending.

Robust Construction

Built with high-quality materials for both jars and balls, ensuring durability and consistent performance.

Self-lubricated belt drive system provides smooth, maintenance-free operation.

Advanced Control System

Microprocessor-controlled digital RPM for precise speed adjustments.

Programmable timer for setting specific grinding duration.

Safety and User-Friendly Operation

Equipped with input and output fuses to enhance operational safety.

Low-noise functionality for a quieter, more comfortable workspace.

Extended Operational Capability

Supports continuous operation for up to 10 hours.

Specifications

Category	Details
Grinding Jar Material Options	Tungsten Carbide (TC) or Stainless Steel (SS)
Jar Volume Options	SS: 250, 500, 750, 1000 ml TC: 250, 500 ml
Grinding Media Material Options	Tungsten Carbide (TC) or Stainless Steel (SS)
Grinding Media Ball Sizes	Variable diameters to suit application requirements
Total Number of Balls	20-100
Maximum Speed	Up to 600 RPM (Variable)
Drive Mechanism	Self-lubricated belt drive
Continuous Operation	Up to 10 hours
Grinding Method	Planetary rotation for uniform grinding



Planetary Ball Mill (Mono Mill)

Control System

Category	Details
RPM Control	Adjustable, with digital RPM display
Motor	0.5 HP, 230V, 50Hz, Variable Frequency Drive
Programmable Timer	Set grinding time as needed
Indications	RPM indicator for real-time monitoring
Safety	Input and output fuses for protection
Control Switches	Mains on/off and motor on/off
Noise Level	Minimal, for a quieter work environment

Jar and Grinding Media Options

Jar Options

Stainless Steel (SS) Jars

Available Volumes: 250 ml, 500 ml, 750 ml, 1000 ml

Suitable for general applications with medium wear resistance.

Tungsten Carbide (TC) Jars

Available Volumes: 250 ml, 500 ml

Ideal for high-wear applications and grinding of hard materials.



Planetary Ball Mill (Table Top)

Flexible Milling Modes

Supports both dry and wet milling for diverse applications.

Operates with 2 or 4 jars simultaneously for efficiency.

Wide Material Compatibility

Handles a range of materials: soft, hard, brittle, fibrous, cellulose, glass, soil, ore, chemicals, and more.

Precise Controls and Long Operation

Adjustable rotational speed (70–670 rpm).

Maximum continuous operation time: 72 hours.

Versatile Grinding Options

Offers a selection of jars and variable ball diameters for customizable grinding setups.

Planetary motion ensures uniform particle size distribution for optimal blending.

Advanced Control System

Microprocessor-controlled digital RPM for precise speed adjustments.

Programmable timer for setting specific grinding duration.

Safety and User-Friendly Operation

Equipped with input and output fuses to enhance operational safety.

Low-noise functionality for a quieter, more comfortable workspace.



Category	Details
Maximum Jar Volume	500 ml per jar
Milling Modes	Dry and Wet
Work Modes	2 or 4 jars working together
Rotational Speed	70 – 670 rpm, Adjustable
Revolution-to-Rotation Ratio	1:2
Input Granularity	<10 mm (soft materials), <3 mm (hard materials)
Output Granularity	Minimum 0.1 µm
Material Capacity	Material + balls <2/3 jar volume
Machine Weight	80 kg (without jars)
Machine Size (L×W×H)	750 × 470 × 590 mm
Voltage	220V, 50Hz / 110V, 60Hz
Grinding Jars	Stainless Steel, Zirconia, Alumina, Tungsten Carbide
Grinding Mediums	Stainless Steel Balls, Zirconia Balls, Alumina Balls, PU Balls, Tungsten Balls
Continuous Operation	Up to 72 hours

Single Roller Jar Mill

Robust Construction

M.S Body with Powder Coating: Durable and resistant to wear and corrosion.

One-Tier Design: Accommodates jars of different sizes for versatile applications.

Precision Roller Design

Rubber-Coated Rollers: Highly resistant to mechanical wear and chemical attack.

Sealed Ball Bearing Pillow Blocks: Ensures smooth and consistent rolling operation.

Smooth and Versatile Operation

Suitable for wet or dry grinding processes.

Supports continuous operation for enhanced efficiency.

Advanced Control System

Equipped with VFD speed control for adjustable operation up to 300 RPM.

Features automatic timers for precise control over grinding durations.

Compact and User-Friendly

Space-saving dimensions: 400 × 300 × 500 mm.

Includes essential safety features like emergency stop buttons.



Category	Details
Construction	M.S with powder coating
Arrangement	One-tier for different jar sizes
Roller Coating Options	Rubber-coated, wear-resistant
Roller Mounting	Sealed ball bearing pillow blocks
Dimensions	Approx. 400 × 300 × 500 mm
Power Supply	230 V, AC, 50 Hz
Motor Capacity	0.5 HP
Drive	Belt drive
Speed	Adjustable up to 300 RPM
Operation	Wet or Dry
Jars	Customer scope
Controls	Automatic for precise timing
Indicators	On/off switch, emergency button
Speed Control	Via VFD

Table top Jar Mill

Ultra-Compact Design

Space-efficient tabletop model, perfect for laboratories with limited space.

Designed for convenience without compromising on functionality.

Robust and Reliable Construction

Built with a durable M.S body with powder coating for resistance to wear and corrosion.

One-tier design accommodates jars of varying sizes for flexible applications.

Precision Roller System

Rubber-coated rollers: Provide excellent grip and are resistant to wear and chemical attack.

Mounted on sealed ball bearing pillow blocks for smooth, consistent operation.

Flexible and Efficient Operation

Handles both wet and dry grinding processes.

Operates continuously at speeds of up to 300 RPM, ensuring efficient grinding.

Energy-Efficient Motor

Equipped with a 0.25 HP motor, providing the right balance of power and energy efficiency.

Intuitive Controls for Ease of Use

Automatic timer for precise grinding duration control.

Features an on/off switch, emergency button, and VFD-based speed control for user-friendly operation.



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Power Supply	230 V, AC, 50 Hz
Motor Capacity	0.25 HP
Drive	Belt drive
Speed	Adjustable up to 300 RPM
Operation	Wet or Dry
Jars	Customer scope
Timer	Automatic for precise timing
Indicators	On/off switch, emergency button
Speed Control	Via VFD