

# 2L Vacuum Planetary Mixer Machine For Battery Slurry Mixing

# **Basic Information**

• Price:

Place of Origin: China
Brand Name: MRBEST
Certification: CE
Model Number: MR-XJB-7
Minimum Order Quantity: 1 Set

Packaging Details: Standard Export Wooden Packing

Negotiable

• Delivery Time: 7-20 working days

Payment Terms: T/T, Western Union, MoneyGram

• Supply Ability: 500 sets per month



# **Product Specification**

Name: Vacuum Planetary Mixer MachineApplication: For Powder And Liquid Mixing And

Dispersing

30~60%

• Adapt To The Working 1000~300000 MPas

Viscosity Range mPas:

Applicable Solid Content

(%)

Design Total Volume: 3.8LEffective Volume: 1.2L-2L

• Highlight: Vacuum Planetary Mixer Machine,

2L Planetary Mixer Machine

# Cylindrical Cell Machine 2L Vacuum Planetary Mixer Machine For Battery Slurry Mixing



Model: MR-XJB -7-2L

#### **Product Introduction**

This MR-XJB -7-2L Small Planetary Mixer is a high efficient equipment with a set of vacuum mixing and dispersion function together, it is suitable for lithium electricity experiment process for anode and cathode paste mixing process, and also other glue, chemical and other industries.

The vacuum planetary mixer is programmable in vacuum operation , raising or lowering , speed adjusting by the frequency inverter , temperature show/control , urgent stop , and so on

The vacuum planetary mixer is excellent for preparing LiCoO3, LiFePO4, Phosphors and ceramic slurry without gas bubble. And the processed material results in the better dispersion and uniformity.

#### **Specifications**

#### Features:

Used for different powder and liquid mixing and dispersing, finally get a uniformly mixed slurry. Ideal for highly viscous processes.

Adapt to the working viscosity range(mPas): 1000~300000 mPas Applicable solid content (%): 30~60%

### **Main Parameters**

MR-XJB-7-2L		
3.8L		
1.2L-2L		
180mm		
150mm		
The contact part with material is 304 stainless steel		
Single-layer jacket, for cooling or heating		
G3/8", with quick-open type union, jacket pressure resistance ≤0.4MPa		
Prepared by customer Suggest the temperature of jacket inlet ≤ 8 , and the cooling water flow > 1.5 L/min		
No discharge port at the bottom of the barrel		
-10 120°C		
No		
5-50 hz		
0.75 kw		
8-76 rpm		
5-52 rpm		
94 mm		
Variable cross-section spiral type, 90 ° helix		

Mixing blade line-speed	0.03-0.37 m/s		
Mixing blade number	2 pcs		
Distance between mixing blades	6±1 mm		
Distance between balde and	0±111111		
barrel	3+1 mm		
wall			
Distance between blade and			
barrel	2-3 mm		
bottom			
Dispersing Parts	<u> </u>		
Working frequency	5-50 hz		
Dispersing power	1.1 kw		
Dispersing speed	450-4450 rpm		
Dispersing plate diameter	60 mm		
Dispersing plate type	Serrated		
Dispersing plate material	304 stainless steel		
Dispersing line-speed	1.3-13 m/s		
Dispersing number	1 pcs		
Dispersing shaft number	1 pcs		
Dispersing share humber	Scraping bracket material: 304 stainless steel		
	Scraper board material: PTFE		
	Wall scraping speed: consistent with the speed of		
Wall-scraping parts	the planetary box		
	Removable: Removable design (removal of the		
	scraping wall during high-viscosity process)		
	Parts material: High rigid structure carbon steel		
Base and Lifting Parts	Lifting method: hydraulic lifting		
	Lifting guide: guide rod		
	Lifting stroke: ≤225mm		
	Upper barrel material: 304 stainless steel		
	Powder and liquid feeding port: DN40, and hopper		
	1pcs		
Upper Barrel Parts	Mirror port: DN40 tempered glass mirror 1pcs Spotlight: DN40 tempered glass mirror 1pcs		
	Vacuuming port: G1/2" coupling 1pcs		
	Exhaust port: shared with the vacuum port		
	Digital vacuum gauge port: M14×1.5		
	Electrical cabinet: used to house low-voltage		
	electrical components such as inverters		
	Operation panel: used to place buttons, knobs, etc.		
	Power supply: AC 3×380V±5 , 50Hz		
	Control method: electric control		
	Power control and speed regulation mode: inverter		
	start and control		
Control System	Cooling method: air cooling		
	Operation mode: panel operation, button and knob		
	Digital temperature display: material temperature		
	Emergency stop button: 1 pcs Alarm system: over temperature alarm, over		
	temperature alarm shutdown, alarm shutdown		
	Speed display: the panel displays the speed		
	Power indicator: 1 pcs		

Safety System	Emergency stop: press the emergency stop switch, the equipment will stop immediately, and no operation can be performed Start low-speed mixing: mixing while lifting the barrel High speed dispersion: start mixing after the barrel is up to the position Safety lock during operation: when the machine is running, the mixing tank cannot be lowered and opened. Prevent the backflow of vacuum pipeline: the special design of vacuum buffer tank can effectively prevent the phenomenon of vacuum pump oil backflow to the mixing tank Operation failure stop: the inverter has its own overload, overcurrent, overvoltage, leakage, lack of equal protection The mixing barrel rises and falls: the mixing barrel can only rise after it is in place The vacuum in the mixing tank cannot be lowered without exhausting the vacuum (not returning to normal pressure) The mixing tank can only be started after the high-speed dispersion is in place. After the mixing tank rises to the position, it is equipped with a locking protection system to prevent the mixing tank from falling abnormally during operation. Dry mixing stage, while the barrel rising, the mixing
Other Description	Diade need to mix at the same time.  Temperature measuring probe: Pt100 Temperature measurement method: the temperature probe is installed on the wall of the barrel to detect the temperature of the material Bearings for transmission components: high-speed components are imported bearings, and low-speed components are domestic bearings Oil seal: domestic brand, O-ring for static seal, mechanical seal for dynamic seal Lubricating grease: domestic brand Mechanical seal lubricant: imported brand Valves: domestic brands Vacuum design requirements: optional, or customer prepare a vacuum pump, pumping capacity 2L/S Vacuum maintenance: -0.098Mpa, keep the pressure for 24 hours > -0.085Mpa, no leakage into the barrel Total power: >3kw Total weight: about 550kg Dimensions: L1000mm×W700mm×H1835mm Appearance color: beige Floor load: 900kg/

# **Complementary Condition**

Item	Standard Requirement
Workshop height	>2M
Door size	Height >2M, width >1M to ensure the machine in and out.
Cooling water	To ensure cooling requirements, it is best to have a cooling water supply system. If heat preservation is required in winter, hot water supply is required.
Warm air	For cold weather, in order to prevent the hydraulic oil used for lifting from condensing, it is necessary to ensure that the indoor temperature is >20 °C to ensure the smooth lifting of the machine and the normal operation of the lubricating system.
Gas source	5 7 kgf/cm <sup>2</sup> , 100 l/min. Pneumatic pump drive and other situations.
Other	Non-corrosive gas, liquid, explosive gas.

# **Quick-wear Parts go with Machine**

Name	Material	QTY
Upper cover sealing ring	Silica gel	1
Mirror seat seal	Silica gel	2
Feed port gasket	Silica gel	1
High speed mechanical seal	C+SiC	1
High speed timing belt	rubber	1
Scraper	Teflon	1
Mirror glass	Tempered	2

#### **Our Advantages**

- 1. Steady and high quality !-cause we are a manufacturer of Lithium Battery Equipment, and we only focus on one thing that is make professional Lithium ion Battery Equipment for customer around the world.
- 2. Friendly use! all MRBEST Battery Equipment with teach manual and support live teaching via media.
- 3. Reliable factory! My factory located in Shenzhen city of China, support factory visit and video factory visit .
- 4. 1 year warranty plus lifetime technical support.
- 5.All the parts use on machine, in stock forever.
- 6. Powerful technical support, NOT TRADE COMPANY! We are professional on Lithium Battery Equipment, the chief engineer

more than 20 years experience on lithium battery area, so we can easy do diagnose on machine if customer have question.

7. 100% PATIENCE to all customers! Our patience not only before consult order, also after-sale service, one by one .





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