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Provide A Full Set Of Solutions For Battery Machines.

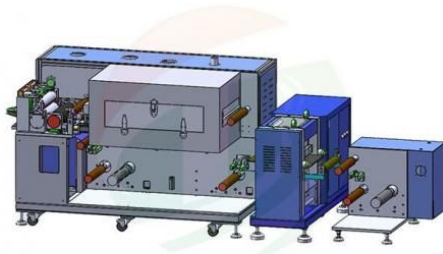
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## Battery Electrode Intermittent Coating And Roller Press Machine



This is an intermittent battery coating and roller press machine for battery electrode preparation.

- Brand:TOB NEW ENERGY
- Item No.:TOB-TBJY300-1J
- Order(Moq):1
- Payment:L/C,T/T,Western Union,paypal
- Product Origin:China
- Shipping Port:xiamen
- Lead Time:30 days

## Product Detail

Lithium ion Battery Electrode Intermittent Coating and Roller Press Machine

## SPECIFICATIONS

This intermittent coating and roller pressing machine is a three roller transfer coating equipment, it can carry out continuous and intermittent coating, and then roll with high precision, it is used for surface coating and rolling process of various substrates. This equipment is convenient for researchers to use, and meets the requirements of coating accuracy and consistency, which is the same as the design of production. It has excellent drying effect. It is an ideal choice for the research and development of lithium-ion batteries, super capacitors, nickel batteries and other secondary batteries.

### Main features

No	Features
1	It can switch freely to realize continuous and intermittent coating.
2	Base material tension control, stable belt running, equipped with rectifying device.
3	Hot air oven, up and down double-sided blowing, high quality drying effect.
4	Three roller transfer coating with wide coating window.
5	Comma scraper metering, with precise adjustment mechanism, to achieve high coating precision.
6	Optional solvent recovery and treatment device.
7	Roll integral gantry frame, CNC precision machining, to ensure high precision and high stability.
8	The roller is made of imported cold-rolled chrome molybdenum material by heat-treated surface chrome plating and cryogenic treatment, with high internal and external hardness and good wear resistance.
9	American original imported hydraulic system, automatic control rolling pressure.
10	Patented hydraulic balanced rolling mechanism, stable pressure maintaining, good rolling uniformity in transverse and longitudinal direction.
11	Inclined block type roll gap adjustment device, surface display adjustment.
12	PLC touch screen is convenient to control parameter setting.
13	Roll continuously to avoid cutting waste.
14	The winding mechanism is equipped with an automatic deviation rectifying device to ensure that the edge of the material after rolling is neat.

## Coating function

No	Item	Technical parameter	Remark
1	Suitable system	NCM, LFP, LCO, LMO, Graphite, Silicon carbon and other systems battery coating	
2	Coating method	Continuous and intermittent coating	Transfer coating machine
3	Oven section	1m/section	
4	Coating speed	0~0.5m/min	Depending on the drying state
5	Base material thickness	Al foil : 8~30um, Cu foil : 8~30um	
6	Roller width	330mm	
7	Effective coating width	≤280mm	
8	Coating roller	Φ120mm	
9	Squeegee roller	Φ80mm	
10	Coating accuracy	±3um	
11	Weight accuracy of double-sided coating (mg/cm <sup>2</sup> )	Coating center value ±1.0%	
12	Suitable for slurry viscosity	2000~12000 (mPas)	
13	Single side coating dry thickness range	20-200μm	
14	Solvent properties	Oily solvent NMP(s.g=1.033,b.p=204°C)	
		Aqueous solvent H <sub>2</sub> O/NMP(s.g=1.000,b.p=100°C)	
15	Suitable for solid content range	20~85%	

16	Coating size accuracy (mm)	$L \leq \pm 1, W \leq \pm 0.5$	L: length direction  W: width direction
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**\*Introduction to the structure of coating parts :**

**1. Integral unwinding, machine head mechanism :**

N o	Item	Technical Parameters	Remarks
1.	Over roller installation structure	Steel frame firmly installed	
2.	Over roller surface treatment	Surface oxidation of metal aluminum roll	
3.	Tension control system	Automatic control of constant tension, tension range 0 ~ 50N, servo motor control	
4.	Correction method	Automatic EPC control, Stroke 50mm	
5.	Feeding Unwinding material method	The material roll is fixed by a 3-inch inflatable shaft ;	
		Unwinding single air expansion shaft	
6.	Maximum unwinding diameter	$\Phi 250\text{mm}$	
7.	Maximum load of inflatable shaft	80Kg	
8.	Number of unwinding and inflation shafts	1Pcs	
9	Main drive motor	Servo motor	
10	Roller surface treatment	Surface oxidation of metal aluminum roll	
11	Scraper structure	Double-sided comma scraper	
12	Coating roller (steel roller)	Hard chrome plating	
13	Back roller (rubber roller)	The surface is wrapped with imported EPDM	

14	Scraper intermittent height adjustment	Manual adjustment;	
15	Single head position	Installation and operation before drying tunnel	

## 2. Coating drying tunnel

No	Item	Technical Parameters	Remark
1.	Oven structure	Double-layer independent heating, arranged up and down	
2.	Oven length	1 meter / section	
3.	Material	SUS304 stainless steel	
4.	Temperature control	Divided into normal working temperature control, over-temperature monitoring and alarm protection control, and cut off the heating main power supply; each section is completely independent control	
5.	Heating method	Analog signal control power heating, hot air circulation structure	
6.	Heating power of single section oven	6KW	
7.	Temperature in drying tunnel	Design Max150 °C, temperature difference in single section oven $\leq \pm 2.5$ °C	
8.	Blowing method	Upper and lower air blowing, common heating body for upper and lower air chamber	
9.	Wind nozzle structure	The nozzle slot is slotted by a special mold	
10.	Fan control	Contact control	
11.	Heating control	solid state relay	

12.	Fan material	SUS304 stainless steel	
13.	Solvent recovery system	Optional	

**\*Roller winding function :**

1	Rolling purpose	Roller press the battery material coated on aluminum foil or copper foil	Remark
2	Maximum opening thickness of rolling mill	2 mm	
3	Rolling width	Max 300 mm	

**\*Roller winding parameters :**

1	Rolling force	Max. 35T (Can be customized to increase)	Remark
2	Mechanical speed	Max.10m/min	
3	Roll diameter:	Φ200 mm ; Material : 9Cr3Mo	
4	Roller surface hardness	>HRC65	
5	Roller surface width	330 mm	
6	Pushdown mode	Hydraulic	
7	Rolling accuracy	±2.5 um	
8	Maximum opening of rolling mill	2 mm	
9	Reducer and gear box	Modular	
10	Rolling mill motor	AC frequency conversion motor	
11	Winding	With correction function and tension control function	

**\*Control System :**

No	Item	Technical Parameters	Remark
1	Main control system	Touch screen, PLC, servo system	
2	Operation mode	Manual, automatic, emergency stop; the whole machine can be operated before and after	
4	Alarm situation	When the device fails, the touch screen will display the corresponding correction screen	

**\*Hardware accuracy**

No	Item	Technical Parameters	Remarks
1.	Scraper	Round jump $\leq \pm 1.5\mu\text{m}$ , Ra0.4, straightness $\leq \pm 1.5\mu\text{m}$	
2.	Coating roller (steel roller)	Round jump $\leq \pm 1.5\mu\text{m}$ , Ra0.4 straightness $\leq \pm 1.5\mu\text{m}$	
3.	Glue roll	Round jump $\leq 10\mu\text{m}$ , straightness $\leq 10\mu\text{m}$	
4.	Roll	Round jump $\leq \pm 2\mu\text{m}$ , Ra0.4, straightness $\leq \pm 2\mu\text{m}$	
5.	Deviation correction	$\pm 0.2\text{mm}$	

**Equipment appearance size and weight: size L3100 \* W1040 \* H1100mm weight: about 1300KG installed caster feet.**

**PRODUCT DISPLAY**

