



**ALCO INTERNATIONAL CO.,LTD.**



**BL PANEL/BOARD LIFTER**

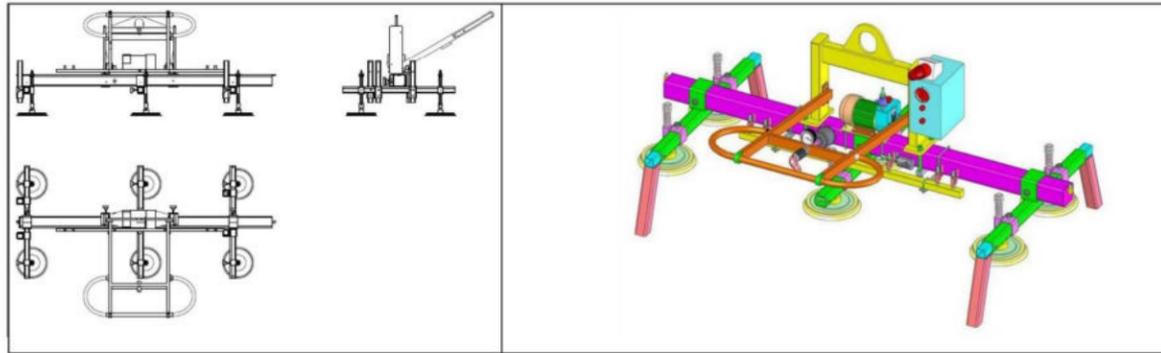


**BL Function**

- Max. 2000Kg
- Without damages
- One operator
- Acoustic warning
- Intergrated safety tank
- Imported Pump& Valve
- Efficient,safe,quick,easy
- SafetyTank& pressure switch warning
- Adjustable suction cups,
- can be turned off individually
- Design according to CE

**Application**

- Steel Boards
- Aluminium Boards
- Plastic Boards
- Glass Boards
- Stone Slabs
- Laminated chipboards



负载 kg	型号 MODEL	CUP SIZE MM	LIFTING WEIGHT KGS	VACUUM PUMP	电源 POWER			CONTROL	SELF WEIGHT KGS	MACHINE SIZE L*W*H MM
					VOLTAGE V	FRE. Hz	PHASE			
100	BL100-4-120	120	54	VT4.4	220/380	50/60	1/3	MANUAL	60	1800 x 800 x 500
250	BL250-4-230	230	210	VT4.4	220/380	50/60	1/3	MANUAL	65	1800 x 800 x 500
	BL250-6-150	150	84	VT4.4	220/380	50/60	1/3	MANUAL	70	1800 x 800 x 500
500	BL500-6-230	230	210	VT4.4	220/380	50/60	1/3	MANUAL	75	1800 x 800 x 500
	BL-500-8-200	200	150	VT4.4	220/380	50/60	1/3	MANUAL	75	2400 x 800 x 500
750	BL-750-2-450	450	750	VT4.8	220/380	50/60	1/3	MANUAL	95	2400 x 800 x 500
	BL-750-4-360	360	520	VT4.8	220/380	50/60	3	MANUAL	100	2400 x 800 x 500
	BL-750-6-300	300	400	VT4.8	220/380	50/60	3	MANUAL / ELECTRIC	100	2400 x 800 x 500
1000	BL-1000-4-360	360	520	VT4.16	220/380	50/60	3	MANUAL / ELECTRIC	160	2400 x 800 x 500
	BL-1000-6-300	300	400	VT4.16	220/380	50/60	3	MANUAL / ELECTRIC	180	2400 x 800 x 500
1250	BL-1200-12-230	230	210	VT4.16	220/380	50/60	3	MANUAL / ELECTRIC	240	3200 x 1000 x 500
	BL-1200-6-300	280	312	VT4.16	220/380	50/60	3	MANUAL / ELECTRIC	250	3200 x 1000 x 500
1500	BL-1500-6-360	360	520	VT4.25	220/380	50/60	3	MANUAL / ELECTRIC	290	3200 x 1000 x 500
	BL-1500-8-300	280	300	VT4.25	220/380	50/60	3	MANUAL / ELECTRIC	295	3200 x 1000 x 500
2000	BL-2000-8-360	360	520	VT4.25	220/380	50/60	3	MANUAL / ELECTRIC	320	3200 x 1000 x 500
	BL-2000-10-300	280	312	VT4.25	220/380	50/60	3	MANUAL / ELECTRIC	350	3200 x 1000 x 500

**Board Lifter Applications**

LASER/CNC CUTTING MACHINE, PUNCHING MACHINE, BENDING MACHINE FOR PANEL LIFTING/MOVING



激光切割机上料 1000kg 钢板 Steel Board



激光切割机上料 300kg 钢板 Steel Board



水刀切割上料 300kg Steel Board



产品搬运 500kg Steel Board



钢板吸吊机 1000Kg Steel Board



钢板吸吊机 200Kg Steel Board



钢板吸吊机 800Kg Steel Board



钢板吸吊机 500Kg Steel Board

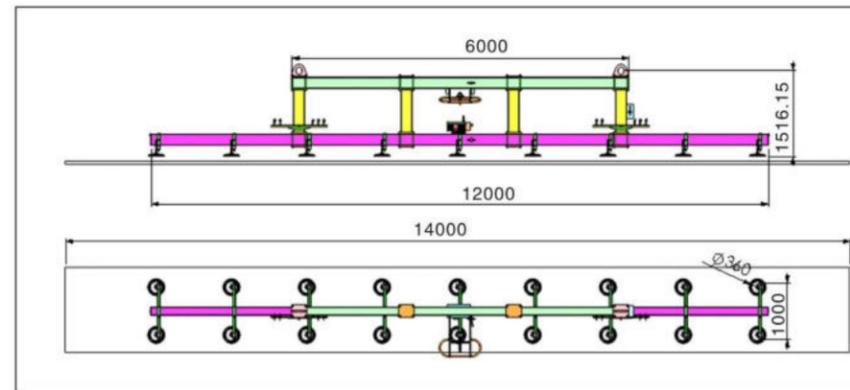
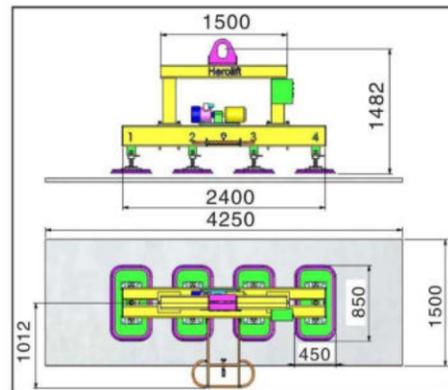
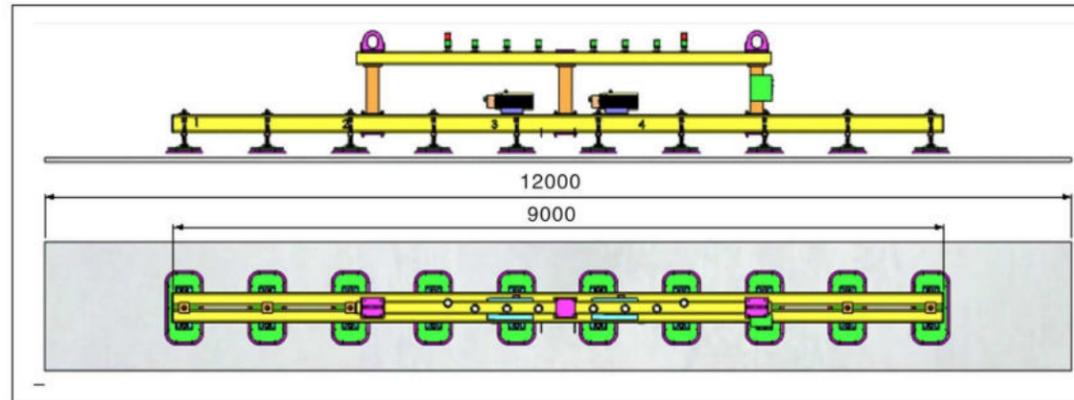
## BC Huge Lifter

### GI Function

Max. Capacity 20T  
 Acoustic warning  
 Intergrated safety tank  
 Imported Pump& Valve  
 Efficient,safe,quick,easy  
 SafetyTank& pressure switch warning  
 Adjustable suction cups, can be turned off individually  
 Design according to CE

### Application

Steel Plate Handling  
 Plate Un/Loading  
 Aluminum Handling  
 Alloy Plate Handling



PAYLOAD KGS	MODEL	CUP SIZE MM	CUP NO.	CONTROL	VACUUM PUMP	POWER			SELF WEIGHT KGS	MACHINE SIZE L*W*H MM
						VOLTAGE V	FRE HZ.	PHASE		
2500	HL2500-10	ϕ 360	10	MANUAL/ELECTRIC	VT4.16	380	50/60	3	500	4000 × 1000 × 1200
3000	HL3000-3	450 × 850	3	MANUAL/ELECTRIC	VT4.16	380	50/60	3	600	4000 × 1000 × 1200
4000	HL4000-4	450 × 850	4	MANUAL/ELECTRIC	VT4.16	380	50/60	3	780	4500 × 1000 × 1200
4500	HL4500-18	ϕ 360	18	MANUAL/ELECTRIC	VT4.25	380	50/60	3	1020	5000 × 1000 × 1200
5000	HL5000-5	450 × 850	5	MANUAL/ELECTRIC	VT4.25	380	50/60	3	140	4500 × 1000 × 1200
6000	HL6000-6	450 × 850	6	MANUAL/ELECTRIC	VT4.40	380	50/60	3	180	6000 × 1200 × 1200
8000	HL8000-8	450 × 850	8	MANUAL/ELECTRIC	R0063	380	50/60	3	250	9000 × 1200 × 1200

## Huge Lifter Applications



夹芯板Sandwich panel



铝板吸吊机2.5T Aluminum Board



碳钢板Carbon steel plate



不锈钢板搬运Stainless Steel board



铝板搬运 Aluminum Board



钢板搬运 Steel board

## Battery plate suction crane

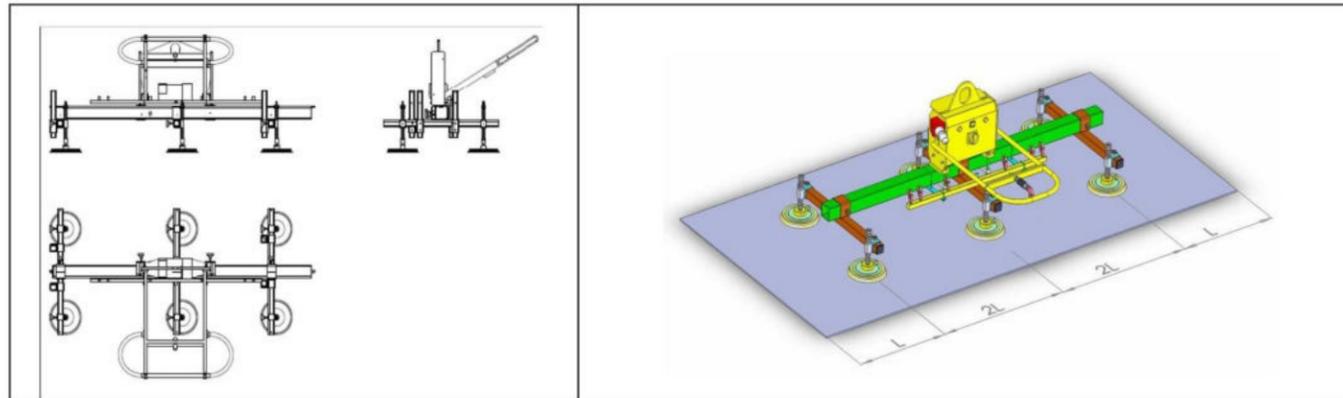


### BL Function

Max. 2000Kg  
Without damages  
One operator  
Acoustic warning  
Intergrated safety tank  
Imported Pump& Valve  
Efficient,safe,quick,easy  
SafetyTank& pressure switch warning  
Adjustable suction cups, can be turned off individually  
Design according to CE

### Application

Steel Boards  
Aluminium Boards  
Plastic Boards  
Glass Boards  
Stone Slabs  
Laminated chipboards



PAYLOAD KGS	型号 MODEL	CUP SIZE MM	LIFTING WEIGHT KGS	VACUUM PUMP	电源 POWER			CONTROL	SELF WEIGHT KGS	MACHINE SIZE L*W*H MM
					VOLTAGE V	FRE. HZ	PHASE			
100	BC-100-4-120	120	54	22D	12V DC	50/60	1	手动/电动	65	1800 × 800 × 500
250	BC-250-4-230	230	210	22D	12V DC	50/60	1	手动/电动	70	1800 × 800 × 500
	BC-250-6-150	150	84	22D	12V DC	50/60	1	手动/电动	75	1800 × 800 × 500
500	BC-500-6-230	230	210	22D	12V DC	50/60	1	手动/电动	80	1800 × 800 × 500
	BC-500-8-200	200	150	22D	12V DC	50/60	1	手动/电动	80	2400 × 800 × 500
750	BC-750-2-450	450	750	22D	12V DC	50/60	1	手动/电动	95	2400 × 800 × 500
	BC-750-4-360	360	520	22D	12V DC	50/60	1	手动/电动	100	2400 × 800 × 500
1000	BC-750-6-300	300	400	22D	12V DC	50/60	1	手动/电动	100	2400 × 800 × 500
	BC-1000-4-360	360	520	22D	12V DC	50/60	1	手动/电动	160	2400 × 800 × 500
1250	BC-1000-6-300	300	400	22D	12V DC	50/60	1	手动/电动	180	2400 × 800 × 500
	BC-1200-12-230	230	210	22D	12V DC	50/60	1	手动/电动	240	3200 × 1000 × 500
1500	BC-1200-6-300	280	312	22D	12V DC	50/60	1	手动/电动	250	3200 × 1000 × 500
	BC-1500-6-360	360	520	22D	12V DC	50/60	1	手动/电动	290	3200 × 1000 × 500
2000	BC-1500-8-300	280	300	22D	12V DC	50/60	1	手动/电动	295	3200 × 1000 × 500
	BC-2000-8-360	360	520	22D	12V DC	50/60	1	手动/电动	320	3200 × 1000 × 500
	BC-2000-10-300	280	312	22D	12V DC	50/60	1	手动/电动	350	3200 × 1000 × 500

## A case study of the application site of battery plate suction crane



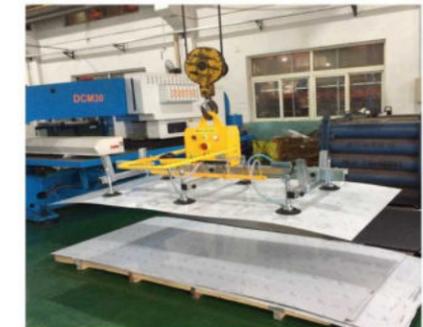
激光切割机上料 1000kg 钢板 Steel Board



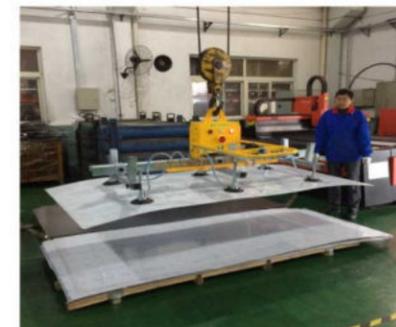
激光切割机上料 300kg 钢板 Steel Board



水刀切割上料 300kg Steel Board



产品搬运 500kg Steel Board



钢板吸吊机 1000Kg Steel Board



钢板吸吊机 200Kg Steel Board

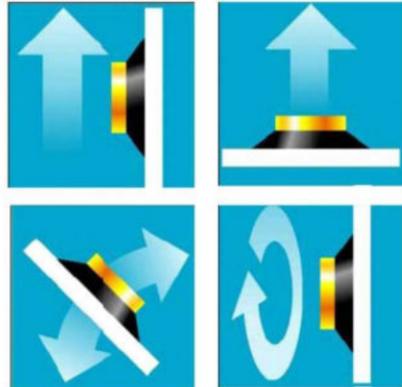


钢板吸吊机 800Kg Steel Board



钢板吸吊机 800Kg Steel Board

## Electric glass sucker



### GI Function

- Max. 2000Kg
- Turning, Swiveling
- One operator
- Acoustic warning
- Intergrated safety tank
- Imported Pump& Valve
- Efficient,safe,quick,easy
- SafetyTank& pressure switch warning
- Adjustable suction cups, can be turned off individually
- Design according to CE

### Application

- Glass Production
- Glass Curtain Wall
- Glass Loading/Unloading
- Outdoor mounting



PAYLOAD KGS	MODEL	CUP SIZE MM	TURNING DEGREES	FLIP FUCTION	CONTROL	VACUUM PUMP	原 POWER			SELF WEIGHT KGS	MACHINE SIZE L*W*H MM
							VOLTAGE V	FRE. Hz	PHASE		
200	GL200-4-90V	230	360度	无	手动	22D	12V DC	50/60	1	60	1200 × 800 × 500
400	GL400-4-90E	300	360度	90度	手动	22D	12V DC	50/60	1	90	1800 × 800 × 500
500	GL500-6-90E	300	360度	90度	手动	22D	12V DC	50/60	1	90	1800 × 800 × 500
600	GL600-6-90E	300	360度	90度	手动	22D	12V DC	50/60	1	100	1800 × 800 × 500
800	GL800-8-90E	300	360度	90度	手动	22D	12V DC	50/60	1	115	2500 × 1200 × 500
1000	GL1000-8-90E	360	360度	90度	手动	22D	12V DC	50/60	1	160	2500 × 1200 × 500

## Application case of the glass electric suction cup BL

CURTAIN WALL INSTALLATION, GLASS FACTORY LIFTING/MOVING/HANDLING.



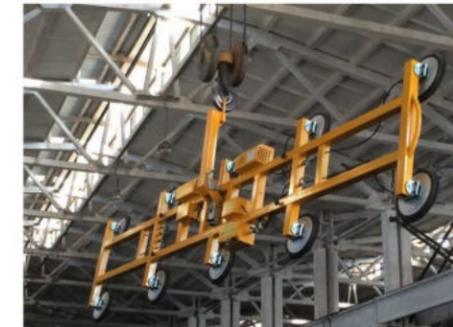
玻璃90度翻转/360度旋转400kg



玻璃90度翻转/360度旋转600kg



玻璃90度翻转/360度旋转800kg



玻璃90度翻转/360度旋转1000kg



玻璃90度翻转/360度旋转400kg



玻璃90度翻转/360度旋转1000kg

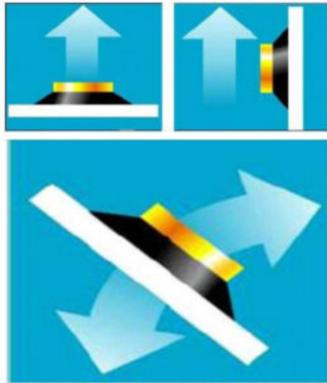


玻璃90度翻转/360度旋转800kg



玻璃90度翻转/360度旋转600kg

### Overturning suction crane

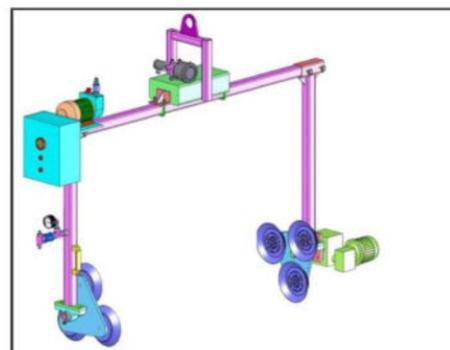
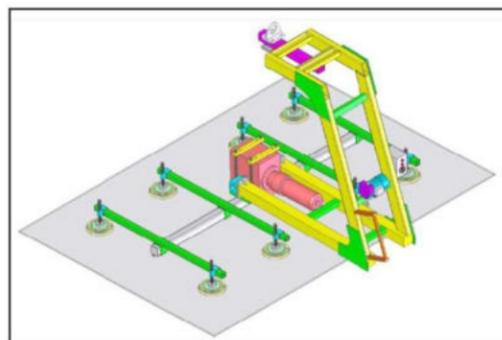
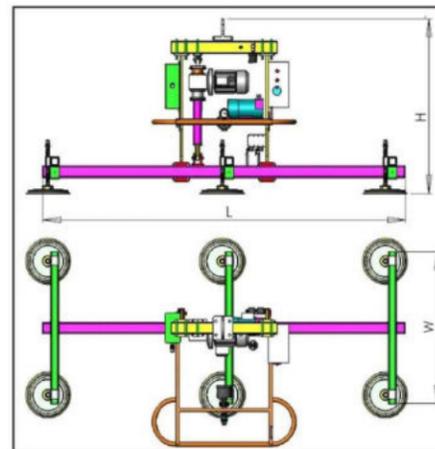
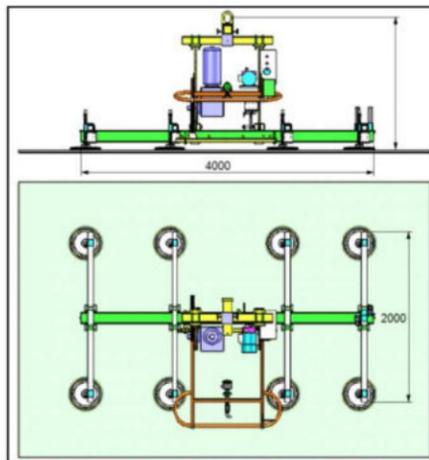


#### BSL Function

- Max. 2000Kg
- Vertical handling
- Lock at any position 0-90 degree
- Acoustic warning
- Intergrated safety tank
- Imported Pump& Valve
- Safety Tank& pressure switch warning
- Design according to CE

#### Application

- Glass Production
- Aluminum Wall
- Stone Slabs
- laminated chipboard
- Assembly



PAYLOAD KGS	MODEL	CUP SIZE D MM	LIFTING WEIGHT KGS	PUMP	POWER			CONTROL	SELF WEIGHT KGS	MACHINE SIZE L*W*H MM
					VOLTAGE V	FRE HZ	PHASE			
200	BSL200-4-90E	230	240	VT4.4	220/380	50/60	1/3	MANUAL	158	1800 × 800 × 600
400	BSL400-4-90E	300	400	VT4.4	220/380	50/60	1/3	MANUAL	170	2000 × 800 × 600
600	BSL600-6-90E	300	400	VT4.8	220/380	50/60	1/3	MANUAL	210	2500 × 1000 × 600
800	BSL800-8-90E	300	400	VT4.16	220/380	50/60	1/3	MANUAL	250	3000 × 1200 × 600
1000	BSL1000-6-90E	360	500	VT4.16	220/380	50/60	1/3	MANUAL	290	3000 × 1200 × 600
2000	BSL2000-12-90E	360	500	VT4.25	220/380	50/60	1/3	MANUAL	480	3000 × 1200 × 600

### Application case of flip suction crane site



90度 翻转500KG



90度 翻转600KG



90度 翻转500KG



90度 翻转800KG



90度 翻转2000KG



90度 翻转1000KG

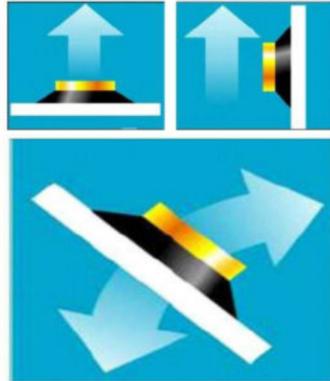


90度 翻转1000KG



90度 翻转1000KG

### Coil suction crane with coil

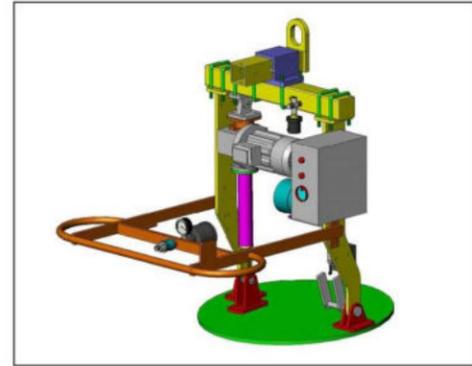
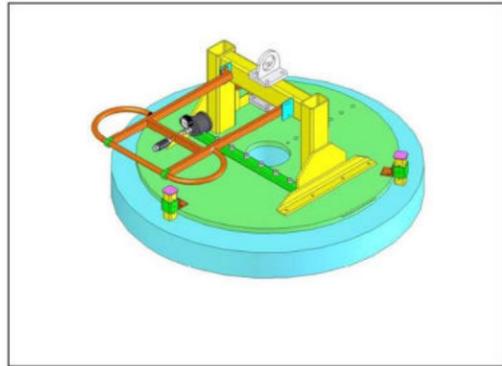


#### CI Function

- Max. 6000Kg
- Vertical handling, Swiveling
- Lock at any position 0-90 degree
- Acoustic warning
- Intergrated safety tank
- Imported Pump& Valve
- Safety Tank& pressure switch warning
- Design according to CE

#### Application

- Aluminum Coil Production
- Copper Coil handling
- Paper Coil handling
- Steel Coil handling
- Carbon Coil handling



PAYLOAD KGS	MODEL	CUP SIZE MM	LIFTING WEIGHT KGS	PUMP	电源 POWER			CONTROL	SELF WEIGHT KGS	MACHINE SIZE L*W*H MM
					VOLTAGE V	FRE. HZ	PHASE			
200	CI200	500	400	VT4.8	220/380	50/60	1/3	MANUAL	280	500 x 500 x 600
400	CI400	600	800	VT4.8	220/380	50/60	1/3	MANUAL	330	600 x 600 x 600
600	CI600	700	1200	VT4.16	220/380	50/60	1/3	MANUAL	360	700 x 700 x 600
1000	CL1000	900	2000	VT4.25	220/380	50/60	1/3	MANUAL	400	1000 x 100 x 600



带卷吸吊机100KG



带卷吸吊机500KG

### Application case of coil suction crane



带卷吸吊机1000KG



带卷吸吊机500KG



带卷吸吊机1000KG



带卷吸吊机1000KG



带卷吸吊机300KG



带卷吸吊机1000KG



带卷吸吊机200KG



带卷吸吊机200KG

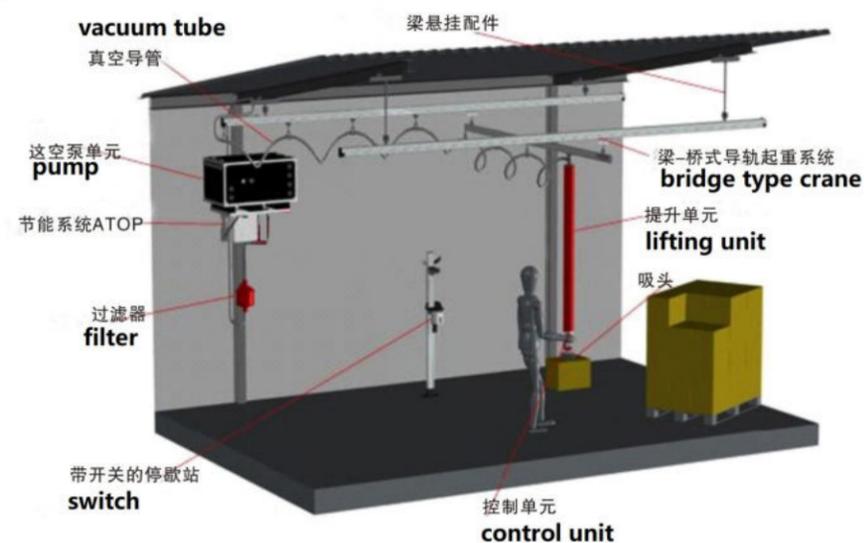
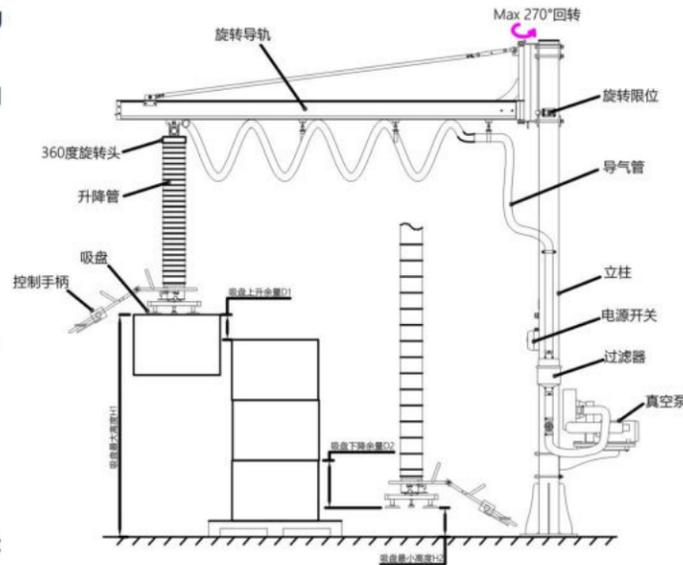
## Vacuum tube lifter

Vacuum tube handling machine is a material handling equipment that uses a vacuum pump to generate negative pressure in the internal circuit, forming an atmospheric pressure difference, and then obtains lifting force from the suction nozzle part.

### Applications

Vacuum tube handlers are widely used in the industry, capable of handling almost all materials. They are mainly used in industries such as chemical industry, pharmaceuticals, video, home appliances, tires, textiles, packaging, etc. They are commonly used for handling cardboard boxes, packaging bags, plates, rubber, home appliances, batteries, round rods, barrels, and various heavier products.

The handling speed is fast, flexible, and the lifting speed can reach 1 meter per second, improving production efficiency. The natural rubber material suction cup has no damage to the surface of the transported workpiece, and is integrated into a control handle for lifting, lowering, suction, and release. It is easy to operate and has a modular structure system, which can be updated at any time to adapt to new applications. Conforming to ergonomics, reliable safety performance, with a safety factor of 2-2.5 times, flexible installation method, optional column type or bridge type, small footprint, effectively reducing labor intensity, reducing strain risk, and low investment cost.



### 详情参数 Details about the parameters

Model	VLT100	VLT120	VLT140	VLT160	VLT180	VLT200	VLT230	VLT250
lifting weight	30	40	50	60	80	100	120	180
Tube length	2500/4000	2500/4000	2500/4000	2500/4000	2500/4000	2500/4000	2500/4000	2500/4000
Tube size D mm	100	120	140	160	180	200	230	250
Lifting height mm	1750/2500	1750/2500	1750/2500	1750/2500	1750/2400	1700/2350	1650/2300	1550/2200
Speed m/s	appr 1m/s	appr 1m/s	appr 1m/s	appr 1m/s	appr 1m/s	appr 1m/s	appr 1m/s	appr 1m/s
Control panel	Customized control panel							可定制
Sucking cup	option choice							选配
Vacuum pump	2.2kw	2.2kw	3.0kw	3.0kw	3.0kw	3.0kw	3.0kw	5.5kw

### 导轨形式 Rail Type

旋臂式 Jib Crane



立柱桥架式 H type rail



曲臂式 Traversing Jib Crane



悬挂桥架式 Suspension H type rail



## Carton handling

### Handling products

#### Moving cartons, wooden case, bags

Mainly used in the factory packaging box assembly line for piling and packaging, combined with rotary arm guide rails or bridge guide rails for trial use, it can achieve fast stacking and unstacking work. The entire process from suction lifting to release unloading can be as fast as 8 seconds. According to the size and weight of the cardboard box, a suitable number of rectangular or circular suction cups can be selected to meet various cardboard box adsorption and transportation work.



单吸盘  
适用于体积小,重量轻(35kg以下)的纸箱  
Single sucker  
Suitable for small size, light weight (35kg below) of the carton



VLT120/2.5型真空管搬运机搬运35kg纸箱流水线下料堆垛应用  
VLT120 / 2.5 vacuum tube handling machine handling 35kg carton assembly line cutting applications



双吸盘  
适用于体积较小,重量较轻(80kg以下)的纸箱  
Double sucker  
For smaller, light weight (80kg below) of the carton



四吸盘  
适用于体积较大,重量较大(60kg以上)的纸箱  
Four sucker  
For larger, heavier (60kg and above) cartons



顶吸+侧吸  
适用于体积小,重量较大,顶部吸附面积不够的纸箱  
Top suction + side suction  
Suitable for small size, heavy weight, the top of the carton area is not enough adsorption



一次吸附2个或多个纸箱  
Adsorb two or more cartons at a time

## Sack handling

### Handling products

Packaging bags including woven bags, kraft paper bags, PE bags

### Applications

It is widely used in industries such as chemical engineering, plastic particles, food and medicine, construction, etc. It can handle sugar bags, salt bags, fertilizer bags, rice bags, plastic particle bags, pharmaceutical powder bags, etc.

The assembly line is used for unloading and stacking, handling and feeding, commonly used for sugar bag pouring, plastic particles pouring into the reaction kettle, and bag suction using elliptical rubber or sponge suction cups. Stainless steel handling machines can be selected according to customer requirements.



50kg糖袋吸附  
50kg sugar bag adsorption



25kg纸袋吸附  
25kg paper bag adsorption



50kg蛇皮袋 50kg snake skin bag



50kg牛皮纸袋 50kg kraft paper bag

### 桶搬运 Drum handling

真空管搬运机对于各种桶类的搬运都能轻松胜任!



25-50kg粉料桶, 配圆形吸盘, 在医药, 食品, 化妆品厂可用于堆垛, 投料作业  
25-50kg powder bucket, with a round sucker, in medicine, Food, cosmetics factory can be used for stacking, feeding operations



吸电脑机箱  
Suction computer chassis



150kg原料桶, 配圆形大吸盘, 在食品化工厂可用于堆垛作业  
150kg raw barrels, with a large round sucker, In the food chemical plant can be used for stacking operations



30-70kg啤酒桶, 配海绵吸盘, 也可在侧面使用弧形吸盘吸附  
30-70kg beer barrel, with sponge sucker, Can also be used in the side of the suction cup suction



30-25kg胶块  
30-25kg plastic block



20-25kg原料  
20-25kg raw materials

## Coil vacuum handling

Moving aluminium coil, steel coil, copper coil

### Applications

Vacuum loading trucks are mainly used in the automotive condenser, air conditioning heat exchanger industry, replacing traditional manual or cantilever hook loading to achieve more labor-saving and safe auxiliary uncoiler loading

Sponge rubber material sealant strip has no damage to the surface of the coil material

Dual DC vacuum pump, maintenance free

Equipped with horizontal electric fine adjustment, front and rear electric fine adjustment, and slow down fine adjustment functions, the alignment between the coil center and the shaft center is more efficient

Car mounted dual display screen for easy observation of alignment and surrounding conditions, making it safer

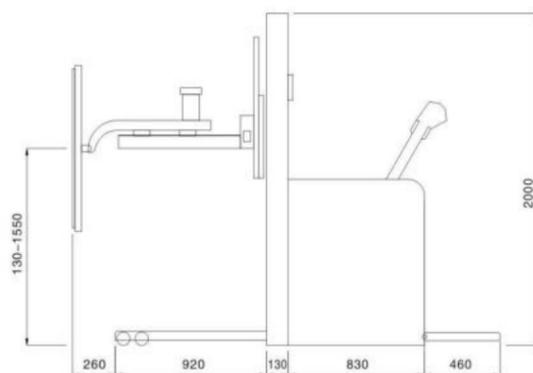
Transparent acrylic material suction cup, divided into three vacuum chambers, each of which can be opened and closed independently, matched with different diameter coils, with a wider range of applications.

Reliable safety performance, super suction, 4x safety factor

Low pressure alarm function



Model	MVCT200	VCT500	VCT1000
lifting weight	200KG	500KG	1000KG
lifting height	130-1400mm	130-1550mm	130-1500mm
pump	GAST 6m <sup>3</sup> /h 车体外置	GAST 6m <sup>3</sup> /h 车体外置	GAST 6m <sup>3</sup> /h 车体外置
Sucking cups	customized cup sizes		
Battery	24V/100Ah	24V/200Ah	24V/300Ah
Turning radius	≥2300mm	≥2800mm	≥3100mm
Control	Manual/Electric	Electric	Electric
handle control	with handle	with handle	with handle
Machine size	L ( 1600-1850 ) W1000 H2150	L ( 2340-2600 ) W1200 H2000	L ( 2490-2690 ) W1240 H1900
self weight	650KG	1120KG	1500KG
charging time	> 8小时	> 8小时	> 8小时



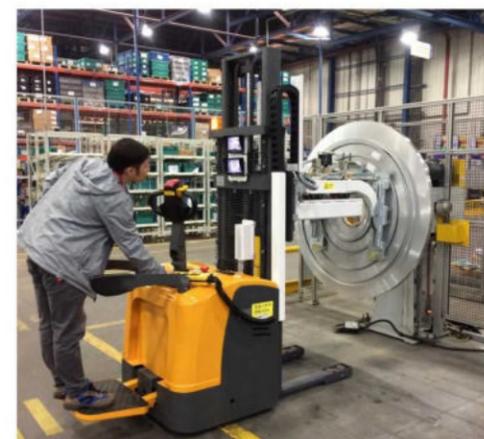
## Application case of coil truck



卷料搬运车300KG



卷料搬运车500KG



卷料搬运车500KG



卷料搬运车500KG



卷料搬运车300KG



卷料搬运车1000KG

## Stacking manipulator

Vacuum chuck manipulator suitable for loading and unloading in the processing platform and assembly line, using this type of equipment can help customers quickly transport parts, without labor, through the PLC programming and Servo motor, one-button operation can be easily completed the entire handling process cycle.

- A variety of plates, glass, cardboard boxes, assembly lines, such as loading and unloading
- Provide energy saving and labor saving
- High security, improve efficiency and quality
- Size can be customized load
- Can be applied to the workpiece below 400 degrees high temperature
- Can be automatically sub-Zhang handling

### Field application case of stacking manipulator



碳钢300kg Carbon steel 300kg



碳钢300kg Carbon steel 300kg



冷轧板350kg Cold-rolled plate 350kg



铝板150kg Aluminum 150kg



不锈钢100kg Stainless steel 100kg



防火板500kg Fire board 500kg



镀锌板200kg Galvanized plate 200kg

### Various of Vacuum Components

Sales& customized  
Suction Cups  
Vacuum gauges  
Vacuum Filters  
Vacuum Ejectors  
Vacuum Pumps  
Vacuum Valves



真空零配件 Vacuum Components



无油真空泵 Oilless Vacuum Pump



圆形真空吸盘 Suction Cups



方形真空吸盘 Suction Cups



大型真空吸盘 Big Cups



吸盘连接件 Fixing Elements



真空鼓风机 Vacuum Blower



真空压力表 Vacuum Gauge



真空发生器 Vacuum Ejectors



真空泵 Vacuum Pump



真空保压阀 Non-return Valve



真空压力开关 Vacuum Switch



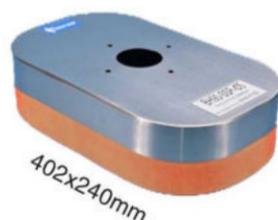
真空过滤器 Vacuum Filter



大型真空过滤器 Vacuum Filter



280x184mm



402x240mm



254mm



### 工程案例 Engineering case

有色金属	
激光切割	
航空铁路工程 机械汽车	
玻璃	
家电电器办公	
橡胶轮胎	
化工	
食品	
制药	
新能源	

To be Continued