

■ Purchase Requisition Document

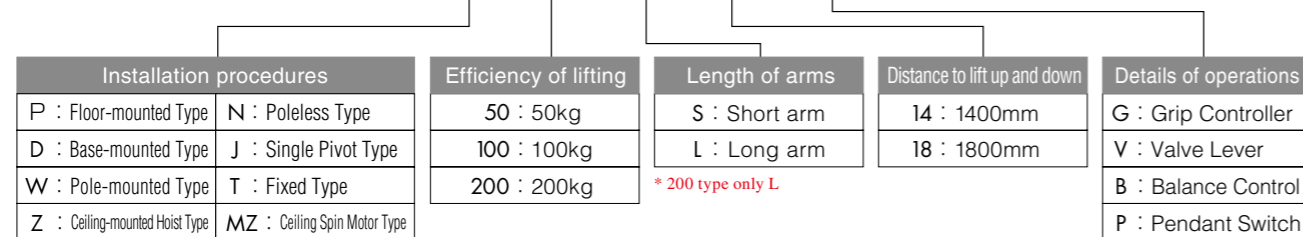
Customer Information	Company Name				Business Type		
	Address						
	Occupation Title				Authorized Personnel		
	T E L		F A X		e - mail		

Product Delivery Information	Project				Raw Material			
	Maximum Weight Load				kg	Number of lifters	Number of lifting points	
	Size Dimension	Max	Width	mm	Length	mm	Height	mm
		Min	Width	mm	Length	mm	Height	mm
	Lifting Method Preference	Pull • Grip • Suction • Others			Shape of moving objects			
	Remarks : In case of moving objects are cardboard boxes or paper bags, the company require to retain the sample for suction testing.							
Distance of Movement	Vertical			mm				
	Horizontal			mm				

Installation Information	Ceiling Height	from F.L	Equipped with air generator or not?	No • Yes	Mpa (kg./cm ²)
	Color	Standard color Munsell #6.25PB5-10 Specify Color ()			
	Required for installation?	Yes • No			
	Purchasing schedule				
	Machines required when purchasing	No • Forklift Truck • Hoist • Pulley • Crane			
	Model required				

■ Specify model

D50-L-14-G



* There is no 200 types of MZ and D

* B, P is optional.
Can not be combined B and G, and P.

Moving loads with ease and more safety



Mr. Catchman Air Balancer Weight Load Capacity : 50Kg./100Kg./200Kg.



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Hitachi Jûki Sekkei Co.,Ltd.

The solution to move loads with speed by using the balance control under any conditions with effectiveness.



Mr.Catchman Base-mounted Type
D50-S-14-G

Base Mounted LIFT 50kg ARMS Short UP&DOWN 1400mm Grip Controller



Mr.Catchman Pole-mounted Type
W200-L-18-V

Pole Mounted LIFT 200kg ARMS Long UP&DOWN 1800mm Valve Lever



Mr.Catchman Floor-mounted Type
P100-L-18-B

Floor Mounted LIFT 100kg ARMS Long UP&DOWN 1800mm Balance Control

What is Mr. Catchman?

We usually use human-controlled electric crane when moving the light weight load, which is complicated, slow and cause a back pain. Mr. Catchman utilizes the human-like hand movement for more efficiency, more versatile and more functional which the crane is unable to accomplish. After all, it keeps the users stay healthy.

Unique handle allows to use with different loading objects.
(Lifter Equipment)

We produce the highest efficiency handles to apply using with different loading objects. With our long extensive experience, we accept the offer and order to design a specific function of handle to optimize the precise usage and to meet the customer's requirements. (Please read page 7 & 8)

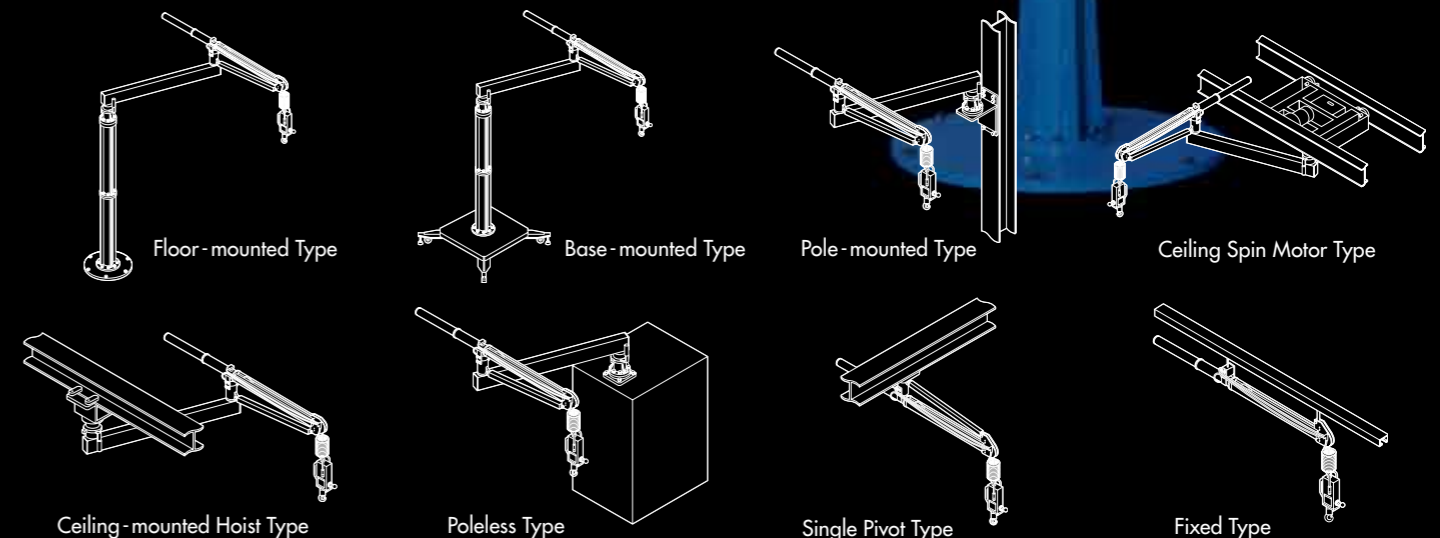
Powerful for long time hard work.
*Options Balance control

Example Usage : To lift up heavy tools like air impact wrench. Makes objects remain weightless to help relieve exhausted work from time consuming task.

Versatile usage available for different tasks

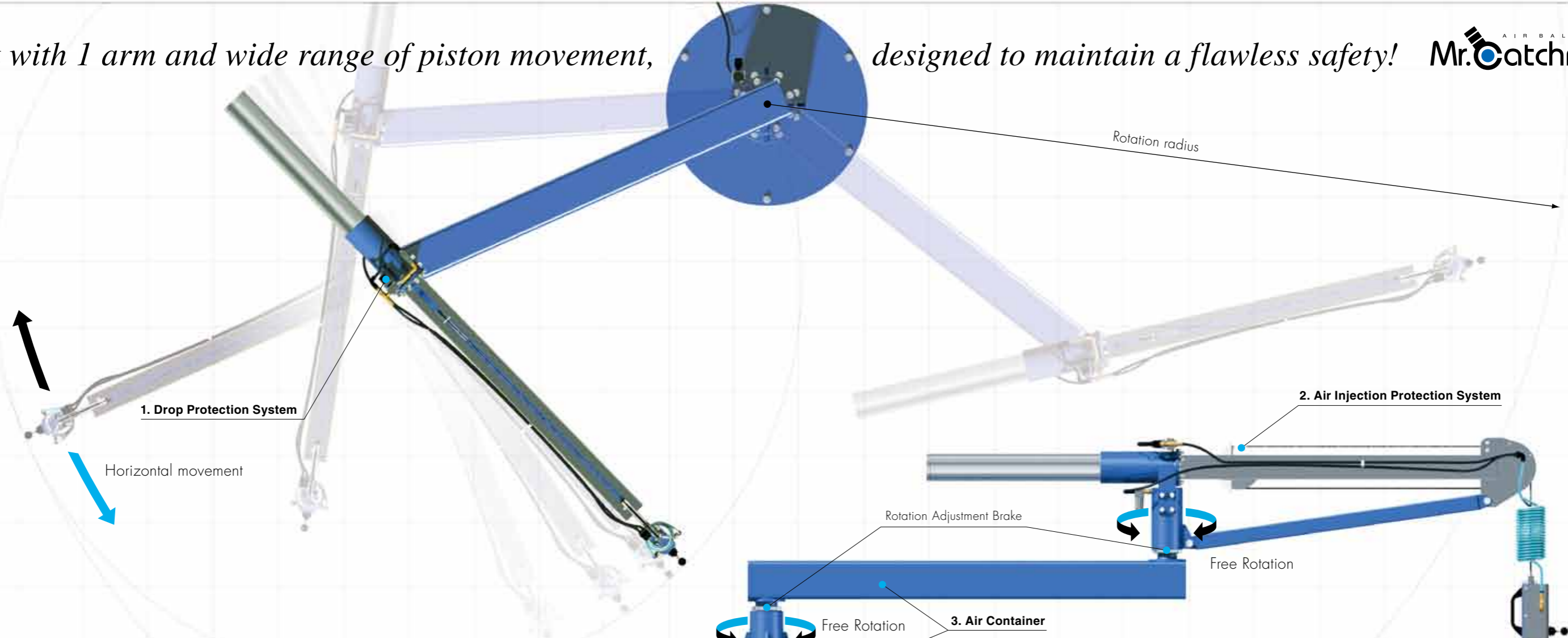
Totally 8 types of body-attached equipment. Allow to apply for all different usage. Especially for 50kg. and 100kg. There are options to choose ; short arm and long arm.

(Please select the type from the last page of catalogue)



Work with 1 arm and wide range of piston movement,

designed to maintain a flawless safety!



Features and Benefits

1. The movement (please select the Grip Controller¹⁾), utilize human-like handle unlike being seen on the electric crane. Hence reduce time consuming when moving loads. Able to adjust speed up or down according to the loads and speed control according to the power level changing.
2. Able to adjust the handle (Lifter equipment) according to air level.
3. Air pressure suction draws the weight of moving objects like a suction hand. Hence there is no impact to the objects and also promote more safety.
4. Control speed of the up and down movement by the air with ease. (Please select Valve Lever function²⁾)
5. Non-electrical appliance, and thus prevent explosions. Able to use in danger area.
6. Balance control function³⁾(optional), allow to move loads with ease according to the hand control assigned. Able to control direction for precise drop-off position.
7. Lift up super-heavy loads (ie, sanding machine). Handle weight load capacity from 0 kg. Up to maximum weight identified. Setup the balance control³⁾ (optional) and then move the objects up and down with ease.
8. Using electric crane causes dusty surrounding and the moving objects covered with dust. While our tool have air bumper to prevent dustiness.

What makes the balancer different from other manufacturer

1. The hanging cable mechanism makes it able to handle with various weight of object, by holding the object at one side and hanging the other side down, like a hand gripper. But in fact, 80-90% of moving load does not operate like that, and yet the cable mechanism can flip the moving objects. So therefore it can keep very well balance under low cost expense.
2. Uncomplicated structure and various adaptable installation. Besides, the spinning arm structure can be turned in horizontal direction, thus can be installed even in a low ceiling area.
3. Up and down movement control and catch the moving object with only one hand. (Please select Grip Controller¹⁾)
4. Design for easy installation with affordable price
(Please check out the installation method at <http://www.hitachi-juki.com/03products/pdf/suetsuke.pdf>)

Functions (Optional)

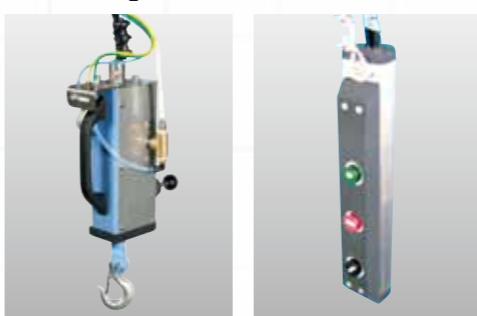


¹ Grip Controller ² Valve Lever

With the unique safety system

- 1. Drop Protection System (PAT)**
In case of the load is floating up and the air pipe gets broken accidentally which causes the air let out from the cylinder, the Drop Protection System will be engaged automatically by slowly moving the object down on the ground with speed of 1 meter/minute.
- 2. Air Injection Protection System (PAT)**
In case of loose sling occurred while the moving object is hanging afloat, caused the air to inject. The system will lock up not to exceed 10 cm. if the injection speed is beyond specified limit.
- 3. Electrical Failure Function**
There are air containers located within the pole and arm

Optional (Functions)



³ Balance Control Pendant Switch

Pressure decreasing valve Pressure gauge

for backing up the power to be used several times in case of electrical failure occurred. (number of times is subject to weight and amount of moving objects)

4. Explosion Protection
Non-electrical structure, operated by air to move object, so there is no contact between metal. Allow to be used with dangerous objects and works well in dusty environment.

5. Handle Switch Design
For example) In case of electric failure occurred, The air flow will be stopped. The Air Pressure Suction & Release system will be engaged and would cause free fall of loads. But the machine is designed according to the air release when the air pressure dropped down 1 level, by using the switch to put the objects on the ground before engaging Vacuum System.

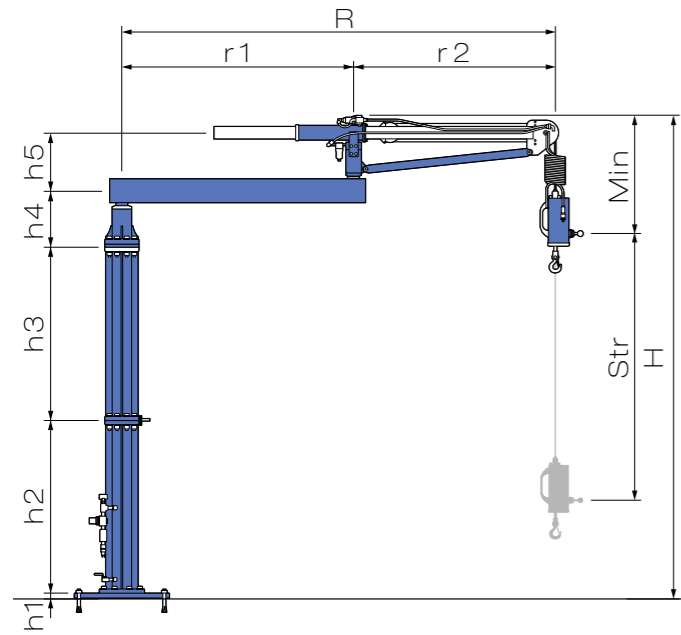
What kind of location can be used ?

Can be used anywhere that wanted to move loads and mostly used in the high production capacity facilities in every industry. For example ; Automobile, Steel Metal, Boat Construction, Power Generation, Electrical Appliances, Pharmaceutical Products, Food Products, Semi-Conductor and Agricultural Products.

(Please see the Samples of Application on Page 9 and 10)

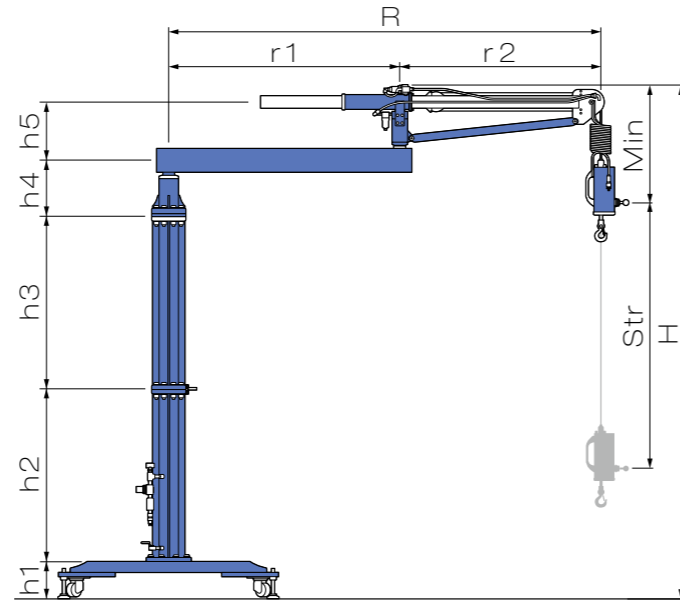
Up and Down Movement

P Floor-mounted Type



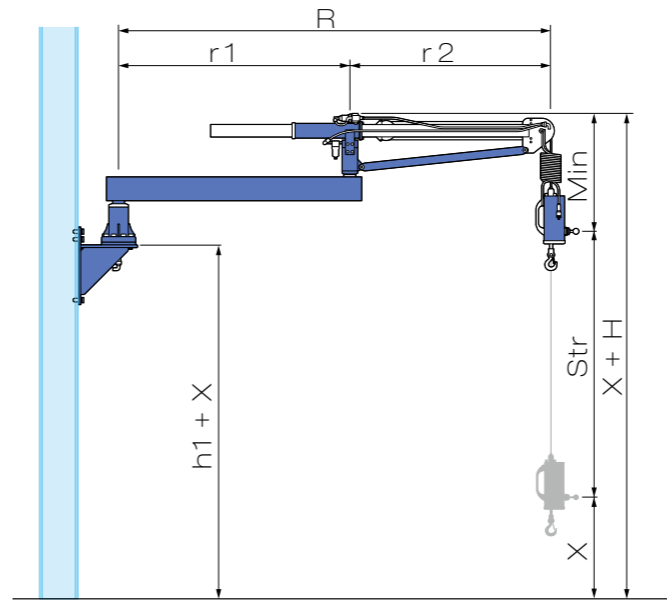
	H	h1	h2	h3	h4	h5	R	r1	r2	Str	Min
50kg Short	2535	22	910	910	297	306	2280	1220	1060	1400	600
50kg Long	2535	22	910	910	297	306	3000	1600	1400	1800	600
100kg Short	2545	25	875	800	348	393	2500	1340	1160	1400	600
100kg Long	2545	25	875	800	348	393	3000	1600	1400	1800	600
200kg Long	3175	25	1100	1100	382	451	3053	1600	1453	1800	770

D Base-mounted Type



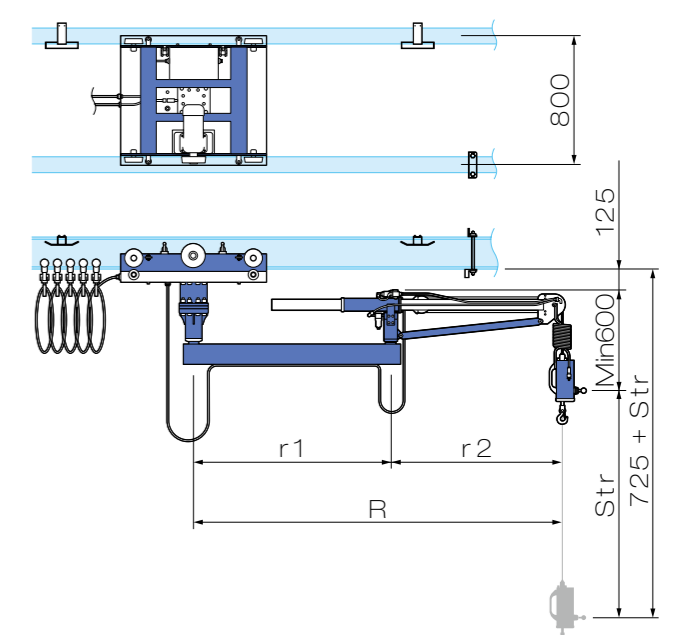
	H	h1	h2	h3	h4	h5	R	r1	r2	Str	Min
50kg Short	2710	197	910	910	297	306	2280	1220	1060	1400	600
50kg Long	2710	197	910	910	297	306	3000	1600	1400	1800	600
100kg Short	2737	217	875	800	348	393	2500	1340	1160	1400	600
100kg Long	2737	217	875	800	348	393	3000	1600	1400	1800	600
200kg Long	3396	245	1100	1100	382	451	3053	1600	1453	1800	770

W Pole-mounted Type



	H	h1	R	r1	r2	Str	Min
50kg Short	2000	1328	2280	1220	1060	1400	600
50kg Long	2400	1728	3000	1600	1400	1800	600
100kg Short	2000	1189	2500	1340	1160	1400	600
100kg Long	2400	1589	3000	1600	1400	1800	600
200kg Long	2778	1827	3053	1600	1453	1800	770

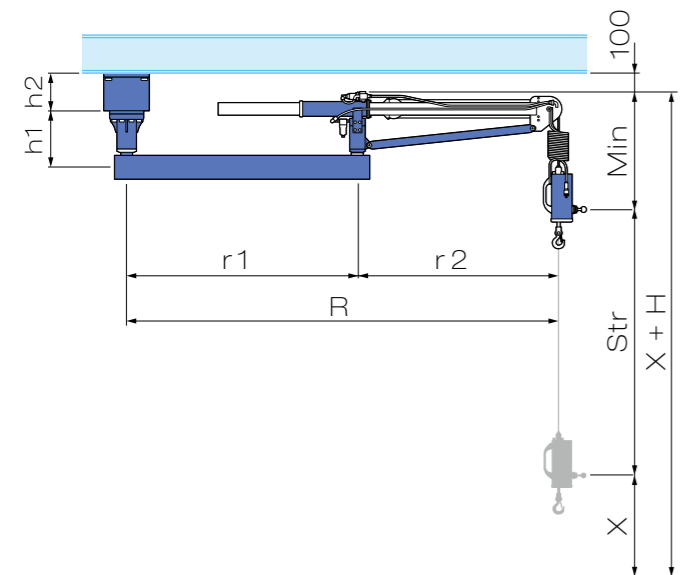
MZ Ceiling Spin Motor Type



* Client is responsible for track installation. (I shape size 100×200)

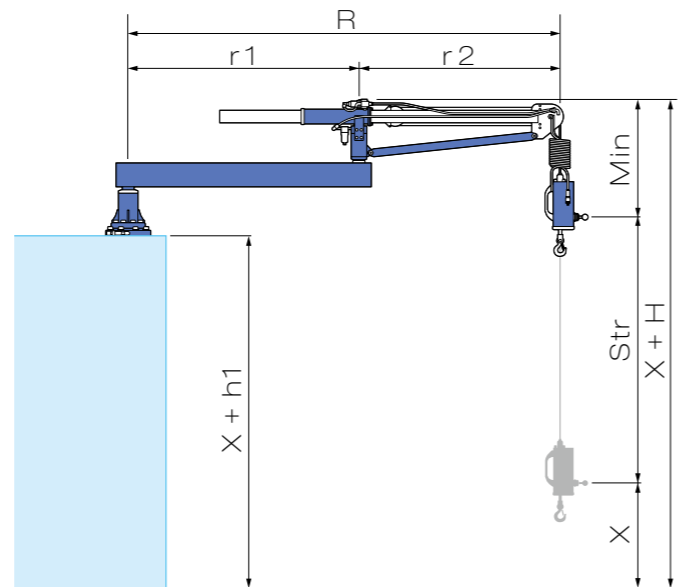
	R	r1	r2	Str
50kg Short	2280	1220	1060	1400
50kg Long	3000	1600	1400	1800
100kg Short	2500	1340	1160	1400
100kg Long	3000	1600	1400	1800

Z Ceiling-mounted Hoist Type



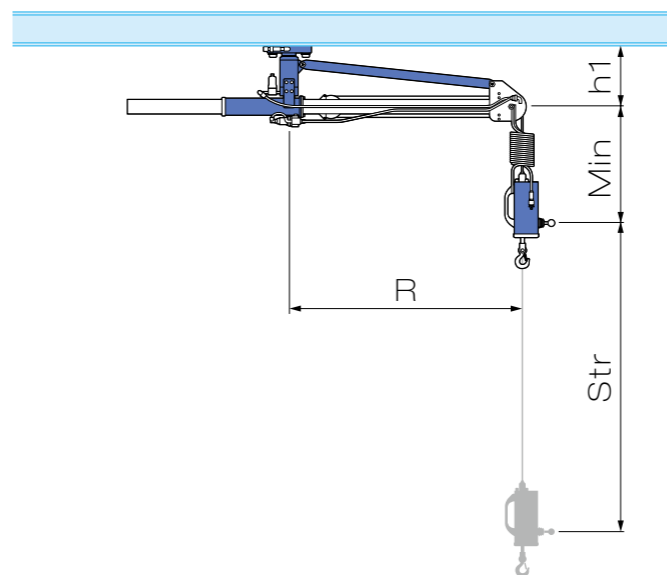
	H	h1	h2	R	r1	r2	Str	Min
50kg Short	2000	297	200	2280	1220	1060	1400	600
50kg Long	2400	297	200	3000	1600	1400	1800	600
100kg Short	2034	348	249	2500	1340	1160	1400	600
100kg Long	2434	348	249	3000	1600	1400	1800	600
200kg Long	2670	382	287	3053	1600	1453	1800	770

N Poleless Type



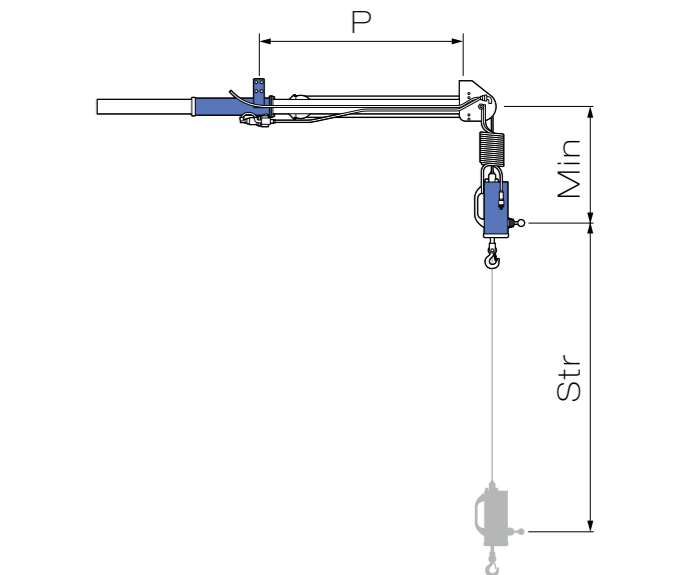
	H	h1	R	r1	r2	Str	Min
50kg Short	2000	1303	2280	1220	1060	1400	600
50kg Long	2400	1703	3000	1600	1400	1800	600
100kg Short	2034	1164	2500	1340	1160	1400	600
100kg Long	2434	1564	3000	1600	1400	1800	600
200kg Long	2670	1826	3053	1600	1453	1800	770

J Single Pivot Type



	h1	R	Str	Min
50kg Short	275	1220	1400	530
50kg Long	275	1400	1800	530
100kg Short	351	1340	1400	530
100kg Long	351	1400	1800	530
200kg Long	351	1453	1800	700

T Fixed Type



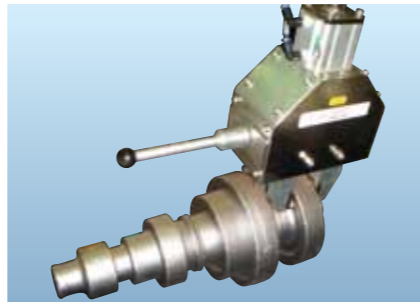
* Equipment was designed varied by installation format.

	P	Str	Min
50kg Short	926	1400	530
50kg Long	1265	1800	530
100kg Short	971	1400	530
100kg Long	1211	1800	530
200kg Long	1279	1800	700

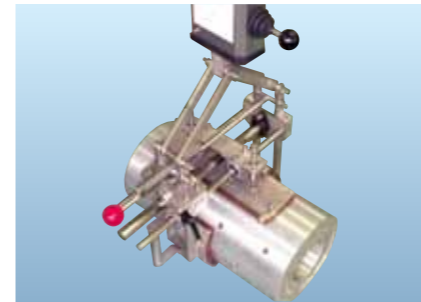
Have variety of handle for solution of every handling purpose



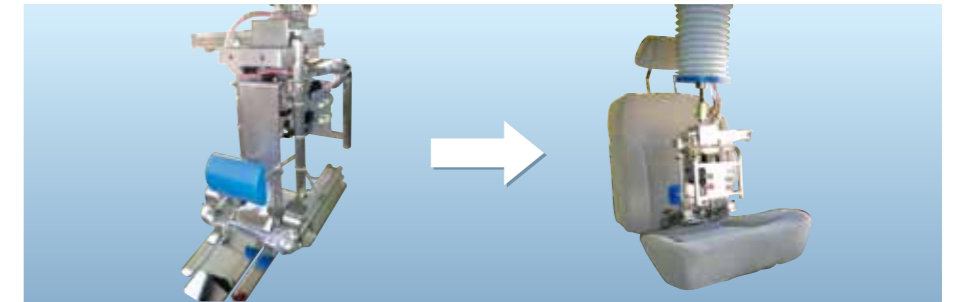
Gripping



Task : Countershaft Weight : App. 20Kg.
Lifting Method : Gripping with air
Type of Lifting Tool : US240-A1B

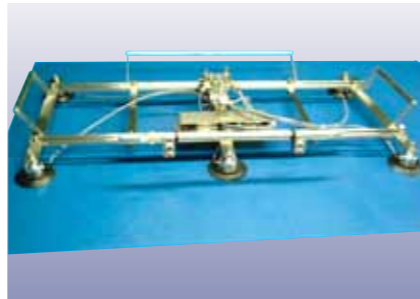


Task : Cylinder shape object Weight : App. 25kg.
Lifting Method : Weight grip
Type of Lifting Tool : US190-A1D



Task : Car upholstery Weight : App 50Kg. Lifting Method : Nail jack Type of Lifting Tool : US140-A1B

Suction



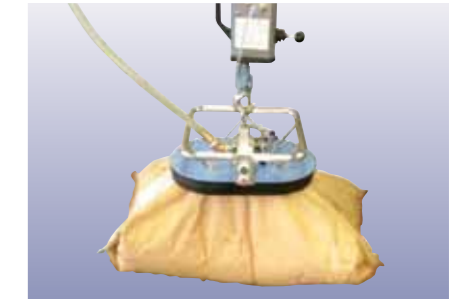
Task : Decorative veneer wood Weight : App. 40Kg.
Lifting Method : Suction and release
Type of Lifting Tool : US134-A1B



Task : Bottle (Food) Weight : App. 20Kg.
Lifting Method : Suction and release



Task : Cardboard box Weight : App. 25Kg.
Lifting Method : Vacuum pump suction system
Type of Lifting Tool : US178-A1B

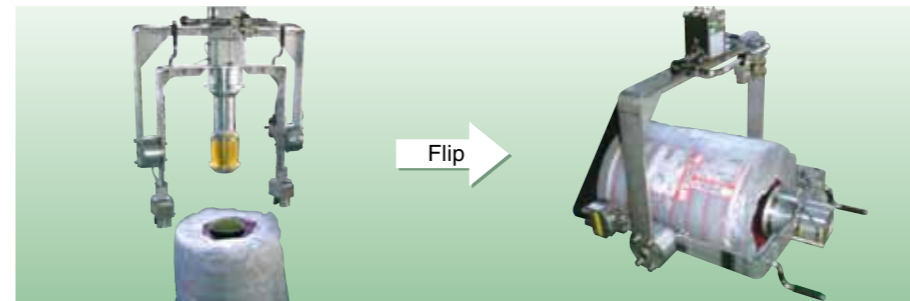


Task : Paper bag Weight : App. 25Kg.
Lifting Method : Vacuum pump suction system

Clamping



Clamping from the inside



Task : Film rolls Weight : App. 110Kg. Lifting Method : Flip and grip from the inside
Type of Lifting Tool : US103-A1E



Task : Product packaging Weight : App. 20Kg.
Lifting Method : Vacuum pump suction system
Type of Lifting Tool : US339-A2



Product Lifting Suction Equipment

First time in the industry!

Equipped with standard stainless steel.



Main function

Rust Free, Dust Free,
Sanitary Standard for
Food Manufactures

Samples of Applications

Industry

Air Compressor
Ventilation Shaft
Outside the building air conditioner heat ventilation unit
Paper bundle
Gas container
Mold types
Cam Shaft
Glass Sheet
Glass Pipe
Wind Turbine Electric Generator
U-shape Concrete Gutters
Concrete Blocks

Recycle Rubber Sheet	Steel Bucket
Reproduce / Recycle Polyester	Semi-Conductor Die-Casting
Silicone Metal Block	Fiber Optic Glass Blocks
Artificial Marble	Fiber Bucket
Cement Boat	Paper Plastic Mixed Bag
Ceramic Sheet	Coil Bobbin
Dishwasher Basket	Window Frames
Carbon Metal Block	Oil Cylinder
Electric Wire Rolling Machine	Freezer
Battery Coating Material	
Electric Motor	
Color Bucket	

Vehicle, Electrical Appliance & Chemical Industry

18 Ltr. Barrel	Vehicle Tires
Clothes Drying Machine	Dishwasher Dryer
Sodium Hydroxide Paper Bag	Washing Machine
Gallium Arsenide Metal Blocks	Car Hub Caps
Dish Washing Sink	Television
Food Oven	Microwave Oven
Photocopy Machine	Door Sheets
Car Windscreen	Computer Screen
Car Shafts	CRT Tube
Roof of Convertible Car	Fridge
Car Upholstery	Dismantling Television
Car Chassis	

Food, Pharmaceutical & Agriculture Industry

Medical Telescope	Blocks of Cheese
Snack / Sweet Cardboard Paper Package	Beer Carton
Cardboard Carton for Fruits	Fertilizer Bag
Package for Fruits	Plastic Bottle
Snack Candy Packaging	Plastic Wares
Cardboard Carton for Instant Noodle	Medical Packaging
Wooden Barrels	Cardboard Carton for Medical Packaging
Rice Packaging Bag	Vegetable Container
Cardboard Container for Soju Korean Liquor	Cardboard Carton for Vegetable
Raw Materials & Ingredients for Food	Rolled Packaging
Canned Food	
Bottled Food	

Aforementioned samples are our past experiences, just to name a few.

Application Recommendation

1
Pickup die cast products from wooden carton And arrange on the conveyor line by automatic robots.

Structure : Body # P50-L-14-G,
 Grip Controller,
 Counter Shaft Chuck equipment,
 Rotation control stopper for the main shaft

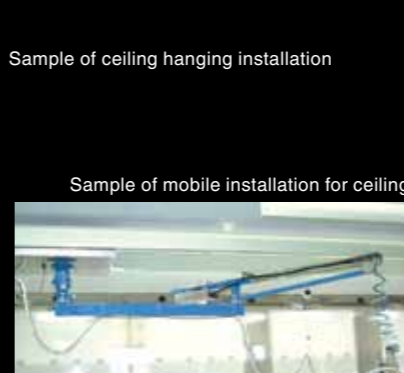
3
Moving well packed product boxes on the assembly line to the palette.

Structure : Body #D100-18,
 Lifter equipment for suctioning the cardboard boxes,
 Rotation control stopper for the main shaft,
 Vacuum Pump 2.2kw (comes with sound proof box)

4
Moving product packages from the warehouse to the palette.

Structure : Body #D50-S-14-G,
 Grip Controller,
 Lifter equipment for suctioning the packages,
 Vacuum Pump 1.5kw,
 Rotation control stopper for the main shaft

Watch the video here
<http://www.hitachi-juki.com/03products/video.html>



2
Moving film rolls on the palette into slot-less box.

Structure : Body # D100-L-14-B,
 Balance Control,
 Rotation control stopper for the main shaft

9
Gripping up die-cast products from wooden container and sending to production machinery.

Structure : Body #Z50-S-14-G,
 Grip Controller,
 Lifter Equipment for Lifting Up Counter-Shaft,
 Rotation control stopper for the main shaft

5
Moving 18Ltr. Bucket from conveyor line to the palette.

Structure : Body #Z50-S-14-G,
 Grip Controller,
 Lifter equipment for suctioning the buckets,
 Suction & Release,
 Rotation control stopper for the main shaft

6.7
Lifting up metal bars with magnet, sending to products processing machine and taking out from the machine.

Structure : Body #P50-L-18-B,
 Balance Control,
 Rotation control stopper for the main shaft



7
Packing up post-assembly products into cardboard box.

Structure : Body #J200-18-P,
 Pendant Switch00,
 Specific Designed Lifter Equipment

8
Packing up post-assembly products into cardboard box.

Structure : Body #J200-18-P,
 Pendant Switch00,
 Specific Designed Lifter Equipment

8
Packing up post-assembly products into cardboard box.

Structure : Body #J200-18-P,
 Pendant Switch00,
 Specific Designed Lifter Equipment

8
Packing up post-assembly products into cardboard box.

Structure : Body #J200-18-P,
 Pendant Switch00,
 Specific Designed Lifter Equipment

*From Past to Present,
 Manufacturers Always Rely on Mr. Catchman
 Application Recommendation*

Purchasing Process



Installation Concern

- Please provide a clear installation method and detailed information regarding the delivery.
- Unable to be used outdoor nor under the unsuitable environment. In case of pharmaceutical manufactures etc., please call for a conference beforehand.
- Please operate with air pressure from air generator at 0.6 – 0.8Mpa. (6.1 – 8.1 kg. / cm²)
- Use with clean air, no water or oil contaminated.
- Installing surface area must be smooth and even. No rough surface even on the ground or pole.
- In case of installing with the attachment, please install to reinforce the concrete.
- In case of requiring the use of CAD information to draw the installation layout, please inform the company.
- In case of moving object is cardboard box or paper bag, the company require the sample of the object to run a suction test.

CAUTION

- Do not touch the working area while in use.
- Do not reach any part of body under the moving object.
- In case of using the handle, do not use it to lift anything else except the specified object only.
- Do not use with the unequal weights objects.
- During the moving operation, do not move the base of machine.
- Please wear appropriate outfit for operation.
- The machine features can be changed by the company for improving without prior notice.
- Please read the “Manual/Instructions” thoroughly before use.
- Please read the maintenance part in the “Manual/Instructions”.
- 1 Year Body Warranty from the company after the date of purchase.