

AIR BALANCER

PREVENTATIVE MEASURE TO BODY INJURY

Maximize
production efficiency



Simplify
skilled tasks



Protecting
workers health and safety



Reduced
working time



Artificial Intelligence System Balancer with Load cell and Pneumatic servo control.

The Air Robot is a revolutionary tool created to outclass all previous Balancer Systems.

| SIMPLE OPERATION The pneumatic Arm can be easily lowered and raised by any operator and requires little force to handle.

| SUBTLE MOVEMENTS Allows extremely precise movement.

| SAFETY When air supply is interrupted.

| UNLIMITED APPLICATION Wide range of features and attachment for any workplace.

| CLEAN WORK SITE The Air Robots do not require any type of fluids in their components.

| MAXIMIZE PRODUCTION EFFICIENCY Improves workflow and reduces labor costs.

AIR ROBOT & AIR BALANCER

comparison

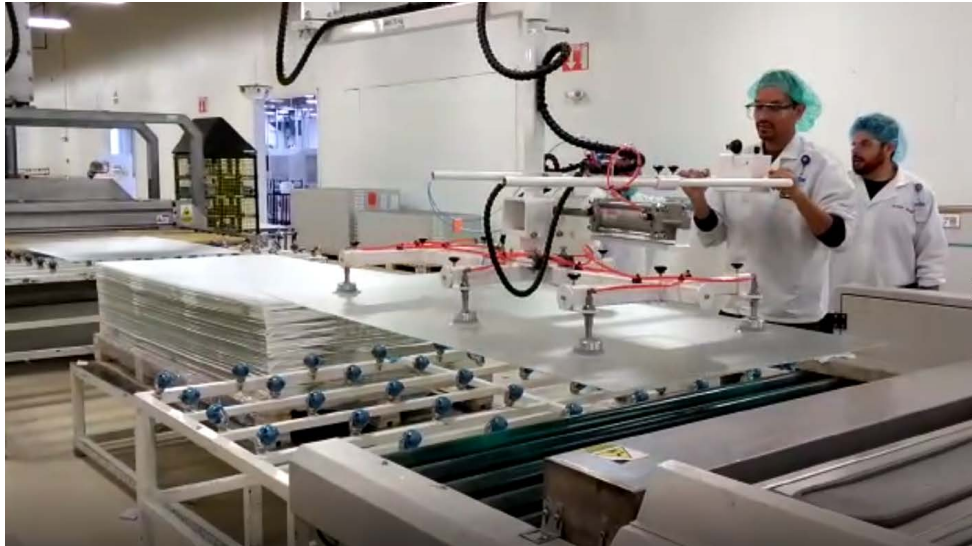
<p>Air Robot (Air+electricity)</p>	<p>Electric Servo Control System</p> <ul style="list-style-type: none"> · The settings allow operator to handle considerably heavy loads. · Safty lights and weight display can be easily attached. · Maintain loads stabilized even when weight change occurs during handling. · Handle greater loads and operates in wider range than any Balacer. · User friendly and easy to maintain · No pressure loss
<p>Air Balancer (Manually Operated)</p>	<p>Manual Balancer Operation</p> <ul style="list-style-type: none"> · Consistent · Pneumatic operated/or Only Pneumatic Operated Robots available. · Suitable for flammable work sites. · Fixed range of work and work load.

MODEL SELECTION METHODS

Air robot(Artificial intelligence control balancer) and Air Balancer

<p>AR: Air Robot AB: Air Balancer AH: Air Hoist EH: Electric Hoist</p>	<p>AR</p>	<p>A</p>	<p>- 050</p>	<p>S</p>	<p>- LS</p>	<p>Installation Conditions LS - Fixed to the ground LM - Ground movement HS - Fixed to the ceiling HM - Moving the ceiling</p>
		<p>Mechanical structure: A, B, C, W, 700CPA, 600CP, 700J, 700CA, 700JA, 500H, 500M, 500D (Type Reference)</p>	<p>Payload</p>	<p>ArmStructure S: Single Link, W: Double Link (A, W Type)</p>		

➤ Solarcell Panel Handling



[Play Video](#)

➤ Heavy duty object Handling

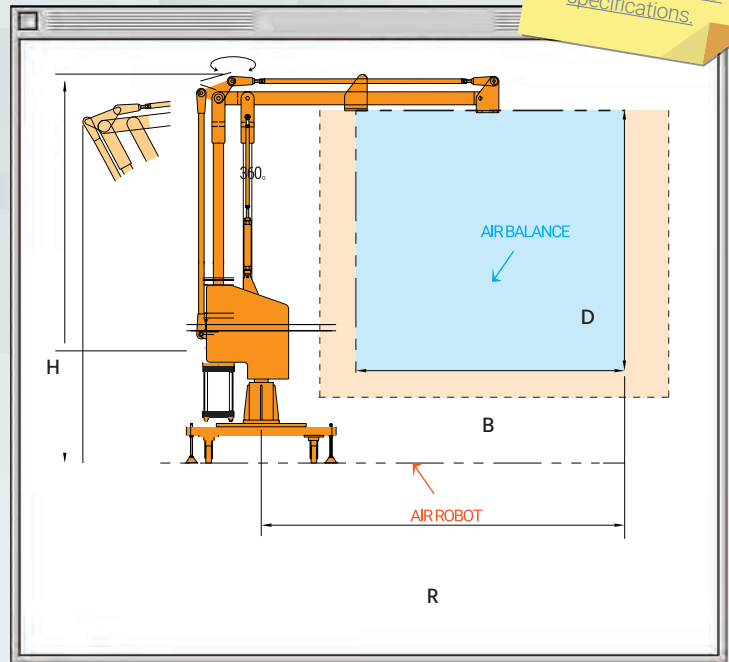


[Play Video](#)

A TYPE

Suitable for low-ceiling sites!

- Pantographed arm keeps an object parallel as it moves up and down.
- Installation movement is possible even at work sites with low ceiling and a wide range of works can be secured.
- Additional attachment allows for various functions.
- In case of sudden loss of air supply, the arms are kept normal and prevent falling.
- Designed as a safety circuit to prevent jumping if heavy loads are removed during handling.

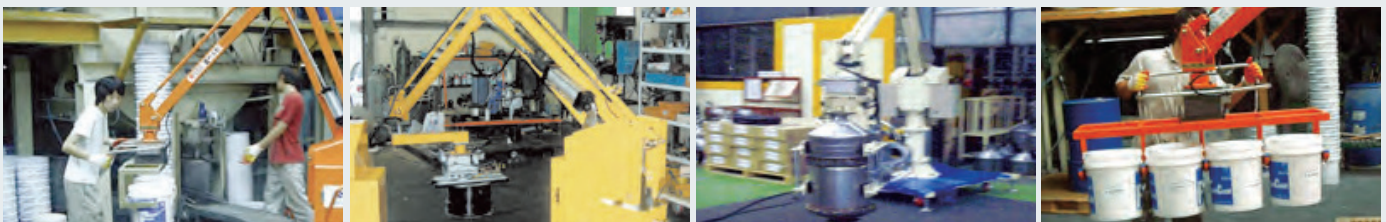


► Lowest working pressure **Air Balancer:** 2bar, **Air Robot:** 0.5bar (S: Single link type D: Double link type)

Base Type	Type	Extra Weight (kg)	Dimension (mm)				Body Weight (kg)
			H	B	D	R	
Fixed	A-040	38	2430	1530	1600	2380	135
	A-050	50	2280	1530	1600	2000	140
Movable	A-040	38	2430	1530	1600	2380	135
	A-050	50	2280	1530	1600	2000	140

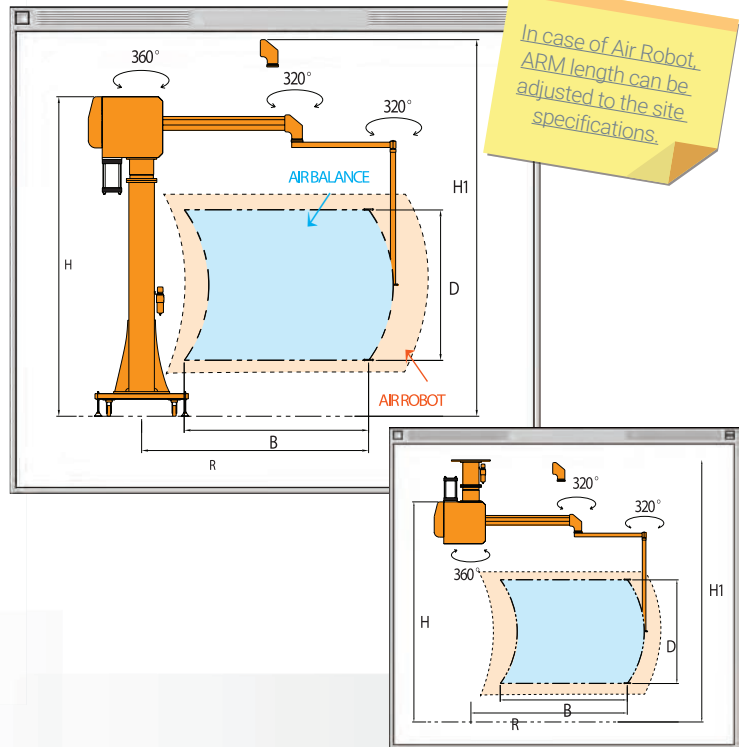
Base Type	Type	Extra Weight (kg)	Dimension (mm)				Body Weight (kg)
			H	B	D	R	
Fixed	A-075	75	2450	1530	1600	2200	220
	A-150	150	2450	1530	1600	2200	290
Movable	A-075	75	2450	1530	1600	2200	220
	A-150	150	2450	1530	1600	2200	290

※ Air Robot allows the arm to be length-adjusted to meet field specifications and allows the working radius to be wider.



B TYPE

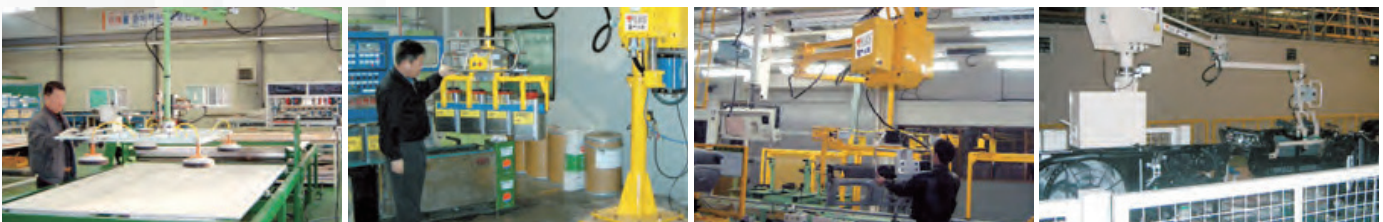
- Can work higher and wider than the recruitment of parallel link bodies
- The main body can be installed in a circular shape and Use as a fixed or driving type.
- Maintain zero gravity during the three-dimensional movement.
- Additional attachment allows for various functions.
- In case of sudden loss of air supply, Arm is kept normal and prevents falling.
- It is designed as a safety circuit to prevent jumping if heavy loads are removed during handling.



► Lowest working pressure Air Balancer: 2bar, Air Robot: 1bar

Base Type	Type	Extra Weight (kg)	Dimension (mm)					Body Weight (kg)
			B	D	R	H	H1	
FIXED AND MOVABLE TYPE	B-040	40	1800	1410	1940	2450	3300	130
	B-075	75	1800	1410	2150	2650	3300	170
	B-100	100	1800	1410	2150	2650	3300	180
	B-150	150	1800	1510	2150	2730	3370	220
	B-250	250	1800	1510	2450	2730	3370	430
	B-500	500	1800	1510	2450	2730	3370	980

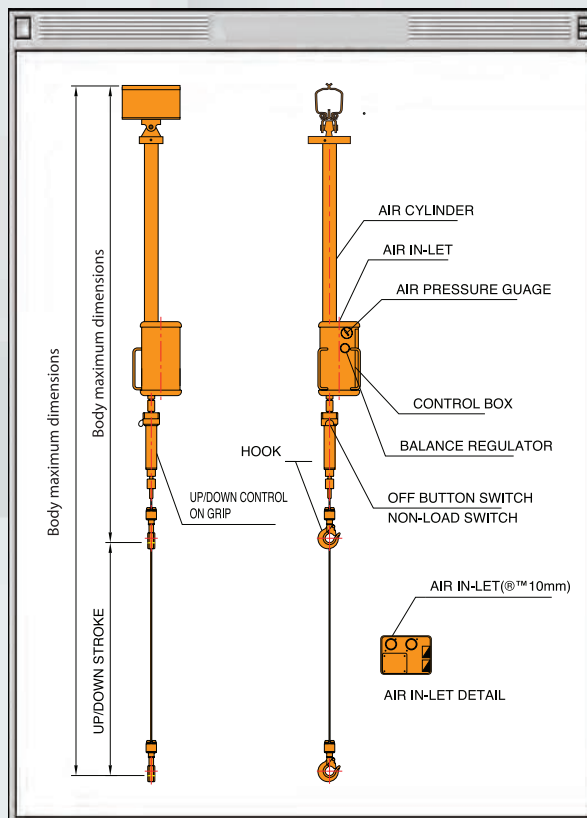
※ Air Robot allows the arm to be length-adjusted to meet field specifications and allows the working radius to be wider.



C TYPE

Free up to work space!

- The working radius can be applied as much as possible, depending on the length of the light rail.
- Depending on the cylinder specification, the weight of the unit and the up/down Stroke are free.
- Additional attachment allows for various functions.
- A ground-type frame is easy to disassemble and assemble.
- Up and Down Stroke is available to the users.



► Lowest working pressure Air Balancer: 2bar, Air Robot: 1bar

Type	Extra Weight (kg)	Air inlet hose D	Up / Down stroke
C - 075	075	Φ10	Applicable to onsite specifications
C - 100	100	Φ12	
C - 075	170	Φ10	
C - 300	300	Φ12	
C - 500	500	Φ12	

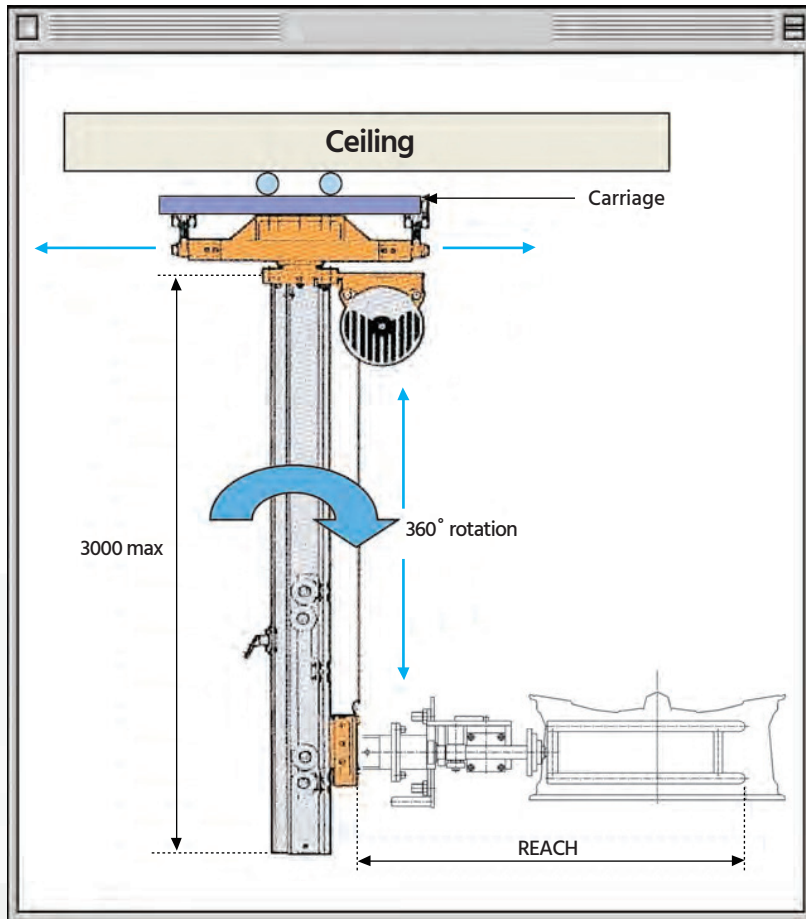
※ Air Robot allows the arm to be length-adjusted to meet field specifications and allows the working radius to be wider.



600CP TYPE

Stable and Movable Type

- The object to be moved can be safely moved up, down, and 360 degrees simultaneously.



Model	Capacity	Air Balancer	Capacity of the Air Balancer
600CP - 45	45	BW150LB080	150 LBS
600CP - 70	70	BW200LB120	200 LBS
600CP - 120	120	BW350LB080	350 LBS
600CP - 200	200	BW500LB080	500 LBS

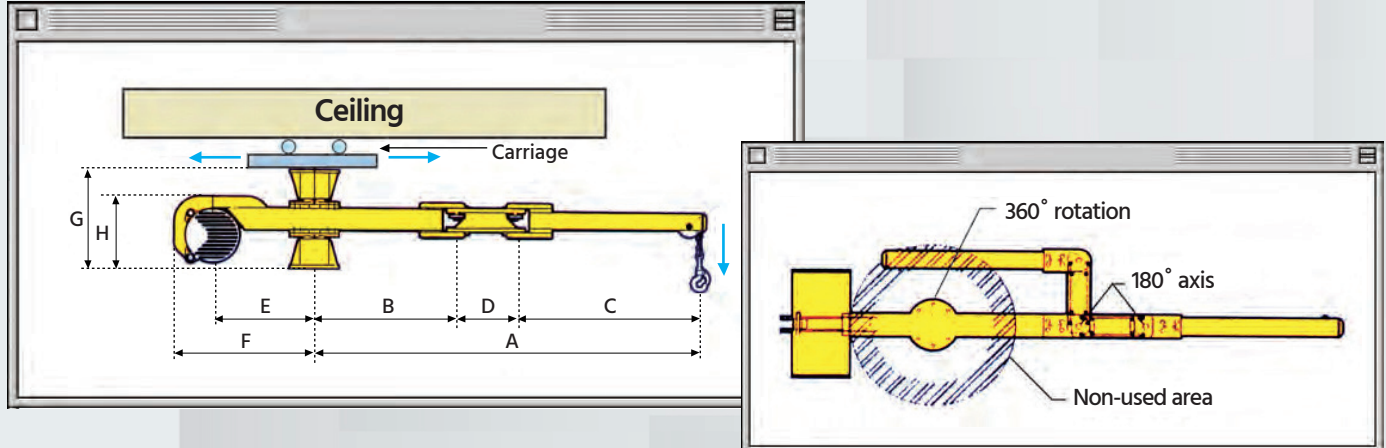
※ Air pressure used based on 5kgf / cm²



700CA TYPE

Ceiling fixed / Movable joint Type

- In case the upper Auto Runner is interfering while moving or the work site conditions make it difficult to install normally.
- Like the basic type, it can be moved up and down and can additionally rotate 360 degrees



MAX CAP.	A	B	C	D
350 LBS	1830	660	865	305
350 LBS	2130	660	1165	305
350 LBS	2440	970	1165	305

MAX CAP.	E	F	G	H
150 LBS	470	600	370	340
200 LBS	483	660	450	340
350 LBS	508	690	420	365

► The System Specifications can vary depending on the work site conditions and customer requests.

Model (Ceiling fixed / Movable joint Type)	Capacity	Air Balancer	Capacity of the Air Balancer
700CA(M) - 45	45	BW150LB080	150 LBS
700CA(M) - 70	70	BW200LB120	200 LBS
700CA(M) - 120	120	BW350LB080	350 LBS

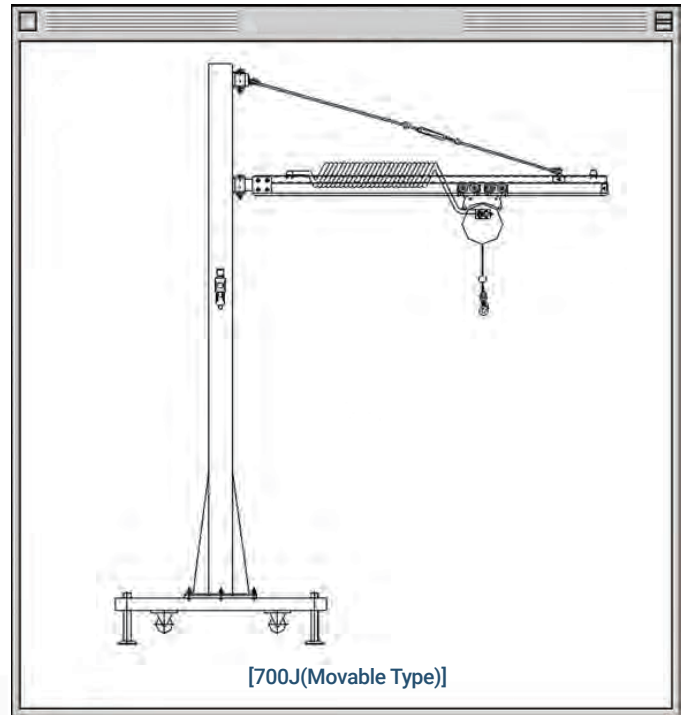
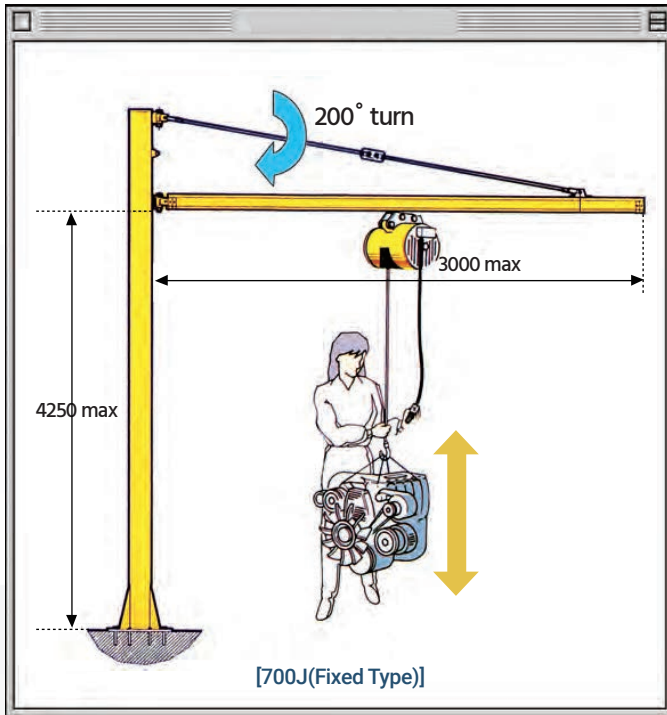
※ Air pressure used based on 5kgf / cm²



700J TYPE

Fixed and Movable Jib Type

- If the ceiling height is more than 4m and the work area is less than 3m, It is possible to work within a radius of 200 degrees of rotation around a column.
- Applicable to 200 kg weight.



Model (Fixed / Movable Type)	Extra Weight (kg)	Model Application	Classification
700J - 45	45	BW150LB080	Air Balancer
700J - 70	70	BW200LB120	Air Balancer
700J - 120	120	BW350LB080	Air Balancer
700J - 200	200	BW500LB080	Air Balancer
700J - 250	250	KA1S-025	Air Hoist
700J - 490	490	KA1S-025	Air Hoist

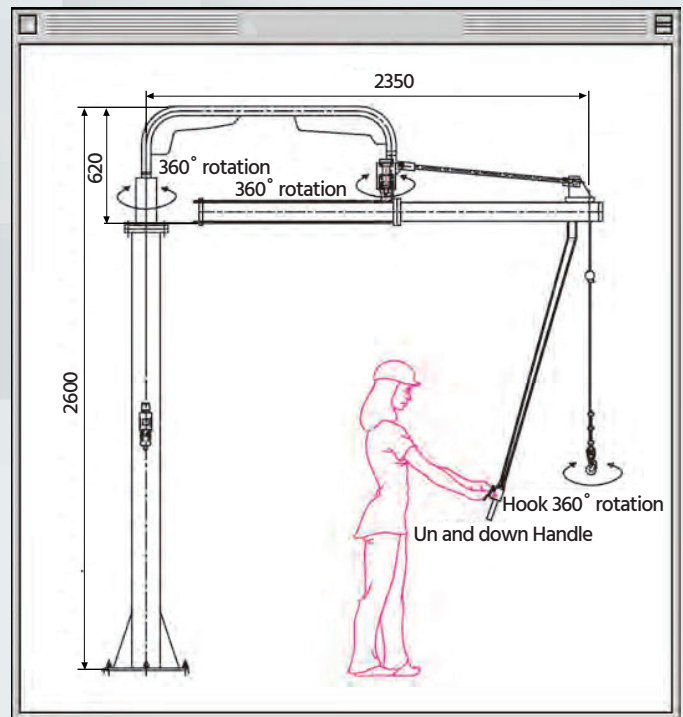
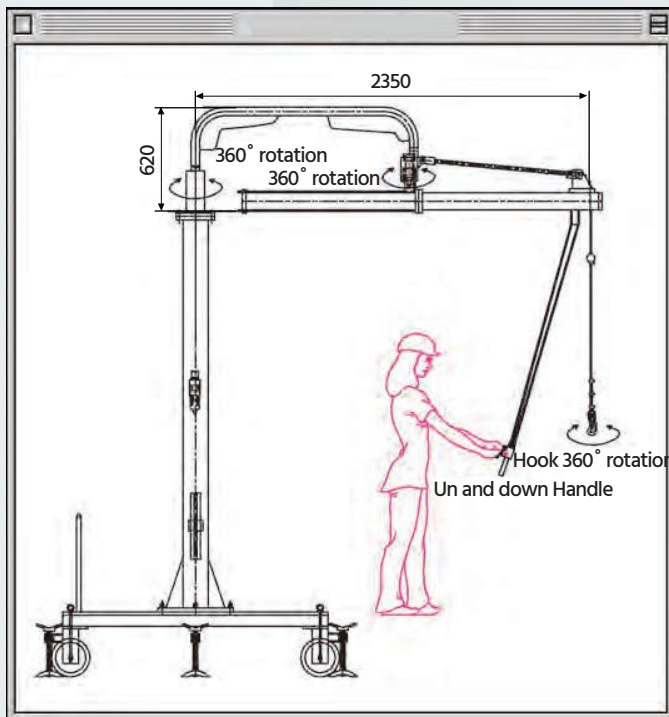
※ Air pressure used based on 5kgf / cm²



700JA TYPE

Air Balancer Cylinder ARM

- It is the simplest, safest and most efficient air Balancer.
- It only operates with the Up/down control handle.
- Work speed is faster because the worker's sense of hand adjusts the work speed.
- Easily replace jigs(GRIPPER) for your work.
- If compressed air supply is shut off at the moment, there is no danger of heavy products falling down.
- Compressed air ensures long-term durability without operational failure.



Model (Fixed / Movable Type)	Extra Weight (kg)	Work radius (mm)	upper and lower camps	Body Rotation Angle
700JA-60-XX	100	2350	1450	360

※ XX: VP(Vacuum Absorption), CP(Clamp), HK(Hook)

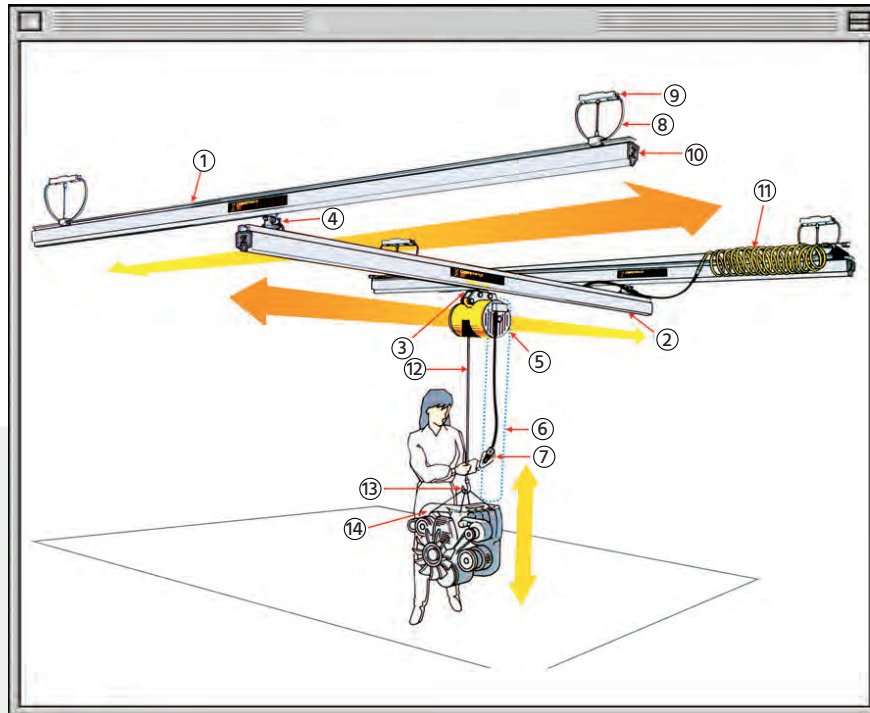
※ Air pressure used based on 6kgf / cm²



700J TYPE

The most basic form!!

- Applied in the most common form where a beam is installed on the ceiling or similar.
- Most convenient form.



Key Configurations

- ① **Run Way Rail** : System Drive Rail. Steel and aluminium
- ② **Bridge Rail** : The system's gangrene. Steel and aluminium
- ③ **Trolley Kit** : Trolley that can move the air balance in the direction of gangrene
- ④ **End Truck Trolley** : Trolley capable of moving the system in the direction of travel.
- ⑤ **Air Balancer** : A device that moves an item up and down as a key device.
- ⑥ **Control Kit** : Controls with the Up/Down switch.
- ⑦ **Safety Cable** : Safety wire
- ⑧ **Hanger Kit** : The coupling between the H beam and the driving rail.
- ⑨ **End Cap** : Rail end cap
- ⑩ **Air Supply Package** : All filters and air supplies.
- ⑪ **UP/DOWN Wire** (2~3m)
- ⑫ **Hook to hold the jig**(Gripper)
- ⑬ **Gripper(JIG)** : Equipment to catch inventory items

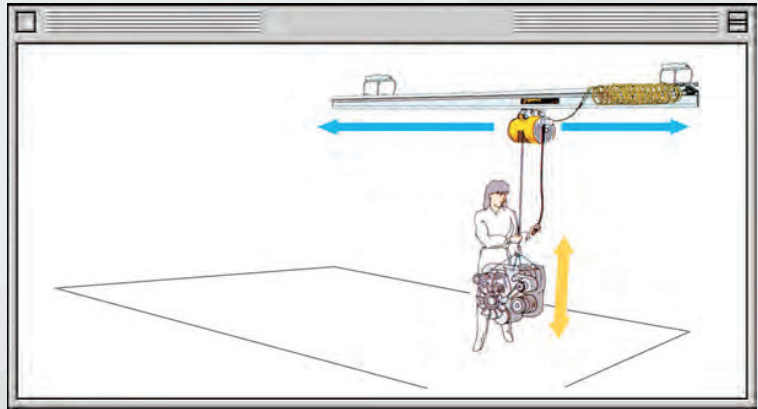
Model	Extra Weight (kg)	Model Application	Classification
500H - 45	45	BW150LB080	Air Balancer
500H - 70	70	BW200LB120	Air Balancer
500H - 120	120	BW350LB080	Air Balancer
500H - 200	200	BW500LB080	Air Balancer
500H - 250	250	KA1S-025	Air Hoist
500H - 490	490	KA1S-025	Air Hoist

※ Air pressure used based on 5kgf / cm²

500M,500D TYPE

500M Type(Mono Rail Type)

- When only linear movement is required.

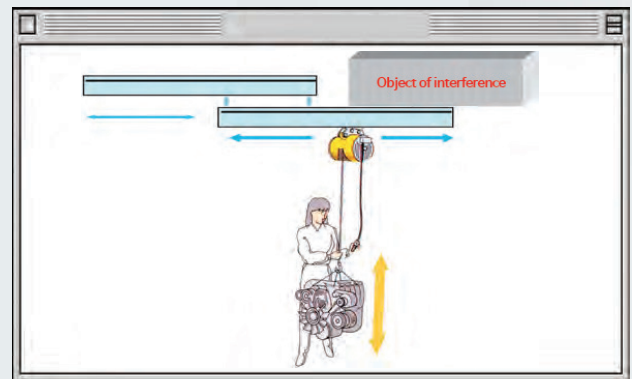


Model	Extra Weight (kg)	Model Application	Classification
500M - 45	45	BW150LB080	Air Balancer
500M - 70	70	BW200LB120	Air Balancer
500M - 120	120	BW350LB080	Air Balancer
500M - 200	200	BW500LB080	Air Balancer
500M - 250	250	KA1S-025	Air Hoist
500M - 490	490	KA1S-049	Air Hoist

※ Air pressure used based on 5kgf / cm²

500D Type(Movable 2-Stage Rail)

- Install the bridge rails in a two-stage format when there is an upper interference.
- Be able to move from side to side



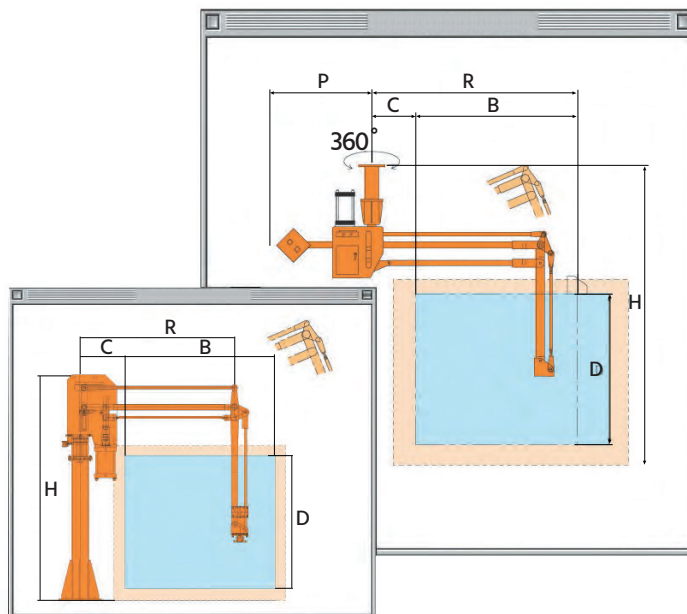
Model (2-Stage Rail)	Capacity (kg)	Air Balancer	Capacity of the Air Balancer
500D - 45	45	BW150LB080	150 LBS
500D - 70	70	BW200LB120	200 LBS



W TYPE

Handle heavy loads easily with maximum flexibility!

- Drive rail is installed on ceiling to provide a wide range of working areas.
- Depending on the weight of the Handling target, you can select Single Link and Double Link.
- Additional attachment allows for various functions.
- In case of sudden loss of air supply, Arm is kept normal and prevents falling.
- It is designed as a safety circuit to prevent jumping if heavy loads are removed during handling.



► Lowest working pressure **Air Balancer:** 2bar, **Air Robot:** 1bar (S: Single link type D: Double link type)

Base Type	Type	Extra Weight (kg)	Dimension (mm)					Body Weight (kg)	
			B	C	D	R	P		H
FIXED AND MOVABLE TYPE	W-075S	75	1700 ~ 2100	300	1610	2300	500 ~ 700	3550	160
	W-100S	100		300	1610	2300		3550	200
	W-150S	150		300	1610	2300		3550	250
	W-250D	250		350	1610	2350		3650	370
	W-350D	350		350	1700	2350		3650	435
	W-480D	480		350	1700	3000		4000	1100

※ Air Robot allows the arm to be length-adjusted to meet field specifications and allows the working radius to be wider.



INSTALLATION

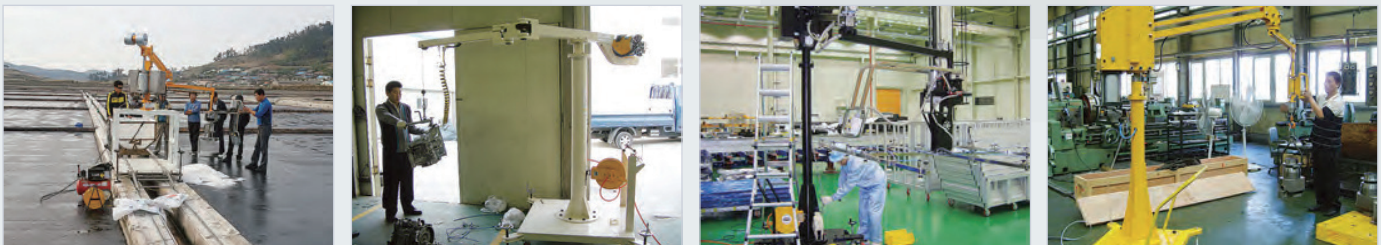
Ceiling Motion Method



Ceiling Fixation Method



Ground Motion Method



Ground Fixation Method



Lightweight Rail Application



VARIOUS ATTACHMENTS

Clamp Method



Vaccum Method



Magnet Method



Hook / Fork Method





AUTOMATION, SMT & LEAN MANUFACTURING

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