

# VACUUM TUBE LIFTER SYSTEM

## FEATURES


- ↳ Crane Systems
- ↳ Vacuum Heads
- ↳ Lifting Tubes
- ↳ Vacuum Units



CATALOGUE 2024



AARDWOLF VACUUM  
TUBE LIFTER VIDEOS

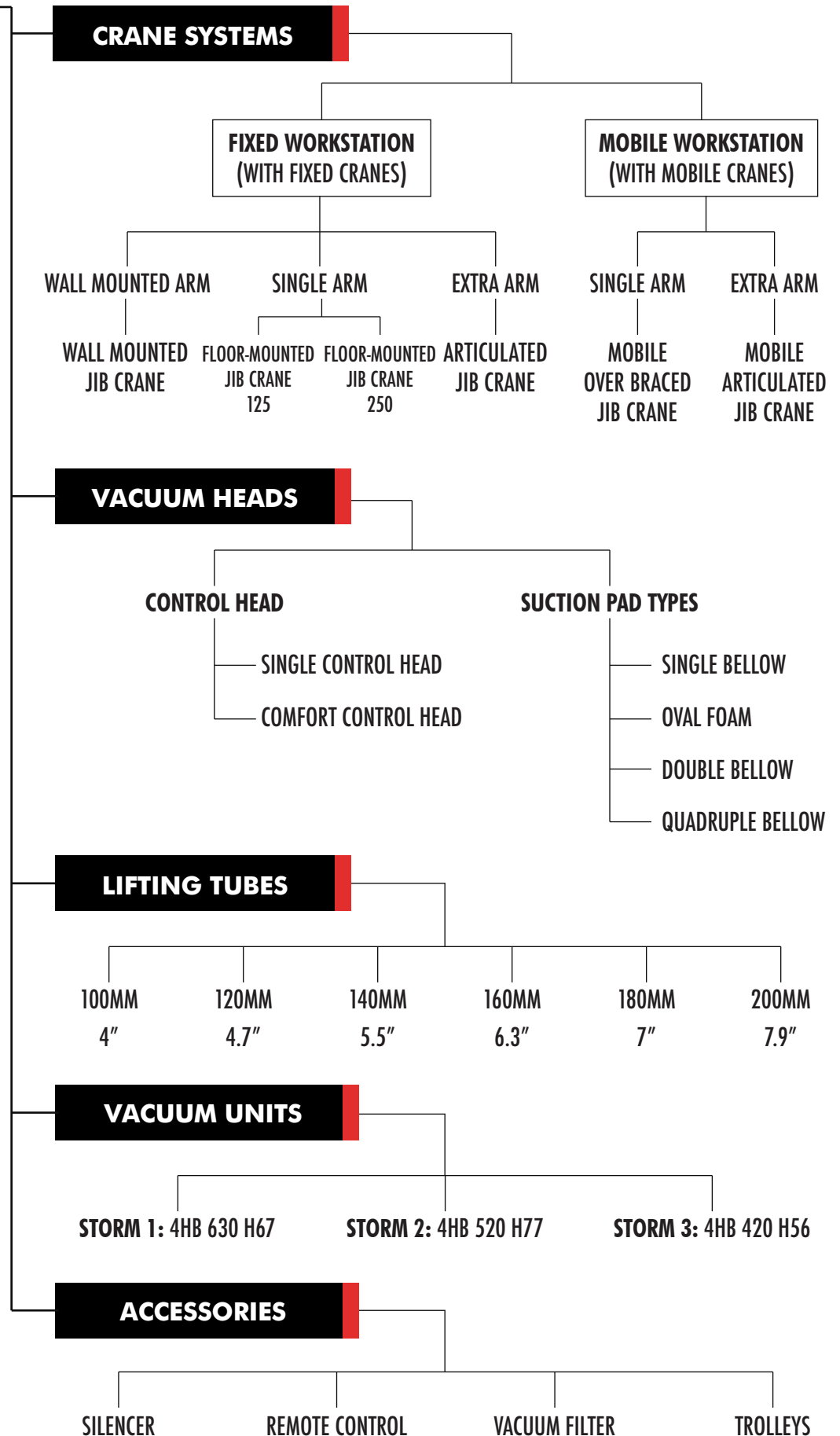
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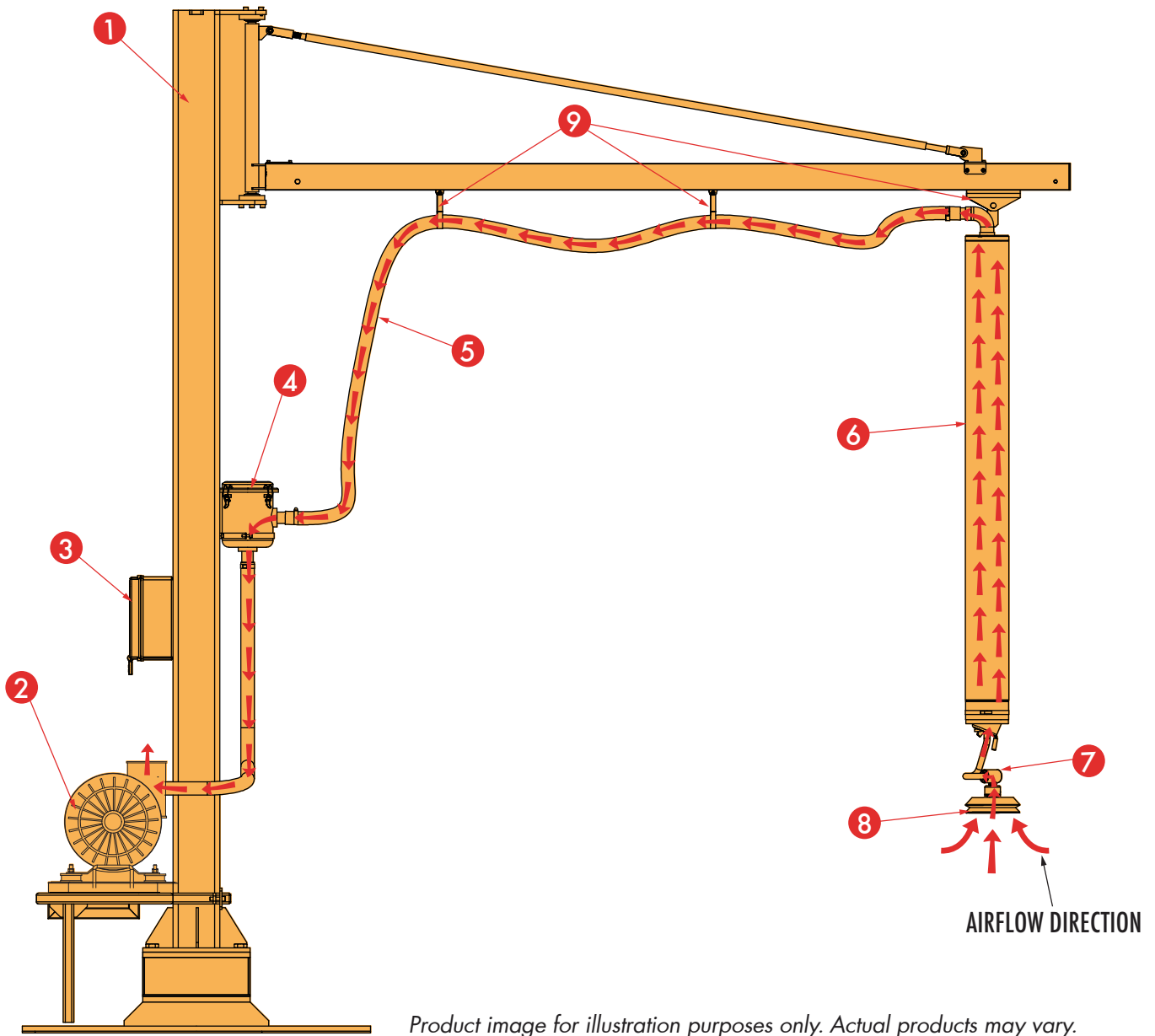


**VACUUM TUBE LIFTER SYSTEM**



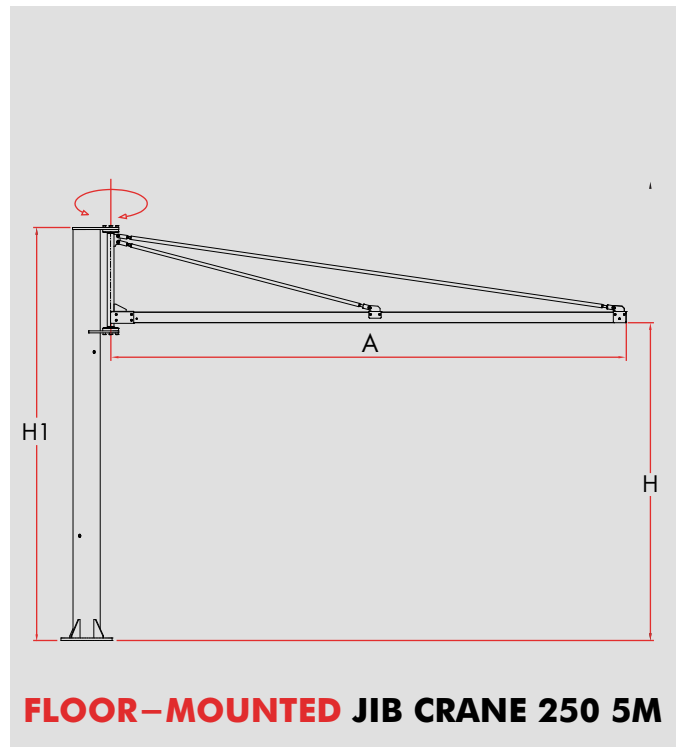
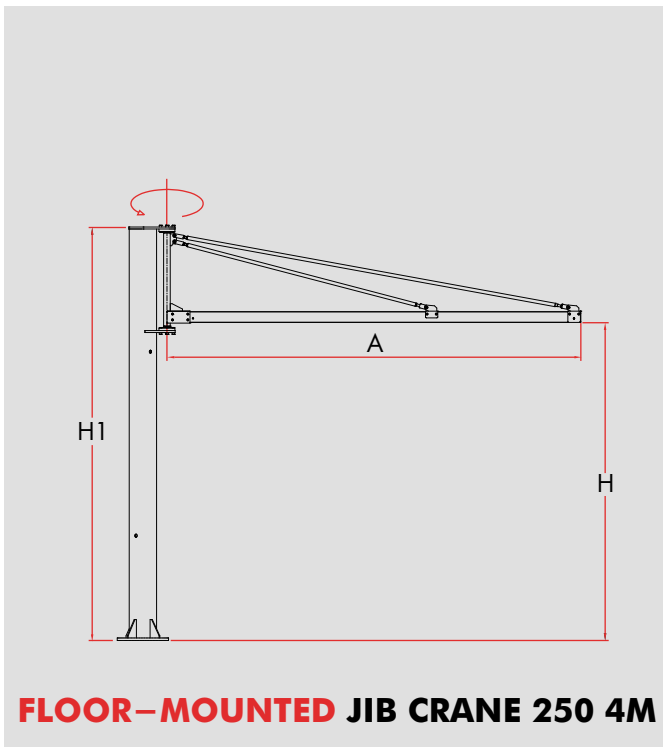
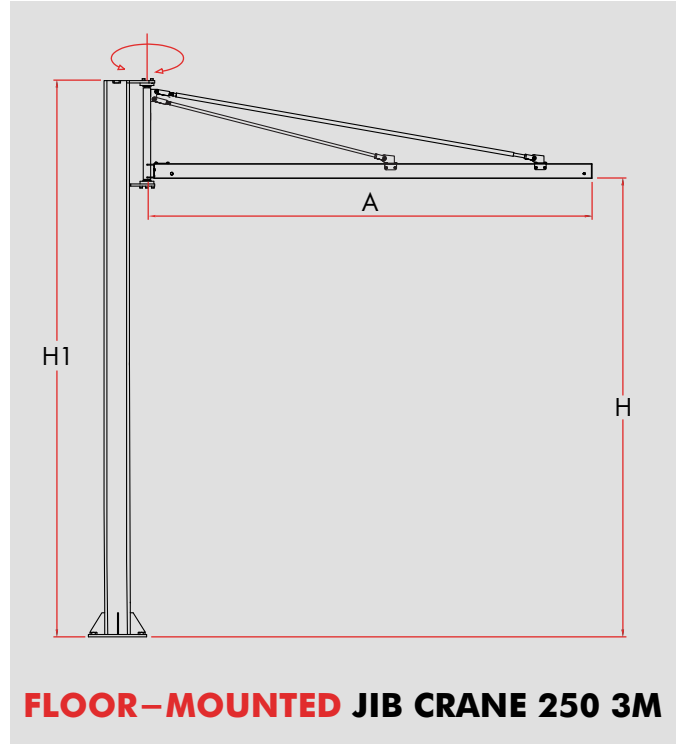
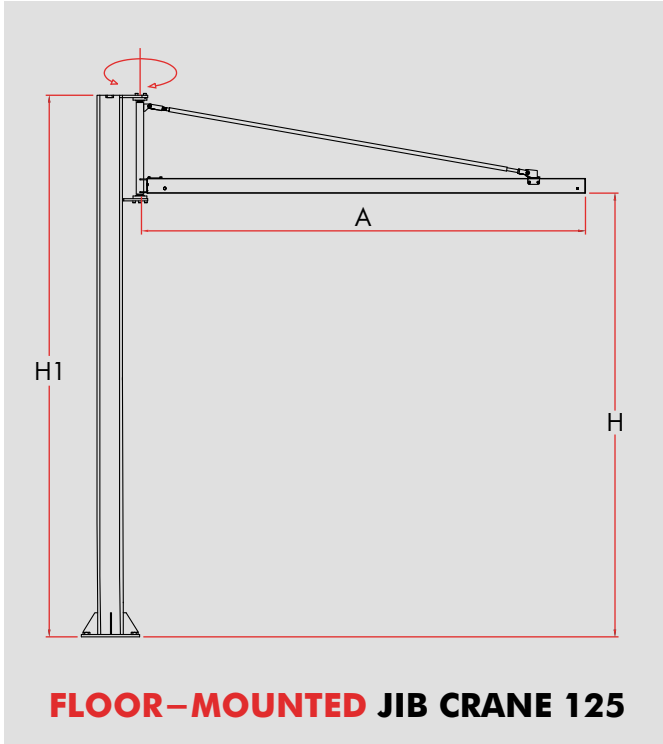
## PRODUCT HIGHLIGHT

- Secure, reducing risk of injuries to employees, minimizing downtime.
- Simplifying operations requiring only one person for handling.
- Equipped with a protective power cut-off device if the power supply is suddenly cut, the Lifting Tube retains pressure for a necessary period, allowing goods to be gradually lowered to the ground.

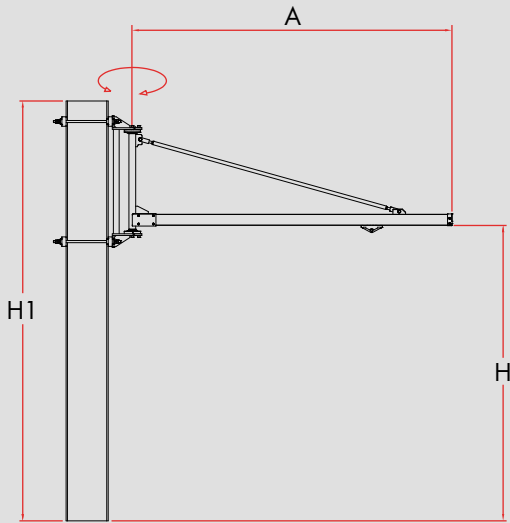


## COMPONENTS

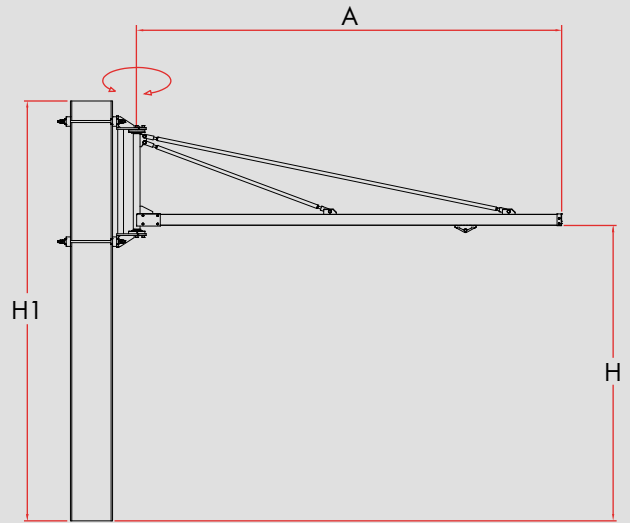
- |                               |                               |
|-------------------------------|-------------------------------|
| <b>1</b> CRANE SYSTEM         | <b>6</b> VACUUM TUBE          |
| <b>2</b> VACUUM UNIT          | <b>7</b> CONTROL HEAD         |
| <b>3</b> ELECTRIC CONTROL BOX | <b>8</b> VACUUM SUCTION PAD   |
| <b>4</b> VACUUM FILTER        | <b>9</b> ACCESSORY - TROLLEYS |
| <b>5</b> VACUUM SUPPLY HOSE   |                               |



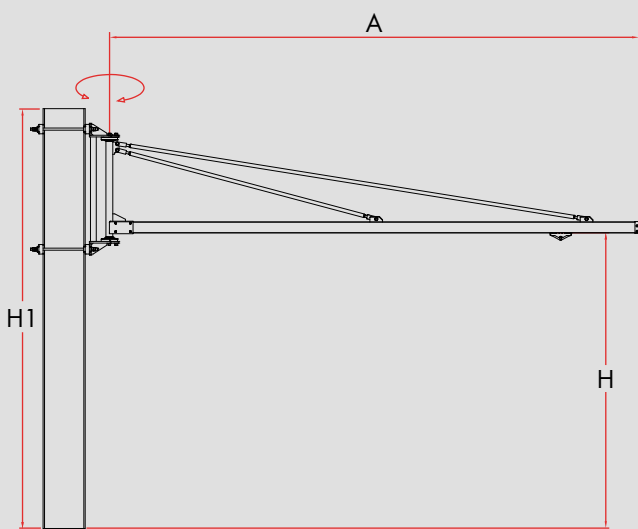
FIXED CRANES	A - Arm length (mm)	H - Arm height (mm)	H1 - Crane height (kg)	Capacity (kg)
FLOOR-MOUNTED JIB CRANE 125	3000	3150	3850	125
FLOOR-MOUNTED JIB CRANE 250 3M	3000	3150	4000	250
FLOOR-MOUNTED JIB CRANE 250 4M	4000	3150	4000	200
FLOOR-MOUNTED JIB CRANE 250 5M	5000	3150	4000	150



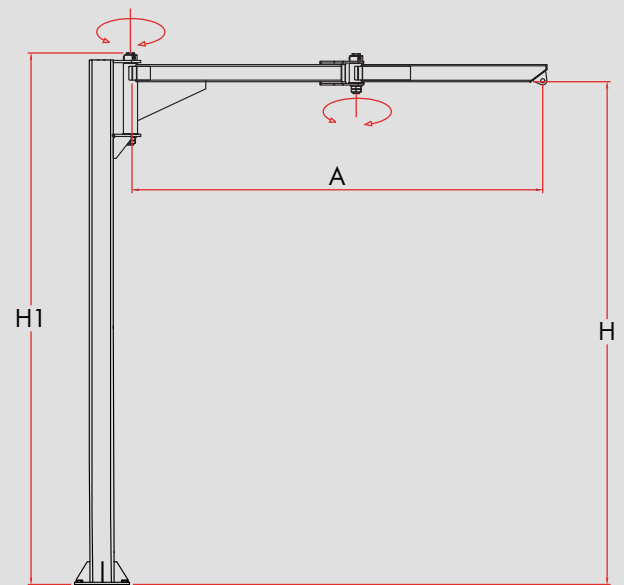
**WALL MOUNTED JIB CRANE 3M**



**WALL MOUNTED JIB CRANE 4M**



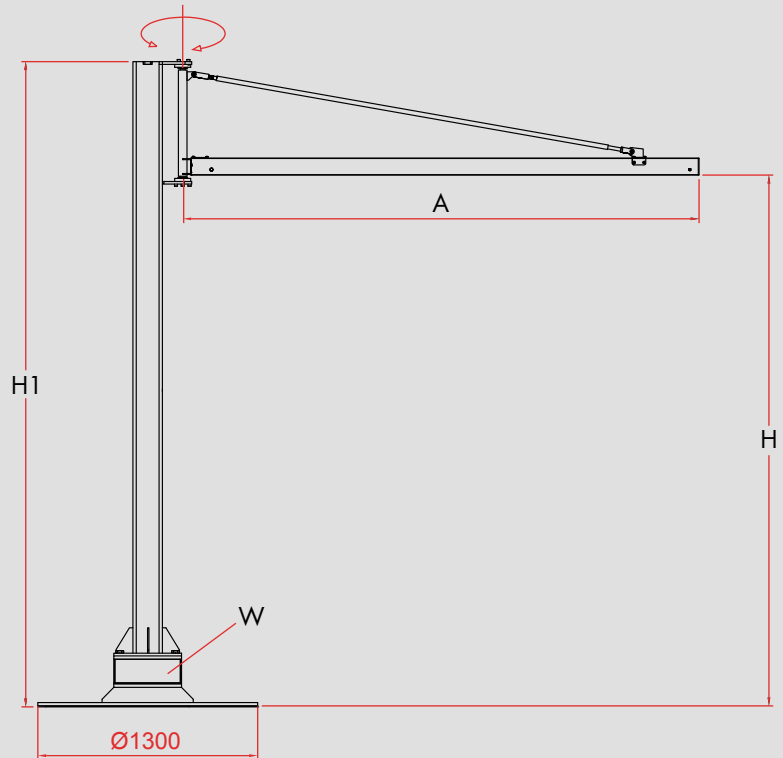
**WALL MOUNTED JIB CRANE 5M**



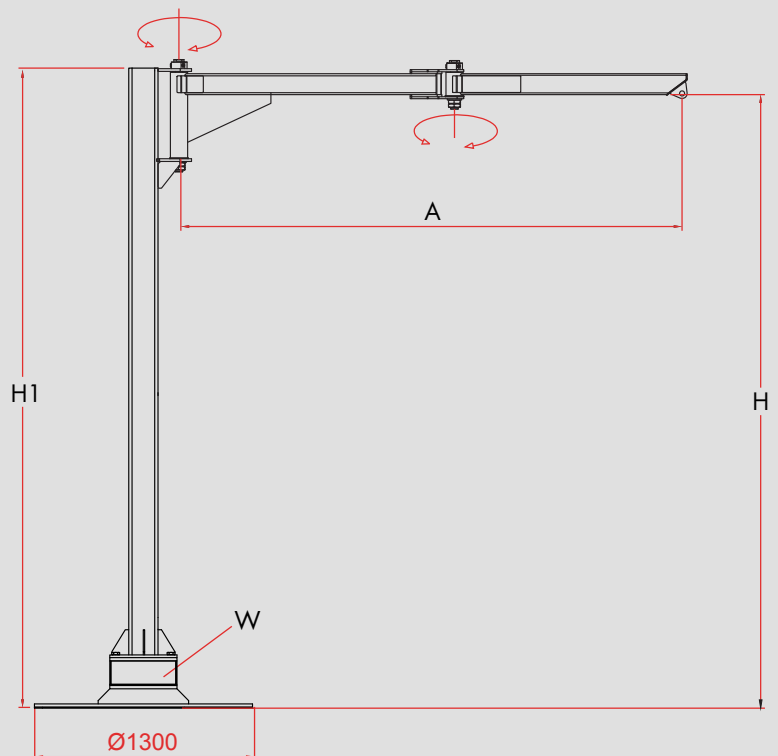
**ARTICULATED JIB CRANE**

FIXED CRANES	A - Arm length (mm)	H - Arm height (mm)	H1 - Crane height (kg)	Capacity (kg)
WALL MOUNTED JIB CRANE 3M	3041	2816	3850	250
WALL MOUNTED JIB CRANE 4M	4041	2816	3850	200
WALL MOUNTED JIB CRANE 5M	5041	2816	3850	150
ARTICULATED JIB CRANE	2500	3150	3350	150

**MOBILE  
OVER BRACED  
JIB CRANE**

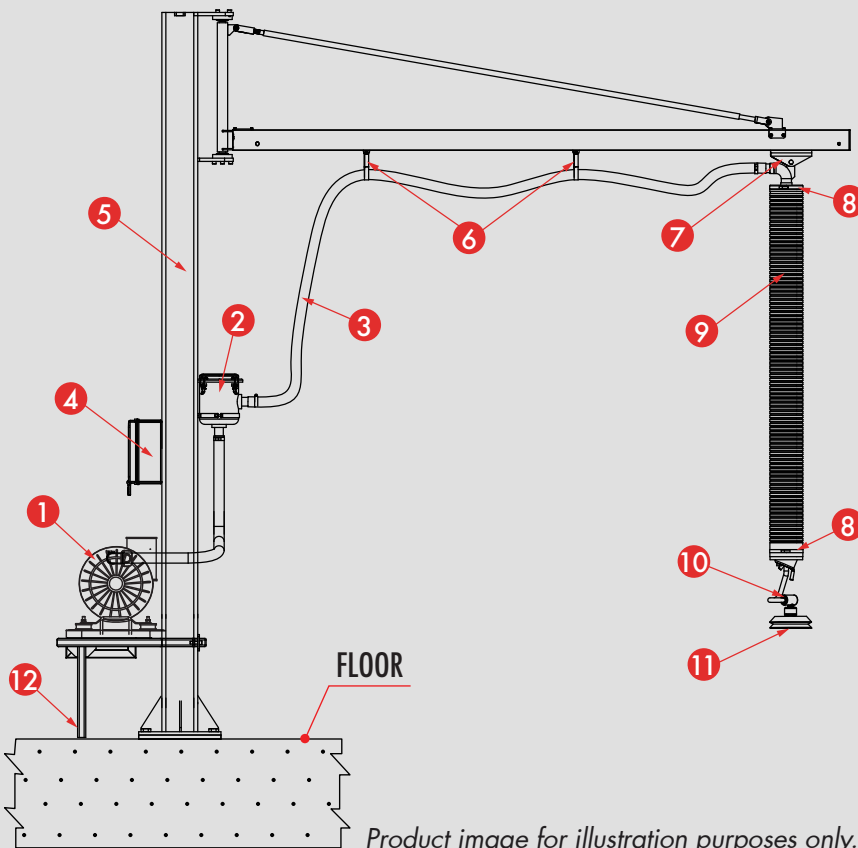


**MOBILE  
ARTICULATED  
JIB CRANE**



MOBILE CRANES	A - Arm length (mm)	H - Arm height (mm)	H1 - Crane height (kg)	W- Balance base (kg)	Capacity (kg)
MOBILE OVER BRACED JIB CRANE	3000	3150	3850	500	100
MOBILE ARTICULATED JIB CRANE	2500	3150	3350	500	100

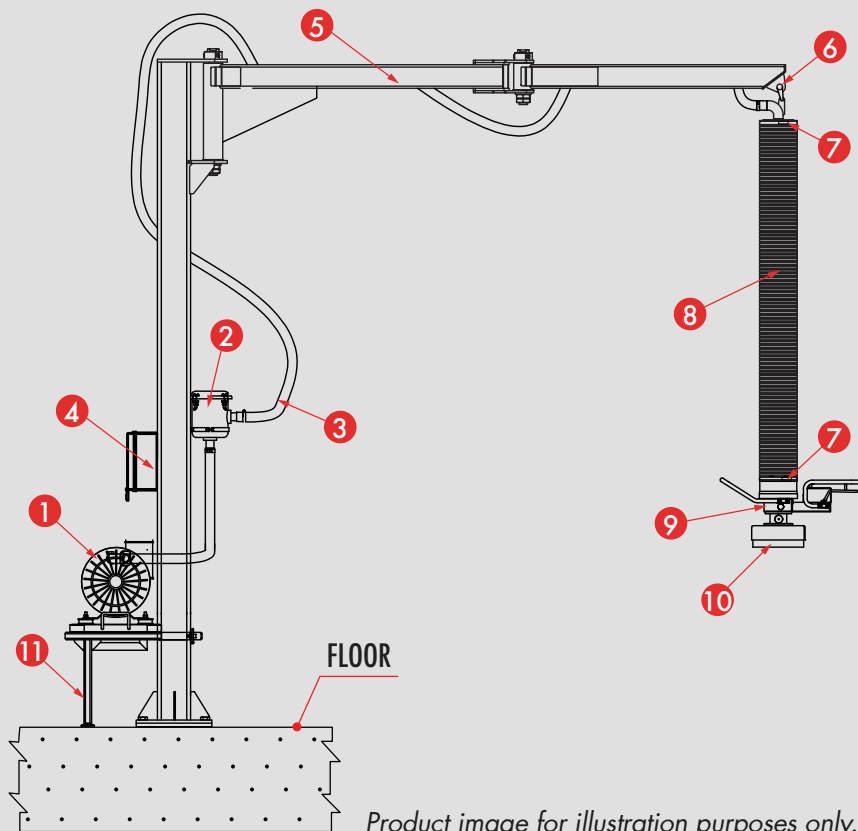
## FIXED WORKSTATION SINGLE ARM



- 1 VACUUM UNIT ▶ 3 OPTIONS
- 2 VACUUM FILTER
- 3 VACUUM SUPPLY HOSE
- 4 ELECTRIC CONTROL BOX ▶ 2 OPTIONS
- 5 FLOOR-MOUNTED JIB CRANE ▶ 4 OPTIONS
- 6 RAIL CABLE TROLLEYS
- 7 TROLLEY FOR LOAD
- 8 CLAMPS FOR FASTENING
- 9 LIFTING TUBE ▶ 6 OPTIONS
- 10 CONTROL HEAD ▶ 2 OPTIONS
- 11 VACUUM SUCTION PAD ▶ 4 OPTIONS
- 12 SUPPORT STAND FOR UNIT

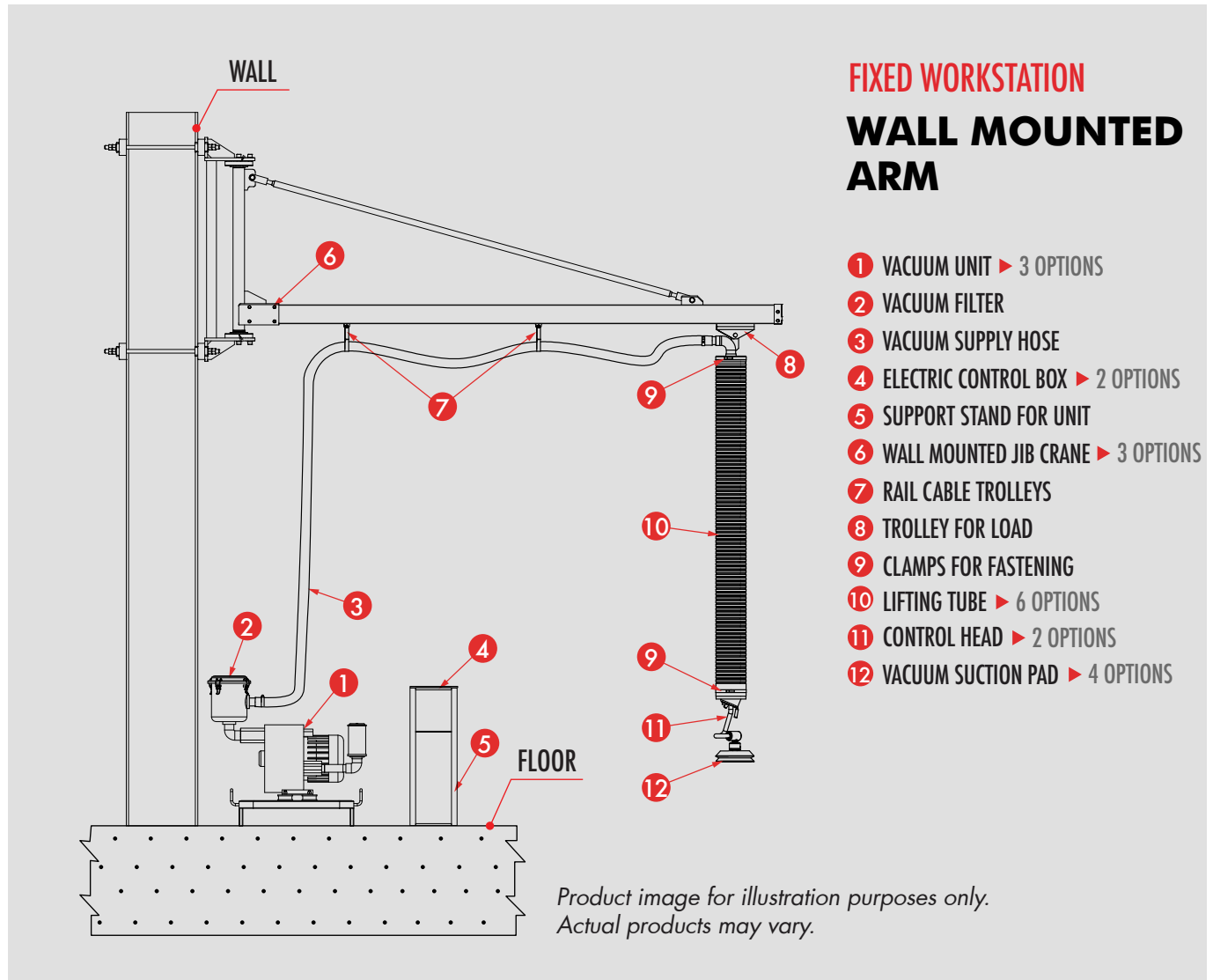
Product image for illustration purposes only. Actual products may vary.

## FIXED WORKSTATION EXTRA ARM



- 1 VACUUM UNIT ▶ 3 OPTIONS
- 2 VACUUM FILTER
- 3 VACUUM SUPPLY HOSE
- 4 ELECTRIC CONTROL BOX ▶ 2 OPTIONS
- 5 ARTICULATED JIB CRANE
- 6 PIN Ø20
- 7 CLAMPS FOR FASTENING
- 8 LIFTING TUBE ▶ 6 OPTIONS
- 9 CONTROL HEAD ▶ 2 OPTIONS
- 10 VACUUM SUCTION PAD ▶ 4 OPTIONS
- 11 SUPPORT STAND FOR UNIT

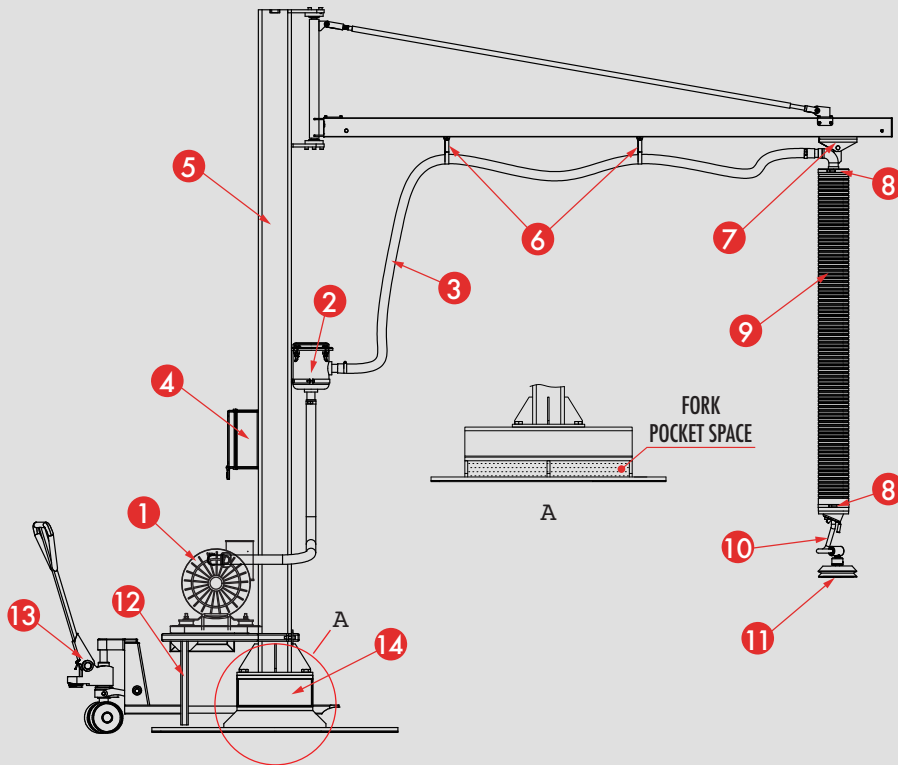
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The Fixed Workstations are mounted on the floor or wall. They can be placed in various locations in your factory, warehouse or other work environments. A solid foundation or wall is required for installation, especially when supporting heavy equipment. Proper anchoring is essential to ensure stability and safety.



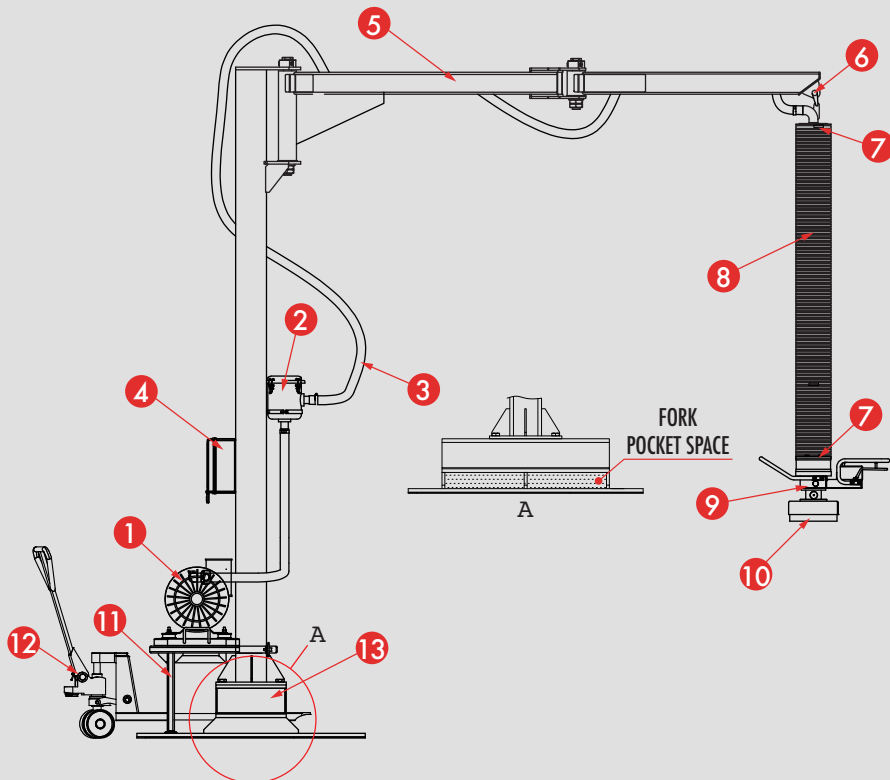
## MOBILE WORKSTATION SINGLE ARM



- 1 VACUUM UNIT ▶ 3 OPTIONS
- 2 VACUUM FILTER
- 3 VACUUM SUPPLY HOSE
- 4 ELECTRIC CONTROL BOX ▶ 2 OPTIONS
- 5 MOBILE OVER BRACED JIB CRANE
- 6 RAIL CABLE TROLLEYS
- 7 TROLLEY FOR LOAD
- 8 CLAMPS FOR FASTENING
- 9 LIFTING TUBE ▶ 6 OPTIONS
- 10 CONTROL HEAD ▶ 2 OPTIONS
- 11 VACUUM SUCTION PAD ▶ 4 OPTIONS
- 12 SUPPORT STAND FOR UNIT
- 13 HAND PALLET TRUCK
- 14 BALANCE BASE

Product image for illustration purposes only. Actual product may vary.

## MOBILE WORKSTATION EXTRA ARM



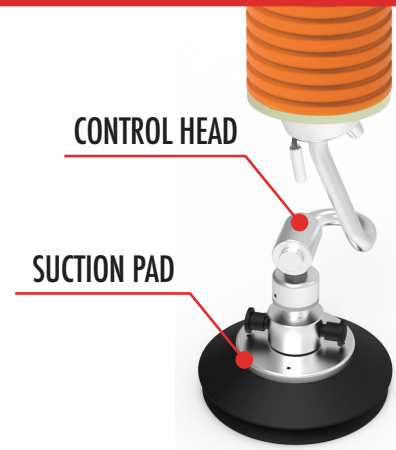
- 1 VACUUM UNIT ▶ 3 OPTIONS
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- 5 MOBILE ARTICULATED JIB CRANE
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- 7 CLAMPS FOR FASTENING
- 8 LIFTING TUBE ▶ 6 OPTIONS
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- 11 SUPPORT STAND FOR UNIT
- 12 HAND PALLET TRUCK
- 13 BALANCE BASE

Product image for illustration purposes only. Actual products may vary.

The Mobile Workstations are equipped with a hand pallet truck. This addition enhances the crane's flexibility and ease of operation by allowing it to change its working position more conveniently.

**VACUUM HEADS**  
**COMPONENTS**

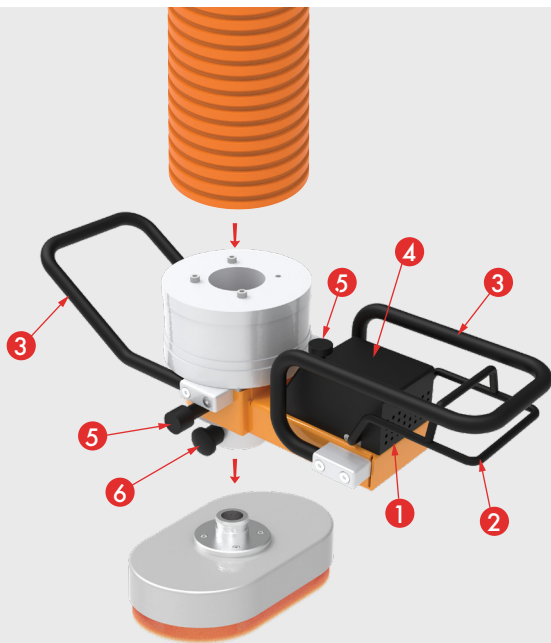
Aardwolf Vacuum Heads are versatile and customizable, featuring a variety of Control Heads and Suction Pads to accommodate different needs. Their ability to mix and match components easily provides efficient and tailored lifting solutions for a broad range of customer needs.



HEAD CONTROL SUCTION PAD TYPE	SINGLE CONTROL HEAD	COMFORTABLE CONTROL HEAD
	 SINGLE BELLOW	 ✓ Popular modular
 OVAL FOAM	✓	✓ Popular modular
 DOUBLE BELLOW	✓	✓
 QUADRUPLE BELLOW	✓	✓

## CONTROL HEADS

### POPULAR MODULARS

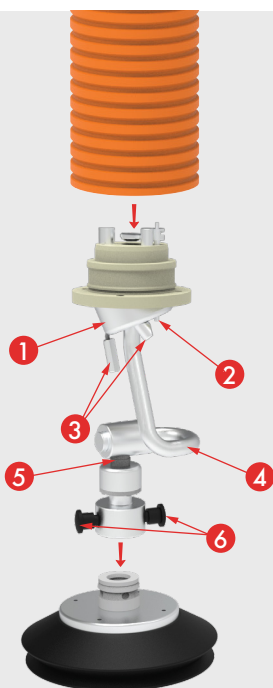


## 01 COMFORTABLE HAND

The Comfortable Hand features a Comfort Control Head and an Oval Foam Pad. It is operated with a Control Hand and two Handlebars, designed for efficient handling of light loads such as bags and cardboard boxes.

The load is lifted by pulling up and lowered by pressing down the Control Hand.

- |                       |                          |
|-----------------------|--------------------------|
| <b>1</b> CONTROL BOX  | <b>4</b> VALVE COVER     |
| <b>2</b> CONTROL HAND | <b>5</b> BALANCING KNOBS |
| <b>3</b> HANDLE BARS  | <b>6</b> PLUNGER KNOB    |

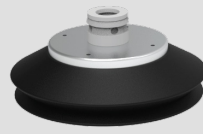
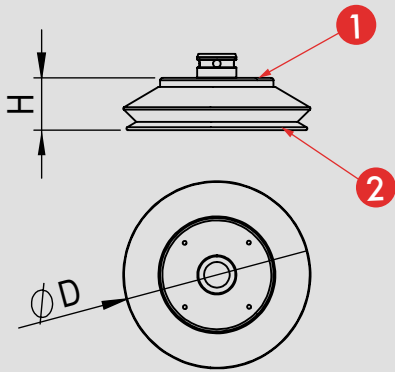


## 02 SINGLE HAND

The Single Hand features a Single Control Head and a Single Bellow Pad. Equipped with a 360-degree Rotation Pivot, users can adjust the direction of the goods as needed and operate it easily with one hand.

Goods are lifted or lowered using the Release Valves.

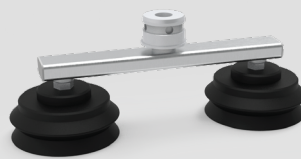
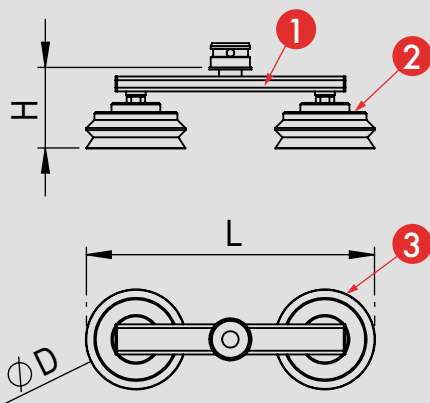
- |                         |                              |
|-------------------------|------------------------------|
| <b>1</b> VALVE BASE     | <b>4</b> PIPELINE            |
| <b>2</b> BALANCING KNOB | <b>5</b> 360° ROTATION PIVOT |
| <b>3</b> RELEASE VALVES | <b>6</b> PLUNGER KNOBS       |



- 1 BASE PLATE
- 2 BELLOWS PAD

### SINGLE BELLOW

The Single Bellow is a suction foot designed for lifting boxes, barrels, slabs and other smooth-surfaced transport goods.

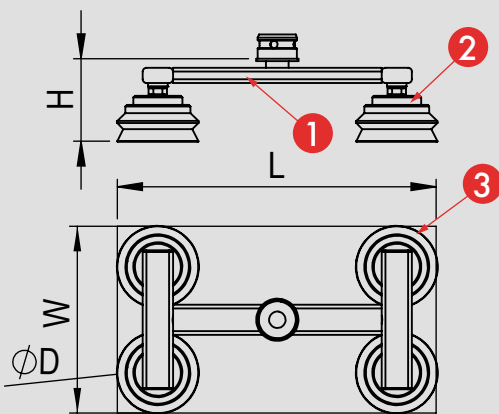


- 1 ALUMINIUM FRAME
- 2 BASE PLATE
- 3 BELLOWS PAD

### DOUBLE BELLOW

The Double Bellow uses 2 suction cups which attach to the aluminium frame.

This type is good for lifting small carton boxes, suitcases or other smooth workpieces.

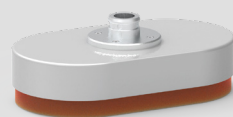
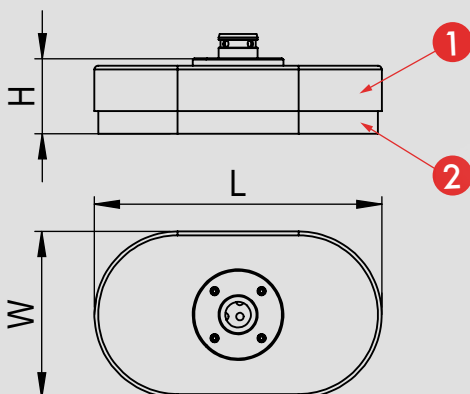


- 1 ALUMINIUM FRAME
- 2 BASE PLATE
- 3 BELLOWS PAD

### QUADRUPLE BELLOW

The Quadruple Bellow uses 4 suction cups which attach to the aluminium frame.

This type is good for lifting large or long carton boxes, some flat and light workpieces.

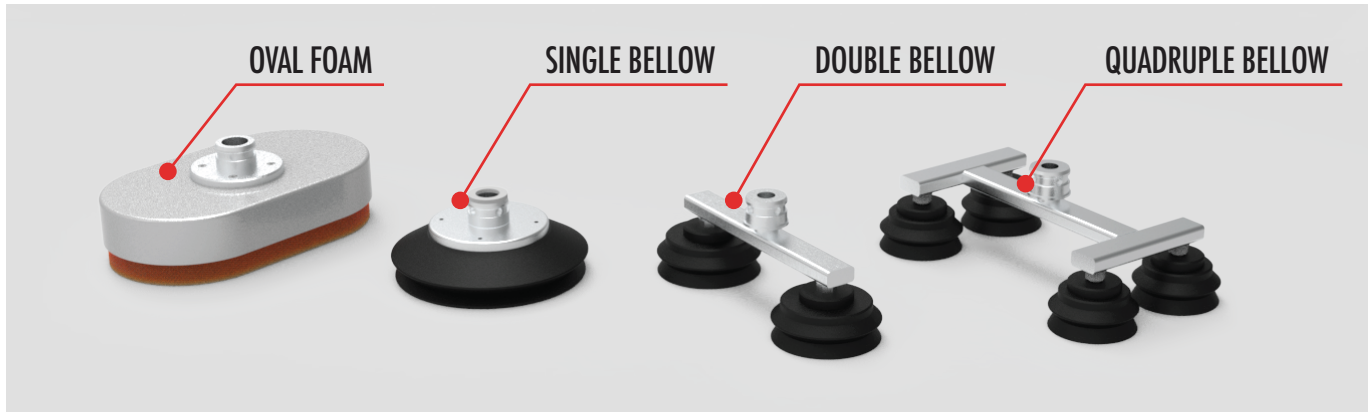


- 1 COVERING BLOCK
- 2 FOAM SEAL

### OVAL FOAM

The Oval Foam is designed for safely lifting bags and uneven-surface goods.

The foam seal compensates for surface irregularities, ensuring a secure grip on items.



<b>SINGLE BELLOW</b>	<b>Dimension (mm)</b>	<b>Non-porous Load (kg)</b>	<b>Porous Load (kg)</b>
BELLOW 200	Ø200 - H70	35	17
BELLOW 250	Ø250 - H75	54	27
BELLOW 300	Ø300 - H80	78	39
<b>Material Load:</b> Carton boxes, slabs			

<b>DOUBLE BELLOW</b>	<b>Dimension (mm)</b>	<b>Non-porous Load (kg)</b>	<b>Porous Load (kg)</b>
DOUBLE BELLOW 100	Ø100 - L320 x H106	17	17
DOUBLE BELLOW 125	Ø125 - L380 x H110	27	14
<b>Material Load:</b> Carton boxes, slabs			

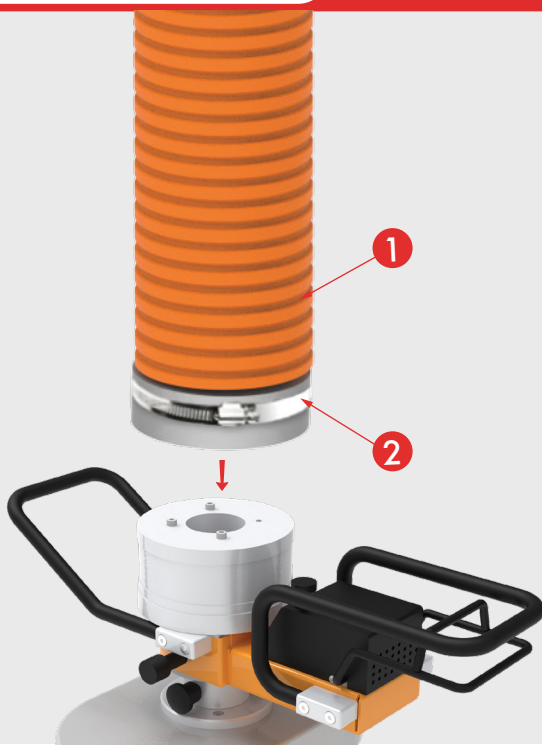
<b>QUADRUPLE BELLOWS</b>	<b>Dimension (mm)</b>	<b>Non-porous Load (kg)</b>	<b>Porous Load (kg)</b>
QUADRUPLE BELLOW 80	Ø80 - L380 x W210 x H100	22	11
QUADRUPLE BELLOW 100	Ø100 - L420 x W250 x H106	35	17
QUADRUPLE BELLOW 125	Ø125 - L470 x W300 x H110	54	27
<b>Material Load:</b> Carton boxes, slabs			

<b>OVAL FOAM</b>	<b>Dimension (mm)</b>	<b>Non-porous Load (kg)</b>	<b>Porous Load (kg)</b>
OVAL FOAM 380*220	L380 x W220 x H110	60	30
OVAL FOAM 300*200	L300 x W200 x H100	40	20
<b>Material Load:</b> Bags, carton boxes, slabs			

**LIFTING TUBE**  
**STRUCTURE**

The Aardwolf Lifting Tube, connected to a crane via a swivel joint and fastened to the Control Head with a clamp on the bottom, is used to lift, hold, and lower products by adjusting the vacuum pressure. It rises when the vacuum increases and lowers when it decreases.

If the vacuum supply fails or the blower malfunctions, the tube and its load descend slowly, ensuring a safe release.



1 LIFTING TUBE

2 CLAMP FOR FASTENING

**VACUUM TUBES OPTIONS**

LENGTH: 2000MM - 79"

100MM - 4"

120MM - 4.7"

140MM - 5.5"



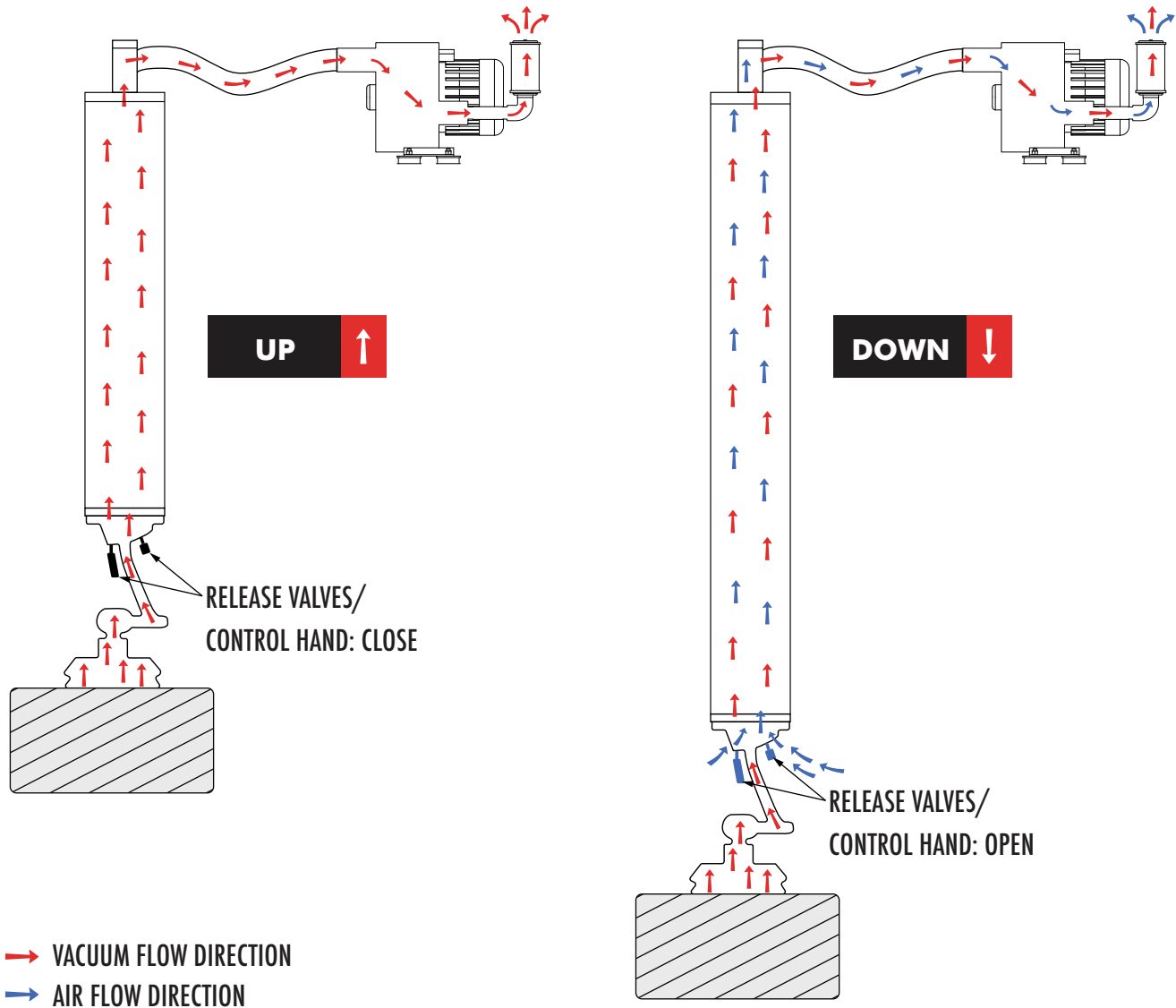
160MM - 6.3"

180MM - 7"

200MM - 7.9"



The lifting tube is covered by protective fabric.



*Image for illustration purposes only.*

## PICKING UP AND LIFTING THE LOAD

- The vacuum generator (pump, blower, or ejector) creates a vacuum in the system by continually evacuating air.
- The difference between the negative pressure and the ambient pressure, draws the workpiece to the vacuum gripper, a process commonly referred to as "picking up" the workpiece.
- Once the workpiece is picked up, the lifting tube contracts due to the flow rate, lifting the workpiece.

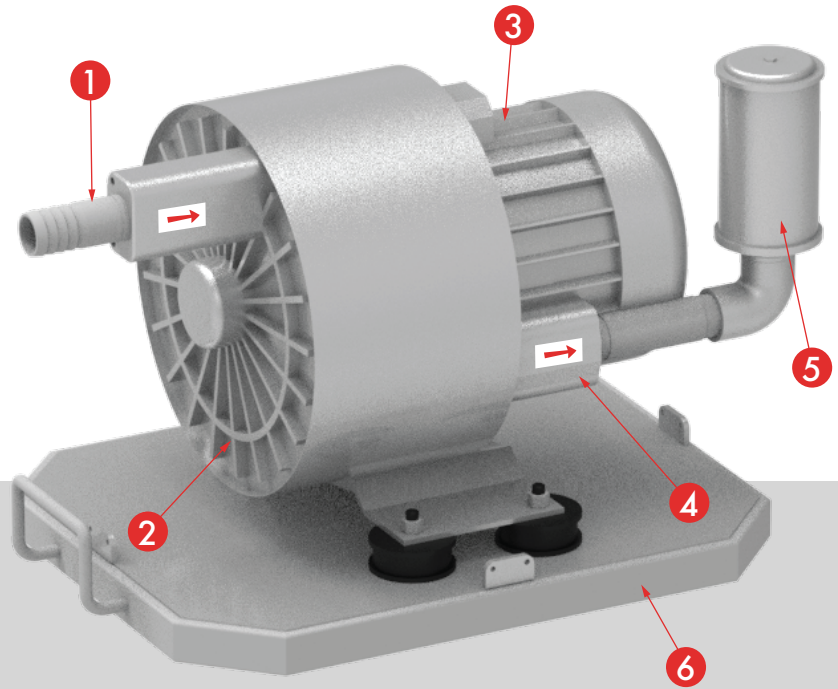
## LOWERING AND RELEASING THE LOAD

- Operating the controls allows atmospheric air to enter the system ("venting"), reducing the vacuum.
- This causes the lifting tube to expand, lowering the load.
- The lifting height can be precisely controlled by adjusting the amount of atmospheric air fed into the system.
- To release the load, the vacuum is completely emptied through venting via the operator handle.

## AARDWOLF VACUUM PUMP

### SAFETY, DURABILITY, AND EFFICIENCY

- Advanced vacuum pump technology
- Energy Efficiency
- High Flow Rates and Pressure
- User-Friendly Operation

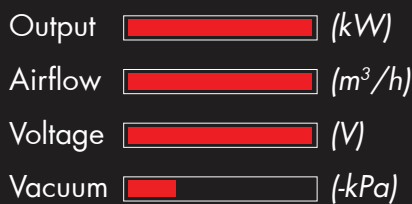


- 1 INLET PORT
- 2 PUMP CHAMBER
- 3 PUMP MOTOR
- 4 EXHAUST PORT
- 5 SILENCER
- 6 PUMP BASE



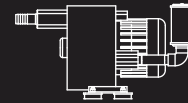
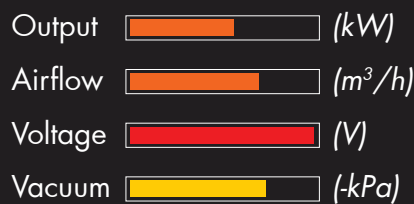
### STORM 1

AST-630



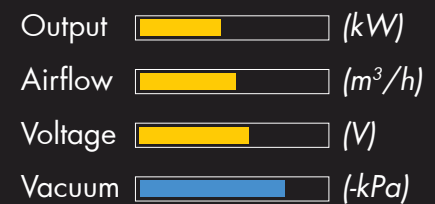
### STORM 2

AST-520



### STORM 3

AST-420



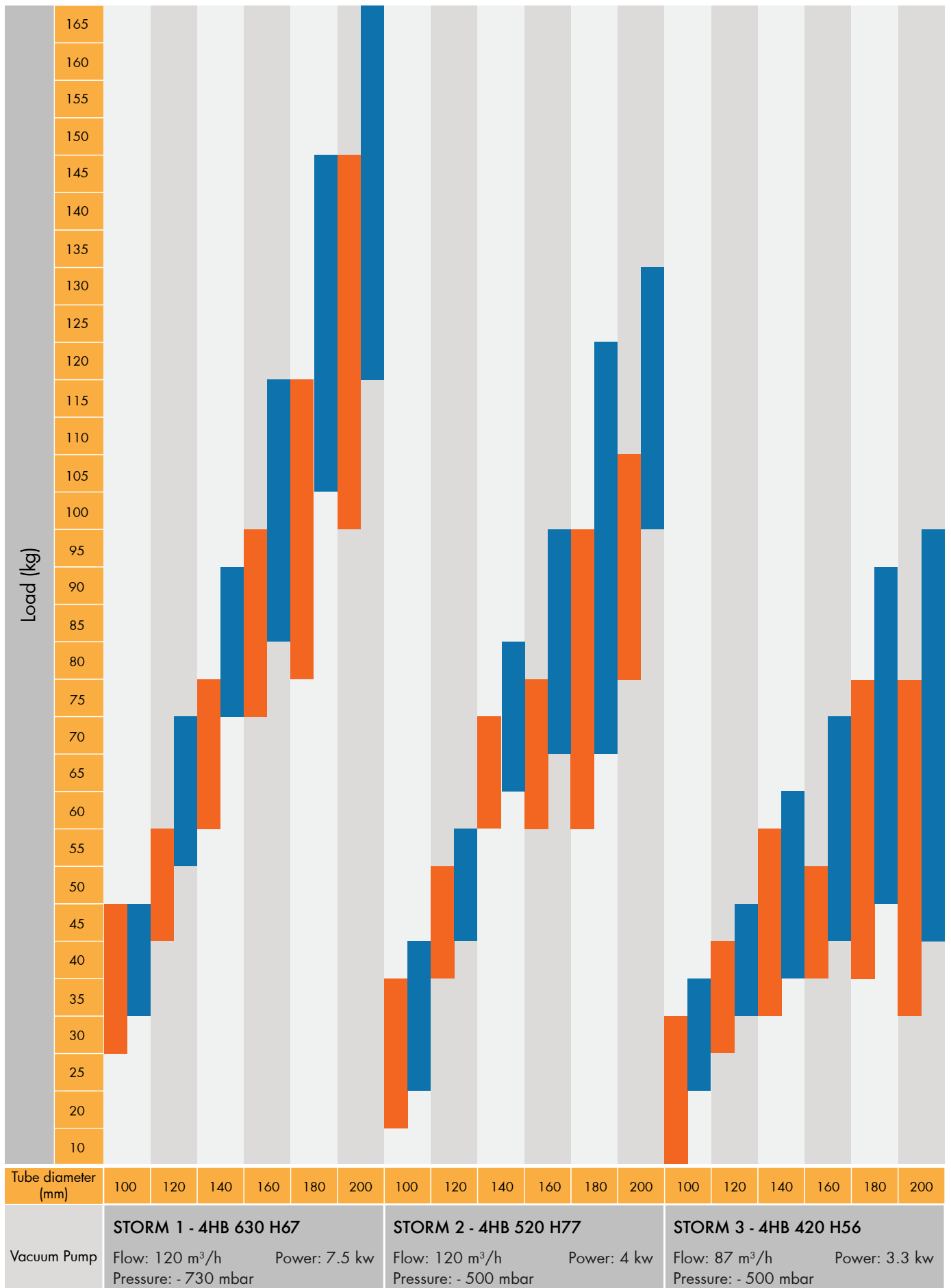
STORM		Output (kW)	Voltage (V)	Rated airflow (m <sup>3</sup> /h)	Rated vacuum/ Rated pressure (kPa)
<b>STORM 1</b> 4HB 630 H67	50 Hz	7.5	345 - 415△	170	-73/ 104
	60 Hz	8.6	380 - 480△	200	-70/ 104
<b>STORM 2</b> 4HB 520 H77	50 Hz	4	345 - 415△	120	-50/ 82
	60 Hz	4.6	380 - 480△	145	-53/ 81
<b>STORM 3</b> 4HB 420 H56	50 Hz	3.3	200 - 240△ / 345 - 415Y	87	-50/ 75
	60 Hz	3.8	220 - 275△ / 380 - 480Y	105	-51/ 85





# AARDWOLF LIFTING CAPACITY TABLE

■ Porous load
 ■ Non-porous load



Tube diameter (mm)	100	120	140	160	180	200	100	120	140	160	180	200	100	120	140	160	180	200
Vacuum Pump	STORM 1 - 4HB 630 H67						STORM 2 - 4HB 520 H77						STORM 3 - 4HB 420 H56					
	Flow: 120 m <sup>3</sup> /h      Power: 7.5 kw						Flow: 120 m <sup>3</sup> /h      Power: 4 kw						Flow: 87 m <sup>3</sup> /h      Power: 3.3 kw					
	Pressure: - 730 mbar						Pressure: - 500 mbar						Pressure: - 500 mbar					





**ELECTRIC CONTROL BOX**



**REMOTE CONTROL**

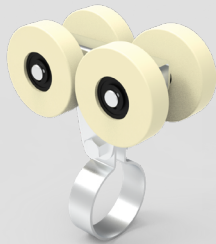
### **REMOTE CONTROL**

Turn the black knob to the right to activate Remote Control mode. The Remote has two ON/OFF buttons, working like those on the Electric Control Box to operate the Lifter.

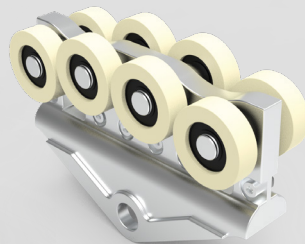


### **VACUUM FILTER**

The Vacuum Filters help remove dirt, impurities, preventing them from damaging vacuum pumps and other equipment. This enhances the longevity and operational efficiency of the equipment.



**RAIL CABLE TROLLEY**

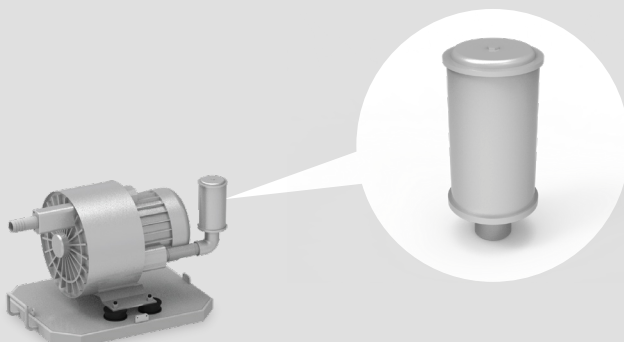


**TROLLEY FOR LOAD**

### **TROLLEYS**

The Rail Cable Trolley and Trolley for load facilitate the movement of the lifting tube along the crane system.

The Rail Cable Trolleys hang the vacuum supply hose off the ground.



### **SILENCER**

The Silencer reduces noise from the exhaust side to maintain a quieter working environment.

## ANSWER THE QUESTION BELOW TO DESIGN YOUR LIFTING SYSTEM

When designing the perfect handling solution, there are a large number of deciding factors at play. Using the following questions, you can prepare yourself for the design discussion with our consultant.

### 1 What type of crane do you require?

- |  |                                       |
|--|---------------------------------------|
| <input type="checkbox"/> Floor-Mounted Jib Crane | <input type="checkbox"/> Mobile Crane |
| <input type="checkbox"/> Wall-Mounted Jib Crane  |                                       |

### 2 What Jib length do you require?

- |   |                             |
|---|-----------------------------|
| <input type="checkbox"/> 2.5m (Articulated Jib Crane) | <input type="checkbox"/> 3m |
| <input type="checkbox"/> 4m                           | <input type="checkbox"/> 5m |

### 3. What work load limit do you require?

- |                                       |                                       |
|---------------------------------------|---------------------------------------|
| <input type="checkbox"/> W.L.L 45 kg  | <input type="checkbox"/> W.L.L 70 kg  |
| <input type="checkbox"/> W.L.L 80 kg  | <input type="checkbox"/> W.L.L 120 kg |
| <input type="checkbox"/> W.L.L 160 kg |                                       |

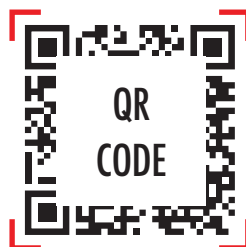
### 4 What Jib length do you require?

- |  |   |
|--|---|
| <input type="checkbox"/> Small Cartons (300x300 max) | <input type="checkbox"/> Large Cartons (300 to 400) |
| <input type="checkbox"/> Large Cartons (above 400)   | <input type="checkbox"/> High Stack                 |
| <input type="checkbox"/> Bags                        | <input type="checkbox"/> Sheet Material             |

IF YOU REQUIRE ANY FURTHER INFORMATION, FEEL FREE TO CONTACT OUR CONSULTANT

☎ 84 931 707 793

✉ [info@aardwolf.com.au](mailto:info@aardwolf.com.au)



THIS QR CODE WILL BE ADDED  
WHEN WE FINISH VACUUM TUBE LIFTER APP

OR SCAN HERE

For using Aardwolf Vacuum Tube Lifter  
Calculator Application



AARDWOLF PRODUCT VIDEO:  
[www.youtube.com/@Aardwolf.industries](http://www.youtube.com/@Aardwolf.industries)



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