

TAWI



Lifting technology for efficient manual handling



Efficient and ergonomic manual handling is key for long term business success

In Kungsbacka, a small town on the west coast of Sweden, TAWI head office is home to a dedicated staff, including everything from product development to production. Our team of experienced engineers design lifting solutions customized for your business needs. Their innovations are realised in the lifting equipment put together by skilled technicians, securing optimal quality and short lead times.



Dedicated customer support is guaranteed when investing in TAWI lifting solutions and our service team will assure that the equipment never fails you. Choosing TAWI means that you get Swedish quality and reliability, in product, service and support. We offer a wide selection of lifting solutions for everything from food manufacturing to automotive industry.

Our lifting equipment handles everything from boxes and sacks, to cheese and windshields. We can turn, tilt and rotate heavy barrels, large panels and much more. Our solutions include vacuum lifters, hoists, crane systems and mobile lifters. This means that TAWI equipment cover all your lifting needs. Experience the benefits of using one complete supplier.
- Contact us today.



973-761-4150



SALES@AIROYAL.BIZ



AIROYALCOMPANY.NET

Save money with TAWI

Higher productivity and...

Increase productivity by making lifting easy. Lift more without losing speed and maintain productivity all day, every day. When lifting is easy you can lift more, with less effort.



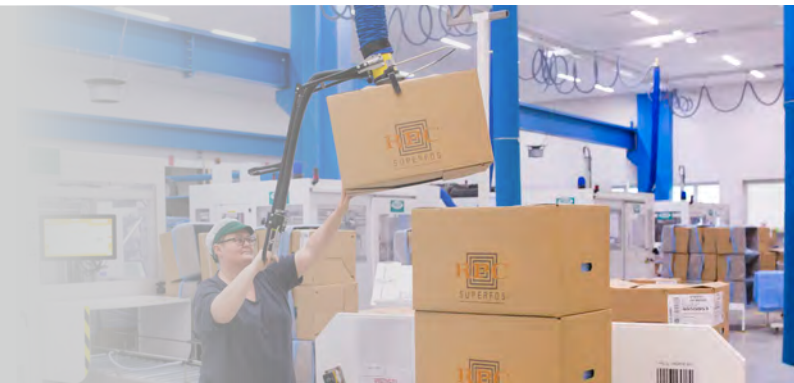
healthier employees and...

Relieve employees from strenuous lifting and help them stay healthy, alert and efficient all day. Your staff will be healthier and feel better, they will manage demanding work for long hours and still have energy for more.



workforce flexibility...

Big and strong or small and slender. It doesn't matter, anyone can lift. Streamline your operations by giving everyone the power to lift. Create a flexible workplace where employees can move between workstations to avoid unnecessary downtime and ensure continuous productivity.



...come together as the TAWI equation

Higher productivity, healthier employees and greater workforce flexibility equals a cost effective and ergonomic work environment. That is how you save money with the TAWI equation.

Speed up the manual handling of goods with vacuum

TAWI vacuum lifters are robust and reliable tools that make lifting easy, for everyone. Our lifters are always designed with the user in focus. The vacuum lifters are very user-friendly and anyone will learn how to use them within minutes.

Vacuum technology is ideal for secure lifting without risk of damaging the goods or the person lifting them. Grip the load with suction cups designed for the goods you need to lift, regardless if you are lifting sacks, boxes, sheets or something else.

TAWI vacuum lifters allow everyone to lift up to 270 kilos without effort. Giving everyone the power to lift increases workforce flexibility, making it easy for employees to switch between work stations. The lifters are extremely versatile, handling everything from simple boxes to complicated car components.

TAWI VacuMove is our most versatile lifter, handling everything from ungainly sacks to fragile glass sheets or complex car components.

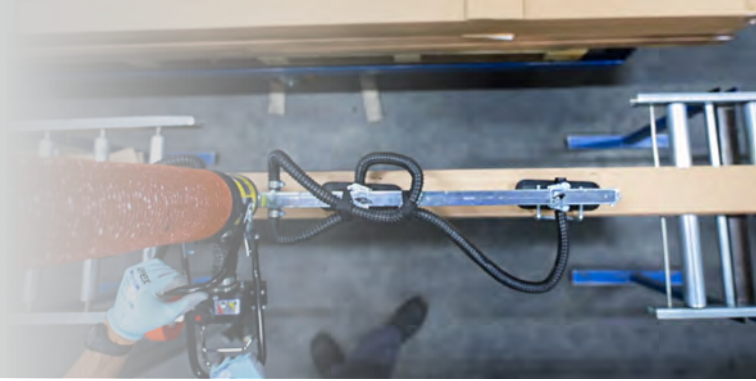
TAWI VacuCobra is your high-speed choice, ideal for high frequency handling of packaged goods.



TAWI VacuMove

Boxes and cartons

- Rapid, efficient workflow
- Accurate, secure grip and positioning
- Adjustability to suit various box sizes and shapes
- Maximum speed with minimal effort

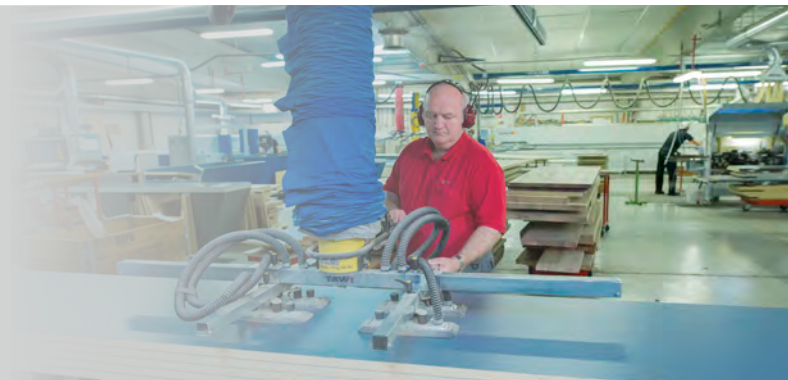


Sacks and bags

- Drastic reduction in heavy, repetitive lifting
- Secure grip on every bag for efficient reliable lifting
- Tools for plastic, paper and woven sacks
- Lifting without damaging the sack

Sheets

- Handling sheets of wood, glass, aluminium and laminate
- Secure grip for efficient, reliable lifting
- Big range of movement for highest accuracy and flexibility
- Tilt or turn sheets up to 360°



Drums, kegs and cannisters

- Grip from the top or from the side
- Easy and ergonomic manual handling
- Tools for tilting or rotating drums
- Grip and lift several drums or pails together

TAWI VacuMove standard models

Model	VM30	VM40	VM50	VM60	
Lifting capacity	30 kg/65 lbs	40 kg/90 lbs	50 kg/110 lbs	60 kg/130 lbs	
Max length lift tube	2 500 mm	2 500 mm	2 500 mm	4 000 mm	
Lift tube ø	100 mm	120 mm	140 mm	160 mm	
Stroke	1 800 / 2 600 mm	1 800 / 2 600 mm	1 800 / 2 600 mm	1 800 / 2 600 mm	
Lifting speed	0-1 m/s	0-1 m/s	0-1 m/s	0-1 m/s	

Model	VM80	VM100	VM120	VM180	VM270
Lifting capacity	80 kg/175 lbs	100 kg/220 lbs	120 kg/265 lbs	180 kg/400 lbs	270 kg/600 lbs
Max length lift tube	4 000 mm	2 500 mm	4 000 mm	2 500 mm	2 500 mm
Lift tube ø	180 mm	200 mm	230 mm	250 mm	300 mm
Stroke	1 800 / 2 600 mm	1 700 / 2 400 mm	1 700 / 2 400 mm	1 500 / 1 800 mm	1 500 / 1 800 mm
Lifting speed	0-1 m/s	0-1 m/s	0-1 m/s	0-1 m/s	0-1 m/s

VM30-VM120 are available in stainless steel, ideal for industries with high sanitary requirements.
VM180 and VM270 are available in stainless steel with standard hose.



We recommend mounting your
TAWI VacuMove in our own range of crane systems. The jib arm or bridge crane suspends the lift tube and is available in different lengths and capacities.

Find more information about TAWI crane systems on pages 26-27.

Vacuum pumps

Our vacuum pumps are designed with three key features in mind; performance, reliability and sustainability. The direct driven pump minimizes friction and unnecessary wear, ensuring continuous operations for your vacuum lifters.

TAWI vacuum pumps are available in two models; medium and large. The medium model is recommended for VM30-50, the large model for VM60-270.



Handles



Fixed handle



Standard handle



Flex handle



Special handle

Suction feet



Fixed handle with
special suction foot
630200



Standard handle
with suction foot for
sacks 630300



Fixed handle with
hook tool 630460



Flex handle with
suction foot for
boxes 630650



Fixed handle with
suction foot 610650



Flex handle with
suction foot for reels
610400



Fixed handle with
suction foot for
sacks 610320



Flex handle with
suction foot for
sheets 610620, angle
adapter 610810, and
handle for angle
adapter 610811



Flex handle with
suction for side
lifting 610850



Flex handle with
special spider yoke
for lifting sheets



Flex handle with
suction foot 610700



Suction foot for
drums 650210

TAWI VacuCobra standard models

Model	VC20	VC35	VC40	VC50
Lifting capacity	20 kg/45 lbs	35 kg/75 lbs	40 kg/90 lbs	50 kg/110 lbs
Max length lift tube	2 100 mm	2 100 mm	2 100 mm	2 100 mm
Lift tube ø	80 mm	100 mm	120 mm	140 mm
Stroke	1 680 mm	1 6150 mm	1 615 mm	1 590 mm
Lifting speed	0-1 m/s	0-1 m/s	0-1 m/s	0-1 m/s



High-speed manual handling has never been easier. Grip and lift quick and easy with just one hand, powered by reliable vacuum technology.

TAWI VacuCobra is conveniently mounted in a TAWI Jib Crane or for larger working areas, in a TAWI Overhead Bridge Crane. The air hose is held out of the way so that you can work efficiently without any disturbance. Your local TAWI representative will be happy to guide you to the best mounting solution for your lifter.

TAWI VacuCobra options

All TAWI VacuCobra models are available in stainless steel execution, a safe choice when lifting in environments with high demands on cleanliness. The stainless steel models are often used in food production, safely handling blocks of cheese or frozen meat, milk cartons, wine boxes and more. The suction feet can be adapted to meet your specific requirements, ensuring that the lifter is ideal for gripping your goods, no matter what they are.



VC35 stainless steel

VC35 with standard suction head

VC35 with adapter

TAWI VacuCobra

High speed handling

- High-speed box handling
- Grip boxes from the top or from the side
- One-handed lifting with user-friendly joystick handle
- Suitable for left- and right-handed users



Time-efficient

- Easily pick up load with one hand
- Quick and easy release of load



Ergonomic and user-friendly

- Comfortable joystick handle for easy operations
- Saves workers from straining repetitive lifting
- Rotate the load without rotating the lifter and handle goods with great accuracy
- Ergonomic design ensures a safe and ergonomic working position



Handling boxes and more

- Gripping load with vacuum for a safe grip that does not damage the load
- Various suction tools allow quick handling of cartons, pails, sacks and more



Ergonomic lifting with full mobility and flexibility

TAWI mobile lifters allow you to lift anything, anywhere. Pick up goods in one place, transport them effortlessly, and lift them in place wherever you need them.

TAWI Mobile Order Picker is a unique solution for efficient order picking and material handling. Simply pick up the mobile vacuum lifter unit with any kind of forklift or pallet jack and go wherever you need to lift.

TAWI Lifting Trolleys are ideal for moving goods to and from a production line, or simply lifting without being confined to just one work station. A variety of tools make these portable devices suitable for lifting different types of goods, including reels, drums and crates.

We know the importance of flexibility and mobility and that is why our lifting trolleys do not only lift but also rotate, turn and tilt goods. Reels are tilted from vertical to horizontal position before they are conveniently mounted on a machine axis. Drums and crates are easily tilted to empty their contents with no physical effort for the operator.



TAWI Mobile Order Picker

Lift anything

- Cartons and boxes
- Paper, plastic and woven sacks
- Sheets of wood, metal, glass or plastic
- Drums, kegs or cannisters
- Tyres
- and more



Lift anywhere

- Move the lifter anywhere you need to lift
- Compatible with any type of forklift or pallet jack
- Adjustable tower height allows reach into pallet racks or other low headroom areas



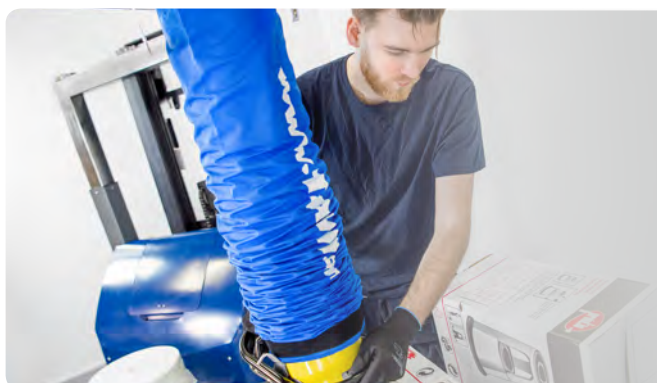
Safe and user friendly

- Designed for ergonomic manual handling
- Support legs for optimal stability when lifting
- Safety lock holds articulating arm in place when moving the lifter
- User friendly on-board panel
- Integrated light panel facilitates work in dark spaces



Flexible and versatile

- Compatible with various vacuum lifters and vacuum tools
- Adaptable fork tunnels for effortless adjustment to any fork system
- Electronically driven height adjustment to accommodate different lifting heights and height limitations



TAWI Mobile Order Picker specifications

Model	VM40	VM50	VM60	VM80	VC40
Lifting capacity	40 kg/90 lbs	50 kg/110 lbs	60 kg/130 lbs	80 kg/175 lbs	40 kg/90 lbs
Lift tube ø (mm)	120	140	160	180	120
Stroke vacuum lifter (mm)	1340	1320	1320	1290	1230
Stroke tower (mm)	500	500	500	500	500
Lift tube length (mm)	1750	1750	1750	1700	1600
Noise level, idle (dB)	76	76	76	76	76
Noise level, in operation (dB)	75	75	78	78	76
Max lifting height*	1940	1920	1900	1890	1810
with lowered tower (mm)	1440	1420	1400	1390	1310
Battery charging procedure	Plug into an electrical outlet (100-240 V. For 110 V, use 3-phase charger. For 230 V, use single-phase charger. Grounded, 50-60 Hz) Recommended 8 hours continuous charge.				
Battery pack replacement	Prolonged operational time is achieved by switching the battery pack. This procedure takes approx. 10 minutes.				
External power source	The unit can be connected to a 24 V external power source				
Up and down motions of tower	52-58 mm/s				
Weight of unit	630 kg				

* From bottom of suction head (excl. suction foot)

Technical drawings

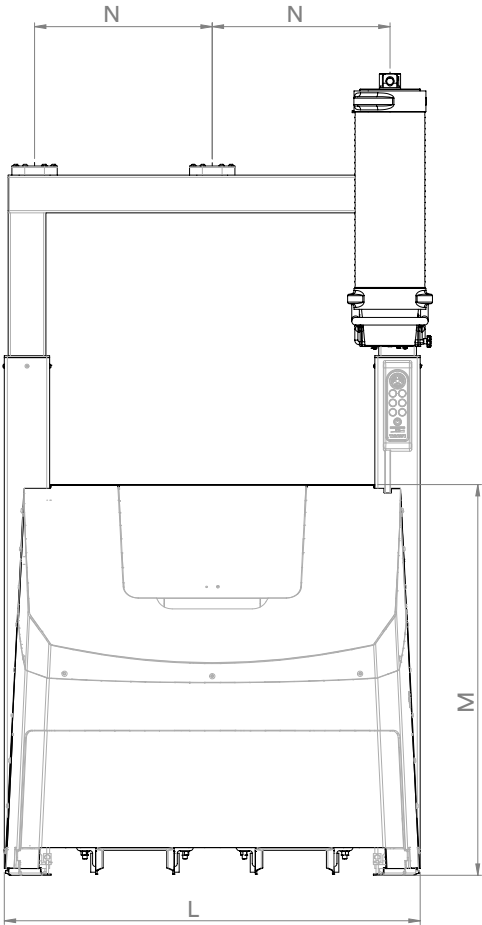
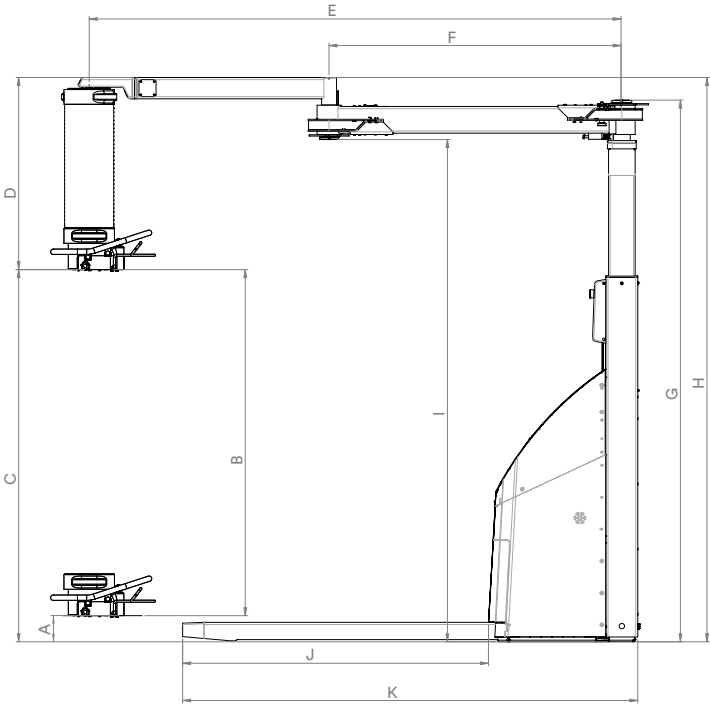
Drawings on the following pages provide an overview of ^{TAWI} Mobile Order Picker in various perspectives. The table lists dimensions for the unit equipped with different vacuum lifter models. All measures are in millimeters.

	VM40	VM50	VM60	VM80	VC40
A*	150	149	132	156	130
B	1340	1320	1320	1290	1230
C*	1490	1469	1452	1446	1360
D	592	613	630	637	722
E	2000	2000	2000	2000	2000
F	1100	1100	1100	1100	1100
G*	2000	2000	2000	2000	2000
H*	2080	2080	2080	2080	2080
I*	1850	1850	1850	1850	1850
J	1150	1150	1150	1150	1150
K	1710	1710	1710	1710	1710
L	1100	1100	1100	1100	1100
M	1130	1130	1130	1130	1130
N	470	470	470	470	470

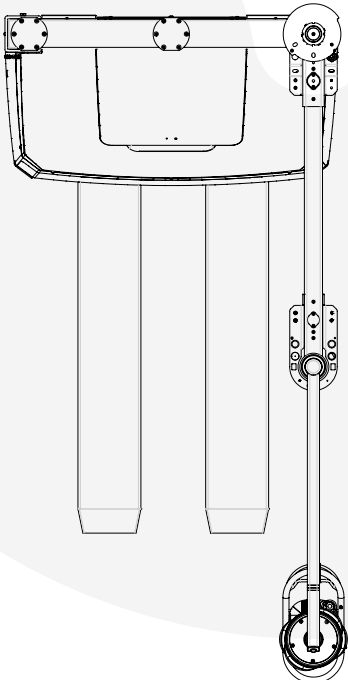


Side view

Front view



Top view



TAWI Mobile Order Picker Compact



Unlimited reach

The Mobile Order Picker Compact offers extended reach into pallet racks, containers and other areas with limited head room.

Due to the extremely compact design the operator can smoothly move the arm in and out of pallet racks, reaching all goods on a pallet from top to bottom.



Control all motion with one hand

- User-friendly ergonomic handle
- Grip, lift, lower and release loads with one hand
- Adjust the height of the tower directly on the handle
- Start and stop the vacuum pump with one click

Integrated battery and vacuum pump

- Battery and vacuum pump are integrated in the unit
- Operation time: 3 hours constant use
- Easy to switch battery pack
- Robust cover protecting battery and on-board electronics



Support legs for optimal safety

- Automatically activated support legs
- Ensure stability when lifting
- Maximum safety for operator and load

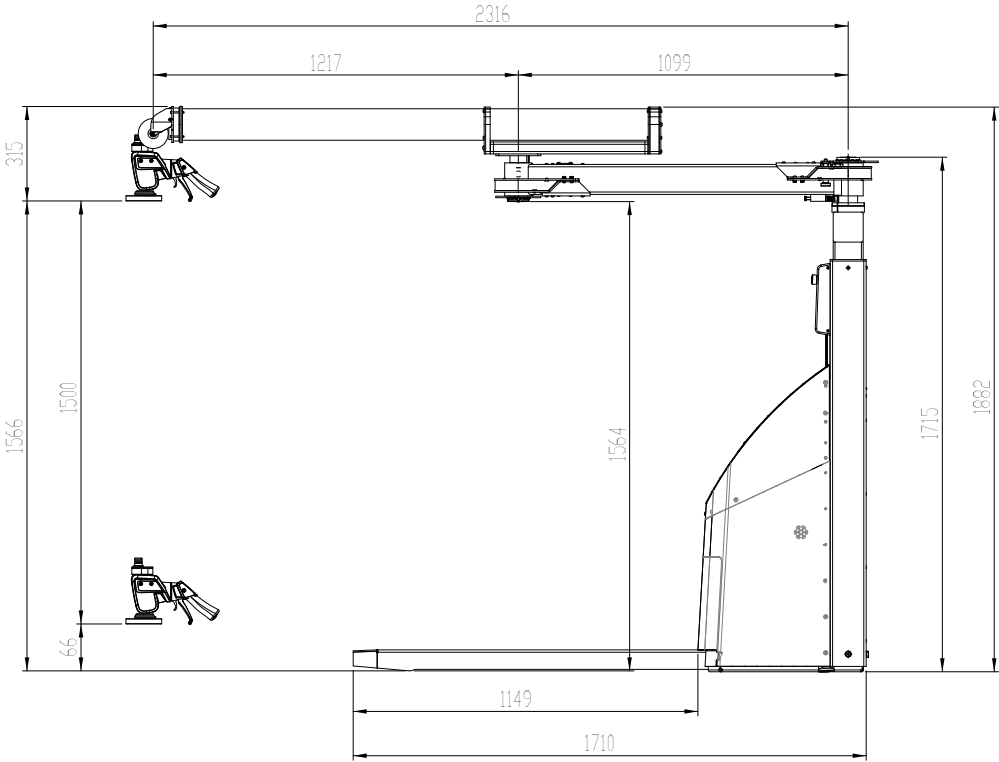


TAWI Mobile Order Picker Compact - technical specifications

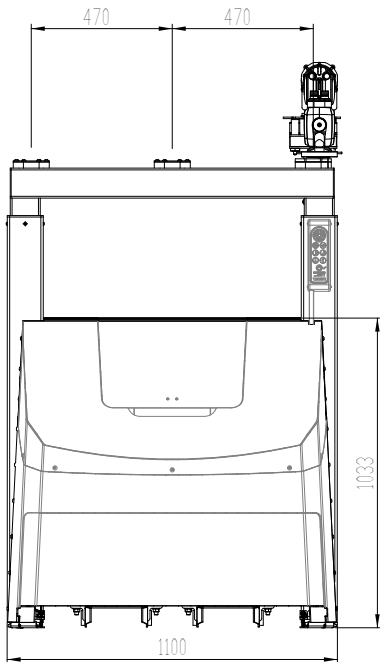
	Specification
Lifting capacity	35 kg/75 lbs
Adjustable height	500 mm
Battery charging procedure	Plug into an electrical outlet (100-240 V. For 110 V, use 3-phase charger. For 230 V, use single-phase charger. Grounded, 50-60 Hz) Recommended 8 hours continuous charge.
Battery pack replacement	Prolonged operational time is achieved by switching the battery pack. This procedure takes approx. 10 minutes.
External power source	The unit can be connected to a 24 V external power source
Up and down motions of tower	52-58 mm/s
Weight of unit	630 kg



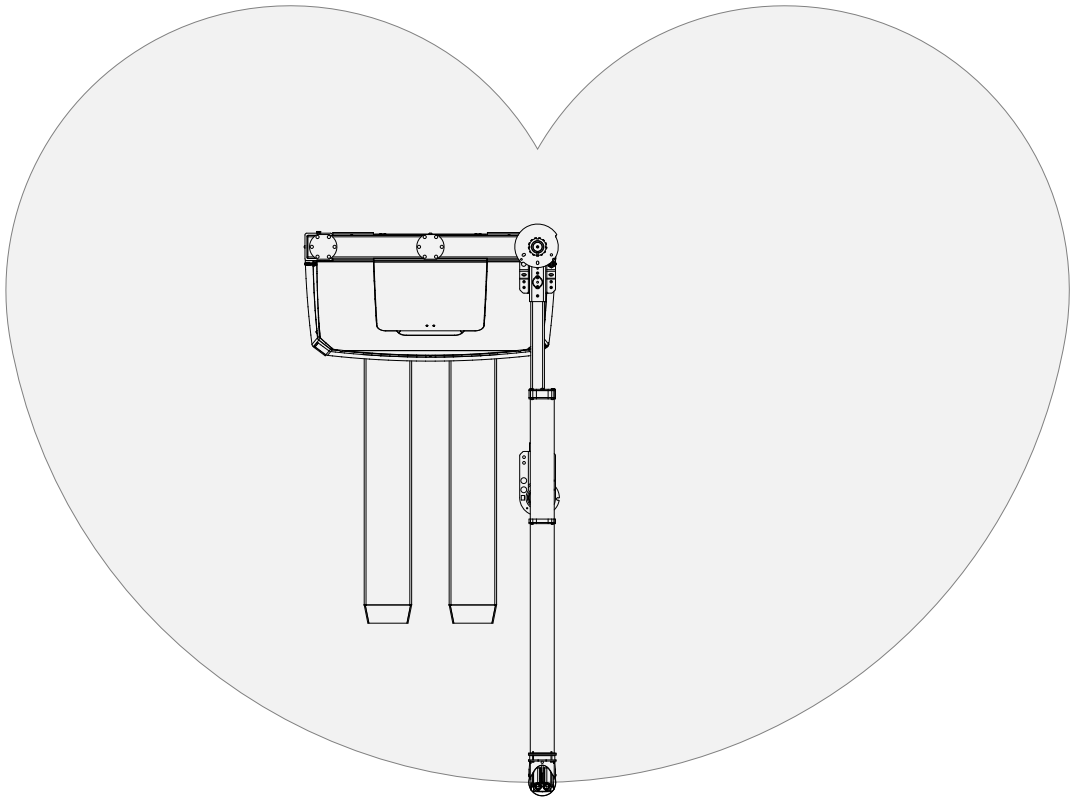
Side view



Front view



Top view



TAWI Lifting Trolleys

Variable mast size

Variation of lengths to meet your requirements



Detachable hand control

Smoothly detached hand control for optimal operation



User friendly control panel

- Emergency stop
- Integrated operation controls for tooling
- Service indicator
- Battery status display



SmartPack - the efficient battery pack solution

- Long battery life
- Detachable battery
- Easy to switch batteries
- No cables
- Effective charger
- Battery status indicator



Wide selection of tools

Easy handling of

- Reels
 - Drums
 - Crates
 - Boxes
- And much more!



Reliable braking system

Cental brake with three positions:
Directional lock, Neutral and
Brake



Safe and reliable

- SafeDrive ensures that if a tool hits an object during lowering, it will stop immediately
- The lifter is belt driven which ensures quiet and smooth oil free drive
- Circuit board for speed control and overload protection on all models



Flexible

- Modular construction, making it easy to adjust the lifter for various applications
- The standard series have lifting capacities between 40-250 kg/90-550 lbs
- On several models, the measures of the wheels makes it possible to drive the lifter into a Euro-pallet in three different ways

Ergonomic

- Minimizes the strain on back, knees and shoulders
- Ergonomic handle for easy and comfortable operation
- High quality and robust wheels for smooth and simple transportation with and without load



Efficient

- Lift more with less effort
- Detachable battery pack makes it easy to switch batteries. No cables.
- Effective battery charger makes the full charging cycle fast
- Charging indicator clearly showing the battery charging status

Models and technical details



Model	PRO40	PRO80	PRO140	PRO180
Lifting capacity	40kg/90 lbs	80kg/175 lbs	140kg/300 lbs	180kg/400 lbs
Stroke mm short/medium/long	-/1040/-	850/1400/1950	840/1390/1940	840/1390/1940
Weight of unit kg short/medium/long	-/41 /-	46/50/53	69/73/78	77/ 81/86
Total height of unit mm short/medium/long	-/1640/-	1440/1990/2540	1440/1990/2540	1440/1990/2540
Battery charging procedure	100-240V, grounded 50-60 Hz	100-240V, grounded 50-60 Hz	100-240V, grounded 50-60 Hz	100-240V, grounded 50-60 Hz
Lifts per charge	40kg x 1m x 100 times	80kg x 1m x 100 times	140kg x 1m x 100 times	180kg x 1m x 100 times
Up and down motions	Control panel (one speed)	Hand control (two speed)	Hand control (two speed)	Hand control (two speed)
Front wheels	Swivelling	Swivelling	Fixed	Fixed
Brake system	Rear wheels separately braked	Central brake with directional lock	Central brake with directional lock	Central brake with directional lock
Overload protection	Incorporated in circuit load	Incorporated in circuit load	Incorporated in circuit load	Incorporated in circuit load

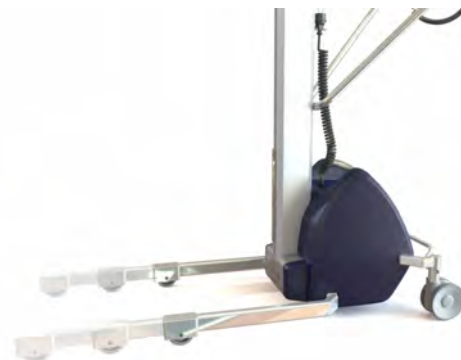


Model	PRO250	PRO100ESE	PRO200ESE	Stainless steel
Lifting capacity	250kg/550 lbs	100kg/220 lbs	200kg/440 lbs	
Stroke mm short/medium/long	-/1360/1910	-/1390/1940	-/1360/1910	
Weight of unit kg short/medium/ long	- /107/113kg	- /115/120kg	- /152/158kg	Legs, wheels and handle in stainless steel. Equipped with a white FDA approved cover.
Total height of unit mm short/medium/long	-/1990/2540	-/1990/2540	-/1990/2540	
Battery charging procedure	100-240V, grounded 50-60 Hz	100-240V, grounded 50-60 Hz	100-240V, grounded 50-60 Hz	Available for models PRO140-250 including 100ESE and 200ESE.
Lifts per charge	250kg x 1m x 100 times	100kg x 1m x 100 times	200kg x 1m x 100 times	
Up and down motions	Hand control (two speed)	Hand control (two speed)	Hand control (two speed)	For technical details see separate model.
Front wheels	Fixed	Fixed	Fixed	
Brake system	Central brake with directional lock	Central brake with directional lock	Central brake with directional lock	
Overload protection	Incorporated in circuit load	Incorporated in circuit load	Incorporated in circuit load	



With **EasyFlex** we can adjust the length of the legs according to your specific needs.

On models PRO80 and PRO140 the legs can also easily be adjusted in width, each leg is adjustable by 150mm.



Tools and accessories



Platform

Ergonomic handling of various goods. Two surface materials: stainless steel and checker plate.



Fold up platform

Flexible tool with fold up platform and fork tool. Lift boxes and crates with the same tool.



Boom

Ergonomic reel handling. Lift and transport reels onto shafts and machines without effort.



Roller boom

Equipped with rollers for effortless loading and unloading of reels. Safety pin for safe transportation.



Tube fork

Easy handling of reels from their outer surface.



Crane arm with hook

Handling of various goods. Optimal for reaching into narrow spaces.



Fork for shafts

Precise handling of reels on shafts into machine.



Coregripper

Reel handling from the core, Ø76 and Ø152. Rotate from vertical to horizontal position.



Ladder

Optimal for pushing goods from the tool onto a shelf. Can be mounted on both sides of the lifter.



Quick coupling

Makes it possible to easily switch tools on the lifter.



Articulating adapter

Enables easy articulation of tools. Can be mounted between all types of tools.

Lifting all types of goods with precision and power

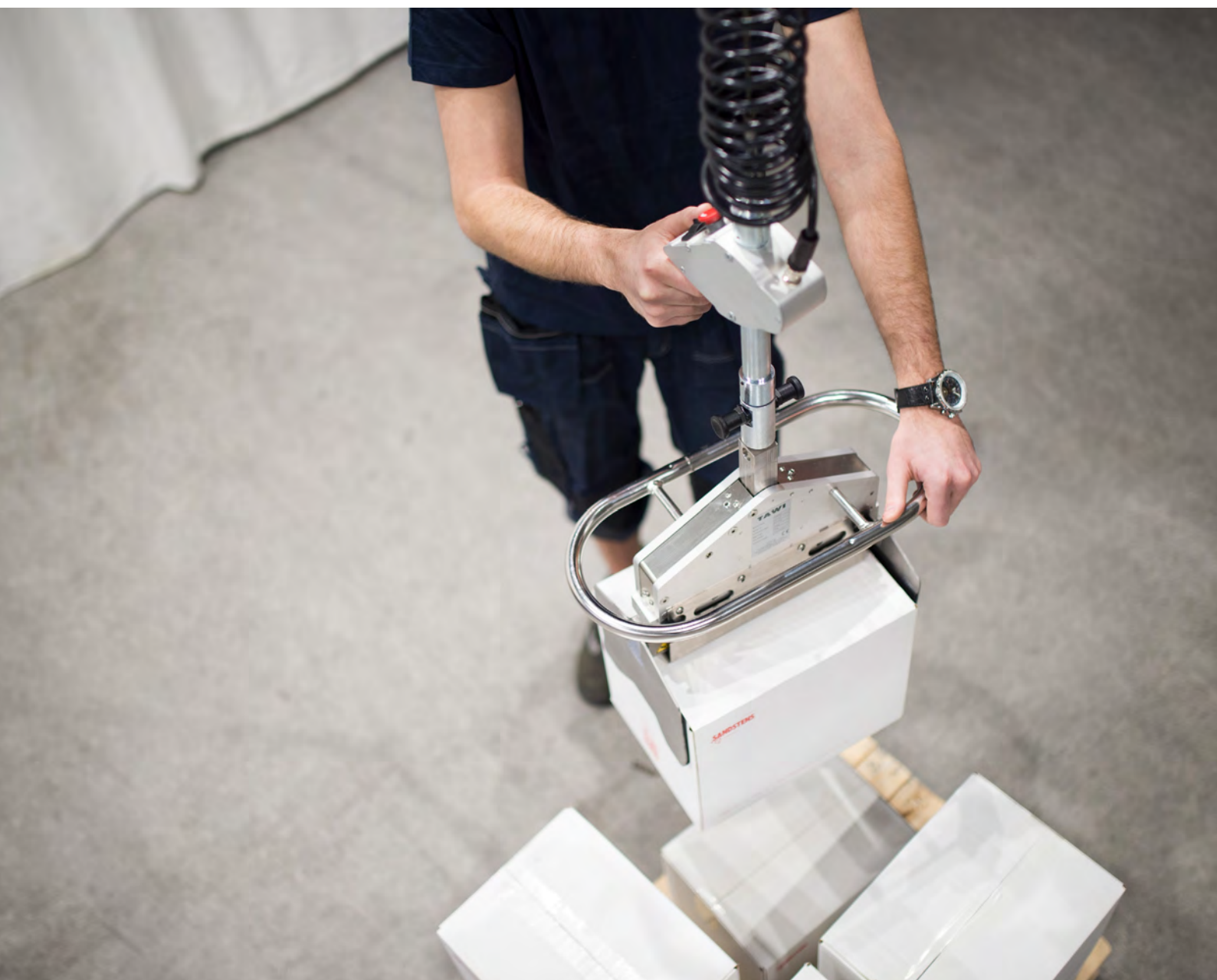
An electric hoist is ideal when you need to lift with stability and control. Perfect for handling cumbersome containers, tall metal profiles and much more.

^{TAWI} ViperHoist is among the fastest hoists on the market, lifting with both speed and precision. A wide selection of tools makes it possible to lift anything from woven sacks to metal profiles. A user-friendly and ergonomic handle makes the hoists easy to control with just one hand. Variable speed control allows you to choose how fast or

slow you need to move at any point, giving you full control and precision when lifting.

^{TAWI} Chain Hoist lets you handle heavier loads, up to 2,500 kg/5,500 lbs. The chain hoist is characterized by its silent run and long durability, even in very tough conditions. This strong and durable hoist is even suitable for outdoor use.

The electric hoists are easy to install and require little maintenance. High quality and low energy consumption makes the hoist a sustainable choice with low cost of ownership. Simply a great way of streamlining manual handling of goods and saving both time and money.



TAWI ViperHoist & TAWI Chain Hoist

Tools for various applications

- Reels
- Metal profiles
- Car components
- Batteries
- Cannisters, drums
- Pallets
- Sacks



Speedy and efficient

- Up to 0.75 m/s lifting speed
- Variable speed control
- User-friendly joystick handle makes the hoist easy and efficient to work with
- Quick coupling allows quick change of tools
- Lifting capacity 60/120 kg (130/260 lbs) wire hoist



Cost-efficient and sustainable

- low energy consumption
- low cost of ownership
- easy to install and requires little maintenance



Heavy duty chain hoist

- Lifting capacity <2 500 kg (5,500 lbs)
- IP65, suitable for outdoor use
- Chain safety factor min 8 times (FEM, 2m, ISO, M5)
- Low-wear DC-spring-loaded brake



Models and technical details

	ViperHoist Vh60/VH120	Chain Hoist
Lifting capacity	60/120kg 130/260lbs	<1,600 kg/3,500 lbs
Lifting speed	0.75/0.35 m/s	8/2 m/min
Power supply	230V +/-10%	3x400V
Lifting height	2 000 mm	4 000 mm
Speed control	variable	2-speed
Frequency	47-63 Hz	50 Hz

TAWI offers a complete selection of wire hoists and chain hoists. The wire hoist is the preferable choice when you need to lift with speed and precision. The chain hoist is very powerful and durable, the right choice for heavier loads and for lifting in tough conditions.

Both hoists offer a selection of tools for handling all types of loads, anything from sacks or drums to car chassis or entire walls.

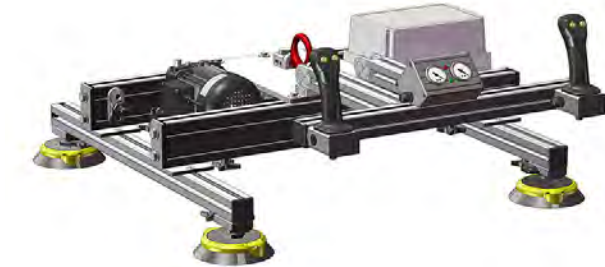


TAWI Grip vacuum yoke

	Horizontal	Vertical
Lifting capacity	500 kg/1,100 lbs	250 kg/550 lbs
Vacuum source	electric or pneumatic	electric or pneumatic
Suction cups	dimensioned for double the load	dimensioned for four times the load
Tilt	-	90°

Mounted in a chain hoist ^{TAWI} Grip vacuum yoke allows easy and efficient handling of all types of sheet materials. Using an electric or pneumatic vacuum source, the yoke safely holds big sheets of glass, metal, wood or plastic. The vertical model allows 90° tilt, while the horizontal model can handle heavier loads, up to 500 kg/1,100 lbs.

The vacuum yoke is available in two standard models but can also be customized to meet specific customer requests. Talk to your local TAWI representative and they will help you find the best tool for your needs.



TAWI Grip

Handling all types of sheets

- Glass
- Metal
- Laminate
- Plastic
- Wood



Tilt and turn

- Tilt and turn big sheets effortless and easy
- Up to 180° tilt
- CNC loading

Ergonomic and user-friendly

- User-friendly control panel
- Compact design
- Adaptable to your needs
- Ergonomic design minimises the risk of straining or injury



Custom made

- The tool can be custom made to meet your every need
- Suction cups adapted to your load
- Tilt and turn functionality adaptable to suit your workflow and requirements

A reliable foundation for efficient lifting

A crane system built for your needs, integrated in your workflow, will help ensure efficient lifting and productive processes. TAWI Overhead Bridge Cranes and TAWI Jib Cranes give you the freedom to lift and move goods exactly where you need them.

TAWI crane systems offer flexible solutions for mounting lifters so that you can use them wherever you need. Steel or aluminium profiles can be mounted in the ceiling or on floor pillars, built to match your facilities and meet your every need. No matter how your facilities are constructed, we will

build an overhead crane system that is ideal for your conditions.

With a selection of standard jib cranes, and the ability to modify cranes to customer requests, we can always find an ideal solution for your business needs.

TAWI cranes are reliable systems that will help keep your operations running for decades. The profiles are produced from high-quality steel, finished off with a protective coating. Parts are merged together seamlessly, making sure whatever you suspend in the system will run smoothly for many years to come.



TAWI crane systems

Many options

- Aluminium or steel profiles
- Mounted in ceiling or on floor pillars
- Suspended directly in ceiling or in roof beams
- Move lifters by manual power or remote control
- Portable jib cranes for greater flexibility
- Overbraced or underbraced depending on what suits your facilities



Customization

- TAWI crane systems are always built on customer request
- Adapted to your facilities and requirements
- Easily integrated in your workflow
- Delivered in TAWI blue coating, or the colour of your choice

Complete range of systems

- Single and double girder cranes
- Low built system for low headroom areas
- Stainless steel systems for easy cleaning
- Jib cranes mounted on wall or pillar
- Portable options available



Powerful suspension

- Up to 1 500 kg lifting capacity
- Up to 8 000 mm between suspension points
- Provides great range of motion when lifting with vacuum lifters or hoists



AIROYAL COMPANY

AUTHORIZED

TAWI

Smart lifting

Distributor

SALES@AIROYAL.BIZ | AIROYALCOMPANY.NET

NEW JERSEY

43 Newark Way, Maplewood, NJ 07040

973-761-4150 Fax 973-761-5731

PENNSYLVANIA

610-314-5566 Toll Free: 866-247-6645

DELAWARE & MARYLAND

Toll Free: 866-247-6645 Fax 410-235-0011

NEW YORK

306 Commack Rd. Ste. 200, Commack, NY 11725

516-248-4833 Fax 631-499-0119