



Self-Powered, Self-Cycling

Mechanical Vacuum Lifters

*The Leading Sheet & Plate Lifters
in North America Since 1968*

*The Unique Design Allows You to
Attach to Any Crane Hook and Lift*



Made in USA by ANVER Corporation

Self-Powered, Self-Cycling Units C

Unique Features Set the Standard in Vac



ANVER® Mechanical Vacuum Lifters do not rely on plant power, outside controls, or complex accessories. These self-contained units create their own vacuum mechanically, giving them unmatched versatility for use in metal fabricating plants, service centers, warehouses, and plate yards. These lifters offer instant attach and release via the hoist up and down. The internal piston and rolling diaphragm create vacuum and will work silently with minimum maintenance for years.

One person simply attaches the hook of the crane, hoist, or boom truck to the lifter, positions the lifter on the load and controls the entire operation alone. The attach and release alternates each lift cycle for fast, efficient handling.

Mechanical lifters increase speed and efficiency of horizontal handling of sheet and plate, fabrications, panels, and all types of non-porous materials.



How ANVER Mechanical Vacuum Lifters Work

**Upward/Downward Movement of Hoist Controls Vacuum Attach and Release
Simple On/Off Cycle is Quick and Reliable**

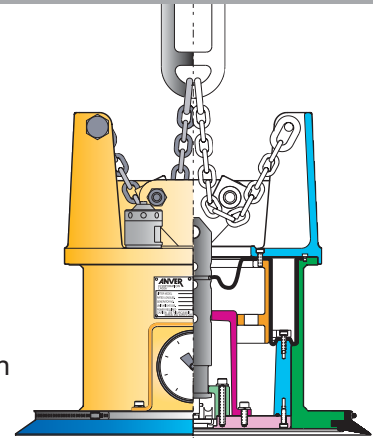
Basic Operating Procedure

1. The lifter is hanging from crane hook and is lowered onto load until the chain is slack.
2. The lifter is pulled up by hoist and picks up load.
3. The lifter and load are set down until chain is completely slack.
4. The lifter can now be raised without load.
5. Set the lifter down again on a load until the chain is completely slack and it is ready to pick up the load.

Technical Description

The vacuum generator of these lifters consists of a free-moving piston within a closed cylinder. A rubber rolling diaphragm forms an airtight seal between piston and cylinder. Since the integrity of this seal does not depend on metal-to-metal contact or a tight fit, it does not lose efficiency with use.

The vacuum attach-and-release cycle is controlled by an automatic self-cycling valve located in the bottom of the piston. When the unit is lowered onto the load and the suspension chain slackens, a cam automatically opens the piston valve. The hoisting action then pulls up the piston, creating a powerful vacuum inside the cylinder and underneath the vacuum pads. When the load is completely set down, and the suspension chain is again slackened, the cam closes the piston valve, releasing the vacuum. The lifter then can be raised, ready for the next pickup. Attach and release are instantaneous. Since the valve sealing disc can only cycle when the chain is completely slack, it cannot shift positions while in use and accidentally release the load.



Create Their Own Grip Mechanically

Vacuum Lifters for Sheet and Plate Handling



Vacuum Lifters with Mechanical Generators Offer Unique Advantages

- No installation required. Simply attach the hook of a hoist, crane, or boom truck to the lifter and it's ready for operation!
- Attach and release are controlled by the up and down movement of the hoist. The vacuum control valve alternates between attach and release each time the lifter is picked up or set down.
- An operator cannot release a load without setting down the lifter load and until the chain is slack.
- No control buttons of any kind on the lifter.
- No external power source or festooning required.
- Unit can be spun around 360° without limitation, as there are no electric or air lines to tangle.
- Not affected by power failures or power brownouts. Safe around water burning tables.
- Totally silent operation creates no oil mist or pollution. Extremely efficient, low-cost operation.
- Lowest maintenance requirements of all vacuum lifters. Rebuilds are infrequent and simple.
- Suitable for 100% duty cycle, 24 hours a day operation. They never overheat or burn-out.



Adjustable for Varying Load Sizes

- Cups are adjustable on crossarms.
- Crossarms are adjustable on the beam.
- Crossarms can pivot to near parallel.
- Outside cups can be shut off with ball valves.

Leaves no Trace on the Load

- Cups are non-marking, non-marring.
- Bottom springs for even attachment.
- Top springs for even loading when lifting.
- Ball-in-socket articulated suspensions for wavy or blocked plate.

Simple to Set-Up and Use

- Shipped fully assembled and vacuum tight.
- No installation required, just attach and go!
- Front and end-of-beam handlebars standard.
- Minimal training of operator, no buttons to use.

Premium Construction for Long Life

- Built utilizing the latest CAD/CAM techniques and advanced materials.
- Top quality fit-and-finish: Epoxy paint, nickel-plated hardware throughout. Built rugged with heavy welded steel construction.

Easy to Maintain and Keep Operating in Heavy Production Environments

- New SSR Snap-In Sealing Rings for cup replacement in seconds without tools.
- No wires or hose to tangle up in the hoist chain; no fuses, motors or switches.
- Mechanical Vacuum Lifters cannot overheat and are not affected by brownouts.

ANVER Lifters comply fully to U.S. ANSI and OSHA and European CE mark requirements.

Standard Mechanical Vacuum Lifter Models

for Handling Sheet and Plate of Various Sizes

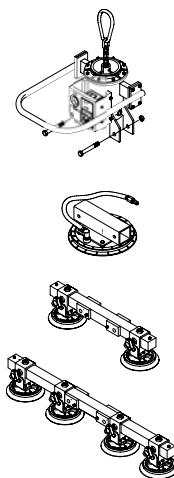
ANVER Mechanical Vacuum Lifters are available in literally hundreds of possible combinations depending on the generator, beam, crossarms, and cups used. Instead of listing so many configurations we have found it is simpler for our experienced application engineers to size the right lifter for you from your information. While not complicated, vacuum lifters are selected based on individual needs.

- We design our vacuum lifters so that each cup takes an equal amount of load weight with less than 2" (51 mm) of sag or droop. This means that the thinnest material in the largest sheet size determines the number of cups needed.
- The heaviest load determines the vacuum lifter's overall load capacity. Remember to check that the crane has the capacity to handle the load *plus* the weight of the vacuum lifter. Just get the load specifications to our dealer or to us and we will do the calculating and recommend the proper lifter to handle your sheet sizes.

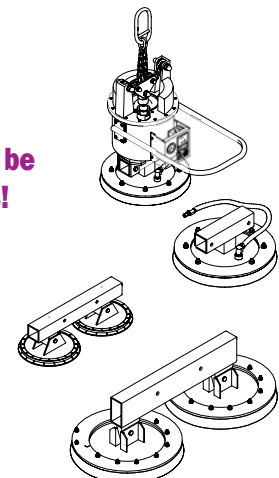
- All our lifters are built to order from stock modular components, usually within a week. They come with ANVER's unique 30-day performance guarantee and one or two year warranty, depending on the portion of the lifter covered.
- Vacuum Lifters are shipped fully assembled and ready to operate. All crossarms slide up and down the beam, and also pivot to allow adjustment for narrow loads and compact crating. This allows us to ship lifters with the vacuum system completely assembled and tested. There is no installation other than bolting on the front handle, which does not affect the vacuum circuit.
- ANVER builds various generator sizes for handling a wide range of plate sizes. While this brochure shows smaller units, we build Mechanical Lifters in greater capacities. Contact our Application Engineers with your specific



Single and Interchangeable Pad - Vacuum Lifters



Pad Attachments Can be Changed in Minutes!



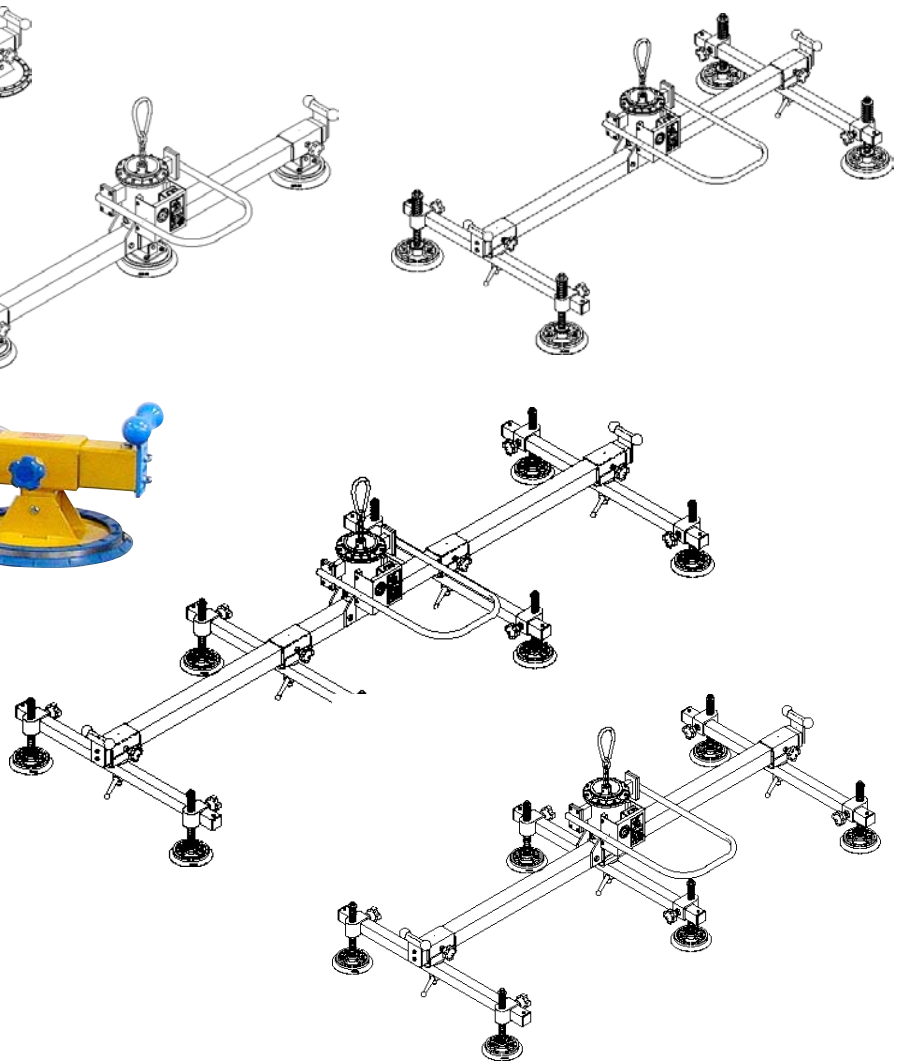
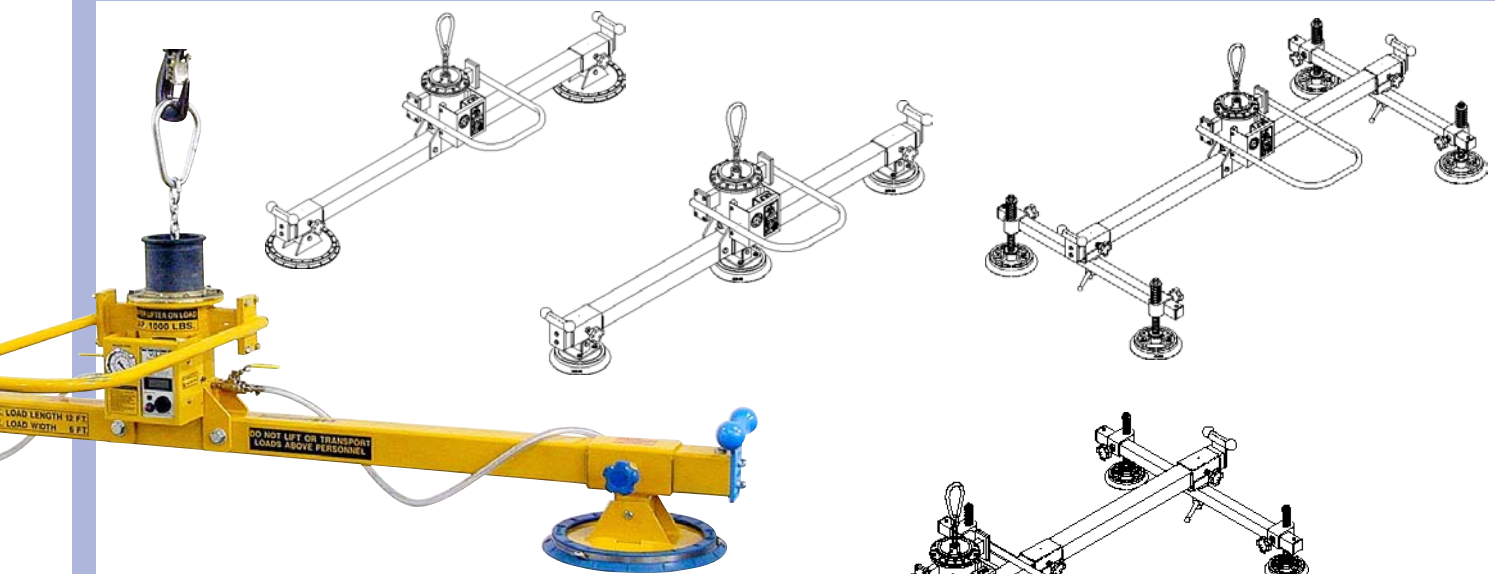
◀ Our popular model M70S with 700 lb. (318 kg) capacity and a 14.5" (368 mm) dia. vacuum pad. A versatile unit for small plate handling.

Capacity Chart for Standard Models

One Pad Lifters		Single Pad Attachments				Dual Pad Attachments	
lb.	(kg)	lb.	(kg)	lb.	(kg)	lb.	(kg)
700	(318)	150	(68)	700	(318)	300	(136)
1000	(454)	200	(91)	900	(408)	450	(204)
1550	(703)	250	(113)	1000	(454)	600	(272)
		500	(227)	1200	(544)	750	(340)
		600	(272)	1300	(590)	1000	(454)
						1200	(544)
						2000	(907)
						2400	(1089)
						3000	(1361)
						4000	(1814)
						4200	(1905)

M100 Series Mechanical Vacuum Lifters

Standard Lifters with Capacities up to 1000 lb. (455 kg)
for Light Sheet Metal up to approximately 6' x 12' (1.82 m x 3.65 m)



Quick-Change Snap-In Sealing Rings!



All Lifters come with the New SSR Snap-In Rubber Sealing Rings. The rubber seals can be replaced in minutes by hand, without using any tools, minimizing down time. The suspensions feature top and bottom springs, and are articulated with a ball swivel. The cups are adjustable on the crossarms, and the crossarms pivot and slide along the beam.

Fully Adjustable Suspensions



Capacity Chart for Standard Models

Two Pad Lifters		Three Pad Lifters		Four Pad Lifters	
lb.	(kg)	lb.	(kg)	lb.	(kg)
500	(227)	750	(340)	830	(377)
1000	(454)				

Six Pad Lifters		Eight Pad Lifters	
lb.	(kg)	lb.	(kg)
900	(408)	900	

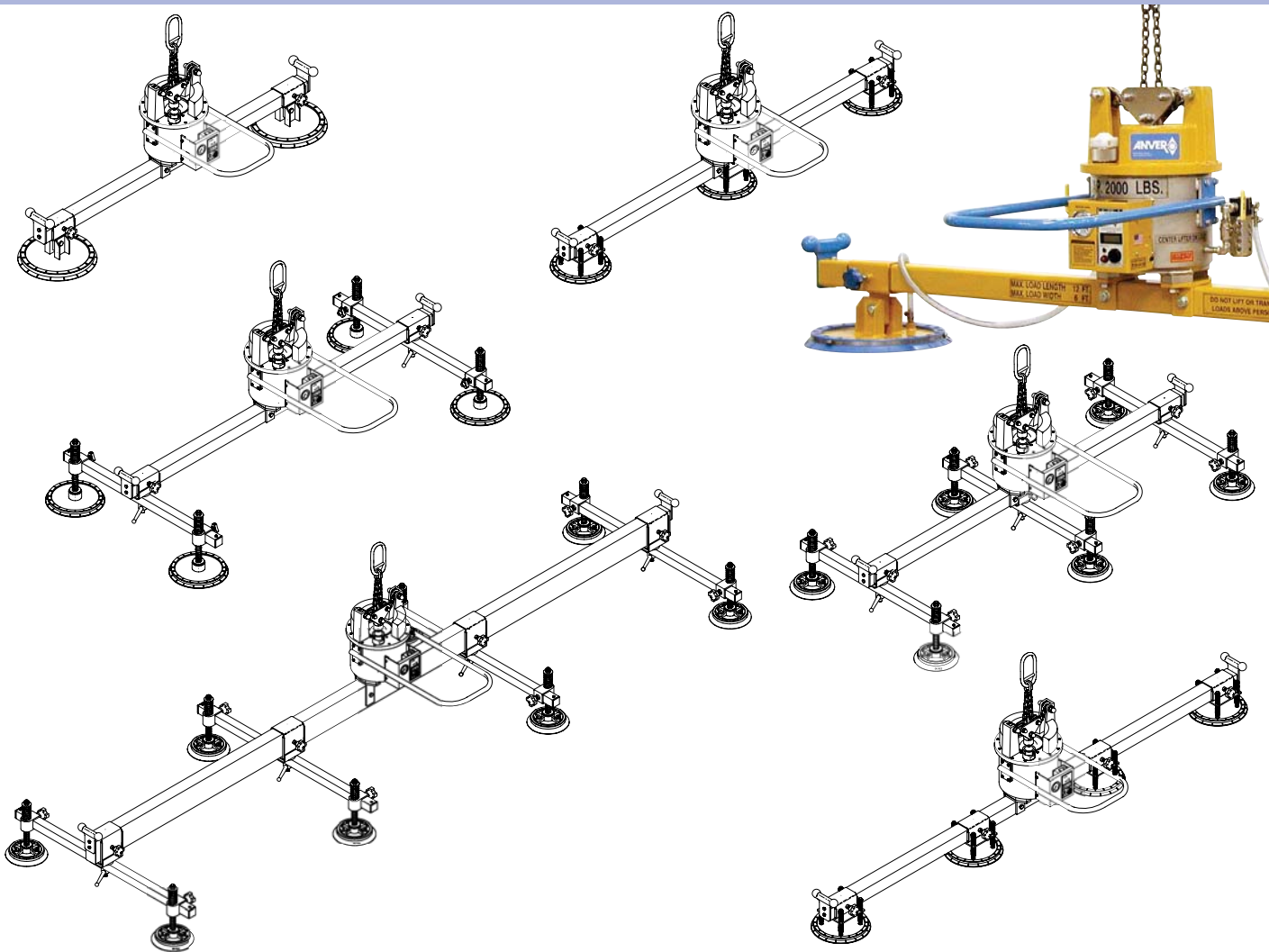
Note: 1. The above chart lists capacities for our most popular models. Various other multiple pad configurations are available. Contact factory for a fully engineered recommendation based on your exact load specifications.

2. Standard Beam lengths are: 63" (1.6 m), 88" (2.2 m) and 112" (2.8 m).



M200 and M400 Series Mechanical Vacuum Lifters

Standard Lifters with Capacities up to 7000 lb. (3175 kg)
for Common Sheet and Plate Sizes up to approximately 10' x 40' (3.0 m x 12.2 m)



Capacity Chart for Standard Models

Two Pad Lifters		Three Pad Lifters		Four Pad Lifters	
lb.	(kg)	lb.	(kg)	lb.	(kg)
1000	(454)	1500	(680)	1000	(454)
2000	(907)	3000	(1361)	2000	(907)
3000	(1361)	4200	(1905)	4000	(1814)
4200	(1905)	6900	(3130)	6000	(2722)
Six Pad Lifters		Eight Pad Lifters		Ten Pad Lifters	
lb.	(kg)	lb.	(kg)	lb.	(kg)
1200	(544)	1200	(544)	1500	(680)
1500	(680)	2000	(907)	2000	(907)
3000	(1361)	4000	(1814)	2500	(1134)
7000	(3175)	6000	(2722)	6000	(2722)

Note: 1. Only our most popular models are listed. Other standard models are available.
2. Standard Beam Lengths are: 61" (1.5 m), 86" (2.2 m), 110" (2.8 m), 150" (3.8 m), 190" (4.8 m) and 231" (5.9 m).

No Electrical Cords or Air Lines Needed



For More Technical Information Visit: www.ANVER.COM or Call 800-654-3500

Vacuum Lifter Accessories

Parking Stands: Reduce Wear to the Vacuum Pads

ANVER Mechanical Vacuum Lifters are so sturdy and functional that they give uncompromised service for years. However, the Parking Stands will minimize replacement of rubber sealing rings and the VLS-07 Vacuum Leakage Sensing Device will increase the safety of the lifter itself.

These Spring-Loaded, Adjustable, Four Position Parking Stands keep the vacuum sealing rings clean and debris-free. Plus, in other positions they can be used to locate the lifter precisely over the load. They feature rugged steel construction. A grease fitting is provided to lubricate the spring loaded locking mechanism.

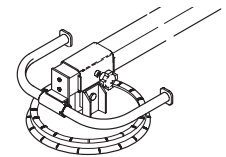


1 Folded Down

Keeps rubber vacuum pads off the ground when the lifter is stored.

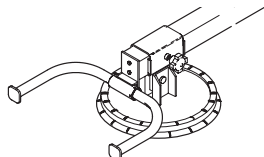


- In the 'Down' position, which is recommended when you store the lifter, they provide a support for the lifter so that the vacuum rubber seals will not touch the ground. This protects them from damage as well as maintains their shape and keeps them from flattening out.
- In a 'Folded In', 'Out' or 'Up' position, they provide a grab bar for positioning the lifter easily and precisely onto the load from the side of the lifter.



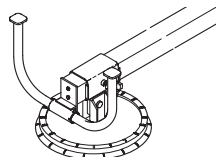
2 Folded In

Typical when the lifter is in use.



3 Folded Out

Can be used as 'Positioning Grab Bars'.



4 Folded Up

Can be used as 'Positioning Grab Bars'.

Telescoping Parking Stands are Available for Larger Capacity Lifters



Vacuum Leakage Sensing Systems: New Solid State VLS-07 Series

The VLS-07 represents the state-of-the-art in vacuum leakage detection for vacuum lifters. During each lifting cycle this programmed 'intelligent' processor automatically senses maximum vacuum, sets itself, and will start operating from this point for each lift. It will not go off on the detach cycle as with other primitive systems using pre-set switches. Even the smallest leak anywhere in the system will be detected. The system automatically monitors the vacuum level for the operator.

- Advanced solid state circuitry with micro-controller.
- Precise, reliable board-mounted vacuum transducer.
- LCD digital display of vacuum level.
- Loud, audible warning horn.
- Bright, flashing red LED warning light.
- Push-to-connect vacuum source port.
- Auxiliary output jack.
- Easy access battery compartment.
- Low battery "chirp" indicator.
- Light/horn/LCD test button.
- Takes one standard 9V lithium battery: included.



The Vacuum Leakage Sensing Device will not provide a timely warning to the operator that a reduction in vacuum has occurred due to incorrect use of a vacuum lifter such as overloading, lifting oversized loads, unbalanced lifting or improper operation of any kind.

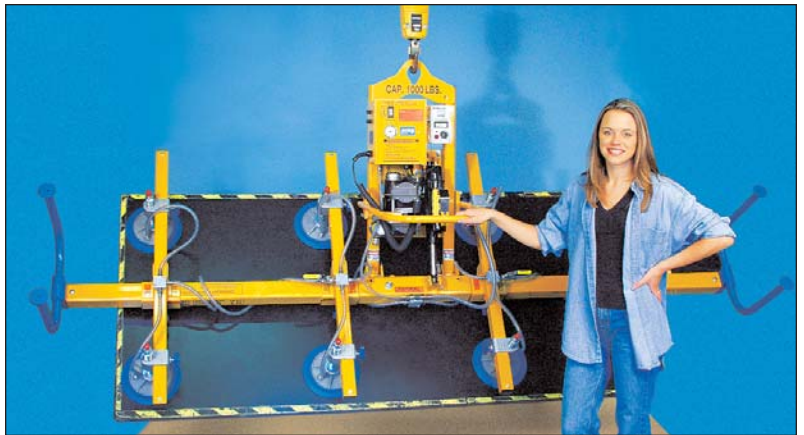
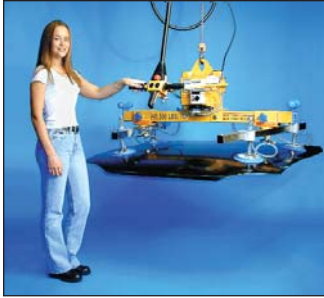
ANVER® VLS-07-AUX-S Auxiliary Siren/Alarm

The VLS-07-AUX-S is a peripheral device designed to be connected to the VLS-07 vacuum leakage sensor. When the VLS-07 warning is activated, the VLS-07-AUX-S sounds a loud, 105 dB siren and the flashing strobe is initiated. This add-on device is ideal for noisy environments, where the lifter is at a distance from the operator or where other personnel may be in the general area of use. This device is completely self contained, with an easily accessible 9V battery, and plugs directly into the Auxiliary Output Port on the side of the VLS-07 unit using the signal cable (included).



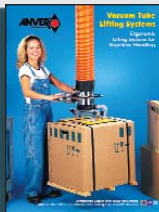
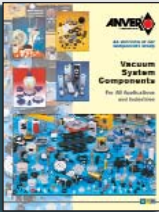
A Complete Selection of Powered Sheet & Plate Lifters

Electrical, compressed air, and battery powered vacuum lifters, tilters, rotators, heavy mill-duty, and custom designed vacuum lifting systems. Our applications engineers will help you select the right vacuum lifting system for your product handling needs.



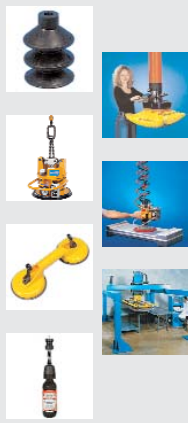
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- Bottling Components



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