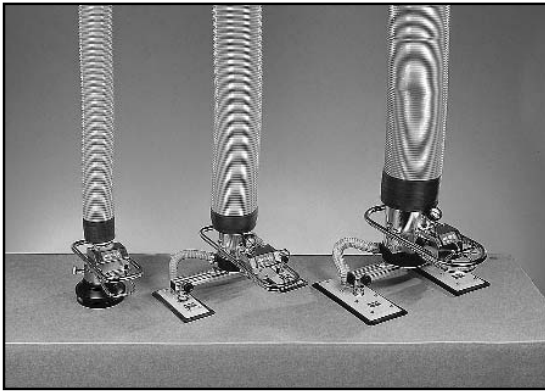


Ergonomic Vacuum Tube Lifters



Selecting the Right Tube Lifter



ANVER offers several sizes and styles of vacuum tube lifting systems. Selecting the lifting system that will most efficiently meet your load lifting requirements will increase your productivity and make for a safer working environment.

System lifting capacities and capabilities are dependent on several factors, including:

- The weight and material composition of the load to be lifted (porous, non-porous or semi-porous)
- Total load surface available for lifting
- The style of load to be lifted (loose or densely packed, light or heavy wall, compact or bulky size)
- The system vacuum station (High or Low Vacuum and Flow?)
- The vacuum level achieved
- The vacuum pad attachment size, style
- The vacuum safety factor (tube diameter area in proportion to vacuum pad area)

Our applications engineers will help ensure that:

- You select a system with a rated capacity that matches your needs. While you can not use a system with a rated load capacity less than your load size, you also should not choose a system that is too powerful. A system that is too large may not operate smoothly.
- You choose the right vacuum station. ANVER's HV vacuum pumps produce high vacuum and are ideal for heavy, non-porous loads. HF vacuum pumps produce high flow making them ideal for porous loads.
- You choose the right vacuum attachment based on the type of load. Using the right attachment will not only make your system more productive, but safer to operate.
- You consider the lifting tube diameter. In a vacuum tube lift system, the vacuum level generated is constant throughout the system. Attachment pads grip the load at the same vacuum level as the vacuum level in the lifting tube. The pad's gripping force must be considerably greater than the weight of the load to prevent the load from peeling off and dropping. ANVER recommends a gripping force of at least twice the load's weight. Since both the gripping and lifting operations are accomplished at the same vacuum level, a gripping force twice the weight of the load requires the use of properly rated pads with a seal surface area twice the area of the lifting tube.

VT System Number	Lift Tube Diameter in. (mm)	Lift Tube Area sq in. (sq cm)	Minimum Pad Area to Maintain 2:1 Ratio sq in. (sq cm)
VT90	3.54 (90)	10 (64)	20 (127)
VT100	3.9 (100)	12 (79)	24 (157)
VT120	4.7 (120)	18 (113)	35 (226)
VT140	5.5 (140)	24 (154)	48 (308)
VT160	6.3 (160)	31 (201)	62 (402)
VT180	7.1 (180)	39 (254)	79 (509)
VT200	7.9 (200)	49 (314)	97 (628)
VT250	9.8 (250)	76 (491)	152 (982)
VT2180	2 x 7.1 (2 x 180)	79 (509)	158 (1018)
VT2200	2 x 7.9 (2 x 200)	97 (628)	195 (1257)

► This spec sheet was adapted for print from our website. Additional information and photos are available at www.anver.com. 7080201