

## **V-Series High Frequency Linear Vertical and Rotary Vibrator Compaction Tables For No-Bake Cores and Molds from 5 lb – 12,000 lb Capacities.**

- Reduce Burn-in
- Reduce Binder Levels
- Rugged Heavy Duty Construction
- Rotary and Vertical Models
- Single, Double, or 4-Force Settings – to closely match the weight of mold or core
- Custom Sizes to 12,000 lb

### **Options**

- Flat Top – with or without airbag
- Lifting Bars
- Gravity Conveyor
- Powered Conveyor

### **Key**

I = Vertical
R4 = Rotary
F = Flat Top
LB = Lifting Bars
G = Gravity Conveyor
P = Powered Roller Conveyor

## **V-200-I-F and V-500-I-F Linear Vertical Vibrator Compaction Tables For Cores and Molds from 5 lb - 500 lb**

- Flat Top – with or without airbag
- Rugged – heavy duty construction
- High Frequency Vertical Vibration
- Adjustable Duration Timer – .1 to 10 seconds
- Adjustable Force
- “Hands-free” Actuation
- Precision-ground Top Plate
- Also Used to Remove Hard-to-draw Cores
- Well-compacted Cores and Molds Require Less Binder – which saves money and lowers gas-related defects

The V-200-I-F / V-500-I-F uses a high frequency (3,600 CPM) vertical stroke, electric vibrator which provides excellent densification of sand, particularly in pocket and ribs area. The stroke of the vibrator is completely adjustable from 0 to 100% to provide excellent control of the compaction.

Complete with a heavy-duty fabricated steel base, Blanchard ground steel top (V-200: 24”x24”, V-500: 30”x30”) and a NEMA 12 enclosure that houses all electrical controls. There is a large pushbutton that can be activated by the operator’s knee, providing hands-free operation. A potentiometer located on the door of the enclosure allows the operator to adjust the force of the vibration. An adjustable .1 to 10 second timer located inside the enclosure controls the duration of the compaction cycle, 120V, 1PH, 60 Hz.



## V-Series High Frequency Linear Vertical Vibrator Compaction Tables

Model	V-1500-I-LB	V-3000-I-LB	V-6000-I-LB
Maximum Capacity	1,500 lb	3,000 lb	6,000 lb
60"L x 34"W	60"L x 34"W	72"L x 56"W	48" x 60"
Table Size	(or sized to fit)	(or sized to fit)	(or sized to fit)
Top	Flat Top, Lift Bar, or Conveyor	Flat Top, Lift Bar, or Conveyor	Flat Top, Lift Bar, or Conveyor
Height	24" (or to customer specifications)	24" (or to customer specifications)	24" (or to customer specifications)
Vibrator(s)	3-Phase, 480-Volt, 60-HZ, 3600 CPM	3-Phase, 480-Volt, 60-HZ, 3600 CPM	3-Phase, 480-Volt, 60-HZ, 3600 CPM
Lift Bars	5/8" x 8" Steel	5/8" x 8" Steel	5/8" x 8" Steel
Air Bags	Four at 850-lb. Capacity Each	Six at 850-lb. Capacity Each	Ten at 850-lb. Capacity Each
Number of Output Forces	Infinite	Infinite	Infinite
Number of Vibrators	One	Two	Three
Timer Starter	Included	Included	Included
Timer Starter Enclosure	Remote	Remote	Remote
Controls	With an automatic cycle timer for one-button operation to raise box, vibrate for a set amount of time, and lower back onto conveyor. Control panel is included and includes a heavy-duty rheostat for force output selection, cycle start button, and emergency stop button.		



V-1500-I-LB



V-3000-I-CLB

### Key

- I = Vertical
- R4 = Rotary
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### Construction

The rugged steel frame is fabricated from integrally interlinked 1/2" steel plate. The lift bar assembly is fabricated from 5/8" x 8" steel with an interlocked rib system welded solid to a 5/8" steel base plate.

The lift bar assembly is actuated by pneumatic air bags, each with a capacity of 850 lbs. and a maximum stroke of 2". In the elevated position, the lift bars extend above the roller conveyor approximately 1/2". Figure 1



FIGURE 1

### Vertical Vibrators

The vertical vibrators are used to obtain the optimum compact ability of molds and cores. The vibrators provide an infinitely adjustable level of output force while maintaining the high frequency that is critical for the correct no-bake compaction. Figure 2



FIGURE 2

### Controls

All vibrator controls and time relays are housed in NEMA 12 enclosures. Figure 3

The cycle start button and the force selector rheostat are located at the operator control box. Figure 4



FIGURE 3

### Operation

The mold/core box is rolled onto the table rollers and filled. Prior to striking off, the operator presses the cycle start button. The air bags inflate, lifting the core/mold above the rollers the vibrators run the amount of time set on the timer located inside the enclosure. Once the vibrators stop, the air bags lower the core/mold to roller conveyor surface for striking off. Figure 5

Reduced Decibel Level Option – reduces force output 6% while reducing sound from 107 db to 85 db per vibration.



FIGURE 4

### Options

- Flat Top – with or without airbag
- Lifting Bars
- Gravity Conveyor
- Powered Conveyor
- Reduced Decibel Level Option



FIGURE 5

# V-Series High Frequency Rotary Vibrator Compaction Tables

## Construction

All Palmer compaction tables are manufactured in our well known, foundry-duty format for years of use and abuse. Heavy wall steel tubing and plate steel are used in all fabrications.

The lift bar assembly is actuated by the pneumatic lift bags. In the elevated position the lift bars extend above the roller conveyor approximately 1/2".

All Palmer compaction tables are built to fit your conveyor specifications. All we need to know is the roller diameter, height, and spacing between the rollers to manufacture to fit existing systems.

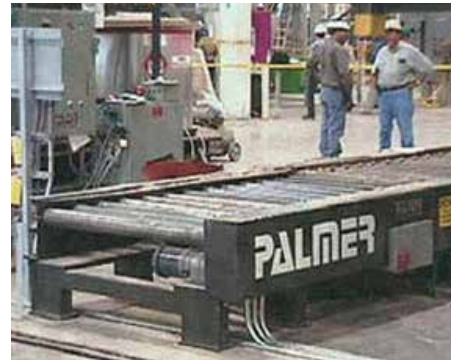
All Palmer compaction tables feature easy access for cleaning and maintenance.

## Reversing Vibrators

Reversing vibrators are used to obtain the optimum compact ability of molds and cores. The reversing vibrators provide a different level of output force for each direction of rotation. The use of two of these vibrators produces four different output force levels while maintaining the high frequency vibration that is critical for the correct compaction.

## Key

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- R4 = Rotary
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V-800-R4-LB

Model	V-4000-R4	V-6000-R4	V-10000-R4	V-15000-R4	V-20000-R4
Maximum Capacity	4000 lb	6000 lb	10000 lb	15000 lb	20000 lb
Table Size (Standard)	36" x 60"	48" x 60"	48" x 60"	60" x 60"	72" x 72"
Top of Roller Height	24" Standard - Custom Heights Available	24" Standard - Custom Heights Available	24" Standard - Custom Heights Available	24" Standard - Custom Heights Available	24" Standard - Custom Heights Available
Vibrators	2 @ 3500 lb of Force Each	2 @ 3500 lb of Force Each	2 @ 5000 lb of Force Each	2 @ 7500 lb of Force Each	2 @ 10000 lb of Force Each
Lift Bars	5/8" x 8" Tall Steel	2" x 8" Steel Tubing	2" x 8" Steel Tubing	2" x 8" Steel Tubing	2" x 8" Steel Tubing
Air Bags	6 @ 850 lb of Force Each	8 @ 850 lb of Force Each	10 @ 1300 lb of Force Each	14 @ 1300 lb of Force Each	20 @ 1300 lb of Force Each
Number of Output Forces	4	4	4	4	4
Controls	Automatic cycle timer for one-button operation to raise box, vibrate for a set amount of time, and lower back onto conveyor. Pedestal-mounted control panel is included and will have a 4-position switch for force output selection, cycle start button, and emergency stop button.				

## Controls

All reversing motor starter and timer relays will be housed in the main electrical enclosure. The cycle start button and the force selector switch will be located at the operator control box.

## Operation

The mold/core box is rolled onto the table rollers and filled. Prior to striking off, the operator selects the force level to run and presses the "cycle start" button. The air bags inflate lifting the core/mold above the rollers, the vibrator(s) run the amount of time set on the timer located inside the enclosure. Once the vibrators stop, the air bags lower the core/mold to roller conveyor surface for striking off.

## Options

- Flat Top – with or without airbag
- Lifting Bars
- Gravity Conveyor
- Powered Conveyor