

# Vacuum Loader Packages Series VF & VMF



When your plant requirements demand high productivity on a continuous basis, you'll find our series VF and VMF VACUUM LOADER PACKAGES will provide the dependable, efficient operation necessary to succeed in today's competitive processing environment.

For over 45 years Foremost has been engineering and manufacturing solutions to bulk material conveying problems. We have provided the highest quality equipment in our engineered systems and dependable vacuum loader packages. Our standard high quality components are matched with a conservative engineering factor to provide the end user with years of low cost, low maintenance productivity.

Material loading is accomplished through the following sequence of operation:

The positive displacement pump creates a vacuum on the vacuum chamber, closing the flapper valve. The material is then drawn through the suction lance or from a vacuum-take-away box via tubing or flex hose to the vacuum chamber.

The vacuum chamber can be loaded by either a timing cycle, which is easily adjusted at the control panel or by an end-point-control sensor mounted in the vacuum chamber.

After the loading cycle, the vacuum breaks, causing the flapper valve to open and the material drops into the process hopper.



## **VACUUM LOADER POWER UNITS**

### **STANDARD FEATURES**

- STANDARD PUMP PACKAGES AVAILABLE IN 5, 7.5, 10, 15, 20, 25 AND 30 HP
- HEAVY DUTY POSITIVE DISPLACEMENT PUMP
- DURABLE TEFC MOTOR WITH 5 YEAR MANUFACTURER'S WARRANTY
- MULTI-STAGE CENTRAL FILTER WITH REPLACEABLE FILTER ELEMENT AND REMOVABLE DUST CUP WITH SIGHT GLASS
- FACTORY SET VACUUM RELIEF VALVE
- LIQUID DAMPED VACUUM GAUGE
- EXHAUST SILENCER
- EXHAUST FILTER WITH REPLACEABLE FILTER ELEMENT
- ALL MOUNTED ON A RIGID BASE WITH BELT GUARD, INTERCONNECTING PIPING AND FLEX HOSE
- LINE SIZES ENGINEERED TO MATCH PUMP SPEED AND HORSEPOWER FOR MAXIMUM EFFICIENCY AND EQUIPMENT DURABILITY

### **OPTIONAL FEATURES**

- HIGH EFFICIENCY MOTORS
- HIGH TEMPERATURE ALARM
- ELECTRICALLY OPERATED VACUUM BREAKER VALVE
- CENTRAL FILTER WITH COUNTER-WEIGHTED FLAPPER VALVE IN PLACE OF DUST CUP
- HIGH AND LOW VACUUM ALARM
- SOUND REDUCTION PACKAGES FOR UNDER 85 dbA OPERATION
- EXPLOSION PROOF DESIGNS
- MOBILE BASE WITH PNEUMATIC TIRES
- POWER UNITS UP TO 100 HP
- "ROLL-AWAY" DUST DRUM WITH DUST COVER

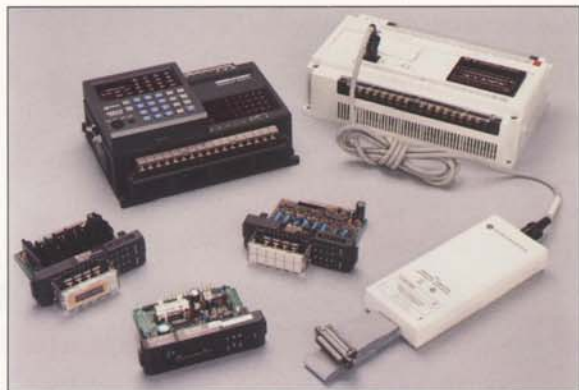
## **CONTROL PANELS**

### **STANDARD FEATURES**

- NEMA 12 ENCLOSURE
- FUSED DISCONNECT
- NAME-BRAND PROGRAMMABLE LOGIC CONTROLLER (PLC) (MULTIPLE STATION UNITS)
- ADJUSTABLE LOADING TIMER
- MAGNETIC STARTER
- 110VOLT CONTROL TRANSFORMER
- TWO-POSITION, OIL-TIGHT, ILLUMINATED, POWER ON/OFF AND INDIVIDUAL STATION ON/OFF SWITCHES (WHERE REQUIRED)
- GRAPHIC DISPLAY FOR BOTH POWER UNITS AND INDIVIDUAL LOADING STATIONS
- PANEL WIRED COMPLETE

### **OPTIONAL FEATURES**

- ALPHA NUMERIC OPERATOR INTERFACE
- SELF-ADJUSTING LOADING TIMERS
- DIFFERENTIAL PRESSURE DIRTY FILTER WARNING INDICATOR
- TIMERLESS END-POINT CONTROL





## VACUUM CHAMBERS STANDARD FEATURES

- CAPACITIES OF 0.2, 0.6, 2.0, 4.0, 6.0, AND 8.0 CU. FT.
- PELLET SCREEN INTEGRALLY MOUNTED IN CHAMBER LID
- MOLDED LID GASKET
- DURABLE, LIGHTWEIGHT, SPUN ALUMINUM CONSTRUCTION
- REPLACEABLE "SIZE-STEPPED" CAST ALUMINUM MATERIAL INLETS\*
- REPLACEABLE "SIZE-STEPPED" CAST ALUMINUM VACUUM OUTLETS\*
- MATERIAL REQUIRED LEVEL SWITCH
- CAST ALUMINUM FLAPPER VALVE HOUSING WITH COUNTER-WEIGHTED FLAPPER\*
- RUGGED ANODIZED SINGLE LATCH "QUICK-SEAL" BAND CLAMP MATING CHAMBER AND LID\*
- PRE-DRILLED BIN MOUNTING FLANGE WITH GASKETS

\* MODEL 02 CU. FT. CHAMBERS ARE PROVIDED WITH ALUMINUM TUBING INLETS, OUTLETS AND FLAPPER VALVE HOUSINGS. CHAMBER AND LIDS ARE ATTACHED BY INTEGRAL CLAMPS.



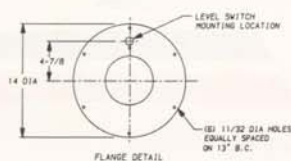
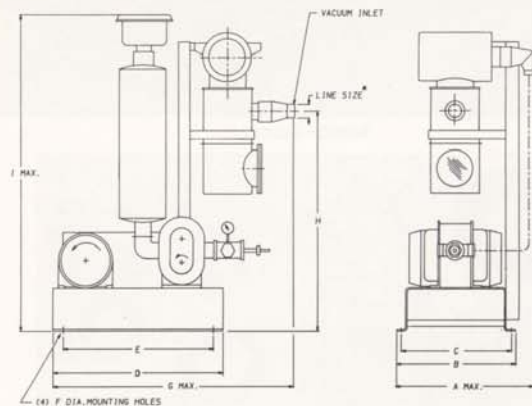
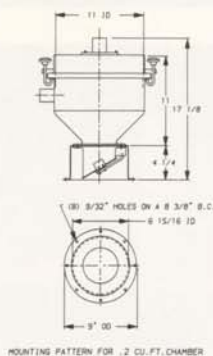
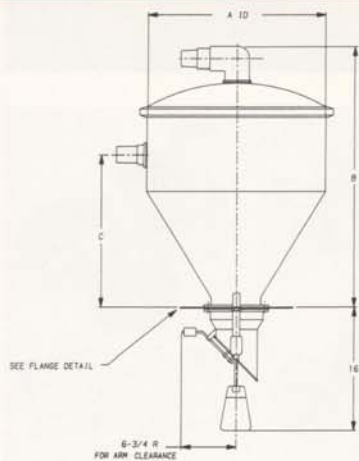
## OPTIONAL FEATURES

- STAINLESS STEEL CONSTRUCTION
- CARTRIDGE OR FLAT FILTER FOR BLOWBACK SYSTEMS
- FILTER BAGS WITH AUTOMATIC PULSE-JET FILTER CLEANING FOR POWDER APPLICATIONS
- END-POINT CONTROL PROXIMITY SWITCH
- AIR OPERATED FLAPPER VALVE
- SINGLE MATERIAL LINE CHECK VALVE
- INTERNAL FLAP-TYPE PROPORTIONING VALVE (AIR OPERATED)
- CHOICE OF AIR OPERATED OR ELECTRICALLY OPERATED VACUUM CONTROL VALVE
- STAINLESS STEEL MATERIAL WEAR PLATE DEFLECTOR
- STRAIGHT WALL CHAMBERS FOR HARD TO MOVE MATERIALS

## ADDITIONAL COMPONENTS

- SUCTION LANCES
- GAYLORD TILTERS
- TUBING AND FLEX HOSE
- COUPLINGS
- QUICK DISCONNECT FITTINGS
- VACUUM TRAY ADAPTERS
- AUTOMATIC DIVERTERS
- BIN VENT FILTERS
- EXTENSION CASTINGS
- WEIGH INVENTORY CONTROL RECEIVERS
- MULTI-DRAFT BATCH LOADERS
- IN-LINE VACUUM METAL SEPARATORS
- INTERMEDIATE DUST CYCLONES

VACUUM CHAMBER CAPACITY	DIM. "A"	DIM. "B"	DIM. "C"
0.6 CU.FT.	13 1/4	23 1/4	13
2.0 CU.FT.	22	32	18 5/8
4.0 CU.FT.		42	28 5/8
6.0 CU.FT.		52	38 5/8



VACUUM PUMP UNIT	A	B	C	D	E	F	G	H	I	RECOMMENDED LINE SIZE
5 HP	28	20	18	28	28		52	45	57	2 00, 2 EXT
7 1/2 HP	26	20	18	28	28		51	43	60	
10 HP	26	25	23 3/4	36	28	5/16	58	43	72	2 1/2 00
15 HP	26	25	23 3/4	36	28		60	43	74	3 00
20 HP	37	21	15	60	57 1/2	3/4	95	37	62	4 00
25 HP	50	31	29 3/4	50	42	5/16	61	46	74	4 00, 4 1/2 00
30 HP	37	21	15	60	57 1/2	3/4	95	37	82	4 00, 4 1/2 00, 5 00

NOTE: SPECIFIC LINE SIZE CAN BE SELECTED FROM 2" EXT TO 5" OD, DEPENDING UPON CONVEYING REQUIREMENTS & SUBSEQUENT VACUUM PUMP SELECTION.

# ADDITIONAL COMPONENTS



Pedestal with Filter



Intermediate Cyclone



Dust Cup

Vacuum Take Away Box



Valves and Gauges



Suction Lances



Level and Limit Switches



Gaylord Tilter



Extension Casting with Filter



Filters

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