



## Hi-Vac® Model 840 Portable

### I. General

The Hi-Vac® Model 840 is a portable heavy-duty industrial vacuum loader consisting of a powerhead, material collection hopper, support frame and airlift. The Hi-Vac® Model 840 is an ideal industrial vacuum source to power permanent in-plant piping systems.

### II. Power Module

The Hi-Vac® Model 840 is powered by a 40 horsepower, 480V/3PH/60HZ electric motor. A NEMA 4 control panel is provided with all necessary controls. All Hi-Vac® units feature a positive displacement rotary lobe type vacuum producer with ductile iron impellers and high temperature seals. A cast aluminum flap on the vacuum pump discharge silencer acts as a check valve to prevent the vacuum pump from reversing direction and pressurizing the system.

### III. Material Collection Hopper

The Hi-Vac® Model 840 features a large 1.5 cu. yd. (1.15 cu. m.) capacity main material collection hopper. The hopper is constructed of reinforced carbon steel and is designed to handle negative pressure over 18" Hg. The collected material enters the hopper through the centrifugal separator located at the side of the powerhead. The centrifugal action of the air as it enters the hopper assures that only the finest particles get carried into the linear separator and the baghouse for final separation from the airstream.

### IV. Air Lift

The Hi-Vac® Model 840 is equipped with an air lift device to raise the Power Module from the Material Collection Hopper allowing the hopper to be removed for emptying. The Air Lift requires an external compressed air supply of 80 PSI at 1 CFM.

### V. Anticipated Performance

The Model 840's electric motor and positive displacement rotary lobe type vacuum producer provide the following performance specifications:

<b>Horsepower:</b>	40 HP (30 KW)	<b>Conveying Rate:</b>	
		Nominal =	200 lbs/min. (90.7 kg/min.)
<b>Vacuum Rating:</b>	16" Hg (0.542 Bar)	Maximum =	400 lbs/min. (181.4 kg/min.)
<b>Air Flow:</b>		<b>Conveying Distance:</b>	
No Load =	1000 CFM	Nominal =	100 ft. (30.5 m.)
Full Load =	850 CFM	Maximum =	400 ft. (122 m.)

Material handling rates and conveying distance will vary based on the bulk density and particle size of the material, as well as the skill and efficiency of the operating personnel.

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### VI. Filtration System

The Hi-Vac® Model 840 features a two stage filtration system consisting of the initial centrifugal separator and a fabric dust collector. The centrifugal separator removes the majority of the material, usually more than 90%, entering the Hi-Vac®. The dust collector is the second stage of separation. It includes 4 cartridge style filters having a total filtration area of more than 144.5 sq. ft. (13.4 sq. m.) with an air-to-cloth ratio of 5.9:1. Filter cleaning is continuous and is accomplished by a timed pulse of compressed air. Frequency and duration of the pulse cleaning cycle is adjustable from the main control panel. Filter cleaning requires an external compressed air supply of 80 PSI at 20 CFM.

### VII. Controls

The Model 840 Hi-Vac® features a complete package of instrumentation for operation at 120V/1PH/60HZ and product protection controls. Standard features include the following:

- Start and Stop pushbuttons with system "Running" pilot light
- Filter bag differential gauge and automatic shutdown, clean, and restart cycle
- Vacuum gauge and mechanical high vacuum relief valve
- Hopper full level control with automatic shutdown and "Hopper Full" pilot light
- All required starters, relays and timers

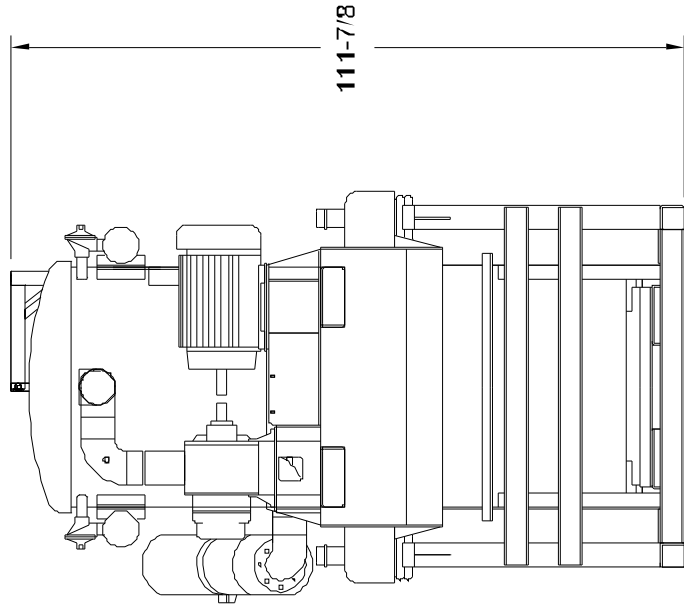
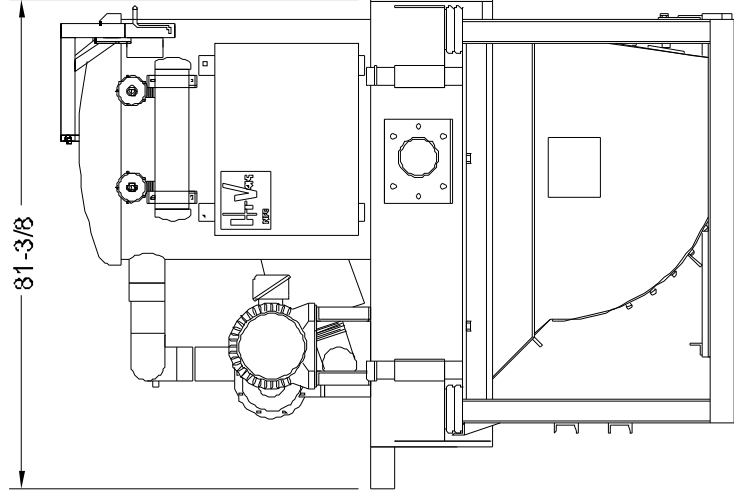
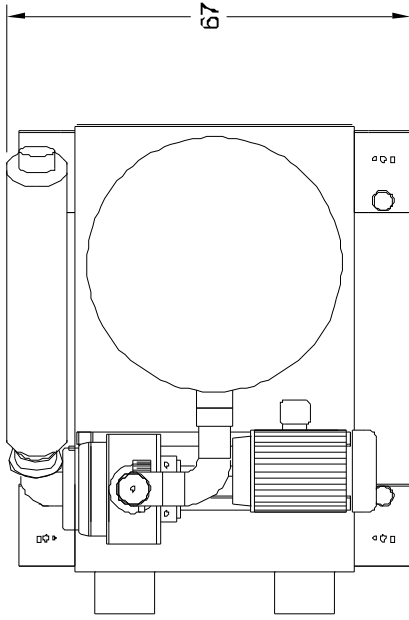
### VIII. Miscellaneous

All Hi-Vac® units include two (2) Operation and Maintenance Manuals as standard. Additional manuals are available at \$100.00 each. Units are primed and painted with durable industrial enamel. Standard color is yellow or your choice of any single color specified on written order. All Hi-Vac® equipment is covered by our twelve (12) month warranty covering defects in materials and workmanship excluding normal wear components such as filters and hose.

### IX. Additional Equipment

The proposed Hi-Vac® includes the following equipment in addition to the features listed above:

- NONE



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Corporation

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TITLE: 800 SERIES HI-VAC@W/ 1.5 YD<sup>3</sup> HOPPER  
STAND AND AIRLIFT

DATE: 11 DEC 02

SCALE: NONE

DRAWN: CGT

J-RWG: NO.: 201121-3