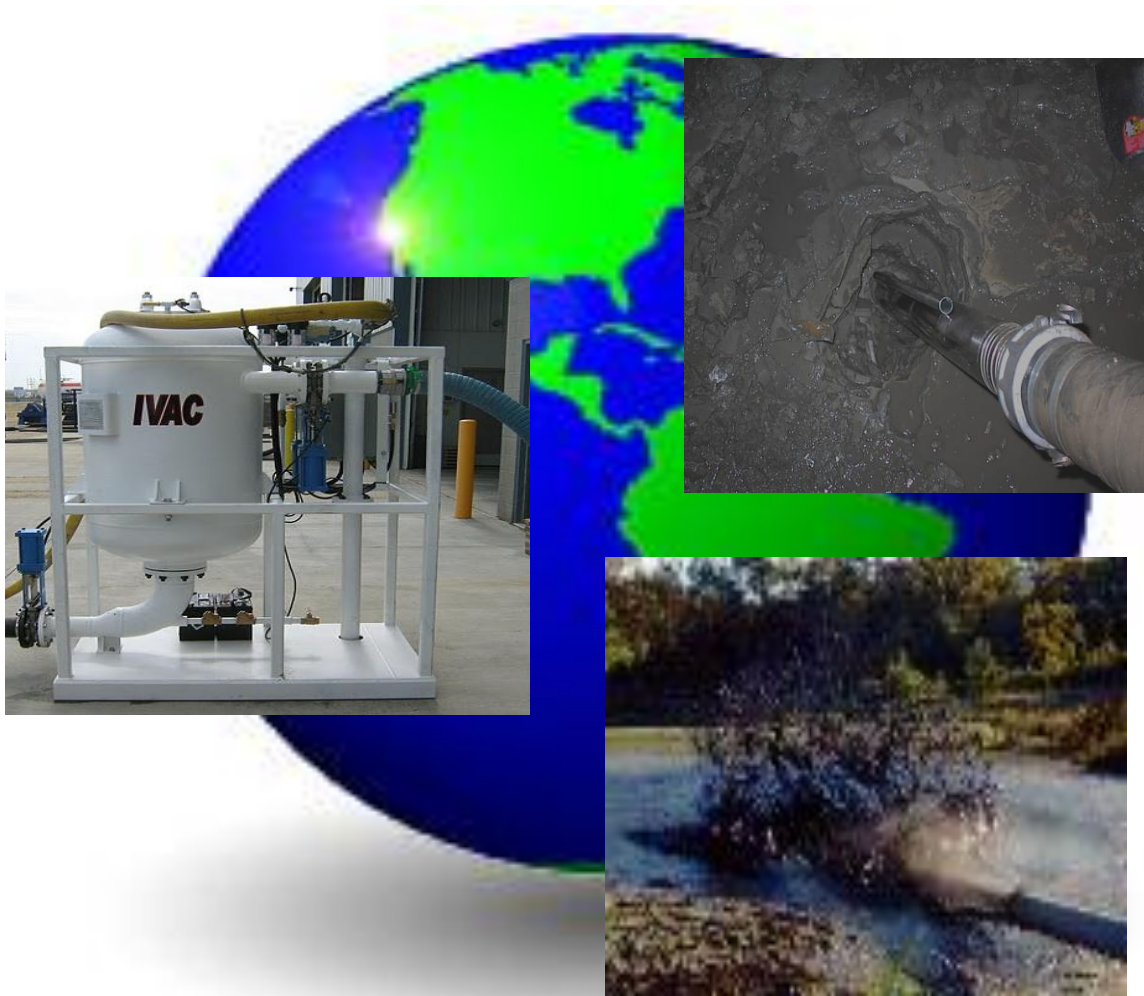


# **IVAC**

## **OPERATING MANUAL**



### **Maintenance And Operating Manual**

# PV500 Vacuum Unit



The Industrial vacuum unit performs very well in a variety of material handling. It's a cost effective, safe solution for Oil, handling rock, slimes, sludges, sand, gravel and rock in many mine, mill, & factory applications.

Keep all equipment in good working order.

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**Vacuum Operation**

The vacuum unit operates on compressed air. Compressed air is required to create the vacuum to operate the unit as well as provide discharge air to clear the tank and lines.



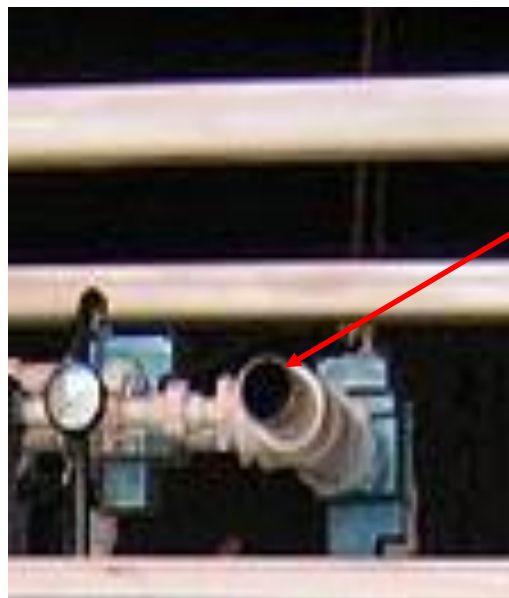
**Be sure all lines and fittings are tight. Install whip checks on all air hoses.**



**Wear ear protection whenever the equipment is operating.**



**Air Inlet-** The air inlet is 2" N.P.T. Be sure all lines are tight before turning air on to the unit. **Whip checks must be installed on all hoses leading to the unit.**



Air inlet

**Operator Controls**

Operator Controls- The vacuum unit is operated from the control panel located on the unit.

Remote controls are available for automatic pumping operations.

With the control switch located in the manual position the operator moves the discharge/vacuum toggle to control discharge and vacuum.

With the toggle switch located in Automatic the timer controls vacuum and discharge times and operation.

This is set by the operator depending on the types of material being transferred.

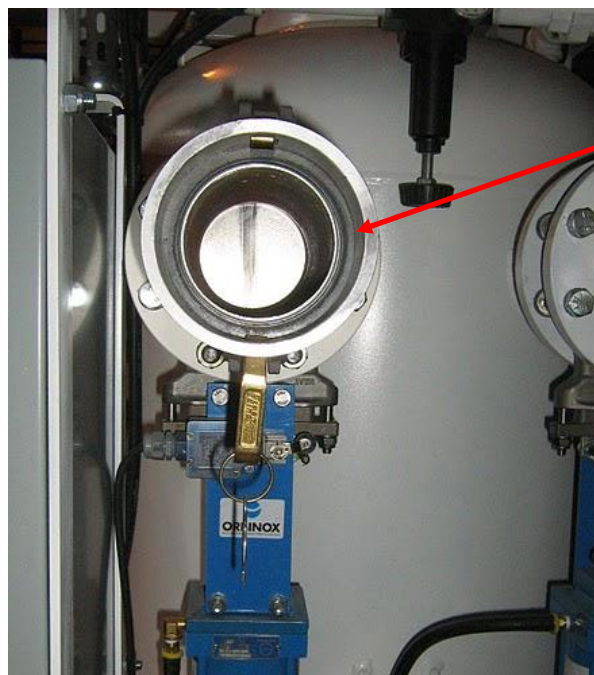


## MATERIAL INLET

### Suction Inlet

Suction Inlet- The suction inlet is 4" cam lock. It is desirable to have the unit located as close as possible to the material being picked up.

Line sizes may be smaller to reduce the weight for operator comfort as well as provide suction velocity for different types of materials.



Suction Inlet

## Material Discharge

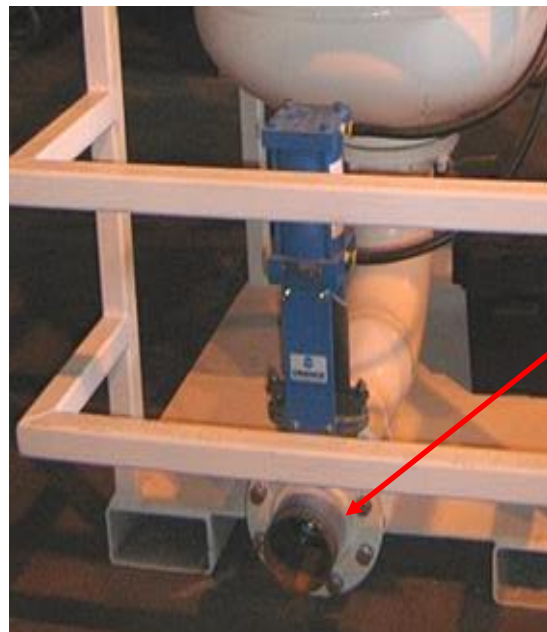
### Discharge Outlet



Discharge Outlet-. Be sure all lines are tight and secured before operating the unit. **Whip checks must be installed on all portable piping leading from the unit.**



Be sure the area at the discharge pipe end is clear and cannot be accessed by any personnel.



Discharge outlet

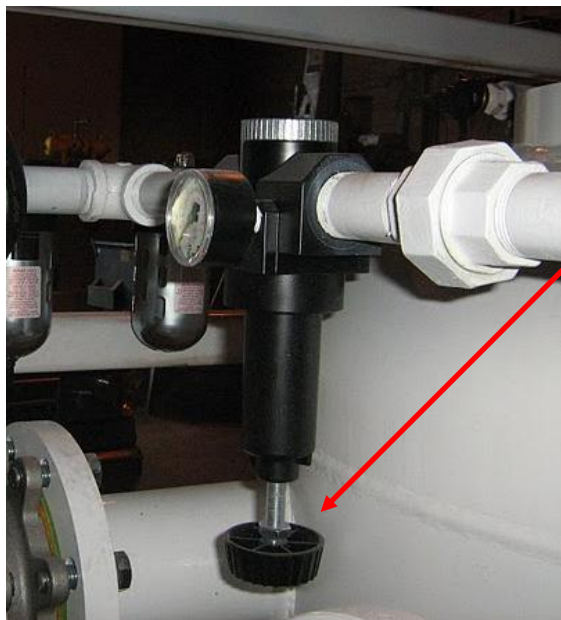
## Discharge Valves

Discharge air- there are two 1" manual ball valves located on the pressure vessel.

These valves control the amount of air entering the tank during discharge mode.

These valves may be adjusted to control the discharge velocity depending on the operation being performed. i.e. If discharging into a car, skip etc they may be on  $\pm 1/4$  turn to prevent material splashing or fly rock.

There is a pressure-reducing valve located on the discharge lines; this valve enables the operator to set the flow rate of material through the discharge line.



Pressure-reducing valve



## Pressure Vessel/Tank Bleed

A One Inch valve (pictured below) is installed to manually purge the pressure vessel of air. **IMPORTANT NOTE:** This valve will purge the pressure vessel only. Before disconnecting the main airline that powers the unit this inlet line must also be bled.



***IT IS IMPORTANT THAT ALL LINES, HOSES, VESSELS CONTAIN ZERO AIR PRESSURE BEFORE REMOVAL. COMPRESSED AIR MAY CAUSE SEVERE INJURY OR DEATH!***



One Inch purge valve