

INSTALLATION, OPERATION AND TROUBLESHOOTING

INSTRUCTIONS FOR ENCYCLON SELF-PRIME FILTRATION SYSTEM

1. INSTALLATION

- A. Carefully unpack the unit from crate
- B. Locate the Encyclon system as near as possible to the sump it is to be connected to.
- C. Install necessary suction line from the sump to the self-prime pump using pipe or reinforced hose.
- D. Install necessary return piping from cyclone to sump.
- E. Connect overflow hose from swarf container to sump.
- F. The standard pump motor is suitable for connection to 120 volt, single phase, 60 cycle 30 amp dockside power unit. Just plug the unit in, turn on the switch and it's ready to go. Optional power choices are available.



2. OPERATION

- A. Before operating this system, the sump and swarf container must be filled liquid. To avoid impeller damage, do not run the unit dry!
- B. Check the rotation of the pump if connected to optional 460/230 volt 3 phase motor. It should be clockwise looking at the pump from the motor end.
- C. An initial priming of the pump may be necessary. Remove the plug on the impeller housing, fill to proper level, and replace plug. The pump will not need to be primed any further unless disassembled or liquid removed from impeller.
- D. The Encyclon system is now ready to operate. It can run continuously or cycled as needed. Liquid pressure to the cyclone should be 25- 40 P.S.I.



Liquid pressure out of the cyclone should be 0- 10 P.S.I.

- E. The swarf container should be emptied from time to time by pouring of the liquid and depositing the swarf material in a suitable waste collector.

3. TROUBLESHOOTING

- A. Low "Cyclone In", pressure below 25 P.S.I.
 - 1. Disassemble and check for obstructions in suction line from sump to pump.
 - 2. Disassemble and check for obstruction in pump casing and impeller.
- B. High "Cyclone Out" pressure above 10 P.S.I.
 - 1. Check for restriction in return line to sump.
 - 2. Check for clogged cyclones.
- C. Clogging of ceramic nozzles.
 - 1. In a rare case of clogged nozzles, Stop pump motor and remove cap nut to inspect inside of ceramic nozzle. If clogged, a 1/8 inch wire may be used to free up and clear material from cyclone. After cleaning replace nozzle and cap nut.
 - 2. Check input strainer, perforations should be sized less than 1/8" diameter to avoid clogging 1/4" hole in the end of the cyclone cone.
 - 3. Run the system long enough to clear debris from input lines before shut down (1 to 2 minutes)

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