

# E/One Upgrade

## After Market Grinder Pump

**If you're tired of constant service calls resulting from greased-fouled floats, jammed grinders, burned-out motors, and other grinder pump problems, it's time to call E/One.**

When you're having too many problems with your system's centrifugal grinder pumps, it can wear you down. And wear you out. Those inferior grinder pumps aren't worth fixing. And fixing. And fixing. The solution is to upgrade. To Environment One's Upgrade, the aftermarket grinder pump that works and goes on working without any preventive maintenance. It's the original grinder pump design, the one others have tried to copy but they just haven't gotten it right. We have it down to a science. A simple science – design a pump for the application. So replace that troublesome pump. With E/One's Upgrade.



*The E/One Upgrade outperforms any grinder pump on the market. Use it anywhere you're currently using 2 hp and below grinder pumps.*



# Why is the E/One Upgrade better?

## 10 Reasons to switch to the E/One Upgrade



### Our Upgrade

1. Semi-positive displacement pump – provides virtually the same flow regardless of pressure. Scouring velocities are maintained without stressing the pump.
2. Non-jamming grinder – low-speed, high torque, with large-diameter inlet.
3. Non-contact, non-fouling pressure switch level controls. Proven reliable and maintenance-free.
4. Air-filled motor requires zero maintenance.
5. Built-in check valve and anti-siphon valve.
6. Longest mean time between calls –ten years.
7. Lowest operation and maintenance costs.
8. All pump, level, and motor controls in one compact assembly, making service simple and convenient.
9. Near-constant flow regardless of pressure – prevents build-up of solids in piping.
10. Zero preventive maintenance.

### Their Grinder Pumps

1. Centrifugal pumps – flows vary dramatically, causing high flows and dangerously short run times to no flow and continuous operation. The result: burned-out motors.
2. Jamming common – high-speed, low torque, with small-diameter inlet.
3. Float switches – require preventive maintenance to remove grease and oil. Constant source of problems. Mercury float switches difficult to dispose of and are an environmental issue.
4. Oil-filled motor requires periodic oil changes.
5. No anti-siphon valve.
6. Constant service calls.
7. Routine preventive maintenance and service calls.
8. Separate pump, level, and motor controls, making troubleshooting and repairs more difficult and time-consuming.
9. Widely varying flow, reduced as pressure increases, allowing build-up of solids in pipe. Solids build-up causes increased pressure and reduced flow, compounding the problem.
10. Jammed grinders, grease-fouled floats require periodic maintenance.

**The E/One Upgrade is the reliable, cost-efficient**

## Have you taken control of the maintenance problems with your centrifugal grinder pumps? But at what cost?

We've heard operators say, "... we don't have any problems any longer. We're on top of it. Every six months we visit each and every station, rinse down the floats, check for jams, sometimes we'll reverse the grinder, replace piping if necessary, and we've seen the service calls drop considerably." The point is, you don't have to live like that. All of that preventive maintenance is unnecessary with the Upgrade from Environment One.

Centrifugal pumps were never intended to be connected parallel in large numbers. The problem with centrifugal grinder pump systems is that the design doesn't work. They use centrifugal pumps, which create an ever-changing system curve. They use a small grinder. They use high-speed, low-torque motors. They use floats. And when the design doesn't work, the system doesn't work. The result? On-going maintenance headaches. And unreliable performance.

Fortunately, there is a simple solution. A reliable solution. From Environment One, the company that's been making the industry's most reliable pump for more than 30 years. With more than 500,000 end-users daily, E/One is the leader in grinder pump technology. So if you're dealing with nuisance pumps that are maintenance-intensive, replace them with the Upgrade, the pump with the lowest operation and maintenance costs and the longest mean time between service calls – ten years.

The Upgrade is engineered to fit virtually any other grinder pump well. Its universal design allows ready to connect, easy drop-in changeover. So don't put up with one more maintenance disaster from your centrifugal pump. Call E/One and start making your life easier today.

*Top view showing Upgrade retrofit.*



*Too many centrifugal pumps end up in the graveyard. E/One pumps keep working reliably year after year with the lowest operation and maintenance costs in the industry.*

# Efficient solution to your grinder pump problems.

# Specifications

## INSTALLATION

The Upgrade is engineered to fit into virtually any other grinder pump wet well. Universal design allows easy drop-in changeover.

## FEATURES AND BENEFITS

- All solids are ground into fine particles to pass easily through the pump, check valve, and small-diameter pipeline. The 1¼-inch slide face discharge connection can be adapted to any existing discharge piping without changing piping on the outside of the basin.
- Grinder is designed to eliminate jamming and for minimum wear to grinding mechanism.
- The Upgrade's self-contained level control system eliminates troublesome float switches. E/One's pressure switch level control system is the most effective in the industry.
- An internal check valve assembly is designed for non-clog, trouble-free operation.
- The grinder pump activates automatically and runs infrequently and for short periods. Its annual electric energy consumption is typically that of a 40-watt light bulb.

## OPERATIONAL INFORMATION

### Motor

1 hp, 1,725 rpm, high torque, capacitor start, thermally protected 240-volt, 60 Hz, 1 phase; 120-volt motors are also available

### Alarm Panel

For new installations, a NEMA 4X, UL-listed alarm panel includes power and signal circuit breakers, audible and visual alarms, push-to-silence button, push-to-run button, and terminal strips. For centrifugal replacements, an Upgrade power board consisting of DIN RAIL mountable components is designed to be installed inside the existing centrifugal panel.

### Discharge\*

15 gpm at 0 psig / 11 gpm at 40 psig / 9 gpm at 60 psig / 8gpm at 80 psig

\* Discharge data include loss through check valve, which is minimal.

