

# BARNES<sup>®</sup>

Pressure Sewer Systems

brands you trust.

# Upgrade Core



*Upgrade now... and never upgrade again!  
The Barnes Upgrade Core will relieve you of  
repetitive maintenance costs resulting from  
failing grinder pumps.*



# Upgrade Core

*The heart of a pressure sewer system is the grinder pump/level control. Crane Pumps & Systems Barnes Upgrade Cores allow operators and service providers to upgrade competitor's grinder pumps with a Barnes centrifugal grinder pump by fitting directly into competitor's stations.*

### Why a Barnes Upgrade Core for your system?

- Reliability you can count on
- Reduces operational and maintenance costs
- Hydraulic coverage to meet higher discharge head pressure and increased flows to provide proper line scouring velocities
- Reduces or eliminates odor problems
- Increases pump life
- Reduces solids settling out in basin
- Reduces level control issues

### Barnes Upgrade Core Benefits:

- Superior hydraulic design coverage versus common 1hp and 2hp grinder pumps
- Multiple assemblies available for a variety of applications
- Individual plug-n-play cords allow for modular component installation and upgrade needs
- Rigid piped or flex-hose connections





**CRANE**<sup>®</sup>

A Crane Co. Company

PUMPS & SYSTEMS

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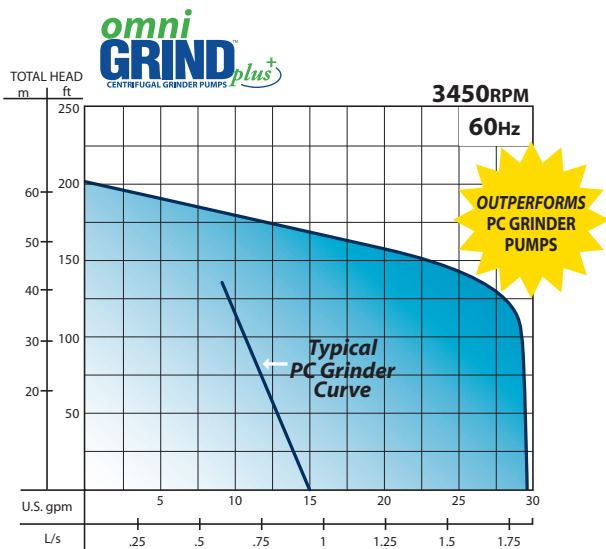


**PROSSER**<sup>®</sup>



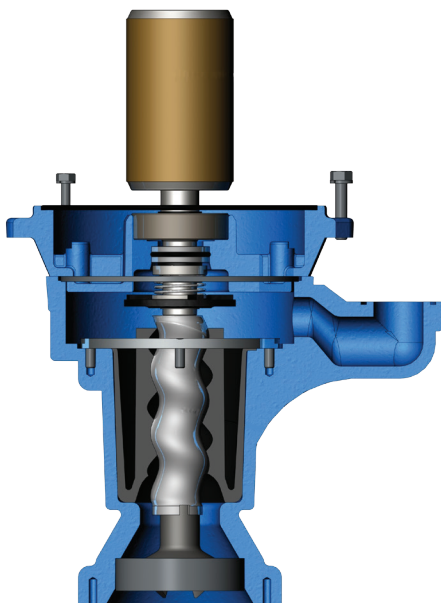
**Crane Pumps & Systems Pressure Sewer design utilizes a two-stage centrifugal pump to allow reduced life cycle costs and a higher degree of reliability.**

Pressure sewer systems that utilize progressing cavity pumps are at risk for potential failure due to continual pump end stator wear. Progressing cavity pumps have limited grit handling capabilities, reduced pump life when system head conditions exceed 150 feet and have limited operation at 185 feet or greater. A centrifugal pump will provide a service call mean time of 10-12 years, while a progressing cavity pump averages 3-10 years.

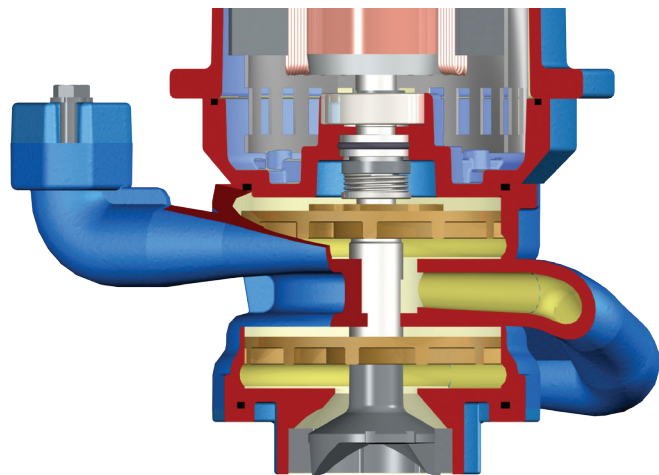


**Two-Stage Centrifugal Pump Benefits:**

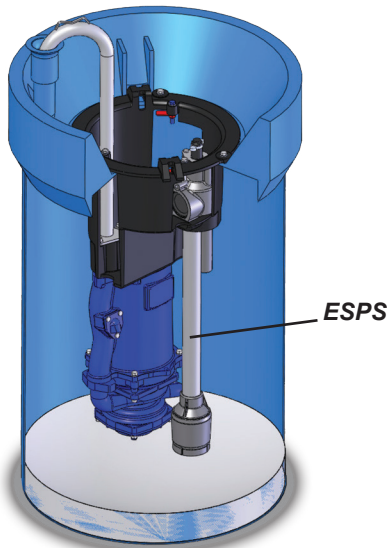
- Provides continuous operation at heads over 180 feet and greater performance capabilities compared to 1hp progressing cavity pumps
- One pump can scour a HDPE 11, 1¼” pipe **BY ITSELF** to a head of 185 feet
- Two vortex impellers handle solids and provide continuous operation at any point on the curve without overloading the motor
- Can run continuously at shutoff without damage
- No “Closed Valve Protection” required for high wear components as required with progressing cavity pumps



**Progressing Cavity Pump**



**Two-Stage Centrifugal Pump**



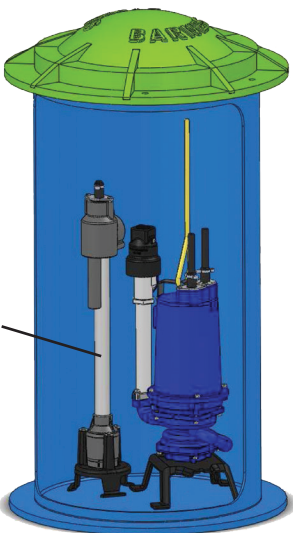
**1.25 Fixed Discharge Upgrade Core  
with OGP pump**

### 1.25 Fixed Discharge Upgrade Core

The Barnes 1.25 Fixed Discharge Core uses the Barnes Omni Grind Plus™ (OGP) pump and provides a drop-in ready package that fits directly into E/One\* 200, 2000 and Extreme D-Series. The pump combines the reliability of a centrifugal grinder with high head capability.

#### Features:

1. Stainless discharge pipe fits into existing receiver
2. Flap-Style check valve easily maintained
3. Grinder pump is cast iron and all hardware provided in corrosion-resistant stainless steel
4. 2hp centrifugal grinder pump empties basin in half the time with substantially greater life than progressing cavity design
5. Level control easily removed for inspection without removing pump
6. Quick-connect fittings simplify electrical connection
7. ESPS sealed pressure switch controls pump with no exposed electrical components



**Universal Upgrade Core  
with OGP Pump**

### Universal Upgrade Core

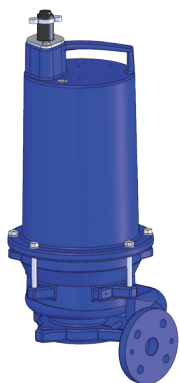
The Barnes Universal Upgrade Core is designed to fit into many universal basin styles with an 1.25" NPT discharge connection. The Barnes Omni Grind Plus two-stage centrifugal pump provides maximum reliability and low life-cycle costs.

#### Features:

1. 1.25" NPT for connection to existing flex hose or hard piped connection
2. Combination Flap-Style check valve with anti-siphon port
3. Cast iron pump stand and level control stand provides proper clearance and support for the units eliminating field adjustments
4. Independent level control and pump allow for easy removal and inspection of either item

#### ESPS™ Features:

1. Self-compensating design eliminates the need for external pressure relief tubes or bulky bladders
2. Thermal protection with an internally mounted high temperature cut-off switch
3. Save time and money! No control panel required with Simplex Automatic Version



**Omni Grind Pump with  
Flanged Discharge**

### Flanged Horizontal Discharge Upgrade Core

Barnes OGV Omni Grind Pump with flanged discharge fits directly into existing ABS® brand systems. The flanged volute features a 1.25" discharge with a standard ANSI pipe flange design. The suction also features a pipe flange design to fit 3" ANSI flanged pipe.

Wet End kits are available to convert Standard model OGVF and OGVH grinder pumps.

\* E/One® is a registered trademark of Environment One Corporation and is not affiliated with Barnes Pumps.

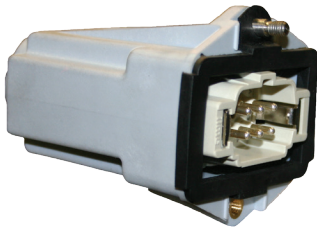
Model	OGP2022CO	OGP2022AUE	OGVF2022M
Description	1.25" Fixed Discharge Unit	Universal Unit - 1.25" NPT	Flanged Horizontal 1.25" Discharge Unit
Fits	E/One* GP200 E/One* GP2000 E/One* Extreme D-Series	E/One*, Hydromatic®, Myers® and many others	Upgrades ABS® S-16 and S-18 grinder pumps
hp	2	2	2
Volts / Phase	240 / 1	240 / 1	240 / 1
Amps	16.5	16.5	15.0
Head / Flow* (Max)	up to 200' / 28GPM	up to 200' / 28GPM	up to 100' / 58GPM

\* See Barnes Pressure Sewer Catalog for additional technical information and curve performance

## Accessory Options:

### Optional Factory wired Electrical Quick Disconnect (EQD)

The factory installed EQD option reduces field upgrade time. The connector is identical to the original fitting used on the E/One\* 2000 or Extreme series stations.



Fits E/One\* 2000 Series



Fits E/One\* Extreme

### Circuit breakers are sold separately for all kits

Option to select the required breaker design for the installation.

### New Grinder Pump and ESPS-100 and -150 level control stands

Painted cast iron with protective feet and stainless steel mounting hardware. The pump stand provides the required pump suction clearance and works with all of the 2hp series grinder pumps. The level control stand locates the ESPS-100 and ESPS-150 height so there is no need for field adjustment. Independent stand allows for ease of installing and servicing for the ESPS level control or pump.

### Optional 120V indoor remote alarm light wall plate

Remote Alarm wall plate allows the homeowner to install a fault warning light indoors. Available in various color options and installs in a standard single gang enclosure.



ESPS 100-150 Series Stand



2hp SGV, OGV, and OGP Grinder Stand



Remote Alarm Wall Plate