

# Barnes Effluent Pumps

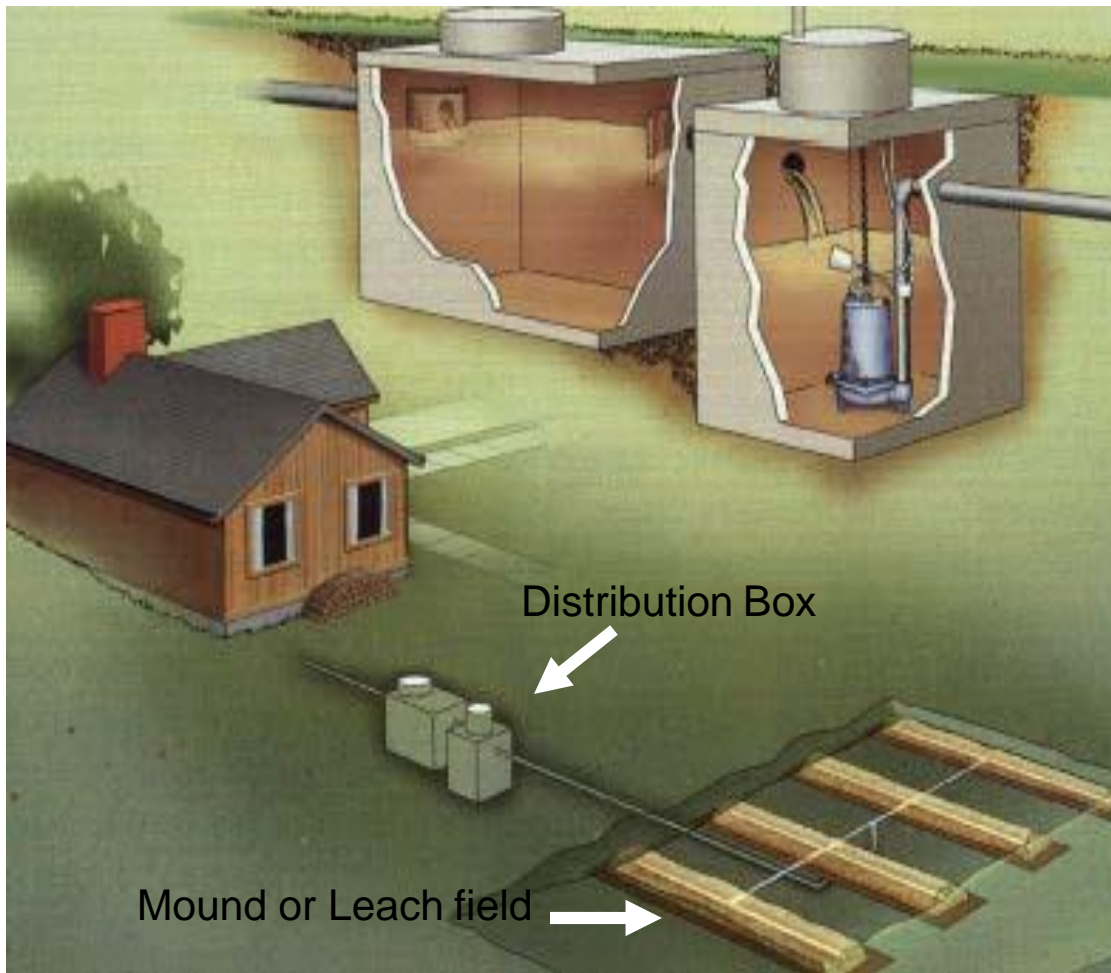
Crane Pumps & Systems



PUMPS & SYSTEMS

# Effluent Pumps

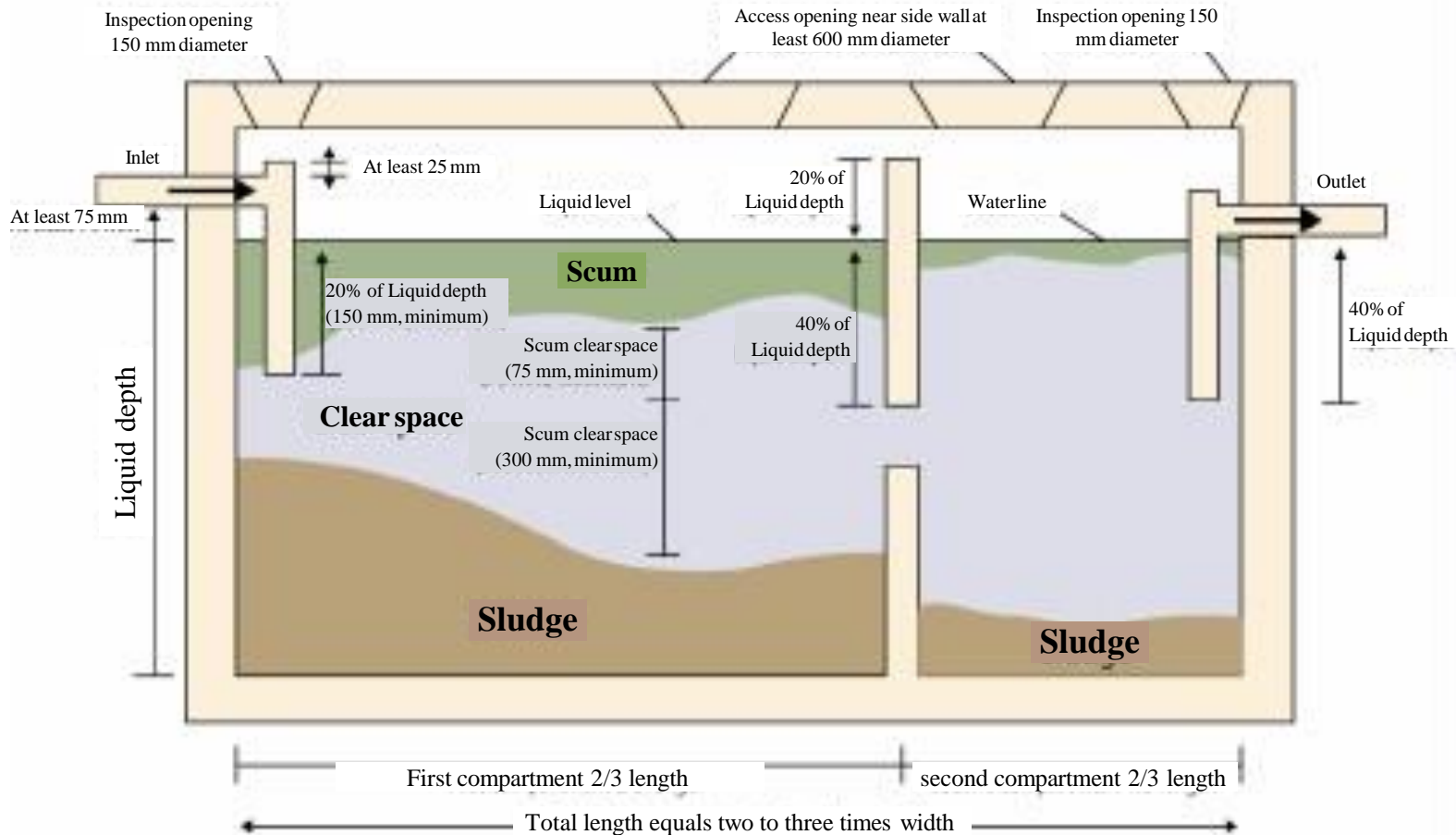
*Everyone. Everywhere. On Time Every Time.*



Effluents (3/4" solids) are pumped from a distribution box into a mound system or a leach field. Local codes may require this type of system

This is also a typical application for a time-dosing system.

Schematic of conventional septic tank



*Everyone. Everywhere. On Time Every Time.*

Septic  
Contractors

Plumbers

Water  
Proofers

Excavators

Precasters  
& etc.



*Everyone. Everywhere. On Time Every Time.*

- Most Effluent Pumps for single structures are low head for pumping to Leach Fields
- Effluent Pumps for STEP systems have higher heads in order to pump some distance in the effluent collection system
- As a result, several impeller types are employed:



Vortex

- EHV412 (120V)
- SP33/50/75 (120V)
- EP52/72 (230V)
- Iron



Monovane Enclosed

- STEP ½ & 1 HP
- Glass-Filled Nylon



Dual Vane Semi-Open

- EH ½, 1 & 1.5 HP (Iron)
- BP314 (Bronze)
- SE (Iron)

Barnes Offers a wide variety of Effluent Pumps for multiple applications

*Everyone. Everywhere. On Time Every Time.*

- All pumps are Oil Filled
  - Better motor heat dissipation
    - (7x better than air filled motors)
  - Oil-lubricated bearings last longer
- Plug-in Power Cords simplify maintenance as the pumps are merely un-plugged before service (EH and STEP pumps only)
- Double seals use Buna diaphragms to pressurize the seal chamber
- Pumps with double seals have two plug-in cords:
  - One for power
  - One for temperature and moisture detector circuits
  - Cords available in 30, 50, 100 Ft



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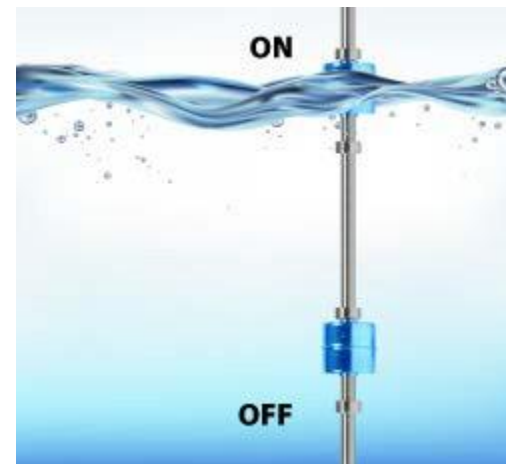
- 1-1/2" NPT on SP and EP series 2" NPT Discharge Connections on all others
- Standard pumps rated for 104° F liquid in continuous operation
- Hi-Temp pumps are rated 200° F liquid in continuous operation (185° F on SP33HTX)
- CI construction, SS Hardware, Buna o-rings
- Impellers:
  - Cast iron on EH-HT, SE, EHV412, SP and EP models
  - Bronze on BP314/324 (BR and HT) models
  - Polypropylene on EH, BP, STEP models
  - Cast-in feet provide lower clearance than SE
  - Standard seals:
    - Carbon vs Ceramic, standard on all models
    - Silicon Carbide Vs Silicon Carbide available as an upgrade



# BARNES®

*Everyone. Everywhere. On Time Every Time.*

- A wide range of control panels for pumps without temperature or moisture sensors (i.e. - EP series or single seal pumps)
  - Located in the Barnes Prof. Plumbing Catalog Accessory section
- A completely customizable series of control panels are available
  - Versatrol series located in the Barnes Engineered Catalog Accessories
- The most popular accessory for effluent pumps is a level control!





## Model Nomenclature



**EH1592DS**



- Pump Model EH
- Motor HP x 10
- Voltage / Phase
  - 1 = 115V 1 Phase
  - 2 = 230V 1 Phase
  - 3 = 230V 3 Phase
  - 4 = 460V 3 Phase
  - 5 = 575V 3 Phase
  - 7 = 208-230 1 Phase
  - 9 = 208-230V 3 Phase
- Pump Speed
  - 2 = 3450 RPM
  - 4 = 1750 RPM
- Suffixes:
  - SS or L = Single Seal
  - DS = Double Seal
  - HT = High Temperature

- Marketing brochure
- Competitive comparison brochure
- Catalog Info
- Specifications
- Mentor pump selection

**Plumbing Solutions** brands you trust.

**Product Overview**





**BARNES PROSSER**

**CRANE** PUMPS & SYSTEMS

**Pump Data Sheet - Crane/Barnes**

Company: \_\_\_\_\_  
 Name: \_\_\_\_\_  
 Date: 7/30/2012



<b>Pump:</b>	<b>Search Criteria:</b>	
Size: 3SE30*4DS	Flow: 225 US gpm	Head: 40 ft
Type: Sewage Eject 2-3"-1B	Speed: 1750 rpm	
Synch speed: 1800 rpm	Dia: 7.25 in	
Curve: V88799	<b>Fluid:</b>	
Specific Speeds:	Water	Temperature: 60 °F
	SG: 1	Vapor pressure: 0.2563 psi a
	Viscosity: 1.105 cP	Atm pressure: 14.7 psi a
	NPSH <sub>a</sub> : ---	
Dimensions:	<b>Motor:</b>	
Suction: ---	Motor is integral to the pump except in 4A, 4B, and 5B catalog sections.	
Discharge: 3 in		

**Pump Limits:**

Temperature: ---	Power: ---
Pressure: ---	Eye area: ---
Sphere size: 2.5 in	

