

GRINDER PUMP STATION OVERVIEW

- > **Grinder Pump Requirements**
 - Pump Type: Centrifugal (preferred) or semi positive-displacement (with prior DTMA approval).
 - Pump Operating Point: 11 gallons per minute (gpm), minimum, at 92 feet total dynamic head.
 - Horsepower: 1 horsepower Minimum, 120 Volts.
- > **Tank Requirements:**
 - Capacity: 50 gallons, minimum.
 - Tank Inlet Diameter: 4 inches.
 - Discharge Pipe Diameter: 1-¼ inches.
 - Materials: High Density Polyethylene (HDPE) or Fiberglass.
- > **Control Panel Minimum Requirements:**
 - Constructed in accordance with Underwriter's Laboratory or other nationally recognized certification agency.
 - Alarms:
 - Visual signal (light mounted on the top of the control panel).
 - Audible signal.

GRINDER PUMP SPECIFICATIONS

- > Single-family residential establishments shall utilize a prefabricated unit which includes a factory-built sewage grinder pump with all associated parts and fittings mounted in a corrosion proof tank and a remote pump control panel mounted at a suitable location inside or outside the home. The unit shall be suitable for use in or near structures and shall be free from noise, odor, or health hazards.
- > The unit for single-family residential establishments shall have the following characteristics:
 - General - Any grinder pump proposed for use under this section shall:
 - Have the pumping capacity and be able to meet the head conditions required by the application.
 - Be capable of reducing all components in normal domestic sewage, including a reasonable amount of "foreign objects", such as paper, wood, plastic, glass, rubber, and the like, to finely divided particles which will pass freely through the pump and the discharge piping.
 - Be positioned in such a way that solids are fed in an upflow direction.
 - Anti-siphon valve.
 - Pump
 - Shall be a centrifugal grinder. Semi positive-displacement type grinders are permitted with prior approval of DTMA.
 - Shall be capable of discharging a minimum of eleven (11) gallons per minute against a normal rated total dynamic head of ninety-two (92) feet.
 - Shall utilize a motor with a minimum of one (1) horsepower.
 - Appurtenances
 - Tank – Shall be watertight, 24 inch diameter minimum with a minimum capacity of fifty (50) gallons. Depth to be determined on individual basis.
 - Tank Inlet - Four (4) inches in diameter.
 - Discharge Pipe - Shall be a minimum of 1 ¼ inches in diameter.
 - Anti-Siphon Valve – Basin package shall include an anti-siphon valve.

- Braided Flex Hose Assembly - A 1 ¼ inch (minimum) braided flex hose assembly of 36 inch length shall be located between the tank discharge pipe flange and the low pressure sewer piping to accommodate differential settling. The braided flex hose assembly shall be pressure rated for the operating conditions and constructed of T-304 stainless steel.
- Pump Control Panel - Shall be constructed in accordance with the requirements of the Underwriter's Laboratory or other nationally recognized certification agency and shall be appropriately labeled.
- Alarms - As a minimum, the unit shall be provided with an alarm to indicate a high water condition. Panels should have a visual signal and an audible signal.

ACCEPTABLE PRE-PACKAGED GRINDER PUMP SYSTEMS

- > **Pentair Myers VS20 or VH20 Series Pre-Packaged Simplex System (Centrifugal)**
- > **Zoeller Shark 7011, 7012, or 7013 Series Pre-Packaged Simplex System (Centrifugal)**
- > **Liberty Omnivore LSG200 or LSGX200 Series Pre-Packaged System (Centrifugal)**
- > **Barnes Razor ZOGP or ZOGV Series EcoTRAN Pre-Packaged System (Centrifugal)**
- > **E/One DH071/DR071 Pre-Packaged System (Semi Positive-Displacement)**
- > **NOTE: "HIGH HEAD" GRINDER PUMPS REQUIRED IF CONNECTING INTO A FORCE MAIN.**

DISTRIBUTORS

- > **Orchard Pump and Supply**
- > **LB Water**
- > **HAJOCA**
- > **RF Fager Co.**
- > **Thos. Somerville Co.**
- > **Note: This is not an all-inclusive list of distributors.**