

Specifications - SGR125 - 24" Dia. Simplex Package for 2Hp Grinder

General:

Contractor shall furnish all labor, materials, equipment and performance of all work necessary or incidental to furnish and install a simplex prefabricated fiberglass reinforced polyester (FRP) basin package 24 inch diameter and _____ inches deep. The basin package shall be a completely factory-assembled unit, requiring only minor adjustments and reassembly in the field.

Package Design:

Basin: The wet well FRP wall laminate must be designed to withstand wall collapse or buckling based on the following assumptions and third party specifications:

- Hydrostatic Loading of 62.4 lbs. per cubic foot
- Saturated soil weight of 120 lbs. per cubic foot
- Soil Modulus of 700 lbs. per square foot
- Pipe stiffness values as specified in ASTM D3753

The wet well FRP laminate must be constructed to withstand or exceed two times the assumed loading on any depth of the wet well. A ballast support flange shall be provided as an integral part of the basin assembly, which shall extend a minimum of three inches on the radius of the basin.

Discharge:

A 1¼ inch grommet for 3 inch hole, shall be factory installed at a distance of 36 inches from the bottom of basin to the center line of 1¼" Sch 80 PVC discharge pipe.

Electrical Coupling:

A 1½ inch NPT stainless steel bolt-on coupling, shall be factory installed at a distance of 12 inches from the top of the basin to the center line of on the coupling. Stainless steel fasteners shall be used to bolt coupling to basin and wet well wall penetrations shall be sealed with silicone sealer.

Inlet Hub:

A 4 inch nominal pipe diameter pipe grommet shall be field installed by the contractor in a 5 inch diameter hole in the wet well wall. The pipe grommet shall provide a mechanical seal and shall not require any secondary sealing materials.

Float Bracket:

Float Bracket shall be fabricated from 300 series stainless steel with three compression style cord grips to maintain float level position. It shall be factory installed with stainless steel fasteners. The wet well wall penetrations shall be sealed with silicone sealer.

Ventilation:

A 2 inch NPT stainless steel bolt-on coupling, shall be factory installed at a distance of 12 inches from the top of the basin to the center line of on the coupling. Stainless steel fasteners shall be used to bolt coupling to basin and wet well wall penetrations shall be sealed with silicone sealer. Wet well ventilation shall comply with all applicable codes.

Slide Rail Assembly:

The slide rail assembly shall include a 1¼ inch brass pump quick disconnect, upper and lower stainless steel stand-off brackets, and 1½ inch 304 stainless steel guide rails.

Piping/valves: The discharge piping shall consist of 1¼ inch schedule 40 stainless steel pipe and exit the basin with sch 80 pvc pipe. An 1¼ inch cast iron ball check valve shall be installed in the vertical position. It shall be non-clog in design and shall be full ported with a minimum rated pressure of 150 PSI. A 1¼ inch sch 80 PVC gate valve shall be installed in the discharge piping to provide shut-off capabilities from ground level.

Lifting Cable:

The lifting cable shall be 300 series stainless steel with a diameter of at least 3/16" and a nominal breaking strength of at least 2500 pounds.

Fiberglass Cover:

The solid fiberglass cover shall be constructed with continuous mat or chopped-strand glass fiber reinforcement with a minimum thickness of 0.325 inches. The cover shall be mounted to the basin with stainless steel fasteners.

