THERMOPLASTIC SUMP-GARD® SG VERTICAL CENTRIFUGAL PUMP

- **GENERAL**
  Pumps constructed with all wetted components of polyvinyl chloride (PVC) chlorinated polyvinyl chloride (CPVC) polypropylene (PP), or polyvinylidene fluoride (PVDF) thermoplastic materials. Flows to 1450 GPM (330m^3/hr). Heads to 245 Ft (85m). Temperatures to 275°F (135ºC). Depths to 20 Ft (15m). (See SGL-12-30 for taller pumps)

- **CASING AND CASING COVER**
  Injection molded homogeneous thermoplastic material selected for compatibility with the fluids being pumped.

- **IMPELLER**
  Thermoplastic material injection molded with an embedded dynamically balanced stainless steel insert with radial vanes. It shall be closed or semi open vane designed, with keyway for mounting on the shaft to assure positive drive.

- **THERMAL FLUCTUATION MODIFICATION (TFM)**
  Casing, impeller and suction nozzle designed to accommodate temperature fluctuation without change in pump performance.

- **SHAFT**
  Stainless steel shaft sleeved with a thermoplastic material to isolate it from the fluid. It shall be machined at the drive end to fit a flexible coupling. The immersed portion of the shaft to be guided by sleeve bearings consisting of an ultra pure alumina ceramic inner sleeve and a Vanite (Siliconized Graphite) outer sleeve. Bearings to be lubricated by the pumped fluid, or clean external water.

- **VERTICAL SUPPORT COLUMN AND DISCHARGE PIPE**
  Fabricated of heavy-sectioned thermoplastic. Upper portion of the column to be fitted with a nonmetallic vapor seal to protect motor and ball bearings in mounting bracket.

- **COVER PLATE**
  To be sized and shaped to fit the sump, and furnished in the same or compatible thermoplastic material as the pump. All hardware below the coverplate to be nonmetallic.

- **MOTOR MOUNTING BRACKET**
  To have precision-machined mounting surfaces for a rabbet fit to automatically align pump and motor coupling. The assembly to be designed to house regreasable ball bearing(s) for positioning and locking the shaft into position and to allow adjustable impeller clearance without removing the pump from installation. The cast iron motor mounting bracket to be painted with a two-part chemical resistant epoxy resin or similar resistant coating material.

- **SUCTION STRAINER**
  Strainer basket to be provided where required in the same material as the hydraulic head.

- **FACTORY TESTING**
  Each pump to be tested to assure performance at conditions of service. Test data to be permanently recorded and retrievable on request.