

**THERMOPLASTIC CHEM-GARD® CGM
SEALLESS HORIZONTAL END SUCTION
MAGNETICALLY DRIVEN CENTRIFUGAL PUMP**

- **GENERAL**

Pump to be of sealless design, conform to ANSI process pump standards, and be constructed with all wetted components of polypropylene (PP) or polyvinylidene fluoride (PVDF) homogeneous thermoplastic materials. Flows to 450 GPM (102 m³/hr). Heads to 280 Ft (95m). Temperatures to 275°F (135°C).

- **CASING AND BEARING HOUSING**

Injection molded homogeneous thermoplastic material selected for compatibility with the fluids being pumped. These are to be solid, not lined, components. Bearing housing to be designed with wide-open fluid passages for continuous flow of fresh liquid to keep magnets cool and bearings lubricated.

- **CONTAINMENT CAN**

Dual nonmetallic assembly with a fluoropolymer thermoplastic inner can backed by a thermoset composite outer can.

- **MAGNETS**

High performance, rare-earth magnets selected for power ratings to 45 hp.

- **IMPELLER**

Thermoplastic material injection molded with an embedded dynamically balanced stainless steel insert with radial vanes. Closed vane design, with keyway for mounting on the shaft to assure positive drive.

- **SHAFT AND BEARING ASSEMBLIES**

Driven shaft to be precision machined, stainless steel with wet end sleeved in thermoplastic. It shall be guided by low PV stationary bearings and rotary sleeve/thrust bearings of silicon carbide. Ultrapure ceramic or similar chemically inert bearing materials are available. External drive shaft to be precision machined alloy steel.

- **EXTERNAL ARMOR**

Cast iron protective armor surrounding the pump casing to be painted with chemically resistant two-part epoxy resin or similar coating material.

- **FACTORY TESTING**

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