

THERMOPLASTIC CHEM-GARD® CGMC
CLOSE-COUPLED SEALLESS HORIZONTAL END SUCTION
MAGNETICALLY DRIVEN CENTRIFUGAL PUMP

- **GENERAL**

Pump to be of sealless, close-coupled design, pump head to conform to ANSI B73.1 process pump dimensional standards and be constructed with all wetted components of polypropylene (PP) or polyvinylidene fluoride (PVDF) homogenous thermoplastic materials. Flows to 400 gpm (91 m³/h). Heads to 180 ft (55 m). Temperatures to 225°F (107°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 liquid for cooling and lubricating the sleeve/thrust bearings.

- **CONTAINMENT CAN**

Non-metallic assembly with a thermoplastic inner can backed by a non-metallic composite outer can.

- **MAGNETS**

High performance, rare earth magnets selected for power ratings to 30 hp at 3600 rpm. The inner magnet assembly to be encapsulated in thermoplastic material to isolate it from the fluid being pumped.

- **IMPELLER**

Injection molded thermoplastic closed vane impeller with an embedded dynamically balanced stainless steel insert with keyway for mounting on the shaft to assure positive drive.

- **SHAFT AND BEARING ASSEMBLIES**

Shaft to be precision machined, stainless steel with wet end sleeved in thermoplastic. It shall be guided by high PV stationary and rotating sleeve/thrust bearings of ultra-pure alumina ceramic, siliconized graphite or silicon carbide.

- **EXTERNAL ARMOR**

Protective cast iron armor encasing the pump hydraulic head 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 upon request.