Fiberglass Reinforced Plastic Pumps
MAGNATEX® / Argal FRP Pumps

The pumps are manufactured using the RTM injection molding process. Reinforcing layers of fiberglass mat are placed in molds prior to injecting the appropriate resin, depending on the application. The use of layers of different weight mats produces a finished product of the highest possible mechanical strength, comparable to stainless steel or alloy pumps, so that a casing armor is not required to reinforce the strength of the pump. Thermoset resin pumps offer higher strength, thermal and dimensional stability and much longer life than competitive thermoplastic pumps.

Applications
Depending on the application, the use of different formulations of epoxy vinyl ester resins provides a broad spectrum of chemical and abrasion resistance, such that the pumps are commonly used in industrial and municipal waste water treatment facilities, water parks, large scale aquariums, zoos and aquaculture farms.

MAGNATEX® MFRP-L (Long Coupled) ANSI Specifications
- Maximum Flow: 5900 GPM
- Maximum Head: 450 FT
- Liquid Temperature: -50°F and 250°F

MAGNATEX® MFRP-C (Close Coupled) ANSI Specifications
- Maximum Flow: 1320 GPM
- Maximum Head: 246 FT
- Liquid Temperature: -50°F and 250°F

Fiberglass Resin/Applications
- V1G standard vinyl ester resin compound: General Purpose / Salt Water
- V1A vinyl ester resin compound: Abrasive Liquid
- V1C vinyl ester resin compound: Bleach Applications
- V1F vinyl ester resin compound: Fluoride Applications
FRP PUMPS for aquarium, zoos, marine parks and aquaculture facilities.

Magnatex/Argal Pumps are specifically designed to handle sea water services in large public aquariums, zoos, aquaculture facilities and marine parks. All wet end parts are manufactured from high strength, long strand, fiberglass reinforced polymer (FRP) in order to resist corrosion, abrasion and operating temperatures between -50°F (-45°C) and 250°F (120°C). Available pumps include ANSI B73.1 pumps in both close coupled and long coupled configurations, Vertical sump pumps, AODD pumps and Submersible pumps.

Manufacturing Process

Magnatex/Argal fiberglass reinforced polymer pumps are manufactured using a Resin Transfer Injection molding process (RTM). Reinforcing layers of long strand fiberglass mats are placed into molds prior to injecting the appropriate resin. The use of layers of different weight fiberglass mats produces a finished product of the highest possible mechanical strength (comparable to stainless steel or alloy pumps) so that a casing armor is not required to reinforce the pump casing. FRP (fiberglass reinforced polymer) thermoset resin pumps offer higher strength, thermal and dimensional stability and much longer life than our competitors’ thermoplastic pumps.

Applications

Depending on the application, different formulations of epoxy vinyl ester resins provides a broad spectrum of chemical and abrasion resistance suitable for pumps that are used in industrial and municipal waste water treatment facilities, water parks, large scale aquariums, zoos, marine parks and aquaculture farms.