

## **CHEM-GARD® CGA** Thermoplastic HORIZONTAL CENTRIFUGAL PUMPS TO ANSI B73.1

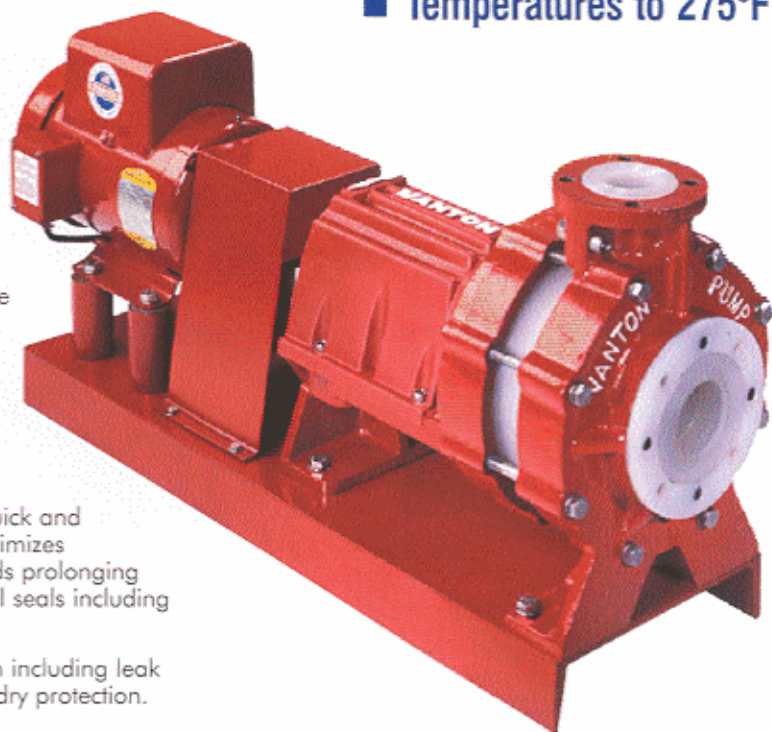
These quality built end suction thermoplastic pumps with centerline discharge and back pullout construction, combine the award winning wide open seal area features of our innovative Chem-Gard® line of thermoplastic pumps with the standard dimensional and performance characteristics embodied in ANSI specification B73.1. They are fully interchangeable with any other pump manufactured to this specification without disturbing piping, baseplate, foundation, driver or coupling. At the same time, they incorporate thermoplastic construction offering complete resistance to the most corrosive, abrasive and other aggressive fluids.

The pump casing and impeller are molded from solid, homogeneous thermoplastics. The casing and flanges are armored with structural metal in order to accept the same nozzle loading as metal pumps while limiting fluid contact exclusively to non-metallic components.

The adjustable sliding inboard bearing design provides for quick and easy mechanical seal inspection while at the same time it minimizes impeller overhang and shaft deflection at higher critical speeds prolonging seal life. The open seal area accommodates most commercial seals including single, double, cartridge and balanced arrangements.

Optional features are available for control and safe operation including leak detection, temperature monitoring within the pump, and run-dry protection.

- POLYPROPYLENE ■ PVDF
- Flows to 1450 gpm ■ Heads to 280 feet
- Temperatures to 275°F



Rugged homogeneous thermoplastic pump components assure dependable performance

### MATERIALS OF CONSTRUCTION

No metal is ever in contact with the fluids being pumped. The wetted end of the stainless steel shaft is sleeved in thick sectioned thermoplastic material. The homogeneous structure of Vanton thermoplastics minimizes the possibility of chemical absorption and eliminates the danger of bleeding or wicking commonly associated with fiberglass reinforced thermoset pumps. Heavy sectioned independent molded components avoid porosity and separation problems that tend to occur with lined pumps. With proper flushing, these thermoplastic pumps can be used for any other compatible service without fear of contamination.

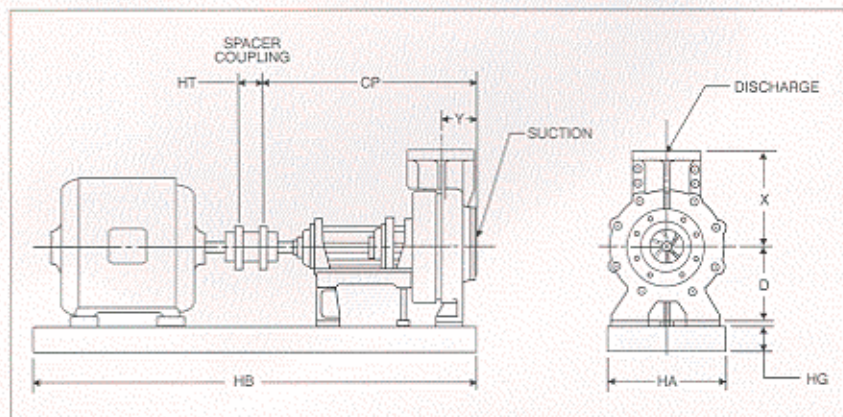
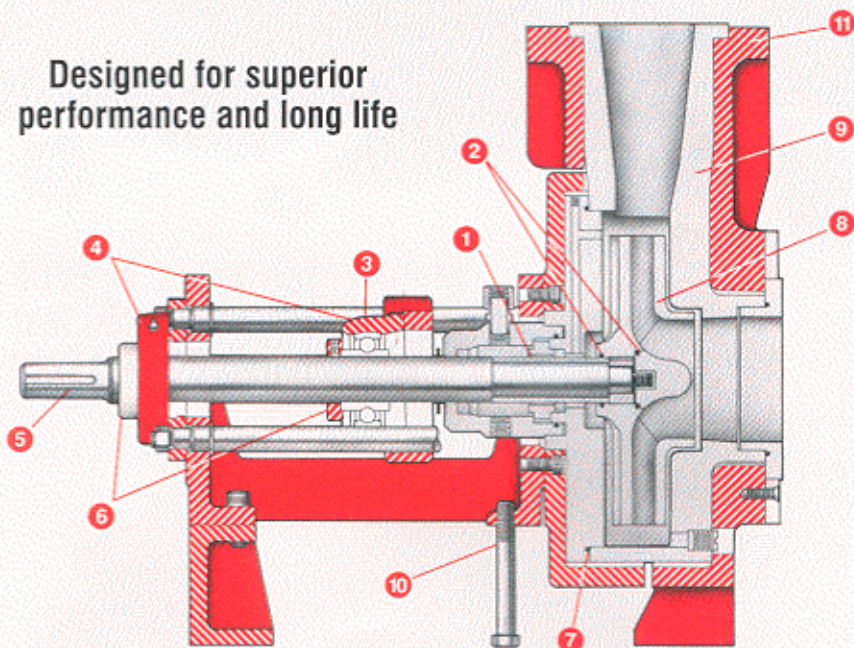
### APPLICATIONS

Vanton thermoplastic pumps are ideal for handling the broad range of corrosive, hazardous, toxic and other aggressive fluids used throughout the processing and manufacturing industries, in utilities, and in industrial and municipal water/wastewater treatment facilities. These fluids include: chemicals, biochemicals and pharmaceuticals, foods, mining slurries, pure water for semiconductor wafer fabrication, electroplating formulas, pickling liquors, paper/pulp bleaches, industrial and municipal noxious odors, sea water in fisheries and aquariums, and an endless list of product recovery/reuse as well as OEM applications.

# VANTON CHEM-GARD<sup>®</sup>

## Horizontal Centrifugal Thermoplastic Pumps Conforming to ANSI B73.1 Process Pump Standards.

Designed for superior performance and long life



PUMP SIZE	ANSI DES.	SUCTION SIZE	DIS-CHARGE SIZE	DIMENSIONS (IN INCHES)							
				CP	D	X	Y	HA*	HB*	HG*	HT
1½ x 1 x 6	AA	1½	1	17½	5¼	6½	4	12	39	3¼	3½
3 x 2 x 6	A-10	3	2	23½	8¼	8¼	4	15	52	3¾	3¾
3 x 2 x 8	A-60	3	2	23½	8¼	9½	4	15	52	3¾	3¾
4 x 3 x 8	A-70	4	3	23½	8¼	11	4	18	58	3¾	3¾
4 x 3 x 9	A-70	4	3	23½	8¼	11	4	18	58	3¾	3¾
4 x 3 x 10	A-70	4	3	23½	8¼	11	4	18	58	3¾	3¾
4 x 3 x 13	A-40	4	3	23½	10	12½	4	18	58	3¾	4¾
6 x 4 x 13	A-80	6	4	23½	10	13½	4	18	58	3¾	4¾

\* Baseplate dimensions will vary slightly with motor frame size. All dimensions are inches and are approximate and not to be used for construction purposes. Pump dimensions conform to ANSI B73.1.

Design specifics subject to modification as dictated by ongoing product improvement programs.

### SPECIFICATIONS

1. Plastic sleeve isolates the stainless steel shaft from the fluid being pumped.
2. O-ring seals between the plastic sleeve and the impeller, and between the impeller and the locknut, assure no metal contact with solution.
3. The retractable front bearing can be pulled back on parallel bars for easy seal inspection, reduced maintenance and assuring perfect alignment.
4. Heavy duty, self aligning bearings widely spaced on the shaft, for maximum stability and long seal life.
5. The relatively short, large diameter stainless steel shaft with generous radii significantly reduces stress concentrations and avoids the potential for shaft failure.
6. Camlock bearings are utilized to allow easy adjustment of the impeller.
7. Heavy sectioned static casing O-ring prevents leaks and blow outs.
8. Key driven, dynamically balanced molded impeller design with stainless steel imbedded insert ensures positive drive, provides additional rigidity to impeller at higher temperatures and pressures, and prevents damage in case of reverse rotation. Semi-open or closed impellers are available.
9. Heavy wall, homogeneous molded thermoplastic casing and casing covers.
10. Quick servicing back pullout construction per ANSI B73.1 and leveling bolt to facilitate removal and reassembly.
11. Heavy duty epoxy coated metal armor serves to carry nozzle loading.

**As standard Vanton procedure, every pump is fully tested to applicable Hydraulic Institute specifications in our plant prior to shipment. Test reports for each pump are kept on file at the company.**



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