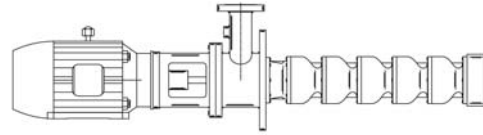




PRODUCT BULLETIN MODEL HT MULTISTAGE TURBINE

The American-Marsh model HT horizontal multistage turbine pumps are designed for long, dependable life in many applications. The Model HT multistage turbine pumps operate at 3500 RPM quietly and efficiency. Due to the unique design, the single mechanical seal is only under suction pressure, extending seal life and reducing cost. The HT product line, with its many options, allows the end user pincreased flexibility in todays pump applications.



Material Specifications

PART	CONSTRUCTION			
	BRONZE FITTED	ALL IRON	NI-RESIST FITTED	316SS FITTED
Bowl Assembly	Cast Iron	Cast Iron	Cast Iron	Cast Iron
Suction Head	Fabricated Steel	Fabricated Steel	Fabricated Steel	Fabricated Steel
Bearing Stage	Cast Iron	Cast Iron	Cast Iron	Cast Iron
Thrust Bearing Hsg.	Cast Iron	Cast Iron	Cast Iron	Cast Iron
Impellers	Bronze	Cast Iron	Ni-Resist	316 Stainless Steel
Shaft	416 Stainless Steel	416 Stainless Steel	316 Stainless Steel	316 Stainless Steel
Bearing Housings	Cast Iron	Cast Iron	Cast Iron	Cast Iron
Mechanical Seal	Carbon/Si-C/Buna	Carbon/Si-C/Buna	Carbon/Si-C/Buna	Carbon/Si-C/Buna

MODEL HT SPECIFICATIONS

Bowl Assembly: The pump bowls shall be of close grained, cast iron ASTM A48 Class 30. The water passages shall be lined with porcelain enamel, shall be free of blow holes, sand holes and other detrimental defects, and shall be accurately machined and fitted. The impellers are of the single suction, enclosed, francis, non-overloading type and are dynamically balanced. Impellers shall be securly fastened to the shaft with taper split bushings of steel. Upon request, impellers can be keyed to the shaft. Impellers shall be adjusted vertically by an external means.

The pump shaft shall be of A582 grade 416 stainless steel, turned, ground and polished. It shall be supported by bronze bearings on both sides of each impeller. The size of the shaft shall be no less than that determined by ANSI/AWWA Specifications E101, Section A4.3 paragraph 4.3.3.

Suction Head: The suction head shall be of Schedule 40 fabricated steel, free from defects, accurately machined and with a surface discharge. The suction flange shall be machined and drilled to ANSI standards for 125 pounds rating. The driver side of the suction head shall have a rabbit fit to accurately locate the c-face driver

The standard cast iron seal chamber shall be rated for 125 PSI discharge pressure and shall be fitted with an American-Marsh 810 series low pressure mechanical seal. The seal chamber housing is bolted to the head with an o-ring seal. Seal materials shall be compatible with the liquid pumped. Optional mechanical seals are available upon request.

Thrust Bearing Housing: The thrust bearing shall be chosen to handle the continuous axial thrust as specified by the pump manufacturer with an AFBMA B-10 one-year minimum or five year average life under design conditions. Provisions shall be made for momentary upthrust equal to 30 percent of rated down thrust. The thrust bearing shall have provisions for adjusting the lateral clearances of the pump and should be sealed with a lip seal to keep out contaminants.

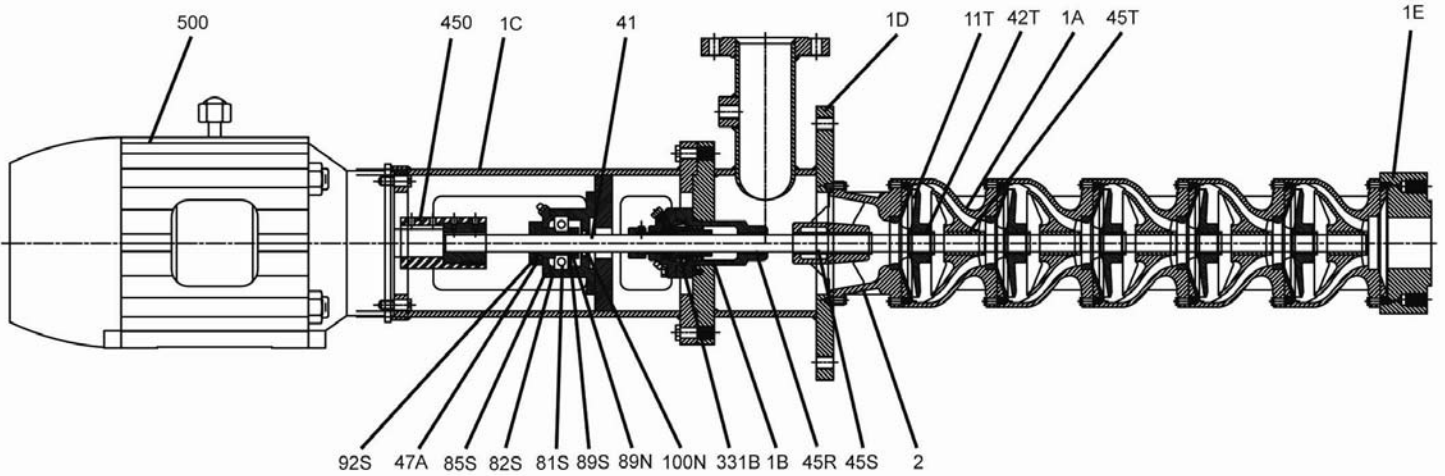
Motor: The electric motor shall be c-face, 3500 RPM., three phase (50 or 60 Hz) squirrel cage induction design. Enclosure shall be TEFC or other specified type. Motor shall have Class B or Class F insulation with temperature rise as specified by NEMA standards for class insulation used and shall have a 1.15 service factor.

INDUSTRIAL
Process, Petrochemical,
Chemical Injection

COMMERCIAL
HVAC, Booster, Boiler Feed,
High Rise, Condenser Water

MUNICIPAL
Booster Systems, Chemical Injection

PRODUCT BULLETIN
MODEL HT MULTISTAGE



HT Sectional Drawing

Item Number	Item Description	Num. Req.
1A	Bowl Assembly	Varies
1B	Seal Chamber	1
1C	Motor Bracket	1
1D	Suction Head	1
1E	Discharge Flange	1
2	Bearing Stage	1
11T	Impeller	Varies
41	Shaft	1
42T	Impeller Collet	Varies
45R	Bearing, Seal Chamber	1
45S	Bearing, Bearing Stage	1
45T	Bearing, Bowl	Varies

Item Number	Item Description	Num. Req.
47A	Set Screw, Bearing Adapter	2
81S	Bearing, Thrust	1
82S	Housing, Bearing	1
85S	Cap, Thrust Bearing	1
89S	Locknut	1
89N	Lockwasher	1
92S	Adapter, Thrust Bearing	1
100N	Lip Seal, Bearing Housing	1
331B	Mechanical Seal	1
450	Coupling, Motor	1
500	Motor	1

Recommended spare parts are in **BOLD**.