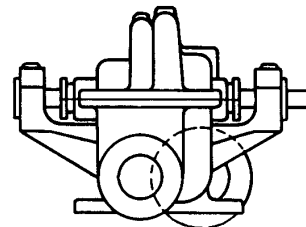




PRODUCT BULLETIN MODEL HH MULTISTAGE HSC

Applications

The American-Marsh model HH multistage splitcase pumps are designed for long, dependable life in many applications. The model HH multistage splitcase pumps operate at 3500 RPM quietly and efficiency. The HH product line, with its many options, allows the end user increased flexibility in todays pump applications.



Material Specifications

PART	CONSTRUCTION			
	BRONZE FITTED	ALL IRON	NI-RESIST FITTED	316SS FITTED
Casing	Cast Iron	Cast Iron	Cast Iron	Cast Iron
Impellers	Bronze	Cast Iron	Ni-Resist	316 Stainless Steel
Shaft	420 Stainless Steel	420 Stainless Steel	420 Stainless Steel	420 Stainless Steel
Lantern Rings	Bronze	Cast Iron	Ni-Resist	316 Stainless Steel
Stuffing Box Glands	Bronze	Cast Iron	Ni-Resist	316 Stainless Steel
Shaft Sleeves	Bronze	Stainless	Stainless	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 HH SPECIFICATIONS

Casing: The casing is of high tensile cast iron or other specified material. It is of the volute type, split on the horizontal center line with the suction and discharge flanges as well as the bearing brackets cast integral with the lower half. Removal of the upper half of the casing gives complete access to the interior of the pump without disturbing the piping connections or pump alignment.

Impellers: The impellers are of the single suction, enclosed, non-overloading type. They are placed back to back to balance the end thrust without the use of extra seal rings or other balancing devices. Impellers are made of high tensile cast iron, or other special material, machined and polished all over, and dynamically and hydraulically balanced. They are keyed to the shaft, secured by lock nuts and adjustable for position.

Case Wear Rings: Case wear rings are made of high tensile cast iron or other specified material. They are of the labyrinth type with the diameter at wearing surface reduced to a minimum, and are firmly secured in the casing by dowel pins.

Shaft: The shaft is of 420 stainless steel, ground to accurate dimensions and polished to a smooth surface. It is designed for extra stiffness to avoid all critical speeds in operation, and is threaded for bearing and lock nuts.

Shaft Sleeves: are of bronze, or other specified material, extending from the impeller hub through the stuffing boxes and secured to the shaft by twin positive locknuts. Stuffing boxes prevent leakage along the shaft while allowing freedom for the sleeve to expand independently of the shaft expansion.

Stuffing Boxes: The stuffing boxes are extra deep, designed for six rings of packing in addition to the lantern ring. Under each stuffing box is a drip pocket with tapped drain outlet. A wide variety of mechanical seals are available upon request.

Glands: The glands are of the hinge bolt type, split for easy removal and fastened together with capscrews.

Bearings: Both the inboard and outboard ball bearings are of the single row, deep groove type, precision grade, with cartridge mounting, permitting the removal of the shaft without exposing or disturbing the bearing assembly. They are of extra large capacity for both radial and thrust loads, and are locked to the shaft with nut and positive nut lock. The outboard bearing is confined rigidly in the bearing housing to take the end thrust, while the inboard bearing is set with sufficient clearance to allow for shaft expansion. Each bearing is designed for grease lubrication and is provided with a water slinger to prevent leakage from the stuffing box into the bearing. A grease zerk fitting is furnished for each bearing.

INDUSTRIAL

Process, Petrochemical,
Chemical Injection

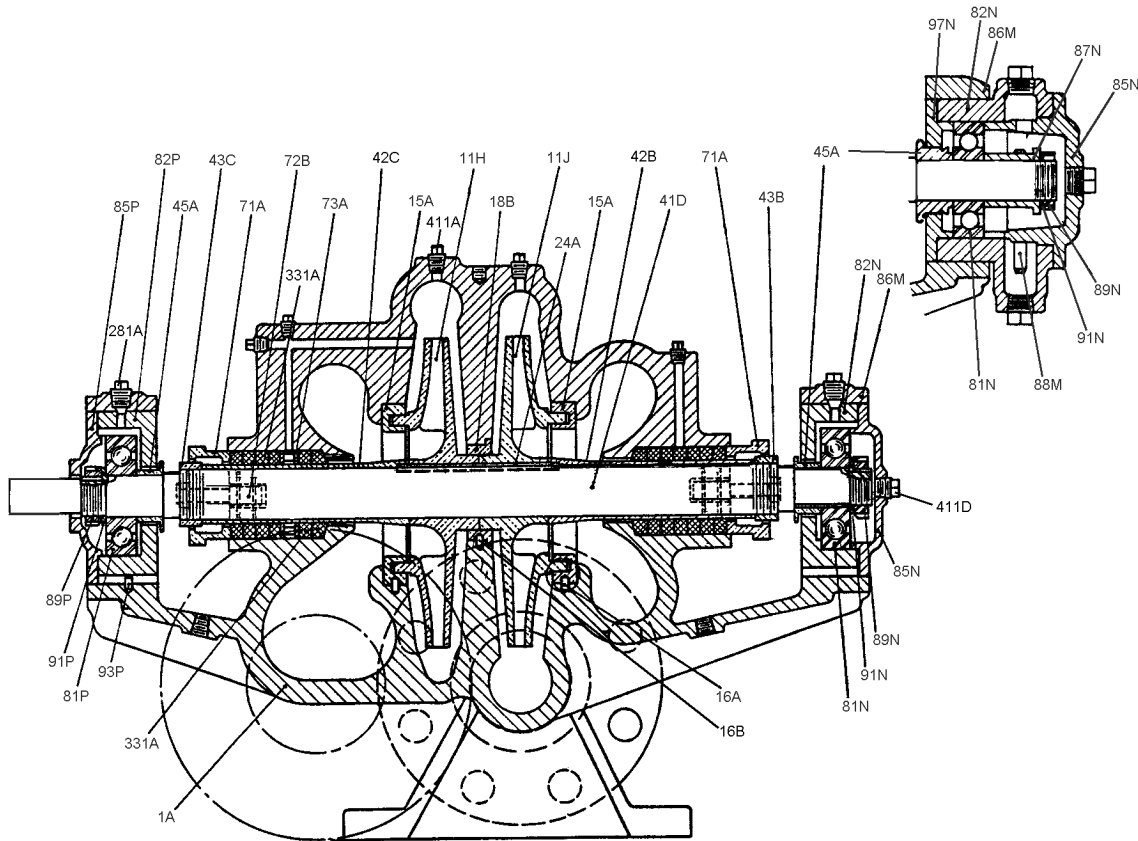
COMMERCIAL

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

MUNICIPAL

Booster Systems, Chemical Injection

PRODUCT BULLETIN
MODEL HH MULTISTAGE



HH Sectional Drawing

Item Number	Item Description	Num. Req.
1A	Casing	1
11H	Impeller, 1 st Stage	1
11J	Impeller, 2 nd Stage	1
15A	Ring, Casing Wearing	2
16A	Pin, Dowel, Casing Ring	2
16B	Pin, Dowel, Casing Bushing	1
18B	Bushing, Casing	1
24A	Key, Impeller	1
41D	Shaft	1
42B	Sleeve, Shaft, RH	1
42C	Sleeve, Shaft, LH	1
43B	Shaft Sleeve Nut, RH	1
43C	Shaft Sleeve Nut, LH	1
45A	Bushing, Shaft	2
71A	Gland, Complete	2
72B	Bolt, Gland, with Nut and Washer	4
73A	Ring, Lantern	1
81N	Bearing, Ball, Outboard	1
81P	Bearing, Ball, Inboard	1
82N	Housing, Bearing, Outboard	1
82P	Housing, Bearing, Inboard	1

Item Number	Item Description	Num. Req.
85N	Cap, Housing, Outboard	1
85P	Cap, Housing, Inboard	1
87N	Spacer, Bearing	1
87P*	Spacer, Bearing	1
88M	Ring, Oil	2
86M	Strap, Housing	2
89N	Locknut, Bearing, Outboard	1
89P	Locknut, Bearing, Inboard	1
91N	Lockwasher, Bearing, Outboard	1
91P	Lockwasher, Bearing, Inboard	1
93N	Pin, Housing Thrust, Outboard	1
93P	Pin, Housing Thrust, Inboard	1
97N	Bearing Cap, Outbd/Inbd	1
97P	Bearing Cap, Inbd/Inbd	1
281A	Fitting, Zerk	2
331A	Packing, Stuffing Box	1 set
384C*	Screw, Bearing Cap	8
411A	Plug, Pipe, Vent	2
411D	Plug, Pipe, Bearing Cap	1
353A*	Gasket, Casing	1
381B*	Bolt, Casing	Varies

* Not shown in sectional.

Recommended spare parts are in **BOLD**.