



## COMPLETE PRODUCT LINE

#### Manufacturer of Pumps, Tanks, Heat Exchangers & Accessories



www.flofab.com

#### HISTORY

Flo Fab was established in 1981 by Denis Gauvreau who created and developed the products line and constantly being perfected by Marc Gauvreau, as well as by a team of professional engineers and designers. It's a combination of existing designs from several renowned products and the innovative ideas of a new generation professionals.

Founder 1981



Through the years, Flo Fab has acquired several companies and service entities including : AQUA-PROFAB (ASME Tanks manufacturer), MÉNARD, LÉONARD ÉLECTRIQUE, PMA., Furthermore Flo Fab purchased equipment, fabrication designs and patterns from IDEALCO, a manufacturer of shell and tube type heat exchangers.

The after sales services, sales, engineering, R&D, production, quality control, accounting and administration departments of all the above companies share the same location.

In December 2014, Marc Gauvreau, son of the founder, acquired all shares of The company. Flo Fab and is constantly investing in new state of the art innovations new product like the XRI series and Prefab Skid for Hydronic Hearing 8 cooling system, pumping systems. This has allowed Flo Fab to retain competent and experienced staff of professionals with varied and specialized abilities that constantly work on improving our existing products and add new engineered solutions that exceeding customer's expectations .

Flo Fab has grown quite rapidly and now proudly offers of a wide range of products available directly from one manufacturer. This includes pumps & pump packages, tanks, heat exchangers & hydronic accessories. This allows each project stakeholders to enjoy economical savings, peace of mind, best value for their investment and optimized total cost of ownership.



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#### VERTICAL IN-LINE PUMPS

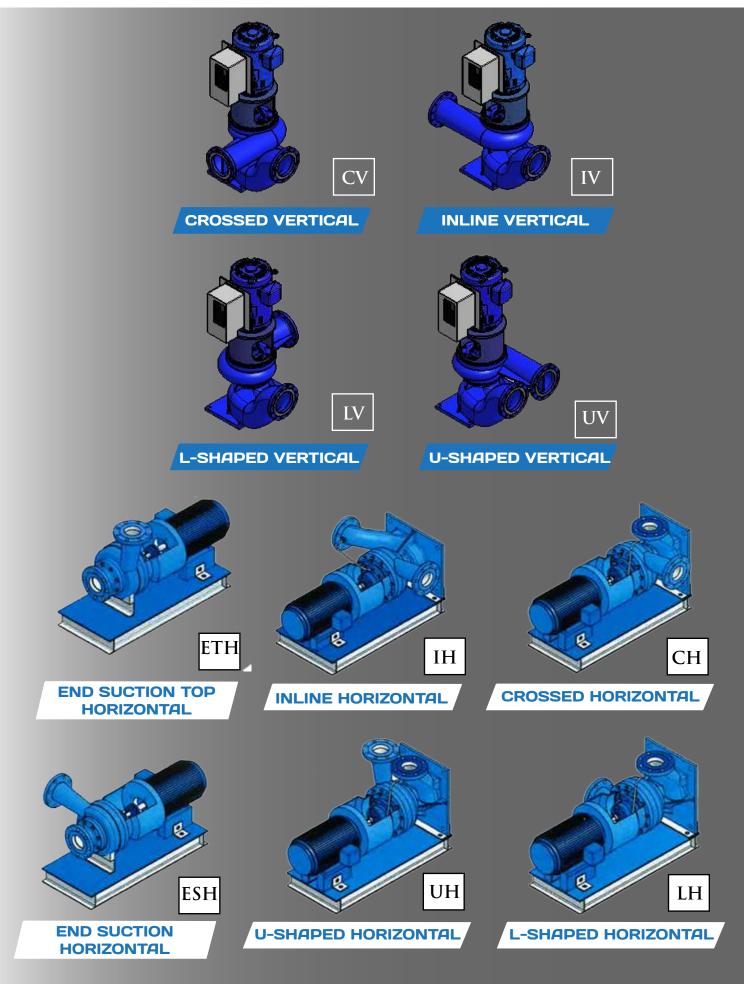
SERIES	500	600	840SC	880RI
TYPE	Circulating Pump	In-Line Circulator	Vertical In-Line Centrifugal Split Coupling	Vertical In-Line Centrifugal Split Coupling
CAPACITIES	up to 234 USGPM (54 m³/hr)	up to 290 USGPM (61 m³/hr)	454 to 8000 USGPM (1816 m³/hr)	Up to 3000 USGPM (680 m³/hr)
HEAD	up to 43 ft. (14 m)	up to 120 ft. (37 m)	up to 410 ft. (125 m)	up to 650 ft. (198 m)
PRESSURE	up to 145 PSI (999 kPa)	up to 250 PSI (1724 kPa)	up to 600 PSI (4136 kPa)	up to 250 PSI (1724 kPa)
HORSEPOWER	up to 2/5 HP (280 kW)	up to 10 HP (7.5 kW)	up to 400 HP (298 kW)	up to 200 HP (149kW)
DRIVES	ECM Motor ERP Ready	56C Electric Motors	TC Electric Motors	TC Electric Motors
APPLICATIONS	Water / Glycol	Water / Glycol	Water / Glycol	Water / Glycol
TEMPERATURE	up to 220°F (104°C)	up to 250°F (121°C)	up to 300°F (149°C)	up to 300°F (149 °C)
CONSTRUCTION MATERIAL	Cast Iron, Stainless, Bronze	Cast Iron, Bronze Fitted or All Bronze	Cast Iron, Bronze Fitted as Standard, Other Materials Also Available	Cast Iron, Bronze Fitted as Standard, Other Materials Also Available

SERIES	XRI
TYPE	Universal 10 positions Vertical / Horizontal Centrifugal Pump with removable Impeller
CAPACITIES	up to 15850 USGPM 3600 m <sup>3</sup> /hr
HEAD	up to 655ft (200m)
PRESSURE	up to 600 PSI (4136 kPa)
HORSEPOWER	up to 1000 HP (746 kW)
DRIVES	TC Electric Motors
APPLICATIONS	Water / Glycol
TEMPERATURE	up to 300°F (149°C)
MATERIAL OF CONSTRUCTION	Cast Iron, Bronze Fitted as Standard, Other Ma- terials Also Available

#### - FEATURE PRODUCT-



#### SERIES XRI VARIOUS CONFIGURATIONS



#### VERTICAL IN-LINE, HORIZONTAL BASE MOUNTED, CLOSED COUPLED, AND SPLIT CASE DOUBLE SUCTION TYPE PUMPS

SERIES	880	1000/1004	2000	2300 / 2600
ТҮРЕ	Compact In-Line Centrifugal	End Suction, Close Coupled	Radially Split Bearing Frame Pump Mounted With Flexible Coupling Back Pull Out Design	Radially Split Bearing Frame Pump Mounted With Flexible Coupling Back Pull Out Design
CAPACITIES	up to 3000 USGPM (680 m³/hr)	up to 1900 USGPM (431 m³/hr)	up to 1900 USGPM (431 m³/hr)	from 1900 to 6500 USGPM (432 to 1476 m³/hr)
HEAD	up to 650 ft. (198 m)	up to 43 ft. (14 m)	up to 120 ft. (37 m)	up to 410 ft. (125 m)
PRESSURE	up to 250 PSI (1724 kPa)	up to 175 PSI (1206 kPa)	up to 175 PSI (1206 kPa) with 125# flanges	up to 400 PSI (1206 kPa) with 400# flanges
HORSEPOWER	up to 200 HP (149 kW)	up to 200 HP (149 kW)	up to 200 HP (149 kW)	up to 500 HP (373 kW)
DRIVES	JM Electric Motors	JM Electric Motors	T Frame Electric Motors or Diesel Engines	T Frame Electric Motors or Diesel Engines
APPLICATIONS	Water / Glycol	Water / Glycol	Water / Glycol	Water / Glycol
TEMPERATURE	up to 300°F (149 °C)	up to 300°F (149 °C)	up to 300°F (149 °C)	up to 300°F (149 °C)
CONSTRUCTION MATERIAL	Cast Iron, Bronze Fitted as Stan- dard, Other Materials Also Available	Cast Iron, Bronze Fitted as Stan- dard, Other Materials Also Available	Cast Iron, Bronze Fitted as Stan- dard, Other Materials Also Available	Cast Iron, Bronze Fitted as Stan- dard, Other Materials Also Available
SERIES	4800L	4800U	4800/4800H/4900	4800V
ТҮРЕ	Single Stage, Double Suction Split Case	Single Stage, Double Suction Split Case	Horizontally Mounted, Single Stage, Double Suction Split Case	Vertically Mounted, Single Stage, Double Suction Split Case
CAPACITIES	up to 12000 USGPM (2725 m <sup>3</sup> /hr)	up to 12000 USGPM (2725 m³/hr)	up to 12700 USGPM (2884 m <sup>3</sup> /hr)	up to 12700 USGPM (2884 m <sup>3</sup> /hr)
HEAD	up to 750 ft. (227 m)	up to 750 ft. (227 m)	up to 625 ft. (190 m)	up to 625 ft. (190 m)
		· · · · · ·	· · · · ·	
PRESSURE	up to 600 PSI (4136 kPa)	up to 600 PSI (4136 kPa)	up to 600 PSI (4136 kPa)	up to 600 PSI (4136 kPa)
PRESSURE HORSEPOWER	(4136 kPa) up to 800 HP (597 kW)	up to 600 PSI (4136 kPa) up to 800 HP (597 kW)	up to 600 PSI (4136 kPa) up to 1750 HP (1305 kW)	up to 600 PSI
	(4136 kPa) up to 800 HP	up to 600 PSI (4136 kPa) up to 800 HP	up to 600 PSI (4136 kPa) up to 1750 HP	up to 600 PSI (4136 kPa) up to 1750 HP
HORSEPOWER	(4136 kPa) up to 800 HP (597 kW) Electric Motors, Diesel Engines, Steam	up to 600 PSI (4136 kPa) up to 800 HP (597 kW) Electric Motors, Diesel Engines, Steam	up to 600 PSI (4136 kPa) up to 1750 HP (1305 kW) Electric Motors, Diesel Engines, Steam	up to 600 PSI (4136 kPa) up to 1750 HP (1305 kW) Electric Motors, Diesel
HORSEPOWER	(4136 kPa) up to 800 HP (597 kW) Electric Motors, Diesel Engines, Steam Turbines	up to 600 PSI (4136 kPa) up to 800 HP (597 kW) Electric Motors, Diesel Engines, Steam Turbines	up to 600 PSI (4136 kPa) up to 1750 HP (1305 kW) Electric Motors, Diesel Engines, Steam Turbines	up to 600 PSI (4136 kPa) up to 1750 HP (1305 kW) Electric Motors, Diesel Engines, R.A.G.D

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#### MULTISTAGE AND CLOSED COUPLED STAINLESS STEEL TYPE PUMPS SHELL AND TUBE, PLATE AND FRAME, BRAZED TYPE HEAT EXCHANGERS

-	SERIES	PSN	1CF	PSM	PSF	PST
-	TYPE	Vertical M	-	Vertical Multistage	Flanged Close Coupled Centrifugal	NPT Close Coupled Centrifugal
	CAPACITIES	up to 250 (56 m	ո³/hr)	up to 792 USGPM (180 m³/hr)	13 to 380 USGPM (3 to 86 m³/hr)	up to 52 USGPM (12m <sup>3</sup> /hr)
	HEAD	up to 9 (283	3 m)	up to 930 ft. (283 m)	up to 150 ft. (46 m)	up to 150 ft. (46 m)
	PRESSURE	up to 4 (2964		up to 430 PSI (2964 kPa)	up to 145 PSI (1000 kPa)	up to 115 PSI (793 kPa)
	HORSEPOWER	up to (37	50 HP kW)	up to 100 HP (75 kW)	up to 15 HP (11 kW)	up to 3 HP (2.2 kW)
	DRIVES	Vertical I Mo		Vertical Electrical Motor	Electric Close Coupled Motors	Vertical Electrical Motor
	APPLICATIONS	Wate Clear I		Water and Clear Liquids	Water and Clear Liquids	Water and Clear Liquids
	TEMPERATURE 5°F(-15°C) to 248°F (120°)		5°F(-15°C) to 248°F (120°)	up to 225°F (107°C)	up to 225°F (107°C)	
	CONSTRUCTION MATERIAL	#304 Staiı Optional		Cast Iron as Standard, or Stainless Steel #304 & #316	#304 Stainless Steel	#304 Stainless Steel
			nd Tube changers	Plate and Frame Heat Exchangers	Brazed Heat Exchangers	
[	SERIES	``W″	``S″	``FFW" AHRI	``BR''	IQP1000 / ACH550
	ТҮРЕ	Water to Water / Glycol to Water	Steam to Water	Steam to Water Water to Water Glycol to Water	Steam to Water Water to Water Glycol to Water	VFD Flo Fab's Prefered* 200-240V / 3-Phase 380-480V / 3-Phase 500-600V / 3-Phase
	CAPACITIES	681 up to 2 (1724 kp	00 USGPM m³/hr 250 PSI ba) Steam	up to 10000 USGPM 2271 m <sup>3</sup> /hr up to 250 PSI (1724 kpa) Steam	up to 400 USGPM 91 m <sup>3</sup> /hr up to 150 lbs Steam	150% for 60 sec. (HD), 120% for 60 sec. (ND)
	PRESSURE		1034 kPa) 1724 kPa)	300 PSI (2068 kPa)	300 PSI (up to 2068 kPa)	
	APPLICATIONS		Glycol or eam	Water, Glycol or Steam	Water, Glycol or Steam	
	TEMPERATURE	up to 300	°F (144°C)	up to 300°F (144°C)	up to 300°F (144°C)	
5	CONSTRUCTION MATERIAL	Stainless	Steel or Steel with Steel Tubes	Carbon Steel, Titanium and Stainless Steel. Other Materials available	Titanium and Stainless Steel. Other Materials available	

#### **ASME TANKS & AIR SEPARATORS**

SERIES	SEP	ADSR/AD	RDT/BT	RLU / RWU	RSE
TYPE	Vortex - Tangential Air Separator (With or Without Strainer)	In-Line Air/Dirt Sepa- rator (With Strainer)	Non Replaceable Bladder Expansion Tank Replaceable Bladder Exp. Tank (with bottom system connection)	Hot Water Storage Tank with Heater	Hot Water Storage Tank
CAPACITIES	56 to 67000 USGPM (13 to 15217 m³/hr)	69 to 12100 USGPM (16 to 2748 m³/hr)	3 to 3962 Gallons (11 to 15000 liters)		000 Gallons 781 liters)
CONNECTIONS	2" to 36" Diameter (50 mm to 914 mm)	2" to 36" Diameter (50 mm to 914 mm)	1″ to 3″ 25 mm to 75 mm	As Rec	uested
PRESSURE	up to 250PSI (1724 kPa)		up to 250PSI up to 25 (1724 kPa) (1724 k		
TEMPERATURE	up to 450°F (232°C)	up to 450°F (232°C)	up to 240°F (115°C)	up to 450°	°F (232°C)
CONSTRUCTION MATERIAL	Carbon Steel or Stainless Steel	Carbon Steel or Stainless Steel	Carbon Steel EPDM		Steel or ss Steel

#### **Quotation Requirements** What we need ? For Skid

- 1.1 System PID
- 1.2 Pumps, Tanks and Heat Exchangers Schedule
- 1.3 Cut sheets for non Flo Fab parts like ex. Boilers, Chillers, etc...
- 1.4 Skids footprint
- 1.5 Mechanical room footprint
- 1.6 Details sequence of control

### **Quality Control**

All pumps are factory tested and certified performance test is available when requested by the consultant. Test facilities up to 400 HP with 27,000 gallon test bench with calibrated instruments.

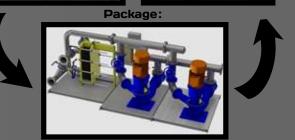
#### Skid Advantages

- Solution for both : New construction and Retrofit.
- Easily add more modules for future expansion.
- One single point of Responsibility / Contact .
- One single submittal for approval Vs. Individual submittals for each component.
- Financial : Cost reduction, Effectively reduce total cost of ownership for all project stakeholders (Contractor / Consultant Engineer / End User)
- Financial : Space saving due to optimized space utilisation.
- Financial : Time (Cost) saving : Skid built in parallel during building construction, also .
- Financial : Cash flow management: One single invoice / payment for all works
- Financial : Overhead

saving including project management, logistical coordination, insurance expense, ...etc.



# PID: Production:



2.1 Heating and Cooling Systems

SPECS exam

2.2 Module HC will be composed of two pumps, control panel VFD, expansion tank, air separator, chemical pot Feeder, and glycol fill system (optional), balancing valves, isolation valves, air vents and drain connections, multifunction valves, suction diffusers or Y strainers, interconnecting black steel schedule 40 piping. All package components are mounted on a structural steel base with lifting lugs.

ple :	Polici	Product Tapy	Sadures:	Date Datestind	Status	
	399	Separatel: Couplet: Hurcontally Miunted, tr-June Centrelugal Pumps	232425+WDRONC PLANE	152016	tunne	view Details
	1000	Teparately Couplet Verticals Mountait, In-Line Centrifugar Plenas	ESPECIAL POINT POINT	192019	samba	View Cretaria
	2000	Separately Coupled, Base- Houmes, End-Sochuri Centhopal Portan	222125+YIDRONC PLAIPS	152516	Dankel	view Details

- Financial : No surplus or extra components left after fabrication by contractor.
- Time (Cost) saving : No construction delay due to tested = site plug & play
- Safety: Avoid unpleasant site safety incidents and lost days as we tremendously minimize job site man-hours.

#### SUBMERSIBLES // SUMP-UTILITY



## FFBP33 & FFBP50

Discharge: 1½" NPT, female, vertical. Spherical solids handling: 1/2" HP: 0.3 & 0.5 RPM: 3500 Impeller: 10 vane vortex, with vanes on back side, dynamically balanced. Cast iron ASTM A-48, class 30. Shaft: 416 series stainless steel. Motor: NEMA L, single phase, permanent split capacitor, 120 volts, 60 Hz, oil filled, with overload protection in motor. Pump operation: automatic float switch or automatic vertical float switch.



## FF2AHS

Discharge: 2" NPT, vertical. Spherical solids handling: 1/2" HP: 1 RPM: 3500 Impeller: 8 vane, open, semi-vortex. Hytrel® thermoplastic elastomer. Shaft: 410 series stainless steel. Motor: dry type submersible motor, 1 & 3 phase, 115 & 230 volts, 60 Hz, 3500 RPM. For continuous duty, with thermal protector IP68 in winding, insulation class B.

#### SUBMERSIBLES // EFFLUENT



## FFBPEV512

Discharge: 2" NPT, female, vertical. Spherical solids handling: 3/4" HP: 0.5 RPM: 3500 Impeller: vortex, dynamically balanced. Cast iron ASTM A-48, class 30. ISO G6.3 Shaft: 416 series stainless steel. Motor: NEMA L, single phase, permanent split capacitor, 115 volts, 60 Hz, oil filled, with overload protection in motor.



## **FFBPSTEP**

Discharge: 2" NPT, vertical. Spherical solids handling: 3/4" HP: 0.5 & 1 RPM: 3500 Impeller: single vane enclosed. Polypropylene with stainless steel insert. Shaft: stainless steel. Motor: NEMA L, single phase, permanent split capacitor, 115/230 volts, 60 Hz, oil filled, class B insulation, with overload protection in motor.



## **FF2BEH-SS**

Discharge: 2" NPT, vertical. Spherical solids handling: 3/4" HP: 0.5 & 1 RPM: 3500 Impeller: 2 vane, open, with vanes on back side, dynamically balanced ISO G6.3. Bronze 85-5-5-5. Shaft: stainless steel. Motor: Single phase: NEMA L, permanent split capacitor, 115/230 volts, oil filled, with overload protection in motor. Three phase: NEMA B, 208/230 & 460 volts, oil filled. Requires overload protection to be included in control panel.

#### SUBMERSIBLES // NON-CLOG



## FF2BSE411 & FF2BSE511

Discharge: 2" NPT, vertical. Spherical solids handling: 2" HP: 0.4 & 0.5 RPM: 1750 Impeller: open, double vane, dynamically balanced. Cast iron ASTM A-48, class 30, ISO G6.3. Shaft: 416 series stainless steel. Motor: NEMA L, single phase, permanent split capacitor, 115 volts, 60 Hz, oil filled, with overload protection in motor.



## **FF2SEV512**

Discharge: 2" NPT, female, vertical. Spherical solids handling: 2" HP: 0.5 RPM: 3500 Impeller: vortex. Cast iron ASTM A-48, class 30, ISO G6.3. Shaft: 416 series stainless steel. Motor: NEMA L, single phase, permanent split capacitor, 115 volts, 60 Hz, oil filled, with overload protection in motor.



## FF2BSE-SS / FF3BSE-SS

Discharge: 2" or 3" NPT female, vertical, bolt on flange. Includes both flanges. (The name of the pump changes to FF3BSE when used with the 3" discharge flange.) Spherical solids handling: 2" HP: 0.5 & 0.75 RPM: 1750 Impeller: 2 vane, open, with vanes on back side. Cast iron ASTM A-48, class 30. Shaft: 416 series stainless steel. Motor: NEMA L, single phase, permanent split capacitor, 120 volts, 60 Hz, oil filled, with overload protection in motor.



## FF3BSE-SS / 1 HP

Discharge: 3" NPT, female, vertical, bolt on flange. Spherical solids handling: 2" HP: 1 RPM: 1750 Impeller: 2 vane, open, with vanes on back side. Cast iron ASTM A-48, class 30. Shaft: 416 series stainless steel. Motor: Single phase: NEMA L, permanent split capacitor, 230 volts, 60 Hz, oil filled, with overload protection in motor. Three phase: NEMA B, 230/460 volts, 60 Hz, oil filled. Requires overload protection to be included in control panel.



## FF3BSE-SS / 1.5 & 2 HP

Discharge: 3" NPT, female, vertical, bolt on flange. Spherical solids handling: 2½" HP: 1.5 & 2 RPM: 1750 Impeller: 2 vane, open, with vanes on back side. Cast iron ASTM A-48, class 30. Shaft: 416 series stainless steel. Motor: Single phase: NEMA L, permanent split capacitor, 230 volts, 60 Hz, oil filled, with overload protection in motor. Three phase: NEMA B, 230/460 volts, 60 Hz, oil filled. Requires overload protection to be included in control panel.

#### SUBMERSIBLES // NON-CLOG



## FF3BSE-SS / 3 HP

Discharge: 3" NPT, female, vertical, bolt on flange. Spherical solids handling: 2½" HP: 3 RPM: 1750 Impeller: 2 vane, open, with vanes on back side. Cast iron ASTM A-48, class 30. Shaft: 416 series stainless steel. Motor: Single phase: permanent split capacitor, 230 volts, 60 Hz, oil filled, with overload protection in motor. Three phase: 230/460 volts, 60 Hz, oil filled. Requires overload protection to be included in control panel.



## **FF3BWSE-DS**

Discharge: 3", 125 lb, flange horizontal. Spherical solids handling: 2½" HP: 2-5 RPM: 1750 Impeller: 2 vane, semi-open, with vanes on back side. Cast iron ASTM A-48, class 30. Shaft: 416 series stainless steel. Motor: NEMA B, three phase, 230 & 460 volts, 60 Hz, oil filled, with class F insulation. Requires overload protection to be included in control panel.



## **FF4BSE-SS**

Discharge: 4" NPT vertical. Spherical solids handling: 3" HP: 3 & 5 RPM: 1750 Impeller: 2 vane, open, with vanes on back side. Cast iron ASTM A-48, class 30. Shaft: 416 series stainless steel. Motor: NEMA B, three phase, 230/460 volts, 60 Hz, oil filled, with class F insulation. Requires overload protection to be included in control panel.



## **FF4BWSE-DS**

Discharge: 4", 125 lb, flange horizontal. Spherical solids handling: 3" HP: 2-7.5 RPM: 1750 Impeller: 2 vane, open, with vanes on back side. Cast iron ASTM A-48, class 30. Shaft: 316 series stainless steel. Motor: NEMA B, three phase, 230 & 460 volts, 60 Hz, oil filled, with class F insulation. Requires overload protection to be included in control panel.



## **FF4BSE-DS**

Discharge: 4", 125 lb, flange horizontal. Spherical solids handling: 3" HP: 4.5-15 RPM: 1750 Impeller: 2 vane, open, with vanes on back side. Cast iron ASTM A-48, class 30. Shaft: 416 series stainless steel. Motor: Single phase: NEMA L, permanent split capacitor, 230 volts, 60 Hz, oil filled. Three phase: NEMA B 230/460 volts, 60 Hz, oil filled.



## **FF4BSE-HLDS**

Discharge: 4", 125 lb, flange horizontal. Spherical solids handling: 3" HP: 7.5-15 RPM: 1750 Impeller: 2 vane, closed, with vanes on back side. Cast iron ASTM A-48, class 30. Shaft: 416 series stainless steel. Motor: NEMA B, three phase, 230/460 volts, 60 Hz, oil filled. Requires overload protection to be included in control panel.

#### SUBMERSIBLES // NON-CLOG



## **FF6BSE-LDS / 9-30 HP**

Discharge: 6", 125 lb, flange horizontal. Spherical solids handling: 4" HP: 9-30 RPM: 1150 Impeller: 1 vane, closed, with vanes on back side. Cast iron ASTM A-48, class 30. Shaft: 416 series stainless steel. Motor: NEMA B, three phase, 230/460 volts, 60 Hz, oil filled. Requires overload protection to be included in control panel.



## **FF6BSE-LDS / 18-60 HP**

Discharge: 6", 125 lb, flange horizontal. Spherical solids handling: 4" HP: 18-60 RPM: 1750 Impeller: 1 vane (2 vane for 48 & 60 HP), closed, with vanes on back side. Cast iron ASTM A-48, class 30. Shaft: 416 series stainless steel. Motor: NEMA B, three phase, 230/460 volts, 60 Hz, oil filled. Requires overload protection to be included in control panel.



## **FF6BSE-HLDS**

Discharge: 6", 125 lb, flange horizontal. Spherical solids handling: 3" HP: 30-60 RPM: 1750 Impeller: 3 vane, closed, with vanes on back side. Cast iron ASTM A-48, class 30. Shaft: 416 series stainless steel. Motor: NEMA B, three phase, 230/460 volts, 60 Hz, oil filled. Requires overload protection to be included in control panel.



## **FF8BSE-HLDS**

Discharge: 8", 125 lb, flange horizontal. Spherical solids handling: 3" HP: 36-48 RPM: 1150 Impeller: 3 vanes, closed, with a bronze wear ring and vanes on back side. Cast iron ASTM A-48, class 30. Shaft: 416 series stainless steel. Motor: NEMA B, three phase, 230/460 volts, 60 Hz, oil filled. Requires overload protection to be included in control panel.



## **FF8BSE-HADS**

Discharge: 8", 125 lb, flange horizontal. Spherical solids handling: 3" HP: 30-75 / 100-200 RPM: 1150 / 3450 Impeller: 3 vane, closed, with with a bronze wear ring and vanes on back side. Cast iron ASTM A-48, class 30. Shaft: 416 series stainless steel. Motor: NEMA B, three phase, 230/460 volts, 60 Hz, air cooled. Explosion proof, class 1, division 1, group C & D. Requires overload protection to be included in control panel.

#### SUBMERSIBLES // NON-CLOG X-PROOF



## **FF4XBSE W/ EXPLOSION PROOF MOTORS**

Discharge: 4", 125 lb, flange horizontal. Spherical solids handling: 3" HP: 5-20 RPM: 1150 & 1750 Impeller: 2 vane, open, with vanes on back side. Cast iron ASTM A-48 class 30. Shaft: 416 series stainless steel. Motor: NEMA B, three phase, 230 & 460 volts, 60 Hz, 1150 & 1750 RPM, air cooled. Explosion Proof, Class 1, Division 1, Group C & D, insulation Class F. Requires overload protection to be included in control panel.



## **FF6XBSE W/ EXPLOSION PROOF MOTORS**

Discharge: 6", 125 lb, flange horizontal. Spherical solids handling: 4" HP: 15-75 RPM: 1150 & 1750 Impeller: 1 vane, closed, with vanes on back side. Cast iron ASTM A-48 class 30. Shaft: 416 series stainless steel. Motor: NEMA B, three phase, 230 & 460 volts, 60 Hz, 1150 & 1750 RPM, air cooled. Explosion Proof, Class 1, Division 1, Group C & D, insulation Class F. Requires overload protection to be included in control panel.



## **FF8XBSE W/ EXPLOSION PROOF MOTORS**

Discharge: 8", 125 lb, flange horizontal. Spherical solids handling: 3" HP: 30-150 RPM: 1150 & 1750 Impeller: 3 vane, closed, with with a bronze wear

ring and vanes on back side. Cast iron ASTM A-48, class 30.

Shaft: 416 series stainless steel.

Motor: NEMA B, three phase, 460 volts, 60 Hz, 1150 & 1750 RPM, air cooled. Explosion Proof, Class 1, Division 1, Group C & D, insulation Class F. Requires overload protection to be included in control panel.

#### SUBMERSIBLES // GRINDER



### FFBGP-DS / 2 HP

Discharge: 1¼" NPT, vertical. HP: 2 RPM: 3500

Impeller: 12 vanes, vortex with vanes on back side, dynamically balanced. Cast iron ASTM A-48, class 30. Radial cutter and shredding ring: hardened 440C, stainless steel, hardness Rockwell C-55.

Shaft: 420 series stainless steel.

Motor:

Single phase: permanent split capacitor, 220 volts, 60 Hz, oil filled, with overload protection in motor. Class F insulation.

Three phase: 220/440 volts, 60 Hz, oil filled with overload protection in motor. Class F insulation.

## FFBGP-DS / 3, 5 & 7.5 HP

Discharge: 2" NPT, vertical. HP: 3, 5 & 7.5 RPM: 3500

Impeller: 10 vanes, vortex with vanes on back side, dynamically balanced. Cast iron ASTM A-48, class 30. Radial cutter and shredding ring: hardened 440C, stainless steel, hardness Rockwell C-55. Shaft: 420 series stainless steel. Motor:

Single phase: NEMA L, permanent split capacitor (to be located in control panel), 230 volts, 60 Hz, oil filled. Class F insulation.

Three phase: NEMA B, 230/460 volts, 60 Hz, oil filled. Class F insulation. Requires overload protection to be included in control panel.



## FFBGPH-DS / 3, 5 & 7.5 HP

Discharge: 2½" flange, horizontal. HP: 3, 5 & 7.5 RPM: 3500 Impeller: 10 vanes, vortex with vanes on back side, dynamically balanced. Cast iron ASTM A-48, class 30. Radial cutter and shredding ring: hardened 440C, stainless steel, hardness Rockwell C-55. Shaft: 420 series stainless steel. Motor: Single phase: NEMA L, permanent split capacitor (to be located in control panel), 230 volts, 60 Hz, oil filled. Class F insulation.

Three phase: NEMA B, 230/460 volts, 60 Hz, oil filled. Class F insulation. Requires overload protection to be included in control panel.

#### SUBMERSIBLES // STAINLESS / RECESSED IMPELLER



## **FFBVRI**

Discharge: 2" & 3" NPT elbow, vertical. Spherical solids handling: 1½" & 2" HP: 0.5 - 7.5 RPM: 3500 Impeller: 8 vane, semi-open Vortex. 316 series stainless steel. Shaft: 416 series stainless steel. Motor: For continuous duty, 1 & 3 phase, 3450 RPM, dry type, insulation class B, protection IP68, 115/230 volts.



## **FFBVRI**

Discharge: 2.5" & 3" NPT elbow, vertical. Spherical solids handling: 2½" & 3" HP: 1.5 - 3 RPM: 3450 Impeller: 6 & 8 vane, semi-open Vortex. Cast iron ASTM A-48, class 30. Shaft: 410 series stainless steel. Motor: 1 & 3 phase, 230 volts, 60 Hz, 3450 RPM. For continuous duty, with protection IP68 in winding, insulation class B.



#### FFMCN-G CHEMICAL PROCESS PUMP TECH DATA

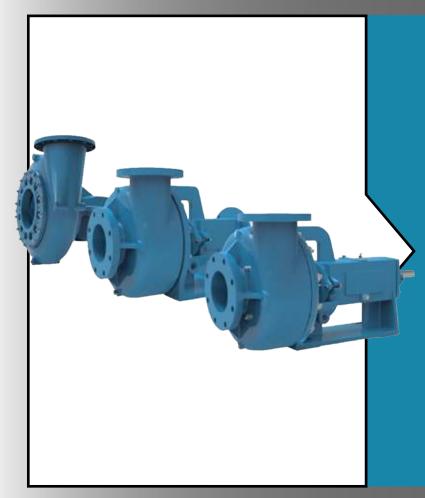
- Size: 1" 10"
- Max head: 6164GPM
- Max cap: 466'
- Media temp: -13°F ~+ 284°F
- Max System Pressure: 363PSI

#### <u>ADVANTAGE</u>

- Complies with ANSI B73.1
- Open impeller
- High efficiency & energy saving
- Wide operation range
- Robust structure
- Modern design

#### **APPLICATION**

- Chemical Engineering
- Paper and pulp
- All process industries
- Petrochemical



## FFMCO SLURRY PUMP

- Size:2" 12"
- Max cap: 7045GPM
- Max head: 361' '
- Media temp: -13°F ~+ 284°F
- Max system pressure: 232PSI

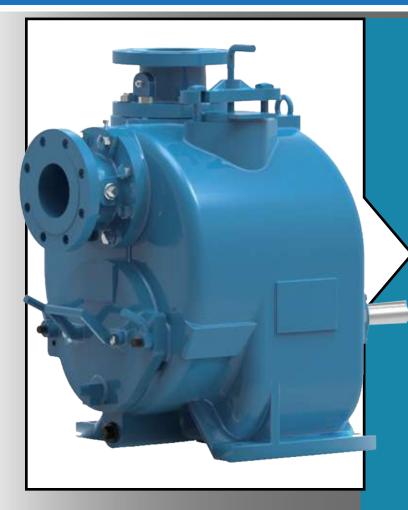
#### **ADVANTAGE**

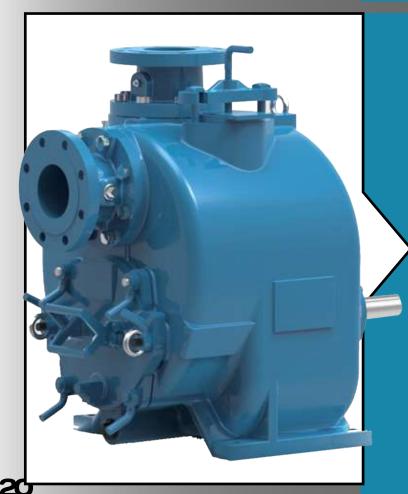
- Semi-open impeller
- Robust design
- Wide operation range
- Heavy duty bearing housing

#### **APPLICATION**

- Barite & mineral oil based drilling
- Bentonite, Salt water slurry
- Cement
- Paper and pulp, Mine dewatering
- Lime, Gypsum, Calcium,
- Ash & coal liquid slurry
- Chemical industry

#### SUBMERSIBLES // FFMC





## FFMCT SELF PRIMING TRASH PUMP

#### TECH DATA

- Size: 2"- 12"
- Max cap: 3400GPM
- Max head: 130'
- Media temp: 14°F ~+ 185°F
- Max system pressure: 51PSI
- Max suction: 25'
- Max solids: 3"

#### <u>ADVANTAGE</u>

- Proven design
- Excellent performance
- Non-clogging design
- Excellent self priming function
- Installation and maintenance

#### **APPLICATION**

- Municipal
- Marine
- Industrial sewage water treatment
- Agriculture irrigation
- Drainage/Construction

## FFMCST SELF PRIMING TRASH PUMP

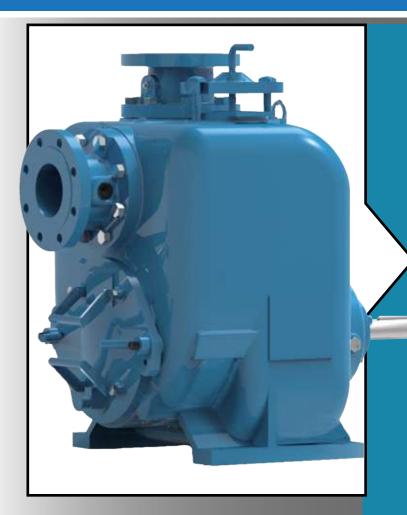
- Size: 2"- 12"
- Max cap: 3400GPM
- Max head: 130'
- Media temp: 14°F ~+ 185°F
- Max system pressure: 51PSI
- Max suction: 25'
- Max solids: 3"

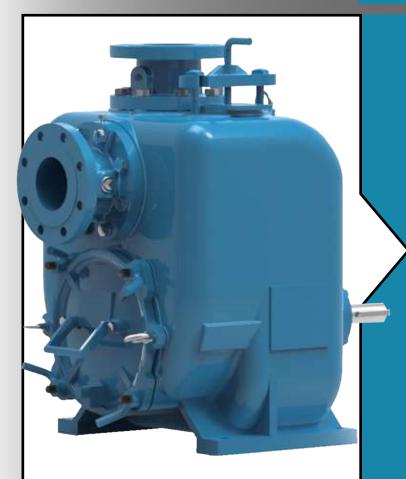
#### **ADVANTAGE**

- Proven design
- Excellent performance
- Non-clogging design
- Excellent self priming function
- Installation and maintenance

#### **APPLICATION**

- Municipal
- Marine
- Industrial sewage water treatment
- Agriculture irrigation
- Drainage/Construction





## FFMCU HIGH HEAD SELF PRIMING TRASH PUMP

- Size: 3" 6"
- Max cap: 1500GPM
- Max head: 207'
- Media temp: 14°F ~+ 185°F
- Max system pressure: 87PSI
- Max suctron:25'
- Max solids: 1.25"

#### **ADVANTAGE**

- Proven design
- Excellent & reliable performance
- Non- clogging design
- Excellent self priming function
- Installation and maintenance
- Excellent trash handling capability

#### **APPLICATION**

- Municipal
- Marine
- Industrial sewage water treatment
- Agriculture irrigation

## FFMCSU HIGH HEAD SELF PRIMING TRASH PUMP

- Size: 3'' 6''
- Max cap: 1500GPM
- Max head: 207'
- Media temp: 14°F ~+ 185°F
- Max system pressure: 87PSI
- Max suctron:25'
- Max solids: 1.25"

#### **ADVANTAGE**

- Proven design
- Excellent & reliable performance
- Non- clogging design
- Excellent self priming function
- Installation and maintenance
- Excellent trash handling capability

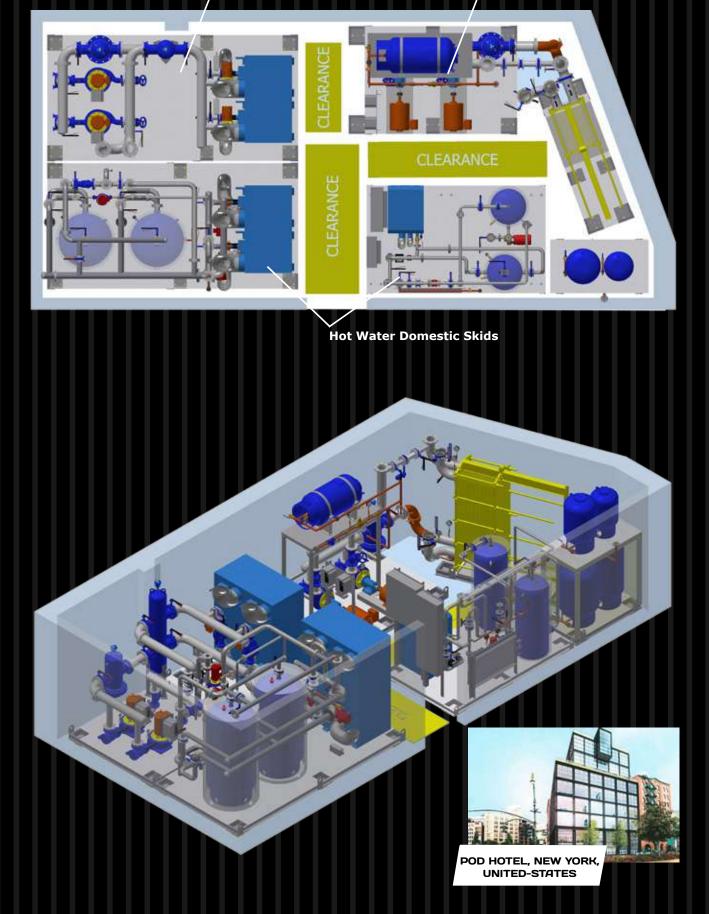
#### **APPLICATION**

- Municipal
- Marine
- Industrial sewage water treatment
- Agriculture irrigation

## **Typical Mechanical Room**

,Hydronic Heating System Skid

Hydronic Cooling System Skid





### SUBMERSIBLE PUMPS

## PLUMBING

SERIES	LB-25, 4 215 &		FS-237, 337 & 437, 475, 675, 4110, 6110, 8110	LBV-40	LBV-75, 215 & 315	LBK-75	LBK-215 & 315
ТҮРЕ	Effluent	Pump	Multi-Purpose Drainage Pump		& Sewage x Pump	Effluent	Sewage Non Clog Pump
CAPACITIES	up to 175 (40 m	³/hr)	up to 1400 USGPM (317 m <sup>3</sup> /hr)	. (36	59 USGPM m³/hr)	. (42 r	5 USGPM n³/hr)
HEAD	8 to 7 (2.4 to 2		10 to 163 ft. (3 to 49 m)		59 ft. to 18m)		59 ft. 18m)
SOLID SIZE	3/8 (9 m	m)	3/4″ (19 mm)	3/4″ (19mm)	2″ (50mm)	3/4″ (19mm)	2″ (50mm)
HORSEPOWER	up to (0.75	kW)	up to 30 HP (22 kW)	(0.7	o 1 HP '5 kW)		5 kW)
DRIVES	Air Fi Electrical Explosio	Motors	Air Filled Electrical Motors Explosion Proof	Electric	Filled al Motors ion Proof	Air Filled Electrical Motors Explosion Proof	
APPLICATIONS	APPLICATIONSWaterTEMPERATUREup to 200°F (94 °C)CONSTRUCTION MATERIALSCast Iron		Water		Sewage & Liquids	Water	Water & Waste Li- quids
TEMPERATURE			up to 200°F (94 °C)	up to 200°F (94 °C) Cast Iron		up to 200°F (94 °C)	
			Cast Iron and Stainless Steel			Cast Iron	
SERIES	FBV-332	FBV-337 & 437	FGC-015 / FGC-022 FGC-037 / FGC-055	BAF		Sub Accessories	
ТҮРЕ	Sewa Non Clog		Sewage Grinder Pump	Break A	way Fitting		
CAPACITIES	up to 317 72 m	³/hr	up to 61 USGPM 14 m³/hr				
HEAD	8 to 6 (2.4 to	20 m)	17 to 105ft (5.2 to 32 m)				
SOLID SIZE	2″ (50 mm)	3″ (80 mm)	3/4″ (19 mm)				
HORSEPOWER	up to (3.7 l	<w)< th=""><th>up to 5 HP (3.7 kW)</th><th></th><th></th><th></th><th></th></w)<>	up to 5 HP (3.7 kW)				
DRIVES	Air Fi Electrical Explosion	Motors n Proof	Air Filled Electrical Motor Explosion Proof				
APPLICATIONS	Water, Se Waste L		Water, Sewage & Waste Liquids				
TEMPERATURE	up to 200°	F (94°C)	up to 200°F (94°C)				
	Cast 1	Iron	Cast Iron	Cas	t Iron		

#### **DIFFERENT SYSTEMS**

CAPACITIES	up to 30 USGPM (3.1 m³/hr)	
HEAD	up to 692 ft. (300 PSI) (211 m)	
PRESSURE	up to 300 PSI (2069 kPa)	
HORSEPOWER	up to 10 HP (7.46 kW)	
DRIVES	Electrical Motors	
APPLICATIONS	Light Fuel Oil	
TEMPERATURE	up to 150°F (65°C)	
CONSTRUCTION MATERIAL	Bronze / Stainless Steel or Cast Iron	



Type: D-FOM Duplex Fuel Oil System

CAPACITIES	up to 12000 USGPM (2725 m <sup>3</sup> /hr)
HEAD	up to 692 ft. (300 PSI) (211 m)
PRESSURE	up to 300 PSI (2069 kPa)
HORSEPOWER	up to 400 HP (298.3 kW)
DRIVES	Electrical Motors
APPLICATIONS	Water / Glycol
TEMPERATURE	up to 300°F (144°C)
CONSTRUCTION MATERIAL	Bronze / Stainless Steel or Cast Iron



CAPACITIES	up to 12000 USGPM (2725 m <sup>3</sup> /hr)
HEAD	up to 692ft. (300 PSI) (211 m)
PRESSURE	up to 300 PSI (2069 kPa)
HORSEPOWER	up to 400 HP (298.3 kW)
DRIVES	Electrical Motors
APPLICATIONS	Water / Glycol
TEMPERATURE	up to 300°F (144°C)
CONSTRUCTION MATERIAL	Bronze / Stainless Steel or Cast Iron



#### PACKAGED SYSTEMS

CAPACITIES	up to 12000 USGPM (2725 m <sup>3</sup> /hr)	1
HEAD	up to 692 ft. (300 PSI) (211 m)	
PRESSURE	up to 300 PSI (2069 kPa)	4
HORSEPOWER	up to 400 HP (298.3 kW)	1
DRIVES	Electrical Motors	
APPLICATIONS	Water / Glycol	
TEMPERATURE	up to 300°F (144°C)	
CONSTRUCTION MATERIAL	Bronze / Stainless Steel or Cast Iron	100

Type: D-CPS-HT Duplex -Constant Pressure System Fresno, California

CAPACITIES	up to 12000 USGPM (2725 m <sup>3</sup> /hr)
HEAD	up to 692 ft. (300 PSI) (211 m)
PRESSURE	up to 300 PSI (2069 kPa)
HORSEPOWER	up to 400 HP (298.3 kW)
DRIVES	Electrical Motors
APPLICATIONS	Water / Glycol
TEMPERATURE	up to 300°F (144°C)
CONSTRUCTION MATERIAL	Bronze / Stainless Steel or Cast Iron

CAPACITIES	up to 12000 USGPM (2725 m <sup>3</sup> /hr)
HEAD	up to 692 ft. (300 PSI) (211 m)
PRESSURE	up to 300 PSI (2069 kPa)
HORSEPOWER	up to 400 HP (298.3 kW)
DRIVES	Electrical Motors
APPLICATIONS	Water / Glycol
TEMPERATURE	up to 300°F (144°C)
CONSTRUCTION MATERIAL	Bronze / Stainless Steel or Cast Iron

## Type: BOI Boiler Package

San Francisco - California, USA

## Type: CHI Chiller Package

Garden City - Texas, USA

#### PACKAGED SYSTEMS

CAPACITIES	up to 12000 USGPM (2725 m <sup>3</sup> /hr)
HEAD	up to 692 ft. (300 PSI) (211 m)
PRESSURE	up to 300 PSI (2069 kPa)
HORSEPOWER	up to 400 HP (298.3 kW)
DRIVES	Electrical Motors
APPLICATIONS	Water / Glycol
TEMPERATURE	up to 300°F (144°C)
CONSTRUCTION MATERIAL	Bronze / Stainless Steel or Cast Iron



Type: LCOO Large Cooling Package Fort Bliss - Texas, USA

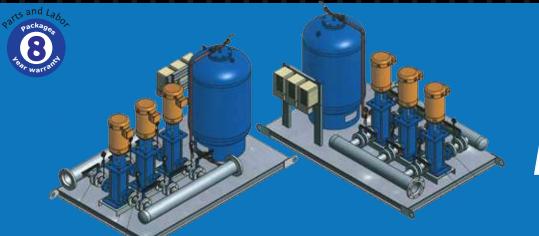
Type: HCE Heating Cooling with Enclosure Michigan, USA



CAPACITIES	up to 12000 USGPM (2725 m <sup>3</sup> /hr)
HEAD	up to 692 ft. (300PSI) (211 m)
PRESSURE	up to 300 PSI (2069 kPa)
HORSEPOWER	up to 400 HP (298.3 kW)
DRIVES	Electrical Motors
APPLICATIONS	Water / Glycol
TEMPERATURE	up to 300°F (144°C)
CONSTRUCTION MATERIAL	Bronze / Stainless Steel or Cast Iron



## Booster





COGIR JAZZ , LONGUEIL, MONTREAL,

## Heating or Cooling





CONCORD GARDEN RICHMOND, B.C., CA

## Large Cooling





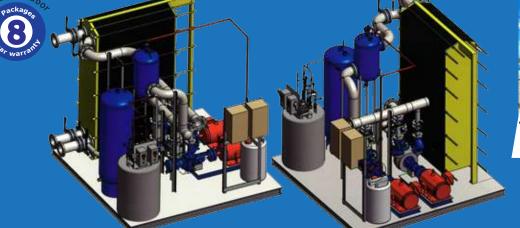
FORT BLISS HOSPITAL EL PASO, TEXAS, UNITED-STATES



#### Proud pumps supplier for the New World Trade Center towers in New York

#### AND MORE

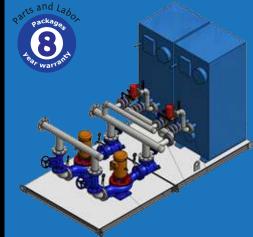
## Heat Transfer

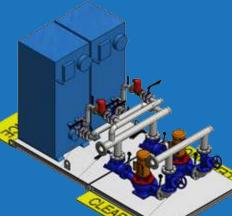




WORLD TRADE CENTER NEW-YORK, U.S.A.

**Duplex Pumps - Heating System** 

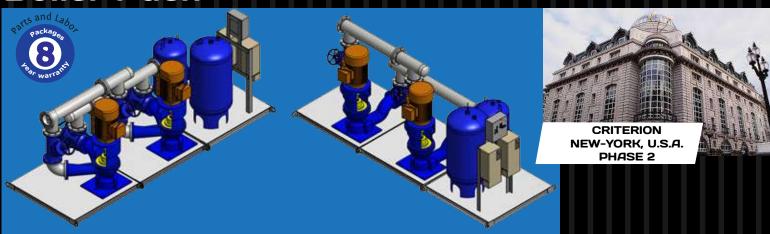






CRITERION HAGUE NEW-YORK, U.S.A. PHASE 1

## Boiler Pack



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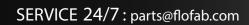
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