



# INDUSTRIAL PRODUCTS

Manufacturer of Pumps, Tanks, Heat Exchangers & Accessories



### **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.

MG

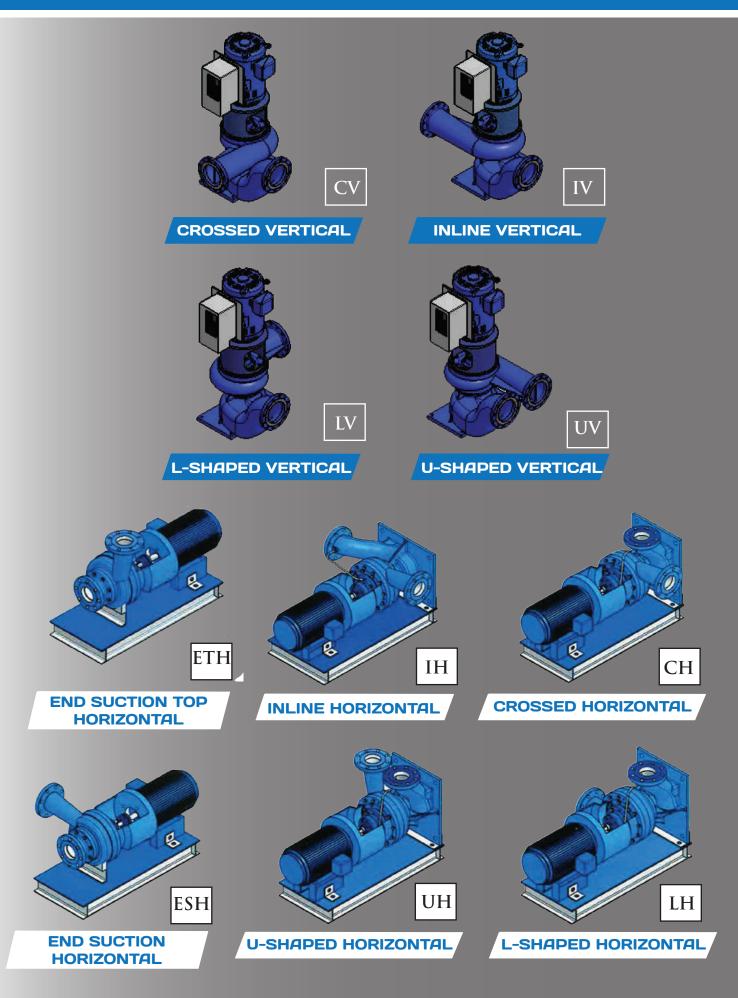
### **TABLE OF CONTENTS**

VERTICAL IN-LINE PUMPS	
FEATURE PRODUCT	3
SERIES XRI VARIOUS CONFIGURATIONS	4
HORIZONTAL BASE MOUNTED & CLOSE COUPLED END SUCTION PUMPS	5
SPLIT CASE DOUBLE SUCTION / MULTISTAGE / CLOSE COUPLED STAINLESS PUMPS	5
CONDENSATE & TURBINE PUMPS	6
ASME TANKS & AIR SEPARATORS	
HEAT EXCHANGERS	6
HOW TO PRICE A PACKAGE	
ALL SUBMERSIBLES	
TYPICAL MECHANICAL ROOM	22
HYDRONIC ACCESSORIES	23
SUBMERSIBLE PUMPS (PLUMBING)	24
PACKAGED SYSTEMS	25-27
DIFFERENT SYSTEMS	28-29
COMPLETE AND ON GOING PROJECTS	30

SERIES	500	600	840SC	880RI
TYPE	Circulating Pump	Circulating Pump In-Line Circulator 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)
<b>HEAD</b> 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 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	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

### - FEATURE PRODUCT-**VERTICAL POSITION Construction of series XRI** Grout Motor Not required **SERIES** XRI Universal 10 positions Vertical / Horizontal **TYPE** Centrifugal Pump Alignment Not required Motor with removable Bracket Impeller up to 15850 USGPM **CAPACITIES** 3600 m<sup>3</sup>/hr up to 655ft **HEAD** (200m) up to 600 PSI **PRESSURE** Impeller (4136 kPa) **Assembly** up to 1000 HP **HORSEPOWER** (746 kW) **DRIVES** TC Electric Motors **Discharge Casing APPLICATIONS** Water / Glycol **Suction Casing TEMPERATURE** up to 300°F (149°C) Cast Iron, **MATERIAL OF** Bronze Fitted as CONSTRUCTION Standard, Other Ma-HORIZONTAL POSITION

terials Also Available



SERIES	880	1000/1004	2000	2300 / 2600
TYPE	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 Standard, 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
			1 1100 7 110110210	
SERIES	4800L	4800U	4800/4800H/4900	4800V
SERIES TYPE	Single Stage, Double Suction Split Case	Single Stage, Double Suction Split Case	4800/4800H/4900 Horizontally Mounted, Single Stage, Double Suction Split Case	Vertically Mounted, Single Stage, Double Suction Split Case
	Single Stage, Double Suction Split Case up to 12000 USGPM (2725 m³/hr)	Single Stage, Double Suction Split Case up to 12000 USGPM (2725 m³/hr)	4800/4800H/4900  Horizontally Mounted, Single Stage, Double Suction Split Case  up to 12700 USGPM (2884 m³/hr)	Vertically Mounted, Single Stage, Double Suction Split Case up to 12700 USGPM (2884 m³/hr)
TYPE	Single Stage, Double Suction Split Case up to 12000 USGPM (2725 m³/hr) up to 750 ft. (227 m)	Single Stage, Double Suction Split Case up to 12000 USGPM (2725 m³/hr) up to 750 ft. (227 m)	4800/4800H/4900  Horizontally Mounted, Single Stage, Double Suction Split Case up to 12700 USGPM (2884 m³/hr) up to 625 ft. (190 m)	Vertically Mounted, Single Stage, Double Suction Split Case up to 12700 USGPM (2884 m³/hr) up to 625 ft. (190 m)
TYPE	Single Stage, Double Suction Split Case  up to 12000 USGPM (2725 m³/hr)  up to 750 ft. (227 m)  up to 600 PSI (4136 kPa)	Single Stage, Double Suction Split Case  up to 12000 USGPM (2725 m³/hr)  up to 750 ft. (227 m)  up to 600 PSI (4136 kPa)	4800/4800H/4900  Horizontally Mounted, Single Stage, Double Suction Split Case  up to 12700 USGPM (2884 m³/hr)  up to 625 ft. (190 m)  up to 600 PSI (4136 kPa)	Vertically Mounted, Single Stage, Double Suction Split Case up to 12700 USGPM (2884 m³/hr) up to 625 ft. (190 m) up to 600 PSI (4136 kPa)
TYPE CAPACITIES HEAD	Single Stage, Double Suction Split Case  up to 12000 USGPM (2725 m³/hr)  up to 750 ft. (227 m)  up to 600 PSI (4136 kPa)  up to 800 HP (597 kW)	Single Stage, Double Suction Split Case  up to 12000 USGPM (2725 m³/hr)  up to 750 ft. (227 m)  up to 600 PSI (4136 kPa)  up to 800 HP (597 kW)	4800/4800H/4900  Horizontally Mounted, Single Stage, Double Suction Split Case  up to 12700 USGPM (2884 m³/hr)  up to 625 ft. (190 m)  up to 600 PSI (4136 kPa)  up to 1750 HP (1305 kW)	Vertically Mounted, Single Stage, Double Suction Split Case up to 12700 USGPM (2884 m³/hr) up to 625 ft. (190 m) up to 600 PSI (4136 kPa) up to 1750 HP (1305 kW)
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TYPE  CAPACITIES  HEAD  PRESSURE  HORSEPOWER	Single Stage, Double Suction Split Case  up to 12000 USGPM (2725 m³/hr)  up to 750 ft. (227 m)  up to 600 PSI (4136 kPa)  up to 800 HP (597 kW)  Electric Motors, Diesel Engines, Steam	Single Stage, Double Suction Split Case  up to 12000 USGPM (2725 m³/hr)  up to 750 ft. (227 m)  up to 600 PSI (4136 kPa)  up to 800 HP (597 kW)  Electric Motors, Diesel Engines, Steam	4800/4800H/4900  Horizontally Mounted, Single Stage, Double Suction Split Case  up to 12700 USGPM (2884 m³/hr)  up to 625 ft. (190 m)  up to 600 PSI (4136 kPa)  up to 1750 HP (1305 kW)  Electric Motors, Diesel Engines, Steam	Vertically Mounted, Single Stage, Double Suction Split Case  up to 12700 USGPM (2884 m³/hr)  up to 625 ft. (190 m)  up to 600 PSI (4136 kPa)  up to 1750 HP (1305 kW)  Electric Motors, Diesel
TYPE  CAPACITIES  HEAD  PRESSURE  HORSEPOWER  DRIVES	Single Stage, Double Suction Split Case  up to 12000 USGPM (2725 m³/hr)  up to 750 ft. (227 m)  up to 600 PSI (4136 kPa)  up to 800 HP (597 kW)  Electric Motors, Diesel Engines, Steam Turbines	Single Stage, Double Suction Split Case  up to 12000 USGPM (2725 m³/hr)  up to 750 ft. (227 m)  up to 600 PSI (4136 kPa)  up to 800 HP (597 kW)  Electric Motors, Diesel Engines, Steam Turbines	4800/4800H/4900  Horizontally Mounted, Single Stage, Double Suction Split Case  up to 12700 USGPM (2884 m³/hr)  up to 625 ft. (190 m)  up to 600 PSI (4136 kPa)  up to 1750 HP (1305 kW)  Electric Motors, Diesel Engines, Steam Turbines	Vertically Mounted, Single Stage, Double Suction Split Case  up to 12700 USGPM (2884 m³/hr)  up to 625 ft. (190 m)  up to 600 PSI (4136 kPa)  up to 1750 HP (1305 kW)  Electric Motors, Diesel Engines, R.A.G.D

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		up to 792 USGPM (180 m³/hr)	13 to 380 USGPM (3 to 86 m³/hr)	up to 52 USGPM (12m³/hr)
HEAD	up to 9 (283		up to 930 ft. (283 m)	up to 150 ft. (46 m)	up to 150 ft. (46 m)
PRESSURE	up to 4 (2964	30 PSI kPa)	up to 430 PSI (2964 kPa)	up to 145 PSI (1000 kPa)	up to 115 PSI (793 kPa)
HORSEPOWER	up to (37		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	S°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 #304 Stainless Steel Optional #316 S/S		Cast Iron as Standard, or Stainless Steel #304 & #316	#304 Stainless Steel	#304 Stainless Steel	
	Shell and Tube Heat Exchangers		Plate and Frame Heat Exchangers	Brazed Heat Exchangers	
SERIES	"w"	"S"	"FFW" AHRI	"BR"	IQP1000 / ACH550
TYPE	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	up to 3000 USGPM 681 m³/hr up to 250 PSI (1724 kpa) Steam		up to 10000 USGPM 2271 m³/hr up to 250 PSI (1724 kpa) Steam	up to 400 USGPM 91 m³/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	1	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)	
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	

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			100 to 150 (379 to 56		
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 Requested	
PRESSURE	up to 250PSI (1724 kPa)	up to 250PSI (1724 kPa)			250PSI kPa)
TEMPERATURE	up to 550°F (288°C)	up to 550°F (288°C)	up to 240°F (115°C)	up to 550°F (288°C)	
CONSTRUCTION MATERIAL	Carbon Steel or Stainless Steel	Carbon Steel or Stainless Steel	Carbon Steel EPDM	Carbon Stainles	

# 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:







- Heating and Cooling Systems
- 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.

### **SPECS** example:

Product	Product Type	Section(s)	Date Submitted	Status	
XRI	Separately Coupled, Horizontally Mounted, In-Line Centrifugal Pumps	232123-HYDRONIC PUMPS	1/5/2016	Submitted	View Details
880RI	Separately Coupled, Vertically Mounted, In-Line Centrifugal Pumps	232123-HYDRONIC PUMPS	1/5/2016	Submitted	View Details
2000	Separately Coupled, Base- Mounted, End-Suction Centrifugal Pumps	232123-HYDRONIC PUMPS	1/5/2016	Submitted	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.



# 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.



# 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.

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



# 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: 21/2"

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



# FF3BSE-SS / 3 HP

Discharge: 3" NPT, female, vertical, bolt on flange.

Spherical solids handling: 21/2"

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: 21/2"

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



# 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



# 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



# 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.



# FFBGP-DS / 2 HP

Discharge: 11/4" 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.

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

### **ADVANTAGE**

• 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

### **TECH DATA**

• 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

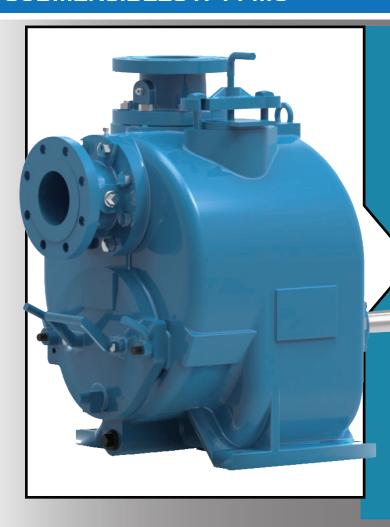
• Cement

• Paper and pulp, Mine dewatering

• Lime, Gypsum, Calcium,

Ash & coal liquid slurry

Chemical industry



# 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"

### **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



# FFMCST 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"

### **ADVANTAGE**

Proven design

Excellent performance

Non-clogging design

• Excellent self priming function

• Installation and maintenance

### **APPLICATION**

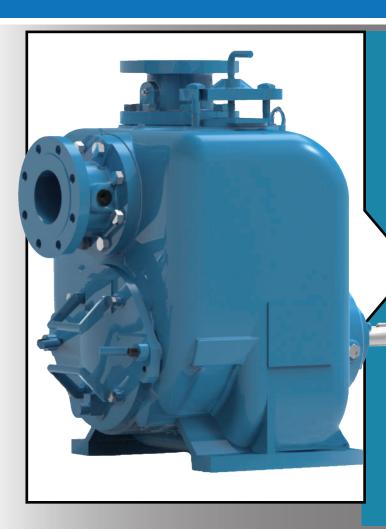
Municipal

Marine

• Industrial sewage water treatment

Agriculture irrigation

Drainage/Construction



# FFMCU HIGH HEAD SELF PRIMING TRASH PUMP

### **TECH DATA**

• 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

### **TECH DATA**

• 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

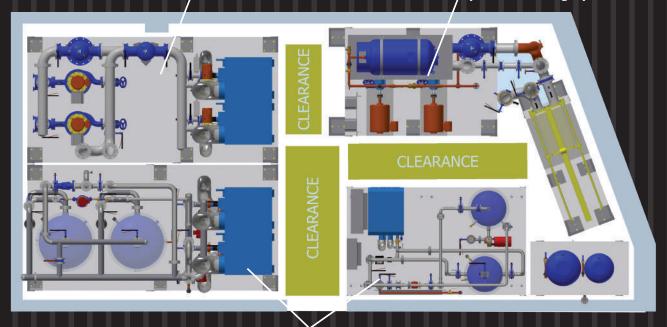
• Industrial sewage water treatment

• Agriculture irrigation

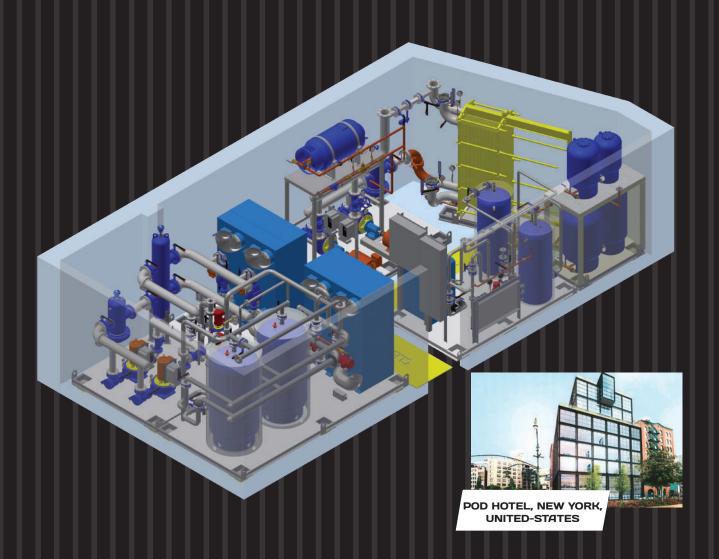
# **Typical Mechanical Room**

Hydronic Heating System Skid

Hydronic Cooling System Skid



**Hot Water Domestic Skids** 



# FLEXIBLE - ST Material: Steel and Stainless Steel Pressure: 475 PSIG at 850°F with water Size Range: 1/2" to 2" Connections: Threaded























SE	RIES	LB-25, 4 215 &		FS-237, 337 & 437, 475, 675, 4110, 6110, 8110	LBV-40	LBV-75, 215 & 315	LBK-75	LBK-215 & 315
т	YPE	Effluent	Pump	Multi-Purpose Drainage Pump		& Sewage x Pump	Effluent	Sewage Non Clog Pump
САРА	ACITIES	up to 175 (40 m <sup>2</sup>	³/hr)	up to 1400 USGPM (317 m³/hr)	(36	59 USGPM m³/hr)	. (42 r	5 USGPM n³/hr)
н	EAD	8 to 7 (2.4 to 2	1.5 m)	10 to 163 ft. (3 to 49 m)		59 ft. to 18m)	(3 to	59 ft. 18m)
SOLI	ID SIZE	3/8 (9 m		3/4" (19 mm)	3/4" (19mm)	2" (50mm)	3/4" (19mm)	2" (50mm)
HORSI	EPOWER	up to 1 (0.75		up to 30 HP (22 kW)	•	o 1 HP 5 kW)	•	1 HP 5 kW)
DR	RIVES	Air Fil Electrical Explosion	Motors	Air Filled Electrical Motors Explosion Proof	Electric	Filled al Motors ion Proof	Air Filled Electrical Motors Explosion Proof	
APPLI	CATIONS	<b>S</b> Water		Water	Water, Sewage & Waste Liquids		Water	Water & Waste Li- quids
TEMPE	TEMPERATURE up to 200°F (94 °C)		up to 200°F (94 °C)	up to 200°F (94°C)		up to 200°F (94 °C)		
	CONSTRUCTION Cast Iron		Cast Iron and Stainless Steel	Cas	t Iron	Cast Iron		
							none i.ii	Suspended Simples Simples
SE	RIES	FBV-332	FBV-337 & 437	FGC-015 / FGC-022 FGC-037 / FGC-055	В	BAF	Sub Acc	cessories
Т	YPE	Sewa Non Clog		Sewage Grinder Pump	Break Av	way Fitting		
САРА	ACITIES	up to 317 72 m <sup>3</sup>	hr.	up to 61 USGPM 14 m³/hr				
н	EAD	8 to 6 (2.4 to 2	20 m)	17 to 105ft (5.2 to 32 m)				
SOLI	ID SIZE	2" (50 mm)	3" (80 mm)	3/4" (19 mm)				
HORSI	EPOWER	up to 5 (3.7 k	(W)	up to 5 HP (3.7 kW)				
DR	RIVES	Air Fil Electrical Explosior	Motors Proof	Air Filled Electrical Motor Explosion Proof				
APPLI	CATIONS	Water, Se Waste L		Water, Sewage & Waste Liquids				
ТЕМРЕ	ERATURE	up to 200°	F (94°C)	up to 200°F (94°C)				
	RUCTION	Cast I	ron	Cast Iron	Cas	t Iron		

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		



CAPACITIES	up to 12000 USGPM (2725 m³/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 m³/hr)		
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	(211 m)
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HORSEPOWER	up to 400 HP
	(298.3 kW)
DRIVES	Electrical Motors
APPLICATIONS	Water / Glycol
TEMPERATURE	up to 300°F (144°C)
CONSTRUCTION	Bronze / Stainless
MATERIAL	Steel or Cast Iron



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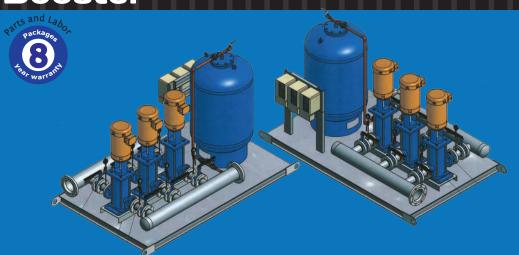
Type: HCE Heating **Cooling with** Enclosure

Michigan, USA



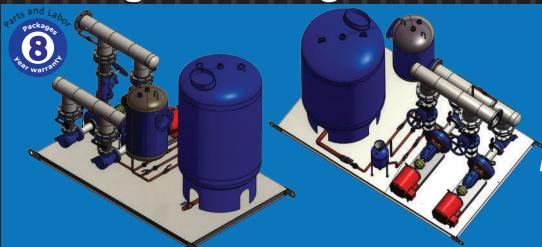


# Booster





# **Heating or Cooling**

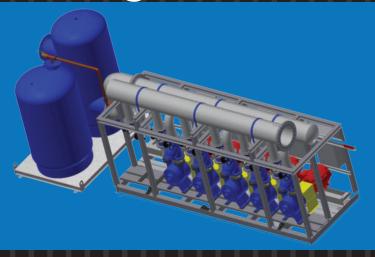




RICHMOND, B.C., CA

# \_arge Cooling



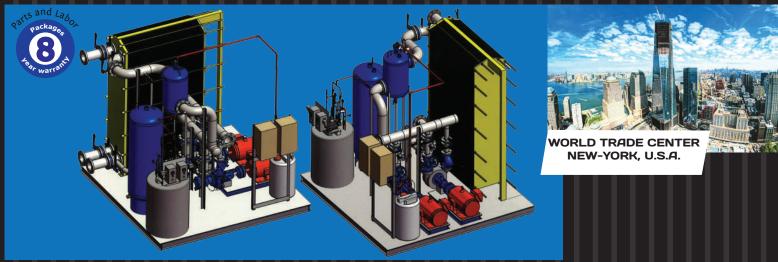




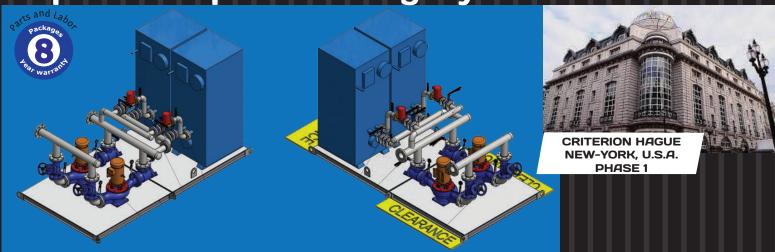
## Proud pumps supplier for the New World Trade Center towers in New York

### **AND MORE**

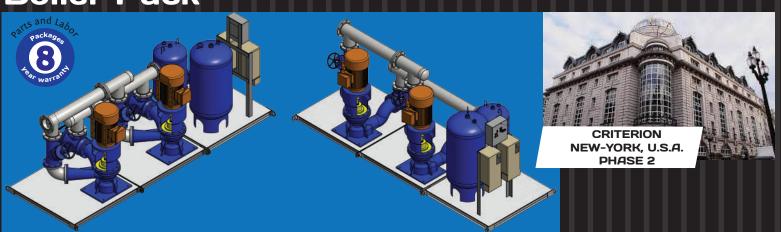
# **Heat Transfer**



# **Duplex Pumps - Heating System**



# **Boiler Pack**



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