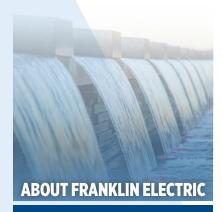
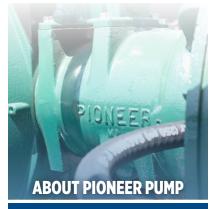




# YOUR PARTNER FOR WATER SYSTEMS



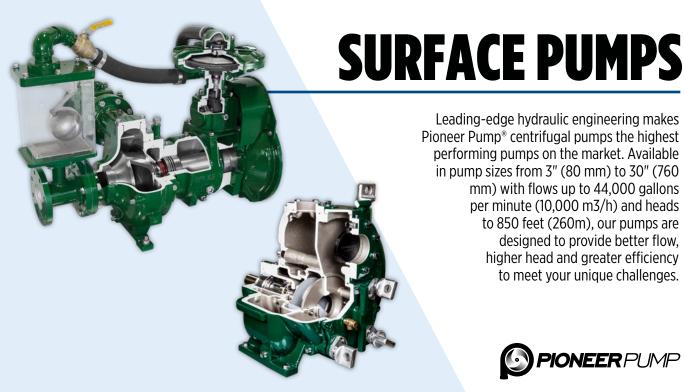
Franklin Electric is a global provider of complete systems for the movement of water.



Pioneer Pump, a brand of Franklin Electric, specializes in the engineering and manufacturing of large centrifugal pumps and packages.



Transport water and wastewater for any sized job with our proven portfolio of centrifugal pumps.



Leading-edge hydraulic engineering makes Pioneer Pump® centrifugal pumps the highest performing pumps on the market. Available in pump sizes from 3" (80 mm) to 30" (760 mm) with flows up to 44,000 gallons per minute (10,000 m3/h) and heads to 850 feet (260m), our pumps are designed to provide better flow. higher head and greater efficiency to meet your unique challenges.



# RANGE OF PUMP ENDS

PUMP END	FLOODED SUCTION (NO PRIMING)			VACUUM-ASSISTED DRY PRIMING			SELF-PRIMING PUMPS	
CONFIGURATION	CLEAR LIQUIDS	SOLIDS HANDLING	VORTEX (EXTREME Solids Handling)	CLEAR LIQUIDS	SOLIDS HANDLING	VORTEX (EXTREME SOLIDS HANDLING)	GT SERIES	GS SERIES
Pump Size	3-12" (80-300 mm)	4-30" (80-760 mm)	4-8" (100-200 mm)	3-12" (80-300 mm)	4-30" (80-760 mm)	4-6" (100-150 mm)	3-6" (76-150 mm)	3-10" (76-250 mm)
Flow Range	20-44,000 gpm (4-10,000 m <sup>3</sup> /h)		1,450-3,600 gpm (329-818 m³/h)	20-44,000 gpm (4-10,000 m <sup>3</sup> /h)		1,450-2,300 gpm (329-522 m³/h)	660-2,250 gpm (150-511 m³/h)	490-3,450 gpm (111-783 m³/h)
Max Head	850+ feet (260+ meters)	700+ feet (210+ meters)	150+ feet (46+ meters)	850+ feet (260+ meters)	700+ feet (210+ meters)	130+ feet (40+ meters)	250+ feet (76+ meters)	175+ feet (53+ meters)
Solids Size	0.5-2.3" (10-60 mm)	2-5.9" (50-150 mm)	3.15-5.12" (80-130 mm)	0.5-2.3" (10-60 mm)	2-5.9" (50-150 mm)	3.15-4.92" (80-125 mm)	2.5-3" (63-76 mm)	
Wet End Material	Ductile Iron		Ductile Iron	Ductile Iron		Ductile Iron	Ductile Iron	
Impeller Material	CA6NM Stainless Steel		Ductile Iron	CA6NM Stainless Steel		Ductile Iron	Ductile Iron	

SOLUTIONS	CLEAR LIQUIDS							
		SOLIDS HANDLING	VORTEX SERIES	CLEAR LIQUIDS	SOLIDS HANDLING	VORTEX SERIES	GT SERIES	GS SERIES
	SC32C10	SC44S8	SC44V10	PP425C75	PP44S8	PP44V10	GT3	GS3
	SC425C75	SC44S8B	SC66V10	PP425C75	PP44S8B	PP66V10	GT4	GS4
	SC425C10	SC44S10	SC66V12	PP425C10	PP44S10	PP66V12	GT6	GS6
	SC43C75	SC64S17	SC88V12	PP43C75	PP64S12	-	-	GS8
	SC43C10	SC66S10	-	PP43C10	PP64S17	-	-	GS10
	SC43C21	SC66S12	-	PP43C21	PP66S10	-	-	-
	SC44C75	SC66S14	-	PP44C75	PP66S12	-	-	-
	SC53C14	SC86S20	-	PP53C14	PP66S14	-	-	-
	SC54C75	SC88S12	-	PP54C75	PP86S17	-	-	-
	SC63C17	SC108S17	-	PP63C17	PP86S20	-	-	-
Models	SC64C10	SC128S20	-	PP64C10	PP88S12	-	-	-
	SC64C14	SC128S22	-	PP64C14	PP108S17	-	-	-
	SC64C17	SC1212S17	-	PP64C17	PP128S20	-	-	-
	SC64C21	SC1414S17	-	PP64C21	PP128S22	-	-	-
	SC66C14	SC1818S22	-	PP66C14	PP1212S17	-	-	-
	SC86C95	SC3030S34	-	PP86C95	PP1414S17	-	-	-
	SC86C10	-	-	PP86C10	PP1818S22	-	-	-
	SC86C14	-	-	PP86C14	PP3030S34	-	-	-
	SC86C17	-	-	PP86C17	-	1	-	-
	SC86C17B	-	-	PP86C17B	-	-	-	-
	SC86C21	-	-	PP86C21	-	-	-	-
	SC108C18	-	-	PP108C18	-	-	-	-
	SC108C24	-	-	PP108C24	-	-	-	-
	SC1010C14	-	-	PP1010C14	-	-	-	-
	SC1212C17	-	-	PP1212C17	-	-	-	-
Electric & Diesel Packages Available	<b>√</b>	<b>✓</b>	✓	✓	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>

# 

Pioneer standard centrifugal pumps provide superior performance in a variety of high pressure, sewage, trash or dewatering applications. The large stainless-steel impeller eye yields lower NPSHr and improved vapor-handling capabilities, making them ideal for industrial, municipal, agricultural, mining, and oil and gas settings.

#### **KEY BENEFITS**

- Reduce operating costs with a highperformance impeller design that provides more flow with less horsepower
- Minimize maintenance and overhead costs

# **CLEAR LIQUIDS**

Our best in class standard centrifugal clear liquid processing pumps optimize performance in high pressure applications.

#### **Features:**

- Available from 3" to 12" sizes
- Casing balance line is fitted on extreme high head models to improve mechanical seal life

# **SOLIDS HANDLING**

Pioneer standard centrifugal pumps are designed to handle the toughest dewatering, sewage, and trash applications.

#### **Features:**

- Available from 4" to 30" sizes
- Handles solids sizes 2 to 5.9 inches in diameter

# **EXTREME SOLIDS HANDLING**

Eliminate costly and disruptive downtime by passing through the most challenging solids with Vortex Series™ pumps.

#### **Features:**

- Available in 4" to 8" sizes
- Uses a recessed ductile iron impeller, ideal for applications where fluid conditioning, macerating, or mix-prevention are unnecessary
- Saves time and money by eliminating internal wetted parts, like wear plates and chopper blades, that would otherwise have to be monitored, adjusted or replaced









All Pioneer standard centrifugal pumps can be upgraded to a Pioneer Prime vacuum-assisted self-priming pump that delivers extreme flows with high head capability and utilizes our advanced priming system. This dry prime system is capable of rapid (50 CFM) unattended priming and operation for the ultimate in reliable performance, even in run-dry situations and suction lift applications. The Pioneer Prime system combined with our low NPSHr impeller design achieves better suction lift and faster priming than the competition.

### **KEY BENEFITS**

- Enables unassisted dry priming
- Achieve higher performance and increased energy efficiency
- Faster priming time compared to compressordriven priming systems

# THE PIONEER PRIME ADVANTAGE

A true dry-prime pump, our self-priming system eliminates the need for water to prime the pump and is engineered to prevent product carryover. The Pioneer Prime hydraulic design maximizes lift capability and offers both quick initial priming and continuous, unattended reprime under auto stop/start conditions.

#### Features:

## 1. Stainless Steel Air Separation Valve

Allows for quick priming with no product carryover

#### 2. Priming Chamber

Stainless steel internals for high wear resistance

#### 3. Reliable Sealing Components

- Non-contacting bearing frame seals with protectors at drive and pump ends
- Hybrid cassette seals simultaneously prevent leakage and eliminate shaft wear

#### 4. Heavy-Duty Modular Bearing Housing

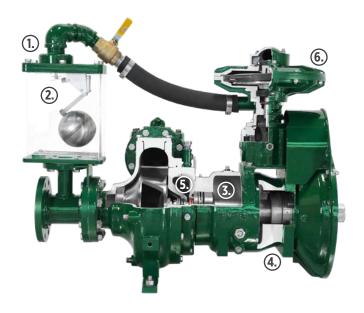
Designed to run at high speeds without risk of shaft or bearing failure

#### 5. Run-Dry System

Oil-lubricated mechanical seal allows the pump to run completely dry without damage

#### 6. Vacuum Pump

Belt driven from pump shaft





Pioneer self-priming pumps are designed for reliable solids and clear liquids handling. After initial priming, they continue to re-prime – for low maintenance and cost-effective performance. Constructed with the best materials including standard heavy-wall ductile iron volute and 17-4 PH stainless steel shaft for durability and peace of mind.

#### **KEY BENEFITS**

- External shimless impeller adjustment allows user to easily adjust the tolerance between the impeller and wearplate
- Cartridge type tungsten mechanical seal makes for ease of maintenance and simple installation

# **GT SERIES**

Engineered for increased durability and operation at higher speeds than the industry standard for self-priming pumps.

#### **Features:**

- Larger shaft design, heavy-duty bearing frame and ductile iron construction
- Unique suction design improves NPSHr and alleviates abrasion wear on pump
- Distinct cover combines both the fill access port and flapper check valve into one to improve ease of use



# **GS SERIES**

A cost-effective solution for high head applications with high performance demands.

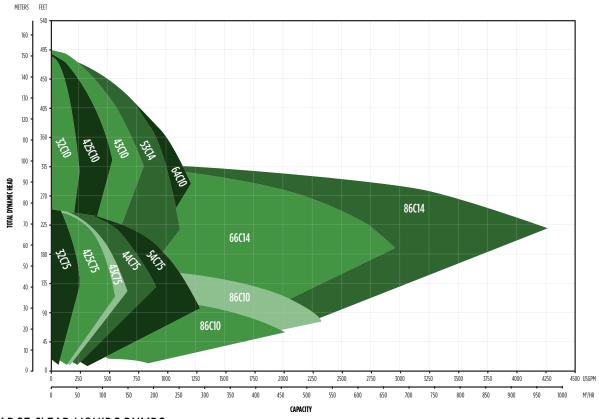
#### **Features:**

- Provides industry consistency in rotating assembly interchangeability
- Pump footprint is compatible with other manufacturer models, making it an ideal direct replacement option

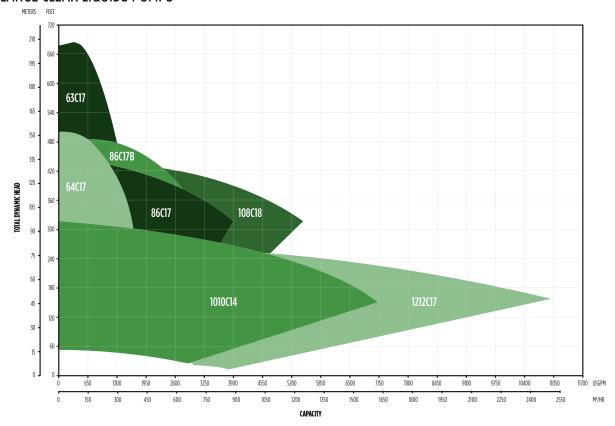


# PERFORMANCE CURVES: CLEAR LIQUIDS PUMPS

# SMALL CLEAR LIQUIDS PUMPS



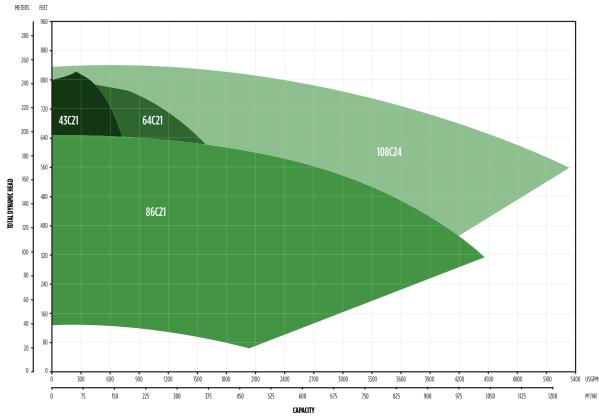
# LARGE CLEAR LIQUIDS PUMPS



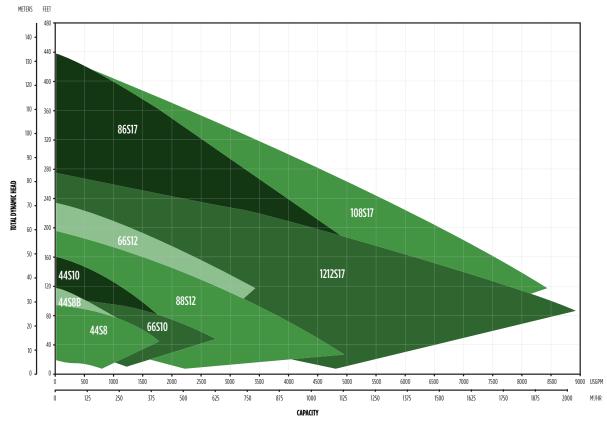
 $<sup>^*</sup>$ Performance curves represent pump performance for both Standard Centrifugal and Pioneer Prime configurations of each pump end.

# PERFORMANCE CURVES: CLEAR LIQUIDS & SOLIDS HANDLING PUMPS

# CLEAR LIQUIDS PUMPS - HIGH HEAD



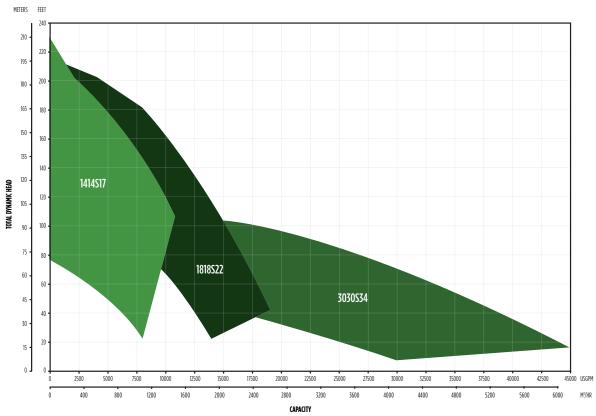
# **SOLIDS HANDLING PUMPS**



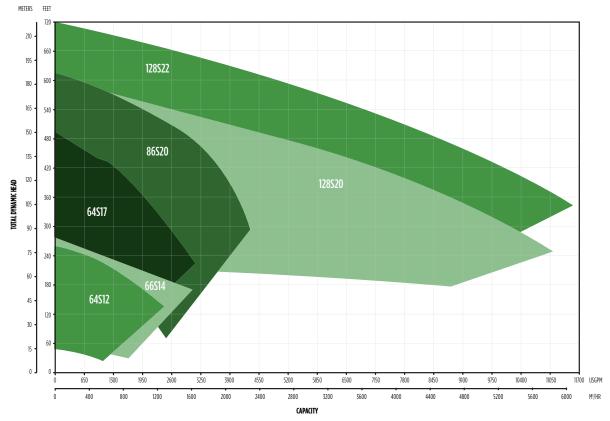
<sup>\*</sup>Performance curves represent pump performance for both Standard Centrifugal and Pioneer Prime configurations of each pump end.

# PERFORMANCE CURVES: SOLIDS HANDLING PUMPS

# SOLIDS HANDLING PUMPS - HIGH FLOW



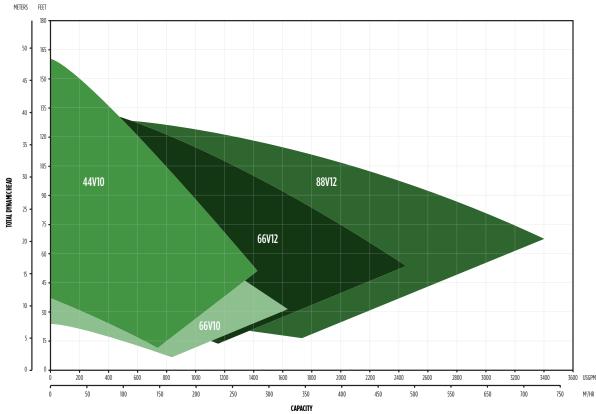
# SOLIDS HANDLING PUMPS - HIGH HEAD



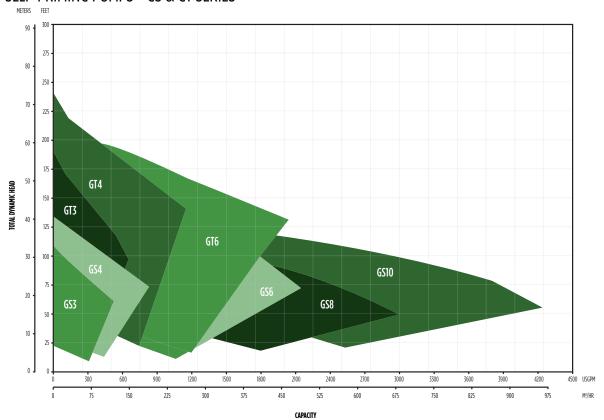
<sup>\*</sup>Performance curves represent pump performance for both Standard Centrifugal and Pioneer Prime configurations of each pump end.

# PERFORMANCE CURVES: EXTREME SOLIDS HANDLING & SELF-PRIMING PUMPS

# EXTREME SOLIDS HANDLING PUMPS - VORTEX SERIES



# SELF-PRIMING PUMPS - GS & GT SERIES



<sup>\*</sup>Performance curves represent pump performance for both Standard Centrifugal and Pioneer Prime configurations of each pump end.



A comprehensive range of pump package options are available for fixed and portable installations with vacuum-assisted priming, self-priming and standard centrifugal pump ends. These packages are built to last and engineered for optimal performance in the toughest environments.

#### **KEY BENEFITS**

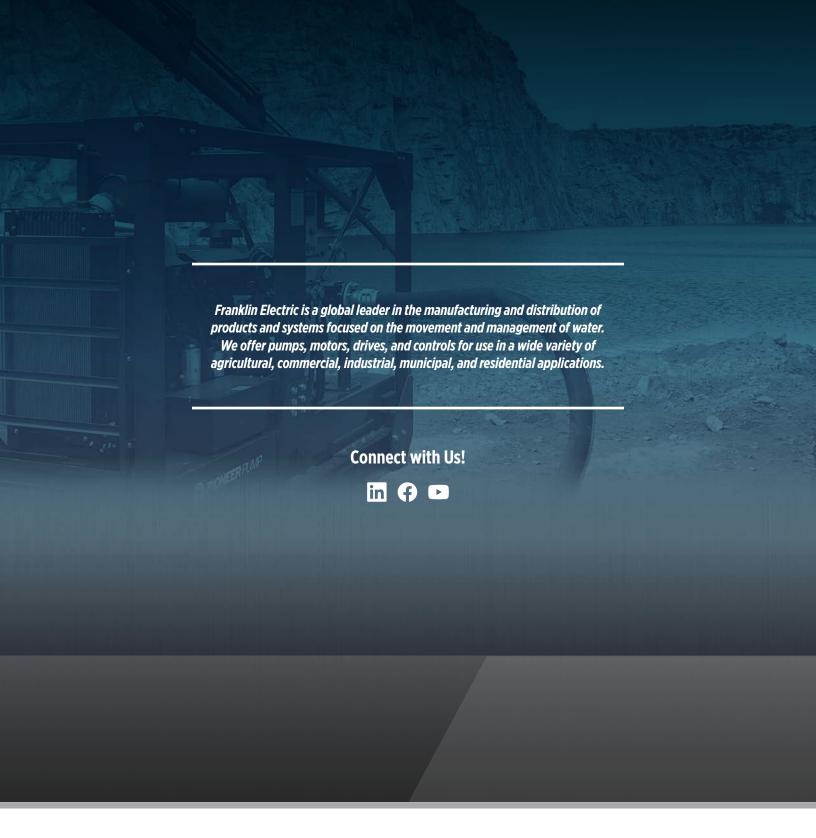
- Select from diesel engine and electric motor power options to meet your application needs
- Configurations include open and enclosed, skid and trailer packages



With 24/7 online and mobile-friendly availability, FE Select is the industry-leading online tool from Franklin Electric that makes pump sizing and selection easy for contractors, engineers, fleet managers and wholesale distributors. It's secure and free-to-use: input your performance requirements or specs, and FE Select will help you find the best Pioneer Pump product to fit your needs.

#### **KEY FEATURES**

- Automatically select pump based on duty point
- Integrated head loss and suction lift calculator
- Configure your pump & package with instant pricing



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