



VERTICAL LINESHAFT TURBINE PUMPS

- FVT - LINESHAFT TURBINE
- FMF - MIXED FLOW TURBINE
- FAF - AXIAL FLOW TURBINE
- FP-FVT - FIRE PROTECTION LINESHAFT TURBINE

From deep-set vertical lineshaft turbines delivering 2,500 feet of head – to axial-flow turbines moving 40,000 gallons per minute – our array of pumping solutions is engineered to handle the toughest applications. Vertical lineshaft turbines are ideal for commercial, municipal or industrial settings where water supply is readily available in rivers, lakes, ponds, streams or water wells. Plus, they come in a variety of configurations, including mixed or axial flow. Outfitted with ASTM A48 high tensile cast iron bowls, investment-cast 304 stainless impellers, and bronze bearings standard, you get superior materials for proven durability, aligned with a highly efficient broad operating range.





FVT SERIES VERTICAL LINESHAFT TURBINE PUMPS

FEATURES

IMPELLER

- Constructed from investment-cast 304 stainless steel
- Choice of semi-open or enclosed impellers with broad operating range
- Dynamically balanced to ISO standards

BOWL

- Constructed from ASTM A48 high tensile cast iron (bowls greater than 15"); bowls less than 15" are standard vitreous enamel, glass lined cast iron
- Corrosion-resistant heavy walls are designed for long service life
- O-ring bowl connection standard through 16" diameter
- Bronze standard bearings

LINESHAFT (COLUMN)

- Outfitted with 416 stainless steel threaded or flanged couplings
- Product or oil-lubricated couplings

DISCHARGE HEAD

- Standard cast iron available up to 16"
- Fabricated heads configurable to any application

ADDITIONAL

- Specify, configure, and price your vertical turbine with FE Select
- Compatible with a variety of motor types and drives
- NSF/ANSI 61 Certified
- Various options in sizing, design, and material constructions can be specified to meet application needs

SPECIFICATIONS

- Size Range: 5" (125 mm) – 42" (1100 mm) Bowls
- Discharge Size: 4", 6", 8", 10", 12", 14" and 16" FNPT
- Capacity: Flows up to 35,000 GPM (7,950 m³/hr)
- Total Dynamic Head: up to 2,500+ feet (762+ m)
- Operating Temperature: up to 400 °F (204 °C)
- Speed Ranges: 450 RPM to 3,600 RPM
- Power: up to 2,000 hp

APPLICATIONS

- Agriculture & Irrigation
- Mining
- Industrial
- Water & Wastewater
- Dewatering
- Pulp & Paper
- Power Generation



WATER QUALITY
MECHANICAL DEVICE
NSF/ANSI 61 & 372
COLD WATER 6R21

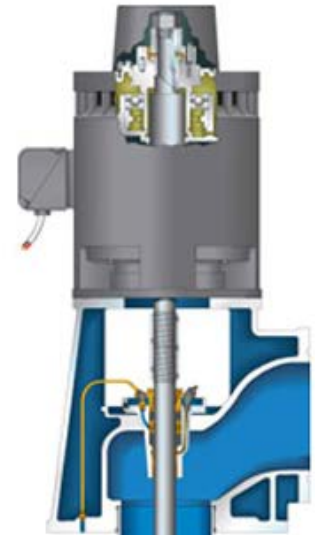
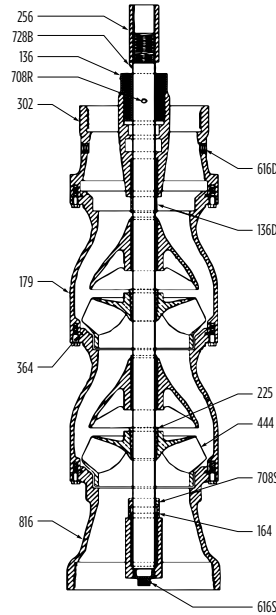
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MATERIALS OF CONSTRUCTION

PRODUCT-LUBRICATED

Item	Description	Standard Material
136	Discharge Case Bearing (Upper)	Bronze
136B	Bowl Bearing	Bronze
136D	Discharge Case Bearing	Bronze
136S	Suction Case Bearing	Bronze
164	Sand Collar	Bronze
179	Bowl	Cast Iron; Vitreous enamel, glass lined*
225	Impeller Collet	Carbon Steel
256	Lineshaft Coupling	Carbon Steel
302	Discharge Case	Ductile Iron
364	Bowl O-Ring	Viton
444	Impeller	Investment Cast 304 SS
616D	Discharge Case Plug	Carbon Steel
616S	Suction Case Plug	Carbon Steel
708D	Retainer Bearing Setscrew	300 S
708S	Sand Collar Setscrew	300 S
728B	Bowl Shaft	416 SS
816	Suction Case	Cast Iron

*NOTE: Bowls 15" and smaller are vitreous enamel and glass lined. Bowls larger than 15" are cast iron.

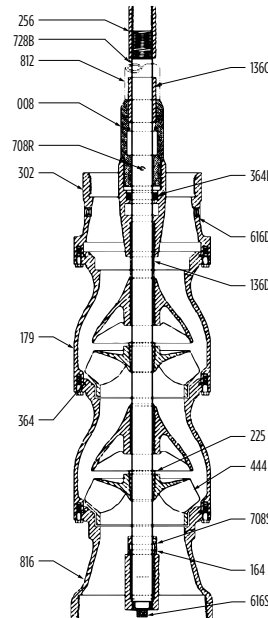


MATERIALS OF CONSTRUCTION

OIL-LUBRICATED

Item	Description	Standard Material
8	Inner Column Adapter	Cast Iron
136B	Bowl Bearing	Bronze
136C	Inner Column Bearing	Bronze
136D	Discharge Case Bearing	Bronze
136S	Suction Case Bearing	Bronze
164	Sand Collar	Bronze
179	Bowl	Cast Iron; Vitreous enamel, glass lined*
225	Impeller Collet	Carbon Steel
256	Lineshaft Coupling	Carbon Steel
302	Discharge Case	Ductile Iron
364	Bowl O-Ring	Viton
364L	Lip Seal	Rubber
444	Impeller	Investment Cast 304 SS
616D	Discharge Case Plug	Carbon Steel
616S	Suction Case Plug	Carbon Steel
708D	Retainer Bearing Setscrew	300 S
708S	Sand Collar Setscrew	300 S
728B	Bowl Shaft	416 SS
812	Inner Column	Carbon Steel
816	Suction Case	Cast Iron

*NOTE: Bowls 15" and smaller are vitreous enamel and glass lined. Bowls larger than 15" are cast iron.

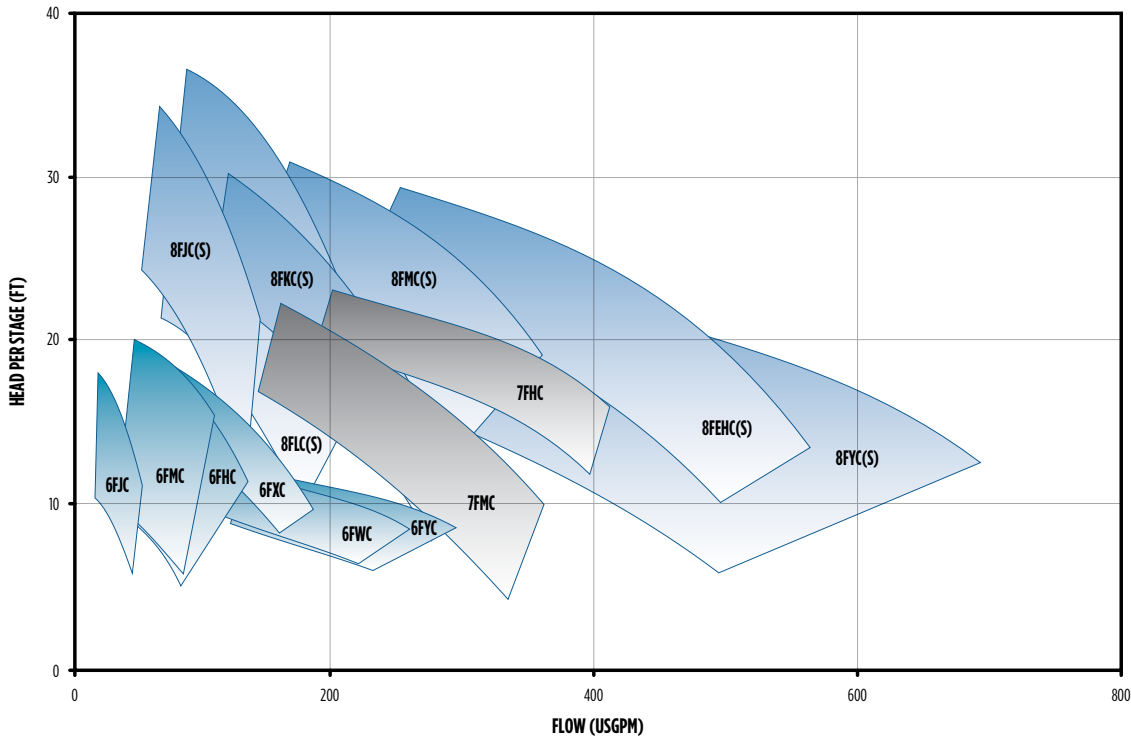




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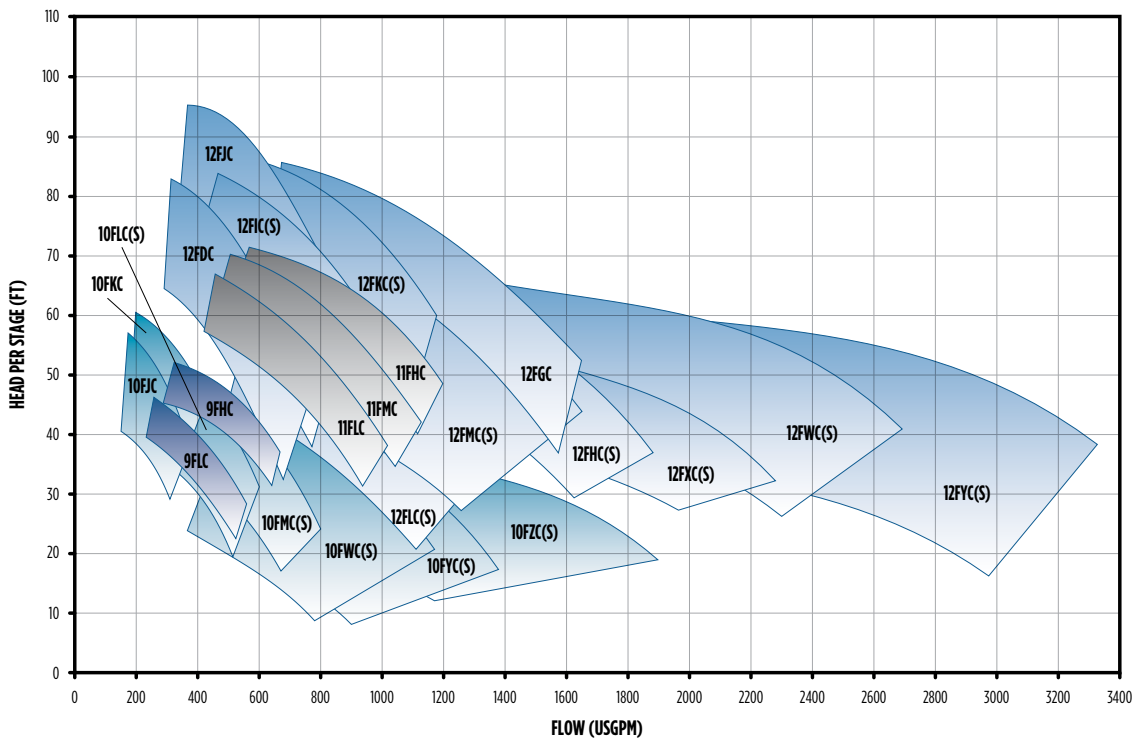
PERFORMANCE

6", 7", 8"



PERFORMANCE

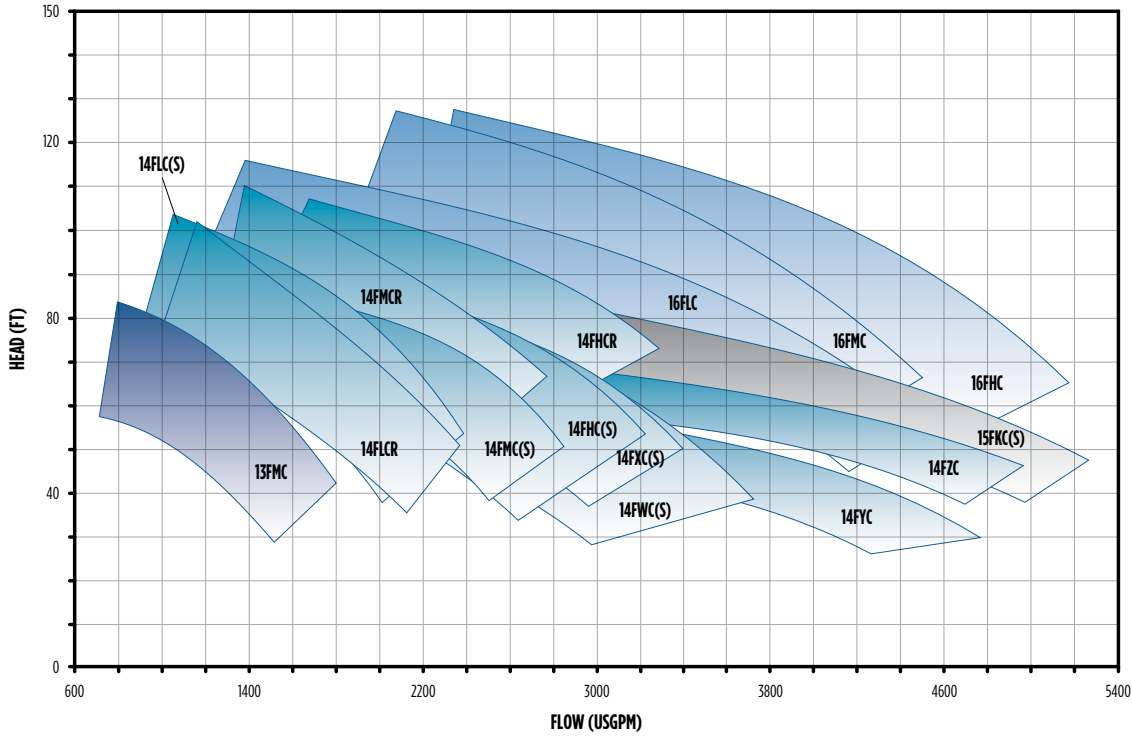
9", 10", 11", 12"



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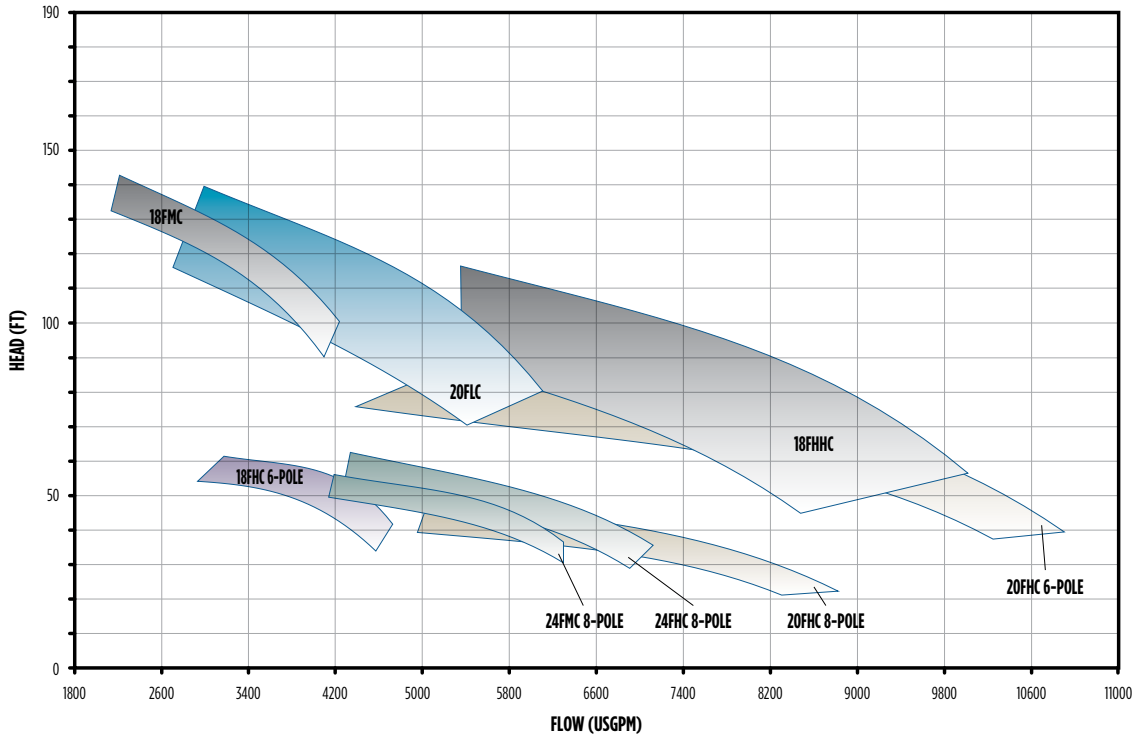
PERFORMANCE

13", 14", 15", 16"



PERFORMANCE

18", 20", 24"

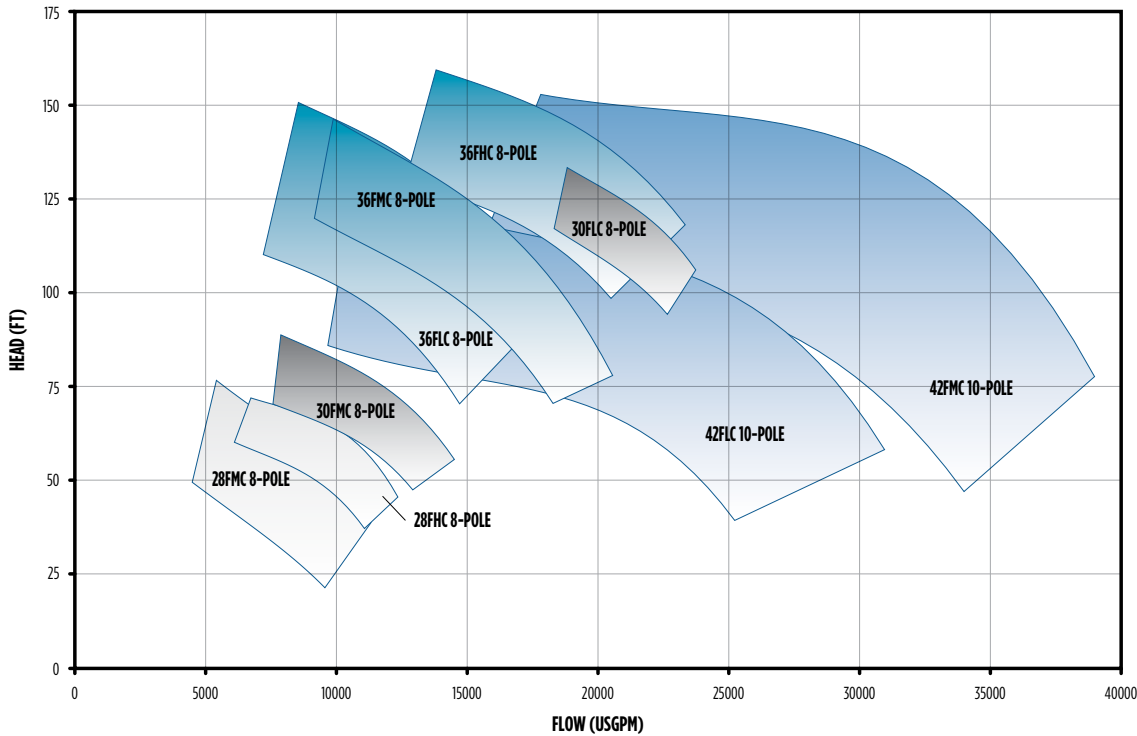




FVT SERIES VERTICAL LINESHAFT TURBINE PUMPS

PERFORMANCE

28", 30", 36", 42"



VERTICAL LINESHAFT TURBINE PUMPS

RELATED PRODUCTS

- For highest flow applications up to 40,000 gallons per minute, see Franklin Electric's [FMF Series Mixed Flow Turbine](#) and [FAF Series Axial Flow Turbine](#) at franklinwater.com
- UL-listed Fire Pump models are also available; see [FP-FVT Lineshaft Turbine Pumps](#) on franklinwater.com for more information

Vertical Lineshaft Turbines	Operating Parameters		
	Bowl/Pump Size	Max Flow GPM (m ³ /hr)	Max Head
Mixed Flow (FMF)	8" - 30"	40,000 (11,350)	150 ft (31 m)
Axial Flow (FAF)	8" - 30"	40,000 (11,350)	35 ft (11 m)
Fire Protection (FP-FVT)	10" - 12"	4,500 (1,022)	376 PSI (25.9 bar)



Mixed Flow
FMF Series



Axial Flow
FAF Series



Fire Protection
FP-FVT Series

FE SELECT

Input your performance requirements or specs, and our industry-leading online tool will help you find the right Franklin Electric product for the job. It's the easy way for you and your customers to size, configure and get a quote.

SIZE & SELECT

Size & Select the Right Pump for the Job

- Requiring only the primary application data, such as flow, total dynamic heads and pump length demands, the software accurately matches the selection for the job
- Obtain quick access to related informational product documentation

QUOTATION MANAGEMENT

Streamline Sales Efforts with Quotation Management

- Start your experience managing new or existing work on your dashboard
- Create and save quotations or projects using your FE account*
- Keep track of your opportunities all in one place

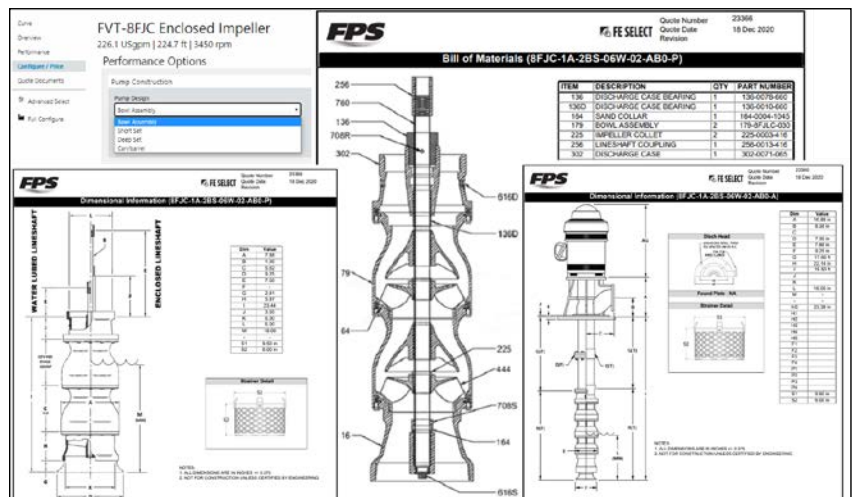
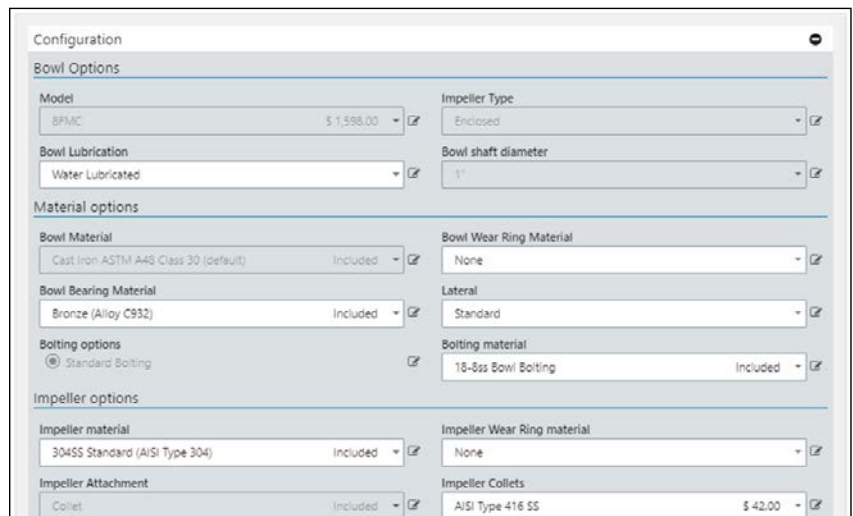
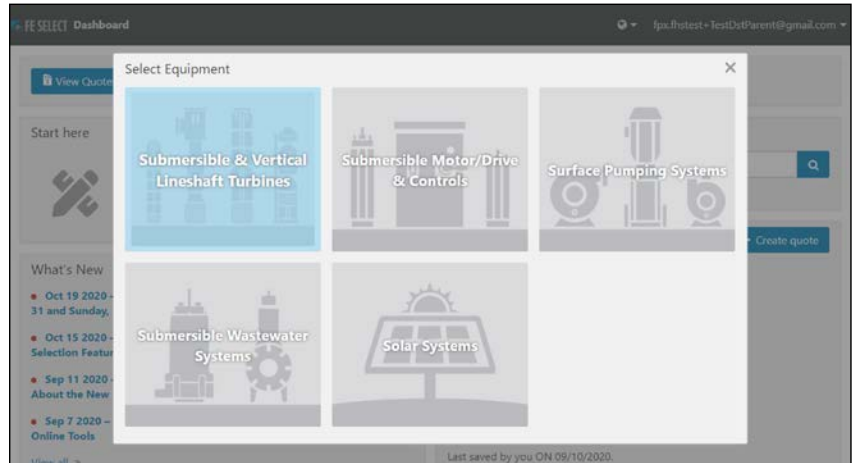
*Single sign-on account allows access to any of our online tools, including FE Select and FranklinTech

CONFIGURATION & PRICING

Simplify Configuration & Pricing Tasks**

- Reduce time when configuring bowl assemblies and OAL (overall length), including all components: discharge head, motor, column, shaft, etc.
- Facilitate pricing details to rapidly setup quotations
- Enhance your proposal documents with the general arrangement drawings for bowl assemblies and OAL (overall length)

**FAF, FMF, FP-FVT Series not available



***Franklin Electric's dedicated support teams have your back every step of the way.
Our products are backed by services unique to the Franklin Experience:***



Access to the industry's leading Technical Support professionals and Field Service Engineers.



Pumps are eligible for an Extended Warranty with Franklin Electric-supplied motor and drive/panel.



Our industry-leading online tool allows you to easily size, configure, price and quote.



Submersible and Lineshaft Turbines are available through an expansive network of Certified Build Centers.*

* FAF, FMF, & FP-FVT Series not available

