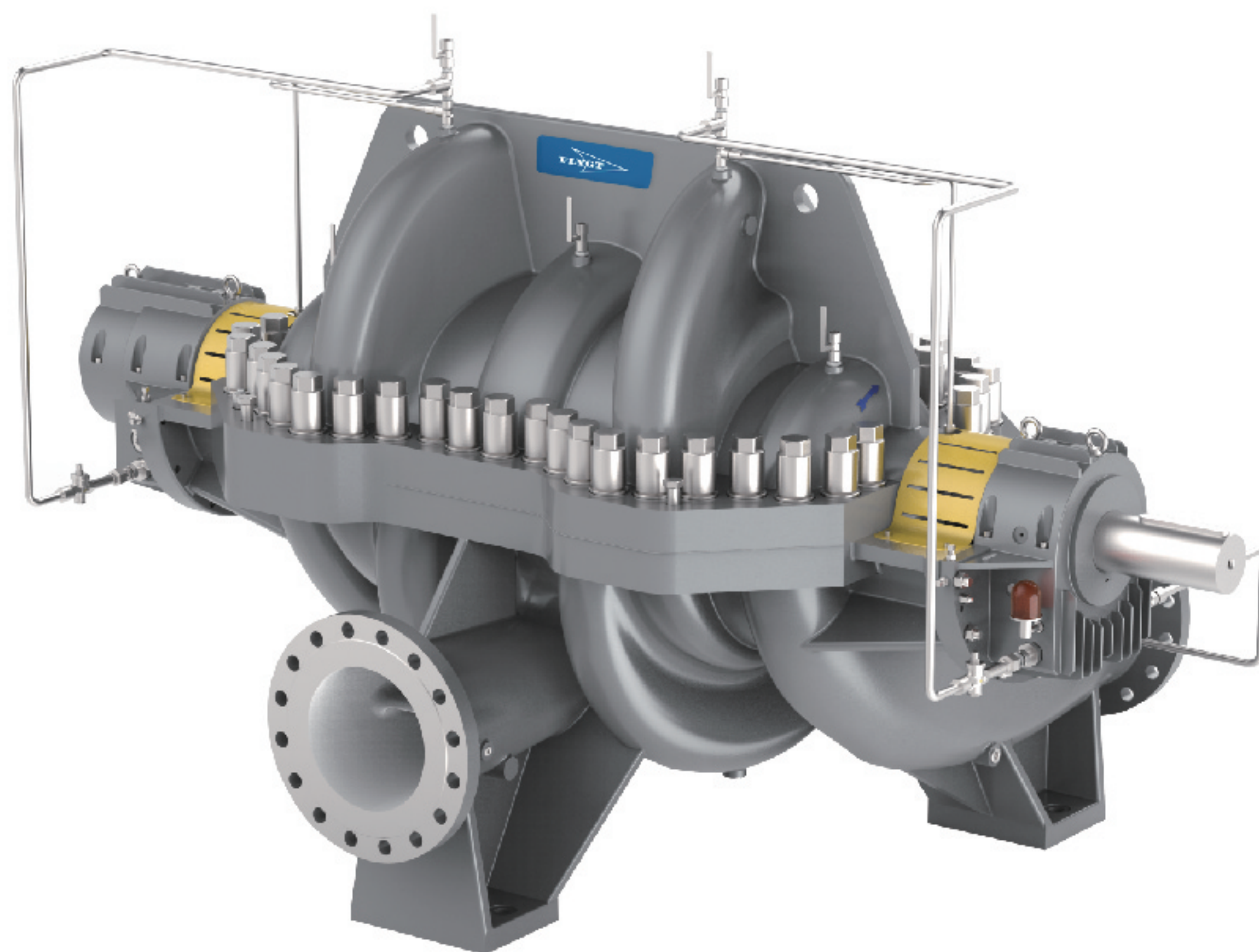




Flygt A-C Series

e-MM Multi-Stage Split-Case Pump

Flygt A-C Series Multi-stage Split-case Pumps

Backed by more than 130 years of experience, Flygt (formerly Allis Chalmers Pump, Inc.) has a reputation as one of the most reliable pump manufacturers in the world.

Flygt A-C Series Multi-stage Split-case Pump lives up to that reputation with a multi-stage design, heavy duty construction and cast components which minimize vibration and provide for long-term, trouble-free operation. With a long, low maintenance pump life and industry leading efficiencies of up to 90%, Flygt A-C Series Multi-stage Split-case Pumps are as reliable as the company that makes them.

Impeller

- Back-to-back arrangement of impellers to balance axial forces.
- Staggered blade arrangement reduces outlet pressure pulsation.

Bearing

- The combination of Cylindrical Roller Bearing and Angular Contact Bearing is safer and more reliable.

Shaft Seal

- Cartridge mechanical seal, better sealing effect and easier disassembly.
- Other sealing types are available.

Volute

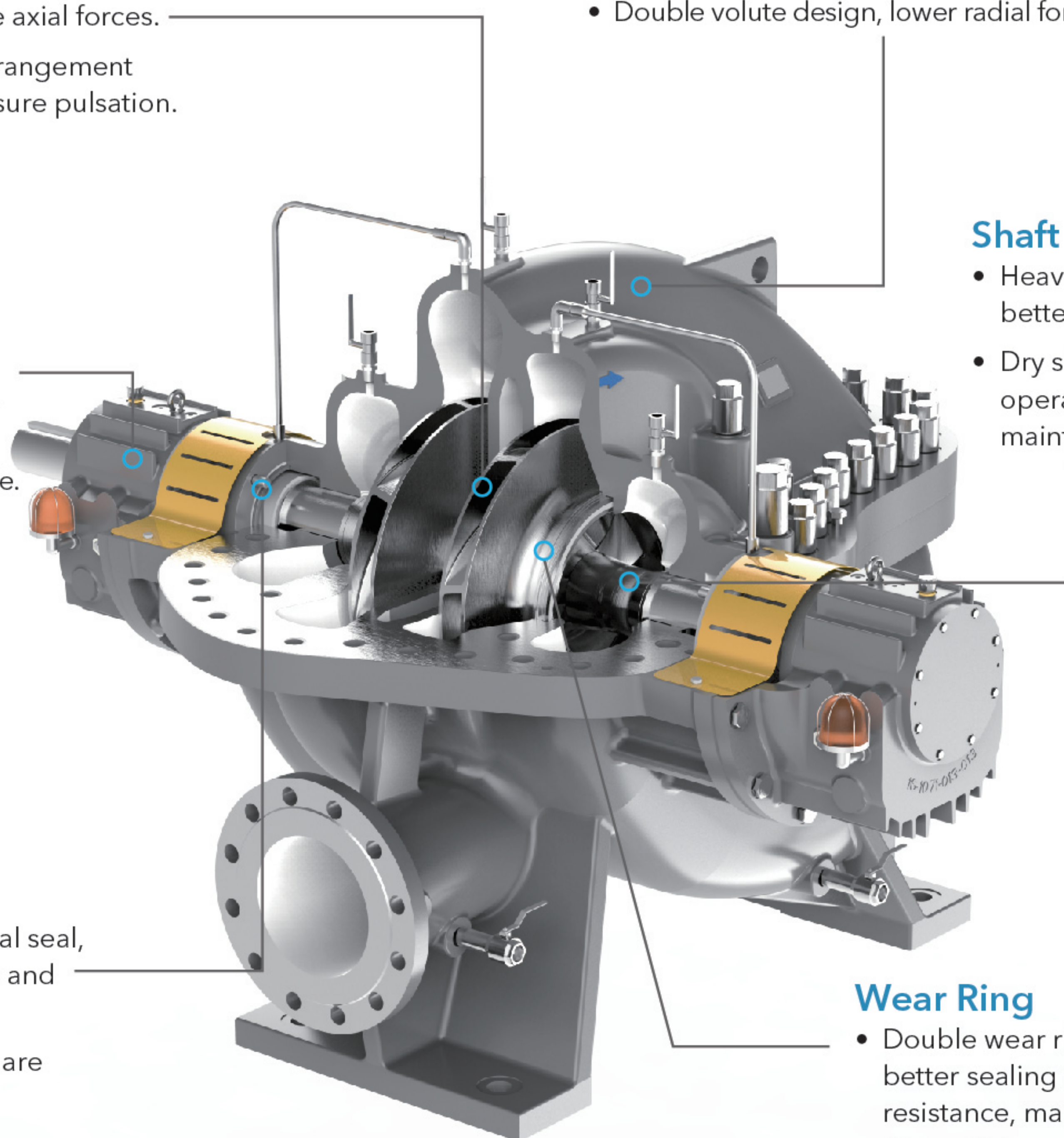
- Split casing structure, convenient for installation and maintenance. The compact flow passage design ensures smooth flow pattern and reduces bearing span.
- The optimized design of the primary stage and secondary stage volute can not only ensure excellent cavitation performance, but also provide excellent efficiency performance.
- Double volute design, lower radial force of impeller.

Shaft

- Heavy-duty design, better stability.
- Dry shaft design, lower operation and maintenance cost.

Wear Ring

- Double wear rings configuration, better sealing and wearing resistance, maintain continuous high efficiency.



This kind of pump has multi-stage impellers, which can meet the application requirements of small to medium flow with high head, such as: water intake, water supply, industrial process water, process water transportation and seawater desalination applications.

Flygt A-C Series Multi-stage Split-case Pump is a state-of-the-art product, feature a double volute design that optimizes radial force and extends shaft and bearing life. Shaft seals provide a variety of sealing type. Double wear rings structure of impeller and pump casing can reduce downtime and facilitate maintenance. Flexible and diverse material combinations can meet many different application needs.

Impeller

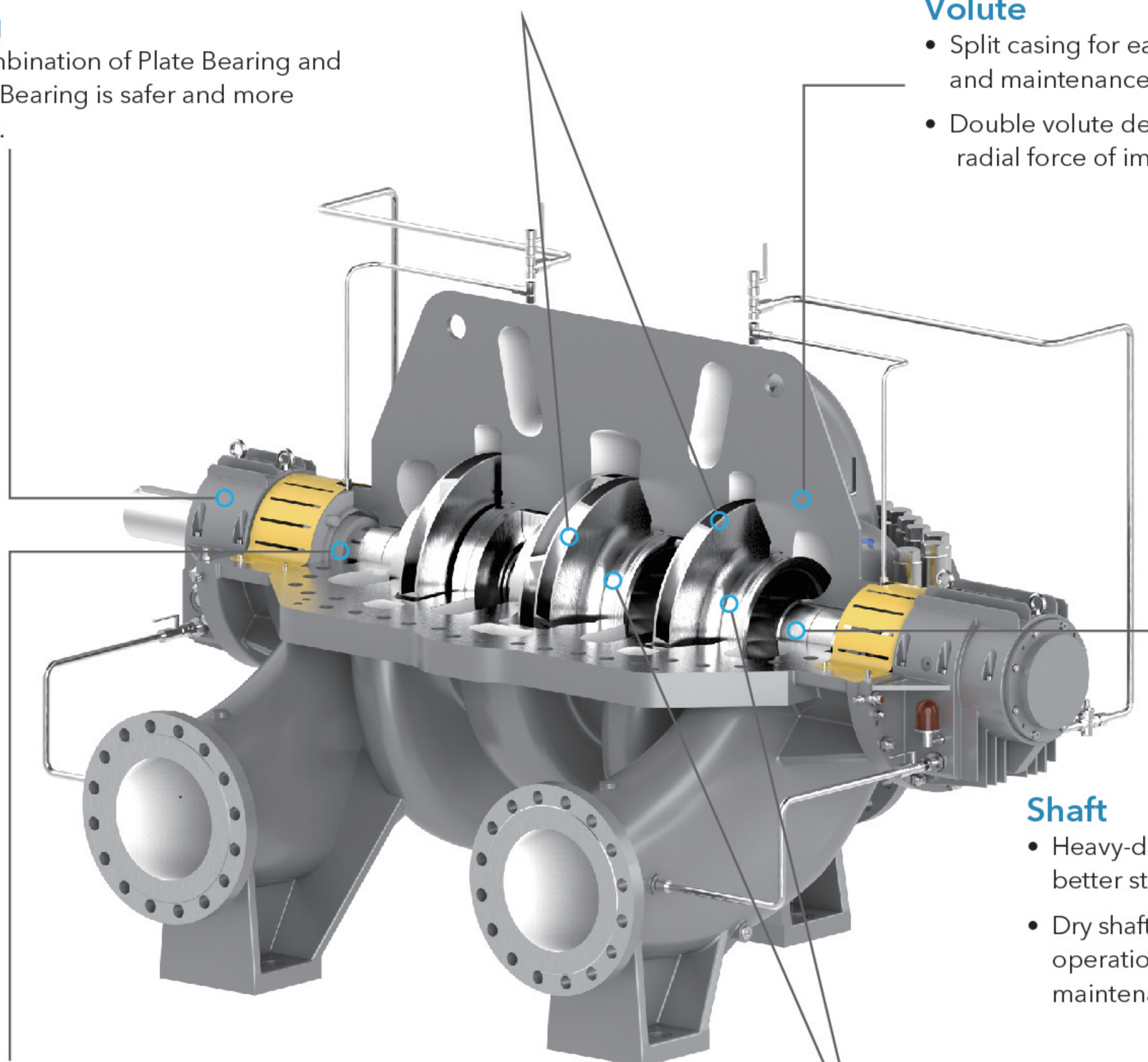
- Symmetrical impeller arrangement can balance axial forces.
- Staggered arrangement of blades reduces pressure pulsation.

Bearing

- The combination of Plate Bearing and Rolling Bearing is safer and more reliable.

Volute

- Split casing for easy installation and maintenance.
- Double volute design, lower radial force of impeller.



Shaft

- Heavy-duty design, better stability.
- Dry shaft design, lower operation and maintenance cost .

Shaft Seal

- Cartridge mechanical seal, better sealing effect and easier disassembly.
- Other sealing types are available.

Wear Ring

- Double wearing rings' structure of volute and impeller, better sealing and wearing resistance, maintain continuous high efficiency.

Material Configuration

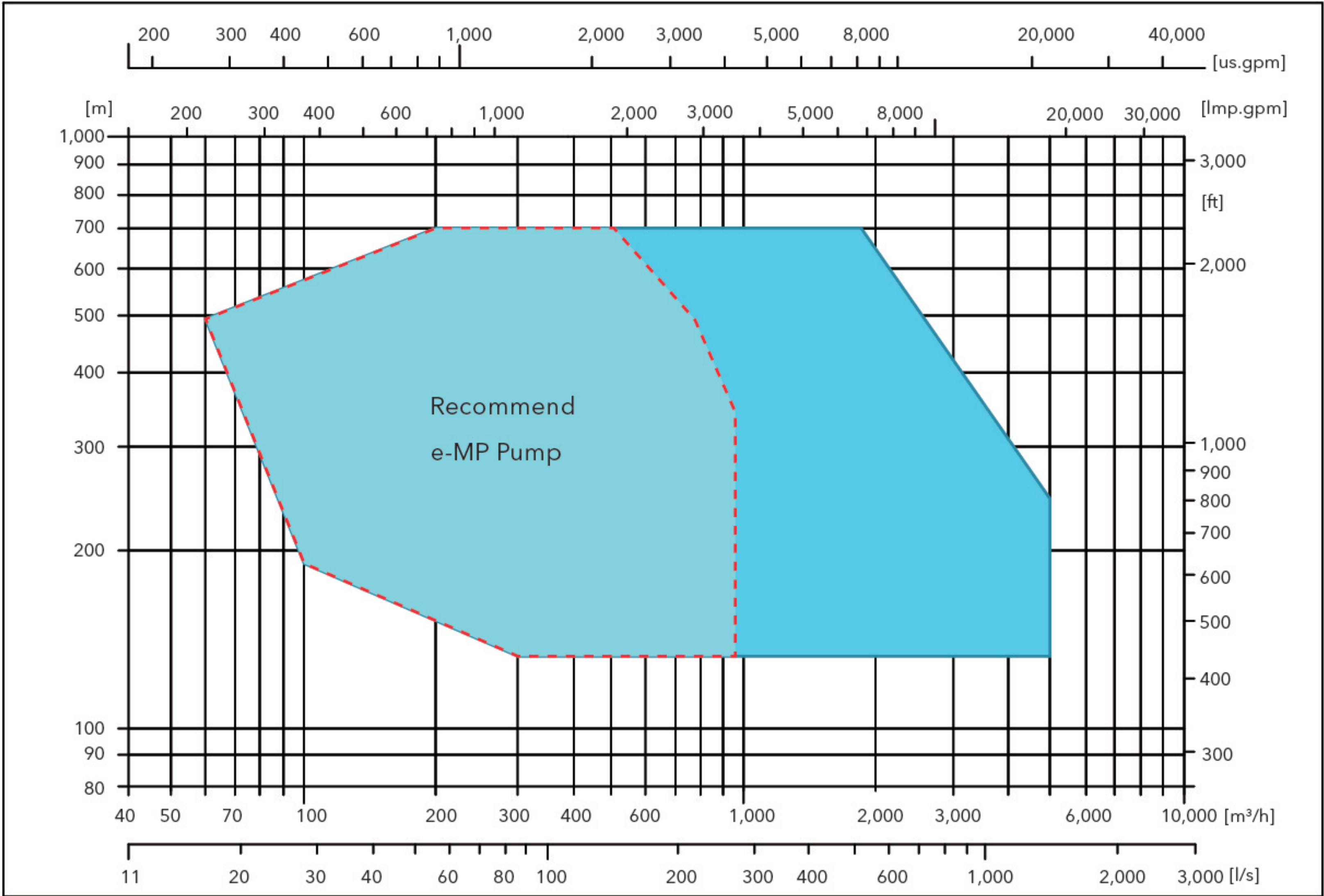
(Material configuration can be customized per request)

Parts	Stainless steel version (water)	Stainless steel version (seawater)	Stainless steel version (seawater optional)
Volute Casing	A216 WCB	A890 Gr 1B	A890 Gr 5A
Impeller	A743 CF-8	A890 Gr 1B	A890 Gr 5A
Shaft	A276 420	A276 S32205	A276 S32750
Wear Ring	A276 420	A276 S32205 / PEEK	A276 S32750 / PEEK
Shaft Sleeve	A276 420	A276 S32205	A276 S32750
Coupling	A29 1045	A29 1045	A29 1045

Parameters Scope

Discharge Diameter: DN 80- DN 450 mm
 Flow: up to 5,000 m³/h
 Head: up to 700 m
 Frequency: 50 HZ, 60 HZ

Selection Chart



For specific parameters, please consult Xylem

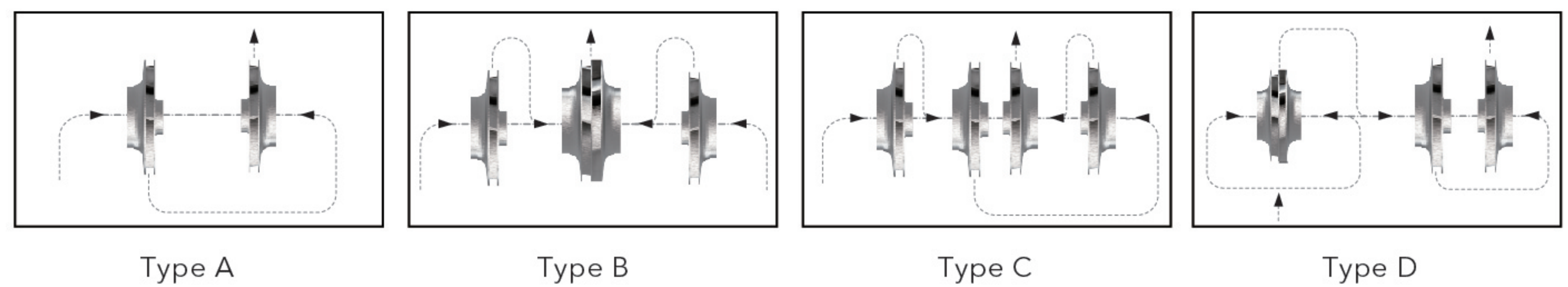
Type Key

Code	Description	Explanation
20	20 inch	Inlet diameter
18	18 inch	Discharge diameter
e-MM	Multi-stage split-case pump	Pump type
A	Type A impeller arrangement	Impeller arrangement type code
620	620 feet head	Head
A	Type A hydraulic model	Hydraulic code (internal use)
2	2 - stage	Number of impeller stages
4	4 - pole	Number of poles
50	50 HZ	Frequency

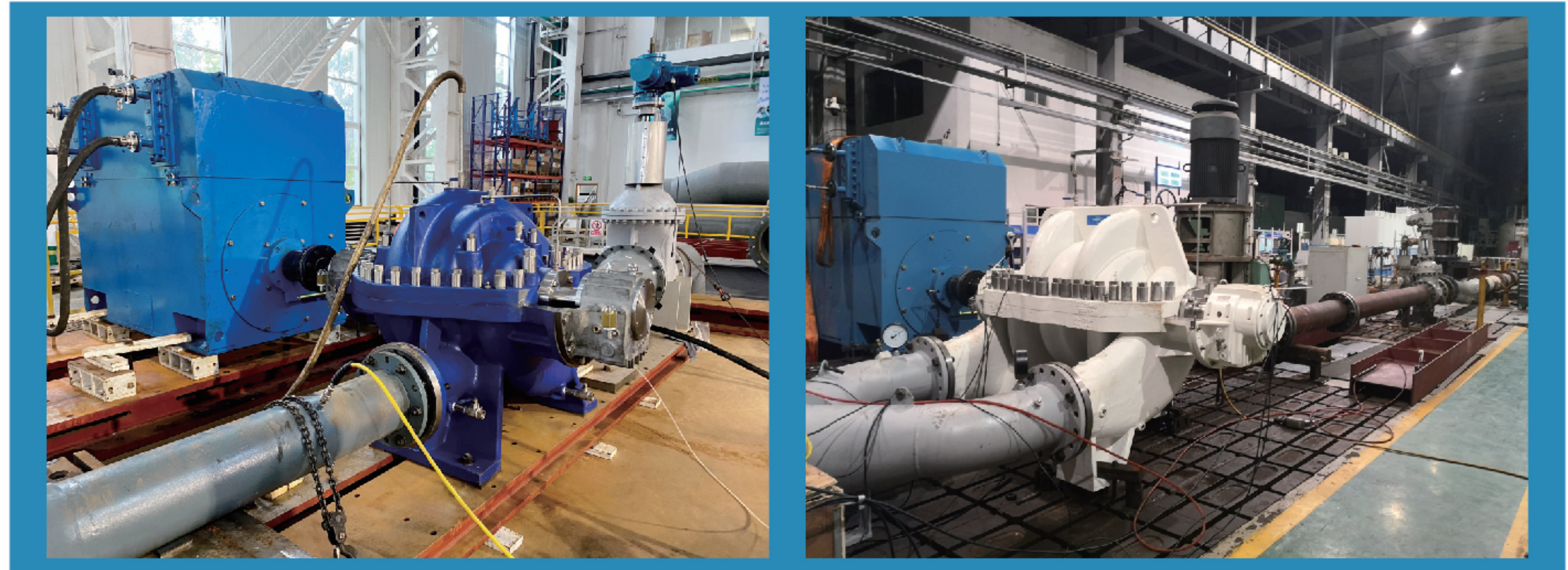
For example: 20 x 18 e-MM.A.620.A.2.4.50

e-MM Multi-stage Split-case Pump, inlet diameter 20-inch, discharge diameter 18-inch, Type A impeller arrangement (single-in-single-out type, back-to-back impeller), rated point head 620 feet, Type A hydraulic model (Internal use), 2 - stage, 4 - pole, 50 HZ.

Impeller Arrangement



Factory Testing



Type A Impeller Arrangement

Type B Impeller Arrangement

The Flygt Advantage



PERFORMANCE TESTING - with excellent testing capabilities, the performance of your pump can be accurately verified before it leaves the factory.

CRITICAL SPEED ANALYSIS - performed on every rotor to ensure that the first critical speed is well above the pump operating speeds.

MECHANICAL DESIGN ANALYSIS - performed on every pump to determine the proper shaft size, bearing spans, wall thickness, bolting sizes & quantities, and other critical design features.

FEA & CFD ANALYSIS - in-house Finite Element Analysis and Computerized Fluid Dynamics analysis are available to ensure that there are no system resonant frequency or hydraulic concerns.

START-UP ANALYSIS - determines the optimal starting sequence between the pump, motor and control valve, and confirms the ability of the drive to start the pump under any number of possible circumstances. Available upon request.

EXPERIENCED CUSTOM DESIGNS - every order is custom designed to match the specific pump configuration, mechanical design, hydraulic requirements and materials of construction dictated by the application and the contract documents.

PUMP QUALITY - all pump components and assemblies are inspected and documented in accordance with Flygt ISO 9000 certified quality program. Any special contract requirements are incorporated into the Inspection and Test Plan developed for each contract.

MODEL TEST DATA - the high efficiency hydraulics for each pump design have been extensively model tested over the full range of impeller diameters/tilts. Model testing in a closed loop system provides accurate measurement of all pump performance characteristics along with NPSHr values, hydraulic thrust values and the development of three quadrant curves (Karman-Knapp curves).

