



**5000147915 PURCHASE OF SUBMERSIBLE SOLIDS HANDLING SEWER
PUMPS FOR JEFFERSON PARISH DEPARTMENT OF SEWERAGE**
Jefferson Parish Government

Project documents obtained from www.CentralBidding.com

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Bid Number 50-00147915

**PURCHASE OF SUBMERSIBLE SOLIDS HANDLING SEWER PUMPS FOR
JEFFERSON PARISH DEPARTMENT OF SEWERAGE**

BID DUE: MAY 30, 2025 AT 11:00 AM

ATTENTION VENDORS!!!

Please review all pages and respond accordingly, complying with all provisions in the technical specifications and Jefferson Parish Instructions for Bidders and General Terms and Conditions. All bids must be received on the Purchasing Department's eProcurement site, www.jeffparishbids.net, by the bid due date and time. Late bids will not be accepted.

**Jefferson Parish Purchasing Department
200 Derbigny Street
General Government Building, Suite 4400
Gretna, LA 70053
Purchasing Specialist: Stacey Champagne
Email: stacey.champagne@jeffparish.gov
Phone: 504-364-2688**

JEFFERSON PARISH
DEPARTMENT OF SEWERAGE
PURCHASE OF SUBMERSIBLE SOLIDS HANDLING SEWER PUMPS
LIFT STATION IRIS & JEFFERSON HWY.

PART 1 - GENERAL

1.01 GENERAL

- A. Vendor shall bid on supplying three (3) Flygt NP3127, 7.5 HP, or approved equal, submersible solids-handling pump with integral electric submersible motor. The pump shall fit the existing rail system, utilizing a metal to metal seat, and fit the existing hatch opening for the sewer lift station, with no modifications. The pump must match the hydraulic performance limits listed in these specifications. The pumps shall be provided by a factory authorized Flygt agent for Jefferson Parish, Louisiana, or for the brand they are bidding. Any bids submitted for pump manufacturers, other than as specified, must include in their bid all information needed to fully demonstrate complete compliance with the requirements of this specification and dimensional duplicity of the Flygt pumps. At the option of Jefferson Parish, the pumps shall be tested and certified test reports provided in accordance with this specification. The bid will be awarded to the lowest responsible bidder complying with all provisions of this invitation, providing the bid is reasonable, and in the best interest of Jefferson Parish. Jefferson Parish reserves the right to accept or reject the bid in whole or in part, any bids that are incomplete or do not provide the required information in order to show compliance with the specifications. It is the bidder's responsibility to provide adequate information necessary for the complete evaluation of proposed equipment at the time of bid. Jefferson Parish shall be the sole judge as to the equality of any alternate manufacturer's offering.

1.02 QUALITY ASSURANCE

A. Manufacturer's Qualifications

1. All equipment approved for this project shall meet or exceed all performance, service, and warranty requirements of this specification.
2. The solid-handling pumps shall be suitable for domestic sewage, pre-treatment plant effluent, and possible storm water and shall be designed and fully guaranteed for this use. The fluid temperature range shall be from 40 degrees to 104 degrees F.

1.03 TESTING

A. General

Each pump shall be shop tested and field tested as specified hereinafter. All costs for the tests shall be borne by the Bidder. In the event any equipment fails to meet the performance values set forth in this specification, the equipment shall be modified and re-tested or replaced with equipment that performs in accordance with this specification.

B. Shop Tests

Each pump and motor shall be performance tested as specified hereinafter; all pumps shall be tested with motor cable to be supplied with the pumps. If required, three copies of certified test reports, including actual test records, shall be submitted and approved by the Engineer prior to shipment of the equipment.

Each pump shall be tested for performance at the factory to determine the head vs. capacity, motor total electrical power draw (KVA), and motor active electrical power draw (KW) for the full speed at which the pumps are specified and shown on a performance test curve, certified by a registered professional engineer, as continuous functions throughout the pump's performance range. Tests of models, prototypes or similar units will not be acceptable.

The motor and cable on each pump shall be tested for moisture content or insulation defects. After the test, the pump cable end shall be fitted with a shrink-fit rubber boot to protect it from moisture or water.

C. Field Tests

Equipment shall be field tested as specified hereinafter. Field testing shall be composed of preliminary tests and acceptance tests. The Bidder shall provide the services of authorized equipment supplier's representatives to conduct all field tests.

1. Preliminary tests shall be run on all pumps, motors, and control systems to demonstrate that they are in proper working order.
2. Acceptance tests shall be run to demonstrate that the pumping units, motors and control system meet the following requirements:
 - a. The pumping units operate as specified without excessive noise, cavitation, vibration, and without overheating of the bearings.
 - b. All automatic and manual controls function in accordance with the specified requirements.

1.04 SUBMITTALS

- A. Furnish complete assembly, foundation support, and installation drawings, together with detailed specifications and data covering pumps, motors, material used, parts, devices and other accessories forming a part of the

equipment furnished shall be submitted for approval in accordance with the procedure set forth in the General Conditions.

Data and specifications for the equipment shall include, but shall not be limited to the following:

a. Setting Plans. Setting plans shall include:

1. Anchor bolt layout
2. Anchor bolt dimensions
3. Outline dimensions and weights of pumps, bases, motors, and control enclosures.

b. Pumps. Data and drawings shall include:

1. Manufacturer, type and model number.
2. Assembly drawing, nomenclature and material list, O&M manual, and parts list.
3. Type, manufacturer, model numbers, location and spacing of bearings.
4. Impeller type, diameter, thru-let dimensions, shredder size, number of vanes and identification number.
5. Complete motor performance data including: rating, voltage/phase/frequency; design type; service factor; insulation class; motor pole number; actual rotation speed when combined with the specified pumps; current, power factor and active input power (KW) as a continuous function of shaft power from no load to at least 115 percent load, start (max. inrush) current; locked rotor current; NEC code letter; and

motor torque as a continuous function through the motor start cycle from no rotation to synchronous speed.

6. Complete performance test curve(s) showing full range (shutoff to run-out) head vs. Capacity, NPSHR, hydraulic efficiency, motor active (KW) input power, motor total (KVA) input power (Based on measured current and voltage), and shaft power (BHP). See Section 1.03 Shop Tests.
7. Location and description of Service Centers and spare parts stock.
8. Warranty for the proposed equipment.

The manufacturer shall indicate, by arrows to points on the Q/H curves, limits recommended for stable operation, between which the pumps are to be operated to prevent surging, cavitation, and vibration. The stable operating range shall be as large as possible, and shall be based on actual hydraulic and mechanical characteristics of the units and shall meet the hydraulic performance requirements of the proposed system.

- B. Furnish shop drawings and other pertinent data to the Department of Sewerage and obtain their approval before fabrication. The drawings shall be complete with respect to dimensions, materials of construction, wiring diagrams, and all supporting engineering information.
- C. At least one month before installation of this work, submit four (4) copies of operation and maintenance instructions to the Department of Sewerage.

PART 2 - PRODUCTS

2.01 Solids-Handling Pumps with Electric Submersible Motors

- A. Each pump shall be equipped with radiant cooling submersible electric motors connected for operation on 230/460 volts, 3 phase, 60 hertz, and 4-wire service. Pumps shall be furnished with 65 feet of submersible shielded cable suitable for submersible pump applications. The power cable shall be sized according to NEC and ICEA standards and meet with P-MSHA Approval.
- 1. Acceptable Manufacturers will be those who meet or exceed all performance, material, warranty and service requirements of these specifications

2.02 PUMP DESIGN

- A. The pumps for this application shall be designed to operate in a fully submerged configuration without the need for an external cooling source. The motors and cable entry system shall be capable of complete submergence and capable of handling a liquid temperature of at least 104 degrees F.

2.03 PUMP CONSTRUCTION

- A. Major pump components shall be of gray cast iron, ASTM A-48, Class 35B, with smooth surfaces devoid of blow holes or other casting irregularities. Higher density cast irons (Class 40 and above) with reduced vibration dampening capacity, will not be acceptable for pump driver castings, such as stator and bearing housings. All exposed nuts or bolts shall be AISI type 316 stainless steel. All metal surfaces coming into contact with the pumped media, other than stainless steel and/or brass, shall be protected by a factory-applied spray coating of acrylic dispersion zinc phosphate primer with a polyester resin paint finish on the exterior of the pump.

Sealing design shall incorporate metal-to-metal contact between machined surfaces. Pump/Motor unit mating surfaces where watertight sealing is required shall be machined and fitted with Nitrile or Viton Rubber O-rings. Joint sealing will be the result of controlled compression of rubber O-rings in two planes and O-ring contact of four sides without the requirement of a specific bolt torque limit.

Rectangular cross sectioned gaskets that require specific torque limits to achieve compression shall not be considered as adequate or equal. No secondary sealing compounds, elliptical O-rings, grease or other devices shall be used.

2.04 COOLING SYSTEM

- A. Each unit shall be provided with an adequately designed integral cooling system that allows up to 30 motor starts per hour with a partially-submerged motor on a continuous basis in an ambient 104 degree F environment, and in a standard available version, with no damage to motor windings, bearings, or drive shaft seals. The pump supplied under this specification shall be suitable for continuous operation; under, partially submerged conditions. The cooling system shall be a radiant heat sink type system integral to the stator housing, providing for dissipation of motor heat, regardless of the type of pump installation.

2.05 CABLE ENTRY SEAL

- A. The cable entry seal design shall provide strain relief and preclude specific torque requirements to insure a watertight and submersible seal. The cable entry shall consist of at least one elastomer grommet, flanked by washers, all having a close tolerance fit against the cable outside diameter and the cable entry inside diameter and compressed by the body containing a strain relief function, separate from the function of sealing the cable. The assembly shall provide ease of changing the cable when necessary using the same

entry seal. Epoxies, silicones, or other secondary sealing systems shall not be considered acceptable.

The cable junction chamber shall be sealed off from the stator housing and shall allow connection of the motor leads to the power cable in an isolated sealing chamber

2.06 MOTOR

- A. Each pump shall be driven by a vertical, submersible squirrel cage induction motor, shell type NEMA B design, housed in a dry watertight chamber. Oil filled motor designs will not be accepted. The motor and the pump shall be produced by the same manufacturer.

The stator winding shall be insulated with moisture resistant Class H insulation, rated for a temperature of 180°C. The stator shall be insulated by the trickle impregnation method using Class H monomer-free polyester resin, resulting in a winding fill factor of at least 95%. The stator shall be heat shrink fitted into the cast iron stator housing. The use of multiple step dip and bake type stator insulation process is not acceptable. The use of bolts, pins, screws, or other fastening devices used to locate or hold the stator and that penetrate the stator housing shall be rejected. The motor shall be designed for continuous duty, while handling pumped media of up to 104 degrees F. The motor shall be capable of withstanding at least 30 evenly spaced starts per hour. The rotor bars and short circuit rings shall be made of aluminum.

Three thermal switches shall be embedded in the stator end coils, one per phase winding, to monitor the stator temperature. These thermal switches shall be used in conjunction with, and supplemental to, external motor overload protection, and shall be connected to the motor control panel.

The motor service factor (combined effect of voltage, frequency, viscosity, and specific gravity) shall be 1.15. The motor shall have a voltage tolerance of plus or minus 10%. The motor shall be designed for continuous operation in a 40°C ambient environment and shall have a NEMA Class B maximum operating temperature rise of 80°C. A motor performance curve shall be provided upon request, showing torque as a function of speed, and current, power factor, speed, input power in KW, and efficiency as a function of shaft power.

The motor shall be sized to be non-overloading when the pump is operated at any point on the pump performance characteristic curve.

Pump and motor shaft shall be a solid continuous unit. The pump shaft is an extension of the motor shaft. Couplings and shafts incorporating sleeves shall not be acceptable. The pump shaft shall be completely isolated from the pumped liquid.

Pump motor power cables installed shall be oil resistant chloroprene rubber jacketed, type SPC multi-conductor cable, suitable for submersible pump applications and heavy mechanical stresses. The power cable shall also be sized according to NEC and ICEA standards and also have P-MSHA approval. The total length of each cable shall be a minimum of 65 feet long. Power cables shall each include a ground check conductor.

2.07 BEARINGS

- A. The integrated pump/motor shaft shall rotate on two (2) sealed and permanently lubricated bearings. External bearing lubrication ports, which allow bearing contamination and over-packing, will not be allowed. The upper bearing, providing for radial thrust, shall be a single row, roller or ball bearing. The lower bearing shall consist of one double row angular contact bearing for combined axial and radial loads. The minimum L_{10} bearing life shall be 50,000 hours at any usable portion of the pump curve.

2.08 MECHANICAL SEAL

- A. Each pump shall be provided with dual tandem mechanical shaft seal system comprising two totally independent seal assemblies. The seals shall operate in a seal lubricant buffer chamber that hydro-dynamically lubricates the lapped seal faces at a constant rate. The inner seal, located between the lubricant buffer chamber and the stator housing, shall contain one stationary and one positively driven rotating ring, functioning as an independent secondary barrier between the pumped liquid and the stator housing. Both inner seal faces shall be corrosion resistant Tungsten Carbide (WCCR). The outer of the tandem set of seals functions as the primary barrier between the pumped liquid and the stator housing. This set shall consist of a stationary ring and a positively driven rotating ring, both of which shall be corrosion resistant WCCR.

Each interface shall be held in contact by its own spring system supplemented by external liquid pressures. The seals shall require neither maintenance nor adjustment, but shall be easily inspected and replaceable. The lower (outer) seal shall not bear on the impeller and shall remain fixed upon impeller removal.

Upon request of the Department of Sewerage (as a Submittal or Pre-Submittal requirement for equipment acceptance on this project), the pump manufacturer shall provide dry run/leakage test procedures and data for the specific pump shaft seal system on pumps proposed for this project.

Shaft seals without positively driven rotating members, or conventional double mechanical seals with a common single or double spring acting between the upper and lower units requiring a substantial pressure differential to offset external pressure and effect sealing, shall not be considered acceptable nor equal to the dual independent seal system specified. Cartridge-type seals comprising a single rotating element sandwiched between dual

stationary elements will not be considered a dual tandem seal system and will not be accepted. Seals shall not be of the uni-directional type, but capable of dual rotation with no damage. The shaft sealing system shall be capable of withstanding volute pressures up to 1.5 times pump shutoff head. No seal damage shall result from operating the pumping unit in its liquid environment, from running pump dry, or from reverse pump operation. The seal system shall not rely upon the pumped media for lubrication.

Each pump shall be provided with a seal buffer chamber containing FDA-approved, non-toxic lubricant for the shaft sealing system. Petroleum-based oil in the buffer chamber will not be accepted. The buffer chamber shall be designed to ensure that air is left in the buffer chamber to absorb the expansion of the lubricant due to temperature variations. The drain and inspection plug, with positive anti-leak seal, shall be easily accessible from the outside.

2.09 PUMP SHAFT

- A. The pump and motor shaft shall be a single piece unit. The pump shaft is an extension of the motor shaft. Shafts using mechanical couplings shall not be acceptable. The shaft shall be stainless steel – ASTM A479 S43100-T. Shaft sleeves will not be acceptable.

2.10 IMPELLER

- A. The impeller shall be of Hi-Chrome Iron, ASTM A532 (Alloy III A) 25% dynamically balanced, semi-open, multi-vane, back swept, screw-shaped, non-clog design. The impeller leading edges shall be mechanically self-cleaned automatically upon each rotation as they pass across a spiral groove located on the volute suction. The screw-shaped leading edges of the impeller shall be capable of handling solids, fibrous materials, heavy sludge and other matter normally found in back wash water. The impeller to volute clearance shall be readily adjustable by the means of a single trim screw. The

impeller shall be adaptive and shall be capable of moving vertically upward along the shaft. The Impeller shall be locked to the shaft, held by an impeller bolt and treated with a corrosion inhibitor. The design as stated above shall be used, with a Brinell hardness of at least 500.

Mass moment of inertia calculations of the rotating assembly shall be provided by the pump manufacturer upon request.

2.11 VOLUTE

- A. The pump volute shall be a single piece gray cast iron, ASTM A-48, Class 35B, non-concentric design with smooth passages of sufficient size to pass any solids that may enter the impeller. Minimum discharge size shall be 10". The volute shall have an integral spiral-shaped, sharp-edged insert ring that is pressed into the suction cover of the volute. The spiral groove(s) of the insert ring shall provide the sharp edge(s) across which each impeller vane leading edge shall cross during rotation so to remain unobstructed. The insert ring shall provide effective sealing between the multi-vane semi-open impeller and the volute. It shall be constructed of ASTM A532 (Alloy III A) 25% – Hi-Chrome Iron.

2.12 PROTECTION

- A. All stators shall incorporate thermal switches in series to monitor the temperature of each phase winding. At 140°C the thermal switches shall open, stop the motor and activate an alarm.

THE USE OF VOLTAGE SENSITIVE SOLID STATE SENSORS AND TRIP TEMPERATURE ABOVE 140°C SHALL NOT BE ALLOWED.

- B. Each pump/motor unit shall be provided with a stator leakage sensor that will sense water intrusion into the motor housing in the event of seal failure or cable entry failure.

PART 3 - SERVICE AND WARRANTY

3.01 SERVICE

- A. The bidder shall be the Authorized Distributor and Authorized Factory Service Center of the proposed products and shall be capable of servicing the products with repair service within 5 hours of the Notice to Proceed. The bidder must own and operate a direct factory service center and stocking facility capable of completely supplying spare parts for the proposed pumps within one (1) hour of Jefferson Parish. The bidder's factory service center/stocking facility shall be available for Jefferson Parish inspection with a twenty-four (24) hour prior notice. The bidders service center must have full-time, factory-trained mechanics capable of and certified to service the proposed equipment.

3.02 WARRANTY

- A. The pump manufacturer shall provide a written prorated warranty for the units supplied to the Department of Sewerage against defects in material and workmanship for a period of at least five (5) years or 10,000 operating hours under the operating conditions presented by this project, in accordance with their standard published Municipal Pump Warranty. Pump manufacturers shall demonstrate the ability to support claimed warranty coverage by meeting all requirements of this specification.

STANDARD INSURANCE REQUIREMENTS FOR BIDDING PURPOSES

All required insurance under this bid shall conform to Jefferson Parish Resolution No. 136353 or No. 141125, as applicable. Contractors may not commence any work under any ensuing contract unless and until all required insurance and associated evidentiary requirements thereto have been met, along with any additional specifications contained in the **Invitation to Bid**. Except as where otherwise precluded by law, the Parish Attorney or her designee, with the concurrence of the Director of Risk Management or her designee, may agree on a case-by-case basis, to deviate from Jefferson Parish's standard insurance requirements, as provided in this Section. **Vendors requesting deviation therefrom shall submit such requests in writing, along with compelling substantiation, to the Purchasing Department prior to the bid's due date.** Any changes to the insurance requirements will be reflected in the bid specifications and addenda. Prior to contract execution and at all times thereafter during the term of such contract, contractors must provide and continuously maintain all coverages as required by the foregoing Resolutions, and the contract documents. Failure to do so shall be grounds for suspension, discontinuation or termination of the contract.

Within ten (10) days of bid opening, the apparent low bidder will be required to provide final insurance certificates to the Parish which shall name the Parish of Jefferson, its Districts Departments and Agencies under the direction of the Parish President and the Parish Council as additional insured on the Commercial General Liability, and the Comprehensive Automobile Liability policies to protect against negligence by the contractor as provided by contract. Failure to provide your certificate of insurance within the ten (10) days, shall result in the Parish rejecting your bid and moving on to the next lowest bidder. Additionally, said certificates should reflect the name of the Parish Department receiving goods and services and reference the respective Jefferson Parish bid number.

JEFFERSON PARISH REQUIRED STANDARD INSURANCE

☒ WORKER'S COMPENSATION INSURANCE

As required by Worker's Compensation Law of the State of the Contractor's headquarters. Employer's Liability is included, with minimum limits of \$500,000 per occurrence, except it shall be \$1,000,000 per occurrence when Work is to be overwater and involves maritime exposures to cover all employees not covered under the State Worker's Compensation Act.

Waiver of Subrogation endorsement in favor of the Parish of Jefferson, its Districts Departments and Agencies under the direction of the Parish President and the Parish Council.

Note: If your company is not required by law to carry worker's compensation insurance, i.e. sole employee of the company, then bidders must request a

worker's compensation insurance declaration affidavit prior to the bid opening date. This insurance declaration affidavit must be fully completed, signed, properly notarized within ten (10) days of the bid opening. A scanned copy may be submitted initially; however, the successful bidder must submit the original affidavit in its original format and without material alteration upon contract execution. Failure to comply will result in the bid submission being rejected as non-responsive. The Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event.

☒ **COMMERCIAL GENERAL LIABILITY**

Commercial General Liability Form CG 00 01, or pre-approved equivalent; Minimal acceptable limits: \$1,000,000 per occurrence; \$1,000,000 personal & advertising injury; \$2,000,000 general aggregate; and \$2,000,000 products/completed operations aggregate.

Waiver of Transfer of Rights of Recovery Against Others endorsement in favor of the Parish of Jefferson, its Districts, Departments, Agencies and Employees under the direction of the Parish President and the Parish Council.

☒ **BUSINESS AUTOMOBILE LIABILITY**

Minimal acceptable limit for bodily injury and property damage liability: \$1,000,000 Combined Single Limit.

Liability coverage to be provided for Any Auto OR for ALL Owned Autos and Hired and Non-owned Autos. **If contractor owns no vehicles, then a Hired and Non-owned Auto Liability policy is required.**

Waiver of Transfer of Rights of Recovery Against Others to Us endorsement in favor of the Parish of Jefferson, its Districts, Departments, Agencies and Employees under the direction of the Parish President and the Parish Council.

Note: This category may be omitted if bidders do not/will not utilize vehicles for the project AS DETERMINED BY Risk Management and Parish Attorney's Office after properly requesting a deviation as discussed above. Bidder must request a deviation prior to bid opening and may be given an automobile insurance declaration affidavit to execute. This insurance declaration affidavit must be fully completed, signed, properly notarized and submitted within ten (10) days of the bid opening. A scanned copy of the completed, signed and properly notarized affidavit may be submitted initially; however, the successful bidder must submit the original affidavit in its original format and without material alteration upon contract execution. Failure to comply will result in the bid submission being rejected as non-responsive. The Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event.

DEDUCTIBLES - The Parish Attorney with concurrence of the Director of Risk Management have waived the deductible section of the Terms and Conditions for all Invitations to Bid, until further notice.

UMBRELLA LIABILITY COVERAGE - An umbrella policy or excess may be used to meet minimum requirements. If you are purporting to use an umbrella policy or excess to meet minimum requirements, then you must provide the Umbrella Schedule of Underlying Policies with the Certificate of Insurance evidencing which policies the Umbrella sits over.

FOR CONSTRUCTION AND RENOVATION PROJECTS: The following are required if selected below. Such insurance is due upon contract execution.

☐ **OWNER'S PROTECTIVE LIABILITY**

To be for the same limits of liability for bodily injury and property damage liability established for commercial general liability.

☐ **BUILDER'S RISK INSURANCE**

The contractor shall maintain Builder's Risk Insurance at his own expense to insure both the owner (Parish of Jefferson) and contractor as their interest may appear.

DATE: 5/27/2025

INVITATION TO BID
THIS IS NOT AN ORDER

Page: 1

BID NO.: 50-00147915

JEFFERSON PARISH

PURCHASING DEPARTMENT
P.O. BOX 9
GRETNA, LA. 70054-0009
504-364-2678

VENDOR: 27118 BLANK BID COPY VENDOR

PURCHASING SPECIALIST:
SCHAMPAGNE@jeffparish.net

Bids will be received until 11:00 AM, 5/30/2025

LATE BIDS WILL NOT BE ACCEPTED

NOTE: ONLY BIDS WRITTEN IN INK OR TYPEWRITTEN, AND PROPERLY SIGNED BY A MEMBER OF THE FIRM OR AUTHORIZED REPRESENTATIVE, WILL BE ACCEPTED. PENCIL AND/OR PHOTOSTATIC FIGURES OR SIGNATURES SHALL RESULT IN BID REJECTION. HOWEVER, ELECTRONIC SIGNATURES AS DEFINED IN LSA - R.S. 9:2602(8) ARE ACCEPTABLE. SIGNATURE MUST BE A SECURED DIGITAL SIGNATURE AND MUST PROVIDE PROOF OF THE SECURED SIGNATURE WITH BID SUBMISSION.

All bids submitted are subject to these instructions and general conditions and any special conditions and specifications contained herein, all of which are made part of this bid proposal reference. By submitting a bid, vendor agrees to comply with all provisions of Louisiana Law, as well be in compliance with the Jefferson Parish Code of Ordinances, Louisiana Code of Ethics, applicable Jefferson Parish ethical standards and Jefferson Parish Resolution No. 136353 as amended. A copy of these resolutions may be obtained from the Office of the Parish Clerk, Suite 6700, Jefferson Parish General Government Building, 200 Derbigny Street, Gretna, LA 70053. You may also obtain a copy by visiting the Purchasing Department webpage at <http://www.jeffparish.gov/464/Purchasing> and clicking on On-line forms.

All vendors submitting bids should register as a Jefferson Parish vendor if not already yet registered. Registration forms may be downloaded from <http://www.jeffparish.gov/464/Purchasing> and by clicking on Vendor Information. Current W-9 forms with respective Tax Identification numbers and vendor applications may be submitted at any time; however, if your company is not registered and/or a current W-9 form is not on file, vendor registration is mandatory. Vendors may experience a delay in payment if your company is not a registered vendor with Jefferson Parish.

Jefferson Parish is exempt from paying sales tax under LSA-R.S. 47:301 (8)(c). All prices for purchases by Jefferson Parish of supplies and materials shall be quoted in the unit of measure specified and unless otherwise specified, shall be exclusive of state and local taxes. The price quoted for work shall be stated in figures no more than four (4) decimal points. In the event there is a difference in unit prices and totals, the unit price shall prevail. Quotations shall be based on F.O.B. Delivered, anywhere within the Parish as designated by the Purchasing Department. JEFFERSON PARISH WILL ACCEPT ONE BID ONLY FROM EACH VENDOR. Items bid must meet specifications. JEFFERSON PARISH will accept one price for each item unless otherwise indicated. Two or more prices for one item will result in bid rejection. Bidders are required to complete, sign and return the bid form and/or complete and return the associated line item pricing forms as indicated. The price quoted for work shall be stated in figures. In the event there is a difference in unit prices and totals, the unit prices shall prevail.

JEFFERSON PARISH reserves the right to award contracts or place orders on a lump sum or individual item basis, or such combination, as shall in its judgment be in the best interest of JEFFERSON PARISH. Every contract or order shall be awarded to the LOWEST RESPONSIVE and RESPONSIBLE BIDDER, taking into consideration the CONFORMITY WITH THE SPECIFICATIONS and the DELIVERY AND/OR COMPLETION DATE.

PROTESTS: Only those vendors that submit bids in response to this solicitation may protest any element of the procurement, in writing to the Director of the Purchasing Department. Written protest must be received within 48 hours of the release of the bid tabulation by the Purchasing Department. After consultation, the Parish Attorney's Office will then respond to protests in writing. (For more information, please see Chapter 2, Article VII, Division 2, Sec. 2-914.1 of the Jefferson Parish Code of Ordinances.)

JEFFERSON PARISH reserves the right to cancel all or any part of an order if not shipped promptly. No charges will be allowed for parking or cartage unless specified in the quotation. The order must not be filled at a higher price than quoted. JEFFERSON PARISH reserves the right to cancel at any time and for any reason by issuing a THIRTY (30) day written notice to the contractor.

JEFFERSON PARISH requires all products to be new (current) and all work must be performed according to standard practices for the project. Unless otherwise specified, no aftermarket parts will be accepted. Unless otherwise specified, all workmanship and materials must have at least one (1) year guaranty, in writing, from the date of delivery and/or acceptance of the project. Any deviations or alteration from the specifications must be indicated on the bid form for each item and upon request, product data for same must be submitted by the time specified by the Purchasing Department.

If this bid requires a pre-bid conference (see Additional Requirements section), bidders are advised that such conference will be held to allow bidders the opportunity to identify any discrepancies in the bid specifications and seek further clarification regarding instructions. The Purchasing Department will issue a written response to bidders' questions in the form of an Addendum.

All formal Addenda require written acknowledgment on the bid form by the bidder by the bidder placing the Addendum number in the appropriate section. Failure to acknowledge an Addendum on the bid form shall cause the bid to be rejected; JEFFERSON PARISH reserves the right to award bid to next lowest responsive and responsible bidder in this event.

USE OF BRAND NAMES AND STOCK NUMBERS: Where brand names and stock numbers are specified, it is for the purpose of establishing certain minimum standards of quality. Bids may be submitted for products of equal quality, provided brand names and stock numbers are specified. Complete product data may be required prior to award.

Quantities listed are for bidding purposes only. Actual requirements may be more or less than quantities listed.

INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

Cyber Security Training: Pursuant to La. R.S. 42:1267, any contractor who has access to state or local government information technology assets is required to complete cybersecurity training during the term of the contract and during any renewal period. As a Parish contractor, you are responsible for taking the cyber training, whether from the State or another source. After completion of said training please forward proof to your contract monitor/Parish contact.

Bidders are not to exclude from participation in, deny the benefits of, or subject to discrimination under any program or activity, any person in the United States on the grounds of race, color, national origin, or sex; nor discriminate on the basis of age under the Age Discrimination Act of 1975, or with respect to an otherwise qualified handicapped individual as provided in Section 504 of the Rehabilitation Act of 1973, or on the basis of religion, except that any exemption from such prohibition against discrimination on the basis of religion as provided in the Civil Rights Act of 1964, or Title VI and VII of the Act of April 11, 1968, shall also apply. This assurance includes compliance with the administrative requirements of the Revenue Sharing final handicapped discrimination provisions contained in Section 51.55 (c), (d), (e), and (k)(5) of the Regulations. New construction or renovation projects must comply with Section 504 of the 1973 Rehabilitation Act, as amended, in accordance with the American National Standard Institute's specifications (ANSI A117.1-1961).

Jefferson Parish and its partners as the recipients of federal funds are fully committed to awarding a contract(s) to firm(s) that will provide high quality services and that are dedicated to diversity and to containing costs. Thus, Jefferson Parish strongly encourages the involvement of minority and/or woman-owned business enterprises (DBE's, including MBE's, WBE's and SBE's) to stimulate participation in procurement and assistance programs.

It shall be the duty of every parish officer, employee, department, agency, special district, board, and commission; and the duty of every contractor, subcontractor, and licensee of the parish, and the duty of every applicant for certification of eligibility for a parish contract or program, to cooperate with the Inspector General in any investigation, audit, inspection, performance review, or hearing pursuant to Jefferson Parish Code of Ordinances Section 2-155.10(19). By submitting a bid, vendor acknowledges this and will abide by all provisions of the referenced Jefferson Parish Code of Ordinances.

IN ACCORDANCE WITH STATE REGULATIONS JEFFERSON PARISH OFFERS ELECTRONIC PROCUREMENT TO ALL VENDORS

This electronic procurement system allows vendors the convenience of reviewing and submitting bids online. This is a secure site and authorized personnel have limited read access only. Bidders are to submit electronically using this free service; while the website accepts various file types, one single PDF file containing all appropriate and required bid documents is preferred. Bidders submitting uploaded images of bid responses are solely responsible for clarity. If uploaded images/documents are not legible, then bidder's submission will be rejected. Please note all requirements contained in this bid package for electronic bid submission.

Please visit our E-Procurement Page at www.jeffparishbids.net to register and view Jefferson Parish solicitations. For more information, please visit the Purchasing Department page at <http://www.jeffparish.gov/464/Purchasing>.

ADDITIONAL REQUIREMENTS FOR THIS BID

PLEASE MATCH THE NUMBERS PRINTED IN THIS BOX WITH THE CORRESPONDING INSTRUCTIONS BELOW. IF THE NUMBER IS NOT SPECIFIED IN THIS BOX, IT IS NOT APPLICABLE FOR THIS BID.

10,13

1. All bidders must attend the MANDATORY pre-bid conference and will be required to sign in and out as evidence of attendance. In accordance with LSA R.S. 38:2212(I), all prospective bidders shall be present at the beginning of the MANDATORY pre-bid conference and shall remain in attendance for the duration of the conference. Any prospective bidder who fails to attend the conference or remain for the duration shall be prohibited from submitting a bid for the project.
2. Attendance to this pre-bid conference is optional. However, failure to attend the pre-bid conference shall not relieve the bidder of responsibility for information discussed at the conference. Furthermore, failure to attend the pre-bid conference and inspection does not relieve the successful bidder from the necessity of furnishing materials or performing any work that may be required to complete the work in accordance with the specification with no additional cost to the owner.
3. Contractor must hold current applicable JEFFERSON PARISH licenses with the Department of Building Permits. Contractor shall obtain any and all permits required by the JEFFERSON PARISH Department of Building Permits. The contractor shall be responsible for the payment of these permits. All permits must be obtained prior to the start of the project. Contractor must also hold any and all applicable Federal and State licenses. Contractor shall be responsible for the payment of these permits and shall obtain them prior to the start of the project.

INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

4. A LA State Contractor's License will be required in accordance with L.R.S. 37:2150 et. seq. and such license number must be entered in the appropriate field in the electronic procurement system. Failure to comply will cause the bid to be rejected.
5. It is the bidder's responsibility to visit the job site and evaluate the job before submitting a bid.
6. Job site must be clean and free of all litter and debris daily and upon completion of the contract. Passageways must be kept clean and free of material, equipment, and debris at all times. Flammable material must be removed from the job site daily because storage will not be permitted on the premises. Precaution must be exercised at all times to safeguard the welfare of JEFFERSON PARISH and the general public.
7. PUBLIC WORKS BIDS: All awards for public works in excess of \$5,000.00 will be reduced to a formal contract which shall be recorded at the contractor's expense with the Clerk of Court and Ex-Officio Recorder of Mortgages for the Parish of Jefferson. A price list of recordation costs may be obtained from the Clerk of Court and Ex-Officio Recorder of Mortgages for the Parish of Jefferson. All awards in excess of \$25,000.00 will require both a performance and a payment bond. Unless otherwise stated in the bid specifications, the performance bond requirements shall be 100% of the contract price. Unless otherwise state in the bid specifications, the payment bond requirements shall be 100% of the contract price. Both bonds shall be supplied at the signing of the contract.
8. NON-PUBLIC WORKS BIDS: A performance bond will be required for this bid. The amount of the bond will be 100% of the contract price unless otherwise indicated in the specifications. The performance bond shall be supplied at the signing of the contract.
9. NON-PUBLIC WORKS BIDS: A payment bond will be required for this bid. The amount of the bond will be 100% of the contract price unless otherwise indicated in the specifications. The payment bond shall be supplied at the signing of the contract.
10. All bidders must comply with the requirements stated in the attached "Standard Insurance Requirements" sheet attached to this bid solicitation. Any deviation from the Standard Insurance Requirements must be requested in writing prior to bid opening. Proof of coverage will be required prior to award. Failure to comply with this instruction will result in bid rejection.
11. A bid bond will be required with bid submission in the amount of 5% of the total bid, unless otherwise stated in the bid specifications. Vendors must submit an electronic bid bond through the respective online clearinghouse bond management system(s) as indicated in the electronic bid solicitation on Central Auction House. No scanned paper copies of any bid bond will be accepted as part of the electronic bid submission.
12. This is an as needed basis contract. JEFFERSON PARISH makes no representations on warranties with regard to minimum guaranteed quantities unless otherwise stated in the bid specifications.
13. Freight charges should be included in total cost when quoting. If not quoted FOB DELIVERED, freight must be quoted as a separate item. Bid may be rejected if not quoted FOB DELIVERED or if freight charges are not indicated on bid form.
14. AFFIDAVIT - Completed, Signed and Properly Notarized Affidavits Required; This applies to all solicitations for construction, alteration or demolition of public buildings or projects, in conformity with the provisions contained in LSA-RS 38:2212.9, LSA-RS 38:2212.10, LSA-RS 38:2224, and Sec 2-923.1 of the Jefferson Parish Code of Ordinances. For bidding purposes, all bidders must submit with bid submission COMPLETED, SIGNED and PROPERLY NOTARIZED Affidavits, including: Non-Conviction Affidavit, Non-Collusion Affidavit, Campaign Contribution Affidavit, Debt Disclosures Affidavit and E-Verify Affidavit. For the convenience of vendors, all affidavits have been combined into one form entitled GENERIC BID AFFIDAVIT. This affidavit must be submitted in its original format, and without material alteration, in order to be compliant and for the bid to be considered responsive. A scanned copy of the completed, signed and properly notarized affidavit may be submitted with the bid, however, the successful bidder must submit the original affidavit in its original format and without material alteration upon contract execution. Failure to comply will result in the bid submission being rejected as non-responsive. The Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event.
15. The ensuing contract for this bid solicitation may be eligible for FEMA reimbursement and/or Federal funding/reimbursement. As such, the referenced appendix will be applicable accordingly and shall be considered a part of the bid documents and ensuing contract. All applicable certifications must be duly completed, signed and submitted as per the appendix instructions. Failure to submit applicable certifications as per the appendix instructions will result in bid rejection.
16. For this project, the Contractor shall not pay any state or local sales or use taxes on materials and equipment which are affixed and made part of the immovable property of the project or which is permanently incorporated in the project (hereinafter referred to as "applicable materials and equipment"). All purchases of applicable materials or equipment shall be made by the contractor on behalf of and as the agent of Jefferson Parish (Owner), a political subdivision of the State of Louisiana. No state and local sales and use taxes are owed on applicable materials and equipment under the provisions of Act 1029 of the 1991 Regular Session - Louisiana Revised Statute 47:301(8)(c). Owner will furnish to contractor a certificate form which certifies that Owner is not required to pay such state or local sales and use taxes, and contractor shall furnish a copy of such certificate to all vendors or suppliers of the applicable materials and equipment, and report to Owner the amount of taxes not incurred.
17. Tech Affidavit: The Tech Affidavit is required for this solicitation and shall be submitted with the bid submission. Failure to do so will result in your bid being rejected. Pursuant to La. R.S. 38:2237.1, prior to the procurement of telecommunications or video surveillance equipment or services, the vendor shall provide documentation by affidavit that the equipment or services to be procured are not prohibited telecommunications or video surveillance equipment or services as defined in R.S. 39:1753.1(A). This affidavit is supplied as a courtesy to Affiant. It is the responsibility of the affiant to insure the affidavit submitted to Jefferson Parish complies, in both form and content, with federal, state and parish laws. No procurement shall be made from a vendor or other entity who fails to provide the documentation; any procurement in contravention to this requirement shall be null and void by law.

DATE: 5/27/2025

INVITATION TO BID
THIS IS NOT AN ORDER

Page: 5

BID NO.: 50-00147915

JEFFERSON PARISH

PURCHASING DEPARTMENT
P.O. BOX 9
GRETNA, LA. 70054-0009
504-364-2678

VENDOR: 27118 BLANK BID COPY VENDOR

PURCHASING SPECIALIST:
SCHAMPAGNE

As per LSA-RS 47:301 et seq., all governmental bodies are excluded from payment of sales taxes to any Louisiana taxing body. Quotations shall be based on F.O.B. Agency warehouse or jobsite, anywhere within the Parish as designated by the Purchasing Department.

JEFFERSON PARISH reserves the right to cancel all or any part of an order if not shipped promptly. No charges will be allowed for parking or cartage unless specified in quotation. The order must not be filled at a higher price than quoted. JEFFERSON PARISH reserves the right to cancel at any time and for any reason by issuing a THIRTY (30) day written notice to the contractor.

JEFFERSON PARISH is expecting all products to be new and all work to be done in workman-like manner, according to standard practices. Any deviations or alteration from the specifications must be indicated on the bid form for each item and upon request, product data for same must be submitted by the time specified by the Purchasing Department.

DELIVERY: FOB JEFFERSON PARISH

INDICATE DELIVERY DATE ON EQUIPMENT AND SUPPLIES

18 weeks ARJ

INDICATE STARTING TIME (IN DAYS) FOR CONSTRUCTION WORK

N/A

INDICATE COMPLETION TIME (IN DAYS) FOR CONSTRUCTION WORK

N/A

In the event that addenda are issued with this bid, bidders MUST acknowledge all addenda on the bid form. Bidder must acknowledge receipt of an addendum on the bid form by placing the addendum number as indicated. Failure to acknowledge any addendum on the bid form will result in bid rejection.

Acknowledge Receipt of Addenda: NUMBER: 10
NUMBER: 13
NUMBER: _____
NUMBER: _____

LOUISIANA CONTRACTOR'S LICENSE NO.: (if applicable) N/A

***** ALL BIDDERS MUST COMPLETE SECTION BELOW *****

FIRM NAME:	
<u>Advanced Industrial Products Inc.</u>	
SIGNATURE: (Must be signed here)	TITLE:
<u>CR</u>	<u>Vice President</u>
PRINT OR TYPE NAME:	
<u>Tina Lopper</u>	
ADDRESS:	
<u>2125 Whitney Avenue</u>	
CITY, STATE:	ZIP:
<u>Gretna LA</u>	<u>70054</u>
TELEPHONE:	FAX:
<u>(504) 367-1257</u>	<u>(504) 366-0844</u>
EMAIL ADDRESS:	
<u>tina @ AIP-Inc. .NET</u>	

TOTAL PRICE OF ALL BID ITEMS: \$ 36,032.00

DATE: 5/27/2025

INVITATION TO BID FROM JEFFERSON PARISH - continued

Page: 6

BID NO.: 50-00147915

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
1	3.00	EA	<p>PURCHASE OF SUBMERSIBLE SOLIDS HANDLING SEWER PUMPS FOR JEFFERSON PARISH DEPARTMENT OF SEWERAGE</p> <p>0001 - Submersible solids-handling pump, 7.5 HP, 230W/MC., with integral electric submersible motor. The pump shall fit the existing rail system, utilizing a metal seal, and fit the existing hatch opening for the sewer lift station, with no modifications.</p> <p>Manufacturer: Flygt Model no. NP3127</p> <p>Locations: Iris and Jefferson Hwy</p>	\$ <u>11,344.⁰⁰</u>	\$ <u>34,032.⁰⁰</u>
2	1.00	EA	<p>0002 - Transportation of Goods and other Freight Charges</p> <p>***AS PER SPECIFICATIONS***</p> <p><i>Please turn page for specifications</i> →</p>	\$ <u>2,000.⁰⁰</u>	\$ <u>2,000.⁰⁰</u>

Bid Number 50-00147915

PURCHASE OF SUBMERSIBLE SOLIDS HANDLING SEWER PUMPS FOR JEFFERSON PARISH
DEPARTMENT OF SEWERAGE

***WE ARE BIDDING OTHER THAN SPECIFIED EQUIPMENT. TURN FOR COMMENT PAGES
UTILIZING BID PARAGRAPHS WITH OUR AVANT (TSURUMI) SPEC COMPARISON
COMMENTS***

***PLEASE SEE ATTACHED ALL INFORMATION NEEDED TO FULLY DEMONSTRATE
COMPLETE COMPLIANCE***

**COMPARABLE EQUIPMENT NOTATIONS AS FOLLOWS:
EQUIPMENT BRAND = AVANT SUBMERSIBLE PUMP (TSURUMI)
MODEL = MQB100J 5.5/4AW 185PD
4" DISCHARGE SUBMERSIBLE PUMP**

TURN PAGE

JEFFERSON PARISH
DEPARTMENT OF SEWERAGE
PURCHASE OF SUBMERSIBLE SOLIDS HANDLING SEWER PUMPS
LIFT STATION IRIS & JEFFERSON HWY.

PART 1 - GENERAL

1.01 GENERAL

- A. Vendor shall bid on supplying three (3) Flygt NP3127, 7.5 HP, or approved equal, submersible solids-handling pump with integral electric submersible motor. The pump shall fit the existing rail system, utilizing a metal to metal seat, and fit the existing hatch opening for the sewer lift station, with no modifications. The pump must match the hydraulic performance limits listed in these specifications. The pumps shall be provided by a factory authorized Flygt agent for Jefferson Parish, Louisiana, or for the brand they are bidding. Any bids submitted for pump manufacturers, other than as specified, must include in their bid all information needed to fully demonstrate complete compliance with the requirements of this specification and dimensional duplicity of the Flygt pumps. At the option of Jefferson Parish, the pumps shall be tested and certified test reports provided in accordance with this specification. The bid will be awarded to the lowest responsible bidder complying with all provisions of this invitation, providing the bid is reasonable, and in the best interest of Jefferson Parish. Jefferson Parish reserves the right to accept or reject the bid in whole or in part, any bids that are incomplete or do not provide the required information in order to show compliance with the specifications. It is the bidder's responsibility to provide adequate information necessary for the complete evaluation of proposed equipment at the time of bid. Jefferson Parish shall be the sole judge as to the equality of any alternate manufacturer's offering.

Avant (Tsurumi) Spec Companion Comment:

We manufacture Flygt adapters

1.03 TESTING

A. General

Each pump shall be shop tested and field tested as specified hereinafter. All costs for the tests shall be borne by the Bidder. In the event any equipment fails to meet the performance values set forth in this specification, the equipment shall be modified and re-tested or replaced with equipment that performs in accordance with this specification.

B. Shop Tests

②

Each pump and motor shall be performance tested as specified hereinafter; all pumps shall be tested with motor cable to be supplied with the pumps. If required, three copies of certified test reports, including actual test records, shall be submitted and approved by the Engineer prior to shipment of the equipment.

Avant (Tsurumi) Spec Companion Comment:

Certified Performance tests are conducted at the factory in Italy

b. Pumps. Data and drawings shall include:

1. Manufacturer, type and model number.
2. Assembly drawing, nomenclature and material list, O&M manual, and parts list.
3. Type, manufacturer, model numbers, location and spacing of bearings.
4. Impeller type, diameter, thru-let dimensions, shredder size, number of vanes and identification number.
5. Complete motor performance data including: rating, voltage/phase/frequency; design type; service factor; insulation class; motor pole number; actual rotation speed when combined with the specified pumps; current, power factor and active input power (KW) as a continuous function of shaft power from no load to at least 115 percent load, start (max. torque), locked rotor current, NEMA code letter, and

Avant (Isurumi) Spec Companion Comment:

Can provide a parts list once a pump is selected

motor torque as a continuous function through the motor start cycle from no rotation to synchronous speed.

6. Complete performance test curve(s) showing full range (shutoff to run-out) head vs. Capacity, NPSHR, hydraulic efficiency, motor active (KW) input power, motor total (KVA) input power (Based on measured current and voltage), and shaft power (BHP). See Section 1.03 Shop Tests.
7. Location and description of Service Centers and spare parts stock.
8. Warranty for the proposed equipment.

Avant (Tsurumi) Spec Comparison Comment:

Certified Performance tests are conducted at the factory in Italy

A. Each pump shall be equipped with radiant cooling submersible electric motors connected for operation on 230/460 volts, 3 phase, 60 hertz, and 4-wire service. Pumps shall be furnished with 65 feet of submersible shielded cable suitable for submersible pump applications. The power cable shall be sized according to NEC and ICEA standards and meet with P-MSHA Approval.

Avant (Tsurumi) Spec Companion Comment:

230V or 460V

1. Acceptable Manufacturers will be those who meet or exceed all performance, material, warranty and service requirements of

2.04 COOLING SYSTEM

- A. Each unit shall be provided with an adequately designed integral cooling system that allows up to 30 motor starts per hour with a partially-submerged motor on a continuous basis in an ambient 104 degree F environment, and in a standard available version, with no damage to motor windings, bearings, or drive shaft seals. The pump supplied under this specification shall be suitable for continuous operation; under, partially submerged conditions. The cooling system shall be a radiant heat sink type system integral to the stator housing, providing for dissipation of motor heat, regardless of the type of pump.

Avant (Tsurumi) Spec Comparison Comment:

Tsurumi = 15 starts per hour

- A. Each pump shall be driven by a vertical, submersible squirrel cage induction motor, shell type NEMA B design, housed in a dry watertight chamber. Oil filled motor designs will not be accepted. The motor and the pump shall be produced by the same manufacturer.

The stator winding shall be insulated with moisture resistant Class H insulation, rated for a temperature of 180°C. The stator shall be insulated by the trickle impregnation method using Class H monomer-free polyester resin, resulting in a winding fill factor of at least 95%. The stator shall be heat shrink fitted into the cast iron stator housing. The use of multiple step dip and bake type stator insulation process is not acceptable. The use of bolts, pins, screws, or other fastening devices used to locate or hold the stator and that penetrate the stator housing shall be rejected. The motor shall be designed for continuous duty while handling pumped media of up to 104 degrees F. The motor shall be capable of withstanding at least 30 evenly spaced starts per hour. The rotor bars and short circuit rings shall be made of aluminum.

Arant (Tsurumi) Spec Comparison Comment:

Tsurumi = 15 starts per hour

Three thermal switches shall be embedded in the stator end coils, one per phase winding, to monitor the stator temperature. These thermal switches shall be used in conjunction with, and supplemental to, external motor overload protection, and shall be connected to the motor control panel.

Avant (Tsurumi) Spec Comparison Comment:

(3) thermal and (1) leakage switch standard.
Additional sensors are optional.

The motor service factor (combined effect of voltage, frequency, viscosity, and specific gravity) shall be 1.15. The motor shall have a voltage tolerance of plus or minus 10%. The motor shall be designed for continuous operation in a 40°C ambient environment and shall have a NEMA Class B maximum operating temperature rise of 80°C. A motor performance curve shall be provided upon request, showing torque as a function of speed, and current, power factor, speed, input power in KW, and efficiency as a function of shaft power.

Avant

(Tsurumi) Spec Comparison Comment:

Tsurumi standard service factor = 1.0

2.07 BEARINGS

- A. The integrated pump/motor shaft shall rotate on two (2) sealed and permanently lubricated bearings. External bearing lubrication ports, which allow bearing contamination and over-packing, will not be allowed. The upper bearing, providing for radial thrust, shall be a single row, roller or ball bearing. The lower bearing shall consist of ~~one double row angular contact bearing for combined axial and radial loads~~. The minimum L₁₀ bearing life shall be 50,000 hours at any usable portion of the pump curve.

Avant (Tsurumi) Spec Comparison Comment:

Tsurumi L10 bearing life is 100,000 hours

2.10 IMPELLER

A.



The impeller shall be of Hi-Chrome Iron, ASTM A532 (Alloy III A) 25% dynamically balanced, semi-open, multi-vane, back swept, screw-shaped, non-clog design. The impeller leading edges shall be mechanically self-cleaned automatically upon each rotation as they pass across a spiral groove located on the volute suction. The screw-shaped leading edges of the impeller shall be capable of handling solids, fibrous materials, heavy sludge and other matter normally found in back wash water. The impeller to volute clearance shall be readily adjustable by the means of a single trim screw. The

Avant (Tsurumi) Spec Comparison Comment:

We will provide a hardened cast iron impeller

impeller shall be adaptive and shall be capable of moving vertically upward along the shaft. The Impeller shall be locked to the shaft, held by an impeller bolt and treated with a corrosion inhibitor. The design as stated above shall be used, with a Brinell hardness of at least 500.

Mass moment of inertia calculations of the rotating assembly shall be provided by the pump manufacturer upon request.

Avant (Tsurumi) Spec Comparison Comment:

Tsurumi does not use an insert ring with its open channel impeller. Our spiral relief groove is cast into the volute. High Chrome impellers are available.

2.11 VOLUTE

- A. The pump volute shall be a single piece gray cast iron, ASTM A-48, Class 35B, non-concentric design with smooth passages of sufficient size to pass any solids that may enter the impeller. Minimum discharge size shall be 10". The volute shall have an integral spiral-shaped, sharp-edged insert ring that is pressed into the suction cover of the volute. The spiral groove(s) of the insert ring shall provide the sharp edge(s) across which each impeller vane leading edge shall cross during rotation so to remain unobstructed. The insert ring shall provide effective sealing between the multi-vane semi-open impeller and the volute. It shall be constructed of ASTM A532 (Alloy III A) 25% - Hi-Chrome Iron.

Avant (Tsurumi) Spec Comparison Comment:

We will provide a hardened cast iron impeller

2.12 PROTECTION

PART 3 - SERVICE AND WARRANTY

3.01 SERVICE

- A. The bidder shall be the Authorized Distributor and Authorized Factory Service Center of the proposed products and shall be capable of servicing ~~the products with repair service within 5 hours of the Notice to Proceed.~~ The bidder must own and operate a direct factory service center and stocking facility capable of completely supplying spare parts for the proposed pumps within one (1) hour of Jefferson Parish. The bidder's factory service center/stocking facility shall be available for Jefferson Parish inspection with a twenty-four (24) hour prior notice. The bidders service center must have full-time, factory-trained mechanics capable of and certified to service the proposed equipment.

Avant (Tsurumi) Spec Comparison Comment:

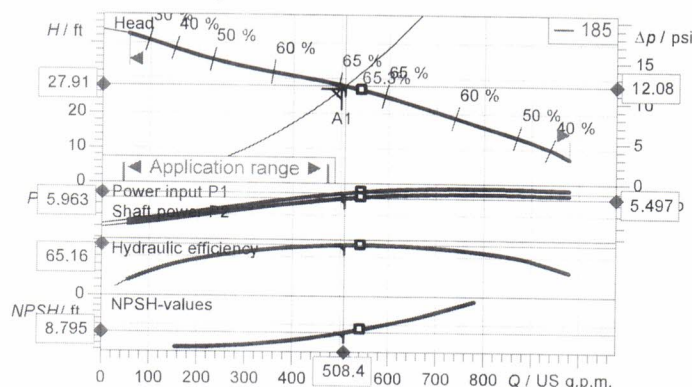
Distributor provided service center

- A. The pump manufacturer shall provide a written prorated warranty for the units supplied to the Department of Sewerage against defects in material and workmanship for a period of at least five (5) years or 10,000 operating hours under the operating conditions presented by this project, in accordance with their standard published Municipal Pump Warranty. Pump manufacturers shall demonstrate the ability to support claimed warranty coverage by meeting all requirements of this specification.

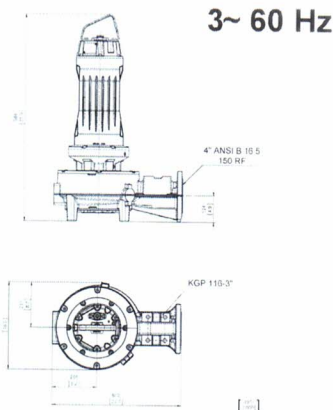
Avant (Tsurumi) Spec Comparison Comment:

Tsurumi standard warranty is (2) years, extended warranty (5) years

Technical specification



Characteristic curves according to UNI EN ISO 9906:2012
P2 < 10 kW: paragraph 4.4.2
10 kW < P2 < 100 kW: Grade 3B
P2 > 100 kW: Grade 2B
for pumps with standard material combination



Pump

Series	AVANT MQ
Type	MQB100J 5,5/4AW 185SD
Version	BB 10 230 D6 FM NN
Variant	A431 GG25 GG25 N 200 VN A270 N N STD 0 40 0
FM mark	Class I Division 1, Groups C, D; T3C Ta(max)= 40°C, IP68

Certificate No. US: FM20US0017; CA: FM23CA0047

Motor data

Rated voltage	230 V
Frequency	60 Hz
Motor phases	3~
Number of poles	4
Rated power P2	7.38 hp
Incoming power P1	8.04 hp
Rated current	19.8 A
rpm	1739 rpm
Efficiency	91.7 %
cos ϕ	0.76
Rated torque	22.3 lbf ft
Start*	Direct starting
Starting current	108.9 A
Starting torque	44.6 lbf ft
Degree of protection	IP 68
Insulation class	H
Motor efficiency class ref	IE3
Motor size	M08L

*use soft start, inverter or star/delta method to start and stop the pump if the power is greater than or equal to 30 kW.

Hydraulic

Free passage	2.56 inch
Impeller type	Open channel impeller
No. of vanes	2
Nominal impeller size	7.3 inch
Max. hydraulic efficiency	65.3 %
Suction	DN 4" UNDRILLED
Discharge	DN 4" ANSI B16.5
Curve tolerance	UNI EN ISO 9906:2012

Operating limits (standard pumps)

Max. ambient temperature	104 °F
Max. density treated liquid	68.67 lb/ft ³
pH treated liquid	6 ÷ 14
Max. start per hour (equally distributed)	20
Wet/dry use	WET
Max. acoustic pressure level	70 dB
Operating mode	S1 - Continuous use

Construction materials

Case	Cast iron EN-GJL 250
Shaft	AlSi 431
Hydraulic	Cast iron EN-GJL 250
Impeller	Cast iron EN-GJL 250
Painting	Bi-epoxy 200 μ m (7,9 thou) sea water resistant
Screws	Stainless steel A2-70
Gaskets	MITON

Construction features

Cooling jacket	-
Main cable **	4G4+3x1
Cable length	10 m (32,8 ft)
Mechanical seals	2 in sil.carbide (SiC) in oil chamber
Flushing valve - drilling	-
Drilling variant	SD
Weight*	211 kg

* cable and fixing system excluded

** Main cable for standard versions, no FM, no special cable

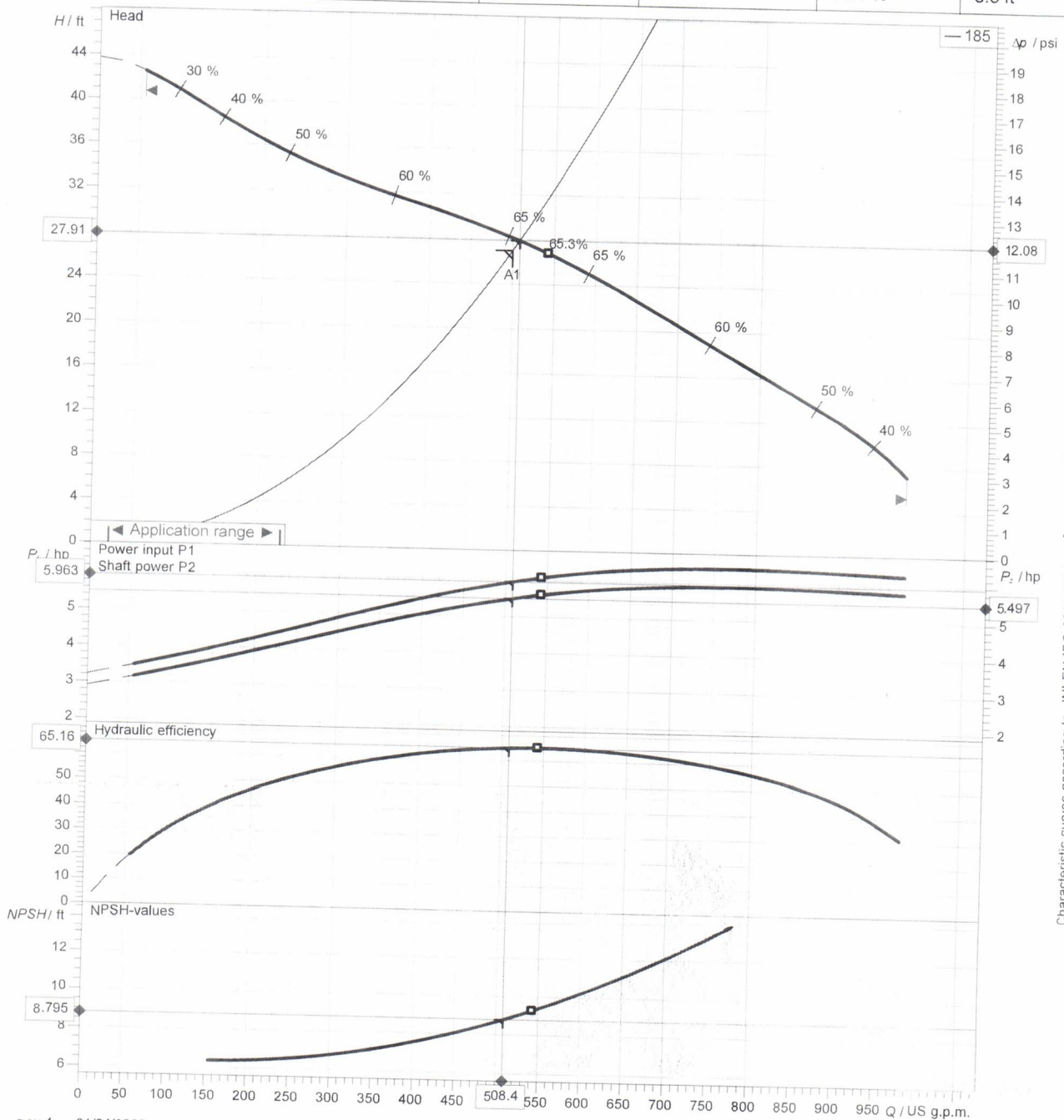
Monitoring features

Monitoring option	BB
- n.3 bimetal thermal protectors (Klixon) in series	
- n.1 double leakage sensor, mechanical seals chamber and stator housing (1 signal)	
- No bearing thermistors	
- No vibration sensor	

Pump performance curves

3 ~ 60 Hz

Impeller type Open channel impeller		Nominal impeller size 7.3 inch		Free passage 2.56 inch		Data version 03/07/2015	
Density 62.32 lb/ft³	Viscosity 1.082E-5 ft²/s	No. of vanes 2	Discharge DN 4"	Suction DN 4"			
DUTY POINT							
Flow 508.4 US g.p.m.	Head 27.9 ft	Shaft power P2 5.5 hp	Power input P1 6.0 hp	Hydraulic efficiency 65.2 %	Total efficiency 60.1 %	NPSH 8.8 ft	

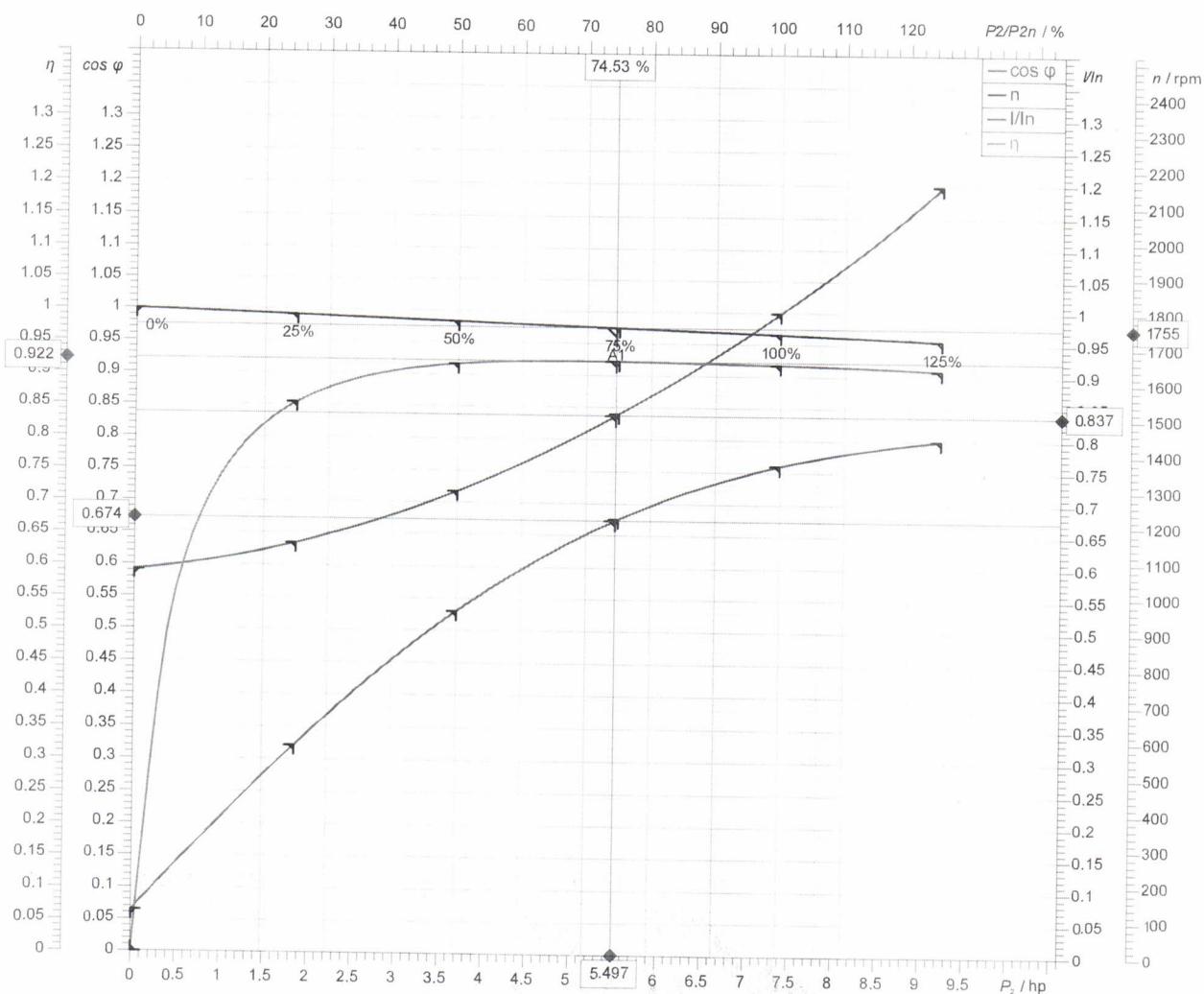


Characteristic curves according to JN EN ISO 9906:2012
for pumps with standard material combination
P2 < 10 kW: paragraph 4.4.2
10 kW < P2 < 100 kW: Grade 3B
P2 > 100 kW: Grade 2B

Motor performance curves

3 ~ 60 Hz

Motor 5,5/4 AW	Rated power 7.4 hp	Rated voltage 230 V	Motor efficiency 91.7 %
Number of poles 4	Nominal Speed 1739 rpm	Rated current 19.8 A	cos ϕ 0.76
Starting current 108.9 A	Start Direct starting	Rated torque 22.3 lbf ft	



Symbol	No load	25 %	50 %	75 %	100 %	125 %
P_2 / hp	0	1.844	3.688	5.532	7.376	9.22
P_1 / hp	0.4058	2.150	4.024	5.901	7.807	10.14
n / rpm	1800	1785	1770	1755	1739	1720
cos ϕ	0.674	0.8215	0.83	0.8759	0.9603	0.9803
I / A	11.72	12.57	14.21	16.62	19.79	23.72
s / %	0.002271	0.8164	1.689	2.527	3.378	4.431
M / lbf ft	0	5.425	10.95	16.56	22.27	28.15
η / %	0	85.4	91.65	92.18	91.77	90.91

Tolerances according to EN 60034-1

Rev.4 - 01/04/2022

All data shown are not binding. Tsurumi reserves the right to change data and dimensions without notice.

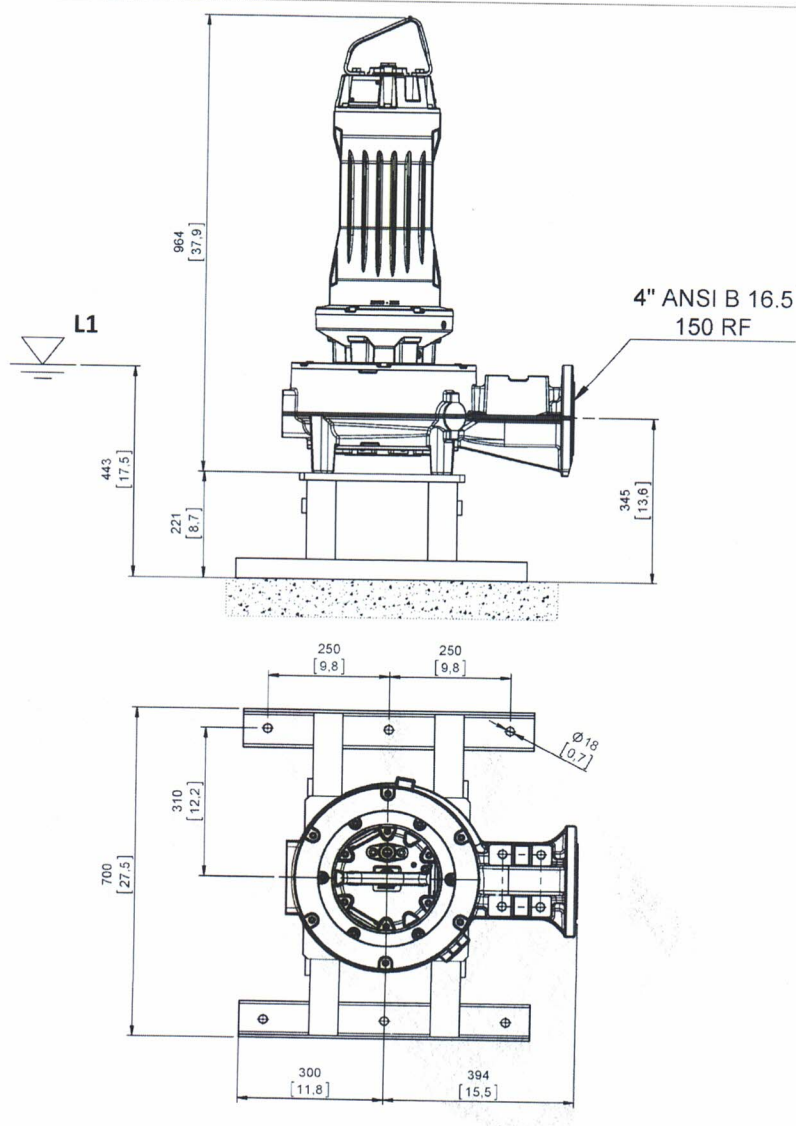
created on: 2025-05-28

Dimensional drawing

3 ~ 60 Hz

Installation type S: Free installation with base plate		
Wet/dry use WET	Drilling variant SD	Flushing valve - drilling -
Discharge DN 4" ANSI B16.5	Suction DN 4" UNDRILLED	Pressure rating (suction/discharge): -150 lb/sq. in.
Accessory KBS 4F I345 [AZ] (S)	Accessory code 9024.015	Accessory variant

Note: Accessory must be ordered separately



The minimum indicated levels do not prevent the formation of vortices and/or cavitation

L1: Minimum operating level for continuous use

L2: Minimum operating level for discontinuous use (excluding -EX/FM models)

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All data shown are not binding. Tsurumi reserves the right to change data and dimensions without notice.

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