VERTIFLO

The Vertical Pump Specialists

PUMPS FOR INDUSTRY

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0407

Furnish and install (as shown on the plans) **VERTIFLO Series 700** vertical immersion non-clog sewage ejector, pump size x x of all iron construction. Each pump shall be capable of pumping GPM when operating against a total dynamic head of feet, at specific gravity, temperature and viscosity indicated. Each pump shall operate at RPM and shall be percent efficient at the design condition point. Pump shall be designed for installation in a deep sump and furnished with inch discharge pipe and inch (round) (square) (oval) cover plate.

The pump casing shall have an integrally-cast long radius discharge elbow and shall be flanged. The impeller shall be of the non-clog 2-vane centrifugal design. The pump shaft shall have a minimum diameter of (1.250 inches) (1.500 inches). Column pipe shall be minimum 4.00 inch diameter, with welded flanges machined for registered fits. A separate bottom bearing housing of the same material as the liquid end shall be located directly behind the impeller and shall include replaceable bearings of material.

A replaceable intermediate bearing housing of the same material as the pump liquid end shall be provided on pumps built for pit depths over 6'-0". One intermediate bearing shall be provided for each 5'-0" pump length increment. Bottom and intermediate bearings shall be (grease) (water) lubricated through separate lubrication lines.

Pump shall be furnished with a separate thrust bearing housing with a grease lubricated angular contact thrust bearing in a splash-proof enclosure with grease seals. External impeller and shaft axial adjustment shall be provided. Separate motor support with registered fits shall be bolted to the thrust bearing housing. Pump shall be driven through a factory choice flexible coupling.

Pump(s) operation shall be controlled by a (float switch) (alternator) in a NEMA enclosure. Float shall be (304) (316) stainless steel with a (fiberglass) (316 stainless steel) rod and stops. All duplex pump sets shall be equipped with a factory manufactured independent switch bracket and control assembly, which shall be located independently of either pump, and provide for operation of either pump when one (1) is removed from the sump.

Pump shall be driven by a standard "C" face, HP, RPM, Phase, Cycle, Volt, enclosure, electric motor.

Pump and motor unit shall be installed according to the manufacturer's recommendations. In accordance with the Standards of the Hydraulic Institute, there shall be no strain transmitted to the pump.

Furnish and install (as shown on the plans) **VERTIFLO Series 800** vertical immersion sump pump size x x of (standard fitted) (stainless steel fitted) (316 stainless steel) (alloy 20) construction. Each pump shall be capable of pumping GPM when operating against a total dynamic head of feet, at specific gravity, temperature and viscosity indicated. Each pump shall operate at RPM and shall be percent efficient at the design point. Shut-off head shall be not less than feet. Pump shall be designed for installation in a deep sump and furnished with inch discharge pipe and inch (round) (square) (oval) cover plate.

The pump casing shall have an integrally cast discharge flange. The impeller shall be of the semi-open design. The impeller shall be affixed to the shaft with Woodruff key, washer, castellated nut and cotter pin. The pump shaft shall have a minimum diameter of (1.250 inches) (1.500 inches) (2.000 inches) and shall be of the tapered design, (416) (316) stainless steel. Column pipe shall be minimum (4.00) (6.00) inch diameter, with welded flanges machined for registered fits. A separate replaceable bottom bearing housing of the same material as the liquid shall be located directly behind the impeller and shall include replaceable bearing(s) of material.

A replaceable intermediate bearing housing of the same material as the liquid end shall be provided on pumps built for pit depths over 6'-0". One intermediate bearing shall be provided for each 5'-0" pump length increment. Bottom and intermediate bearing(s) shall be (grease) (water) (product) lubricated through separate lubrication lines.

Pump shall be furnished with a separate thrust bearing housing with a grease lubricated angular contact thrust bearing in a splash-proof enclosure with grease seals. External impeller and shaft axial-adjustment shall be provided. Separate motor support with registered fits shall be bolted to the thrust bearing housing. Pump shall be driven through a factory choice flexible coupling.

Pump(s) operation shall be controlled by a (float switch) (alternator) in a NEMA enclosure. Float shall be (304) (316) stainless steel. All duplex pump sets shall be equipped with a factory manufactured independent switch bracket and control assembly, which shall be located independently of either pump, and provide for operation of either pump when one (1) pump is removed.

Pumps shall be driven by a standard "C" face HP, RPM, Phase, Cycle, Volt, enclosure, electric motor.

Pump and motor unit shall be installed according to the manufacturer's recommendations. In accordance with the Standards of the Hydraulic Institute, there shall be no strain transmitted to the pump.

Furnish and install (as shown on the plans) **VERTIFLO Model 814** vertical immersion sump pump size x x of (standard fitted) (stainless steel fitted) (316 stainless steel) construction. Each pump shall be capable of pumping GPM when operating against a total dynamic head of feet, at specific gravity, temperature and viscosity indicated. Each pump shall operate at RPM and shall be percent efficient at the design point. Shut-off head shall be not less than feet. Pump shall be designed for installation in a deep sump and furnished with inch discharge pipe and inch (round) (square)) cover plate.

A replaceable intermediate bearing housing of the same material as the liquid end shall be provided on pumps built for pit depths over 5'-0'. One intermediate bearing shall be provided for each 4'-0" pump length increment. Bottom and intermediate bearing(s) shall be carbon graphite and (fresh water) (product) lubricated through separate lubrication lines.

External impeller and shaft axial adjustment shall be provided. Separate motor support with registered fits shall be bolted to the thrust bearing housing. Pump shall be driven through a factory choice flexible coupling.

Pump(s) operation shall be controlled by a (float switch) (alternator) in a NEMA enclosure. Float shall be (316 stainless steel) with a (fiberglass) (316 stainless steel) rod and stops. All duplex pump sets shall be equipped with a factory manufactured independent switch bracket and control assembly, which shall be located independently of either pump, and provide for operation of either pump when one (1) is removed.

Pump shall be driven by a standard "C" face HP, RPM, Phase, Cycle, Volt, enclosure, electric motor.

Pump and motor unit shall be installed according to the manufacturer's recommendations. In accordance with the Standards of the Hydraulic Institute, there shall be no strain transmitted to the pump.

Furnish and install (as shown on the plans) **VERTIFLO Series 900** vertical recessed impeller vortex pump, size x x of (All Iron) (316 S.S. Fitted) (All 316 S.S.) construction. Each pump shall be capable of pumping GPM against a total dynamic head of feet. Each pump shall operate at RPM. Pump shall be designed for installation in a deep sump and furnished with a discharge pipe assembly terminating above the mounting plate with flange. A " (round) (square) mounting plate shall be furnished as part of the pump assembly. The pump casing shall have an integrally-cast discharge flange. The impeller shall be of the fully recessed vortex type with educator vanes and have the capacity of passing " diameter solids.

The pump shaft shall have a minimum diameter of (1.250 inches) (1.500 inches) (2.000 inches) and shall be of the tapered design, (416) (316) stainless steel. Column pipe shall be minimum (4.00) (6.00) inch diameter, with welded flanges machined for registered fits. The bottom lineshaft bearing housing shall be located directly behind the impeller and shall include replaceable bearings of carbon graphite material.

An intermediate bearing housing assembly shall be provided on pumps built for pit depths over 6'-0'. One intermediate bearing assembly with two carbon graphite bearings shall be provided for each 5'-0" pump length increment. Bottom and intermediate bearings shall be fresh water lubricated through separate lubrication lines.

Pump shall be furnished with a separate thrust bearing housing with a grease lubricated angular contact thrust bearing in a splash-proof enclosure with grease seals. External impeller and shaft axial adjustment shall be provided. Separate motor support with registered fits shall be bolted to the thrust bearing housing. Pump shall be driven through a factory choice flexible coupling.

Pump shall be driven by a standard "C" face HP, RPM, phase, cycle , volt, enclosure electric motor.

Pump and motor unit shall be installed according to the manufacturer's recommendations. In accordance with the Standards of the Hydraulic Institute, there shall be no strain transmitted to the pump.

Furnish and install (as shown on the plans) **VERTIFLO Series 1100**, Model (1101), 1102, 1103) vertical immersion cantilever vortex pump size x x of (All Iron) (316 Stainless Steel Fitted) (All 316 Stainless Steel) construction. Pump shall be capable of pumping GPM when operating against a total dynamic head of feet, at specific gravity, temperature and viscosity indicated. Pump shall operate at RPM. Pump shall be designed for installation in a deep sump.

The pump casing shall have an integrally cast suction and discharge flange. The impeller shall be of the fully recessed vortex design. The impeller shall be affixed to the shaft with a key, nut and/or impeller locking screw. The shaft shall have a minimum diameter of " and shall be of the tapered design. A protective shaft sleeve (shall, shall not) be required. Column pipe shall be " diameter, with welded flange machined for registered fit.

Pump shall be constructed with a separate thrust bearing housing with a grease lubricated duplex angular contact thrust bearing in a splash-proof enclosure with grease seals. External impeller and shaft axial adjustment shall be provided. Pump shall be driven through a factory choice flexible coupling.

Pump shall be driven by a standard "C" face HP, RPM, Phase, Cycle, Volt, enclosure, electric motor.

Pump and motor unit shall be installed according to the manufacturer's recommendations. In accordance with the Standards of the Hydraulic Institute, there shall be no strain transmitted to the pump.

VERTIFLO PUMP COMPANY Vertical Wet Pit Cantilever Centrifugal Pumps

Furnish and install (as shown on the plans) **VERTIFLO Series 1200**, Model (1201, 1202, 1203) vertical immersion cantilever centrifugal pump size x x of (all Iron) (316 Stainless Steel Fitted) (All 316 Stainless Steel) construction. Each pump shall be capable of pumping GPM when operating against a total dynamic head of feet, at specific gravity, temperature and viscosity indicated. Pump shall operate at RPM. Pump shall be designed for installation in a deep sump.

The pump casing shall have an integrally cast suction and discharge flange, and shall be double volute when size 4 X 3 X 10 or larger is required. The impeller shall be of the semi-open centrifugal design. The impeller shall be affixed to the shaft with a key, nut and/or impeller locking screw. The shaft shall have a minimum diameter of " and shall be of the tapered design. A protective shaft sleeve (shall, shall not) be required. Column pipe shall be " diameter, with welded flange machined for registered fit.

Pump shall be constructed with a separate thrust bearing housing with a grease lubricated duplex angular contact thrust bearing in a splash-proof enclosure with grease seals. External impeller and shaft axial adjustment shall be provided. Pump shall be driven through a factory choice flexible coupling.

Pump shall be driven by a standard "C" face HP, RPM, Phase, Cycle, Volt, enclosure, electric motor.

Pump and motor unit shall be installed according to the manufacturer's recommendations. In accordance with the Standards of the Hydraulic Institute, there shall be no strain transmitted to the pump.

The contractor shall furnish and install (as shown on the plans) **VERTIFLO Series 1300**, Model (1320, 1326) horizontal close-coupled back pull-out centrifugal pump(s) size x x of (all iron) (316 stainless steel fitted) (all 316 stainless steel) construction. Each pump shall have a capacity of GPM at FT total head, with a temperature of °F., specific gravity. Each pump is to be furnished with (packing) (mechanical seal). A Teflon® lantern ring and split packing gland shall be furnished in all packed pumps. Impeller shall be semi-open and have the capability of passing " diameter solids. Shaft sleeve shall be 316 stainless steel. Suction and discharge openings shall be flanged and pumps 4 X 3 X 10 and larger shall be double volute. The pump shall be close-coupled to a horizontal foot-mounted JP shaft motor, HP Phase Cycle Volts RPM (drip-proof) (totally enclosed) (explosion-proof) (chemical duty) electric motor.

Pump and motor unit shall be installed according to the manufacturer's recommendations. In accordance with the Standards of the Hydraulic Institute, there shall be no strain transmitted to the pump.

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The contractor shall furnish and install (as shown on the plans) **VERTIFLO Series 1400**, Model (1420, 1424) horizontal flexible coupled back pull-out centrifugal pump(s) size x x of (all iron) (316 stainless steel fitted) (all 316 stainless steel) construction. Each pump shall have a capacity of GPM at FT total head, with a temperature of °F., specific gravity. Pump is to be furnished with (packing)(mechanical seal). A Teflon® lantern ring and split packing gland shall be furnished in all packed pumps. Impeller shall be semi-open and have the capability of passing " diameter solids. Impeller shall be externally adjustable. Shaft shall be (416 stainless steel) (316 stainless steel) and tapered at the impeller and attached with castellated nut, washer and cotter pin. Thrust and radial bearings shall be (grease) (oil) lubricated. Cast iron power frame shall be one piece construction. Suction and discharge openings shall be flanged and all pumps 4 X 3 X 10 and larger shall be double volute. Pump and motor shall be mounted on a common steel base. The pump shall be flexible coupled to a horizontal HP RPM (drip-proof) (totally enclosed) (explosion-proof) (chemical duty) electric motor.

Pump and motor unit shall be installed according to the manufacturer's recommendations. In accordance with the Standards of the Hydraulic Institute, there shall be no strain transmitted to the pump.

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The contractor shall furnish and install (as shown on the plans) **VERTIFLO Series 1500**, Model (1520, 1524) horizontal flexible coupled back pull-out Vortex recessed impeller pump(s) size x x of (all iron) (316 stainless steel fitted) (all 316 stainless steel) construction. Each pump shall have a capacity of GPM at FT total head, with a temperature of °F., specific gravity. Each pump is to be furnished with (packing) (mechanical seal). A Teflon® lantern ring and split packing gland shall be furnished in all packed pumps. Impeller shall be fully recessed and have the capability of passing " diameter solids. Impeller shall be externally adjustable. Shaft shall be (416 stainless steel) (316 stainless steel) and shall be tapered at impeller attached with castellated nut, washer and cotter pin. Thrust and radial bearings shall be (grease) (oil) lubricated. Cast iron power frame shall be one-piece construction. Suction and discharge openings shall be flanged. Pump and motor shall be mounted on a common steel base. The pump shall be flexible coupled to a horizontal HP RPM (drip-proof) (totally enclosed) (explosion-proof) (chemical duty) electric motor.

Pump and motor unit shall be installed according to the manufacturer's recommendations. In accordance with the Standards of the Hydraulic Institute, there shall be no strain transmitted to the pump.

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The contractor shall furnish and install (as shown on the plans)**VERTIFLO Series 1600**, Model (1620, 1626) horizontal close-coupled back pull-out Vortex recessed impeller pump(s) size x x of (all iron) (316 stainless steel fitted) (all 316 stainless steel) construction. Each pump shall have a capacity of GPM at FT total head, with a temperature of °F., specific gravity. Each pump is to be furnished with (packing) (mechanical seal). A Teflon® lantern ring and split packing gland shall be furnished in all packed pumps. Impeller shall be fully recessed and have the capability of passing " diameter solids. Shaft sleeve shall be 316 stainless steel. Suction and discharge openings shall be flanged. The pump shall be close-coupled to a horizontal foot-mounted JP shaft motor, HP Phase Hertz Volts RPM (drip-proof) (totally enclosed) (explosion-proof) (chemical duty) electric motor.

Pump and motor unit shall be installed according to the manufacturer's recommendations. In accordance with the Standards of the Hydraulic Institute, there shall be no strain transmitted to the pump.

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The contractor shall furnish and install (as shown on the plans) VERTIFLO Series 2100, (Model 2122, 2128 2128L), size_____x_____, solid-handling, self-priming centrifugal pump. Material of construction shall be (cast iron), (316 stainless steel fitted), (CD4Mcu fitted), (all 316 stainless steel), (all CD4Mcu). Pump shall have a capacity of _____GPM against_____feet of TDH, including a maximum total dynamic suction lift of _____feet, and a minimum re-prime lift of _____ feet. The pump shall pass a sphere _____inch(es) in diameter.

The priming chamber shall be a one-piece, heavy-duty casting with an integral smooth wall volute, priming plug, 6" diameter inspection/clean-out cover and check valve cover plate. Suction and discharge connections shall be flanged. Seal chamber shall have oversized tapered bore with flow bars and external fresh water flush to seal faces. Mechanical seal shall be a single, self-aligning, with solid Silicon Carbide vs Silicon Carbide seal faces.

Heavy-duty cast iron Power Frame. Back pullout design with external impeller adjustment. Grease or oil lube bearings. Shaft shall be 17-4ph stainless steel and shall be tapered at impeller, attached with locknut, washer and Woodruff key.

Impeller shall be semi-open, solid handling with rear wiping vanes and balancing hub. Pump shall be fitted with a replaceable impeller wear plate.

Suction inlet flange shall be cast and with gauge tap. Replaceable, molded one-piece Neoprene or Viton check valve with integral rupture disc shall be inspected and serviced through the check valve cover plate without draining the priming chamber or removing piping.

Unit shall be installed according to the manufacturer's recommendations. In accordance with the standards of The Hydraulic Institute, there shall be no strain transmitted to the pump, suction or discharge piping.

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