# SPECIFICATION DATA

## TRAMCO Series 2900

### Industrial Sewage Pump

TRAMCO's Series 2900 Vertical Sewage Pumps are engineered and precision built for years of dependable service. Quality materials and construction, together with a mechanical shaft seal design, allow continuous operation in liquids with abrasives and unscreened solids.

#### **Applications**

Sewage Lift Stations Industrial Processes Waste Treatment Plants Underpass Drainage

#### **Pump**

The Series 2900 is a centrifugal type pump fitted with a semi-open impeller accurately machined and balanced for smooth, quiet operation. Capable of passing 2" diameter solids.

#### **Mechanical Shaft Seal**

Series 2900 pumps are fitted with a mechanical shaft seal which prevents the liquid being pumped from entering and contaminating the lower sleeve bearing while retaining the lubrication in the pump. Seals are available with hardened faces for abrasive liquid application.

#### **Pump Lubrication**

Tramco's lubrication system provides continuous lubrication to shaft, self lubricated intermediate and lower sleeve bearings. It eliminates the need for external grease lines or product lubricated sleeve bearings.

#### **Shaft Column Pipe**

The pump is manufactured with schedule 80 hot dipped galvanized steel.

#### **Shaft**

Size 1" high accuracy, grade 1215 turned, ground and polshed. Shafts are also available in stainless steel.

#### Discharge Pipe

Size 3" or 4" schedule 40 hot dipped galvanized steel.

#### **Motor Support Bracket**

The heavy cast pedestal is accurately machined to house the thrust bearing and align the motor.

#### **Thrust Bearing**

The thrust ball bearing is grease lubricated and elevated above the cover plate for protection from dirt and moisture.

#### Floor Plate Suspension Cover

Heavy duty 20" diameter steel. Tramco will fabricate covers to duplicate existing pumps and piping.

#### **Motors**

The motor and pump shafts are connected by a flexible coupling that allows the motor to be easily removed without distributing the pump and piping.

#### Float Control (Optional)

Heavy duty pedestal mounted float switch is available. Float ball is stainless steel. Refer to page 95 for details.

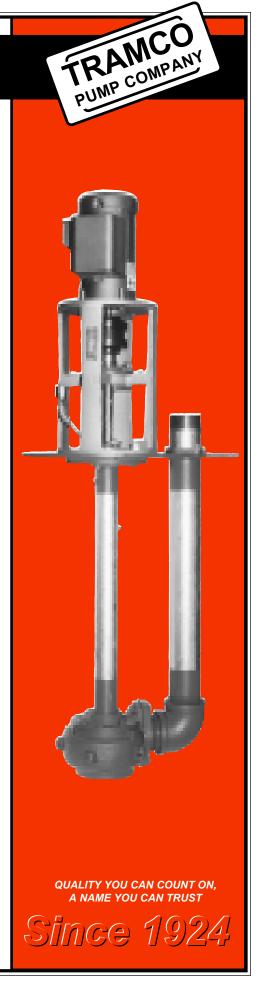
#### **Basin Cover (Optional)**

Heavy duty basin cover capable of supporting vertical suspended pumps and motors. Covers are available for simplex, duplex or other configurations. Refer to page 97 for details.

#### TRAMCO PUMP COMPANY

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### Typical Specifications for a Duplex Vertical Sewage Pump System

Contractor shall furnish and install as shown on the plans a duplex Vertical sewage pump system as designed and manufactured by Tramco Pump Company of Chicago, Illinois. The sump pump system shall consist of Two Tramco Vertical sump pumps and motors, a mechanical alternator assembly, emergency float switch and HWA assembly, duplex control panel, basin and basin cover.

Pumps: Furnish a duplex set of Tramco 2901 series vertical pumps each rated to deliver GPM at TDH. The pumps shall have heavy duty cast iron casings, semi-open type balanced cast iron impellers, grade 1215 turned, ground and polished shafting, raised upper grease lubricated ball thrust bearings. The pump shall be furnished with a 3" - 4" NPT schedule 40 galvanized discharge pipe and steel pump plate. The pump shall be fabricated with Schedule 80 galvanized shaft column constructed with an oil lubricated design having self lubricated intermediate and lower sleeve bearing(s), type 21 buna-N, Carbon vs. Ceramic mechanical shaft seal to prevent contamination of the lower sleeve bearing while providing continuous lubrication for the shaft. Pumps using product lubrication or grease lubricated bearings shall not be considered equal. Pumps using lip seals in lieu of a mechanical seal shall not be approved. Pumps using material other than galvanized steel of the above mentioned schedules, shall not be approved.

Motors: The motors shall be HP, RPM, VOLT, PHASE, HZ, Totally enclosed fan cooled enclosure connected to the pump by use of a Woods style coupling assembly.

Control panel: Furnish for wall mounting a U.L. labeled Nemaswitch. Furnish for each pump a full voltage magnetic starter with properly size 3 leg overload protection, fuse block with fuses,
Hand-Off-Auto selector switch, pump running light, a high water alarm horn, light and silence button and a control transformer for
115 volt control circuit. The control panel shall be factory internally prewired and tested in accordance with the provisions of the
national electric code. All control wires shall be individually numbered and each component shall be labeled accordingly. All
internal wiring shall be copper stranded, A.W.G., with a minimum insulation of 90° C. The complete assembly shall have a U.L.
listing mark for industrial control panel and the enclosure. The enclosure shall be finished inside and out with a machinery grade
enamel. The control panel shall include a terminal strip for connection of float control wiring as required for proper installation. All
control wiring shall be neatly tucked inside wire raceways.

Float Controls: Furnish a Nema-combination mechanical alternating float switch assembly with stainless steel float ball, solid brass float rod and float stops. The assembly shall consist of a pedestal base for basin cover mounting. Furnish a Nema-emergency float switch assembly with stainless steel float ball, solid brass float rod and float stops for activation of the pump and high water alarm if the alternator or first pump fails. The assembly shall consist of a pedestal base for basin cover mounting.

Basin Cover: Furnish a duplex steel basin cover Dia. including all necessary openings for pumps, vent, inspection cover and float assemblies. The basin cover shall be "thick steel plate and shall be painted with a corrosion resistant paint."

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