



TO:

PROJECT:

ENGINEER:

REP:

**SPECIFICATION FOR TIGERCUB ES-3000-MB
SIMPLEX CLOSE-COUPLED END SUCTION
DOMESTIC WATER BOOSTER SYSTEM**

Furnish and install a **TIGERFLOW** Series ES-3000-MB TIGERCUB Model STC ____ (HP) >>>> (Pump Model) ____ (tank) Simplex, U.L./C-U.L. listed, engineered packaged domestic water Booster System. The system shall be rated for a system flow of ____ GPM at a system pressure of ____ PSIG, including a suction pressure of ____ PSIG minimum, ____ PSIG maximum.

PUMP(S) & MOTOR(S)

Pump(s) shall be _____, series _____, Cast Iron, Bronze Fitted, Mechanical Seal, End Suction centrifugal type each close-coupled to a _____ RPM, _____ Voltage, _____ Phase, 60 Hz, high efficiency motor.

Conditions of Service: ____ GPM at ____ ' TDH, ____ HP

VALVES

- (1) 2" angle pattern, fused epoxy coated, combination pressure regulating and check valve, complete with stainless steel internals, stainless steel cover bolting, and stainless steel flex connector piloting. **(option)**
- (1) 2" non-slam, center guided, globe pattern, check valve
- (2) 2" full-port isolation full-port ball valves **(option)**

OVER-TEMPERATURE PROTECTION

Pump shall be equipped with an individual combination type non-electric temperature probe and purge assembly with PRV on Purge line

GAUGES:

- (2) 2-1/2" diameter, stainless steel case, liquid filled pressure gauges complete with shut-off cocks **(option)**

U.L. LISTED POWER AND CONTROL PANEL

- (1) U.L. Listed, Nema 4, Power and Control Panel
 - (*) U.L./C-U.L. 508 Label
 - Pressure sequencing with (1) Mercoid DA Series pressure switch with minimum run timer
 - Individual pump run indicator
 - H-O-A Selectors
 - Low Suction Alarm with light (1) pressure switch with time delay relay

- (1) FVNR magnetic starter with 3-leg overload protection
- (1) 120/1/60 control circuit transformer
- (1) Thru-door disconnect with individual motor circuit protection (**option**)

TANK

- (1) Model ST-12, 4.4 gallon, 150# non-code, FDA bladder tank skid mounted
- (1) Model ST-210V, 86 gallon, 150# non-code FDA bladder tank (adjacent mounted) (**option**)

FACTORY PREFABRICATION:

- (1 set) 2" Schedule 40 galvanized steel suction and discharge piping.
- (* Steel system skid with all necessary pipe supports, tubing, and wiring for complete package.
- (* Unit to be factory primed and painted with machine grade finish coat.
- (* All welding shall be done by ASME Section 9 certified welders.

THIRD PARTY TESTING, OSHA REQUIREMENT

The package shall be UL Listed as a system for its intended use, so meeting OSHA Federal Regulations 29 CFR 1910.303 and 399 as well as NFPA Pamphlet #70 (National Electric Code) Article 90-7, City of Los Angeles Approval Code, CMR248 Massachusetts State Plumbing Code Approval.

FACTORY TEST

The package shall be electrically and hydrostatically tested before shipment, in addition, each system shall be factory tested from 0-100% of flow and pressure.

STARTUP

The factory authorized local representative shall provide (2) hours of startup and field training.

WARRANTY

Each **TIGERFLOW** system shall be warranted for a period of (18) months from date of shipment or (12) months from date of startup, whichever occurs first.

SUBMITTALS & INSURANCE CERTIFICATIONS

Submittals shall be in accordance with requirements of general specifications. Submit 6 copies to the engineer for approval. All submittals must include the following:

- Complete shop drawings and complete wiring diagrams. All drawings must be AUTOCADD Release 2000; complete with full mechanical Desk Top 3-D drawings in both hardcopy and disk format. Complete operating and maintenance instructions.
- Furnish written certification of the manufacturers listing with Underwriters Laboratories as an approved manufacturer of control panels.

- Furnish written certification that the manufacturer is listed by UL/C-UL as an approved manufacturer of factory assembled pumping systems.
- A complete, easily readable functional description of the proposed equipment.
- Upon completion of the installation, the results of the field and acceptance tests as specified under this section of the specification shall be submitted to the engineer.
- Furnished written certification from the manufacturers representative of the proper installation of the station.
- Provide written certification that, a nationally recognized manufacturer of package pump systems, manufactures the pump system. A corporate officer must sign this certification.
- Operation and maintenance manuals:
Submit complete operations and maintenance information for this specific equipment. The engineer shall review these manuals for completeness. They shall include complete parts list including manufacturers reference and ordering number, the local representative name, address and phone number, the model and serial number of the system.
- The manufacturers shall submit a certificate of product liability insurance for no less than one million dollars (\$1,000,000)

QUALITY ASSURANCE

- All equipment under this section shall be furnished by a single supplier and shall be products that the manufacturer regularly engages in. The supplier shall have sole responsibility for proper functioning of the system and equipment supplied.
- Equipment shall be a manufacturer's standard product presently in commercial production.
- The manufacturer shall have in place a quality assurance program to assure the quality of the material furnished.

QUALIFICATIONS

- The manufacturer shall have a minimum of ten years manufacturing and application experience.
- Upon request from the engineer, the pump station manufacturer shall demonstrate proof of financial responsibility with respect to performance and delivery date.
- Upon request from the engineer, the pump station manufacturer shall provide proof or evidence of facilities, equipment and skills required to produce the equipment specified herein