



TSURUMI PUMP

FSP - SERIES
FLOATING SKUM SKIMMER

Sample Spec

1. SCOPE OF SUPPLY -

Furnish and install TSURUMI Model _____ Floating Skum Skimmer(s). Each unit shall be capable of delivering _____ GPM at _____ Feet TDH. The unit(s) shall be designed to efficiently suck skum with minimal amount of water from the top of the water surface, and the suction mouth shall be adjustable from a depth of 0 to 2-3/8". The unit(s) shall be provided with a jet-injector mechanism that allows stable operation even if water, air and skum and drawn in simultaneously. The unit(s) shall be designed so that the shaft power required (BHP) shall not exceed the motor rated output throughout the entire operating range of the performance curve. The discharge size shall be 2". Each unit shall include manufacturer's installation instructions, operation instructions, maintenance information and replacement and spare parts information.

2. MATERIALS OF CONSTRUCTION -

Construction of major parts of the pumping unit(s) including pump casing, impeller, and discharge pipe shall be manufactured from gray cast iron, ASTM A48 CLASS 30B. Internal and external surfaces coming into contact with the pumpage shall be protected by a fused polymer coating. All exposed fasteners shall be stainless steel. Impellers shall be of the semi-open, solids handling design equipped with back pump out vanes and shall be slip fit to the shaft and key driven. The unit shall incorporate three buoyancy floatation devices made of polypropylene resin.

3. MECHANICAL SEAL -

All units shall be furnished with a dual inside mechanical shaft seal located completely out of the pumpage, running in a separate oil filled chamber and further protected by an exclusionary air seal to prevent excessive pressure on the mechanical seal during operation. Unit shall be fitted with a device that shall provide positive lubrication of top mechanical seal, (down to one third of the standard oil level). The device shall not consume any additional electrical power. Mechanical seals shall be rated to preclude the incursion of water up to 42.6 PSI. (98.4 Ft.). Units shall have silicon carbide mechanical seal faces. Mechanical seal hardware shall be stainless steel.

4. MOTOR -

The pump motor(s) shall be _____ HP, _____ kW, _____ V., 60 Hz, _____ Phase and shall be NEMA MG-1, Design Type B equivalent. Motor(s) shall be rated at _____ full load amps. Motor(s) shall have a 1.15 service factor and shall be rated for 20 starts per hour. Motor(s) shall be air filled, copper wound, class E, and insulated with built in thermal protection for each winding. Motor shaft shall be 420 or 403 stainless steel and shall be supported by two permanently lubricated, high temperature ball bearings, with a B-10 life rating at best efficiency point of 60,000 hours. The top bearing shall be single row, double shielded, C3, deep groove type ball bearings. Motor housing and bearing housing shall be gray cast iron, ASTM A48 CLASS 30B. Motors shall be D.O.L. or and shall be suitable for across the line start or variable speed applications, utilizing a properly sized variable frequency drive.

5. POWER CABLE AND CABLE ENTRANCE -

The pump power cable shall be suitable for submersible applications. Units shall be supplied with a cable entrance that incorporates built in strain relief, a one piece, three way mechanical compression seal with a fatigue reducing cable boot. The cable entrance assembly shall contain an anti-wicking block to eliminate water incursion into the motor due to capillary wicking should the power cable be accidentally damaged.