

**PUMP MODEL** – Pump shall be Myers Model Number 4WHR Solids Handling Submersible Pump with multi-vaned recessed impeller. Volute cavity openings are all large enough to pass a 3" diameter sphere. Discharge flange shall be four (4) inch standard.

**OPERATING CONDITIONS** – Pump shall have a capacity of \_\_\_\_\_ GPM at a total head of \_\_\_\_\_ feet and shall use \_\_\_\_\_ HP motor operating at \_\_\_\_\_ RPM.

**MOTOR** – Pump motor shall be of the sealed submersible type rated \_\_\_\_\_ HP at \_\_\_\_\_ RPM 60 Hertz. Motor shall be for single phase 230 volts \_\_\_\_\_ or three phase 200 volts \_\_\_\_\_ 230 volts \_\_\_\_\_ 460 volts \_\_\_\_\_ or 575 volts \_\_\_\_\_. Single phase motors shall be of capacitor start, capacitor run, NEMA L type. Three phase motors shall be NEMA B type.

Stator winding shall be of the open type with Class F inverter duty insulation good for 155°C (311°F) maximum temperature. Winding housing shall be filled with a clean high dielectric oil that lubricates bearings and seals and transfers heat from winding and rotor to outer shell. Air-filled motors which do not have the superior heat dissipating capabilities of oil-filled motors shall not be considered equal.

Motor shall have two heavy duty ball bearings to support pump shaft and take radial and thrust loads. Ball bearings shall be designed for 50,000 hours B-10 life. Stator shall be heat shrunk into motor housing. On single phase motors a line break overload shall be attached to the windings to stop the motor if the temperature of the winding is more than 130°C. This overload will automatically reset when the motor cools to safe operating temperature. On three phase motors overcurrent protection should be provided in the control panel. The common pump-motor shaft shall be of 416 stainless steel.

**SEAL** – Motor shall be protected by a mechanical seal. Seal faces shall be lubricated by the oil-filled motor housing above seal. Seal faces shall be carbon and ceramic and lapped to a flatness of one light band. Seal faces of tungsten carbide are optional.

**IMPELLER** – The impeller shall be cast ductile iron and of the recessed type. Pump-out vanes shall be used on back shroud. Impeller shall be dynamically balanced. Impeller shall be driven by stainless steel key and impeller held in position with lock screw and washer.

**PUMP CASE** – The volute case shall be cast iron and have a flanged center line discharge. Discharge flange shall be four (4) inch standard with bolt holes straddling center line.

**PUMP AND MOTOR CASTING** – The pump shall be painted with waterborne hybrid acrylic/alkyd paint. This custom engineered, quick dry paint shall provide superior levels of corrosion and chemical protection. All fasteners shall be 302 stainless steel.

**POWER CABLES** – Power cord and control cord shall be double sealed. The power and control conductor shall be sealed with epoxy potting compound to seal outer jacket against leakage and to provide for strain relief to meet agency requirements. Insulation of the power and control cords shall be SOOW or W. The power and control cords shall also have a green carrier ground conductor that attaches to the motor frame.