End Suction Back Pull-Out

General
Furnish and install as shown on the plans, _____ (qty) Weinman End Suction Series 375 size (_____x_____x_____) model _____ centrifugal pump(s). Each shall be capable of pumping _____ GPM when operating against a total pumping head of _____ feet (suction lift/suction pressure) at the temperature, specific gravity and viscosity indicated. The pump shall operate at _____ RPM and shall have _____ percent minimum efficiency at the design point. The pump(s) shall be rated for continuous service and shall be bronze fitted construction suitable for pumping a liquid with the following characteristics:

Liquid handled _____
Specific Gravity _____
Temperature _____
Viscosity of liquid at pumping temperature _____
NPSHA _____

Note: Add any additional facts concerning the nature of the liquid or installation which might affect the pump construction, application or operation.

Construction
All pump materials shall be constructed of low lead components and the pump shall be certified in accordance with NSF 372 (NSF 61 Optional). Pump shall be a back pull-out design allowing access to service the pump's internal working components, without disturbing the piping for ease of maintenance.

The adapter to the casing is to be one piece cast iron construction capable of mounting a JM frame motor. The motor shaft shall be steel and protected with a (bronze) (316 stainless steel) sleeve slip fit to the shaft. A neoprene deflector shall be mounted on the shaft to prevent liquid from entering the motor. The pump shall have a mechanical seal constructed with carbon/ceramic faces and Buna elastomers rated at 180 degrees (or optional carbon/silicon carbide faces and EPDM elastomers rated at 300 degrees F) and stainless steel metal parts.

Casing shall be of cast iron ASTM-A48, Class 30 with tensile strength of 30,000 psi (or ductile iron on some models) and shall be designed to be self-venting to prevent air entrapment. Pump unit shall be capable of standing hydrostatic test pressures of 1.5 times the maximum working pressure. All assembly points shall be of machine register fit to assure proper alignment. The flanged casing discharge nozzles shall mate to flanges conforming to ANSI B16.1 specifications with minimum 125 psi ratings at 230 degrees F. The impeller shall be of the enclosed design bronze constructed (< 0.25% Pb).

Motor
The motor shall be not less than _____ hp _____ RPM, NEMA design B squirrel cage type, (drip proof)(TEFC) EISA efficiency motor with (1.15)(1.0) service factor and suitable for operation on (115)(230) volt, 1 phase, (50)(60) Hertz power supply OR (200)(230)(460)(575) volt, 3 phase, 60 hertz power supply. Motor size shall be sufficient to prevent overloading at operating conditions or at the lowest listed head conditions whichever point requires greater horsepower.

Testing
The following (witnessed)(non-witnessed) tests are to be performed in accordance to Hydraulic Institute test standards.

_____ Pump performance (A)(B) tolerance level
_____ Routine Motor test
_____ Hydrostatic - Complete Pump