Vertical Immersion and Process Pumps

General

Furnish _____ Deming Vertical process Pump(s), Fig. _____ size _____ to be capable of pumping _____ GPM against a total head of _____ feet, at temperature, specific gravity and viscosity indicated, when operating at _____ RPM. The pump shall include (9")(12")(15") extension below the base plate.

All parts in contact with the liquid being pumped shall be suitable for service indicated. All cast iron parts shall have minimum 30,000 lbs. tensil strength.

Pump Construction

The pump casing shall be of the vertically split, end suction design. Pumps with 3" and larger discharge shall have double volute type casing and 125# ANSI discharge flange.

Impeller shall be semi-open type with heavy vanes. Balance openings shall be provided in the shroud with pumping vanes on back of the shroud to prevent accumulation of solids behind the impeller. Impeller shall be easily adjusted to compensate for wear by means of external jack screws.

Power frame shall be heavy duty, one piece cast iron, accurately machined, with regreasable ball bearings, sealed against dirt and moisture.

The shaft shall be of high strength steel, compatible with liquid being pumped. It shall be of sufficient diameter to withstand maximum pump load with minimum deflection.

Column shall be cast in one piece, for (9")(12")(15") extension, accurately machined to assure alignment.

A throttle bushing, mounted in a one piece bearing housing, shall be located between the pump liquid end and the column. A suitable deflector shall be mounted on the shaft, adjacent to the throttle bushing.

Pump shall be furnished with
(Motor pedestal for mounting NEMA "C" Flange Motor)(fabricated chair mount for mounting horizontal foot mounted motor).
Flexible shaft coupling shall be furnished to connect the driver to the pump. Coupling shall be enclosed in coupling guard.

Base plate shall be steel, of sufficient thickness to support total weight of the unit, including discharge pipe, when specified.

Motor

The motor shall be not less than _____ hp _____ RPM, NEMA design B squirrel cage type, (drip proof)(TEFC)(EISA)(premium) 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. Following installation, grouting and connection of all piping, pump and motor must be checked for alignment in accordance with standards of the Hydraulic Institute.