

TYPICAL ARCHITECTS/ENGINEERS SPECIFICATIONS

GENERAL: The contractor shall furnish and install as shown on the plans, (qty) Crane Deming horizontal split case series 5060 size (___ x ___ x ___) centrifugal pump(s) as herein specified.

The pump(s) shall be rated for continuous service and of (bronze fitted) (all iron) (all bronze) (stainless-steel fitted) construction for the following operating conditions.

Each pump shall be capable of delivering ___ GPM of (liquid) against ___ feet total head. The following characteristics of the liquid to be pumped are:

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.

PUMP

Furnish and install, as shown on the plans, ___ Crane Deming fig. ___ size ___ horizontally splitcase double suction single stage centrifugal pump(s). Each shall be capable of pumping ___ GPM when operating against a total pumping head of ___ feet of (suction lift/suction pressure) at the temperature, specific gravity and viscosity indicated. The pump shall operate at ___ RPM and shall have ___ percent minimum guaranteed efficiency at the design point. Rotation shall be (clockwise/counterclockwise) when viewed from the driver end.

CONSTRUCTION

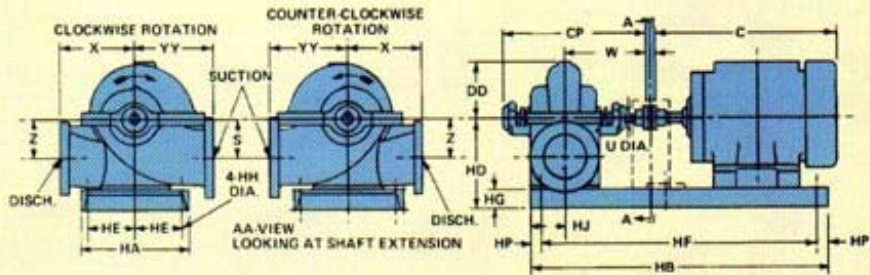
The pump casing shall be of extra heavy cast iron, with minimum tensile strength of 30,000 lbs. and shall be split parallel to the shaft. Bearing housing supports, suction and discharge flanges shall be cast, bored and machined integrally with the lower half casing. Upper and lower half casings shall be doweled and bolted together. Removable upper and lower half casing and bearing caps must permit inspection or removal of the entire rotating assembly without disturbing the piping. Flanges shall be standard 125" O.D. and drill, with 250" thickness. Optional 250" ASA flange.

The impeller shall be of one-piece cast (bronze) (iron) (stainless steel) of the enclosed, double suction type, accurately machined and balanced to minimize thrust; shall be keyed and axially adjusted on the shaft by means of threaded shaft sleeves. Shaft shall be protected by renewable (bronze)(440C) (316) (416) stainless steel shaft sleeves that are threaded and tightened with shaft rotation and are free to expand at the stuffing box end. Shafts shall have a minimum three-year warranty.

Renewable standard (cast iron) or (bronze) (CA15) (316 stainless steel) casing wearing rings shall be on all sizes, accurately machined and securely mounted in the pump casing. Renewable impeller wearing rings shall be of (bronze) (cast iron) (CA15) (316 stainless steel) and mounted on the impeller at the suction inlets and held in place with set screws. When casing and impeller wearing rings are furnished, they shall be of dissimilar alloy.

Rotating assembly shall be supported by heavy-duty, (grease) (oil) lubricated, cartridge mounted ball bearings. The outboard bearing shall be a double row bearing, locked in position by bearing lock nuts. The inboard bearing shall be a single row bearing, free to move axially in the bearing housing. Dual lip seals shall seal the bearing housings against dirt and moisture. Removable bearing caps and bearing covers shall permit inspection or service of the bearings without disturbing the pump casing or piping. Bearing housings shall be designed for grease lubrication. Grease relief shall prevent over-lubrication. When oil lubricated bearings are furnished, constant level oilers shall be mounted on the bearing covers. Stuffing boxes, to seal the pump shaft, shall be located on the shaft center line and include a minimum of five packing rings and a lantern ring in each packing box. Internally drilled liquid passages in upper half casing shall provide lubrication to the packing area through the lantern ring. Heavy cast split glands shall be furnished on each stuffing box designed for easy removal for packing inspection and maintenance. Mechanical seals are also available for all units and construction dependent on the product being pumped. Heavy fabric-

APPROXIMATE DIMENSIONS



APPROXIMATE DIMENSIONS OF PUMPS WITH STEEL BASE, COUPLING AND MOTOR

All dimensions in inches. Not for construction purposes.

Mod. No.	Sect. No.	Disch. Dia.	Max. Imp. Dia.	S	U	Kwy.	W	X	CP	DD	YY	Z	Motor Frame Size*	C	HA	HB	HD	HE	HF	HC	HD	HU	HW
5061	2	1 1/2	8	3 1/2	3/4		11	6 1/2	19 1/8	5	7	3 1/2	266T	24 1/8	15	40	9 1/8	6	37 1/8	3 1/8	4	1 1/2	1 1/2
	3	2	8	3 1/2	3/4		11	6 1/2	19 1/8	5 1/4	7	3 1/2	284T	25 1/8	15	40	10 1/8	6	37 1/8	3 1/8	4	1 1/2	1 1/2
	3	2	11	4 1/2	3/4		11	8	19 1/8	7 1/4	9	4 1/2	326T	30 1/8	13	46	12	7 1/8	4 1/8	4	1 1/2	4	1 1/2
	4	3	14	5 1/2	3/4		11	10	19 1/8	8 1/4	10	5 1/2	284T	25 1/8	15	40	12 1/8	6	37 1/8	3 1/8	4	1 1/2	1 1/2
5062	4	3	11	4 1/2	1 1/8		13	8 1/2	23 1/8	7 1/4	10	4 1/2	447TS	35 1/8	27	53	13 1/8	12 1/8	50	1 1/2	1 1/2	4 1/2	1 1/2
	4	3	14	5 1/2	1 1/8		13	11	23 1/8	10 1/8	12	5 1/2	324T	28 1/8	18	46	14	7 1/8	4 1/8	4	1 1/2	4 1/2	1 1/2
	4	3	17	6	1 1/8		13	12	23 1/8	10 1/8	13	6	365T	34 1/8	18	51	15	7 1/8	4 1/8	4	1 1/2	4 1/2	1 1/2
	6	4	9	5 1/2	1 1/8		13	9	23 1/8	7 1/4	10	5 1/2	425TS	36	25	50	13 1/8	11 1/8	47	1 1/2	1 1/2	4 1/2	1 1/2
5063	6	4	12	5 1/2	1 1/8		13	10	23 1/8	8 1/4	11	5 1/2	324T	28 1/8	18	46	14 1/8	7 1/8	4 1/8	4	1 1/2	4 1/2	1 1/2
	6	4	14 1/2	5 1/2	1 1/8		13	12	23 1/8	11	13	5 1/2	365T	34 1/8	18	51	15	7 1/8	4 1/8	4	1 1/2	4 1/2	1 1/2
	8	6	9	5 1/2	1 1/8		13	10	23 1/8	8 1/4	11	5 1/2	447TS	35 1/8	27	53	13 1/8	12 1/8	50	1 1/2	1 1/2	4 1/2	1 1/2
	10	8	14 1/2	6 1/2	1 1/8		15 1/2	13	27 1/8	11 1/8	15	7	447TS	35 1/8	27	53	17	12 1/8	50	1 1/2	1 1/2	6	1 1/2
5064	8	6	17	7	1 1/8		15 1/2	13	27 1/8	11 1/8	14	7	447TS	35 1/8	27	53	17	12 1/8	50	1 1/2	1 1/2	6	1 1/2
	8	6	12	6 1/2	1 1/8		15 1/2	11	27 1/8	9 1/4	13	6 1/2	365T	34 1/8	18	51	16 1/8	7 1/8	4 1/8	4	1 1/2	6	1 1/2
	8	6	14 1/2	6 1/2	1 1/8		15 1/2	13	27 1/8	10 1/8	14	6 1/2	425TS	36	25	50	17	11 1/8	47	1 1/2	1 1/2	6	1 1/2
	8	6	17	7	1 1/8		15 1/2	14	27 1/8	11 1/8	15	7	447TS	35 1/8	27	53	18	12 1/8	50	1 1/2	1 1/2	6	1 1/2
	10	8	12	6 1/2	1 1/8		15 1/2	12	27 1/8	10 1/8	15	6 1/2	425TS	36	25	50	18	11 1/8	47	1 1/2	1 1/2	6	1 1/2
	10	8	14 1/2	7 1/2	1 1/8		15 1/2	13	27 1/8	11 1/8	15	7 1/2	447TS	42 1/8	27	62	19 1/8	12 1/8	59	1 1/2	1 1/2	6	1 1/2
	12	10	12	7 1/2	1 1/8		18	15	32	13 1/8	16	8 1/2	447TS	44 1/8	30	70	20	13 1/8	66	1 1/2	1 1/2	8	2
	12	10	14 1/2	7 1/2	1 1/8		18	13	32	12 1/8	16	7 1/2	447TS	46 1/8	30	70	20	13 1/8	66	1 1/2	1 1/2	8	2
12	10	14 1/2	9	1 1/8		18	17	32	13 1/8	18	9	447TS	46 1/8	30	70	22 1/8	13 1/8	66	1 1/2	1 1/2	8	2	
12	10	17	9	1 1/8		18	17	32	13	20	9	447TS	44 1/8	30	70	22 1/8	13 1/8	66	1 1/2	1 1/2	8	2	
14	12	14 1/2	10	1 1/8		18	17	32	13 1/8	22	10	447TS	44 1/8	30	70	23	13 1/8	66	1 1/2	1 1/2	8	2	
			14	1 1/8			21 1/2	22	38 1/8	14 1/8	26	12 1/2	447TS	44 1/8	30	70	31 1/8	13 1/8	66	1 1/2	1 1/2	9	2

*Based on standard motor for maximum horsepower required by pump size indicated. Dimensions may vary with make and type of motor.

ed steel base (with drip lip) to mount the pump and driver shall be furnished. Flexible shaft coupling shall be furnished to connect the driver to the pump. Coupling shall be enclosed in (standard) (OSHA) coupling guard.

MOTOR

The motor shall be not less than ___ hp, ___ rpm, NEMA Design B squirrel cage induction type, (drip-proof-TEFC-explosion-proof) motor with (1.15) (1.0) service factor and suitable for operation on (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 accord with standards of the Hydraulic Institute.

SUBMITTAL DATA

Provide general product bulletin, performance curve, and dimension print. Maintenance manual required at time of shipment. Recommended spare parts list to be included.

TESTING

The following (witnessed/non-witnessed) tests to be performed:
 Pump Performance Routine Motor Test Hydrostatic - Complete Pump

WARNING: Coupling guards must be used to avoid serious injury to operating personnel.

For dimensions of vertically mounted pump, please contact factory.

For immediate service:

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