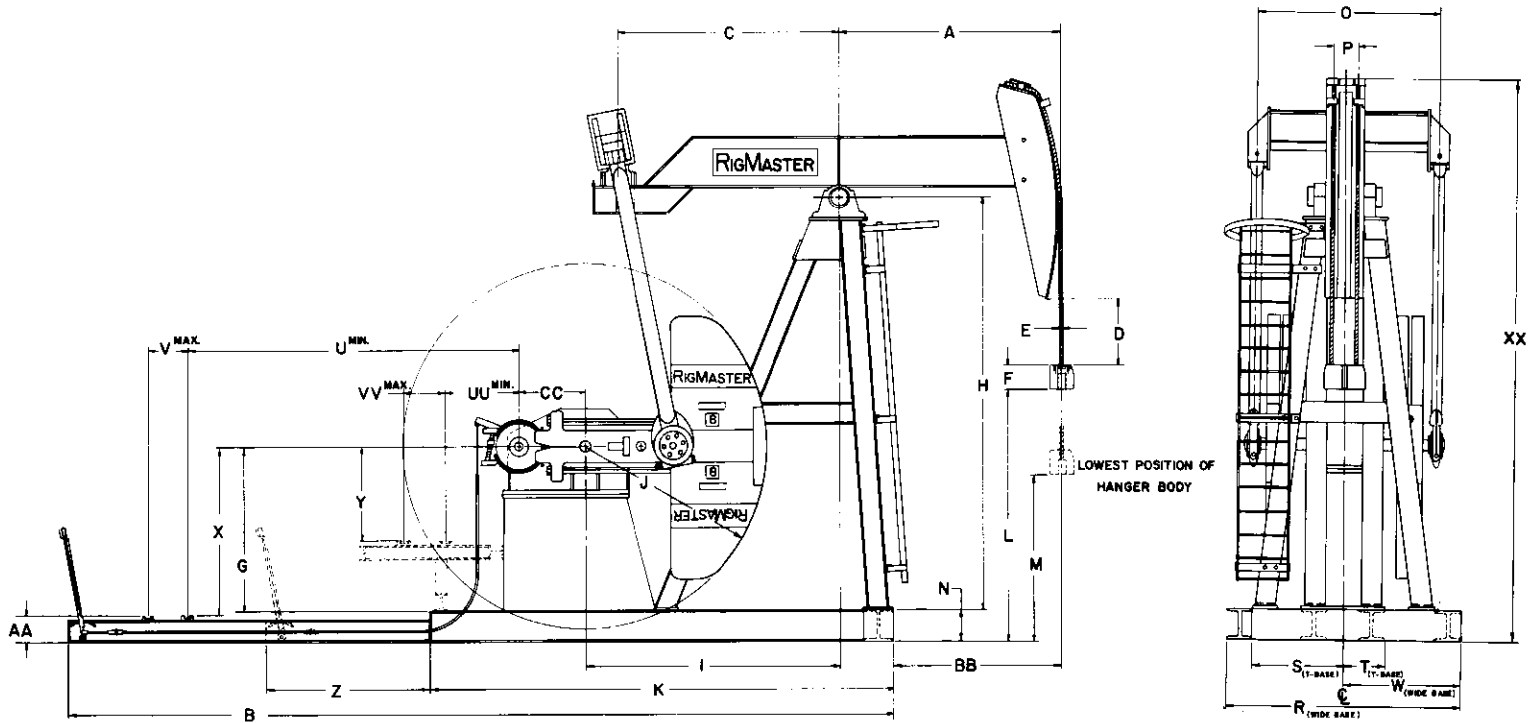


OUTLINE DRAWING



GENERAL DIMENSIONS

MODEL NUMBER	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	Y	Z	AA	BB	CC	UU	W	XX	
114-173-54	5'-9"	19'-0"	5'-9"	24"	1"	7 $\frac{3}{4}$ "	51"	10'-7 $\frac{1}{4}$ "	6'-6 $\frac{1}{4}$ "	56"	12'-4 $\frac{1}{4}$ "	6'-5"	49"	9 $\frac{1}{4}$ "	61 $\frac{1}{2}$ "	8 $\frac{1}{4}$ "	82"	30 $\frac{1}{2}$ "	13"	38"	8'-2"	41"	42 $\frac{1}{16}$ "	9"	33"	18 $\frac{1}{16}$ "	61"	24 $\frac{7}{32}$ "	33"	6'-5"	14'-4 $\frac{1}{8}$ "	
114-143-54	6'-9 $\frac{1}{4}$ "	"	"	"	"	"	"	"	"	"	"	"	46"	"	"	"	"	"	"	"	"	"	"	"	"	"	73 $\frac{1}{4}$ "	"	"	"	"	
114-173-64	6'-8"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	72"	"	"	"	"	
114-119-66	8'-11 $\frac{1}{4}$ "	"	7 $\frac{3}{4}$ "	"	"	60"	160 $\frac{1}{2}$ "	"	"	"	5'-6"	54"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	99 $\frac{1}{16}$ "	"	"	"	17'-1 $\frac{1}{8}$ "	
160-173-74	9'-3 $\frac{3}{4}$ "	25'-1"	9'-3"	24"	1 $\frac{1}{4}$ "	8 $\frac{1}{2}$ "	66"	14'-17 $\frac{1}{4}$ "	10'-1"	76"	17'-2"	8'-2 $\frac{1}{4}$ "	77 $\frac{1}{4}$ "	13 $\frac{1}{4}$ "	69"	10 $\frac{1}{4}$ "	90"	37 $\frac{1}{2}$ "	16"	55"	11'-11"	45"	63 $\frac{1}{16}$ "	39 $\frac{1}{16}$ "	25"	18 $\frac{1}{16}$ "	103 $\frac{1}{16}$ "	26 $\frac{7}{32}$ "	16"	5'-2"	19'-3"	
160-200-74	9'-1 $\frac{1}{2}$ "	"	"	"	"	"	"	"	"	"	"	82"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	101 $\frac{1}{4}$ "	"	"	"	"	
160-173-86	10'-6 $\frac{1}{2}$ "	"	"	"	"	"	"	"	"	"	"	65"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	118 $\frac{3}{16}$ "	"	"	"	"	
160-173-100	12'-2 $\frac{1}{4}$ "	"	17 $\frac{1}{2}$ "	"	"	"	"	"	"	"	9'-3"	56"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	136 $\frac{1}{16}$ "	"	"	"	20'-5 $\frac{1}{4}$ "	
228-200-74	9'-0 $\frac{1}{4}$ "	27'-5"	9'-3"	24"	1 $\frac{1}{4}$ "	8 $\frac{1}{2}$ "	83"	14'-0 $\frac{1}{4}$ "	10'-1 $\frac{1}{4}$ "	76"	17'-3"	9'-1"	62"	13 $\frac{1}{4}$ "	77"	10 $\frac{1}{4}$ "	90"	37 $\frac{1}{2}$ "	17"	111"	12'-6"	45"	74 $\frac{1}{16}$ "	56 $\frac{1}{16}$ "	24 $\frac{1}{2}$ "	18 $\frac{1}{16}$ "	99 $\frac{1}{16}$ "	30 $\frac{7}{32}$ "	18"	7'-11"	19'-2"	
228-213-86	"	"	"	"	"	"	"	"	"	"	"	48"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
228-246-86	9'-0 $\frac{1}{2}$ "	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	99 $\frac{1}{2}$ "	"	"	"	"	
320-305-100	10'-11 $\frac{1}{4}$ "	30'-0"	10'-9"	18"	1 $\frac{1}{4}$ "	9 $\frac{1}{2}$ "	83"	15'-5 $\frac{1}{4}$ "	11'-8 $\frac{1}{4}$ "	92"	19'-0 $\frac{1}{4}$ "	9'-2"	52"	13 $\frac{1}{4}$ "	80 $\frac{1}{16}$ "	12"	96"	40 $\frac{1}{2}$ "	20"	84"	15'-0"	48"	76 $\frac{1}{16}$ "	56"	25"	18 $\frac{1}{16}$ "	122 $\frac{1}{16}$ "	34 $\frac{7}{32}$ "	16"	6'-5"	23'-0 $\frac{1}{4}$ "	
320-213-120	13'-2 $\frac{1}{4}$ "	"	"	"	"	"	"	"	"	"	"	7'-9 $\frac{1}{4}$ "	42"	"	"	"	"	"	"	"	"	"	"	"	"	"	149 $\frac{1}{16}$ "	"	"	"	"	
320-256-120	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"

NOTES: 1. Do not use for construction purposes. Request certified foundation plan.
2. Other sizes available upon request.

CONSTRUCTION FEATURES

BASIC STRUCTURE: Four leg Samson Post of heavy welded beam, cross-braced for extra rigidity; Walking Beam is rolled steel shape selected for straightness; Skid is fabricated of heavy uniform steel beam, cross braced for strength and rigidity; Horsehead of fabricated steel with one piece arc and side plates for added strength; Equalizer of one piece heavy beam, ribbed and reinforced for superior strength.

GEAR REDUCER: API double reduction, 35:1 Ratio, 97% efficiency.

Rugged steel housing, generously proportioned and bored to exacting tolerances to maintain precise gear alignment.

Gears and Pinions precision cut from alloy steel forgings and surface hardened.

Shafts are forged from alloy steel, heat treated, and precision ground. Bearings are oversized tapered roller to insure high efficiency, correct center distances, and shaft alignment.

Lubrication is oil bath for gears and bearings. Double lip oil seals to exclude dirt as well as contain oil. Extra large oil sump capacity.

SADDLE BEARING: Base and Saddle are heavy castings, precision machined. Bearing is sealed in oil.

TAILBOARD BEARING: Heavy casting, precision machined, bearing sealed in oil.

CRANK PINS: High strength alloy steel, tapered and ground to high finish and exacting tolerance. Heavy, castellated hex crank pin nut.

CRANK PIN BEARINGS: Double row spherical, self-aligning.

PITMAN ARMS: Heavy tubular steel with cast steel upper and lower connections.

CRANKS: Rotary type, heavy cast iron, with built-in weight adjustment via threaded rod.

COUNTERBALANCE WEIGHTS: Matched sets of cast weights, with bolted dovetail clamping arrangement. Easily adjusted by rotating threaded rod on crank.

BRAKE: Large diameter drum with full wrap external brake band and lining.

PRIME MOVER SUPPORT: Elevated or ground level for electric motor.

Ground level for single cylinder engine.

Ground level for multi-cylinder engine.

EASE OF INSTALLATION

To save erection time at the well site, Rigmaster units are shipped with the following items already mounted and installed.

Gear Reducer
Crank
Counterbalance Weights

Brake, Actuator, & Lever
Crank Pins
Oil in Gear Reducer

MODEL NUMBER	REDUCER TORQUE (INCH LBS)	STRUCTURE RATING (LBS)	STROKE LENGTHS LONG / MID / SHORT (INCHES)	WALKING BEAM SIZE (INCHES X LB/FT)	REDUCER RATIO	OUTPUT SHAFT (Dia.)	BRIDLE (SIZE X CENTERS)	STRUCTURE UNBALANCE (LBS)	REDUCER SHEAVE SIZE (MAX)	REDUCER OIL CAP (GALS)
114-173-54	114,000	17,300	54-44-34	18" x 71	34.7:1	5"	1" Dia. x 8 3/4"	+ 955	3C30.0	28
114-143-64	114,000	14,300	64-54-44	18" x 71	34.7:1	5"	1" Dia. x 8 3/4"	+ 655	3C30.0	28
114-173-64	114,000	17,300	64-54-44	21" x 83	34.7:1	5"	1" Dia. x 8 3/4"	+ 655	3C30.0	28
114-119-86	114,000	11,900	86-70-54	24" x 84	34.7:1	5"	1" Dia. x 8 3/4"	+ 250	3C30.0	28
160-173-74	160,000	17,300	74-64-54	24" x 94	35:1	5 7/16"	1 1/4" Dia. x 10 1/8"	+ 1015	4C36.0	43
160-200-74	160,000	20,000	74-64-54	24" x 104	35:1	5 7/16"	1 1/4" Dia. x 10 1/8"	+ 1015	4C36.0	43
160-173-86	160,000	17,300	86-74-62	24" x 104	35:1	5 7/16"	1 1/4" Dia. x 10 1/8"	+ 575	4C36.0	43
160-173-100	160,000	17,300	100-86-72	24" x 104	35:1	5 7/16"	1 1/4" Dia. x 10 1/8"	+ 365	4C36.0	43
228-200-74	228,000	20,000	74-64-54	24" x 104	35:1	6"	1 1/4" Dia. x 10 1/8"	+ 975	5C36.0	67
228-213-86	228,000	21,300	86-76-66	24" x 104	35:1	6"	1 1/4" Dia. x 10 1/8"	+ 1095	5C36.0	67
228-246-86	228,000	24,600	86-76-66	24" x 117	35:1	6"	1 1/4" Dia. x 10 1/8"	+ 1095	5C36.0	67
320-305-100	320,000	30,500	100-89-78	27" x 146	35:1	6 7/16"	1 1/4" Dia. x 12"	+ 1112	6C44.0	81
320-213-120	320,000	21,300	120-107-94	24" x 131	35:1	6 7/16"	1 1/4" Dia. x 12"	+ 175	6C44.0	81
320-256-120	320,000	25,600	120-107-94	27" x 146	35:1	6 7/16"	1 1/4" Dia. x 12"	+ 175	6C44.0	81

WARRANTY

(a) Except as follows, Company warrants the products which are included on the face hereof to be free of defects in workmanship for a period of twelve months after the date of invoice or date of start up, whichever occurs first:

(i) The above warranty does not apply to any products which have been modified or repaired without the prior written consent of Company, and/or subjected to improper handling, storage, installation operation or maintenance;

(ii) The above warranty does not apply to any item which is purchased by Company as a component part of the products except to the extent to which such items are covered by the warranty, if any, of the original manufacturer thereof;

(iii) The above warranty does not apply to any item which is a component part of the products where such item is furnished or specified to Company by purchaser; and,

(iv) No warranty for a component part shall extend beyond the warranty period of the device in which such component part is incorporated.

(b) THERE IS NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE AND THERE ARE NO WARRANTIES EXCEPT AS SET FORTH HEREIN.

(c) Company assigns to purchaser its right, title and interest in any warranties made by manufacturers of component materials and workmanship to the extent necessary for purchaser to enforce any such warranties.

(d) Company's liability under its warranty is expressly limited to the repair or replacement, at its sole option, of products which prove to be defective in workmanship within the warranty period. The Company's obligation to repair or replace such defective products constitutes agreed and liquidated damages for any breach of warranty by Company. Any claim by purchaser made pursuant to Company's warranty shall be made in writing ten (10) days after the discovery of the defect with respect to which the claim is made. Company shall have the right to inspect the products claimed to be defective and shall have the sole right to determine the cause of such defect. Company reserves the right to bring any part of the work back to their shops, perform rework necessary, and return to the jobsite at no additional cost to the purchaser. No contingent liability is assumed for delays at the jobsite during time of such repair and transit.

Company shall not be liable under any warranty or otherwise for incidental or consequential damages of any kind including consequential damages for injury to any person, property, or well.

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