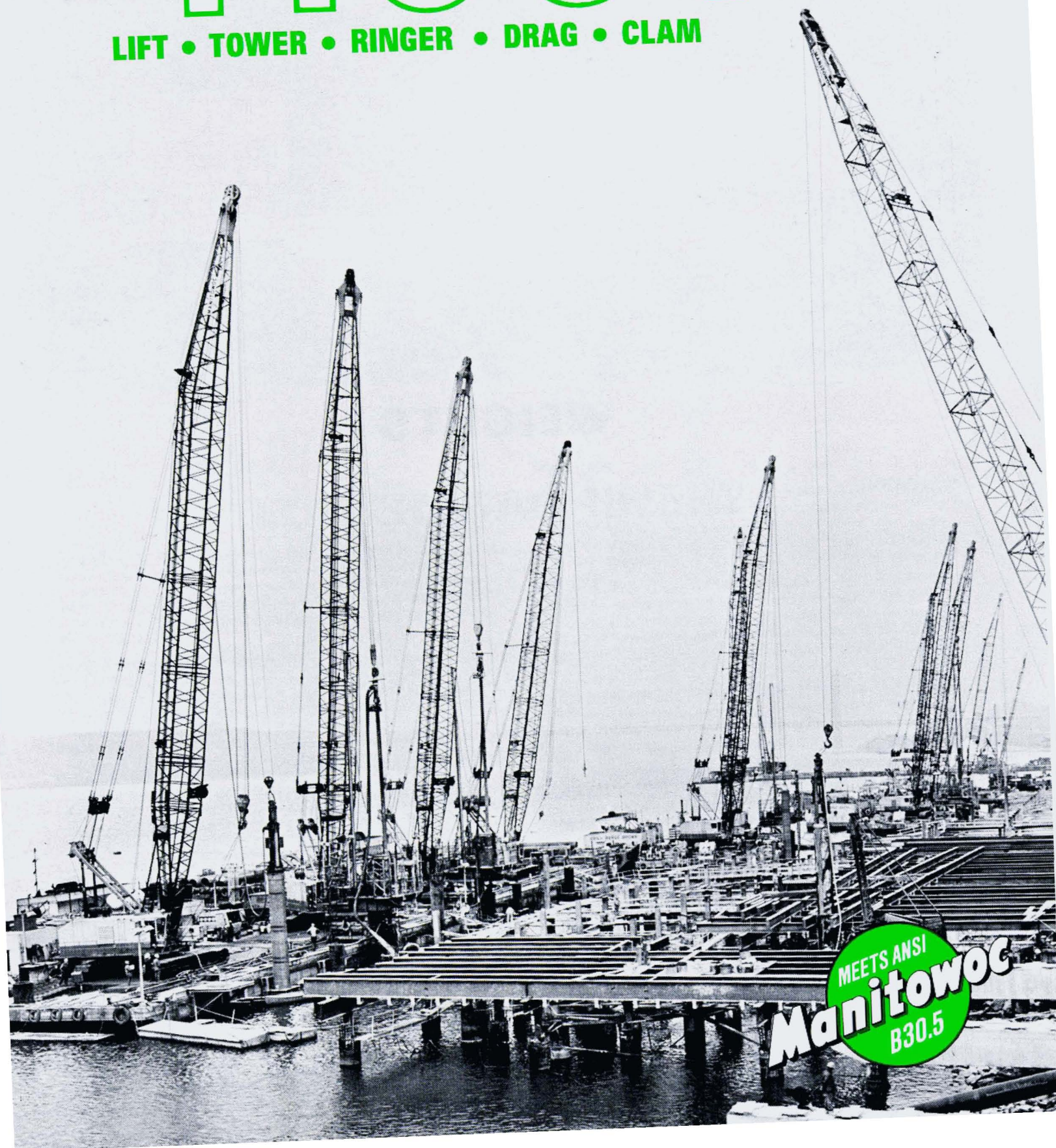




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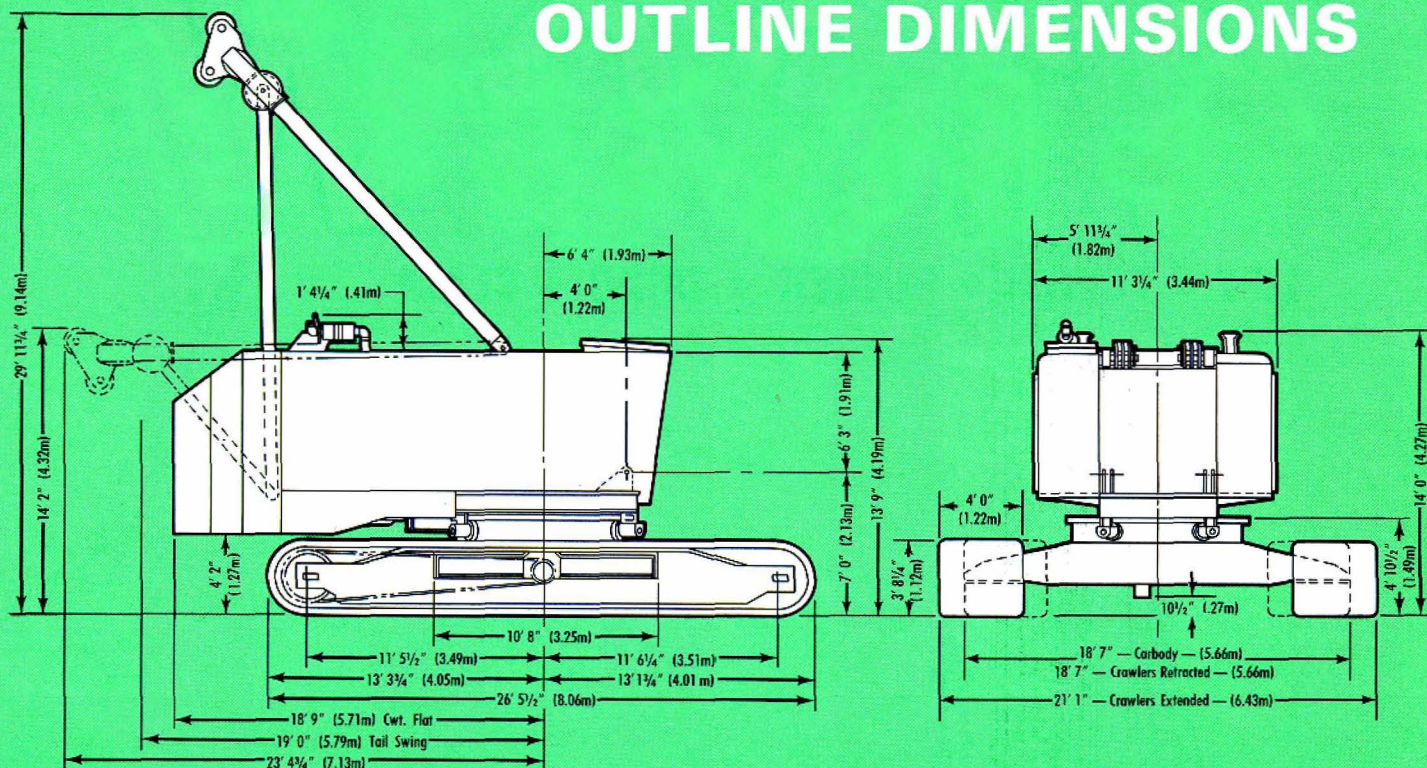
LIFT • TOWER • RINGER • DRAG • CLAM



MEETS ANSI
Manitowoc
B30.5



OUTLINE DIMENSIONS



WEIGHTS

POUNDS*

LIFTCRANE, complete with 70' No. 22A Boom, gantry and backhitch, boom hoist rigging and pendants, hoist wire rope, 15-ton swivel-type hook and weight ball, basic upperworks package, counterweights, 26' 6" long crawlers (48" wide treads), extendible width from 18' 7" to 21' 1", and outside crawler drive chains..... 356,660

CRAWLERS, with crawler side frames, crawler treads, and outside crawler chains (each 36,400) .. 72,800

CARBODY, with center pin, roller path, and travel mechanism, without crawlers..... 49,500

UPPERWORKS, complete with basic machinery, including drums, but not including gantry and backhitch, front end attachments or counterweights... 80,500

GANTRY AND BACKHITCH..... 7,800

POUNDS*

SELF-REMOVING COUNTERWEIGHT (3-PC)

Inner.....	41,900
Middle.....	41,500
Outer.....	39,000

BOOM NO. 22A

BOOM BUTT: (less wire rope and pendants).....	5,980
BOOM TOP: (equipped with lower boom point, sheaves, and pendants).....	9,760
Add for upper boom point and sheave.....	1,460
Total	11,220

BOOM INSERTS:

Insert—10' (with pendants).....	2,000
Insert—20' (with pendants).....	3,100
Insert—40' (with pendants).....	5,340

DRAGLINE FAIRLEAD—REVOLVING TYPE..... 1,910

DRAGLINE FAIRLEAD—HINGED TYPE..... 7,420

*Weights are approximate and may vary between machines as a result of design changes and component variations.

POWER PLANTS

	Model	Cylinder	Bore	Stroke	Cubic Inch Displacement	Net HP @ RPM (at flywheel)
BASIC	Cummins NTA-855 Diesel	6	5.500"	6.000"	855	333 @ 2000
OPTIONAL	G.M. 12V-71N Diesel	12	4.250"	5.000"	852	360 @ 2000
	Caterpillar D343-TA Diesel	6	5.400"	6.500"	893	364 @ 2000

Air Compressor: 37.5 CFM.

Fuel Tank Capacity: 315 gallons.



DRUMS AND LAGGINGS

TANDEM DRUM SHAFT								
Application	Drum	Diameter	Drum Width	Type of Lagging	Wire Rope Size	Spooling Capacity		
						First Layer	Layers	Maximum Capacity
LIFTCRANE Hoist Whip	Front	19"	37¼"	None Plain	1½"	161'	7	1,505'
	Rear	27½"	37¼"		1½"	230'	3	745'
CLAMSHELL Closing Holding	Front	27"	37¼"	Grooved Grooved	1½"	225'		
	Rear	27"	37¼"		1½"	225'		
DRAGLINE Drag Hoist	Front	24"	37¼"	Grooved Grooved	1¼"	164'		
	Rear	27"	37¼"		1½"	225'		
OPTIONAL SPLIT REAR DRUM SHAFT WITH SINGLE FRONT DRUM SHAFT								
LIFTCRANE Hoist Whip Auxiliary	Front	19"	37¼"	None Plain None	1½"	161'	7	1,505'
	Left Rear	21"	*17½"		1½"	83' (*76')	6	622' (*575')
	Right Rear	17½"	17½"		1"	77'	8	847'
CLAMSHELL Closing Holding	Right Rear	27"	17½"	Grooved Grooved	1½"	105'	3	340'
	Left Rear	27"	*17½"		1½"	105' (*97')	3	340' (*315')
DRAGLINE Drag Hoist	Front	24"	37¼"	Grooved Grooved	1¼"	164'	4	755'
	Right Rear	27"	17½"		1½"	105'	3	340'

*Drum width — 16½" with ratchet and pawl.

NOTE: Drum diameters are root diameters. For first layer pitch diameters, add diameter of wire rope.

No. 6105, 11-20-72

*Drum width — 16½" with ratchet and pawl.

No. 6105, 11-20-72

NOTE: Drum diameters are root diameters. For first layer pitch diameters, add diameter of wire rope.

LOWER MACHINERY

CARBODY: One-piece, ribbed steel fabrication with integral side wings, permit crawlers to be extended or retracted without reducing bearing area between crawler side frames and carbody wings. Side wings rest on crawler side frames and transmit loads directly to them, eliminating axles and providing lower center of gravity.

RING GEAR AND ROLLER PATH: Cast alloy steel. Integral ring gear and roller path bolted to carbody with single row of high strength bolts. Internal gear teeth machine cut. Roller path 109" outside diameter with 8" face and 4" thick hook roller flange.

KING PIN: Machined from steel fabrication. Bolted to carbody with high strength bolts. Supports vertical travel shaft and provides pivot for rotating upperworks. Takes horizontal load only, no uplift. Pressure-lubricated bronze bearing in rotating bed.

TRAVEL SHAFTS: Travel power is transmitted from horizontal drive shaft in upperworks to horizontal travel shaft in carbody... through intermediate vertical travel shaft bronze bearing mounted in king pin. Horizontal travel shaft is bronze bearing mounted and enclosed in carbody. Ends extended by telescopic couplings provide for crawler extension and retraction. Totally enclosed bevel gear runs in oil; thrust taken by antifriction bearing.

TRAVEL AND STEERING: Accomplished by air controlled jaw clutches. Both are normally engaged for straight travel. Either clutch may be in neutral or locked position for gradual or sharp turns. Interlock keeps one jaw clutch engaged at all times.

TRAVEL LOCKS: Positive, air operated travel locks have dual ratchet and pawl permitting travel in one direction while preventing movement in opposite direction. Can be set to prevent travel in either direction. Travel lock pawls are spring cushioned and engage external teeth on travel jaw clutch. Each pawl can be released separately by independent air control.

ioned and engage external teeth on travel jaw clutch. Each pawl can be released separately by independent air control.

CRAWLER SIDE FRAMES: Steel fabrication with integral supports for attachment to carbody. Fourteen, 14" diameter double-flanged intermediate idler rollers mounted between side plates on 4½" diameter shafts. Each roller supported by dual bronze bearings with center grease pocket. Abrasion resistant steel slide bars on top of frames support crawler pads.

CRAWLER FRONT IDLER: Double-flanged steel roller; large bronze bearing on each end and grease pocket in center. Mounted on 6½" diameter stationary shaft supported at both ends in side frame. Tread belt adjusted by hydraulic jack and U-shaped shims which hold shaft in position.

CRAWLER SPROCKET AND TUMBLER: Cast steel, teeth and tumbler rim are flame-hardened. Driving torque transmitted through single-unit integral sprocket and tumbler with large bronze bearings on each end and center grease pocket. Mounted on 6½" diameter stationary shaft supported at both ends in side frame. Self-cleaning tumbler has alternate sides open. Crawler chain adjusted by hydraulic jack and U-shaped shims which hold shaft in position.

CRAWLER DRIVE: Drive chains are located outside of crawler frame. Drive sprockets self-contained within crawler side frames are joined to horizontal drive shaft by telescoping coupling which allows crawlers to be extended, retracted or completely removed without separating drive chains or tread belts.

CRAWLER PADS: Cast alloy steel. Box section design with large central driving lug, internally ribbed for extra strength. Bottom edges tapered upward. Each pad connected by two high-carbon, wear resistant steel pins.



UPPER MACHINERY

ROTATING BED: One-piece, ribbed steel fabrication with integral machinery side frames forms a rigid deck for power plant, house rollers, rotating machinery, upper structure and boom hinge. Houses travel gear, swing gear, swing lock and boom hoist.

HOUSE ROLLERS: 6

4 Front antifriction bearing mounted.
2 Rear antifriction bearing mounted.

HOOK ROLLERS: 6 mounted on eccentric shaft for adjustment.

2 Front antifriction bearing mounted.
4 Rear antifriction bearing mounted.

UPPER STRUCTURE: Fabricated steel rear column, roof support and vertical center legs. Bar-type front legs. All joints pin-connected. Structure supports gantry, counterweight and rear drum.

POWER PLANTS: See bottom of page 2.

POWER TRANSMISSION, VICON®: The VICON (Variable Independent CONTROL—Patented) system provides a stepless variable control power transmission for various machine functions. Engine power is divided at transmission case to two controlled torque converters and hydraulic pump. Through chain drives, front converter powers horizontal travel shaft while the rear converter powers horizontal swing shaft. Hydraulic pump provides separate power for independent boom hoist hydraulic motor.

INDEPENDENT HORIZONTAL TRAVEL SHAFT:

Alloy steel shaft, mounted on antifriction bearings. Single-disc clutches, mounted on cast steel hub splined to drive shaft. Clutches applied by axial-pressure, air actuated cam levers. Clutch pressure plates spring released. Cam faces separated by antifriction roller bearings which take axial thrust. Integral clutch spiders and bevel pinions ball bearing mounted. Bevel pinions totally enclosed and oil spray lubricated. These bevel pinions begin gear drive to horizontal travel shaft in carbody. Spur gear on this shaft also begins power source for main drum shafts.

INDEPENDENT HORIZONTAL SWING SHAFT:

Located behind horizontal travel shaft. Alloy steel, mounted on antifriction bearings, except for bronze outboard bearing. Double-disc clutches applied by axial-pressure, air actuated cam levers. Clutch pressure plates, spring released. Cam faces separated by antifriction roller bearings which take axial thrust. Integral clutch spiders and bevel pinions antifriction bearing mounted. Bevel gears totally enclosed and run in oil. Bevel pinions drive intermediate vertical swing shaft.

INTERMEDIATE VERTICAL SWING SHAFT: Alloy steel, antifriction bearing mounted. Bevel gear splined to upper end; integral spur pinion on lower end of shaft. Transmits power from horizontal swing shaft to vertical swing shaft. Manually controlled swing brake mounted in center of shaft.

VERTICAL SWING SHAFT: Alloy steel, antifriction bearing mounted. Transmits power from intermediate vertical swing shaft to ring gear.

SWING LOCK: Gear segment engages swing gear by independent air control. Spring loaded lock provides cushioned operation.

FRONT AND REAR DRUM ASSEMBLIES: Heat treated, alloy steel drum shafts mounted on antifriction bearings. Drums antifriction bearing mounted on drum shafts. Cast iron combination clutch and brake flanges. Air applied, internal expanding, band type clutch mounted on right side. Dual, external contracting, band type brakes. Front drum gear driven from horizontal travel shaft. Rear drum chain driven from front drum shaft. Gears and chain totally enclosed and oil spray lubricated.

SPLIT REAR DRUM SHAFT: Optional. Two equal width drums on rear shaft, each with single clutch and brake. Clamshell and dragline capacities are reduced with this combination. Consult factory.

VICON® POWER LOWERING: Controlled power load lowering on both hoist drums for drum line pull in excess of 6,000 LBS is an integral part of the VICON control system. It enables raising, holding or lowering the load by means of stepless variable torque output of hoist converter. Hoist clutches remain in constant engagement, making transfer of load from clutch to brake unnecessary during normal job cycle.

FULL RANGE VICON POWER LOWERING: Optional.

An engine driven hydraulic pump powers a hydraulic motor which drives output shaft of hoist controlled converter in a reverse direction of rotation. Provides power lowering (or reversing) for drum line pull less than 6,000 pounds. The hydraulic equipment permits a full range of lowering speeds from empty hook through maximum capacities.

INDEPENDENT BOOM HOIST: Dual drums, heat treated alloy steel drum shaft driven by bronze worm and gear through planetary gear reduction. Gears fully enclosed and run in oil. All rotating shafts antifriction bearing mounted. Boom hoist powered by variable displacement hydraulic motor providing full range speed control. Boom hoist brake, external contracting band type, spring applied, air released. Auxiliary brake, external contracting band type, manually applied from operator's station. Ratchet mounted to worm gear; pawl gravity engaged, air released. Ratchet and pawl mounted inside gear housing. Boom hoist mounted in rotating bed at rear of machine.

GANTRY AND BACKHITCH: Gantry is fabricated plate with parallel box section legs. Supported by A-frame center leg on large pins. Backhitch is three-piece, telescoping, link type construction, anchored to rear of rotating bed. Gantry and backhitch are pin-connected. Vertical backhitch sheaves antifriction bearing mounted. Horizontal sheaves bronze bearing mounted. Floating, vertical boom hoist rope sheaves bronze bearing mounted.

GANTRY LIFTING DEVICE: Electrically powered hydraulic unit used for partially raising gantry prior to erecting into working position. Also controls lowering of gantry into cab roof.

AUTOMATIC BOOM STOP: Push rod contacts boom actuating valve in air line, automatically stopping air supply to independent boom hoist hydraulic pump positioner. Set to stop hoisting when boom reaches maximum angle determined by style of boom used. Standard on liftcrane and liftcrane-excavator combinations.

TELESCOPIC BOOM STOP: Telescoping tube, air cushioned. Pinned to boom and A-frame. Starts cushioning at 79½° with positive physical stop at 88° from horizontal. Standard on liftcrane and liftcrane-excavator combinations.



FRONT END EQUIPMENT

NO. 22A BOOM: 70' boom (30' butt section and 40' open throat top section); optional 10', 20' and 40' inserts. All welded construction. Inverted angle chords and tubular lacing 100,000 PSI yield steel. Butt, top and inserts 95" wide x 95" deep at pin-connected joints. Each insert matched with two pair of 1 1/2" diameter single-length pendants. Lower boom point equipped with six 30" OD antifriction bearing mounted sheaves. Jib adapter available for No. 123 jib assembly. Maximum boom length 260'.

BOOM RIGGING: 12-part line, reeved between gantry and equalizer. Controls boom angle by dual lines from independent boom hoist drums which power boom up and down. Two pair of 1 1/2" diameter pendants connect equalizer to boom point. For longer booms, pendants matched to insert lengths.

EQUALIZER: Steel fabrication. Six vertical sheaves, antifriction bearing mounted.

WIRE ROPE GUIDE: Mounted on top side of boom. Two sheaves, bronze bearing mounted.

WIRE ROPE ROLLER GUIDE: Mounted on top side of boom. Induction hardened tubing. Antifriction bearing mounted.

UPPER BOOM POINT: Optional detachable assemblies. Pin-connected to open throat top. Single 36" OD sheave with rope guard for liftcrane. Single 36" OD sheave with cheek plate for dragline. Double 36" OD sheaves with cheek plate for clamshell. All sheaves antifriction bearing mounted.

No. 123 jib adapter cannot be used with detachable upper boom point assemblies on open throat and 4 1/2° offset boom tops.

4 1/2° OFFSET BOOM TOP: Optional. Permits greater clearance between load and boom. Standard No. 22A boom converted by adapter links at boom joint. Jib adapter available for No. 123 jib assembly. Basic length 70'; maximum length 260'. For capacity charts and information, consult factory.

HAMMERHEAD BOOM TOP: Optional. Permits lifting maximum capacity in areas with restricted overhead clearance. Standard No. 22A Boom converted by addition of 30' tapered insert and 10' hammerhead top. Top has lugs for attaching No. 123 jib assembly. Basic length 70'; maximum length 250'.

LIGHT TAPERED TOP: Optional. Permits longer reach with lighter loads. Standard No. 22A Boom converted by addition of 30' tapered insert (same as used for hammerhead) and 50' tapered top. Top has lugs for attaching No. 123 jib assembly. Basic boom length 110'; maximum boom length 280'.

NO. 123 JIB: Optional. 20-ton maximum capacity, 30' length, extendible to 60' with 10' inserts. Jib angle adjustable to 0, 10, and 20 degrees. All welded construction. Tubular chord and lacing members 100,000 PSI yield steel. 30" wide x 30" deep at pin-connected joints. Top section has 24" OD antifriction bearing sheave, cheek plates and anchor for two-part line.

Maximum capacities with inserts: 40' — 15 tons; 50' — 10 tons; 60' — 5 tons. Consult jib lifting capacity charts for specific capacity when used on various boom lengths.

REVOLVING FAIRLEAD: Furnished only on dragline equipped machines. Full revolving, antifriction bearing mounted in its support at front of rotating bed. All joints taper pin-connected for maximum rigidity. Two sheaves mounted on tapered shaft and sleeve for maximum stability. Shaft mounted on bronze bearings. Two large side guide rollers, case hardened and mounted on bronze bearings. Two end guide rollers. For boom lengths 70' through 100', the full revolving fairlead may be used; however, for 90' and 100' boom lengths, a rewrap may occur causing excessive wire rope wear. For continuous dragline service with boom lengths of 90' through 120', the extended hinged fairlead is recommended.

HINGED FAIRLEAD: Optional. Stationary fairlead frame mounted at front of rotating bed with tapered pins for maximum rigidity. Hinge lugs on frame move boom 66" ahead and 13" above normal boom hinge, providing greater spooling capacity on drag drum without rewrap of drag rope. Drag rope fully guided through antifriction bearing mounted hinged frame by guide sheaves and rollers. Sheaves extended for greater fleet angle on drag rope and mounted on tapered shaft for maximum stability; shafts antifriction bearing mounted.

TAGLINE: Furnished only on clamshell equipped machines. Three barrel, 30" drum. Mounted on boom.

GENERAL

CAB: Fully enclosed with operator's station located in right front corner. Tinted rubber mounted safety glass windows provide wide angle view. Sliding door to outside; sliding window to inside. Overhead window for high boom vision, protected by hinged grill and cover. Insulated door behind operator's seat isolates machinery noise. All controls conveniently arranged. Pull-out battery box compartment at lower right of cab. Sliding service door on left side and in cab roof; hinged service door at left front of cab. Power plant radiator shutter. Ladder to roof. Optional elevated cab available with controls in both cabs; forward of main cab, 26' 6" eye level above ground.

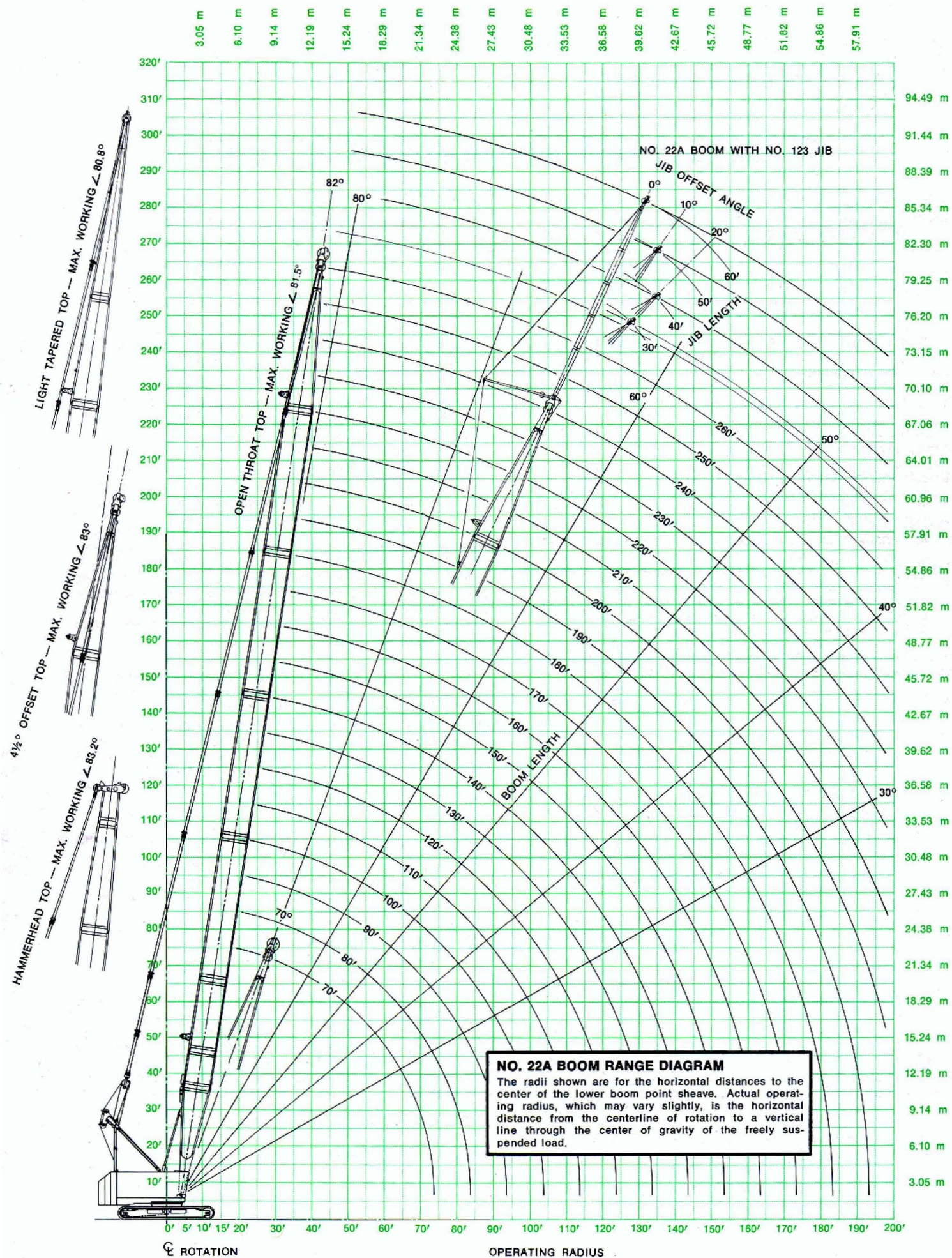
CONTROLS: Air-controlled travel locks, steering and swing

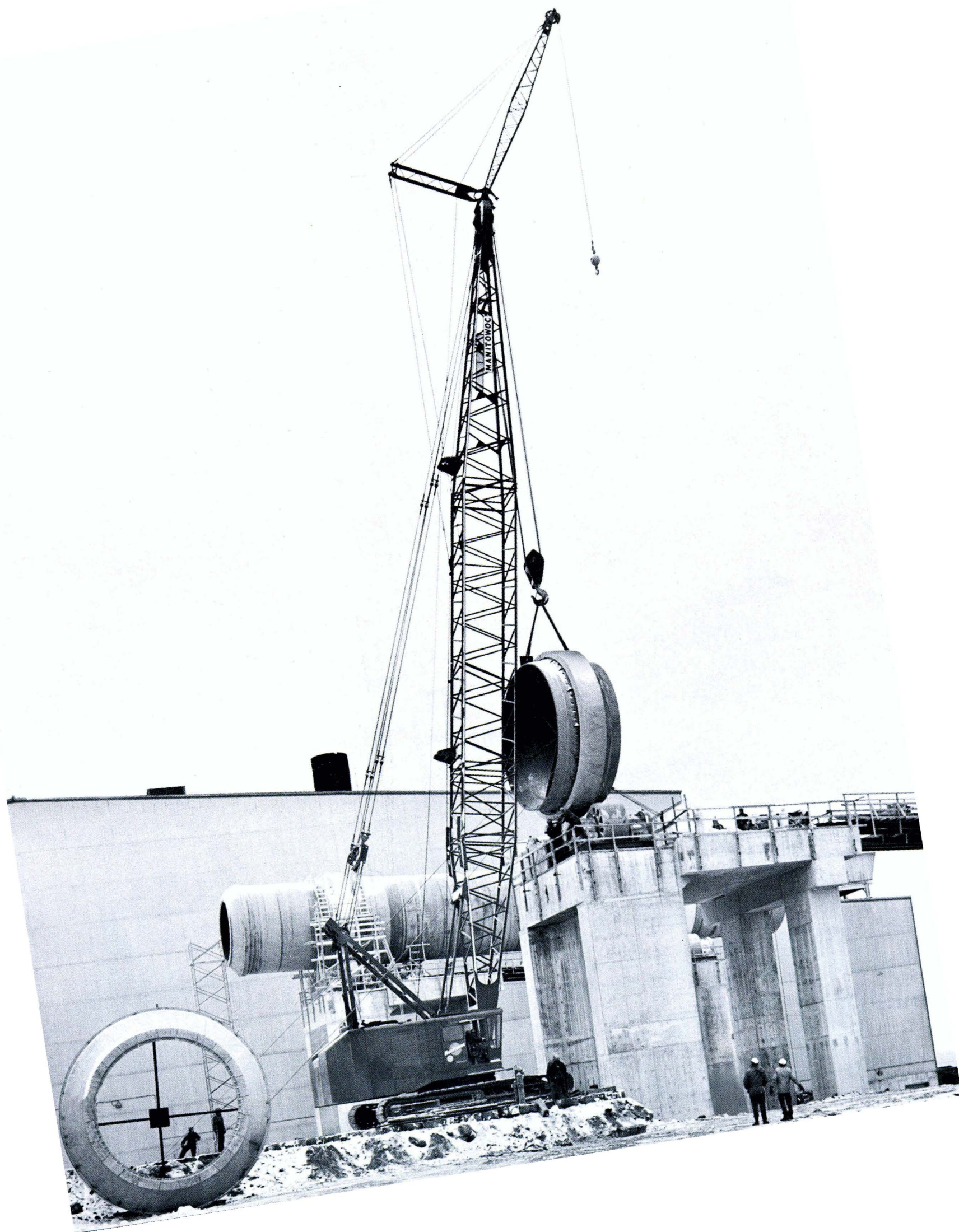
lock. Manually controlled main drum brakes, latched foot pedal operated. Graduated air controls for travel, swing, drum clutches and hydraulic boom hoist. Combination clutch and throttle controls for travel, swing and main drum clutches; first 10° movement of hand lever engages clutch; further movement increases controlled converter output torque permitting variable speed control of operation.

SWING SPEED: Variable, 4.00 RPM maximum.

TRAVEL SPEED: Variable, 1.33 MPH maximum.

GRADEABILITY: 30%.





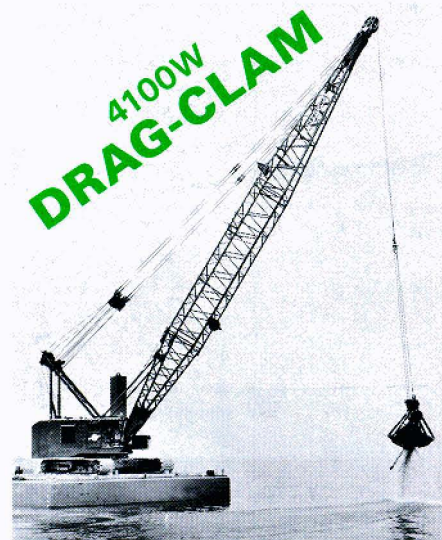
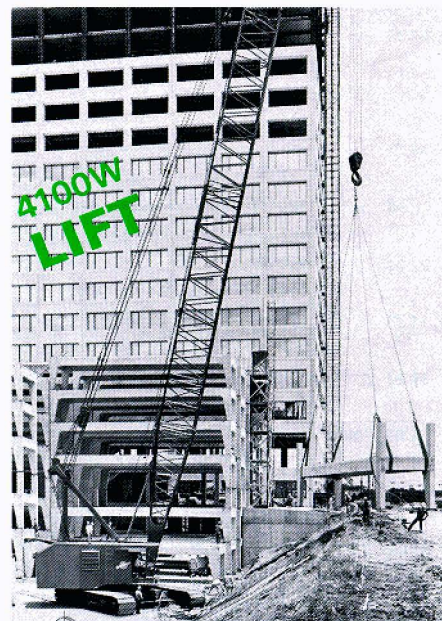
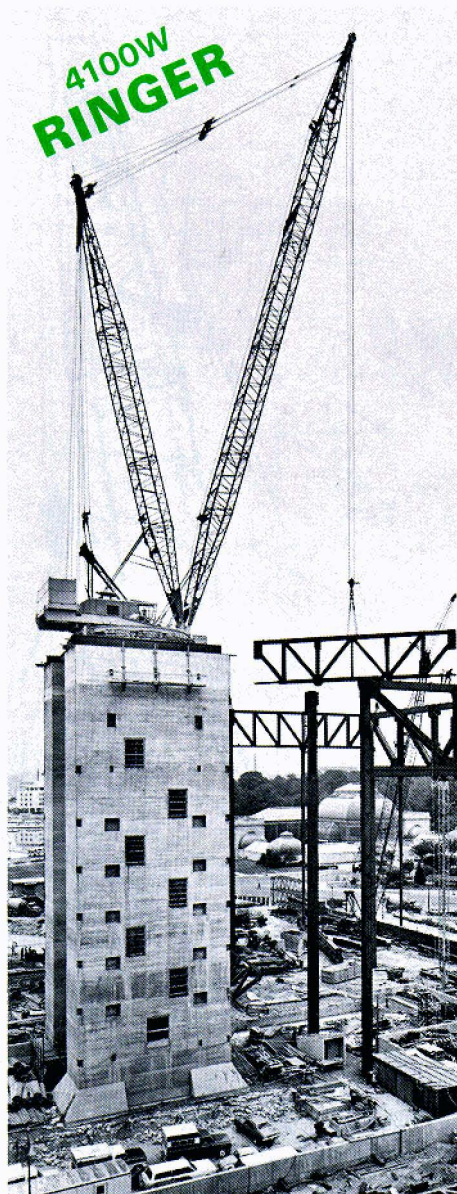
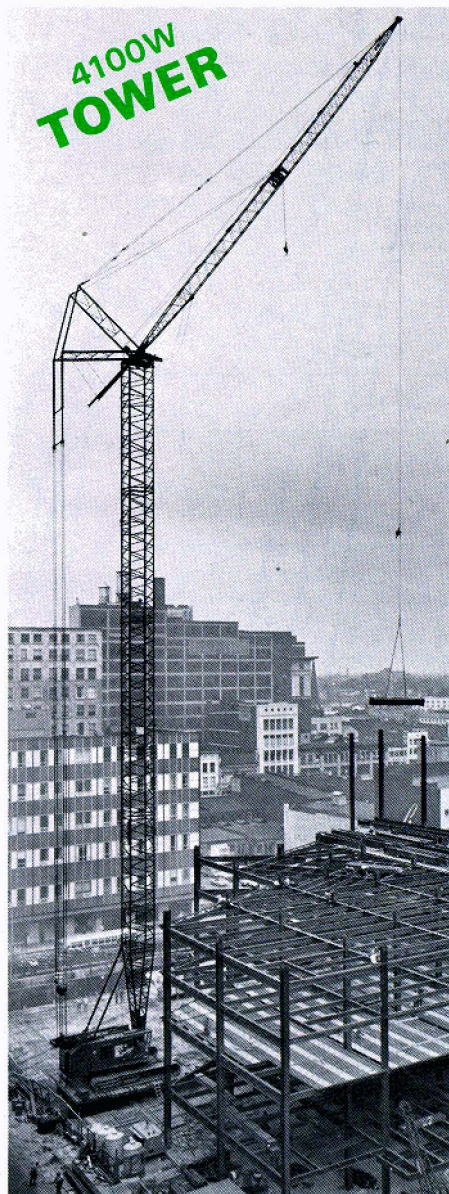


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The Manitowoc RINGER® lets you lift heavy loads in tight quarters... permitting pre-assembly of heavy equipment while supporting structures are being installed.

Capital expenditure is reduced and the return on your original investment is increased. Downtime required to move equipment on and off projects is eliminated.



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MANITOWOC ENGINEERING CO.
(A division of The Manitowoc Co., Inc.)
MANITOWOC, WISCONSIN 54220



...WORLD'S MOST
VERSATILE CRANES!

**WEIGHTS****4100W-S1 4100W-S2**

DESCRIPTION	APPROX. WEIGHT (IN LBS.)
LIFTCRANE - w/70' No. 22C boom, machine counterweight, universal gantry w/telescopic backhitch, 26'-6" crawlers w/48" treads, full width tandem drums, ind. swing, ind. boom hoist, Cummins NTA-855-C360 engine, 27-5/8" dia. lagging for rear drum, boom hoist rope, equalizer, telescopic air cushioned boom stop, 200 ton load block, 15 ton hook and weight ball, single sheave upper boom point, and upper wire rope guide.....	S1 363,795* S2 446,295*
UPPERWORKS - w/Cummins NTA-855-C360 engine, ind. boom hoist, ind. swing, and 27-5/8" dia. lagging for rear drum; <u>LESS</u> boom, gantry and backhitch, equalizer, load block, weight ball, counter weights, telescopic air cushioned boom stop, upper wire rope guide, and catwalk.....	80,500*
UPPERWORKS as above - w/gantry and backhitch, equalizer, boom hoist rope, and carbody; <u>LESS</u> crawlers.....	138,685*
CARBODY -w/roller path, ring gear, and king pin; <u>LESS</u> crawlers.....	49,700
CRAWLERS , 26'-6" w/48" treads.....	37,965 each
COUNTERWEIGHT	
Inner (Self-Removing).....	41,900
Middle (Self-Removing).....	41,500
Outer (Self-Removing).....	39,000
Side (2 Req'd).....	12,000 each
Carbody (2 Req'd).....	30,000 each
BOOM No. 22C	
Boom Butt - 30'	6,150
Boom Top - 40' (w/Lower boom point assembly).....	8,445
Upper Boom Point (Removable - single sheave).....	1,260
double sheave.....	1,505
Jib Adapter (Removable).....	545
Boom Insert - 10' (w/rope guide roller assembly).....	1,350
Boom Insert - 20' (w/rope guide roller assembly).....	2,435
Boom Insert - 40' (w/rope guide roller assembly).....	4,460
Boom Insert - 40' (w/jib backstay, and rope guide roller assembly).....	4,560
Basic Pendant - 40' 9-3/4" (4 Req'd).....	255 each
Pendant - 10' (4 per insert).....	115 each
Pendant - 20' (4 per insert).....	155 each
Pendant - 40' (4 per insert).....	215 each
Pendant Spreader Bar.....	320

*Weights do not include hoist line, whip line, or fuel. For CAT. D-343TA add 1,170 lbs., for CAT. 3406 PCTA add 100 lbs. and for CM 12 V-71N engines add 600 lbs.

**WEIGHTS 4100W Cont'd**

DESCRIPTION	APPROX. WEIGHT (IN LBS.)
JIB NO. 123	
Jib Top - 15' (w/Jib point).....	695
Jib Butt - 15'.....	690
Jib Insert - 10'.....	340
Basic Pendant - 33' 3-3/4" (2 Req'd).....	115 each
Pendant - 10' (2 Per insert).....	65 each
Jib Backstay Pendant.....	155 each
Jib Stut - 12' - 6".....	365

COMPONENTS

Hook Rollers (6) - w/shafts.....	1,020
Light Plant - 6.5KW - w/mounting platform.....	1,390
Catwalk - left and right side w/rails.....	1,320
Lagging - 27-5/8" dia. plain.....	1,410
Boom Hoist Rope - 12 Part - 760' of 7/8" - 6 x 26.....	1,080
Wire Rope Guide Assembly - Lower.....	325
Wire Rope Guide Assembly - Upper.....	510
Rope Guide Roller Assembly.....	55 each
2-Part Gantry w/Telescopic Backhitch.....	7,805
Equalizer.....	2,000
Hoist Line - 1-1/8" - 6 x 31.....	2.34 lbs./ft.
Whip Line - 1-1/8" - 6 x 31.....	2.34 lbs./ft.
15 Ton Hook and Weight Ball.....	865
100 Ton Hook Block Assembly.....	2,065
200 Ton Hook Block Assembly.....	4,900
230 Ton Hook Block Assembly.....	5,375
Boom Stop - Telescopic Air Cushioned.....	675
Dragline Fairlead - Revolving.....	1,910
Dragline Fairlead - Hinged.....	9,330

NOTE: The above weights may fluctuate up or down 5% due to manufacturing tolerances.

**LIFT CRANE CAPACITIES****MEETS ANSI B30.5
REQUIREMENTS**

BOOM NO. 22C WITH OPEN THROAT TOP
146,400 LB. CRANE COUNTERWEIGHT
60,000 LB. CARBODY COUNTERWEIGHT
26'6" CRAWLERS EXTENDED

WARNING: This chart will apply only when
two 12,000 lb. side ctwts. and two 30,000 lb.
carbody ctwts. bear MEC registered Serial Numbers.

LIFTING CAPACITIES: Capacities for various boom lengths
and operating radii may be based on percent of tipping,
strength of structural components, operating speeds and other
factors.

Capacities are for freely suspended loads and do not exceed
75% of a static tipping load. Capacities based on structural
competence are shown by shaded areas.

Capacities are shown in pounds. Deduct 1200 pounds from
capacities listed when single sheave upper boom point is
attached and 1500 pounds when two sheave upper boom point
is attached. To comply with B30.5 requirements, upper
boom point cannot be used on the 260 ft. boom. Weight of jib,
(see chart A), all load blocks, hooks, weight ball, slings, hoist
lines beneath boom and jib point sheaves, etc., is considered
part of the main boom load. Boom is not to be lowered beyond
radii where combined weights are greater than rated capacity.
Where no capacity is shown, operation is not intended or
approved.

OPERATING CONDITIONS: Machine to operate in a level
position on a firm surface with crawlers fully extended and
gantry in working position and be rigged in accordance with
and under conditions referred to in rigging drawing No. 190693
and load line specification chard No. 6592-A.

HOIST REEVEING FOR MAIN LOAD BLOCK

No. Parts Of Line	1	2	3	4	5	6
Max. Load - Lbs.	32,500	65,000	97,500	130,000	162,500	195,000
No. Parts of Line	7	8	9	10	11	12
Max. Load - Lbs.	227,500	260,000	292,500	325,000	357,500	400,000
No. Parts of Line	13					
Max. Load - Lbs.	430,000					

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY: CRAWLERS EXTENDED
70	16.5	79.7	75.9	460,000
	17	79.3	75.8	400,000
	18	78.5	75.6	380,100
	19	77.6	75.4	363,000
	20	76.8	75.1	347,300
	22	75.1	74.6	319,600
	24	73.4	74.1	293,400
	26	71.7	73.5	266,100
	28	69.9	72.8	237,500
	30	68.2	72.0	214,300
80	32	66.4	71.2	195,100
	34	64.6	70.4	178,900
	36	62.8	69.3	163,200
	38	60.9	68.2	153,300
	40	59.1	67.0	143,000
	45	54.1	63.7	122,100
	50	48.9	59.8	106,300
	55	43.2	54.9	93,900
	60	36.9	49.0	84,000
	65	29.4	41.3	75,800
70	19.5	30.3		63,900

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY: CRAWLERS EXTENDED
80	17	80.6	85.9	392,800
	18	79.9	85.8	378,900
	19	79.2	85.6	361,800
	20	78.5	85.4	346,100
	22	77.0	84.9	318,400
	24	75.5	84.5	292,500
	26	74.0	83.9	265,600
	28	72.5	83.3	237,000
	30	71.0	82.7	213,800
	32	69.5	81.9	194,600
90	34	68.0	81.2	178,500
	36	66.4	80.3	164,700
	38	64.8	79.4	152,800
	40	63.3	78.4	142,400
	45	59.2	75.7	121,500
	50	54.9	72.5	105,700
	55	50.4	68.6	93,300
	60	45.6	64.1	83,400
	65	40.3	58.8	75,200
	70	34.4	52.2	68,300
80	75	27.4	43.9	52,500
	80	18.2	32.0	53,900

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY: CRAWLERS EXTENDED
90	18	81.1	95.9	355,400
	19	80.4	95.7	346,900
	20	79.8	95.6	336,900
	22	78.5	95.2	317,400
	24	77.2	94.7	291,700
	26	75.9	94.3	264,800
	28	74.5	93.7	236,600
	30	73.2	93.2	213,400
	32	71.9	92.5	194,200
	34	70.5	91.9	178,000
100	36	69.2	91.1	164,200
	38	67.8	90.3	152,300
	40	66.4	89.5	142,000
	45	62.9	87.1	121,100
	50	59.3	84.4	105,200
	55	55.5	81.2	92,800
	60	51.5	77.5	82,900
	65	47.3	73.2	74,700
	70	42.8	68.2	67,800
	75	37.9	62.3	62,000
90	80	32.4	55.2	57,000
	85	25.8	46.2	52,600
	90	17.1	33.5	45,900

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY: CRAWLERS EXTENDED
100	19	81.4	105.9	332,900
	20	80.8	105.7	327,100
	22	79.6	105.4	316,200
	24	78.5	105.0	299,800
	26	77.3	104.5	283,900
	28	76.1	104.1	268,200
	30	74.9	103.6	252,900
	32	73.7	103.0	237,700
	34	72.5	102.4	222,500
	36	71.3	101.7	207,300
110	38	70.1	101.0	192,100
	40	68.9	100.3	177,000
	45	65.8	98.7	157,000
	50	62.6	95.8	137,000
	55	59.3	93.0	122,000
	60	55.9	89.8	107,000
	65	52.4	86.2	94,100
	70	48.7	82.1	82,200
	75	44.8	77.4	71,400
	80	40.5	72.0	61,400
100	85	35.9	65.6	52,000
	90	30.7	58.0	48,200
	95	24.5	48.5	44,900
110	100	16.3	35.0	39,300

Crane operator judgement must be used to allow for dynamic
load effects of swinging, hoisting or lowering, travel, as well
as adverse operating conditions & physical machine
depreciation.

OPERATOR RADIUS: Operating is the horizontal distance
from the axis of rotation to the center of vertical hoist line or
load block with the load freely suspended. Add 14" to boom
point radius for radius of sheave when using single part hoist
line.

Boom angle is the angle between horizontal and centerline of
boom butt and inserts and is an indication of operating radius.
In all cases, operating radius shall govern capacity.

BOOM POINT ELEVATION: Boom point elevation, in feet,
is the vertical distance from ground level to centerline of boom
point shaft.

MACHINE EQUIPMENT: Machine equipped with 26'6"
extendible crawlers, 48" treads, 17' retractable gantry, 12 part
boom hoist reeving, four 1 3/8" boom pendants, 1st ctwt.
41,900 lbs., 2nd ctwt. 41,500 lbs., 3rd ctwt. 39,000 lbs., two
12,000 lbs. side ctwt's. and two 30,000 lbs. carbody ctwt's.

LOAD AND WHIP LINE SPECIFICATIONS

LOAD LINE: 1-1/8" - 6 x 31 Warrington-Seale, Extra Improved Plow Steel, Regular Lay, IWRC. Minimum Breaking Strength 65 Ton. (Approx. Weight Per Ft. in Lbs. 2.34)
WHIP LINE: 1-1/8" - Warrington-Seale, Improved Plow Steel, Regular Lay, IWRC. Minimum Breaking Strength 56.5 Ton. Maximum Load - 28,300 Lbs. Per Line. (Approx. Weight Per Ft. in Lbs. 2.34)

MAXIMUM BOOM AND JIB LENGTHS LIFTED UNASSISTED				DEDUCT FROM CAPACITIES WHEN JIB IS ATTACHED	
OVERFRONT OF BLOCKED CRAWLERS		OVERSIDE OF EXTENDED CRAWLERS			
BOOM LENGTH	JIB NO. 123	BOOM LENGTH	JIB NO. 123	JIB LENGTH	JIB NO. 123
260'	--	260'	--	30'	3,000 lbs.
250'	--	250'	--	40'	3,600 lbs.
240'	40'	240'	40'	50'	4,200 lbs.
230'	60'	230'	60'	60'	4,900 lbs.

Load Block, hook and weight ball on ground at start.

FOR JIB CAPACITIES, CONSULT JIB CHART.

CAUTION! CHECK AMOUNT OF COUNTERWEIGHT ON MACHINE BEFORE USE OF THIS CHART.

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machine specific. Not responsible for typographical errors.



SEE CONDITIONS ON REVERSE SIDE

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
1	22	80.6	115.5	291,600
	24	79.5	115.2	282,900
	26	78.5	114.8	265,200
	28	77.4	114.3	245,800
	30	76.3	113.9	212,500
1	32	75.3	113.4	193,300
	34	74.2	112.8	177,100
	36	73.1	112.2	163,300
	38	72.0	111.6	151,400
	40	70.9	110.9	141,000
1	45	68.1	109.1	120,100
	50	65.3	106.9	104,200
	55	62.4	104.5	91,800
	60	59.4	101.7	81,800
	65	56.3	98.58	73,600
1	70	53.1	95.0	66,800
	75	49.8	91.0	60,900
	80	46.3	86.5	55,900
	85	42.6	81.4	51,600
	90	38.6	75.6	47,800
1	95	34.2	68.8	44,400
	100	29.2	60.7	41,400
	105	23.3	50.6	36,700
	110	15.5	36.4	33,900
1	22	81.4	125.6	285,000
	24	80.4	125.3	271,700
	26	79.4	125.0	259,800
	28	78.5	124.6	235,300
	30	77.5	124.1	212,100
1	32	76.5	123.7	192,800
	34	75.5	123.2	176,600
	36	74.5	122.7	162,800
	38	73.5	122.1	150,900
	40	72.5	121.5	140,500
1	45	70.0	119.8	119,500
	50	67.5	117.8	103,700
	55	64.8	115.6	91,300
	60	62.2	113.1	81,300
	65	59.4	110.3	73,100
1	70	56.6	107.2	66,200
	75	53.9	103.7	60,400
	80	50.7	99.9	55,300
	85	47.5	95.5	51,000
	90	44.2	90.7	47,200
1	95	40.7	85.2	43,800
	100	36.9	79.0	40,800
	105	32.7	71.8	38,100
	110	28.0	63.2	35,700
	115	22.3	52.6	33,500
1	24	81.2	135.5	260,000
	26	80.3	135.1	248,600
	28	79.4	134.8	234,700
	30	78.5	134.4	211,800
	32	77.6	133.9	192,500
1	34	76.7	133.5	176,300
	36	75.7	133.0	162,500
	38	74.8	132.5	150,600
	40	73.9	131.9	140,200
	45	71.6	130.4	119,300
1	50	69.3	128.6	103,400
	55	66.9	126.6	91,000
	60	64.5	124.3	81,000
	65	62.0	121.8	72,800
	70	59.5	119.0	65,900
1	75	56.9	115.9	60,000
	80	54.2	112.5	55,000
	85	51.5	108.7	50,700
	90	48.6	104.5	46,800
	95	45.6	9.8	43,500
1	100	42.4	94.7	40,500
	105	39.0	88.8	37,800
	110	35.4	82.3	35,300
	115	31.4	74.7	33,100
	120	26.8	65.7	31,100
1	125	21.4	54.5	29,300
	26	81.0	145.3	239,700
	28	80.1	144.9	230,800
	30	79.3	144.6	211,300
	32	78.5	144.2	192,100
1	34	77.6	143.7	175,800
	36	76.8	143.5	162,000
	38	75.9	142.8	150,100
	40	75.1	142.3	139,700
	45	73.0	140.9	118,700
1	50	70.8	139.2	102,800
	55	68.6	137.4	90,400
	60	66.4	135.3	80,400
	65	64.2	133.0	72,200
	70	61.9	130.5	65,300
1	75	59.5	127.7	59,300
	80	57.1	124.6	54,400
	85	54.6	121.2	50,100
	90	52.1	117.5	46,200
	95	49.5	113.4	42,900
	100	46.7	108.9	39,900

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
1	105	43.8	103.9	37,200
	110	40.8	98.5	34,700
	115	37.5	92.3	32,500
	120	34.0	85.4	30,500
	125	30.2	77.4	28,700
1	130	25.8	68.0	27,000
	135	20.7	56.4	25,500
1	28	80.8	155.1	218,600
	30	80.0	154.7	210,300
	32	79.2	154.4	191,600
	34	78.5	154.0	175,400
	36	77.7	153.5	161,600
1	38	76.9	153.1	149,600
	40	76.1	152.6	139,200
	45	74.1	151.3	118,200
	50	72.1	149.8	102,400
	55	70.1	148.1	89,900
1	60	68.1	146.2	79,900
	65	66.0	144.0	71,700
	70	63.9	141.7	64,800
	75	61.7	139.1	59,000
	80	59.6	136.3	53,900
1	85	57.3	133.2	49,600
	90	55.0	129.9	45,700
	95	52.7	126.2	42,400
	100	50.2	122.3	39,400
	105	47.7	117.9	36,700
1	110	45.0	113.1	34,200
	115	42.3	107.9	32,000
	120	39.3	102.1	30,000
	125	36.2	95.7	28,200
	130	32.6	88.4	26,500
1	135	29.2	80.1	25,000
	140	25.0	70.3	23,500
	145	19.9	58.2	22,200
1	28	81.4	165.2	208,500
	30	80.6	164.9	203,500
	32	79.9	164.5	191,100
	34	79.2	164.2	174,900
	36	78.5	163.8	161,000
1	38	77.7	163.3	149,100
	40	77.0	162.9	138,700
	45	75.2	161.7	117,700
	50	73.3	160.2	101,800
	55	71.4	158.7	89,300
1	60	69.5	156.9	79,300
	65	67.6	154.9	71,100
	70	65.6	152.8	64,200
	75	63.7	150.4	58,400
	80	61.6	147.8	53,300
1	85	59.6	145.0	49,000
	90	57.5	141.9	45,100
	95	55.3	138.6	41,800
	100	53.1	135.0	38,700
	105	50.9	131.1	36,000
1	110	48.5	128.1	33,600
	115	46.1	122.2	31,400
	120	43.5	117.5	29,400
	125	40.9	111.7	27,600
	130	38.0	105.6	25,900
1	135	35.0	98.9	24,300
	140	31.8	91.3	22,900
	145	28.2	82.6	21,600
	150	24.1	72.5	20,400
	155	19.3	59.9	19,200
1	30	81.2	175.0	192,600
	32	80.5	174.7	188,400
	34	79.8	174.3	174,600
	36	79.2	174.0	160,800
	38	78.5	173.6	148,800
1	40	77.8	173.1	138,400
	45	76.0	172.0	117,400
	50	74.3	170.7	101,500
	55	72.5	169.2	89,100
	60	70.8	167.5	79,000
1	65	69.0	165.7	70,800
	70	67.2	163.7	63,900
	75	65.3	161.5	58,100
	80	63.4	159.1	53,000
	85	61.5	156.5	48,700
1	90	59.6	153.6	44,900
	95	57.6	150.6	41,500
	100	55.6	147.3	38,500
	105	53.6	143.7	35,800
	110	51.4	139.9	33,300
1	115	49.2	135.8	31,100
	120	47.0	131.3	29,100
	125	44.6	126.4	27,300
	130	42.2	121.1	25,600
	135	39.6	115.3	24,100
1	140	36.9	109.0	22,600
	145	34.0	102.0	21,300
	150	30.8	94.1	20,100
	155	27.3	85.1	18,900
	160	23.4	74.6	17,800
	165	18.7	61.6	16,400

	BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY CRAWLERS EXTENDED
1 8 0	32	81.1	184.8	180,000	
	34	80.4	184.5	174,100	
	36	79.8	184.1	160,300	
	38	79.1	183.8	148,300	
	40	78.5	183.4	137,900	
	45	76.8	182.3	116,900	
	50	75.2	181.0	101,000	
	55	73.5	179.6	88,500	
	60	71.9	178.1	78,500	
	65	70.2	176.3	70,300	
	70	68.5	174.5	63,400	
	75	66.8	172.4	57,500	
	80	65.0	170.2	52,500	
	85	63.3	167.7	48,100	
	90	61.5	165.1	44,300	
	95	59.6	162.3	40,900	
	100	57.8	159.3	37,900	
	105	55.9	156.0	35,200	
	110	53.9	152.5	32,700	
	115	51.9	148.7	30,500	
1 9 0	120	49.9	144.6	28,500	
	125	47.8	140.3	26,700	
	130	45.6	135.5	25,000	
	135	43.3	130.4	23,500	
	140	40.9	124.9	22,000	
	145	38.4	118.9	20,700	
	150	35.8	112.3	19,500	
	155	33.0	105.0	18,300	
	160	29.9	96.8	17,200	
	165	26.6	87.5	16,200	
	170	22.7	76.6	15,300	
	175	18.2	63.2	13,500	
	32	81.5	194.9	171,000	
	34	80.9	194.6	166,100	
	36	80.3	194.3	159,800	
	38	79.7	193.9	147,900	
	40	79.1	193.6	137,400	
	45	77.5	192.5	116,400	
	50	76.0	191.3	100,500	
	55	74.4	190.0	88,000	
60	72.9	188.6	78,000		
65	71.3	186.9	69,700		
1 9 0	70	69.7	185.2	62,800	
	75	68.1	183.7	55,000	
	80	66.4	181.1	52,000	
	85	64.8	178.9	47,600	
	90	63.1	176.4	43,800	
	95	61.4	173.8	40,400	
	100	59.7	171.0	37,400	
	105	57.9	167.9	34,700	
	110	56.1	164.7	32,200	
	115	54.3	161.2	30,000	
	120	52.4	157.5	28,000	
	125	50.4	153.5	26,200	
	130	48.5	149.2	24,500	
	135	46.4	144.6	22,900	
	140	44.3	139.7	21,500	
	145	42.1	134.4	20,200	
	150	39.8	128.6	18,900	
	155	37.4	122.3	17,800	
	160	34.8	115.5	16,700	
	165	32.1	107.9	15,700	
2 0 0	170	29.1	99.4	14,800	
	175	25.8	89.8	13,900	
	180	22.1	78.6	13,100	
	185	17.7	64.8	11,000	
	34	81.4	204.7	157,200	
	36	80.8	204.4	153,500	
	38	80.2	204.1	147,400	
	40	79.6	203.7	136,900	
	45	78.2	202.8	115,900	
	50	76.7	201.6	100,000	
	55	75.2	200.4	87,500	
	60	73.7	199.0	77,400	
	65	72.2	197.5	69,200	
	70	70.7	195.8	62,300	
	75	69.2	194.0	56,400	
	80	67.7	192.0	51,400	
	85	66.1	189.9	47,000	
	90	64.5	187.6	43,200	
	95	62.9	185.1	39,800	
	2 0 0	100	61.3	182.5	36,800
105		59.7	179.6	34,100	
110		58.0	176.6	31,600	
115		56.3	173.4	29,400	
120		54.5	169.9	27,400	
125		52.8	166.2	25,600	
130		50.9	162.3	23,900	
135		49.1	158.1	22,300	
140		47.2	153.6	20,900	
145		45.2	148.8	19,600	
150		43.1	143.7	18,300	
155		41.0	138.1	17,200	
160		38.7	132.2	16,100	
165		36.4	125.7	15,100	
170		33.9	118.6	14,200	



LIFTCRANE CAPACITIES - 4100W SERIES 2
BOOM NO. 22C WITH OPEN THROAT TOP, CONTINUED.

SEE CONDITIONS ON FRONT PAGE

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
2 3 0	38	81.5	234.5	132,900
	40	81.0	234.2	125,200
	45	79.7	233.3	114,500
	50	78.5	232.4	98,600
	55	77.2	231.3	86,100
	60	75.9	230.1	76,100
	65	74.6	228.8	67,800
	70	73.3	227.3	60,900
	75	72.0	225.8	55,000
	80	70.7	224.1	50,000
	85	69.4	222.3	45,600
	90	68.0	220.3	41,700
	95	66.7	218.2	38,400
	100	65.3	216.0	35,300
	105	64.0	213.6	32,600
	110	62.6	211.1	30,200
	115	61.1	208.4	28,000
	120	59.7	205.6	26,000
	125	58.3	202.6	24,100
	130	56.8	199.4	22,400
	135	55.3	196.0	20,900
	140	53.8	192.5	19,400
	145	52.2	188.7	18,100
	150	50.6	184.7	16,900
	155	49.0	180.5	15,700
	160	47.3	176.0	14,700
	165	45.6	171.3	13,600
	170	43.8	166.2	12,700
	175	42.0	160.8	11,800
	180	40.1	155.1	11,000
	185	38.1	148.9	10,200
	190	36.0	142.3	9,400
	195	33.9	135.1	8,700
	200	31.6	127.3	8,100
	205	29.1	118.8	7,400
	210	26.4	109.3	6,800
2 4 0	40	81.4	244.3	123,400
	45	80.2	243.5	112,600
	50	78.9	242.6	98,100
	55	77.7	241.5	85,600
	60	76.5	240.4	75,600
	65	75.3	239.1	67,300
	70	74.0	237.7	60,400
	75	72.8	236.3	54,500
	80	71.5	234.6	49,500
	85	70.3	232.9	45,100
	90	69.0	231.1	41,200
	95	67.7	229.1	37,800
	100	66.4	227.0	34,800
	105	65.1	224.7	32,100
	110	63.8	222.3	29,700
	115	62.5	219.8	27,400
	120	61.1	217.1	25,400
	125	59.7	214.3	23,600
	130	58.3	211.3	21,900
	135	56.9	208.1	20,300
	140	55.5	204.7	18,900
	145	54.0	201.2	17,600
	150	52.5	197.5	16,300
	155	51.0	193.5	15,200
	160	49.5	189.4	14,100
	165	47.9	185.0	13,100
	170	46.2	180.3	12,200
	175	44.6	175.4	11,300
	180	42.8	170.2	10,400
	185	41.0	164.6	9,600
	190	39.2	158.7	8,900
	195	37.3	152.3	8,200
	200	35.2	145.5	7,500
	205	33.1	138.1	6,700
	210	30.9	130.1	6,000

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
2 5 0	45	80.6	253.6	106,600
	50	79.4	252.7	97,800
	55	78.2	251.7	85,200
	60	77.1	250.6	75,200
	65	75.9	249.4	66,900
	70	74.7	248.1	60,000
	75	73.5	246.7	54,100
	80	72.3	245.2	49,100
	85	71.1	243.5	44,700
	90	69.9	241.7	40,800
	95	68.7	239.8	37,400
	100	67.4	237.8	34,400
	105	66.2	235.7	31,700
	110	64.9	233.4	29,300
	115	63.6	231.0	27,100
	120	62.4	228.5	25,000
	125	61.1	225.8	23,200
	130	59.7	222.9	21,500
	135	58.4	219.9	20,000
	140	57.0	216.8	18,500
	145	55.7	213.4	17,200
	150	54.3	209.9	16,000
	155	52.8	206.2	14,800
	160	51.4	202.4	13,700
	165	49.9	198.3	12,700
	170	48.4	193.9	11,800
	175	46.8	189.4	10,900
	180	45.3	184.5	10,100
	185	43.6	179.4	9,300
	190	41.9	174.0	8,500
	195	40.2	168.3	7,800
	200	38.4	162.2	7,000
	205	36.5	155.7	6,200
	210	34.5	148.6	5,500
2 6 0	45	80.9	263.7	104,800
	50	79.8	262.9	95,700
	55	78.7	261.9	84,700
	60	77.6	260.9	74,700
	65	76.4	259.7	66,400
	70	75.3	258.5	59,500
	75	74.2	257.1	53,600
	80	73.0	255.6	48,500
	85	71.8	254.1	44,100
	90	70.7	252.4	40,300
	95	69.5	250.6	36,900
	100	68.3	248.6	33,900
	105	67.1	246.6	31,100
	110	65.9	244.4	28,700
	115	64.7	242.1	26,500
	120	63.5	239.7	24,500
	125	62.3	237.1	22,600
	130	61.0	234.4	20,900
	135	59.7	231.6	19,400
	140	58.5	228.6	17,900
	145	57.2	225.4	16,600
	150	55.8	222.1	15,400
	155	54.5	218.7	14,200
	160	53.1	215.0	13,100
	165	51.7	211.2	12,100
	170	50.3	207.1	11,200
	175	48.9	202.9	10,300
	180	47.4	198.4	9,500
	185	45.9	193.7	8,700
	190	44.3	188.7	7,900
	195	42.7	183.4	7,000
	200	41.1	177.8	6,200
	205	39.4	171.9	5,400
	210	37.6	165.6	4,700

**LIFTCRANE CAPACITIES****MEETS ANSI B30.5
REQUIREMENTS**

BOOM NO. 22C WITH OPEN THROAT TOP OFFSET 4 1/2 DEGREES
 146,400 LB. CRANE COUNTERWEIGHT
 60,000 LB. CARBODY COUNTERWEIGHT
 26'6" CRAWLERS EXTENDED

WARNING: This chart will apply only when two 12,000 lb. side ctwts. and two 30,000 lb. carbody ctwts. bear MEC registered Serial Numbers.

LIFTING CAPACITIES: Capacities for various boom lengths and operating radii may be based on percent of tipping, strength of structural components, operating speeds and other factors.

Capacities are for freely suspended loads and do not exceed 75% of a static tipping load. Capacities based on structural competence are shown by shaded areas.

Capacities are shown in pounds. Deduct 1200 pounds from capacities listed when single sheave upper boom point is attached and 1500 pounds when two sheave upper boom point is attached. To comply with B30.5 requirements, upper boom point cannot be used on the 260 ft. boom. Weight of jib, (see chart A), all load blocks, hooks, weight ball, slings, hoist lines beneath boom and jib point sheaves, etc., is considered part of the main boom load. Boom is not to be lowered beyond radii where combined weights are greater than rated capacity. Where no capacity is shown, operation is not intended or approved.

OPERATING CONDITIONS: Machine to operate in a level position on a firm surface with crawlers fully extended and gantry in working position and be rigged in accordance with and under conditions referred to in rigging drawing No. 190693 and load line specification chard No. 6592-A.

HOIST REEVING FOR MAIN LOAD BLOCK

No. Parts Off Line	1	2	3	4	5	6
Max. Load - Lbs.	32,500	65,000	97,500	130,000	162,500	195,000
No. Parts of Line	7	8	9	10	11	12
Max. Load - Lbs.	227,500	260,000	292,500	325,000	357,500	400,000
No. Parts of Line	13					
Max. Load - Lbs.	430,000					

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
16.5	82.4	76.1	420,000	
17	82.0	76.0	398,900	
18	81.2	75.8	380,100	
19	80.1	75.6	363,000	
20	79.5	75.4	347,300	
22	77.8	74.9	319,600	
24	76.1	74.3	293,400	
26	74.4	73.7	266,100	
28	72.7	73.0	237,500	
30	71.0	72.3	214,300	
32	69.2	71.4	195,100	
34	67.4	70.5	178,900	
36	65.6	69.5	165,200	
38	63.7	68.5	153,300	
40	61.8	67.3	143,000	
45	57.0	64.0	122,100	
50	51.8	60.1	106,300	
55	46.1	55.3	93,900	
60	39.8	49.4	84,000	
65	32.4	41.8	75,800	
70	22.7	31.0	63,900	

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
17	83.0	86.2	315,400	
18	82.3	86.0	309,400	
19	81.6	85.8	303,600	
20	80.8	85.6	298,200	
22	79.4	85.2	286,000	
24	77.9	84.7	278,700	
26	76.4	84.2	265,600	
28	74.9	83.6	257,000	
30	73.4	82.9	243,800	
32	71.9	82.2	234,600	
34	70.4	81.4	218,500	
36	68.8	80.6	204,700	
38	67.3	79.7	192,800	
40	65.7	78.7	182,400	
45	61.6	76.0	161,500	
50	57.4	72.7	140,700	
55	52.9	68.9	123,300	
60	48.1	64.5	109,400	
65	42.9	59.1	97,200	
70	37.0	52.6	86,300	
75	30.1	44.4	76,200	
80	21.0	32.7	67,900	

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
19	82.5	96.0	276,700	
20	81.9	95.8	271,500	
22	80.6	95.4	261,300	
24	79.3	95.0	252,900	
26	78.0	94.5	244,800	
28	76.7	94.0	236,600	
30	75.3	93.4	228,400	
32	74.0	92.8	219,200	
34	72.7	92.1	209,000	
36	71.3	91.4	198,800	
38	69.9	90.6	188,600	
40	68.6	89.7	178,400	
45	65.1	87.4	161,100	
50	61.4	84.6	145,200	
55	57.7	81.4	129,800	
60	53.7	77.7	114,900	
65	49.5	73.5	100,500	
70	45.1	68.5	86,600	
75	40.2	62.7	73,200	
80	34.7	55.6	60,300	
85	28.2	46.7	48,900	
90	19.7	34.3	39,900	

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
20	82.7	105.9	258,300	
22	81.5	105.6	248,700	
24	80.4	105.2	240,100	
26	79.2	104.8	232,100	
28	78.0	104.3	224,800	
30	76.8	103.8	217,900	
32	75.7	103.2	211,700	
34	74.5	102.6	206,100	
36	73.3	102.0	200,900	
38	72.0	101.3	196,100	
40	70.8	100.5	191,600	
45	67.7	98.5	177,500	
50	64.6	96.0	163,700	
55	61.3	93.3	150,300	
60	57.9	90.1	137,400	
65	54.4	86.5	124,900	
70	50.7	82.4	112,900	
75	46.8	77.7	101,400	
80	42.6	72.3	90,300	
85	38.0	66.0	79,600	
90	32.8	58.5	69,200	
95	26.6	49.0	59,900	
100	18.6	35.8	51,600	

Crane operator judgement must be used to allow for dynamic load effects of swinging, hoisting or lowering, travel, as well as adverse operating conditions & physical machine depreciation.

OPERATOR RADIUS: Operating is the horizontal distance from the axis of rotation to the center of vertical hoist line or load block with the load freely suspended. Add 14" to boom point radius for radius of sheave when using single part hoist line.

Boom angle is the angle between horizontal and centerline of boom butt and inserts and is an indication of operating radius. In all cases, operating radius shall govern capacity.

BOOM POINT ELEVATION: Boom point elevation, in feet, is the vertical distance from ground level to centerline of boom point shaft.

MACHINE EQUIPMENT: Machine equipped with 26'6" extendible crawlers, 48" treads, 17' retractable gantry, 12 part boom hoist reeving, four 1 3/8" boom pendants, 1st ctwt. 41,900 lbs., 2nd ctwt. 41,500 lbs., 3rd ctwt. 39,000 lbs., two 12,000 lbs. side ctwt's. and two 30,000 lbs. carbody ctwt's.

LOAD AND WHIPLINE SPECIFICATIONS

LOADLINE: 1-1/8" - 6 x 31 Warrington-Seale, Extra Improved Plow Steel, Regular Lay, IWRC. Minimum Breaking Strength 65 Ton. (Approx. Weight Per Ft. in Lbs. 2.34)
WHIPLINE: 1-1/8" - Warrington-Seale, Improved Plow Steel, Regular Lay, IWRC. Minimum Breaking Strength 56.5 Ton. Maximum Load - 28,300 Lbs. Per Line. (Approx. Weight Per Ft. in Lbs. 2.34)

MAXIMUM BOOM AND JIB LENGTHS LIFTED UNASSISTED				DEDUCT FROM CAPACITIES WHEN JIB IS ATTACHED	
OVERFRONT OF BLOCKED CRAWLERS		OVERSIDE OF EXTENDED CRAWLERS		JIB LENGTH	JIB NO. 123
BOOM LENGTH	JIB NO. 123	BOOM LENGTH	JIB NO. 123		
260'	--	260'	--	30'	3,000 lbs.
250'	--	250'	--	40'	3,600 lbs.
240'	40'	240'	40'	50'	4,200 lbs.
230'	60'	230'	60'	60'	4,900 lbs.

Load Block, hook and weight ball on ground at start.

FOR JIB CAPACITIES, CONSULT JIB CHART.

CAUTION! CHECK AMOUNT OF COUNTERWEIGHT ON MACHINE BEFORE USE OF THIS CHART.

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SEE CONDITIONS ON REVERSE SIDE

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
110	22	82.3	115.7	240,500
	24	81.3	115.4	232,100
	26	80.2	115.0	224,400
	28	79.1	114.6	217,300
	30	78.1	114.1	210,700
100	32	77.0	113.6	193,300
	34	75.9	113.1	177,100
	36	74.8	112.5	161,300
	38	73.7	111.8	151,400
	40	72.6	111.2	141,000
90	45	69.9	109.3	120,100
	50	67.0	107.2	104,200
	55	64.1	104.7	91,800
	60	61.2	101.9	81,600
	65	58.1	98.8	73,600
80	70	54.9	95.3	66,800
	75	51.6	91.3	60,900
	80	48.1	86.8	55,900
	85	44.4	81.7	51,600
	90	40.4	75.9	47,800
70	95	36.1	69.2	44,400
	100	31.1	61.1	41,400
	105	25.3	51.1	38,700
	110	17.6	37.2	33,900
60	22	83.0	125.9	228,700
	24	82.0	125.5	220,500
	26	81.0	125.2	213,000
	28	80.0	124.8	206,100
	30	79.1	124.4	199,700
50	32	78.1	123.9	192,800
	34	77.1	123.4	176,600
	36	76.1	122.9	162,800
	38	75.1	122.3	150,900
	40	74.1	121.7	140,500
40	45	71.6	120.0	119,500
	50	69.1	118.1	103,700
	55	66.5	115.9	91,300
	60	63.8	113.4	81,300
	65	61.1	110.6	73,100
30	70	58.3	107.5	66,200
	75	55.4	104.0	60,400
	80	52.4	100.1	55,300
	85	49.2	95.8	51,000
	90	45.9	91.0	47,200
20	95	42.4	85.5	43,800
	100	38.6	79.4	40,800
	105	34.4	72.2	38,100
	110	29.7	63.9	35,700
	115	24.1	53.2	33,500
10	24	82.6	135.7	212,700
	26	81.7	135.3	205,300
	28	80.8	135.0	198,600
	30	79.9	134.6	192,300
	32	79.0	134.2	186,500
0	34	78.1	133.7	176,300
	36	77.2	133.2	162,500
	38	76.3	132.7	150,600
	40	75.4	132.1	140,200
	45	73.1	130.6	119,300
0	50	70.8	128.8	103,400
	55	68.4	126.8	91,000
	60	66.0	124.6	81,000
	65	63.5	122.0	73,800
	70	61.0	119.2	68,900
0	75	58.4	116.1	60,000
	80	55.7	112.7	55,000
	85	53.0	108.9	50,700
	90	50.1	104.8	46,800
	95	47.1	100.1	43,500
0	100	43.9	95.0	40,500
	105	40.6	89.7	37,800
	110	36.9	82.6	35,300
	115	33.0	75.1	33,100
	120	28.5	66.1	31,100
0	125	23.1	55.1	29,300
1	26	82.3	145.5	198,400
	28	81.3	145.1	191,800
	30	80.2	144.8	185,600
	32	79.1	144.4	179,900
	34	78.0	144.0	174,700
1	36	77.1	143.5	162,000
	38	76.1	143.0	150,100
	40	75.1	142.5	139,700
	45	73.1	141.1	118,700
	50	72.2	139.4	102,800
1	55	70.0	137.6	90,400
	60	67.8	135.5	80,400
	65	65.6	133.2	72,200
	70	63.3	130.7	65,300
	75	60.9	127.9	59,500
0	80	58.5	124.8	54,400
	85	56.1	121.4	50,100
	90	53.5	117.7	46,200
	95	50.9	113.7	42,900
	100	48.1	109.2	39,900

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
110	105	45.3	104.2	37,200
	110	42.2	98.8	34,700
	115	39.0	92.7	32,500
	120	35.5	85.7	30,500
	125	31.7	77.8	28,700
100	130	27.4	68.5	27,000
	135	22.2	57.0	25,500
90	28	82.1	155.3	185,600
	30	81.3	154.9	179,600
	32	80.5	154.6	174,000
	34	79.7	154.2	168,800
	36	79.0	153.8	161,600
80	38	78.2	153.3	149,600
	40	77.4	152.8	139,200
	45	75.4	151.5	118,200
	50	73.4	150.0	102,400
	55	71.4	148.3	89,900
70	60	69.4	146.4	79,900
	65	67.3	144.3	71,700
	70	65.2	141.9	64,800
	75	63.0	139.4	59,000
	80	60.9	136.6	53,900
60	85	58.6	133.5	49,600
	90	56.3	130.1	45,700
	95	54.0	126.5	42,400
	100	51.5	122.5	39,400
	105	49.0	118.2	36,700
50	110	46.4	113.4	34,200
	115	43.6	108.2	32,000
	120	40.7	102.4	30,000
	125	37.6	96.0	28,200
	130	34.2	88.8	26,500
40	135	30.5	80.5	25,000
	140	26.4	70.8	23,500
	145	21.4	58.8	22,200
30	28	82.6	165.4	179,800
	30	81.8	165.1	173,900
	32	81.1	164.7	168,400
	34	80.4	164.4	163,500
	36	79.7	164.0	158,600
20	38	78.9	163.6	149,100
	40	78.2	163.1	138,700
	45	76.3	161.9	117,700
	50	74.5	160.5	101,800
	55	72.6	158.9	89,300
10	60	70.7	157.1	79,300
	65	68.8	155.1	71,100
	70	66.8	153.0	64,200
	75	64.9	150.6	58,400
	80	62.9	148.0	53,300
0	85	60.8	145.2	49,000
	90	58.7	142.2	45,100
	95	56.6	138.8	41,800
	100	54.4	135.2	38,700
	105	52.1	131.4	36,000
0	110	49.7	127.1	33,600
	115	47.3	122.5	31,400
	120	44.8	117.5	29,400
	125	42.1	112.0	27,600
	130	39.3	105.9	25,900
0	135	36.3	99.2	24,300
	140	33.1	91.7	22,900
	145	29.5	83.0	21,600
	150	25.5	72.9	20,400
	155	20.7	60.5	19,200
1	30	82.3	175.2	169,000
	32	81.6	174.9	163,600
	34	81.0	174.5	158,700
	36	80.3	174.2	154,000
	38	79.6	173.8	148,800
1	40	78.9	173.3	138,400
	45	77.2	172.2	117,400
	50	75.4	170.9	101,500
	55	73.7	169.4	89,100
	60	71.9	167.7	79,000
0	65	70.1	165.9	70,800
	70	68.3	163.9	63,900
	75	66.4	161.7	58,100
	80	64.6	159.3	53,000
	85	62.7	156.7	48,700
1	90	60.8	153.9	44,900
	95	58.8	150.8	41,500
	100	56.8	147.5	38,500
	105	54.7	144.0	35,800
	110	52.6	140.2	33,300
0	115	50.4	136.0	31,100
	120	48.1	131.5	29,100
	125	45.8	126.7	27,300
	130	43.3	121.4	25,600
	135	40.8	115.7	24,100
0	140	38.1	109.3	22,600
	145	35.2	102.3	21,300
	150	32.0	94.5	20,100
	155	28.6	85.5	18,900
	160	25.7	75.1	17,800
0	165	20.0	62.2	16,400

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
110	32	82.1	185.0	158,700
	34	81.5	184.7	154,000
	36	80.8	184.3	149,500
	38	80.2	184.0	145,200
	40	79.5	183.6	137,900
100	45	77.9	182.5	116,900
	50	76.3	181.2	101,000
	55	74.6	179.8	88,500
	60	72.9	178.3	78,500
	65	71.3	176.6	70,300
90	70	69.6	174.7	63,400
	75	67.8	172.6	57,500
	80	66.1	170.4	52,500
	85	64.3	168.0	48,100
	90	62.5	165.4	44,300
80	95	60.7	162.5	40,900
	100	58.9	159.5	37,900
	105	57.0	156.2	35,200
	110	55.0	152.7	32,700
	115	53.0	149.0	30,500
70	120	51.0	144.9	28,500
	125	48.9	140.5	26,700
	130	46.7	135.8	25,000
	135	44.4	130.7	23,500
	140	42.0	125.2	22,000
60	145	39.6	119.2	20,700
	150	36.9	112.6	19,500
	155	34.1	105.3	18,300
	160	31.1	97.2	17,200
	165	27.7	87.9	16,200
50	170	23.9	77.1	15,300
	175	19.4	63.8	13,500
40	32	82.5	195.1	153,100
	34	81.9	194.8	148,800
	36	81.3	194.5	144,800
	38	80.7	194.1	140,800
	40	80.1	193.8	137,000
30	45	78.5	192.7	11



LIFTCRANE CAPACITIES - 4100W SERIES 2

BOOM NO. 22C WITH OPEN THROAT TOP OFFSET 4 1/2 DEGREES, CONTINUED

SEE CONDITIONS ON FRONT PAGE

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
230	38	82.3	234.7	119,600
	40	81.8	234.4	117,100
	45	80.6	233.5	111,200
	50	79.3	232.5	98,600
	55	78.0	231.5	86,100
	60	76.7	230.3	76,100
	65	75.4	229.0	67,800
	70	74.2	227.5	60,900
	75	72.9	226.0	55,000
	80	71.5	224.3	50,000
	85	70.2	222.5	45,600
	90	68.9	220.5	41,700
	95	67.5	218.4	38,400
	100	66.2	216.2	35,300
	105	64.8	213.8	32,600
	110	63.4	211.3	30,200
	115	62.0	208.7	28,000
	120	60.6	205.8	26,000
	125	59.1	202.8	24,100
	130	57.6	199.6	22,400
240	135	56.1	196.3	20,900
	140	54.6	192.7	19,400
	145	53.0	189.0	18,100
	150	51.5	185.0	16,900
	155	49.8	180.7	15,700
	160	48.2	176.3	14,700
	165	46.4	171.5	13,600
	170	44.7	166.5	12,700
	175	42.8	161.1	11,800
	180	40.9	155.4	11,000
	185	39.0	149.2	10,200
	190	36.9	142.6	9,400
	195	34.7	135.5	8,700
	200	32.4	127.7	8,100
	205	30.0	119.2	7,400
	210	27.3	109.7	6,800
	40	82.2	244.5	111,700
	45	81.0	243.7	106,300
	50	79.7	242.7	98,100
	55	78.5	241.7	85,600
	60	77.3	240.6	75,600
260	65	76.1	239.3	67,300
	70	74.8	237.9	60,400
	75	73.6	236.5	54,500
	80	72.3	234.8	49,500
	85	71.1	233.1	45,100
	90	69.8	231.3	41,200
	95	68.5	229.3	37,800
	100	67.2	227.2	34,800
	105	65.9	224.9	32,100
	110	64.6	222.5	29,700
	115	63.3	220.0	27,400
	120	61.9	217.3	25,400
	125	60.5	214.5	23,600
	130	59.1	211.5	21,900
	135	57.7	208.3	20,300
	140	56.3	205.0	18,900
	145	54.8	201.4	17,600
	150	53.3	197.7	16,300
	155	51.8	193.8	15,200
	160	50.3	189.6	14,100
280	165	48.7	185.2	13,100
	170	47.1	180.6	12,200
	175	45.4	175.7	11,300
	180	43.7	170.4	10,400
	185	41.9	164.9	9,600
	190	40.0	159.0	8,900
	195	38.1	152.6	8,200
	200	36.1	145.8	7,500
	205	34.0	138.5	6,700
	210	31.7	130.5	6,000

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
250	45	81.3	253.8	101,500
	50	80.2	252.9	96,900
	55	79.0	251.9	85,200
	60	77.8	250.8	75,200
	65	76.6	249.6	66,900
	70	75.5	248.3	60,000
	75	74.3	246.9	54,100
	80	73.1	245.4	49,100
	85	71.9	243.7	44,700
	90	70.6	241.9	40,800
	95	69.4	240.1	37,400
	100	68.2	238.0	34,400
	105	66.9	235.9	31,700
	110	65.7	233.6	29,300
	115	64.4	231.2	27,100
	120	63.1	228.7	25,000
	125	61.8	226.0	23,200
	130	60.5	223.1	21,500
	135	59.2	220.2	20,000
	140	57.8	217.0	18,500
270	145	56.4	213.7	17,200
	150	55.1	210.2	16,000
	155	53.6	206.5	14,800
	160	52.2	202.6	13,700
	165	50.7	198.5	12,700
	170	49.2	194.2	11,800
	175	47.6	189.6	10,900
	180	46.0	184.8	10,100
	185	44.4	179.7	9,300
	190	42.7	174.3	8,500
	195	41.0	168.6	7,800
	200	39.2	162.5	7,000
	205	37.3	156.0	6,200
	210	35.3	149.0	5,500
	45	81.7	263.9	96,500
	50	80.5	263.1	92,300
	55	79.4	262.1	84,700
	60	78.3	261.1	74,700
	65	77.2	259.9	66,400
	70	76.0	258.7	59,500
	75	74.9	257.3	53,600
	80	73.7	255.8	48,500
	85	72.6	254.3	44,100
	90	71.4	252.6	40,300
290	95	70.3	250.8	36,900
	100	69.1	248.8	33,900
	105	67.9	246.8	31,100
	110	66.7	244.6	28,700
	115	65.5	242.3	26,500
	120	64.2	239.9	24,500
	125	63.0	237.3	22,600
	130	61.8	234.6	20,900
	135	60.5	231.8	19,400
	140	59.2	228.8	17,900
	145	57.9	225.7	16,600
	150	56.6	222.4	15,400
	155	55.2	218.9	14,200
	160	53.9	215.2	13,100
	165	52.5	211.4	12,100
	170	51.1	207.4	11,200
	175	49.6	203.1	10,300
	180	48.2	198.6	9,500
	185	46.6	193.9	8,700
	190	45.1	188.9	7,900
310	195	43.5	183.7	7,000
	200	41.8	178.1	6,200
	205	40.1	172.2	5,400
	210	38.4	165.9	4,700



Manitowoc 4100W

JIB LIFTING CAPACITIES

4100W

Meets ANSI B30.5 Requirements SERIES 2

JIB NO. 123 WITH 12' 6" STRUT ON BOOM NO. 22C WITH OPEN THROAT TOP 26' 6" CRAWLERS EXTENDED

0 DEGREE JIB OFFSET ANGLE

Chart supplement boom capacity chart No. 6924-A. Capacities are for freely suspended loads based on tipping, strength of structural components or other factors. Crane operator judgement must be used to allow for dynamic load effects of swinging, hoisting or lowering, travel, as well as adverse operating conditions and physical machine depreciation.

Capacities do not exceed 75% of a static tipping load with machine on firm level surface. Capacities based on structural competence are denoted

by shaded areas. Operating radius is the horizontal distance from axis of rotation to the center of vertical hoist line or load block. Weight of all load blocks, weight ball, slings, hoist lines beneath boom and jib point sheaves, etc., including those on the main boom is considered part of the jib load. Boom and jib load are not to be lowered beyond radii where combined weights are greater than rated capacity. Maximum capacity on 1^{1/2} inch - 6 x 31 IPS, IWRC is 28,300 lbs./line.

	JIB POINT RADIUS FEET	CAPACITIES IN POUNDS BOOM LENGTH - FEET														JIB POINT RADIUS FEET
		110	120	130	140	150	160	170	180	190	200	210	220	230	240	
30 FOOT JIB	90+	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	90+
	95	40000	40000	40000	40000	40000	40000	40000	40000	40000	39500	39100	38600	38000	37500	95
	100	40000	40000	40000	39800	39200	38600	38200	37600	37100	36500	36100	35500	35000	34400	100
	105	38700	38100	37700	37000	36500	35800	35500	34900	34300	33700	33300	32800	32200	31700	105
	110	36300	35600	35200	34600	34000	33400	33000	32400	31900	31300	30900	30300	29800	29200	110
	115	34100	33400	33000	32400	31800	31200	30800	30200	29600	29000	28600	28100	27500	27000	115
	120	32100	31400	31000	30300	29800	29100	28800	28200	27600	27000	26600	26000	25500	25000	120
	130		27900	27400	26800	26200	25600	25200	24600	24100	23500	23100	22500	21900	21400	130
	140			24400	23800	23200	22600	22200	21600	21000	20400	20000	19400	18900	18400	140
	150				21200	20600	20000	19600	19000	18500	17800	17400	16900	16300	15800	150
	160					18400	17800	17400	16800	16200	15600	15200	14600	14100	13500	160
	170							15400	14800	14200	13600	13200	12600	12100	11500	170
40 FOOT JIB	180								13100	12500	11900	11500	10900	10300	9800	180
	190									11000	10300	9900	9300	8800	8200	190
	200										8900	8600	8000	7400	6600	200
	210											7300	6600	5800	5100	210
	105+	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	105+
	110	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	29600	110
	115	30000	30000	30000	30000	30000	30000	30000	30000	29400	29000	28400	27900	27300	26700	115
	120	29600	30000	30000	30000	30000	29500	29100	28500	28000	27400	27000	26400	25800	25300	120
	125	28400	29900	29500	28800	28300	27600	27300	26700	26100	25500	25100	24500	24000	23400	125
	130	27300	28200	27800	27100	26600	25900	25600	25000	24400	23800	23400	22800	22300	21700	130
	140		25200	24800	24100	23600	22900	22500	21900	21400	20800	20400	19800	19200	18700	140
	150			22200	21500	21000	20300	20000	19300	18800	18200	17800	17200	16600	16100	150
50 FOOT JIB	160				19300	18700	18100	17700	17100	16500	15900	15500	14900	14400	13800	160
	170					16100	15700	15100	14600	13900	13500	12900	12400	11800	11200	170
	180						14000	13400	12800	12200	11800	11200	10600	10100	9500	180
	190							11800	11300	10600	10200	9600	9100	8500	7900	190
	200								9900	9300	8900	8300	7700	7000	6400	200
	210									8000	7600	7000	6200	5400	4800	210
	135+	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	135+
	140	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	19600	140
	145		20000	20000	20000	20000	20000	20000	20000	19600	19200	18600	18100	17500	16900	145
	150		20000	20000	20000	20000	20000	20000	19600	19000	18400	18000	17400	16800	16200	150
	155			20000	20000	20000	19400	19000	18400	17800	17200	16800	16200	15700	15100	155
	160			20000	19500	19000	18300	17900	17300	16800	16100	15700	15100	14600	14000	160
	170				17600	17000	16400	16000	15300	14800	14200	13800	13200	12600	12000	170
	180					14600	14200	13600	13000	12400	12000	11400	10900	10300	9700	180
60 FOOT JIB	190							12700	12100	11500	10900	10500	9900	9300	8700	190
	200								10700	10100	9500	9100	8500	7900	7300	200
	210									8900	8200	7800	7200	6500	5900	210
	220										7100	6700	5900	5100	4500	220
	150+	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	150+
	155		10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	9600	155
	160		10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	9600	160
	170			10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	9600	170
	180				10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	9400	180
	190					10000	10000	10000	10000	10000	10000	10000	10000	9400	8800	190
	200						10000	10000	10000	10000	9600	9200	8600	8000	7400	200
	210							9600	9000	8400	8000	7400	6800	6200	5600	210
60 FOOT JIB	220									7900	7300	6800	6100	5300	4700	220
	230										6200	5600	4800	4000	3400	230

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These load charts are intended for instructional purposes only. They were derived from manufacturer sales information which may not be complete or machine specific. Not responsible for typographical errors.



Manitowoc 4100W

JIB LIFTING CAPACITIES

4100W

JIB NO. 123 WITH 12' 6" STRUT ON BOOM NO. 22C WITH OPEN THROAT TOP 26' 6" CRAWLERS EXTENDED

Meets ANSI B30.5 Requirements SERIES 2

10 DEGREE JIB OFFSET ANGLE

Chart supplement boom capacity chart No. 6934-A. Capacities are for freely suspended loads based on tipping, strength of structural components or other factors. Crane operator judgement must be used to allow for dynamic load effects of swinging, hoisting or lowering, travel, as well as adverse operating conditions and physical machine depreciation.

Capacities do not exceed 75% of a static tipping load with machine on firm level surface. Capacities based on structural competence are denoted

by shaded areas. Operating radius is the horizontal distance from axis of rotation to the center of vertical hoist line or load block. Weight of all load blocks, weight ball, slings, hoist lines beneath boom and jib point sheaves, etc., including those on the main boom is considered part of the jib load. Boom and jib load are not to be lowered beyond radii where combined weights are greater than rated capacity. Maximum capacity on 1^{1/8} inch - 6 x 31 IPS. IWRC is 28,300 lbs./line.

	JIB POINT RADIUS FEET	CAPACITIES IN POUNDS BOOM LENGTH - FEET														JIB POINT RADIUS FEET
		110	120	130	140	150	160	170	180	190	200	210	220	230	240	
30 FOOT JIB	90+	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	90+
	95	40000	40000	40000	40000	40000	40000	40000	40000	40000	39900	39500	38900	38400	37900	95
	100	38600	40000	40000	40000	39800	39200	38900	38300	37800	37200	36900	36300	35800	35400	100
	105	37200	38500	38100	37500	37000	36400	36100	35500	35000	34500	34100	33600	33100	32600	105
	110	36900	36000	35600	35000	34500	33900	33600	33000	32500	32000	31600	31000	30500	30000	110
	115		33800	33400	32800	32300	31700	31300	30800	30200	29700	29300	28800	28300	27700	115
	120		31700	31300	30700	30200	29600	29300	28700	28200	27600	27200	26700	26200	25700	120
	125			29400	28800	28300	27700	27400	26800	26300	25700	25300	24800	24300	23800	125
	130				27100	26600	26000	25600	25100	24600	24000	23600	23100	22500	22000	130
	140					23500	22900	22600	22000	21500	20900	20500	20000	19500	18900	140
	150						20300	19900	19400	18800	18300	17900	17300	16800	16300	150
40 FOOT JIB	160								17100	16500	16000	15600	15000	14500	14000	160
	170									14500	13900	13600	13000	12500	11900	170
	180										12200	11800	11200	10700	10200	180
	190												9600	9100	8600	190
	200													7700	7000	200
	100+	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	100+
	105	29100	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	27700	105
	110	28000	29300	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	110
	115	27100	28300	29500	30000	30000	30000	30000	30000	30000	30000	29900	29300	28900	28300	115
	120	26200	27400	28600	29700	30000	30000	29800	29200	28700	28100	27800	27200	26700	26200	120
	125		26600	27700	28800	28800	28200	27900	27300	26800	26200	25900	25300	24800	24300	125
	130		25900	26900	27600	27100	26500	26100	25600	25100	24500	24100	23600	23100	22600	130
50 FOOT JIB	140				24500	24000	23400	23000	22500	22000	21400	21000	20500	20000	19400	140
	150					21300	20700	20400	19800	19300	18700	18300	17800	17300	16800	150
	160						18400	18100	17500	17000	16400	16000	15500	15000	14400	160
	170								15500	15000	14400	14000	13400	12900	12400	170
	180									13200	12600	12200	11600	11100	10600	180
	190											10600	10000	9500	9000	190
	200												8600	8100	7600	200
	130+	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000		130+
	135	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000		135
	140		20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000		140
	145		20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	19400	18900		145
60 FOOT JIB	150				20000	20000	20000	20000	20000	19700	19100	18700	18200	17600		150
	155				20000	20000	19900	19500	19000	18500	17900	17500	17000	16400		155
	160					19400	18800	18400	17900	17300	16800	16400	15800	15300		160
	165						17700	17400	16800	16300	15700	15300	14800	14300		165
	170						16700	16400	15800	15300	14700	14300	13800	13300		170
	180								14000	13500	12900	12500	12000	11500		180
	190									11900	11300	10900	10400	9800		190
	200										9900	9500	8900	8400		200
	140+	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000		140+
	145		10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000		145
	150		10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000		150
	155			10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000		155
60 FOOT JIB	160				10000	10000	10000	10000	10000	10000	10000	10000	10000	10000		160
	170					10000	10000	10000	10000	10000	10000	10000	10000	10000		170
	180						10000	10000	10000	10000	10000	10000	10000	10000		180
	190							10000	10000	10000	10000	10000	10000	10000		190
	200									10000	10000	9700	9200	8700		200
	210										8800	8400	7900	7300		210



Manitowoc 4100W

JIB LIFTING CAPACITIES

4100W

JIB NO. 123 WITH 12' 6" STRUT ON BOOM NO. 22C WITH
OPEN THROAT TOP 26' 6" CRAWLERS EXTENDED

Meets ANSI B30.5 Requirements SERIES 2

20 DEGREE JIB OFFSET ANGLE

Chart supplement boom capacity chart No. 6924-A. Capacities are for freely suspended loads based on tipping, strength of structural components or other factors. Crane operator judgement must be used to allow for dynamic load effects of swinging, hoisting or lowering, travel, as well as adverse operating conditions and physical machine depreciation.

Capacities do not exceed 75% of a static tipping load with machine on firm level surface. Capacities based on structural competence are denoted

by shaded areas. Operating radius is the horizontal distance from axis of rotation to the center of vertical hoist line or load block. Weight of all load blocks, weight ball, slings, hoist lines beneath boom and jib point sheaves, etc., including those on the main boom is considered part of the jib load. Boom and jib load are not to be lowered beyond radii where combined weights are greater than rated capacity. Maximum capacity on 1^{1/2} inch - 6 x 31 IPS, IWRC is 28,300 lbs./line.

	JIB POINT RADIUS FEET	CAPACITIES IN POUNDS BOOM LENGTH - FEET														JIB POINT RADIUS FEET
		110	120	130	140	150	160	170	180	190	200	210	220	230	240	
30 FOOT JIB	90+	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	90+
	95	40000	40000	40000	40000	40000	40000	40000	40000	40000	39500	39100	38600	38000	37500	95
	100	40000	40000	40000	39800	39200	38600	38200	37600	37100	36500	36100	35500	35000	34400	100
	105	38700	38100	37700	37000	36500	35800	35500	34900	34300	33700	33300	32800	32200	31700	105
	110	36300	35600	35200	34600	34000	33400	33000	32400	31900	31300	30900	30300	29800	29200	110
	115	34100	33400	33000	32400	31800	31200	30800	30200	29600	29000	28600	28100	27500	27000	115
	120	32100	31400	31000	30300	29800	29100	28800	28200	27600	27000	26600	26000	25500	25000	120
	130		27900	27400	26800	26200	25600	25200	24600	24100	23500	23100	22500	21900	21400	130
	140			24400	23800	23200	22600	22200	21600	21000	20400	20000	19400	18900	18400	140
	150				21200	20600	20000	19600	19000	18500	17800	17400	16900	16300	15800	150
	160					18400	17800	17400	16800	16200	15600	15200	14600	14100	13500	160
	170						15400	14800	14200	13600	13000	12600	12000	11500	11000	170
	180								13100	12500	11900	11500	10900	10300	9800	180
	190									11000	10300	9900	9300	8800	8200	190
	200										8900	8600	8000	7400	6600	200
	210											7300	6600	5800	5100	210
40 FOOT JIB																
	JIB POINT RADIUS FEET	110	120	130	140	150	160	170	180	190	200	210	220	230	240	JIB POINT RADIUS FEET
	105+	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	105+
	110	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	29600	110
	115	30000	30000	30000	30000	30000	30000	30000	30000	30000	29400	29000	28400	27900	27300	115
	120	29600	30000	30000	30000	30000	29500	29100	28500	28000	27400	27000	26400	25800	25300	120
	125	28400	29900	29500	28800	28300	27600	27300	26700	26100	25500	25100	24500	24000	23400	125
	130	27300	28200	27800	27100	26600	25900	25600	25000	24400	23800	23400	22800	22300	21700	130
	140		25200	24800	24100	23600	22900	22500	21900	21400	20800	20400	19800	19200	18700	140
	150			22200	21500	21000	20300	20000	19300	18800	18200	17800	17200	16600	16100	150
	160				19300	18700	18100	17700	17100	16500	15900	15500	14900	14400	13800	160
	170					16100	15700	15100	14600	13900	13500	12900	12400	11800	11200	170
	180						14000	13400	12800	12200	11800	11200	10600	10000	9400	180
	190							11800	11300	10600	10200	9600	9100	8500	7900	190
	200									9900	9300	8900	8300	7700	7000	200
	210										8000	7600	7000	6200	5400	210
50 FOOT JIB																
	JIB POINT RADIUS FEET	110	120	130	140	150	160	170	180	190	200	210	220	230		JIB POINT RADIUS FEET
	135+	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000		135+
	140	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000		140
	145		20000	20000	20000	20000	20000	20000	20000	20000	19600	19200	18600	18100		145
	150		20000	20000	20000	20000	20000	20000	19600	19000	18400	18000	17400	16800		150
	155			20000	20000	20000	19400	19000	18400	17800	17200	16800	16200	15700		155
	160			20000	19500	19000	18300	17900	17300	16800	16100	15700	15100	14600		160
	170				17600	17000	16400	16000	15300	14800	14200	13800	13200	12600		170
	180						14600	14200	13600	13000	12400	12000	11400	10900		180
	190							12700	12100	11500	10900	10500	9900	9300		190
	200								10700	10100	9500	9100	8500	7900		200
	210									8900	8200	7800	7200	6500		210
	220										7100	6700	5900	5100		220
60 FOOT JIB																
	JIB POINT RADIUS FEET	110	120	130	140	150	160	170	180	190	200	210	220	230		JIB POINT RADIUS FEET
	150+	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000		150+
	155		10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000		155
	160		10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000		160
	170			10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000		170
	180				10000	10000	10000	10000	10000	10000	10000	10000	10000	10000		180
	190					10000	10000	10000	10000	10000	10000	10000	10000	9400		190
	200						10000	10000	10000	10000	9600	9200	8600	8000		200
	210							9600	9000	8400	8000	7400	6700			210
	220								7900	7300	6800	6100	5300			220
	230									6200	5600	4800	4000			230

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