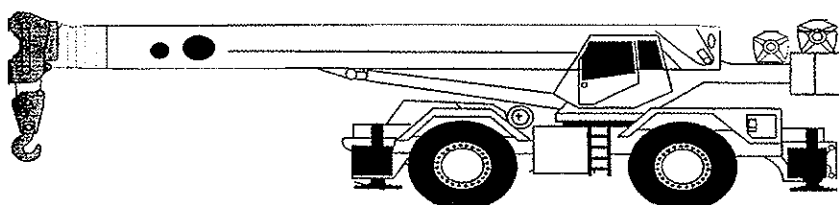




# TEREX RT 1100 SERIES

**100 Ton (91 tonne) capacity  
rough terrain cranes  
specifications**



## STANDARD BOOM EQUIPMENT

### BOOM

40ft. 8in. – 149ft 3" in. (12.4m-45.5m), five section full power synchronized boom. High-strength construction Anti-friction slide pads. Two double acting boom hoist cylinders. Maximum tip height is 159 ft. (48.5m).

### BOOM HEAD

Welded to fifth section of boom. Seven non metallic main sheaves and two non metallic idler sheaves mounted on heavy duty anti-friction bearings.

---

## OPTIONAL BOOM EQUIPMENT

### JIBS

32'10"-65'6" (10m-20m) self storing swing-on lattice type jib. Single sheave mounted on anti-friction bearing. Jib is bi-fold extendible to 57ft.(18.3m), Jib is offsetable at 0', 15' or 26'. Maximum tip height is 225ft. (68.6m)

### HOOK BLOCK

100 ton (91mt) Six steel sheaves on anti-friction bearings with hook and heavy duty latch. Quick reeving design.

### AUXILIARY BOOM HEAD

Removable auxiliary boom head has single sheave mounted on anti-friction bearing. Removable pin-type rope guard for quick reeving. Installs on main boom peak only. Removal is required for jib use.

### HOOK & BALL

9.3 ton (8.4mt) top swivel ball with hook and hook latch.

[www.terexlift.com](http://www.terexlift.com)



## STANDARD UPPERSTRUCTURE EQUIPMENT

### UPPERSTRUCTURE FRAME

All welded one-piece structure fabricated with high tensile strength alloy steel. 23,810 LB. (10,800 kg) bolt on type counterweight is removable.

### TURNTABLE CONNECTION

Swing bearing is a single row, ball type, with external teeth. The swing bearing is welded to the carrier.

### SWING

A hydraulic motor drives a double planetary reduction gear for precise and smooth 360 degree swing function. Swing speed is 1.5 rpm.

### SWING BRAKE

Heavy duty multiple disc swing brake is actuated from operator's cab by foot pedal. Brake may be locked on or used as a momentary brake.

### RATED CAPACITY INDICATOR

Rated Capacity Indicator with visual and audible warning system and automatic function disconnects. Pictographic display includes: boom radius, boom angle, boom length, allowable load, actual load, and percentage of allowable load registered by bar graph. Operator settable alarms provided for swing angle, boom length, boom angle, tip height, and work area exclusion zone. Anti-two block system includes audio/visual warning and automatic function disconnects.

### OPERATOR'S CAB

Environmental cab with all steel construction, optimized visibility, tinted safety glass throughout, and rubber floor matting. The cab has a sliding door on the left side, framed sliding window on the right side and rear with window, hinged tinted all glass skylight.

Acoustical foam padding insulates against sound and weather. Cloth covered adjustable operator's seat is equipped shock absorbing suspension and includes arm rests and seat belts.

### CONTROLS

All joystick control levers and pedals are positioned for efficient operation. Hand operated controls include swing, foot pedal, boom hoist, winch(s), shift, 360 degree house lock. Switches include ignition, engine stop, steering mode, parking brake, two speed winch, and outrigger controls. Foot control pedals include swing brake, boom telescope, service brakes and accelerator.

### INSTRUMENTATION AND ACCESSORIES

In-cab gauges include air pressure, bubble level, engine oil pressure, fuel, engine coolant temperature, voltmeter, transmission temperature, transmission charge pump pressure. Indicators include low air, high coolant temperature/low engine oil pressure/high transmission temperature audio/Visual warning, tachometer, low coolant warning, hoist drum rotation indicator, and rated capacity indicator. Accessories include fire extinguisher; light package including headlights, taillight, brake lights, directional signals, four-way hazard flashers, dome & dash lights, and back-up lights with audible back-up alarm; windshield washer/wiper; roof wiper; rear view mirrors, rear steer centering light, and defroster fan.

### HYDRAULIC CONTROL VALVES

Valves are mounted on the side of the upperstructure and are Easily accessible. Valves are hydraulically operated.

### OPTIONAL EQUIPMENT

Auxiliary Winch - Air Conditioner/heater -WorkLights - Revolving Amber Light - Diesel or Propane Heater

## STANDARD CARRIER EQUIPMENT

### CARRIER CHASSIS

High strength chassis with four-wheel drive and four-wheel steer (4x4x4). Has box beam type construction with reinforcing cross members, a precision machined turn table mounting plate and integrally welded outrigger boxes. Decking has anti-skid surfaces, including tool storage compartment, and access steps and handles.

### AXLES AND SUSPENSION

Rear axle is a planetary drive/steer type with hydraulic lockouts. Oscillation is +/- 5.5 in. (140mm). Oscillation lock out override control. Front axle is a planetary drive/steer type.

### STEERING

Hydrostatic power steering, front and rear axles. Control modes for front only, four wheel crab and crab steering all controlled by steering wheel.

Turning radius to center of outside tire.  
33.25X29-32PR  
24ft. 8in. (7.5M)

### TRANSMISSION

Fully sequential rangeshift with torque convertor. Eight Speeds forward and four reverse.

**STANDARD CARRIER EQUIPMENT (continued)****MULTI-POSITION OUT & DOWN OUTRIGGERS**

Fully independent hydraulic outriggers may be extended to 25 ft. 2 in. (7.6 m), 17 ft. 9 in. (5.4m), and 10 ft. 8 in. (3.25m)  
 Front to rear spread is 25 ft. 2 in. (7.6m) Easily removable  
 Floats 24in. (610mm) square stow on the carrier frame.  
 Complete controls and sight leveling bubble are located in the operator's cab.

**WHEELS & TIRES**

Disc type wheels tubeless tires with rock tread.

**TIRES**

33.25X29-32PR

**HYDRAULIC SYSTEM****HYDRAULIC PUMPS**

System uses two tandem gear-type pumps with a  
 Total flow of 145 gpm (555 lpm). Manual  
 Disconnect is standard.

**Main and Auxiliary Winch Pump**

80 gpm (306 lpm) @ 3,200 psi (220 bar)

**Boom Hoist, Telescope Pump**

42 gpm (200 lpm) @ 3,200 psi (220 bar)

**Power Steering, and Swing Pump**

25 gpm (106 lpm) @ 2,000 psi (138 bar)

**SERVICE BRAKES**

Dual circuit, air drum brakes  
 at each wheel.

**PARKING BRAKE**

Disc brake on rear axle input shaft.

**OPTIONAL EQUIPMENT**

Cold Weather Starting Aid - Immersion Heater • Spare  
 tire • Pintle Hook • Tire Inflation Kit • Front  
 Mounted Winch – 15,000lbs. 6.75mt line pull.

**FILTRATION**

Full flow oil filtration system is by two 10-micron return  
 line filters externally mounted to the reservoir and one 20  
 -micron pressure line filter.

**HYDRAULIC RESERVOIR**

All steel, welded construction with diffuser. Easy access to  
 filters and is equipped with an air breather and dip stick.  
 Capacity is 440 gallons (1500 liters). Oil cooler is standard.

**MAIN WINCH SPECIFICATION**

Hydraulic winch with bent axis piston motor and planetary  
 reduction gearing provides 2-speed operation with equal  
 speeds for power up and down and infinitely variable speed  
 control. Winch is equipped with an multi-disc brake, grooved  
 drum, tapered flanges, standard cable roller on drum, and  
 drum turn indicator.

**OPTIONAL AUX. WINCH**

Same as main winch.

**PERFORMANCE****Braden 185**

Max. line speed

-Fifth layer 393 fpm (120 mpm)

Max. line pull

-First layer 25,000 lbs. (11340kg) low speed

Permissible line pull 16,000 lbs. (7258kg) per part of line

Strength limit 16,800 lbs. (7620kg) with 3.5:1 safety factor

**DRUM CAPACITY**

Max. Storage: 886 ft (237 m) ¾ in. wire rope

**CABLE**

760 ft. (232m) of ¾ in. (19mm) diameter,  
 6x37 EIPS with 7x7 IWRC.

**OPTIONAL CABLE-Auxiliary Winch**

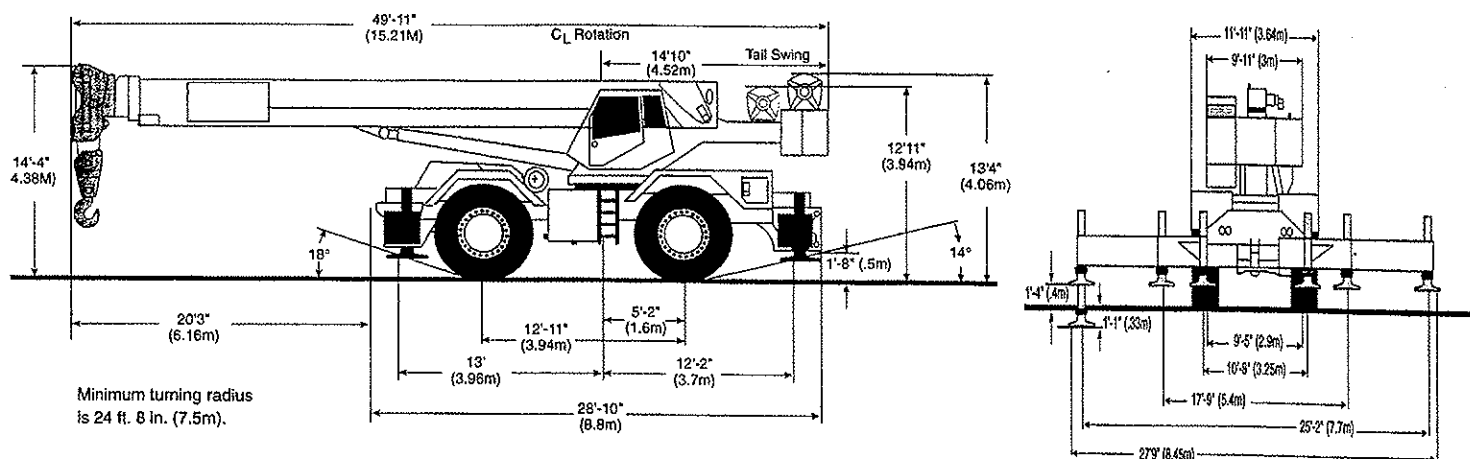
Rotation resistant wire rope 3/4x570' 8x19  
 EIPS WITH 7X7 IWRC.

**ENGINE SPECIFICATIONS**

**Make and Model** Cummins 6CTA8.3L

Type	6 cylinder
Bore and Stroke	4.49 in. (114mm) x 5.32 in. (135mm)
Displacement	504.5 in.3 (8.27 litres)
Gross Horsepower	260 @ 2200 rpm
Gross Torque	828 ft. lbs. (1123 Nm)
Aspiration	Turbo charged, charge air cooled
Air Filter	dry type
Electrical System	24 volt
Alternator	70 amp
Battery	2 8D batteries
Fuel Capacity	80 gallon (303 liter)

## GENERAL DIMENSIONS



	GROSS	UPPER FACING		GROSS	UPPER FACING	
WEIGHTS & AXLE LOADS	WEIGHT	FRONT		WEIGHT	FRONT	
	LBS.	FRONT	REAR	KG.	FRONT	REAR
Basic Machine RT1100 with boom, Counterweight and tires.	129,841	56,052	73,789	58,896	25,284	33,612
Removable Counterweight	-23,810	-14,364	38,174	10,800	-6,516	17,316
Boom	- 34,489	+ 48,625	-14,136	+ 15,644	+ 22,056	-6,412
33.25X29 Standard Tires	-8,664	4,332	-4,332	-3,124	-1,562	-1,562
<b>Add Options:</b>						
Bi-Fold Lattice Extension (Stowed)	+ 2,437	+4,735	-2,298	+ 1,105	+ 2,148	-1,042
Auxiliary Boom Head	+ 220	+ 695	-475	+ 100	+ 315	-216
Auxiliary Winch Controls and Plumbing Only	+ 75	+ 0	+ 75	+ 34	+ 0	+ 34
Auxiliary Winch Wire Rope.	+ 750	- 334	+ 1,084	+ 340	- 152	+492
100 ton 6-Sheave Hook Block (travel)	+ 1,735	+5,283	-3,548	+ 787	+ 2,397	-398
9.2T Hook and Ball (boom)	+ 722	+ 2,320	-1,598	+ 327	+ 1,052	-725
Pintle Hook: Rear	+ 45	-19	+64	+ 20	-9	+64

NOTE: Weights are for factory supplied equipment and are subject to 2% variation due to manufacturing tolerances.

WE RESERVE THE RIGHT TO AMEND THESE SPECIFICATIONS AT ANY TIME WITHOUT NOTICE, THE ONLY WARRANTY APPLICABLE IS OUR STANDARD WRITTEN WARRANTY APPLICABLE TO THE PARTICULAR PRODUCT AND SALE. WE MAKE NO OTHER WARRANTY, EXPRESSED OR IMPLIED.

Terex Cranes, Inc., PO Box 260002, Conway, SC 29528, Phone: (843)349-6900 Fax: (843)349-7090  
TX1100-Rev00 E-mail: [inquire@terexlifting.com](mailto:inquire@terexlifting.com) - [www.terexlift.com](http://www.terexlift.com)

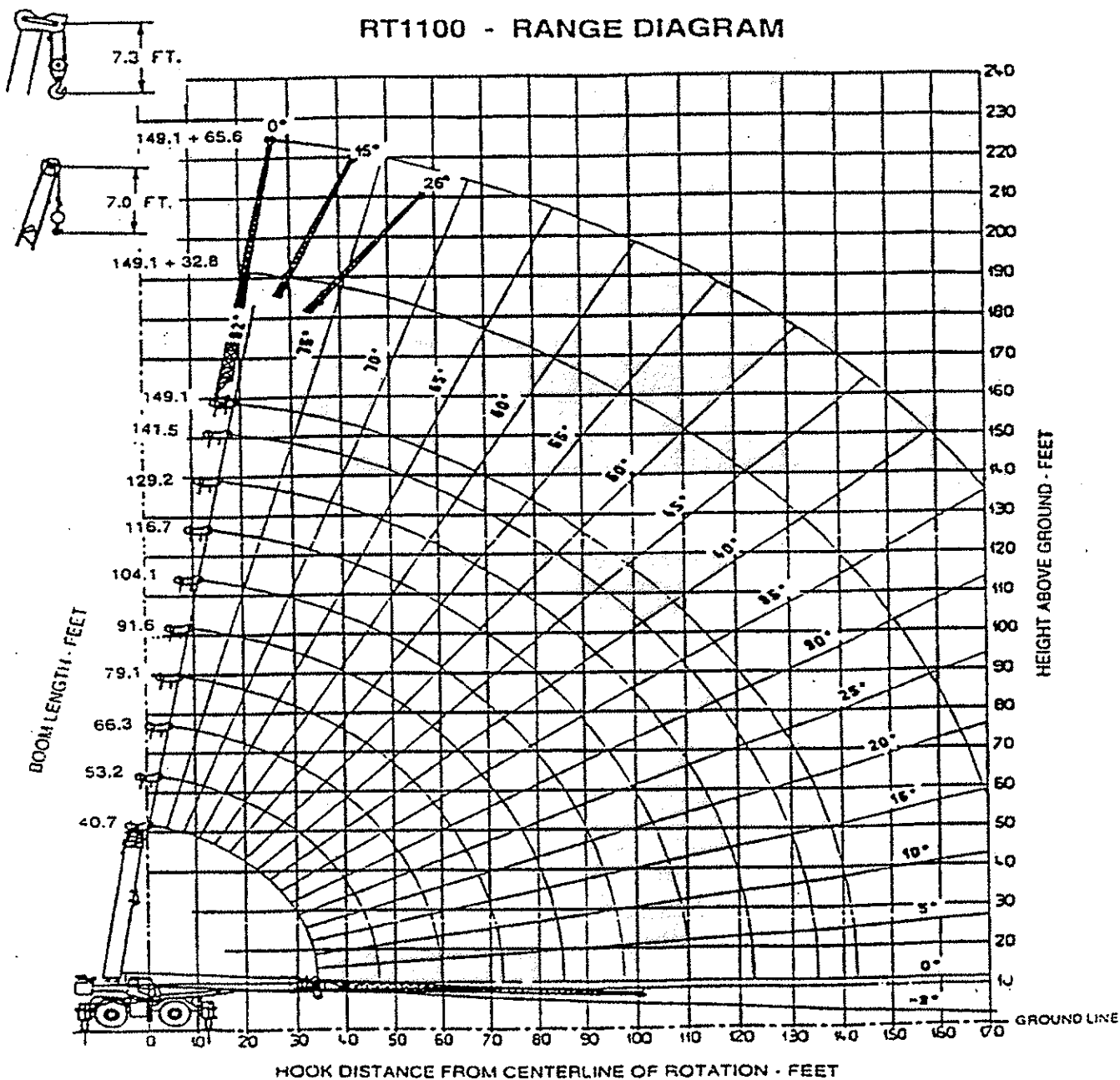


# TEREX RT1100

ROUGH TERRAIN CRANE  
100 Ton Capacity

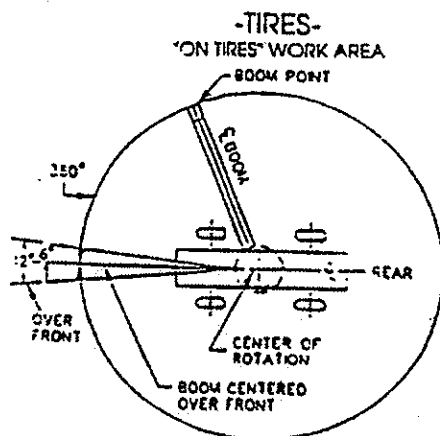
Range diagram & lifting capacities

RT1100 - RANGE DIAGRAM



**WARNING**

CONSULT MACHINE CAPACITIES CHARTS FOR BOOM LENGTHS, BOOM ANGLES AND RADII WHERE A TIPPING CONDITION MAY OCCUR.

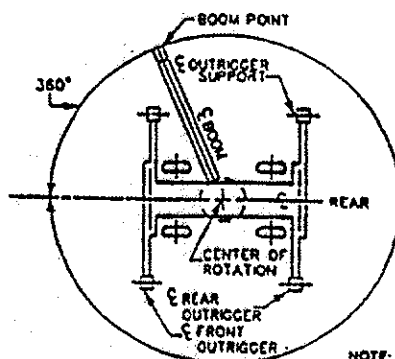


NOTE: THESE LINES DETERMINE THE LIMITING POSITION OF ANY LOAD FOR OPERATING WITHIN WORKING AREAS INDICATED.

DO NOT EXCEED 68 DEGREE BOOM ANGLE WITHOUT A LOAD ON THE HOOK

165 MAIN & AUXILIARY HOIST REEVING 6 x 37									
75 INCH (19 mm) DIA. ROPE BREAKING STRENGTH 54800 LB. (24400 KG)									
PART LINE	1	2	3	4	5	6	7	8	9
MAXIMUM LOAD-LBS	16000	32000	48000	53700					
MAXIMUM LOAD-KGS	7250	14500	21750	24300					

**AREAS OF OPERATION**  
**-OUTRIGGERS-**  
"ON OUTRIGGERS" WORK AREA



NOTE: THESE LINES DETERMINE THE LIMITING POSITION OF ANY LOAD FOR OPERATING WITHIN WORKING AREAS INDICATED.

DO NOT EXCEED 68 DEGREE BOOM ANGLE WITHOUT A LOAD ON THE HOOK

165 MAIN & AUXILIARY HOIST REEVING 6 x 37												
75 INCH (19 mm) DIA. ROPE BREAKING STRENGTH 54800 LB. (24400 KG)												
PART LINE	1	2	3	4	5	6	7	8	9	10	11	12
MAXIMUM LOAD-LBS	16000	32000	48000	64000	80000	96000	112000	128000	144000	160000	176000	192000
MAXIMUM LOAD-KGS	7250	14500	21750	29000	36250	43500	50750	58000	65250	72500	79750	87000



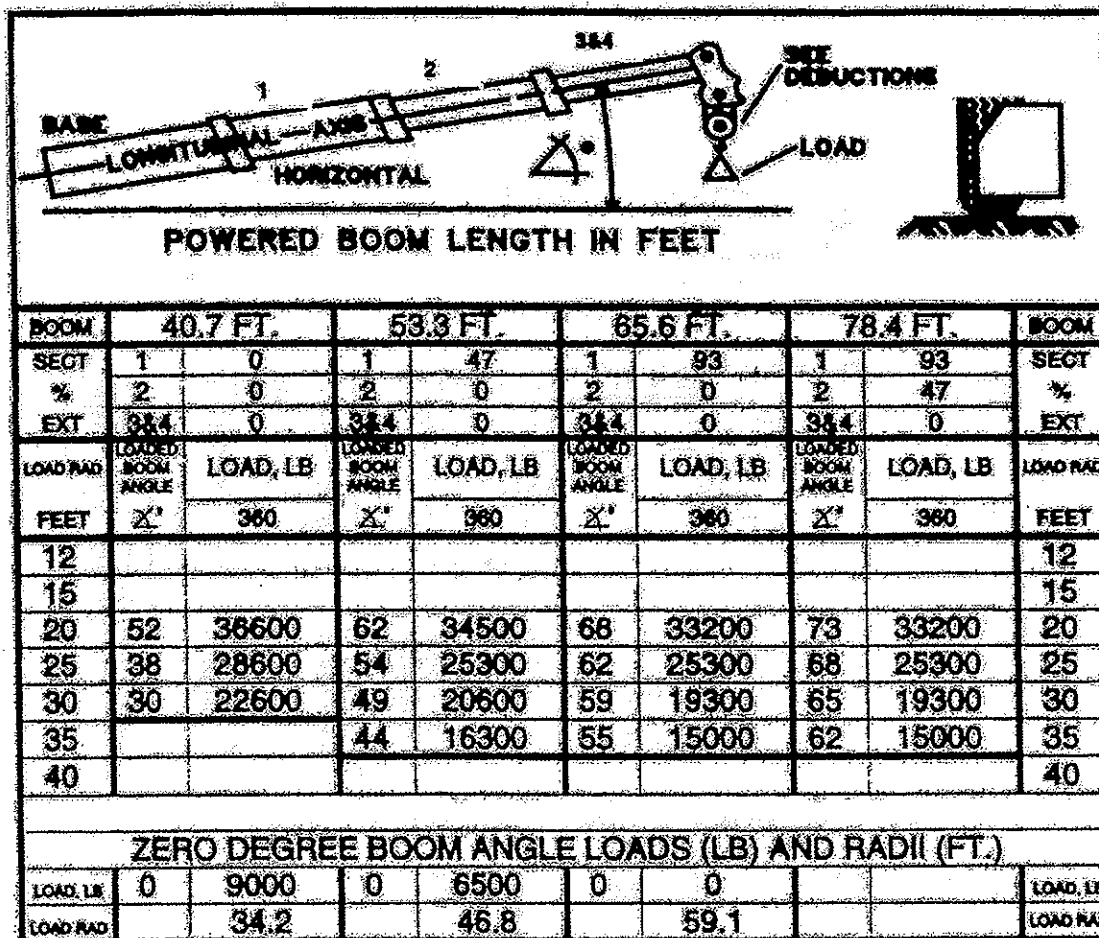
**RT1100 RATED LIFTING CAPACITIES IN POUNDS - MODE 1**

LOAD RATINGS ON TIRES - CREEP - OVER FRONT

MAXIMUM BOOM LENGTH 78.4 FT.

23810 POUND TOTAL COUNTERWEIGHT

LOAD CHART CODE # 01



MINIMUM BOOM ANGLE (DEG) FOR INDICATED BOOM LENGTH (NO LOAD)	-2
MAXIMUM BOOM LENGTH (FEET) AT 0 DEGREE BOOM ANGLE (NO LOAD)	65.6

TIRE INFLATION DATA - PSI		
TIRE SIZE	LOADING	CREEP
33.25 x 29 - 32 PR	50	80

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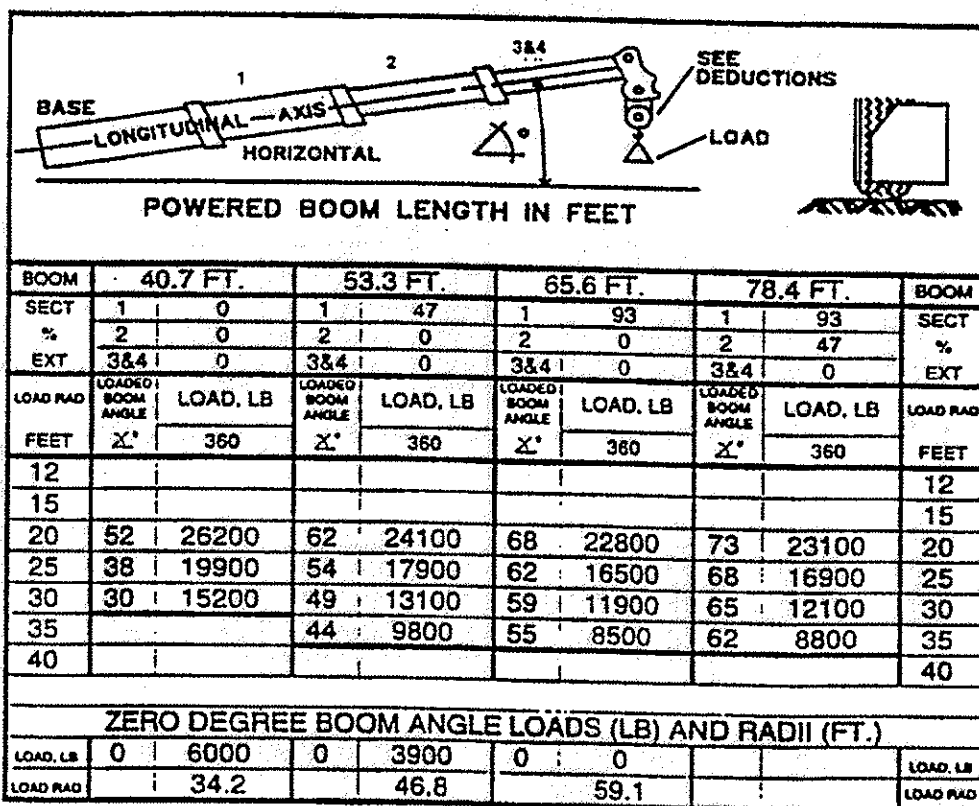
**RT1100 RATED LIFTING CAPACITIES IN POUNDS - MODE 1**

LOAD RATINGS ON TIRES - 2.5 MPH OVER FRONT

MAXIMUM BOOM LENGTH 78.4 FT.

23810 POUND TOTAL COUNTERWEIGHT

LOAD CHART CODE # 00



MINIMUM BOOM ANGLE (DEG) FOR INDICATED BOOM LENGTH (NO LOAD)	-2
MAXIMUM BOOM LENGTH (FEET) AT 0 DEGREE BOOM ANGLE (NO LOAD)	65.6

TIRE INFLATION DATA - PSI		
TIRE SIZE	LOADING	2.5 MPH
33.25 x 29 - 32 PR	50	65



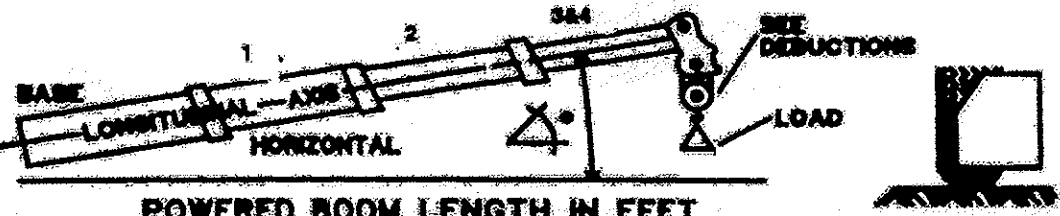
**RT1100 RATED LIFTING CAPACITIES IN POUNDS - MODE 1**

LOAD RATINGS ON TIRES - STATIC +/- 6 DEGREE - OVER FRONT

MAXIMUM BOOM LENGTH 78.4 FT.

23810 POUND TOTAL COUNTERWEIGHT

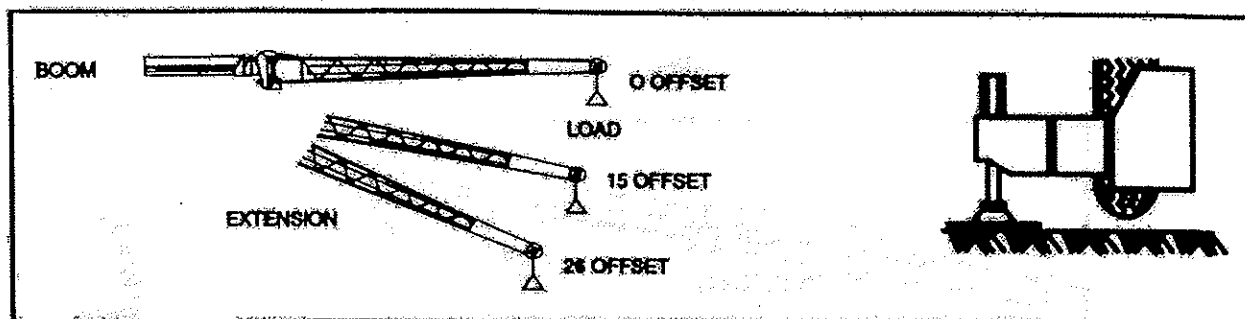
LOAD CHART CODE # 02

 <p>POWERED BOOM LENGTH IN FEET</p>									
BOOM	40.7 FT.		53.3 FT.		65.6 FT.		78.4 FT.		BOOM
SECT	1	0	1	47	1	93	1	93	SECT
%	2	0	2	0	2	0	2	47	%
EXT	31.4	0	31.4	0	31.4	0	31.4	0	EXT
LOAD RAD	LOADED BOOM ANGLE	LOAD, LB	LOADED BOOM ANGLE	LOAD, LB	LOADED BOOM ANGLE	LOAD, LB	LOADED BOOM ANGLE	LOAD, LB	LOAD RAD
FEET	X°	360	X°	360	X°	360	X°	360	FEET
12									12
15									15
20	52	50100	62	47800	68	46300	73	46300	20
25	38	39200	54	37000	62	35600	68	34900	25
30	30	31200	49	28100	59	26100	65	23200	30
35			44	18500	55	18500	62	15700	35
40									40
ZERO DEGREE BOOM ANGLE LOADS (LB) AND RADII (FT.)									
LOAD, LB	0	12400	0	7400	0	0			LOAD, LB
LOAD RAD		34.2		46.8		59.1			LOAD RAD

MINIMUM BOOM ANGLE (DEG) FOR INDICATED BOOM LENGTH (NO LOAD)	-2
MAXIMUM BOOM LENGTH (FEET) AT 0 DEGREE BOOM ANGLE (NO LOAD)	65.6

TIRE INFLATION DATA - PSI		
TIRE SIZE	LOADING	STATIC
33.25 x 29 - 32 PR	50	80

3232Z631\_A

**RT1100 RATED LIFTING CAPACITIES IN POUNDS MODE 2****149.1 FT BOOM FULLY EXTENDED****149.1 FT BOOM + 32.8 FT EXTENSION = 181.9 FT TOTAL****FULLY EXTENDED OUTRIGGERS - 360 DEGREE****23810 POUND TOTAL COUNTERWEIGHT****LOAD CHART CODES #11, 12, 13**

CODE #11		
0 DEG EXT-OFF-SET WITH 32.8 FT EXTENSION		REF. LOAD RADIUS FT.  182 FOOT BOOM ONLY
FOR BOOM LENGTHS 73.5 FT - 181.9 FT		
LOADED BOOM ANGLE	LOAD, LB	
$\Delta^{\circ}$	360	
78	14900	40
77	14900	45
76	14900	50
74	14000	55
73	13000	60
70	12000	65
69	11000	70
67	10300	75
66	9800	80
64	8800	85
61	8300	90
57	6600	100
54	4600	110
50	2900	120
45	1600	130

CODE # 12		
15 DEG EXT OFFSET WITH 32.8 FT EXTENSION		REF. LOAD RADIUS FT.  182 1/2 FOOT BOOM ONLY
FOR BOOM LENGTHS 73.5 FT - 181.9 FT		
LOADED BOOM ANGLE	LOAD, LB	
X°	360	
78	10500	50
76	10000	55
75	9400	60
73	8900	65
72	8300	70
70	7800	75
69	7500	80
65	6800	85
64	6500	90
61	5800	100
56	5100	110
53	3600	120
48	2100	130

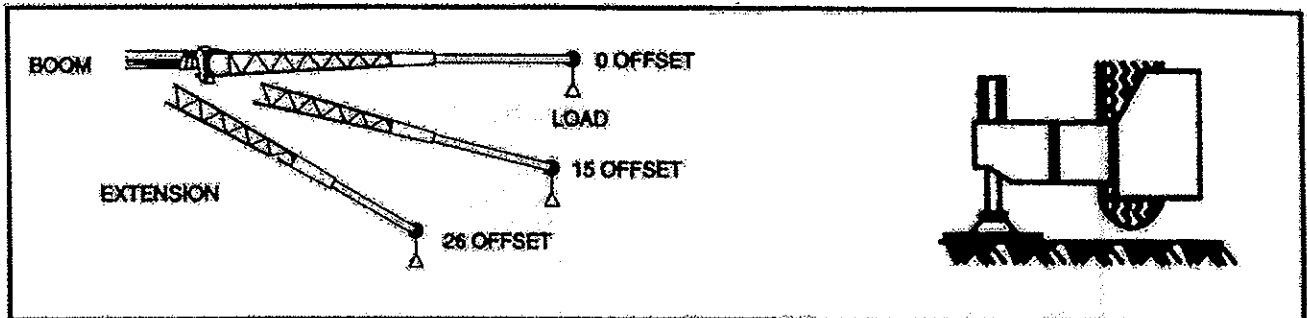
CODE #13		
28 DEG EXT OFFSET WITH 32.8 FT EXTENSION		REF. LOAD RADIUS FT.  182 FOOT BOOM ONLY
FOR BOOM LENGTHS 73.5 FT - 181.9 FT		
LOADED BOOM ANGLE	LOAD, LB	
X°	360	
78	8500	55
77	8000	60
75	7600	65
74	7000	70
71	6600	75
70	6300	80
68	5900	85
66	5600	90
62	4900	100
56	4400	110
54	3900	120
50	2500	130
45	1200	140

REFERENCE LOAD RADIUS FOR 182 FT. BOOM ONLY  
FOR BOOM LENGTHS LESS THAN 182 FT., USE BOOM ANGLE ONLY

MINIMUM BOOM ANGLE (DEG) FOR INDICATED BOOM LENGTH (NO LOAD)	-2
MAXIMUM BOOM LENGTH (FEET) AT 0 DEGREE BOOM ANGLE (NO LOAD)	91.6

<b>LIFTING CAPACITIES - 360 DEGREE AT 0 DEG. BOOM ANGLE</b>						
AREA OF OPERATION	BOOM ANGLE	MAIN BOOM LENGTH IN FEET, LOAD IN POUNDS				
		40.7	53.2	66.3	79.1	91.6
360 DEGREE	0°	1000	1000	1000	1000	0

3232Z640\_B

**RT1100 RATED LIFTING CAPACITIES IN POUNDS MODE 2****149.1 FT BOOM FULLY EXTENDED****149.1 FT BOOM + 65.6 FT EXTENSION = 214.7 FT TOTAL****FULLY EXTENDED OUTRIGGERS - 360 DEGREE****23810 POUND TOTAL COUNTERWEIGHT****LOAD CHART CODES #14, 15, 16**

CODE #14		
0 DEGREE OFFSET WITH 65.6 FT EXTENSION		REF. LOAD RADIUS FT.
FOR BOOM LENGTHS 106.2 FT - 214.7 FT		
LOADED BOOM ANGLE X°	LOAD, LB	
	360	FOR 215 FT BOOM ONLY
79	7600	
78	7600	
76	7500	
75	7300	
74	7000	
73	6700	
72	6600	
71	6400	
69	6200	
67	6100	
65	5600	
62	4900	
59	3900	
55	3000	
52	1800	

CODE #15		
15 DEGREE OFFSET WITH 65.6 FT EXTENSION		REF. LOAD RADIUS FT.
FOR BOOM LENGTHS 106.2 FT - 214.7 FT		
LOADED BOOM ANGLE $X^{\circ}$	LOAD, LB	
	360	FOR 215 FT BOOM ONLY
80	5500	60
79	5500	65
78	5500	70
76	5100	75
75	5000	80
74	4800	85
72	4800	90
69	4300	100
66	3900	110
63	3400	120
60	3100	130
57	2700	140
53	1700	150

CODE #16		
26 DEGREE OFFSET WITH 65.6 FT EXTENSION		REF. LOAD RADIUS FT.
FOR BOOM LENGTHS 106.2 FT - 214.7 FT		
LOADED BOOM ANGLE	LOAD, LB	
X°	360	FOR 216 FT BOOM ONLY
79	4400	75
78	4400	80
76	4200	85
74	3900	90
71	3600	100
68	3100	110
65	2800	120
62	2500	130
59	2300	140
55	2100	150
51	1300	160

REFERENCE LOAD RADIUS IS FOR 149 FT. BOOM ONLY  
 FOR BOOM LENGTHS LESS THAN 149 FT., USE BOOM ANGLES ONLY

MINIMUM BOOM ANGLE (DEG) FOR INDICATED BOOM LENGTH (NO LOAD)	-2
MAXIMUM BOOM LENGTH (FEET) AT 0 DEGREE BOOM ANGLE (NO LOAD)	79.1

<b>LIFTING CAPACITIES - 360 DEGREE AT 0 DEG. BOOM ANGLE</b>						
AREA OF OPERATION	BOOM ANGLE	MAIN BOOM LENGTH IN FEET, LOAD IN POUNDS				
		40.7	53.2	79.1		
360 DEGREE	0°	1100	1100	0		



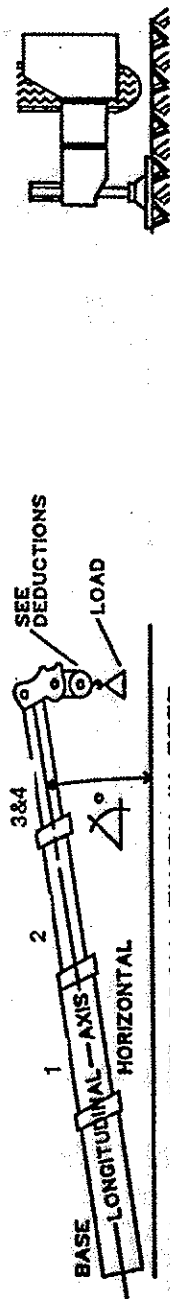


## RT1100 RATED LIFTING CAPACITIES IN POUNDS MODE 1

40.7 FT. - 121.9 FT. BOOM ON FULLY EXTENDED OUTRIGGERS - 360 DEGREE

23810 POUND TOTAL COUNTERWEIGHT

LOAD CHART CODE # 03



POWERED BOOM LENGTH IN FEET

BOOM SECT %	40.7 FT.		53.3 FT.		65.6 FT.		78.4 FT.		90.9 FT.		103.7 FT.		116.2 FT.		121.9 FT.		BOOM SECT %
	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	
EXT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	EXT
RADIUS FT.	LOAD, LB		LOAD, LB		LOAD, LB		LOAD, LB		LOAD, LB		LOAD, LB		LOAD, LB		LOAD, LB		RADIUS FT.
	360 DEG	X°	360 DEG	X°	360 DEG	X°	360 DEG	X°	360 DEG	X°	360 DEG	X°	360 DEG	X°	360 DEG	X°	
10	68	200000	74	140600	78	140600	79	86100									10
12	66	144400	72	140600	76	140600	77	89100									12
15	60	126100	68	123100	73	121600	77	88200									15
20	52	98200	62	95500	68	93800	73	90100	76	84500	78	79700					20
25	38	79600	54	76900	62	75300	68	75500	72	71000	75	67500	77	62200	78	52600	25
30	30	65300	49	62900	59	61200	65	61600	69	60900	73	57300	76	55300	76	45800	30
35			44	51800	55	49800	62	50400	67	50700	71	50200	74	48200	75	40600	35
40			32	40900	48	39200	56	40200	62	40700	67	42500	70	42500	71	35400	40
45			18	31900	39	30300	50	31200	57	31700	63	33400	67	34200	68	31200	45
50					34	23800	47	24700	55	25200	60	26800	65	27500	66	27600	50
55					22	18900	40	19700	49	20200	56	21600	61	22400	63	22500	55
60							36	15700	47	16200	54	21700	59	18400	61	18500	60
65							25	12500	40	13000	49	17700	55	15100	57	15200	65
70							18	9900	37	10400	46	14500	53	12400	55	12500	70
75									28	8200	41	11800	49	10200	51	10300	75
80									23	6200	38	9600	46	8200	49	8300	80
85											31	7600	41	6600	44	6700	85
90											27	6000	39	5100	42	5200	90
95											15	3300	32	3800	37	3900	95
100													29	2700	34	2800	100
105													20	1700	27	1800	105

ZERO DEGREE BOOM ANGLE LOADS (LB) AND RADII (FT.)

BOOM SECT %	40.7 FT.		53.3 FT.		65.6 FT.		78.4 FT.		90.9 FT.		103.7 FT.		116.2 FT.		121.9 FT.		BOOM SECT %
	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	
EXT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	EXT
RADIUS FT.	LOAD, LB		LOAD, LB		LOAD, LB		LOAD, LB		LOAD, LB		LOAD, LB		LOAD, LB		LOAD, LB		RADIUS FT.
	360 DEG	X°	360 DEG	X°	360 DEG	X°	360 DEG	X°	360 DEG	X°	360 DEG	X°	360 DEG	X°	360 DEG	X°	
10	68	200000	74	140600	78	140600	79	86100									10
12	66	144400	72	140600	76	140600	77	89100									12
15	60	126100	68	123100	73	121600	77	88200									15
20	52	98200	62	95500	68	93800	73	90100	76	84500	78	79700					20
25	38	79600	54	76900	62	75300	68	75500	72	71000	75	67500	77	62200	78	52600	25
30	30	65300	49	62900	59	61200	65	61600	69	60900	73	57300	76	55300	76	45800	30
35			44	51800	55	49800	62	50400	67	50700	71	50200	74	48200	75	40600	35
40			32	40900	48	39200	56	40200	62	40700	67	42500	70	42500	71	35400	40
45			18	31900	39	30300	50	31200	57	31700	63	33400	67	34200	68	31200	45
50					34	23800	47	24700	55	25200	60	26800	65	27500	66	27600	50
55					22	18900	40	19700	49	20200	56	21600	61	22400	63	22500	55
60							36	15700	47	16200	54	21700	59	18400	61	18500	60
65							25	12500	40	13000	49	17700	55	15100	57	15200	65
70							18	9900	37	10400	46	14500	53	12400	55	12500	70
75									28	8200	41	11800	49	10200	51	10300	75
80									23	6200	38	9600	46	8200	49	8300	80
85											31	7600	41	6600	44	6700	85
90											27	6000	39	5100	42	5200	90
95											15	3300	32	3800	37	3900	95
100													29	2700	34	2800	100
105													20	1700	27	1800	105

MINIMUM BOOM ANGLE (DEGREES) FOR  
MAXIMUM BOOM LENGTH (FEET) AT 0

BOOM ANGLE (DEGREES) FOR  
BOOM LENGTH (FEET) AT 0

BOOM ANGLE (DEGREES) FOR  
BOOM LENGTH (FEET) AT 0



## RT1100 RATED LIFTING CAPACITIES IN POUNDS MODE 2

40.7 FT. - 149.1 FT. BOOM ON FULLY EXTENDED OUTRIGGERS - 360 DEGREE  
23810 POUND TOTAL COUNTERWEIGHT  
LOAD CHART CODE # 04



## 5-SECTION POWERED BOOM LENGTH IN FEET

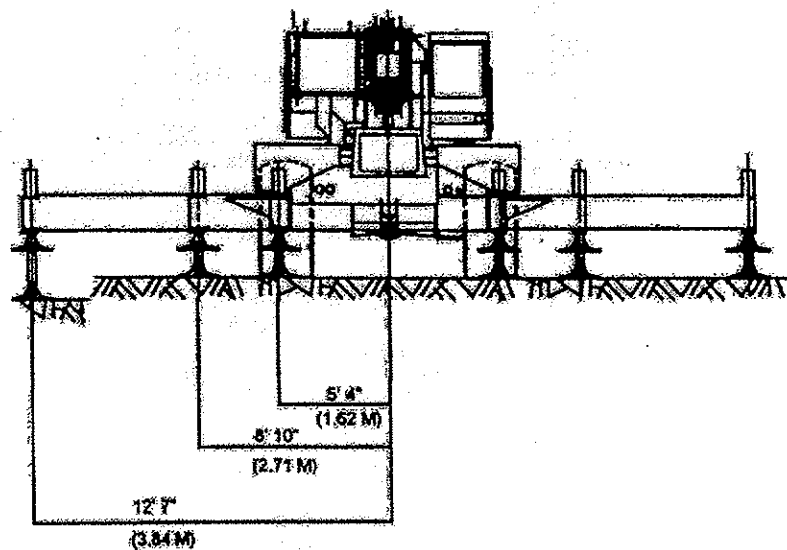
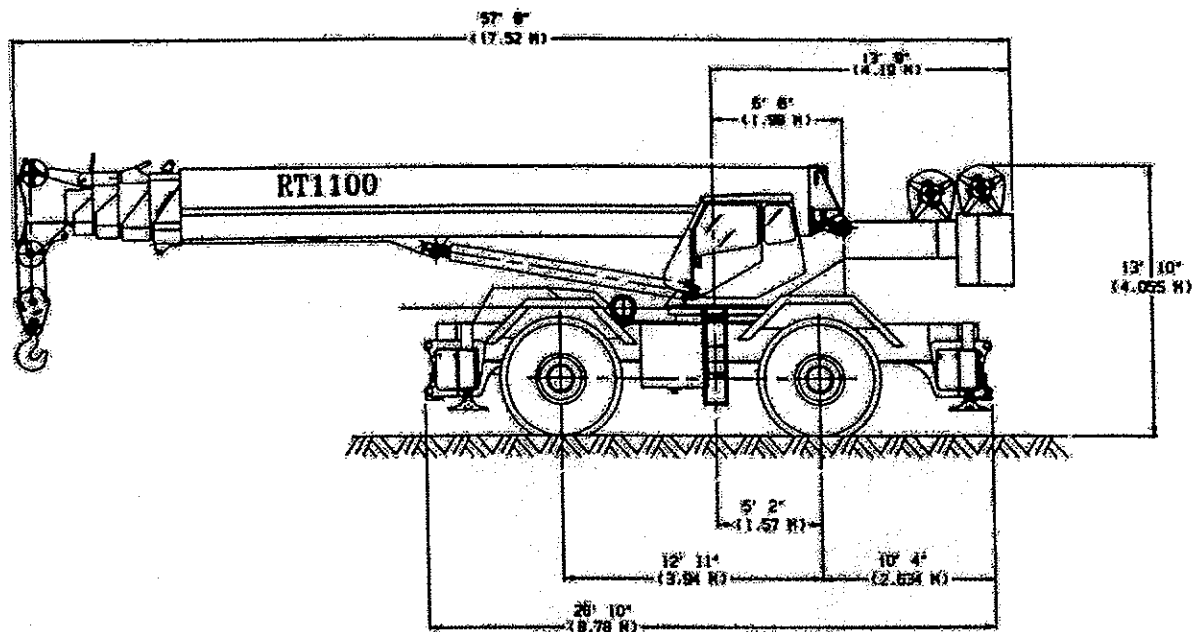
BOOM SECT	40.7 FT.	53.2 FT.	66.3 FT.	79.1 FT.	91.6 FT.	104.1 FT.	118.7 FT.	129.2 FT.	141.5 FT.	149.1 FT.	BOOM SECT
%	1	0	1	0	1	0	1	0	1	0	100
EXT	2	0	2	47	2	93	2	93	2	93	100
OR PAD	3-4	0	3-4	47	3-4	70	3-4	93	3-4	93	100
FT.	LOAD, LB	LOAD, LB	LOAD, LB	LOAD, LB	LOAD, LB	LOAD, LB	LOAD, LB	LOAD, LB	LOAD, LB	LOAD, LB	OR PAD
10	360 DEG	360 DEG	360 DEG	360 DEG	360 DEG	360 DEG	360 DEG	360 DEG	360 DEG	360 DEG	FT.
10	68	38300	74	37400	77	37300					10
12	66	39200	72	37900	76	37800					12
15	60	41000	68	38900	73	38500					15
20	52	45100	62	41100	68	40100					20
25	38	51200	54	44200	62	42100					25
30	30	52600	49	48300	59	44500					30
35			39	52400	52	46800					35
40			32	47100	48	43500					40
45			18	37700	40	39000					45
50					35	32900					50
55					22	27800					55
60											60
65											65
70											70
75											75
80											80
85											85
90											90
95											95
100											100
105											105
110											110
115											115
120											120
125											125

ZERO DEGREE BOOM ANGLE LOADS (LB) AND RADII (FT.)										
24500	18500	13800	8300	4100	3300	1400	0			
34.2	46.7	58.8	72.6	97.6	110.2	122.7	135.0			

MINIMUM BOOM ANGLE (DEGREES) FOR INDICATED BOOM LENGTH (NO LOAD)  
MAXIMUM BOOM LENGTH (FEET) AT -2 DEGREE BOOM ANGLE (NO LOAD)

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-2  
141



## HYDRAULIC DATA

MACHINE DESIGNED TO OPERATE AT THESE MAXIMUM  
PRESSURE SETTINGS AND FLOW RATES

FUNCTION	TWO SECTION VALVE			AUX. & MAIN - TWO SECT. VALVE			SINGLE SECTION VALVE (OPTION)		SINGLE SECTION VALVE	
	INLET	BOOM HOIST	BOOM REEL	INLET	MAIN WINCH	AUX. WINCH	INLET	DEEP WINCH	INLET	SWING
RELIEF SETTING PSI (BAR)	MAIN 3200 (220)	PORT NONE	PORT 2000 (138) RETRACT	MAIN 3200 (220)	PORT 2000 (138) LOWER	PORT 2000 (138) LOWER	MAIN NONE	PORT NONE	MAIN 2000 (138)	PORT NONE
MAX FLOW G.P.M. (L.P.M.)	53 (200)	53 (200)	53 (200)	81 (306)	81 (306)	81 (306)	95 (358)	95 (358)	28 (106)	28 (106)
OUTRIGGER RELIEF - 2500 PSI - 25 GPM (172 BAR - 95 GPM)										
STEER RELIEF - 2500 PSI - 8 GPM - REGULATED FLOW (172 BAR - 30 LPM)										
FLOW RATES TO BE CHECKED AT 2200 ENGINE RPM - NO LOAD - HIGH SPEED										
PRESSURE TO BE CHECKED AT 2200 ENGINE RPM - GOVERNOR SPEED										

HYDRAULIC OIL TEMPERATURES MUST BE BETWEEN PLUS 20°F (21°C) AND 100°F (38°C) WHEN SETTING OF ABOVE PRESSURES.

DO NOT HOLD ON RELIEF MORE THAN 10 SECONDS TO AVOID OVERHEATING THE OIL AND HYDRAULIC COMPONENT DAMAGE.

UNAUTHORIZED PRESSURE SETTINGS IN EXCESS OF THE ABOVE VALUES WILL RESULT IN DENIAL OF WARRANTY CLAIMS.

PRESSURE TO BE WITHIN ±100 PSI (7 BAR) - FLOW RATES TO BE WITHIN ±3%





## GENERAL NOTES

### GENERAL

1. Rated loads as shown on lift charts pertain to this machine as originally manufactured and equipped. Modifications to the machine or use of optional equipment other than that specified can result in a Reduction of capacity.
2. Construction equipment can be hazardous if improperly operated or maintained. Operation and maintenance of this machine shall be in compliance with the information in the Operators, Parts and Safety Manuals supplied with this machine. If these manuals are missing, Order replacements from the manufacturer thru your distributor.
3. These warnings do not constitute all of the operating conditions for the crane. The operator and job site supervision must read the OPERATORS MANUAL, CIMA SAFETY MANUAL, APPLICABLE OSHA REGULATIONS, AND SOCIETY OF MECHANICAL ENGINEERS (ASME) SAFETY STANDARDS FOR CRANES.
4. This crane and its load ratings are in accordance with POWER CRANE & SHOVEL ASSOCIATION, STANDARD NO. 4 SAE CRANE LOAD STABILITY TEST CODE J765A, SAE METHOD OF TEST FOR CRANE STRUCTURE J1063 AND APPLICABLE SAFETY CODE FOR CRANE, DERRICKS AND HOISTS, ASME/ANSI B30.5.

### DEFINITIONS

1. **LOAD RADIUS**- The horizontal distance from the axis of rotation Before loading to the center of the vertical hoist line or tackle with a Load applied.
2. **LOADED BOOM ANGLE**- It is the angle between the boom base Section and the horizontal, after lifting the rated load at the rated Radius. The boom angle before loading should be greater to account for deflections. The loaded boom angle combined with boom length give only an approximation of the operating radius.
3. **WORKING AREA**- Areas measured in a circular arc about the centerline of rotation as shown in the diagram.
4. **FREELY SUSPENDED LOAD**- Load hanging free with no direct External force applied except by the hoist rope.
5. **SIDE LOAD**- Horizontal force applied to the lifted load either on the ground or in the air.
6. **NO LOAD STABILITY LIMIT**- The stability limit radius shown on the range diagrams is the radius beyond which it is not permitted to position the boom, when the boom angle is less than the minimum shown on the applicable load chart, because the machine can overturn without any load.

### SET-UP

1. Crane load ratings are based on the crane being leveled and standing on a firm, uniform supporting surface.
2. Crane load ratings on outriggers are based on all outrigger beams being fully extended or in the case of partial extension ratings mechanically pinned in the appropriate position, and the tires free of the supporting surface.
3. Crane load ratings on tires depend on appropriate inflation pressure and the tire conditions. Caution must be exercised when increasing air pressure in tires. Consult operator's manual for precautions.
4. Use of jibs, lattice-type boom extensions, or fourth section pullouts extended is not permitted for pick and carry operations.
5. Consult appropriate section of the Operator's and Service manual for more exact descriptions of hoist line reeving.
6. The use of more parts of line than required by the load may result in having insufficient rope to allow the hook block to reach the ground.
7. Properly maintained wire rope is essential for safe crane operation. Consult Operator's Manuals for proper maintenance and inspection requirements.

8. When spin resistant wire rope is used, the allowable rope loading shall be the breaking strength divided by 5, unless otherwise specified by the wire rope manufacturer.

### OPERATION

1. **CRANE LOAD RATINGS MUST NOT BE EXCEEDED. DO NOT ATTEMPT TO TIP THE CRANE TO DETERMINE ALLOWABLE LOADS.**
2. When either radius or boom length, or both, are between listed values, The smaller of the two listed load ratings shall be used.
3. Do not operate at longer radii than those listed on the applicable load rating chart (cross hatched areas shown on range diagrams).
4. The boom angles shown on the capacity chart give an approximation of the operating radius for a specified boom length. The boom angle before loading, should be greater to account for boom deflection. It may be necessary to retract the boom if maximum boom angle is insufficient to maintain rated radius.
5. Power telescoping boom sections must be extended equally.
6. Rated loads include the weight of hook block, slings, and auxiliary lifting devices. Their weights shall be subtracted from the listed rated load to obtain the net load that can be lifted.  
When lifting over the jib the weight of any hook block, slings, and auxiliary lifting devices at the boom head must be added to the load. When jibs are erected but unused add 2 times the weight of any Hook block, slings, and auxiliary lifting devices at the jib head to the loads.
7. Rated loads do not exceed 85% on outriggers or 75% on tires, of the tipping loads as determined by SAE Crane Stability Test Code J765A. Rated loads for partially extended outriggers are determined from the Formula.  $\text{Rated Load} = (\text{Tipping Load} - 0.1 \times \text{Tip Reaction}) / 1.25$ . Structural strength ratings in chart are indicated with an asterisk \*.
8. Rated loads are based on freely suspended loads. No attempt shall be made to drag a load horizontally on the ground in any direction.
9. The user shall operate at reduced ratings to allow for adverse job conditions, such as soft or uneven ground, out of level conditions, high winds, side loads, pendulum action, jerking or sudden stopping of loads, hazardous conditions, experience of personnel, two machine lifts, traveling with loads, electric wires, etc. (side pull on boom or jib is hazardous) Derating of the cranes lifting capacity is required when wind speed exceeds 20-mph. The center of the lifted load must never be allowed to move more than 3\* ft. off the center line of the base boom section due to effects of wind, inertia, or both.  
\*\*Use 2 feet off the center line of the base boom for a two section boom, 3 feet for a three section boom, or 4 feet for a four section boom.
10. The maximum load that can be telescoped is not definable, because of variations in loadings and crane maintenance, but it is Permissible to attempt retraction and extension if load ratings are not exceeded.
11. Load ratings are dependent upon the crane being maintained according to manufacturers specifications.
12. It is recommended that load handling devices, including hooks, and hook blocks, be kept away from boom head at all times.
13. **FOR TRUCK ONLY:** 360 deg. capacities apply only to machines equipped with a front outrigger jack and all 5 outrigger jacks properly set. If the front (5) outrigger jack is not properly set, the work area is restricted to the over side and over rear areas as shown on the crane Working positions diagram. Use the 360 deg. Load ratings in the overside work areas.



## DEDUCTIONS TO MADE FROM LOAD RATINGS

Lifting from the main boom, on fully extended outriggers.

100 ton hook block	1,735 lbs.
20 ton hook block	600 lbs.
9.6 ton headache ball	722 lbs.
Auxiliary boom point sheave	220 lbs.
Stowed extensions	2,437 lbs.

**NOTE:** These load deductions only apply to equipment supplied by PPM Cranes, Inc.

### OPERATION ON OUTRIGGERS

1. Crane lifting capacities on fully extended outriggers do not exceed 85% of the tipping load.
2. Rated lifting capacities above the bold line are based on the machines' hydraulic or structural competence. Rated lifting Capacities below the bold line are based on the machines' stability.
3. Rated lifting capacities include the weight of hook block, slings, and auxiliary lifting devices. Their weight must be subtracted from the listed rated lifting capacity to obtain the net load to be lifted. Also see deductions for auxiliary sheave, stowed or erected extensions and jibs.
4. Extension rated lifting capacity is based on loaded main boom angle with reference to horizontal, regardless of main boom length. Reference radius is for fully extended main boom. For angles not shown, use the next lower boom angle to determine the allowable capacity.
5. Do not tip machine to determine allowable lifting capacities.

### OPERATION ON TIRES

1. Crane lifting capacities on tires do not exceed 75% of the tipping load.
2. Crane lifting capacities on tires depend on tire capacity, condition of tires and tire air pressure. Tires must be inflated to the recommended pressure before lifting.
3. Rated lifting capacities above the bold line are based on the machines' hydraulic or structural competence. Rated lifting capacities below the bold line are based on the machines' stability.
4. Rated lifting capacities include the weight of hook block, slings and auxiliary lifting devices. Their weight must be subtracted from the listed rated lifting capacity to obtain the net load that can be Lifted. Also see deductions for auxiliary sheave, stowed extensions and jibs.
5. For pick and carry operations, the boom must be centered over the front of the machine, the mechanical swing lock engaged and the load must be restrained from swinging.

NOTE: All designs, specifications, and components of the equipment described above are subject to change at the manufacturer's sole discretion at any time and without advance notice. Capacity charts and information printed here are only a guide and may not be complete. They should not be relied upon to operate the crane. The individual load charts and related lifting data on each crane must be understood and govern operation of the crane. Data published herein is informational in nature and shall not be construed to warrant suitability of the machine for any particular purpose as performance may vary with conditions encountered. The only warranty applicable is our standard warranty for this machine.

## TEREX CRANES, INC.

P.O. Box 260002 Hwy. 501 East/Atlantic Center Conway, SC 29526-2602 U.S.A.  
(803) 349-6900 FAX (803) 349-7090



RT100-Rev00-E-mail: [inquire@terexlifting.com](mailto:inquire@terexlifting.com) \* [www.terexlifting.com](http://www.terexlifting.com)