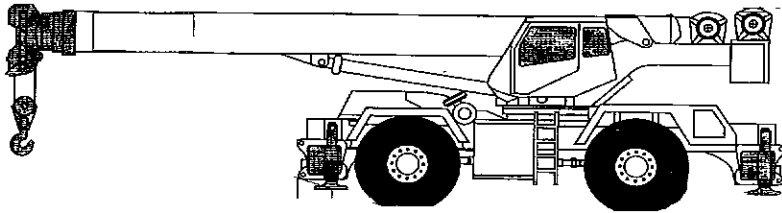


# TEREX RT 160 SERIES

**60 Ton (54 tonne) capacity  
rough terrain cranes  
specifications**



## STANDARD BOOM EQUIPMENT

### BOOM

34-115 ft. (10.4-35 m), four section full power, synchronized boom. High-strength four plate construction welded inside & out. Anti-friction slide pads. Two double acting boom hoist cylinders. Maximum tip height is 122 ft.

### BOOM HEAD

Welded to fourth section of boom. Five non metallic main sheaves and two non metallic idler sheaves mounted on heavy duty anti-friction bearings. Quick reeving boom head.

---

## OPTIONAL BOOM EQUIPMENT

### JIBS

38 ft. (11.6 m) self storing swing-on one-piece lattice type jib. Single sheave mounted on anti-friction bearing. Jib is offsettable at 0', 17', or 30'. Maximum tip height is 153 ft. (46.6 m) with 115 ft. (35 m) boom.

38-60 ft. (11.6 –18.3 m) self storing swing-on lattice type jib. Single sheave mounted on anti-friction bearing. Jib is extendible to 60 ft. (18.3 m) by means of a 22 ft. (6.70 m) manual pull-out tip section, Jib is offsettable at 0', 17' or 30'. Maximum tip height is 186 ft. (56.7 m) with 15 ft. (35 m) boom.

### 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 not required for jib use.

### HOOK BLOCK

60 Ton Five steel sheaves on anti-friction bearings with hook and heavy duty latch. Quick reeving design.

### HOOK & BALL

9.2 ton (8.3mt) 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. 15,200 LB. (6,895kg) 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 2 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, 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-Work Lights-Revolving Amber Light-Diesel or Propane Heater

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# 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 +/- 5.2 in. (132mm). 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.

29.5X25-28PR

19ft. 5in. (6.2m)

## TRANSMISSION

Fully sequential powershift with torque convertor. Six speeds Forward and three reverse.

# STANDARD CARRIER EQUIPMENT (continued)

## MULTI-POSITION OUT & DOWN OUTRIGGERS

Fully independent hydraulic outriggers may be extended to 23 ft. 7 in. (7.2 m), 16 ft. 4 in. (4.98m), and 9 ft. 7 in. (2.9m). Front to rear spread is 23 ft. 8 in. (7.2m). Easily removable. Floats 24 in. (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 with rock tread.

## TIRES

29.5X25-28PR

## SERVICE BRAKES

Dual circuit, air over hydraulic drum brakes at each wheel.

## PARKING BRAKE

Disc brake on the transmission output 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.

## HYDRAULIC SYSTEM

### HYDRAULIC PUMPS

System uses two tandem gear-type pumps with a Total flow of 139 gpm (525 lpm). Manual Disconnect is standard.

### Main and Auxiliary Winch Pump

78 gpm (296 lpm) @ 2,000 psi (138 kg/cm<sup>2</sup>)

### Boom Hoist, Telescope Pump

54 gpm (205 lpm) @ 2,000 psi (138 kg/cm<sup>2</sup>)

### Power Steering, and Swing Pump

25 gpm (95 lpm) @ 2,000 psi (138 kg/cm<sup>2</sup>)

## 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 162 gallons (615 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 a multi-disc brake, grooved drum, tapered flanges, standard cable roller on drum, and drum turn indicator.

## OPTIONAL AUX. WINCH

SAME AS MAIN WINCH

## PERFORMANCE

### Bradon PD17

Max. line speed

-Fifth layer 504 fpm (154 mpm)

Max. line pull

-First layer 17,400 lbs. (7892kg) low speed

Permissible line pull 11,000 lbs. (4990kg) per part of line

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

## DRUM CAPACITY

Max. Storage: 554 ft (168 m) 3/4 in. wire rope

## CABLE

550 ft. (167m) of 3/4 in. (19mm) diameter, 6x37 EIPS with 7x7 IWRC.

## OPTIONAL CABLE

Rotation resistant wire rope 3/4x460' 8x19 EIPS with 7x7 IWRC.

## CABLE

460 ft. (140m) of 3/4 in. (19mm) diameter, 6x37 EIPS with 7x7 IRWC.

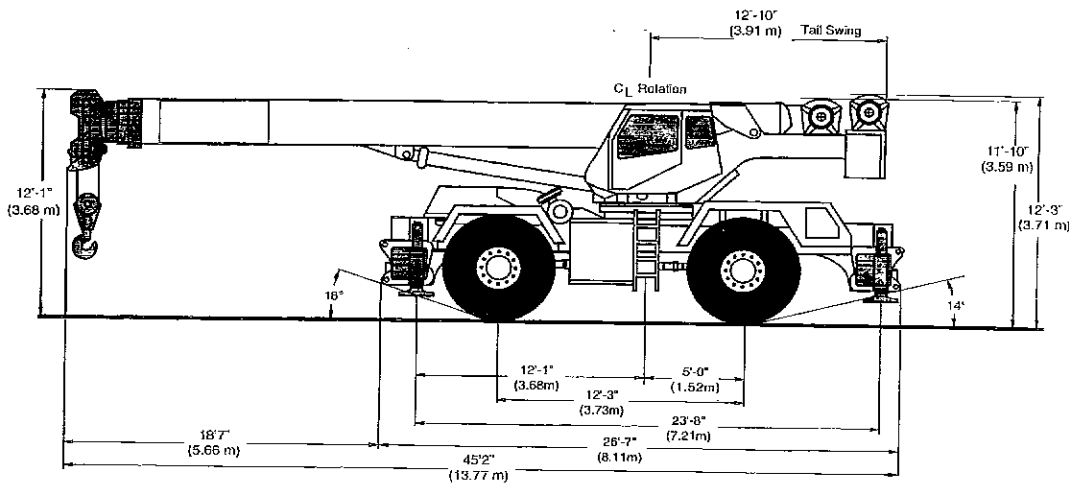
## ENGINE SPECIFICATIONS

Make and Model

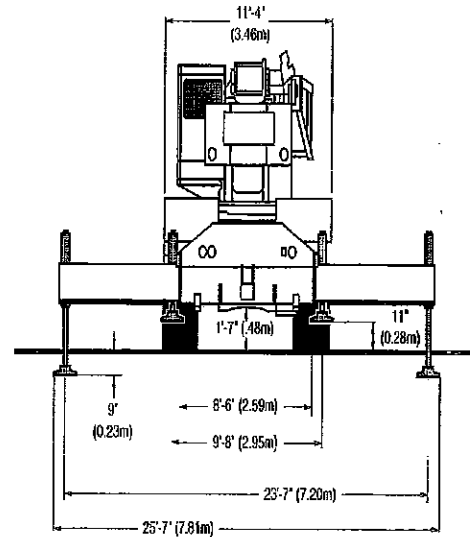
Cummins 6CT8.3L

Type	6 cylinder
Bore and Stroke	4.49 in. (114mm) x 5.32 in. (135mm)
Displacement	504.5 in. <sup>3</sup> (8.27 litres)
Gross Horsepower	215 @ 2500 rpm
Gross Torque	558 ft. lbs. (756 Nm)
Aspiration	Turbo charged
Air Filter	dry type
Electrical System	24 volt
Alternator	70 amp
Battery	2 8D batteries
Fuel Capacity	80 gallon (303 liter)

# GENERAL DIMENSIONS



Minimum turning radius is 19 ft. 5 in. (6.2 m).



WEIGHTS & AXLE LOADS	GROSS WEIGHT	UPPER FACING FRONT		GROSS WEIGHT	UPPER FACING FRONT	
		FRONT	REAR		FRONT	REAR
Basic Machine RT160	90,463	43,912	46,551	41,034	19,918	21,116
<b>Add Options:</b>						
38'(11.6 m) Swing-on jib (Stowed)	+ 1,735	+2,294	-559	+ 787	+ 1,041	-254
38'-60'(11.6-18.3 m) Swing-on Jib (Stowed)	+ 2,661	+3,795	-1,134	+ 1,207	+ 1,721	-514
Auxiliary Boom Head	+ 154	+ 460	-306	+ 70	+ 209	-139
Auxiliary Winch Controls and Plumbing Only	+ 75	+ 0	+ 75	+ 34	+ 0	+ 34
Auxiliary Winch Wire Rope.	+ 487	- 249	+ 736	+ 221	- 113	-334
60T 5-Sheave Hook Block (travel)	+ 1,122	+2,323	-1,201	+ 509	+ 1,054	-545
9.2T Hook and Ball (boom)	+ 467	+ 764	-296	+ 212	+ 346	-134
Pintle Hook: Front	+ 45	+ 64	19	+ 20	+ 29	9

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 Phone: (843)349-6900 Fax: (843)349-7090  
 TX160-Rev00 E-mail: [inquire@terexlifting.com](mailto:inquire@terexlifting.com) - [www.terexlift.com](http://www.terexlift.com)

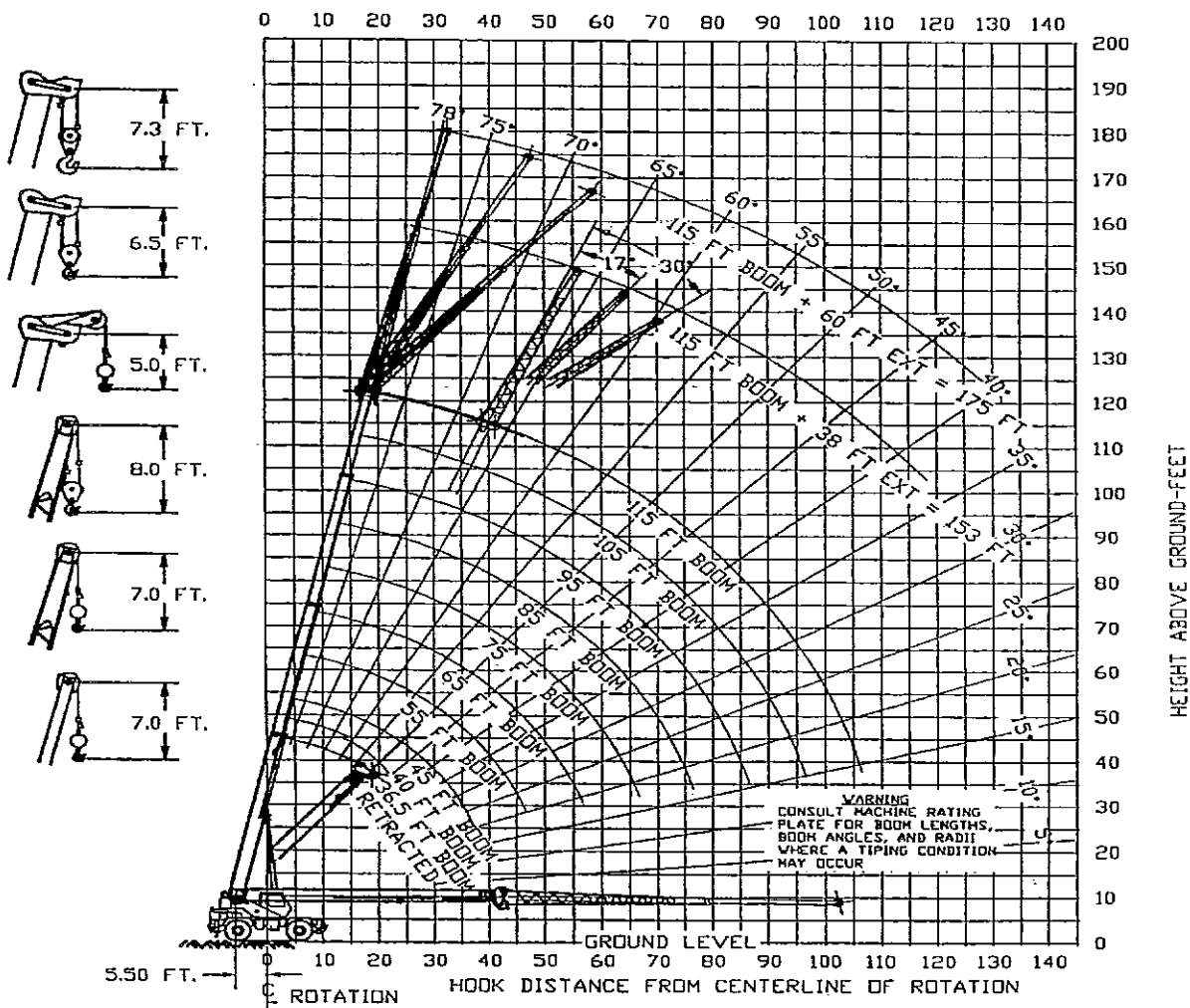
# TEREX

# RT160

ROUGH TERRAIN CRANE  
60 TON CAPACITY

range diagram & lifting capacities

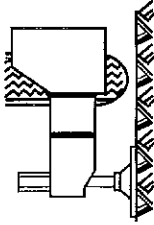
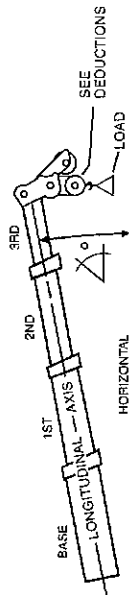
RANGE DIAGRAM RT160 115' FULL POWER BOOM



3232U1335\_B

# RATED LIFTING CAPACITIES IN POUNDS

36.5 - 115 FT BOOM ON FULLY EXTENDED OUTRIGGERS  
 15200 POUND TOTAL COUNTERWEIGHT LOAD MOVEMENT DEVICE (LMI) CODE #04



POWERED BOOM LENGTH IN FEET

LOAD RADIUS FT	36.5 FT		40 FT		45 FT		55 FT		65 FT		75 FT		85 FT		95 FT		105 FT		115 FT		
	LOADED BOOM ANGLE Δ°	LOAD, LB	LOADED BOOM ANGLE Δ°	LOAD, LB	LOADED BOOM ANGLE Δ°	LOAD, LB	LOADED BOOM ANGLE Δ°	LOAD, LB	LOADED BOOM ANGLE Δ°	LOAD, LB	LOADED BOOM ANGLE Δ°	LOAD, LB	LOADED BOOM ANGLE Δ°	LOAD, LB	LOADED BOOM ANGLE Δ°	LOAD, LB	LOADED BOOM ANGLE Δ°	LOAD, LB	LOADED BOOM ANGLE Δ°	LOAD, LB	
10	68	120000	70	120000	72	86000	75	76600													
12	64	100000	67	95000	69	87900	74	76200	76	61000											
15	59	88000	62	85700	65	82200	70	76000	74	59000	76	47900									
20	48	68000	53	68100	58	66300	65	65000	68	57000	72	44700	75	41100	77	40400					
25	38	52800	43	53900	50	55000	59	54200	64	48200	68	40800	72	37300	74	36300	76	31000	78	28000	
30			30	42500	40	42500	52	42000	61	40700	68	39300	72	32100	71	28900	73	27300	75	22500	
35					28	34000	54	33500	64	32900	70	31000	74	28000	68	25000	70	24600	72	20500	
40							48	27100	58	27500	66	27500	70	24800	64	22900	67	21600	70	18000	
45							25	21700	41	23500	50	23000	56	22000	61	20400	64	19100	67	16900	
50									33	14600	47	14600	51	14600	57	14800	61	14800	64	14800	
55									23	13500	38	13500	42	12500	46	12500	53	13500	58	13500	
60									32	12500	32	12500	42	12500	46	12500	54	12500	58	12500	
65									35	10900	35	10900	45	10900	45	11000	51	11000	55	11300	
70									22	10700	30	9200	40	9400	47	9500	52	9500	55	9400	
75											21	7600	35	8300	43	8100	49	8100	53	8200	
80													28	6600	38	6900	45	6900	48	7000	
85															20	5700	33	5900	41	6000	
90																	27	5000	37	5100	
95																	18	4200	32	4500	
100																		28	3600	28	3600

ZERO DEGREE BOOM ANGLE LOADS (LB) / (RADIUS (FT.))

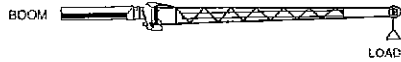
	0	21000 (31.0)	0	18000 (34.5)	0	1400 (39.5)	0	1100 (49.5)	0	7900 (59.5)	0	5100 (69.5)	0	3300 (79.5)	0	2200 (89.5)	0	1500 (99.5)	0	1000 (109.5)
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MIN. BOOM ANGLE (DEG) FOR INDICATED BOOM LENGTH (NO LOAD)	-2
MAX. BOOM LENGTH (FEET) AT -2 DEGREE BOOM ANGLE (NO LOAD)	115

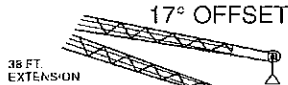
This Lifting Data is for informational purposes only. Do not use to operate the crane; refer to the Operator's Manual and Crane Rating Information supplied with each crane.

# RATED LIFTING CAPACITIES IN POUNDS

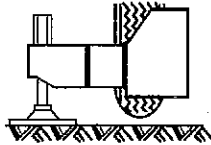
115 FT BOOM + 38 FT. EXTENSION = 153 FT. TOTAL  
 FULLY EXTENDED OUTRIGGERS - 360 DEG • 15200 POUND TOTAL COUNTERWEIGHT  
 LOAD MOMENT DEVICE (LMI) CODES # 11, 12, 13



2° OFFSET



30° OFFSET



REFERENCE LOAD RADIUS IS FOR 153 FT. BOOM ONLY

FOR BOOM LENGTHS LESS THAN 153 FT., USE BOOM ANGLES ONLY

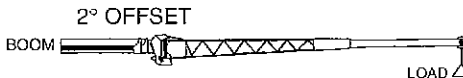
MIN. BOOM ANGLE (DEG) FOR INDICATED BOOM LENGTH (NO LOAD)	-2
MAX. BOOM LENGTH (FEET) AT -2 DEGREE BOOM ANGLE (NO LOAD)	60

CODE #11			CODE #12			CODE #13		
2 DEG EXT OFFSET WITH STINGER RETRACTED		REF. LOAD RADIUS FT.	17 DEG EXT OFFSET WITH STINGER RETRACTED		REF. LOAD RADIUS FT.	30 DEG EXT OFFSET WITH STINGER RETRACTED		REF. LOAD RADIUS FT.
FOR BOOM LENGTHS 74.5 FT - 153 FT			FOR BOOM LENGTHS 74.5 FT - 153 FT			FOR BOOM LENGTHS 74.5 FT - 153 FT		
LOADED BOOM ANGLE Δ°	LOAD, LB	FOR 153 FOOT BOOM ONLY	LOADED BOOM ANGLE Δ°	LOAD, LB	FOR 153 FOOT BOOM ONLY	LOADED BOOM ANGLE Δ°	LOAD, LB	FOR 153 FOOT BOOM ONLY
78	11900	35	77	9100	45	77	7400	50
76	10700	40	75	8300	50	75	6900	55
74	9900	45	73	7600	55	73	6400	60
72	9100	50	71	7000	60	71	5900	65
70	8300	55	68	6500	65	68	5500	70
67	7700	60	66	6000	70	66	5200	75
65	7100	65	64	5600	75	63	4900	80
63	6500	70	61	5200	80	61	4600	85
61	6000	75	59	4800	85	56	4300	90
58	5100	80	56	4000	90	52	2900	100
55	4300	85	50	2700	100	45	1800	110
53	3600	90	44	1600	110			
47	2300	100						

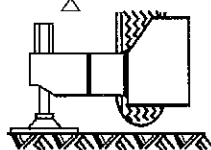
LIFTING CAPACITIES  
 360 DEG AT 0 DEG.  
 BOOM ANGLE

AREA OF OPERATION	BOOM ANGLE	MAIN BOOM LENGTH IN FEET, LOAD IN POUNDS				
		36.5	40.0	45.0	55.0	60.0
360 DEG	0°	1600	1600	1600	1600	0

115 FT BOOM + 60 FT. EXTENSION = 175 FT. TOTAL  
 FULLY EXTENDED OUTRIGGERS - 360 DEG • 15200 POUND TOTAL COUNTERWEIGHT  
 LOAD MOMENT DEVICE (LMI) CODES # 14, 15, 16



30° OFFSET



REFERENCE LOAD RADIUS IS FOR 175 FT. BOOM ONLY

FOR BOOM LENGTHS LESS THAN 175 FT., USE BOOM ANGLES ONLY

MIN. BOOM ANGLE (DEG) FOR INDICATED BOOM LENGTH (NO LOAD)	-2
MAX. BOOM LENGTH (FEET) AT -2 DEGREE BOOM ANGLE (NO LOAD)	50

CODE #14			CODE #15			CODE #16		
2 DEG EXT OFFSET WITH STINGER EXTENDED		REF. LOAD RADIUS FT.	17 DEG EXT OFFSET WITH STINGER EXTENDED		REF. LOAD RADIUS FT.	30 DEG EXT OFFSET WITH STINGER EXTENDED		REF. LOAD RADIUS FT.
FOR BOOM LENGTHS 96.5 FT - 175 FT			FOR BOOM LENGTHS 96.5 FT - 175 FT			FOR BOOM LENGTHS 96.5 FT - 175 FT		
LOADED BOOM ANGLE Δ°	LOAD, LB	FOR 175 FOOT BOOM ONLY	LOADED BOOM ANGLE Δ°	LOAD, LB	FOR 175 FOOT BOOM ONLY	LOADED BOOM ANGLE Δ°	LOAD, LB	FOR 175 FOOT BOOM ONLY
77	6600	45	78	5200	55	78	4100	65
75	6200	50	77	5000	60	77	3900	70
74	5800	55	75	4800	65	75	3800	75
72	5700	60	73	4600	70	73	3700	80
70	5600	65	71	4400	75	71	3500	85
69	5400	70	70	4100	80	69	3300	90
67	5000	75	68	3900	85	65	2900	100
65	4700	80	66	3600	90	61	2600	110
63	4300	85	62	3100	100	56	2300	120
61	4000	90	57	2800	110			
57	3500	100	53	2000	120			
53	2500	110						
48	1700	120						

LIFTING CAPACITIES  
 360 DEG AT 0 DEG.  
 BOOM ANGLE

AREA OF OPERATION	BOOM ANGLE	MAIN BOOM LENGTH IN FEET, LOAD IN POUNDS				
		36.5	40.0	45.0	50.0	
360 DEG	0°	1600	1600	1600	0	

## OPERATION ON OUTRIGGERS

- Read and understand all warnings and instructional notes.
- Rated loads for fully extended outriggers do not exceed 95% of the tipping load as determined by SAE crane stability test code J785. Rated loads for mid position and fully retracted outriggers are determined from the formula:  
 $\text{Rated Load} = (\text{Tipping} \times 0.1 \times \text{Tip Reaction}) / 1.25$
- The lines shall be raised clear of the ground and free of crane weight before operating boom or lifting loads.
- All outrigger beams must be extended to the same length; fully extended, mid position or fully retracted.
- Rated lifting capacities above the bold line are based on the machine's hydraulic or structural competence and not on machine stability. Rated lifting capacities below the bold line are based on the machine's stability.
- 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.
- When lifting over the lattice extension the weight of any hook block, slings, and auxiliary lifting devices at the main boom head must be added to the load.
- When the lattice extension is erected but unused add three (3) times the weight of any hook block, slings, and auxiliary lifting devices at the extension head to the load. Outriggers must be in the fully extended position when lifting at the main boom head with the lattice extension erected.
- Add 150 lbs. to the chart values if the auxiliary boom head sheave is not erected.

This Lifting Data is for informational purposes only. Do not use to operate the crane; refer to the Operator's Manual and Crane Rating Information supplied with each crane.

# RATED LIFTING CAPACITIES IN POUNDS

36.5 - 115 FT BOOM ON TIRES • STATIC - OVER FRONT: +/- 6 DEGREE  
15200 POUND TOTAL COUNTERWEIGHT • LOAD MOVEMENT DEVICE (LMI) CODE # 02

## 29.5 X 25 TIRES

**POWERED BOOM LENGTH IN FEET**

LOAD RADIUS FT.	36.5 FT		40 FT		45 FT		55 FT		65 FT		75 FT		LOAD RADIUS FT.
	LOADED BOOM ANGLE Δ°	LOAD, LB	LOADED BOOM ANGLE Δ°	LOAD, LB	LOADED BOOM ANGLE Δ°	LOAD, LB	LOADED BOOM ANGLE Δ°	LOAD, LB	LOADED BOOM ANGLE Δ°	LOAD, LB	LOADED BOOM ANGLE Δ°	LOAD, LB	
10	68	70800	70	70300	72	70200	75	68100	76	58500			10
12	64	81600	67	61200	69	61200	74	59500	76	58500			12
15	59	51100	62	50800	65	51200	70	49600	74	48900	76	48200	15
20	48	38900	53	38700	58	38700	65	37800	69	37300	72	36800	20
25	36	26400	43	26700	50	27100	59	27600	64	27900	68	27800	25
30			30	18200	40	19100	52	19500	59	19800	64	20100	30
35					28	13400	45	14400	54	14700	60	14900	35
40							36	10800	48	11100	55	11300	40
45							25	7600	41	8400	50	8600	45
50									33	5900	47	6100	50

**ZERO DEGREE BOOM ANGLE LOADS (LB) / (RADII (FT.))**

0	6600 (31.0)	0	5200 (34.5)	0	3700 (39.5)	0	0 (49.5)					
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### OPERATION ON TIRES

- Read and understand all warnings and instructional notes.
- Crane lifting capacities on tires do not exceed 75% of the tipping load.
- Crane lifting capacities on tires depend on tire capacity, condition of the tires and tire air pressure. Tires must be inflated to the recommended pressure before lifting. Crane lifting capacities require lifting from main boom head only on a smooth and level surface.
- Rated lifting capacities above the bold line are based on the machine's hydraulic or structural competence and not on machine stability. Rated lifting capacities below the bold line are based on the machine's stability.
- 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.
- Apply 150 lbs. to the chart values if the auxiliary boom head sheave is not erected.
- For pick and carry operations, the boom must be centered over the rear of the machine, the mechanical swing lock engaged and the load must be restrained from swing.
- Do not travel with boom extension erected.
- Creep: Motion less than 200 feet (60 meters) in a 30 minute period and not exceeding 1 mph (1.6 km/h).
- Maximum recommended boom angle on tires is 73° without load.
- Lifting loads with erected boom extension is neither intended nor approved.
- Handling of persons from the boom is neither intended nor approved.
- Operating pile driving/extracting equipment on tires is neither intended nor approved.

36.5 - 115 FT BOOM ON TIRES • CREEP - OVER FRONT  
LOAD MOVEMENT DEVICE (LMI) CODE # 01

## 29.5 X 25 TIRES

**POWERED BOOM LENGTH IN FEET**

LOAD RADIUS FT.	36.5 FT		40 FT		45 FT		55 FT		65 FT		75 FT		LOAD RADIUS FT.
	LOADED BOOM ANGLE Δ°	LOAD, LB	LOADED BOOM ANGLE Δ°	LOAD, LB	LOADED BOOM ANGLE Δ°	LOAD, LB	LOADED BOOM ANGLE Δ°	LOAD, LB	LOADED BOOM ANGLE Δ°	LOAD, LB	LOADED BOOM ANGLE Δ°	LOAD, LB	
10	68	58400	70	57900	72	57900	75	55900	76	48000			10
12	64	50900	67	50600	69	50700	74	49000	76	48000			12
15	59	42300	62	42000	65	42400	70	40900	74	40200	76	39500	15
20	48	32200	53	32000	58	32600	65	31400	69	30900	72	30500	20
25	36	25300	43	25100	50	25800	59	24700	64	24500	68	24200	25
30			30	18200	40	19100	52	18500	59	19800	64	19500	30
35					28	13400	45	14400	54	14700	60	14900	35
40							36	10800	48	11100	55	11300	40
45							25	7600	41	8400	50	8600	45
50									33	5900	47	6100	50

**ZERO DEGREE BOOM ANGLE LOADS (LB) / (RADII (FT.))**

0	6600 (31.0)	0	5200 (34.5)	0	3700 (39.5)	0	0 (49.5)					
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TIRE INFLATION CHART - PSI	TIRE SIZE	LOADING	CREEP	MIN. BOOM ANGLE (DEG) FOR INDICATED BOOM LENGTH (NO LOAD)	-2
	29X25 28PR	55	75	MAX. BOOM LENGTH (FEET) AT -2 DEGREE BOOM ANGLE (NO LOAD)	55

This Lifting Data is for informational purposes only. Do not use to operate the crane; refer to the Operator's Manual and Crane Rating Information supplied with each crane.



# 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, our 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 BE MADE FROM LOAD RATINGS

## HOOK BLOCK WEIGHTS

9.2 Ton Ball Hook	476 Pounds	8.3 M Ton Ball Hook	213 Kg.
20 Ton 1 Sheave Hook Block	420 Pounds	18.1M Ton 1 Sheave Hook Block	190 Kg.
60 Ton 5 Sheave Hook Block	977 Pounds	54.4M Ton 5 Sheave Hook Block	443 Kg.

Note: These weights apply only to TEREX, INC supplied equipment.

The load charts for the RT160 are net load charts.  
The deductions to these charts are:

1. 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.
2. When lifting over the lattice extension of the weight of any hook block, slings, and auxiliary lifting devices at the main boom head must be added to the load.
3. When the lattice extension is erected but unused, add three (3) times the weight of any hook block, slings, and auxiliary lifting devices at the extension head to the load. Outriggers must be in the fully extended position when lifting at the main boom head with the lattice extension erected.
4. Add 150 pounds to the chart values if the auxiliary boom head sheave is not erected.
5. All other deductions have been taken in the charts.

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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.

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