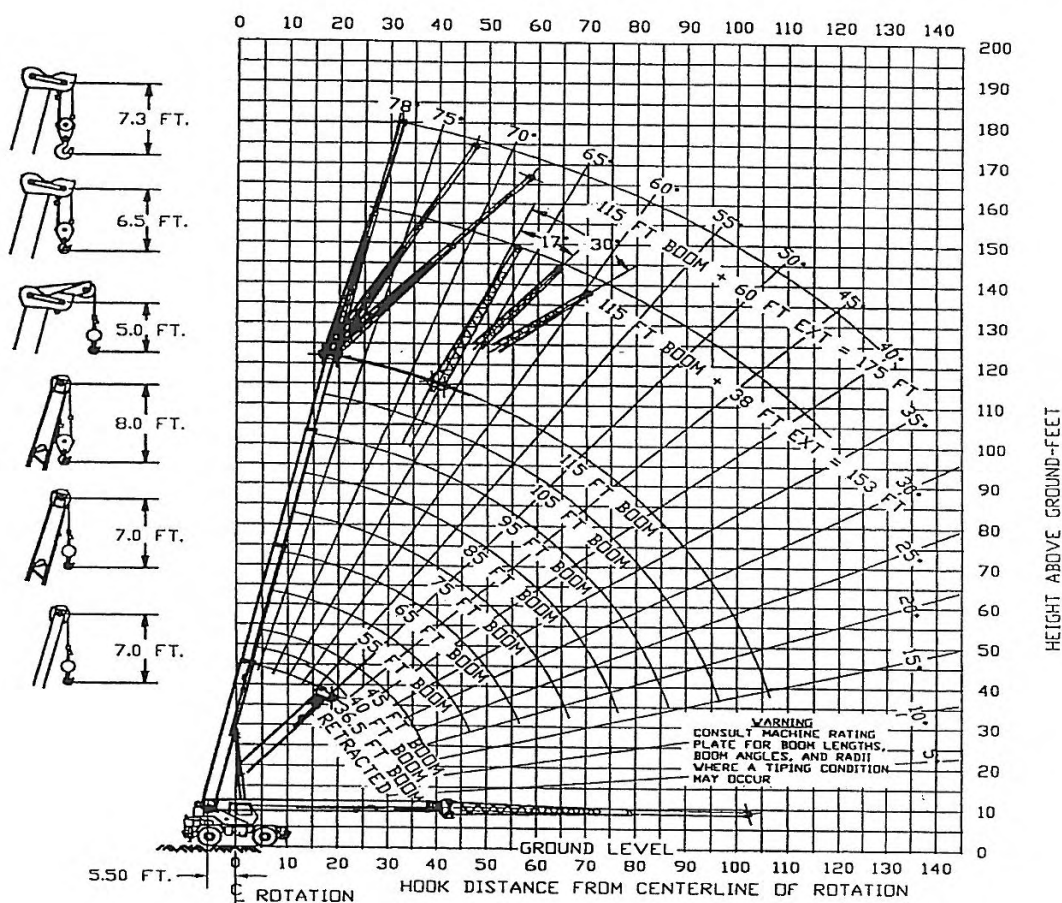


TEREX RT160

ROUGH TERRAIN CRANE
60 TON CAPACITY

range diagram & lifting capacities

RANGE DIAGRAM RT160 115' FULL POWER BOOM

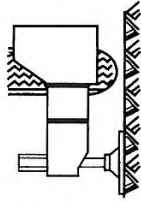
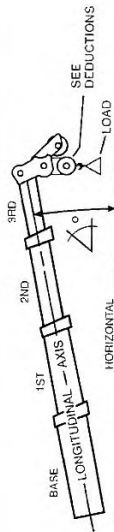


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RATED LIFTING CAPACITIES IN POUNDS

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		
	LOAD, LB 360	LOAD, LB 360	LOAD, LB 360	LOAD, LB 360	LOAD, LB 360	LOAD, LB 360	LOAD, LB 360	LOAD, LB 360	LOAD, LB 360	LOAD, LB 360	LOAD, LB 360	LOAD, LB 360	LOAD, LB 360	LOAD, LB 360	LOAD, LB 360	LOAD, LB 360	LOAD, LB 360	LOAD, LB 360	LOAD, LB 360	LOAD, LB 360	LOAD, LB 360	LOAD, LB 360	LOAD, LB 360	LOAD, LB 360	LOAD, LB 360	LOAD, LB 360	LOAD, LB 360			
10	68	120000	70	102000	72	88000	74	76000	76	61000																				
12	64	100000	67	85000	69	67900	71	58000	73	47900																				
15	59	88000	62	75000	65	62200	68	50000	70	40000																				
20	48	68000	51	58100	54	48300	57	39000	60	31000																				
25	38	52800	41	44500	44	36500	47	29000	50	23000																				
30																														
35																														
40																														
45																														
50																														
55																														
60																														
65																														
70																														
75																														
80																														
85																														
90																														
95																														
100																														

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

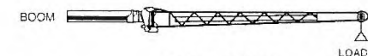
0	21000 (31.0)	0	1400 (20.5)	0	11000 (49.5)	0	7900 (59.5)	0	5100 (69.5)	0	3300 (89.5)	0	2200 (99.5)	0	1500 (109.5)	0	1000 (119.5)
---	-----------------	---	----------------	---	-----------------	---	----------------	---	----------------	---	----------------	---	----------------	---	-----------------	---	-----------------

MIN. BOOM ANGLE (DEG) FOR INDICATED BOOM LENGTH (NO LOAD)	-2
MAX. BOOM LENGTH (FEET) AT 2 DEGREE BOOM ANGLE (NO LOAD)	115

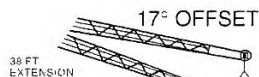
This Lifting Data is for informational purposes only. Do not use to operate the crane; refer to the Operator's Manual and Crane Rating Information supplied with each crane.

RATED LIFTING CAPACITIES IN POUNDS

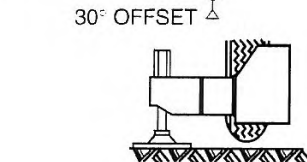
115 FT BOOM + 38 FT. EXTENSION = 153 FT. TOTAL
FULLY EXTENDED OUTRIGGERS - 360 DEG • 15200 POUND TOTAL COUNTERWEIGHT
LOAD MOMENT DEVICE (LMI) CODES # 11, 12, 13



2° OFFSET



17° OFFSET



30° OFFSET

REFERENCE LOAD RADIUS IS FOR
153 FT. BOOM ONLY

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

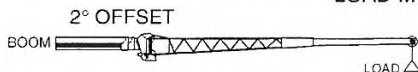
MIN. BOOM ANGLE (DEG) FOR INDICATED BOOM LENGTH (NO LOAD)	-2
MAX. BOOM LENGTH (FEET) AT -2 DEGREE BOOM ANGLE (NO LOAD)	60

CODE #11			CODE #12			CODE #13		
2 DEG EXT OFFSET WITH STINGER RETRACTED			17 DEG EXT OFFSET WITH STINGER RETRACTED			30 DEG EXT OFFSET WITH STINGER RETRACTED		
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	REF. LOAD RADIUS FT	LOADED BOOM ANGLE Δ	LOAD, LB	REF. LOAD RADIUS FT	LOADED BOOM ANGLE Δ	LOAD, LB	REF. LOAD RADIUS FT
		FOR 153 FOOT BOOM ONLY			FOR 153 FOOT BOOM ONLY			FOR 153 FOOT BOOM ONLY
		360 DEG			360 DEG			360 DEG
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	50.0	60.0
360 DEG	0°	1600	1600	1600	1600	0

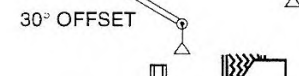
115 FT BOOM + 60 FT. EXTENSION = 175 FT. TOTAL
FULLY EXTENDED OUTRIGGERS - 360 DEG • 15200 POUND TOTAL COUNTERWEIGHT
LOAD MOMENT DEVICE (LMI) CODES # 14, 15, 16



2° OFFSET



17° OFFSET



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			17 DEG EXT OFFSET WITH STINGER EXTENDED			30 DEG EXT OFFSET WITH STINGER EXTENDED		
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	REF. LOAD RADIUS FT	LOADED BOOM ANGLE Δ	LOAD, LB	REF. LOAD RADIUS FT	LOADED BOOM ANGLE Δ	LOAD, LB	REF. LOAD RADIUS FT
		FOR 175 FOOT BOOM ONLY			FOR 175 FOOT BOOM ONLY			FOR 175 FOOT BOOM ONLY
		360 DEG			360 DEG			360 DEG
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 85% of the tipping load as determined by SAE crane stability test code J765. Rated loads for mid position and fully retracted outriggers are determined from the formula:
Rated Load = (Tipping - 0.1 x Tio React.cn) ÷ 1.25
- The tires 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 sneave 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		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	
10	68	70800	70	70300	72	70200	75	68100			10
12	64	61600	67	61200	69	61200	74	59500	76	58500	12
15	59	51100	62	50800	65	51200	70	49600	74	48900	15
20	48	38900	53	38700	58	38700	65	37800	69	37300	20
25	36	26400	43	26700	50	27100	59	27600	64	27900	25
30			30	18200	40	19100	52	19500	58	19800	30
35					28	13400	45	14400	54	14700	35
40							36	10800	48	11100	40
45							25	7600	41	8400	45
50									33	5900	50
ZERO DEGREE BOOM ANGLE LOADS (LB) / (RADIUS (FT.))											
	0	6500 (31.0)	0	5200 (34.5)	0	3700 (39.5)	0	0 (49.5)			

OPERATION ON TIRES

1. Read and understand all warnings and instructional notes.
2. Crane lifting capacities on tires do not exceed 75% of the tipping load.
3. 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.
4. Crane lifting capacities require lifting from main boom head only on a smooth and level surface.
5. 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.
6. Rated lifting capacities include the weight of hook block, slings, and auxiliary lifting devices. The weight must be subtracted from the listed rated lifting capacity to obtain the net load to be lifted.
7. Add 150 lbs. to the chart values if the auxiliary boom head sheave is not erected.
8. 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 swinging.
9. Do not travel with boom extension erected.
10. Creep: Not on less than 200 feet (60 meters); in a 30 minute period and not exceeding 1 mph (1.6 km/h).
11. Maximum recommended boom angle on tires is 73° without load.
12. Lifting loads with erected boom extension is neither intended nor approved.
13. Handling of personnel from the boom is neither intended nor approved.
14. Operating pre-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		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	
10	68	58400	70	57900	72	57900	75	55900			10
12	64	50900	67	50600	69	50700	74	49000	76	48000	12
15	59	42300	62	42000	65	42400	70	40900	74	40200	15
20	48	32200	53	32000	58	32600	65	31400	69	30900	20
25	36	25300	43	25100	50	25800	59	24700	64	24500	25
30			30	18200	40	19100	52	18500	59	19800	30
35					28	13400	45	14400	54	14700	35
40							36	10800	48	11100	40
45							25	7600	41	8400	45
50									33	5900	50
ZERO DEGREE BOOM ANGLE LOADS (LB) / (RADIUS (FT.))											
	0	6500 (31.0)	0	5200 (34.5)	0	3700 (39.5)	0	0 (49.5)			

TIRE INFLATION CHART - PSI	TIRE SIZE	ROADING	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.

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.

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