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**RT 230 XL**  
Rough Terrain Crane  
Datasheet  
imperial



# RT 230 XL

**Features:**

- ▶ Rated capacity:  
30 ton @ 10 ft working radius
- ▶ Maximum boom length:  
100 ft
- ▶ Maximum tip height:  
140 ft

**WORKS FOR YOU.™**



**Key** ..... 3

## Dimensions

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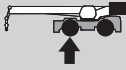

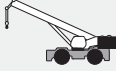







	Counterweight		General performance
	Main boom		Telescoping mode
	Boom length		Boom luffing angle
	Tip height		Working radius
	Boom with extension		Max. boom length with extension
	Main boom with aux head		Distance from the hook to the head sheave pin
	Slewing / Allowable slewing range		Slewing locked / Slewing locked at specified position
	Slewing brake		Slewing gears
	Outriggers / Lifting on outriggers (100/50/0% extended)		Lifting on wheels / Pick & Carry
	Main hoist		Auxiliary hoist
	Hoist speed		Rope length
	Rope - Standard / Optional		Max. line pull
	Rope diameter		Tire
	Hook block		Controls
	Cab		Engine
	Operator aids / Load limiter / Load indicator		Steering
	Mechanical transmission		Speed
	HYDR Hydraulics		Heating / Air conditioning
	Working temperature		Gradeability
	Lights		Gross vehicle weight
	Crane / Crane in standard configuration		Weight on front axle
	Crane without counterweight		Weight on rear axle



# CRANE WEIGHTS

**RT 230 XL**

## Approximate Weights

				
		55,930 lb	28,972 lb	26,958 lb
Add / Subtract for main optional equipment				
	26 ft to 43 ft swing on jib stowed	+ 1500 lb	+ 2600 lb	- 1100 lb
	Auxiliary boom head	+ 100 lb	+ 300 lb	- 200 lb
	Auxiliary hoist*	+ 115 lb	- 25 lb	+ 140 lb
	4 sheaves, 30 T	+ 655 lb	+ 1071 lb	- 416 lb
	3 sheaves, 30 T	+ 670 lb	+ 1099 lb	- 429 lb
	2 sheaves, 25 T	+ 682 lb	+ 1117 lb	- 435 lb
	7T Hookball	+ 240 lb	+ 290 lb	- 50 lb

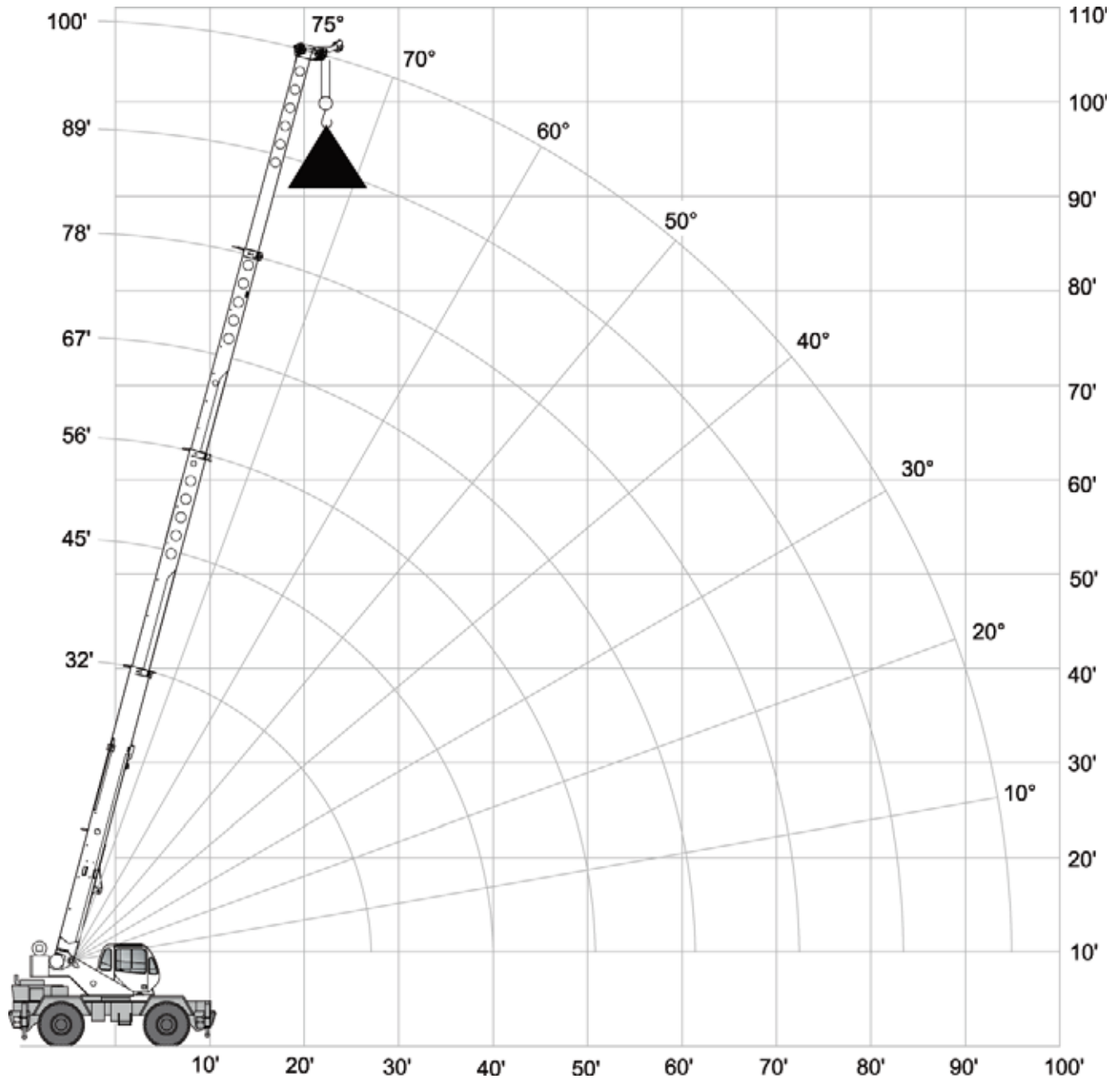
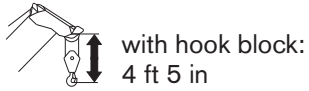
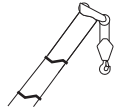
NOTE: Values are subject to 2% variation

\* Weight includes rope

# RANGE DIAGRAM – MAIN BOOM

**RT 230 XL**

**Outriggers Fully Extended (100%)**





# LOAD CHART – MAIN BOOM

**RT 230 XL**



## Outriggers Fully Extended (100%)

 10,000 lbs

 19 ft (100%)

 360°

Standard ASME  
B30.5

	Boom Length							
	32.29 ft	44.79 ft	55.79 ft	66.79 ft	77.79 ft	88.79 ft	99.79 ft	
ft	lbs	lbs	lbs	lbs	lbs	lbs	lbs	ft
10	60,000	46,500						10
12	48,900	45,100	43,000					12
15	42,500	39,100	37,100	35,700				15
20	30,000	30,900	30,300	29,000	26,900			20
25	22,400	23,400	23,800	24,100	22,600	20,300	15,000	25
30	19,300	18,400	18,800	19,100	19,300	17,400	12,800	30
35		13,800	14,300	14,500	14,700	14,800	11,100	35
40		10,400	11,100	11,300	11,500	11,600	9,700	40
45			8,700	9,000	9,200	9,300	8,600	45
50			6,900	7,300	7,500	7,600	7,600	50
55				5,900	6,100	6,200	6,300	55
60				4,700	5,000	5,100	5,200	60
65					4,100	4,200	4,300	65
70					3,300	3,500	3,600	70
75							2,900	75
80							2,400	80
85							1,900	85
90							1,400	90
95							1,000	95

## Notes to lifting capacity

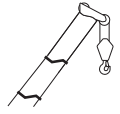
Lifting capacities do not exceed 85% of tipping load. Weight of hook blocks and slings is part of the load, and is to be deducted from the capacity ratings. Consult operation manual for further details.

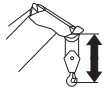
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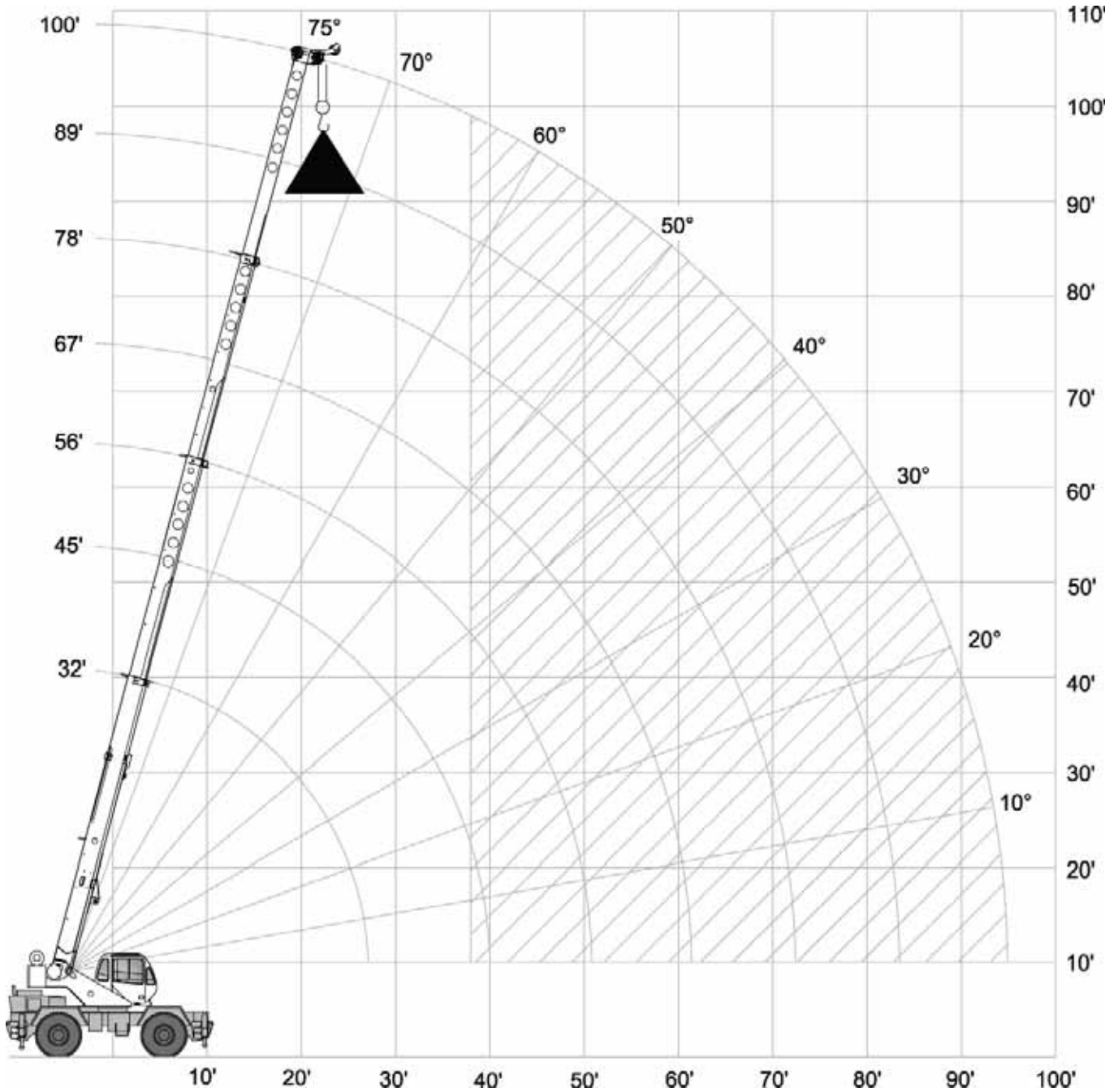
# RANGE DIAGRAM – MAIN BOOM

**RT 230 XL**

**Outriggers Fully Retracted (0%)**



 with hook block:  
4 ft 5 in



# LOAD CHART – MAIN BOOM

**RT 230 XL**


## Outriggers Fully Retracted (0%)

 10,000 lbs

 7 ft 4.5 in (0%)

 360°

Standard ASME  
B30.5

	Boom Length							
	32.29 ft	44.79 ft	55.79 ft	66.79 ft	77.79 ft	88.79 ft	99.79 ft	
ft	lbs	lbs	lbs	lbs	lbs	lbs	lbs	ft
10	34,300	35,100						10
12	24,500	25,300	25,700					12
15	16,200	17,100	17,500	17,700				15
20	9,100	10,100	10,500	10,600	10,800			20
25	5,300	6,200	6,700	6,900	7,000	7,100	7,200	25
30	3,700	3,900	4,300	4,500	4,700	4,800	4,900	30
35		2,200	2,600	2,900	3,100	3,200	3,300	35
40		900	1,500	1,700	1,900	2,000	2,100	40
45				800	1,000	1,100	1,300	45

## Notes to lifting capacity

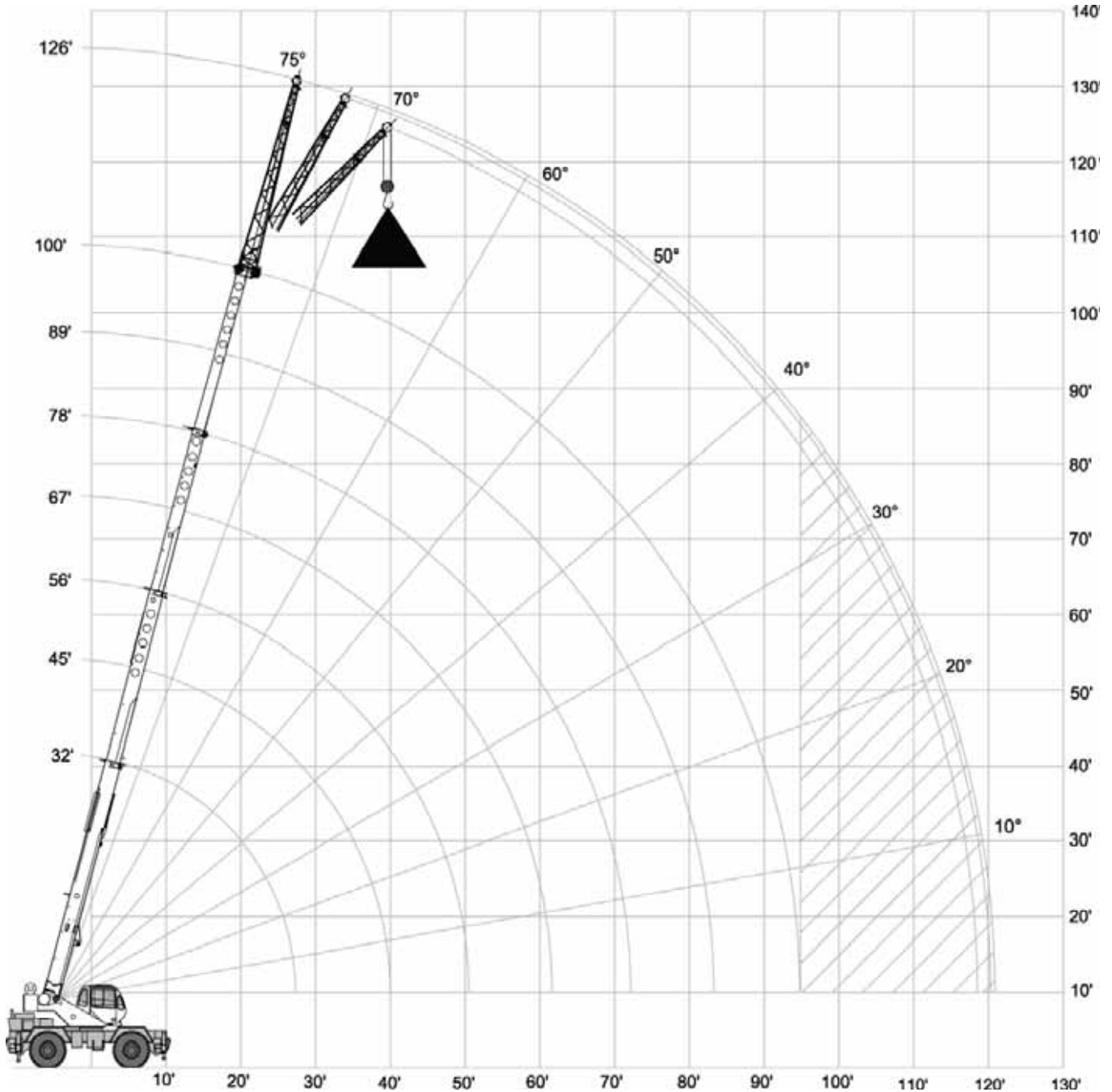
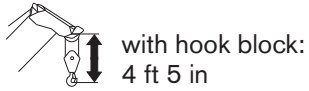
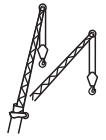
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# RANGE DIAGRAM - MAIN BOOM

RT 230 XL

With Jib, 26 ft offset



# LOAD CHART – MAIN BOOM

**RT 230 XL**




**With Jib, 26 ft offset**

 10,000 lbs

 19 ft (100%)

 360°

Standard ASME  
B30.5

26 ft Offsettable Jib					
0°		15°		30°	
 ft	lbs	 ft	lbs	 ft	lbs
37	9,000	43	7,300	47	5,500
41	8,500	46	6,700	51	5,200
44	8,000	50	6,200	55	4,900
50	7,200	55	5,500	60	4,400
56	6,200	60	5,000	65	4,000
61	5,400	65	4,400	70	3,600
66	3,900	70	3,800	74	3,200
73	3,000	77	3,100	80	2,700
80	2,400	84	2,500	86	2,200
86	1,900	90	1,900	92	1,700
93	1,400	96	1,400	98	1,300
100	900	102	900	103	900

## Notes to lifting capacity

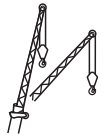
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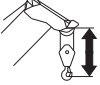
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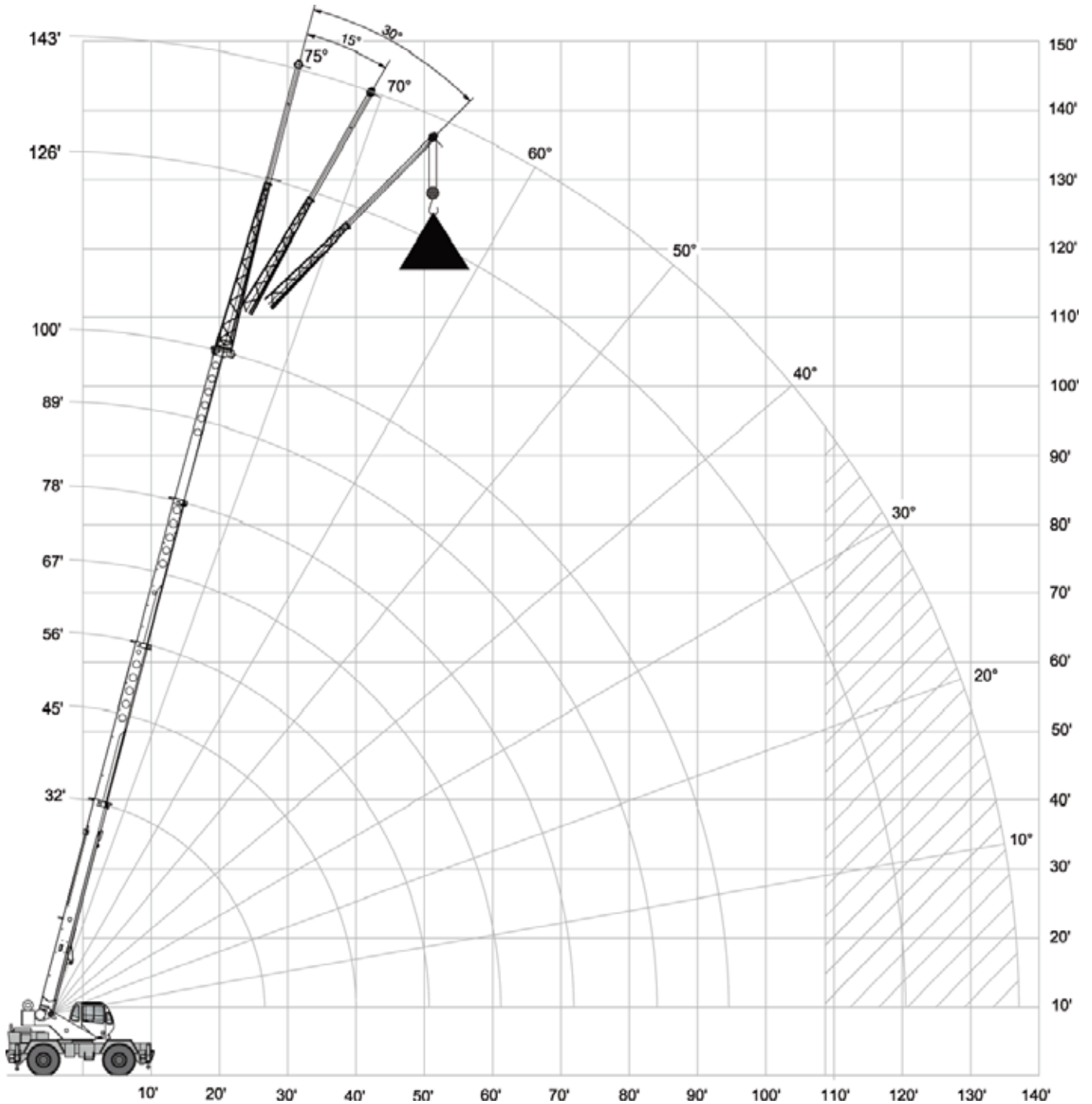
# RANGE DIAGRAM – MAIN BOOM

**RT 230 XL**

**With Jib, 43 ft offset**



 with hook block:  
4 ft 5 in



# LOAD CHART – MAIN BOOM

**RT 230 XL**




**With Jib, 43 ft offset**

 10,000 lbs

 19 ft (100%)

 360°

Standard ASME  
B30.5

43 ft Offsettable Jib					
0°		15°		30°	
 ft	lbs	 ft	lbs	 ft	lbs
41	5,000	51	3,300	59	2,600
46	4,700	56	3,200	63	2,600
51	4,400	61	3,100	67	2,500
58	4,000	67	2,900	74	2,400
64	3,700	74	2,800	80	2,400
70	3,500	79	2,700	85	2,300
76	3,300	85	2,600	90	2,300
83	2,800	91	2,500	96	2,200
90	2,200	98	2,000	102	1,900
98	1,800	106	1,600	108	1,500
106	1,300	112	1,200	114	1,100
115	900	119	800		

## Notes to lifting capacity

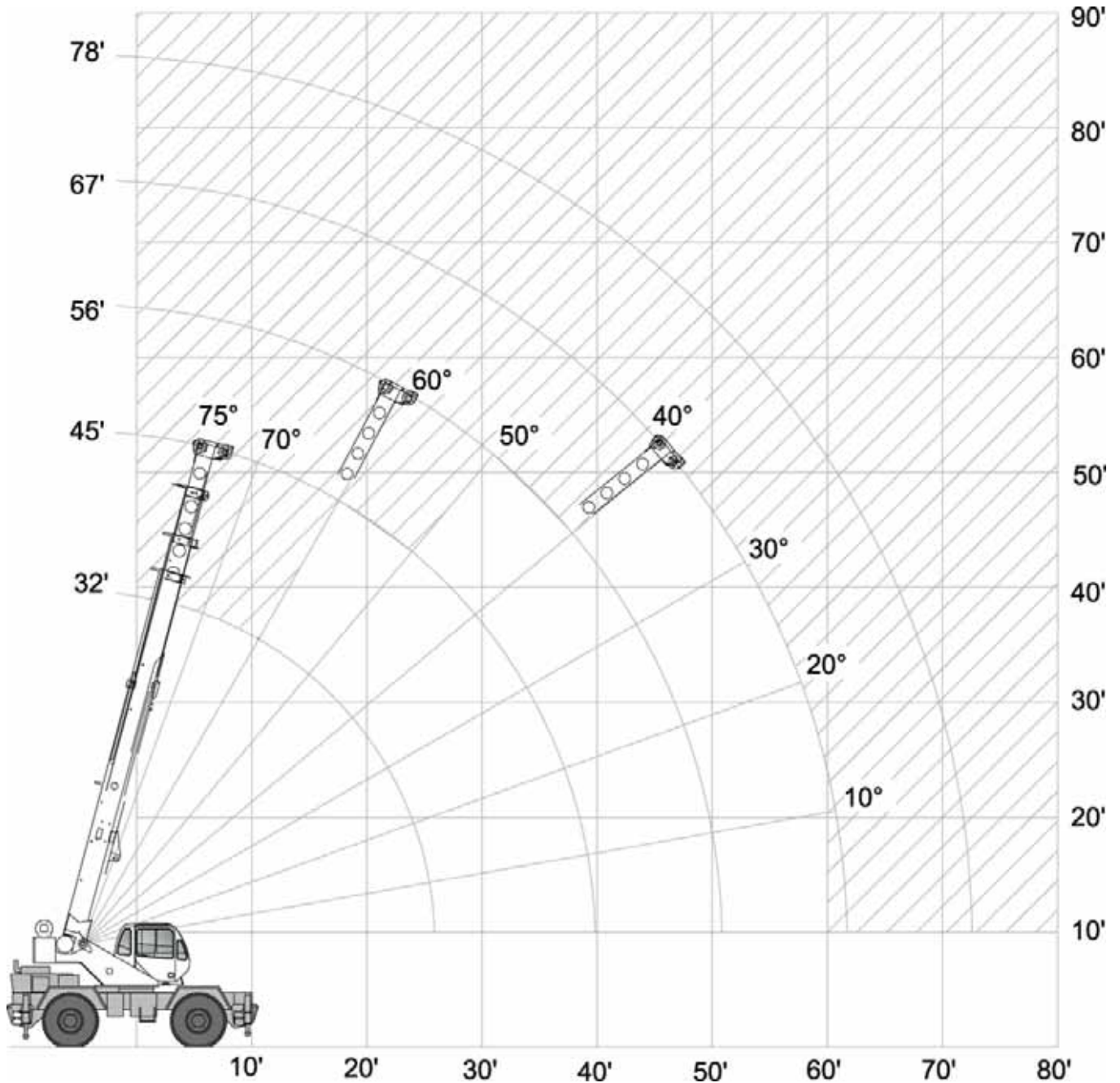
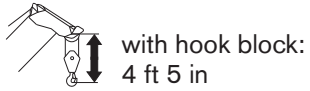
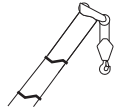
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# RANGE DIAGRAM – MAIN BOOM

**RT 230 XL**

## On Tires






# LOAD CHART – MAIN BOOM



**RT 230 XL**

## On Tires

 10,000 lbs

 On tires  
20.50 x 25-24 PR

Standard ASME  
B30.5








Boom		 Stationary 360°	Travel Speed Boom straight over front	
Radius	Length	0 mph	Creep	2.5 mph
ft	ft	lbs	lbs	lbs
10	32	26,600	34,300	23,300
12	32	19,900	29,400	19,700
15	32	13,900	23,900	15,600
20	45	8,100	17,400	11,000
25	45	5,300	11,000	7,800
30	45	3,400	7,700	5,600
35	56	2,100	5,900	4,300
40	56	1,300	4,500	3,300
45	56	700	3,500	2,500
50	67		2,700	1,800
55	67		2,000	1,300
60	67		1,400	800

## Notes to lifting capacity







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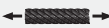
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## Boom




Standard configuration:	
	4 sections hydraulic actuated boom
	Full power mechanically synchronized
	Min. / Max. <span style="float: right;">32 ft / 100 ft</span>
	Boom elevation angle range (min. / max.) <span style="float: right;">-4° / 76°</span>
Optional configuration:	
	Single sheave
	One section, side stowable Angular offsets <span style="float: right;">0, 15 and 30 degrees</span>
	With one section jib <span style="float: right;">120 ft</span> With two section jib <span style="float: right;">147 ft</span>

## Hoist, Rope and Hook




Standard configuration:	
	Grooved drum Storage capacity <span style="float: right;">598 ft</span>
	Two speed ratios Without load in 6th layer (low range / high range) <span style="float: right;">297 ft/min / 475 ft/min</span> Without load in 1st layer (low range / high range) <span style="float: right;">205 ft/min / 329 ft/min</span>
	6 x 19 IWRC XIPS, right regular lay, preformed
	<span style="float: right;">5/8 in</span>
	<span style="float: right;">479 ft</span>
	Max. line pull; 1st layer low-range <span style="float: right;">35,800 lbs</span> Max. line pull permissible <span style="float: right;">9,000 lbs</span>

Optional configuration:		
	Hook and ball	7 ton
	2 sheaves	25 ton
	3 sheaves	30 ton
	4 sheaves	30 ton
	Grooved drum Storage capacity	598 ft
	Without load in 6th layer (low range / high range)	205 ft/min / 329 ft/min
	Without load in 1st layer (low range / high range)	297 ft/min / 475 ft/min
	Rotation resistant compacted strand 18 x 19 or 19 x 19	
		5/8 in
		479 ft
	Minimum breaking strength	35,800 lbs
	Max. line pull permissible	9,000 lbs

## Superstructure

Standard configuration:		
	Non stop	360°
	Maximum rotation speed without load	3 rpm
	Hydraulic motor Planetary reducer	
	Foot actuated pedal – provides variable braking force	
Travel Lock – 360° house lock		

## Cab, Controls, Operator aids and Load limiter / Load indicator

Standard configuration:		
	Sliding door	
	Tinted safety glass throughout	
	Six way adjustable seat	
	Armrest mounted dual axis electro-proportional joysticks	
	Steering wheel column with gear selector on the left and directional light selector on the right	
	Dashboard mounted switches for outrigger operation	
	Graphic interface for load indicator	

### Optional configuration:



- Heater
- Air conditioner
- Work lights
- Rotating beacon

## Carrier, Engine, Drive-line and Hydraulic system

### Standard configuration:



Hydraulic, independent extension:

- Diameter of outrigger pads 24 in
- Area of outrigger pads 254 in<sup>2</sup>



Tier 4i

- Cummins QSB4.5 4 cylinders
- Rated power 130 hp @ 2,200 rpm
- Maximum gross torque 457 ft·lb @ 1,500 rpm
- Intake: turbocharger with intercooler
- Fuel type Ultra Low Sulfur Diesel (ULSD, max 15 ppm)
- Fuel tank capacity 50 gallons

Tier 3

- Cummins QSB4.5 4 cylinders
- Rated power 130 hp @ 2,200 rpm
- Maximum gross torque 457 ft·lb @ 1,500 rpm
- Intake: turbocharger with intercooler
- Fuel type Diesel
- Fuel tank capacity 50 gallons



6 x 6 powershift transmission with integral torque converter

- Full time 4WD (Four-Wheel Drive)
- Rigid mounted front axle
- Oscillating rear axle
- Differential lock on front axle and rear axle
- Rear axle oscillation lock – manual or automatic actuation
- Air-over-hydraulic disc brakes
- Parking brake on front axle
- Hydraulic oil cooler on carrier

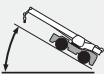



Hydraulic power steering



- Front wheel steering
- Four wheel steering concentric
- Four wheel steering crab
- Optional rear wheel steering package

<b>HYDR</b>	Hydraulic Pumps:	
	<b>Tandem pumps:</b>	
	Boom lift / Telescope	39 gal/min @ 3,500 psi
	Power steering / Outriggers and Swing	21 gal/min @ 2,500 psi
	<b>Single pump:</b>	
	Main and auxiliary hoist pump	53 gal/min @ 3,500 psi
Hydraulic oil reservoir capacity		94 gallons
Hydraulic oil suction filter		250 microns
Hydraulic oil return filter		5 microns

## Vehicle performance

<b>Standard configuration:</b>		
	Max. in 1 <sup>st</sup> gear	112 %
	Max. in 6 <sup>th</sup> gear	3 %
	Max. (6 <sup>th</sup> gear)	24.5 mph

## Tires

<b>Standard configuration:</b>		
	Wide tread earth mover pattern (E3)	20.5 x 25-24 PR
<b>Optional configuration:</b>		
	Wide tread earth mover pattern (E3)	16.00 x 25-28 PR
	Spare wheel	20.5 x 25-24 PR

Lined area for notes, consisting of multiple horizontal lines on a light gray background.

A large rectangular area with horizontal lines, intended for taking notes. The lines are evenly spaced and cover the majority of the page's width and height.

Effective Date: November 2013.

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