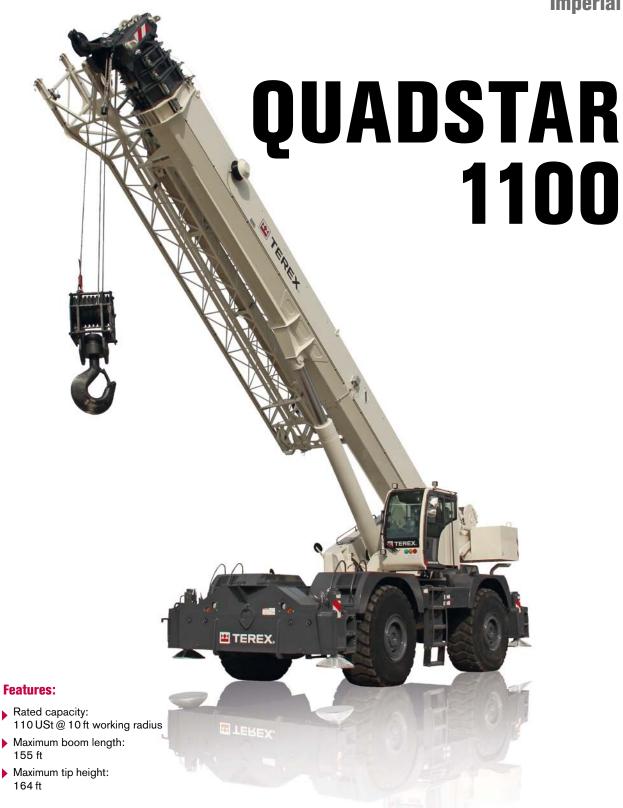




### **QUADSTAR 1100**

110 USt Lifting Capacity
Rough Terrain Crane
Datasheet
Imperial



**WORKS FOR YOU.** 



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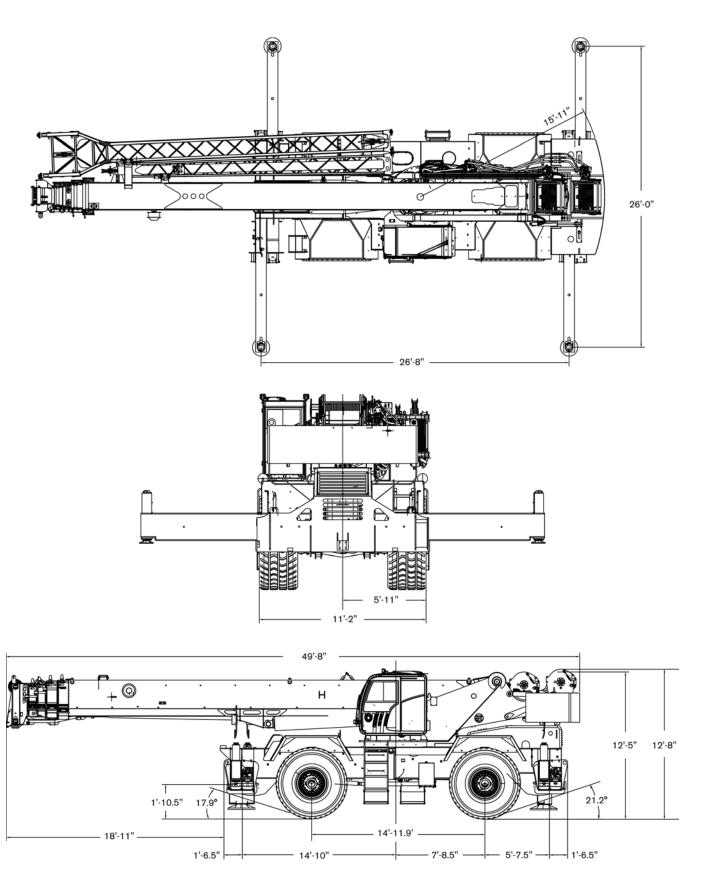


# **KEY**

	Counterweight	10	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
( <del>+</del> )	Slewing / Allowable slewing range		Slewing locked/Slewing locked at specified position
( <del>+</del> )	Slewing brake	( <del>+</del> )	Slewing gears
	Outriggers / Lifting on outriggers (100/50/0% extended)		Lifting on wheels/Pick & Carry
1	Main hoist	2	Auxiliary hoist
	Hoist speed		Rope length
	Rope - Standard / Optional	+	Max. line pull
	Rope diameter	0	Tire
	Hook block		Controls
	Cab		Engine
	Operator aids / Load limiter / Load indicator		Steering
(Ö <b>X</b> Ö)	Mechanical transmission	<b>⊙</b>	Speed
HYDR	Hydraulics	<u> </u>	Heating / Air conditioning
	Working temperature		Gradeability
$\equiv \bigcirc$	Lights	GVW	Gross vehicle weight
	Crane / Crane in standard configuration		Weight on front axle
	Crane without counterweight		Weight on rear axle



# **CRANE DIMENSIONS**







# **CRANE WEIGHTS**

# **QUADSTAR 1100**

### **Approximate Weights**

	F	<b>↓</b> G∨W		
	Without counterweights	105,775 lb	79,912 lb	32,881 lb
	In standard configuration	130,495 lb	63,025 lb	67,489 lb
Add / S	Subtract for main crane configuration			
	Stowed aside the boom	+ 3,560 lb	+ 5,790 lb	– 2,230 lb
	Auxiliary boom head	+ 130 lb	+ 358 lb	– 228 lb
	Optional	+ 221 lb	– 50 lb	+ 271 lb
2	With standard rope	+ 659 lb	– 253 lb	+ 912 lb
2	With optional rope	+ 221 lb	– 97 lb	+ 318 lb
	7 sheaves, 110 USt hanging down from boom head	+ 2,120 lb	+ 3,569 lb	– 1,449 lb
	5 sheaves, 75 USt hanging down from boom head	+ 1,680 lb	+ 2,707 lb	– 1,099 lb
	Hook ball, 12 USt (in tool box)	+ 722 lb	+ 749 lb	– 27 lb

NOTE: Values are subject to 2% variation

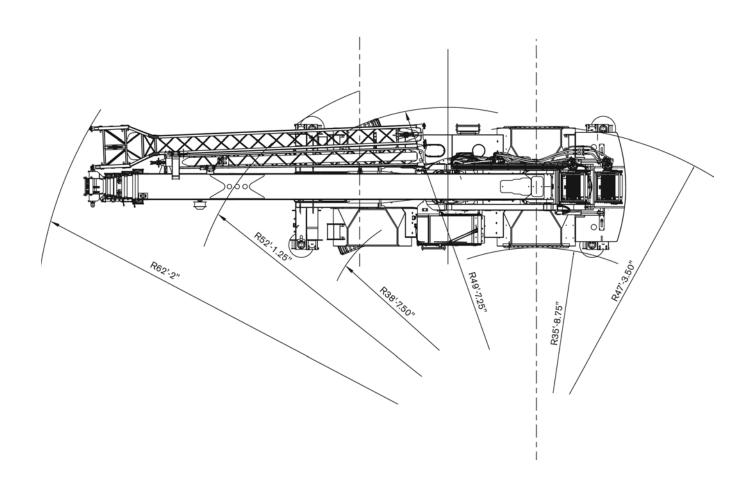
For complete list of adds and subtracts refer to user manual.



# **STEERING RADII**

**QUADSTAR 1100** 

**Two Wheel Steer** 



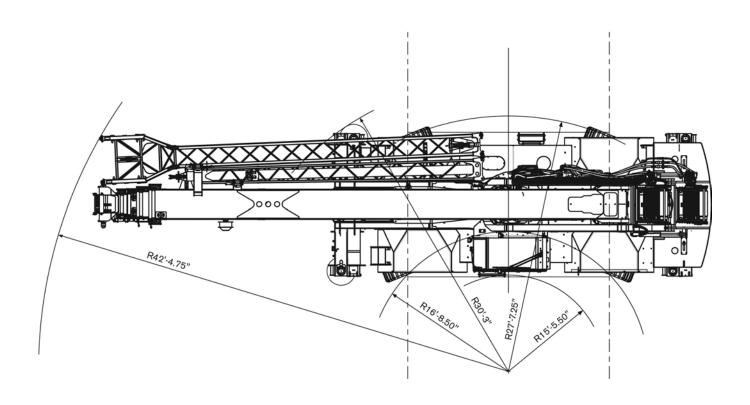




# **STEERING RADII**

## **QUADSTAR 1100**

**Four Wheel Steer** 

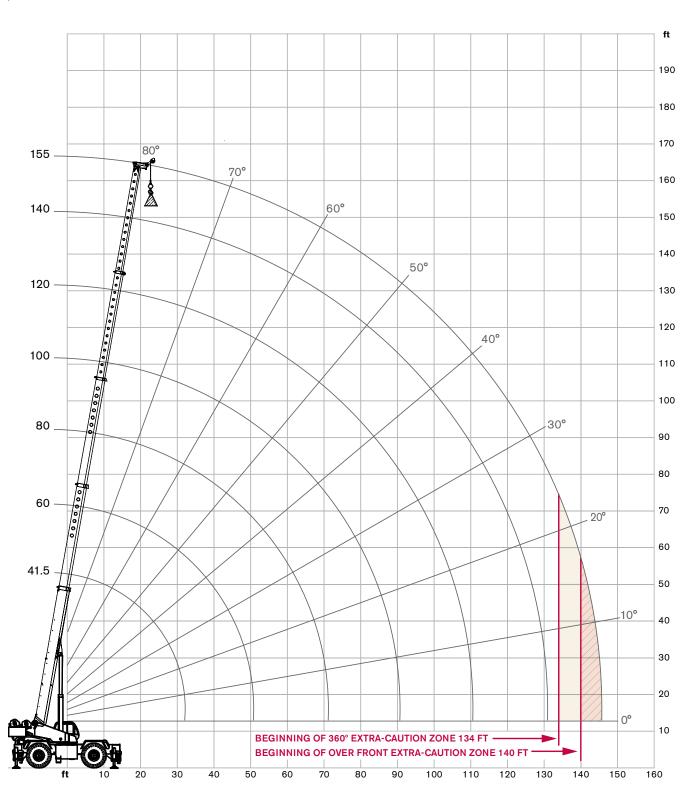




### **QUADSTAR 1100**

Outriggers Fully Extended (100%), Dual Mode









### **QUADSTAR 1100**

#### Outriggers Fully Extended (100%), Dual Mode



	Boom Length							
// *	41.5 ft	60 ft	80 ft	100 ft	120 ft	140 ft	155 ft	
ft	lb	lb	lb	lb	lb	lb	lb	ft
10	220,000							10
12	199,600	150,000						12
15	169,500	150,000	107,200					15
20	131,900	130,200	105,500	85,000				20
25	105,900	104,300	88,000	71,400	60,900			25
30	86,800	89,500	75,100	60,900	52,700	42,800		30
35		66,600	60,400	53,100	45,800	39,400	30,000	35
40		52,400	46,300	46,600	40,600	35,600	26,800	40
45		42,200	36,600	39,100	36,000	31,800	25,200	45
50		34,300	32,800	31,900	32,200	28,800	23,600	50
55			29,900	26,400	28,000	26,000	22,000	55
60			26,600	22,000	23,600	23,500	20,400	60
65			22,800	20,000	20,000	21,100	18,700	65
70			19,500	18,400	17,000	18,100	17,200	70
75				17,000	14,600	15,600	15,900	75
80				15,800	13,100	13,500	14,100	80
85				14,300	12,100	12,500	12,300	85
90				12,500	11,200	11,600	10,700	90
95					10,500	10,700	9,300	95
100					9,800	9,800	8,000	100
105					8,600	8,700	6,900	105
110					7,500	7,700	5,900	110
115						6,800	5,000	115
120						5,900	4,200	120
125						5,100	3,500	125
130						4,300	2,800	130
135							2,100	135
140							1,500	140
145							900	145

Mode 1 Mode 2

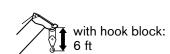
#### **Notes to lifting capacity**

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.

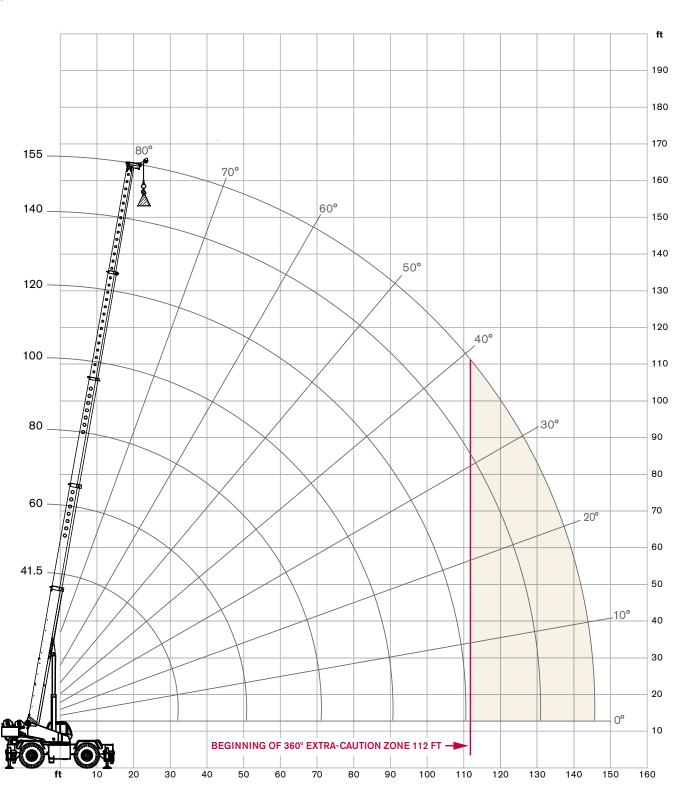


### **QUADSTAR 1100**

Outriggers Half Extended (50%), Dual Mode





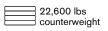


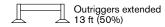




### **QUADSTAR 1100**

#### Outriggers Half Extended (50%), Dual Mode







Standard ASME

	Boom Length							
//-	41.5 ft	60 ft	80 ft	100 ft	120 ft	140 ft	155 ft	
ft	lb	lb	lb	lb	lb	lb	lb	ft
10	212,700							10
12	186,000	150,000						12
15	155,100	150,000	107,200					15
20	98,100	99,100	98,200	85,000				20
25	63,000	67,000	62,500	66,400	60,900			25
30	43,900	48,400	50,300	47,100	47,300	42,800		30
35		36,900	38,700	36,000	35,700	36,900	30,000	35
40		29,000	30,900	31,000	27,700	28,900	26,800	40
45		23,000	25,200	26,000	24,000	24,500	23,800	45
50		18,400	20,900	21,600	21,200	21,500	19,400	50
55			17,400	18,000	17,700	18,300	16,000	55
60			14,500	15,200	16,000	15,400	13,300	60
65			12,100	13,000	13,300	12,900	11,800	65
70			10,000	11,000	11,500	10,900	9,800	70
75				9,200	10,000	8,600	8,100	75
80				7,700	8,500	7,800	6,600	80
85				6,400	7,000	6,600	5,400	85
90				5,100	6,000	5,500	4,300	90
95					4,900	4,500	3,300	95
100					3,800	3,600	2,500	100
105					2,900	2,800	1,700	105
110					2,200	2,000		110

Mode 1 Mode 2

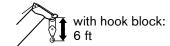
#### **Notes to lifting capacity**

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.

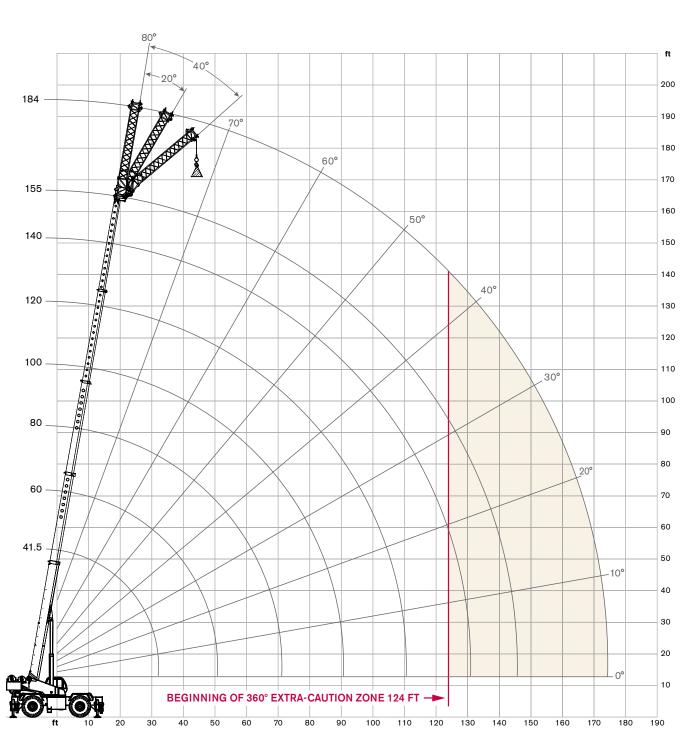


### **QUADSTAR 1100**

With Jib, 28.8 ft offset







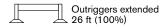




### **QUADSTAR 1100**

With Jib, 28.8 ft offset







Standard ASME

28.8 ft Offsettable Jib						
0° O	ffset	20° C	Offset	40° Offset		
Radius (ft)	lbs	Radius (ft)	Radius Ibs		lbs	
49	16,100	59	15,000	66	12,200	
57	15,200	66	13,300	72	11,500	
64	14,500	73	11,800	77	10,700	
71	12,900	79	10,800	83	9,800	
81	11,000	88	9,400	91	8,700	
90	9,600	96	8,400	99	7,800	
98	8,500	104	7,500	106	7,200	
106	7,600	111	6,900	113	6,500	
115	6,700	120	6,100	122	5,800	
124	5,600	129	5,100	131	5,000	
133	4,200	136	3,900	138	3,900	
138	3,400	141	3,100			
148	2,000	151	1,900			
156	1,000	159	1,000			

#### **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.

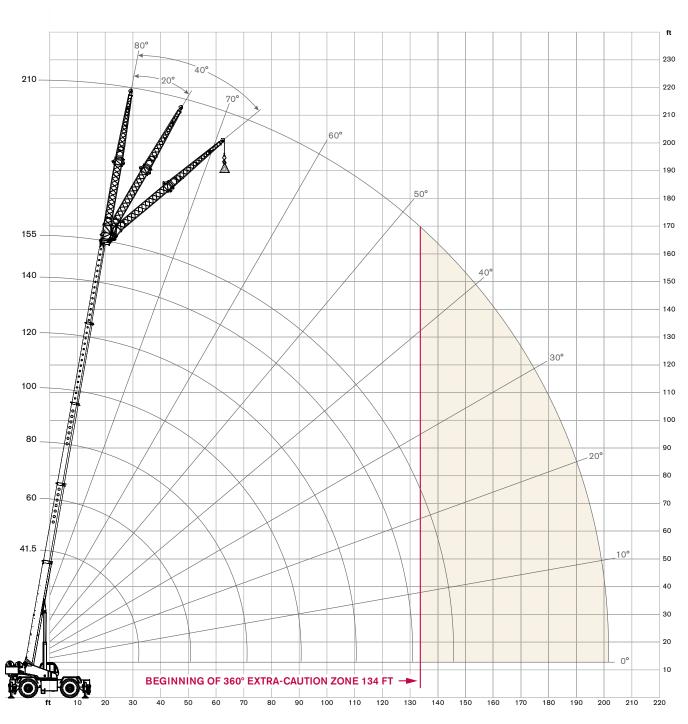


### **QUADSTAR 1100**

With Jib, 54.9 ft offset







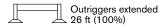




### **QUADSTAR 1100**

With Jib, 54.9ft offset







Standard ASME

54.9 ft Offsettable Jib							
0° O	ffset	20° C	Offset	40° C	40° Offset		
Radius (ft)	lbs	Radius (ft)	lbs	Radius (ft)	lbs		
55	8,700	73	6,900	87	5,600		
63	8,200	80	6,500	93	5,300		
71	7,700	87	6,200	99	5,000		
79	7,300	94	5,800	106	4,700		
91	6,500	105	5,100	114	4,300		
103	5,900	116	4,600	123	3,900		
114	5,200	126	4,100	131	3,500		
125	4,500	135	3,600	139	3,100		
136	3,700	145	3,100	149	2,600		
145	3,100	154	2,600	158	2,200		
154	2,200	161	1,900	167	1,700		
159	1,400	167	1,300				

#### **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.

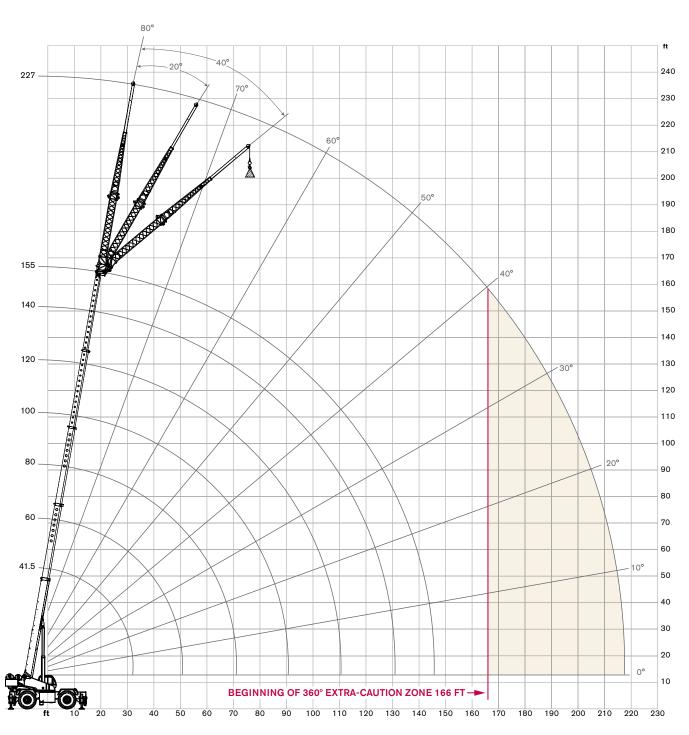


### **QUADSTAR 1100**

With Jib, 72.1 ft offset







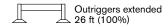




### **QUADSTAR 1100**

With Jib, 72.1 ft offset







Standard ASME

72.1 ft Offsettable Jib						
0° O	ffset	20° C	Offset	40° Offset		
Radius (ft)	lbs	Radius (ft)	lbs	Radius (ft)	lbs	
61	6,700	84	5,100	102	4,000	
70	6,300	93	4,700	108	3,800	
79	5,900	100	4,500	114	3,600	
88	5,500	107	4,200	120	3,400	
100	5,000	118	3,800	129	3,100	
113	4,500	129	3,400	138	2,800	
124	4,000	139	3,000	146	2,500	
135	3,500	149	2,700	153	2,300	
148	3,000	161	2,200	163	2,000	
159	2,500	171	1,800	172	1,700	
169	1,700	179	1,400	181	1,300	
175	1,100					

#### **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.

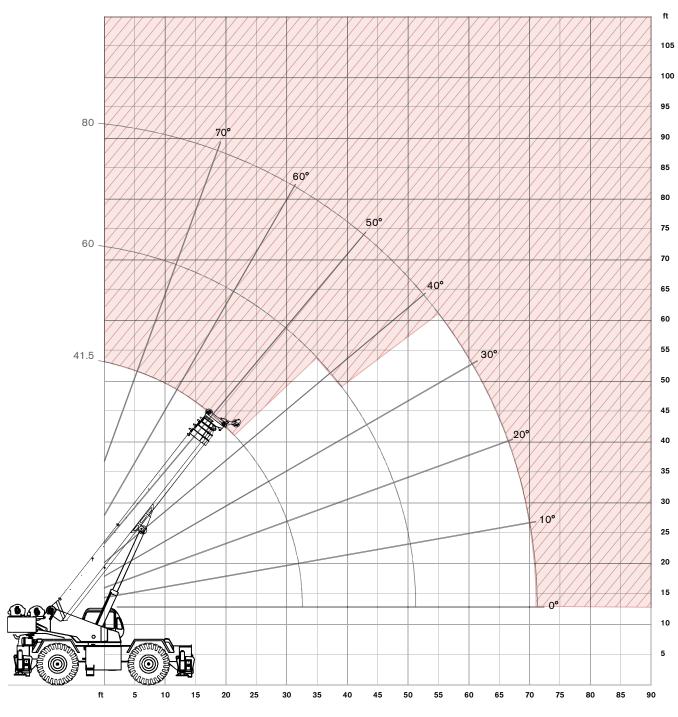


### **QUADSTAR 1100**

**On Tires** 











### **QUADSTAR 1100**

**On Tires** 







Standard ASME

Во	om		Travel Speed Boom straight over fron	ıt
Radius	Length	0 mph	Creep	2.5 mph
ft	lb	lb	lb	lb
20	41.5	56,800	41,500	27,900
25	41.5	45,000	32,000	20,500
30	41.5	30,600	24,900	14,800
35	60	25,600	20,600	11,300
40	60	21,500	18,800	10,900
45	60	18,000	15,300	8,200
50	60	15,100	12,300	5,700
55	80	12,700	11,300	4,900
60	80	10,600	10,100	4,500
65	80	8,900	8,300	3,100
70	80	7,400	6,700	1,800

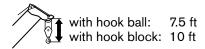
#### **Notes to lifting capacity**

Lifting capacities do not exceed 75% 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.

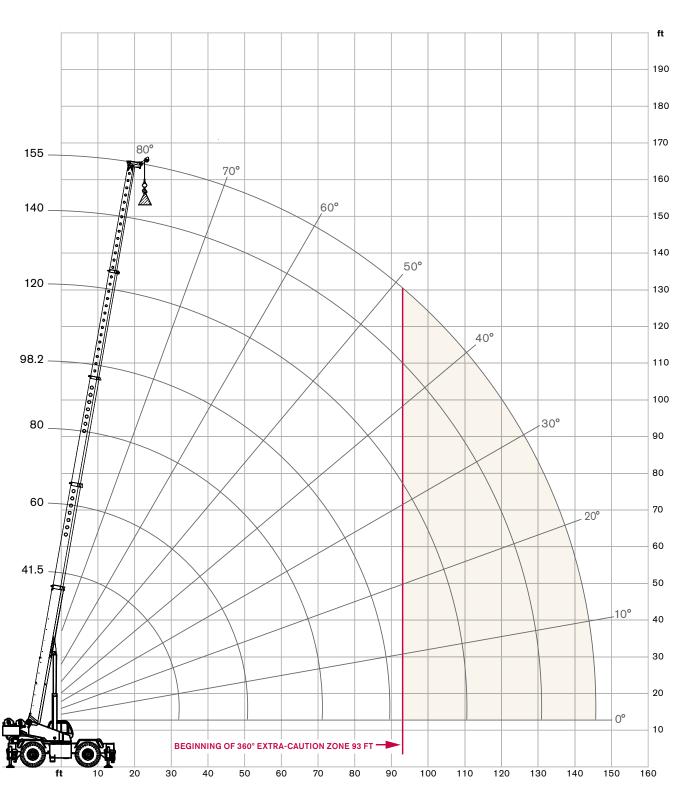


### **QUADSTAR 1100**

### **Without Counterweight**





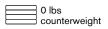


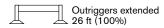




### **QUADSTAR 1100**

#### **Without Counterweight**





360 degree rotation

Standard ASME

	Boom Length							
//-	41.5 ft	60 ft	80 ft	100 ft	120 ft	140 ft	155 ft	
ft	lb	lb	lb	lb	lb	lb	lb	ft
10	214,200							10
12	187,700	110,000						12
15	156,500	110,000	77,500					15
20	119,700	99,100	67,800	53,100				20
25	84,100	88,900	59,400	47,300	37,700			25
30	54,300	59,300	51,600	41,200	34,300	33,700		30
35		42,800	45,000	36,000	30,000	30,600	30,000	35
40		32,400	34,900	31,900	26,900	27,500	26,800	40
45		25,100	27,200	28,400	24,000	24,500	25,200	45
50		19,400	21,900	23,000	21,500	22,000	21,100	50
55			17,800	18,900	18,600	18,500	17,100	55
60			14,600	15,700	15,400	15,300	13,900	60
65			11,900	13,100	12,800	12,700	11,300	65
70			9,500	10,900	10,700	10,500	9,200	70
75				9,100	8,900	8,800	7,500	75
80				7,600	7,300	7,200	6,000	80
85				6,100	6,000	5,900	4,700	85
90				4,800	4,800	4,800	3,500	90
95					3,800	3,600	2,500	95
100					2,900	2,600	1,700	100
105					2,000	1,700	900	105
110					1,100	900		110

#### **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.



### **QUADSTAR 1100**

#### **Boom**

A	Standard configuration:	
/-/ & . <b></b>	5 sections full power  Mode 1: Optimized for best capacity on longer radius	
	Mode 2: Optimized for best capacity on short radius	
	Min. / Max.	41.5 ft / 155 ft
	Maximum tip height main boom	164 ft
	Boom elevation angle range (min. / max.)  Boom raising / lowering time  Boom extension / retraction time	-3° / 80° 70 s / 100 s 130 s / 100 s
<b>28</b>	Optional configuration:	
	Single sheave Tip height - boom fully retracted / boom fully extended	54 ft / 165 ft
	Lattice style, side stow, bi-fold Pullout extension	28.8 ft / 54.9 ft 17.2 ft
*	Angular offsets	0°, 20° and 40°
I appear	With one jibs section With two jibs sections With two jibs sections and pullout	184 ft 210 ft 227 ft
	With one jibs section With two jibs sections With two jibs sections and pullout	193 ft 218 ft 235 ft

### **Hoist, Rope and Hook**

	Standard configuration:					
	Two speeds Grooved drum Storage capacity	1,239 ft				
	Maximum without load	453 ft/min				
	XIPS, IWRC, Right Regular Lay					
		3/4 in				
<b>←</b>		850 ft				
+	Minimum breaking strength Maximum line pull permissible	58,800 lbs 16,800 lbs				





# **QUADSTAR 1100**

	Optional configuration:	
2	Two speeds Grooved drum Storage capacity	1,239 ft
	Maximum without load	453 ft / min
	Type: XIPS, IWRC, Right Regular Lay 35 x 7 rotation resistant compacted strand	
		3/4 in
		850 ft
+	Minimum breaking strength  Maximum line pull permissible	84,000 lbs 16,800 lbs
	Top swivel hook ball with latch 5 metallic sheaves 7 metallic sheaves	12 USt 75 USt 110 USt

### **Superstructure**

	Standard configuration: Weight Pinned to frame and hydraulically mounted / removed	12.4 USt
( <del>1</del> )	Non stop Maximum rotation speed without load	360° 1.5 rpm
( <del>+</del> )	Hydraulic motor Planetary reducer	
( <del>+</del> )	Manually actuated by foot pedal Possibility to set up partial and constant braking force	360° house lock



#### **QUADSTAR 1100**

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

Standard configuration:



Sliding door on the left side Sliding window on the left side and rear Hinged, tinted all glass skylight Six way adjustable seat 18° tiltable cab Working lights



Armrest mounted dual axis electro-proportional joysticks

Controls for hoist and hoist rotation indicator, slewing, boom elevation, boom telescoping

Foot controls for swing brake and engine throttle

Steering wheel column mounted controls for gear shifting

Dashboard mounted switches for steering mode, outriggers



Graphic interface for rated capacity indicator

Standard HVAC, flameless heat

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



Standard configuration:

Hydraulic, independent extension:

100% extended outrigger footprint area

50% extended outrigger footprint area

0% extended outrigger footprint area

Floating ground bearings diamters (area)

Single outrigger jack extending and retracting time

Single outrigger beam extending and retracting time

Floating ground bearings diamters (area)
Single outrigger jack extending and retracting time
Single outrigger beam extending and retracting time
Access steps to the deck from any side



Cummins QSB6.7 6 cylinders

Rated power
Maximum gross torque
Intake: turbocharger with intercooler

Fuel type Diesel
Fuel tank capacity 80 gallons



6 x 6 powershift transmission with torque converter

Selectable four-wheel drive (low range)

Rigid mounted front axle

Oscillating mounted rear axle

Differential lock on front axle and rear axle

Automatic rear axles oscillation lock when superstructure is swung by 10° from centerline in either directions

Pneumatic service brakes



693.3 ft<sup>2</sup> 483.9 ft<sup>2</sup>

283.3 ft2

20 s

8s

24 in (452 in<sup>2</sup>)

260 hp @ 2,200 rpm 728 ft·lb @ 1,500 rpm



### **QUADSTAR 1100**



3 mode hydraulic power steering

Front wheel mode-minimum steering curb clearance radius

All wheels cocentric steering mode - minimum steering curb clearance radius

All wheels crab steering mode

Piston pump for main and auxiliary winch

Piston pump for boom hoisting and telescoping

Gear pump for steering, outriggers and slewing

Hydraulic oil tank capacity

Hydraulic oil filters

**Optional configuration:** 

Engine oil heater Hydraulic oil heater

Battery heater

Low temperature fluids

#### **Vehicle performance**



Standard configuration:

55% 2%

50.1 ft

28.2 ft

304 gallons

 $250 \, \mu m$ 

**O**.....

Maximum (6th gear)

Maximum in 1st gear

Maximum in 6th gear

18.7 mph



Maximum Minimum + 125° F

-20° F

#### **Tires**



#### Standard configuration:

Wide tread - Earth mover pattern (E3)

29.5 R25

#### **Other options**

Revolving amber light (One light mounted on the cab)

Yellow strobe light (One light mounted on the cab - used in place of revolving amber light)

Work light package (Lights mounted on the base of the boom and superstructure)

Tire inflation kit

Mirror for viewing hoist

Battery disconnect switch

Front and/or rear pintle hook



Notes		





Notes		



### **QUADSTAR 1100**

Effective Date: January 2013. Product specifications and prices are subject to change without notice or obligation. The photographs and/or drawings in this document are for illustrative purposes only. Refer to the appropriate Operator's Manual for instructions on the proper use of this equipment. Failure to follow the appropriate Operator's Manual when using our equipment or to otherwise act irresponsibly may result in serious injury or death. The only warranty applicable to our equipment is the standard written warranty applicable to the particular product and sale and Terex makes no other warranty, express or implied. Products and services listed may be trademarks, service marks or trade-names of Terex Corporation and/or its subsidiaries in the USA and other countries. All rights are reserved. Terex® is a registered trademark of Terex Corporation in the USA and many other countries. Copyright 2013 Terex Corporation.

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www.terexcranes.com

Brochure Reference: TC-DS-I-E-RT QS1100-01/13



**WORKS FOR YOU.**