

RT 100US 100 USt capacity class Rough terrain crane Datasheet imperial

# **RT 100US**

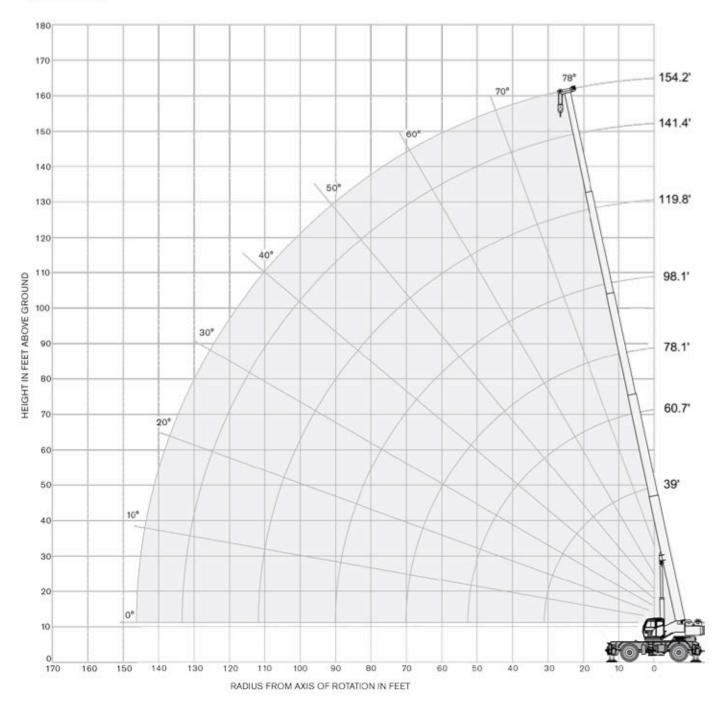
WORKS FOR YOU."

# **RANGE DIAGRAM - MAIN BOOM**

#### Outriggers Fully Extended (100%), 3 Modes









## **RT 100US**

#### Outriggers Fully Extended (100%), 3 Modes

	22,000 lb		25.6 x 26.2 ft (100 %)		(+) 360°		Standard ASME B30.5	
<i>S</i> ∎				Boom Length				A
A.	39.0 ft	60.7 – 62.0 ft	78.1 – 82.3 ft	98.1 – 102.4 ft	119.8 – 121.1 ft	141.4 – 142.7 ft	154.2 ft	A
ft	lb	lb	lb	lb	lb	lb	lb	ft
8	200,000*							
8.2	191,800							8.2
10	174,900	101,500						10
15	135,800	79,600	78,700					15
20	99,100	79,600	78,300					20
25	76,000	75,500	73,600	50,500				25
30		62,200	61,300	47,100	33,200			30
35		50,900	50,000	42,200	31,800			35
40		40,300	41,400	37,200	28,900	23,400	19,600	40
45		32,700	33,600	31,500	25,900	20,700	19,400	45
50		27,200	28,000	26,300	23,300	19,800	17,500	50
55			23,500	22,400	21,000	18,300	15,400	55
60			20,000	20,400	18,600	16,700	13,600	60
65			17,300	17,700	15,800	15,200	12,100	65
70			15,100	15,400	13,400	13,800	10,700	70
75				13,300	11,700	12,200	9,600	75
80				11,500	10,600	10,400	8,600	80
85				10,000	9,800	8,900	7,600	85
90				6,800	8,900	7,700	6,700	90
95					8,000	6,500	5,700	95
100					7,000	5,500	4,600	100
105					6,200	4,600	3,700	105
110					5,300	3,800	2,900	110
115						3,100	2,200	115
120						2,400		120

\* special equipment needed

Notes to lifting capacity:

see page 21

## **RT 100US**

#### Outriggers Half Extended (50%), 3 Modes

	22,000 lb 25.6 x 17.4 ft (50 %)		7.4 ft	(+) 360°		Standard ASI B30.5		
<i>[</i> 771	Boom Length							A
A	39.0 ft	60.7 – 62.0 ft	78.1 – 82.3 ft	98.1 – 102.4 ft	119.8 – 121.1 ft	141.4 – 142.7 ft	154.2 ft	A
ft	lb	lb	lb	lb	lb	lb	lb	ft
8.2	175,700							8.2
10	156,000	101,500						10
15	112,700	79,600	75,600					15
20	65,600	64,400	58,300					20
25	43,000	45,300	43,900	41,100				25
30		32,500	33,300	32,700	27,900			30
35		25,200	25,900	26,300	25,200			35
40		19,600	20,300	20,700	20,900	18,100	16,600	40
45		15,900	16,600	17,000	17,200	15,100	13,800	45
50		13,200	13,700	14,100	14,300	12,600	11,300	50
55			11,300	11,800	12,000	10,500	9,300	55
60			9,400	9,900	10,100	8,800	7,700	60
65			7,900	8,300	8,600	7,200	6,300	65
70			6,800	7,100	7,300	6,000	5,100	70
75				6,000	6,300	4,900	4,100	75
80				5,100	5,300	4,000	3,100	80
85				4,200	4,500	3,100	2,300	85
90					3,800	2,500		90
95					3,100			95
100					2,400			100

Notes to lifting capacity: see page 21



## **RT 100US**

#### Outriggers Fully Extended (100%), 3 Modes

	0 lb		25.6 x 2 (100 %)	6.2 ft		360°	Standa B30.5	rd ASME
<i>S</i> ∎				Boom Length				<i>S</i> ₽
4	39.0 ft	60.7 – 62.0 ft	78.1 – 82.3 ft	98.1 – 102.4 ft	119.8 – 121.1 ft	141.4 – 142.7 ft	154.2 ft	
ft	lb	lb	lb	lb	lb	lb	lb	ft
8.2	191,800							8.2
10	172,700	101,500						10
15	123,000	79,600	76,500					15
20	86,600	78,600	74,600					20
25	59,300	60,700	54,100	46,500				25
30		41,600	41,300	37,600	32,500			30
35		30,800	31,800	31,200	26,500			35
40		23,000	23,800	24,500	23,100	20,300	18,700	40
45		17,900	18,800	19,500	19,600	16,800	15,200	45
50		14,200	15,000	15,600	16,200	13,800	12,200	50
55			12,000	12,600	13,200	11,200	9,600	55
60			9,600	10,200	10,600	8,900	7,400	60
65			7,700	8,200	8,600	7,100	5,700	65
70			6,200	6,600	7,100	5,500	4,300	70
75				5,300	5,600	4,100	3,100	75
80				4,200	4,400	2,900		80
85				3,100	3,400	2,000		85
90					2,500			90

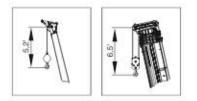
Notes to lifting capacity: see page 21

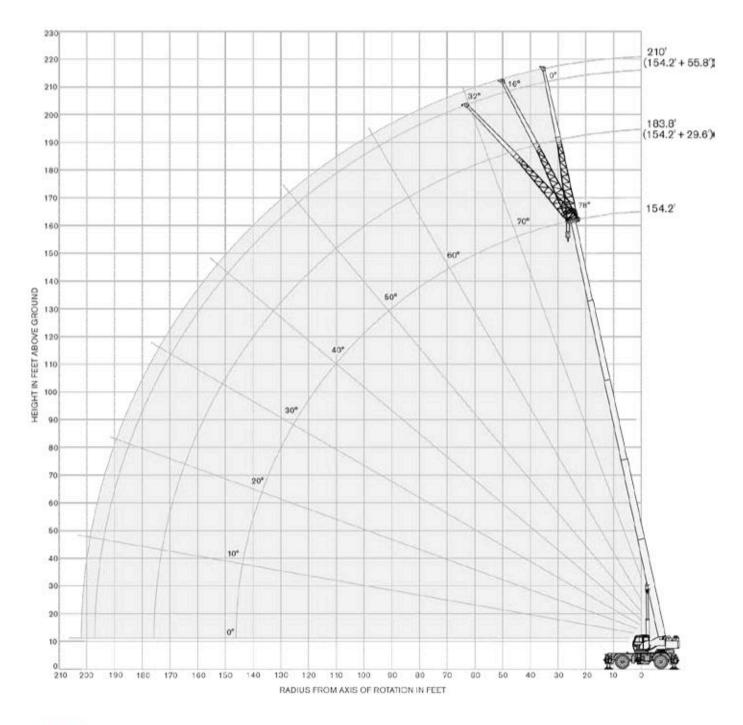
# **RANGE DIAGRAM - JIB**

## **RT 100US**

#### 55.8 ft offset, 3 Modes









# LOAD CHART - JIB

## **RT 100US**

#### **Outriggers Fully Extended (100 %)**

22,0	22,000 lb 25.6 x 26.2 ft (100 %)		(+) 360°			Standard ASME B30.5	
			Boom Len	gth 154.2 ft			
1		· 29.5 ft			· 55.8 ft		
A.	0°	16°	32°	0°	16°	32°	A.
ft	lb	lb	lb	lb	lb	lb	ft
50							50
55	11,000						55
60	11,000	10,900		6,800			60
65	11,000	10,400	9,500	6,800			65
70	10,400	9,800	9,000	6,800			70
75	9,600	9,200	8,500	6,700	5,500		75
80	8,600	8,600	8,100	6,600	5,500		80
85	7,600	8,000	7,700	6,400	5,300	4,600	85
90	6,500	7,300	7,200	6,200	5,300	4,500	90
95	5,500	6,300	6,700	5,600	5,200	4,400	95
100	4,500	5,200	6,000	4,800	5,000	4,400	100
105	3,500	4,400	4,800	4,000	4,800	4,400	105
110	2,700	3,600	4,000	3,300	4,500	4,200	110
115	2,000	2,700	3,200	2,600	3,900	4,200	115
120			2,400	2,000	3,300	4,000	120
125					2,600	3,500	125
130					1,900	2,800	130
135						2,100	135

Notes to lifting capacity: see page 21

## **RT 100US**

#### **On Tires, Mode 3**

	22,000 lb		کَ	On t 26.5	ires R 25 / 29.5-25		) 360°	Standa B30.5	rd ASME
				Boom	Length				A
A a	39 ft	44.9 ft	50.5 ft	56.4 ft	62.0 ft	67.9 ft	73.5 ft	79.4 ft	
ft	lb	lb	lb	lb	lb	lb	lb	lb	ft
15	27,300	25,600	24,000	22,500	21,400	20,100	19,000	17,900	15
16	24,000	22,500	21,200	20,100	19,000	17,900	17,000	15,900	16
20	19,000	17,900	16,800	15,900	15,000	14,300	13,400	12,800	20
23	15,000	14,100	13,400	12,800	12,100	11,500	10,800	10,400	23
26	12,100	11,500	10,800	10,100	9,700	9,300	8,600	8,200	26
30	9,700	9,300	8,600	8,200	7,700	7,300	6,800	6,400	30
33		7,500	6,800	6,400	6,200	5,700	5,300	5,100	33
39			4,200	3,700	3,500	3,300	3,100	2,600	39
46				2,000	1,800				46

Notes to lifting capacity: see page 21

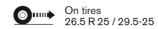


## **RT 100US**

#### **On Tires, Mode 3**

22,000 lb

Boom straight over front Creep



Standard ASME B30.5

		Boom Length								
4	39 ft	44.9 ft	50.5 ft	56.4 ft	62.0 ft	67.9 ft	73.5 ft	79.4 ft	A a	
ft	lb	lb	lb	lb	lb	lb	lb	lb	ft	
8	54,500								8	
10	48,100	48,500	48,700	48,700	48,900	48,900			10	
12	42,800	43,200	43,400	43,400	43,700	43,700			12	
13	38,400	38,800	39,000	39,000	39,000	39,200	39,200		13	
15	34,400	35,100	35,300	35,300	35,300	35,500	35,500	35,500	15	
16	31,100	31,700	32,000	32,000	32,000	32,200	32,200	32,200	16	
20	25,800	26,500	26,500	26,700	26,700	26,700	26,900	26,900	20	
23	21,600	22,000	22,300	22,500	22,500	22,500	22,700	22,700	23	
26	18,300	18,700	19,000	19,000	19,200	19,200	19,200	19,200	26	
30	15,400	15,900	16,100	16,300	16,300	16,300	16,500	16,500	30	
33		13,700	13,700	13,900	14,100	14,100	14,100	14,100	33	
39			10,100	10,100	10,400	10,400	10,400	10,400	39	
46				7,500	7,500	7,700	7,700	7,700	46	
53					5,300	5,500	5,500	5,500	53	

Notes to lifting capacity: see page 21

# **TECHNICAL DESCRIPTION**

## **RT 100US**

#### **Hydraulic Boom**

A	5 sections	
A CONTRACTOR	Triple modeMode 1: Optimized for best capacity on longer rad Mode 2: Optimized for best capacity on short rad Mode 3: Full proportional	
178	Min. / Max.	39 ft / 154.2 ft
	Max. tip height main boom	164.0 ft
	Boom luffing angle range (min. / max.) Boom raising / lowering time <sup>(1)</sup> Boom extension / retraction time <sup>(1)</sup>	-2° / +78° 50 s / 55 s 120 s / 125 s

#### Hoist

	Hydraulic motor Rope roller device Normally engaged brake	
D	2 speeds	
	Max. <sup>(1)</sup>	502 ft /min (6th layer)
	Rotational resistant	
		3/4 in
		820 ft
←∭∭→	Permissible line pull	16,000 lb

#### **Upper Structure**

		22,000 lb
	Non stop Maximum speed <sup>(1)</sup>	360° 1.0 rpm
(+) +	Hydraulic motor Planetary reducer	



# **TECHNICAL DESCRIPTION**

## **RT 100US**

#### **Cab and Controls**

	S-pace cab: Sliding door Wide visibility Front and upper window with windscreen wiper Upper windows can be opened Tiltable cab Fully adjustable seat onto shockproof suspensions Equipped with tiltable arm rests with integrated hand controls for crane operation Radio with CD player Seat belts
<u>***</u>	Climatized cab Air-conditioning
	Electro-proportional joysticks IC-1 control system – Load indicator with graphic interface
≣D	Adjustable working light outside the cab

#### **Carrier**

 Cummins QSB6.7 Stage 4 - Tier 4F	
No. of cylinders	6
Gross power	225 hp @ 2200 rpm
Maximum gross torque	770 lb-ft@1500 rpm
Fuel tank capacity	79 gallons
Diesel Exhaust Fluid (DEF)	10 gallons
Rear axle differential lock	

#### **Vehicle Performance**

Earth moving style

	Max. <sup>(2)</sup>		76 %
<u></u>	Max. <sup>(2)</sup>	Tires 29.5-25 Tires 26.5 R 25	19.3 mph 18.0 mph
F	Min. / Max.	(-20 °C with special flu	-20° / 45 °C ids and options)

#### **Tires**

$\bigcirc$	

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# **TECHNICAL DESCRIPTION**

### **RT 100US**

#### **Options**

	Cummins QSB6.7 Stage IIIA - Tier 3	
	No. of cylinders	6
	Gross power	220 hp @ 2200 rpm
	Maximum gross torque	700 lb-ft@1500 rpm
	Fuel tank capacity	79 gallons
2	Auxiliary winch	
0		26.5 R 25
A	Bi-fold extension	29.5 ft / 55.8 ft
The second secon	Rooster sheave	
<u>***</u>	Auxiliary diesel heater	
	Centralized lubrication system	

Note: refer to your local dealer for a full list of options.

(1) Indicative value only for reference.

(2) Standard crane in travelling configuration - value calculated with nominal tire radius and max power delivered to the wheels.

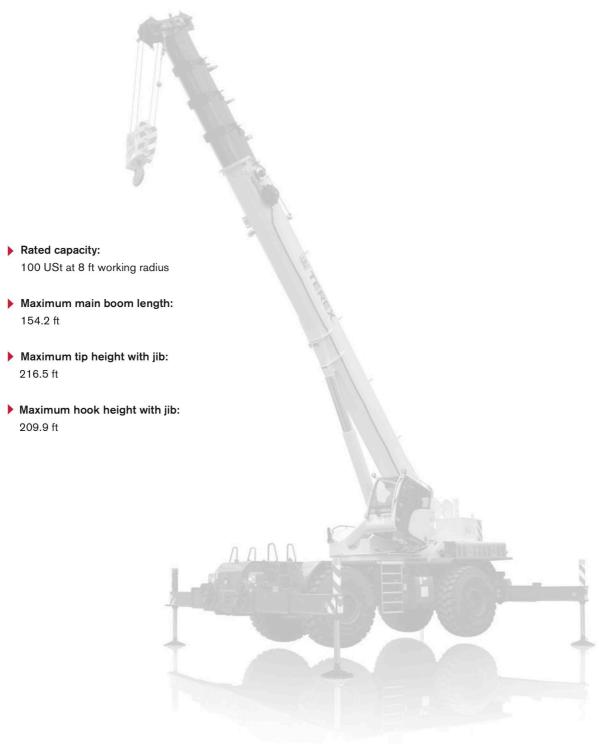


# KEY

## **RT 100US**

	Counterweight		Performance		
A	Main boom		Tip height		
178	Boom length	A	Boom elevation angle		
A	Boom extension	A	Working radius		
A	Angular offsets		Auxiliary head		
NIT OF STREET	Telescoping		Minimum distance between hook block and boom head		
	Outriggers / Lifting on outriggers		Crane / Crane in standard configuration		
	Slewing brake		Removable counterweight system		
	Slewing / Allowable range		Lifting on wheels / Pick & Carry		
	Slewing locked	GVW	Gross vehicle weight		
(+) (+)	Slewing gears		Weight on front axle		
Ď	Hoist speed	<b>T</b>	Weight on rear axle		
	Rope	Ş	Hook block		
	Rope diameter	- +	Electric circuit		
	Rope length		Operation temperature		
<b>←</b>	Line pull	<b>⊙</b> ····•	Speed		
1	Main hoist		Engine		
2	Auxiliary hoist	₹Ģ¥Ģ}	Mechanical transmission		
ED	Lights		Cab		
	Gradeability		Operator aid		
<u>†††</u>	Heating / Air conditioning	d Ib	Rated weight on hook block		
HYDR	Hydraulics		No. of sheaves		
	Steering	Å	Single hook		
0	Tires		Rams-horn hook		
	Controls	<b>X</b>	No. of lines		
	Lubrication system		Differential lock		

## HIGHLIGHTS





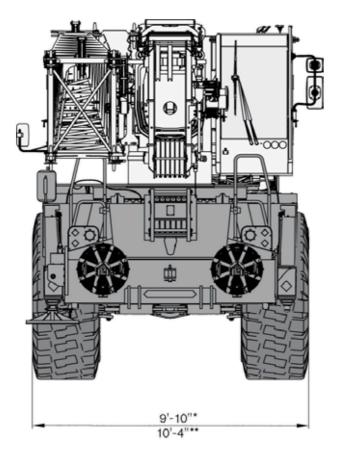
## **WEIGHTS**

## **RT 100US**

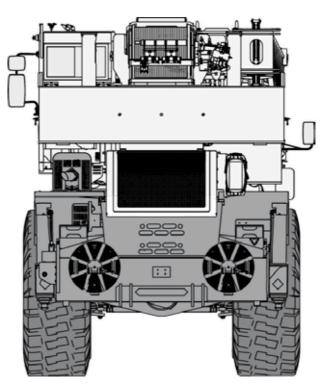
		GVW			
	Without hook block Tires 26.5R25	115,919 lb	57,421 lb	58,498 lb	
	Without counterweight	93,873 lb	63,368 lb	30,505 lb	
Add / Subtract for main optional equipment					
	Removable counterweight system	+ 331 lb	– 89 lb	+ 420 lb	
0	29.5-25	+ 1,146 lb	+ 573 lb	+ 573 lb	
A	55.8 ft Jib stowed	+ 3,086 lb	+ 5,959 lb	– 2,872 lb	
	Auxiliary sheave	+ 176 lb	+ 503 lb	– 327 lb	
2	Auxiliary winch	+ 2,425 lb	– 451 lb	+ 2,876 lb	
6	100 USt hook block, 6 sheaves	+ 2,094 lb	+ 3,945 lb	– 1,851 lb	
3	55 USt hook block, 3 sheaves	+ 1,102 lb	+ 2,076 lb	– 974 lb	
1	22 USt hook block, 1 sheave	+ 661 b	+ 1,246 lb	– 584 lb	
	11 USt headache ball	+ 397 lb	+ 748 lb	– 351 lb	

NOTE: Values are subject to 2% variation

## DIMENSIONS

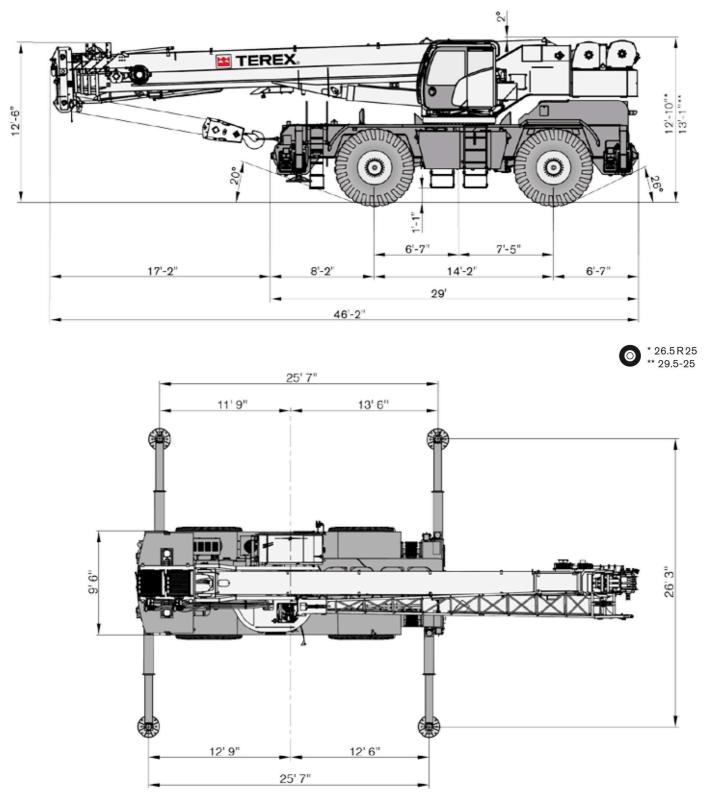








## DIMENSIONS

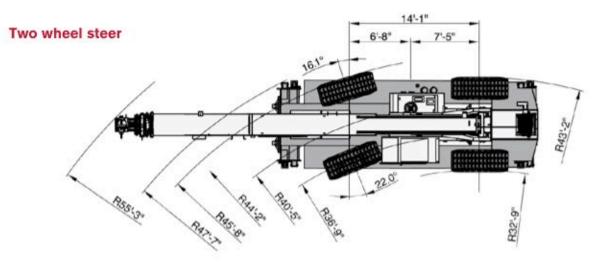


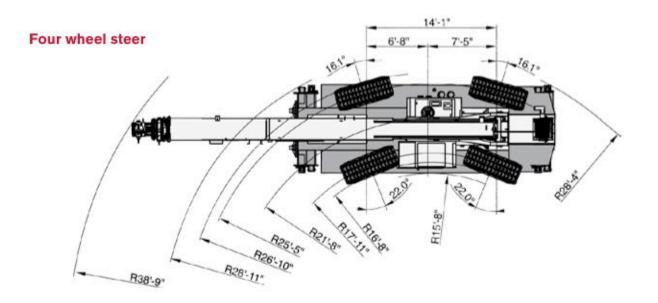
Drawings show optional rooster sheave

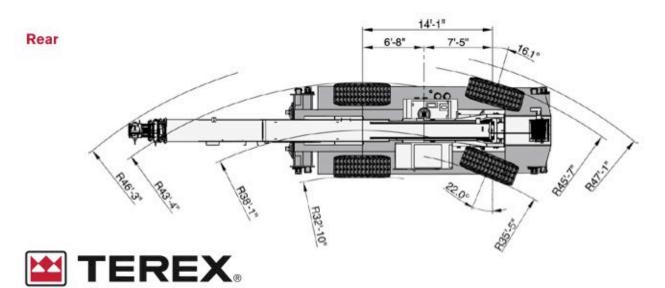
# **STEERING RADII**

## **RT 100US**

#### with 26.5R25 tires







# **STEERING RADII**

## **RT 100US**

#### with 29.5-25 tires

