



#### **CROSSOVER 4500L**

45T capacity class Boom Truck Crane Datasheet imperial

# CROSSOVER 4500L



#### **Features**

- ▶ 45 ton rated capacity @ 9 ft from center of rotation
- ▶ 129 ft maximum boom length
- ▶ 136 ft maximum tip height
- 32/49 ft optional jib
- ▶ 183 ft maximum tip height with 49 ft jib
- Operator cab standard
- Rated capacity indicator with work area definition

**WORKS FOR YOU.** 



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# **KEY**

## **CROSSOVER 4500L**

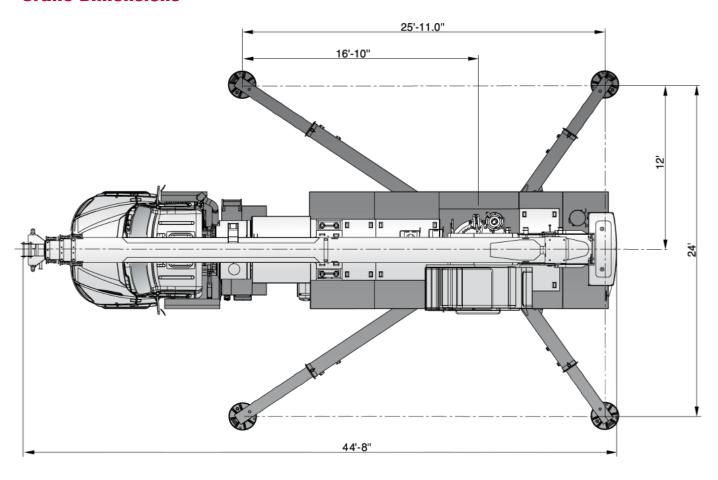
	Main boom		Counterweight
	Boom length	1	Main Hoist
/ <b>j</b>	Tip height	2	Auxiliary hoist
	Boom with jib		Hoist line speed
WILLIAM TO	Telescoping mode		Operator aid
A	Boom angle	HYDR	Hydraulics
	Working radius	<u> </u>	Heating / Air conditioning
	Main boom with aux head		Outriggers
	Boom head		Rotation / Allowable rotation range
	Hook block		Slewing brake
	Hook to head sheave pin		Boom over the rear
	Rope - Standard / Optional		Boom over the front
	Rope diameter		Area of operation
	Rope length	<b>↓</b> GVW	Gross vehicle weight
<b>←</b>	Permissible line pull	4	Weight on front axle
lb •	Maximum line pull	1	Weight on pusher axles
	Man basket		Weight on tandem
	Cab		Weight on tag axle

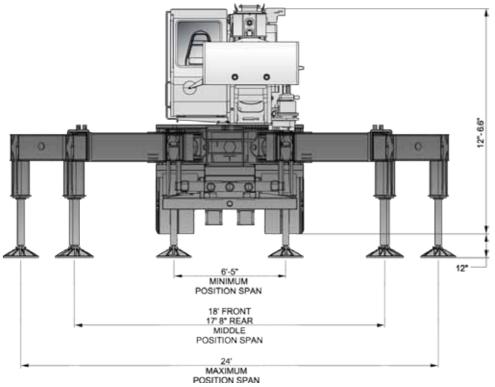


## **DIMENSIONS**

## **CROSSOVER 4500L**

#### **Crane Dimensions**





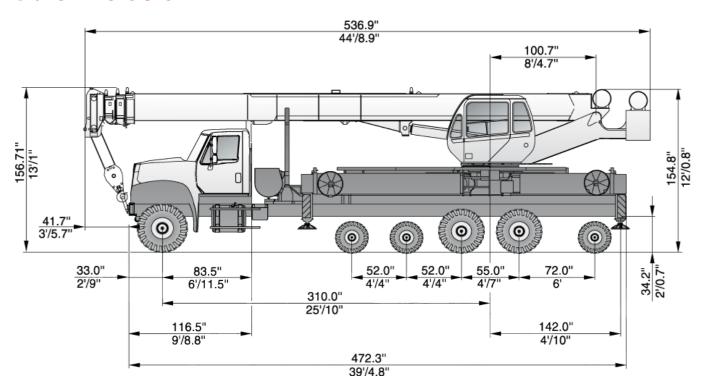




## **DIMENSIONS**

## **CROSSOVER 4500L**

#### **Crane Dimensions**



## **Area of Operation**



## **Mounting Specifications**

Gross Vehicle Weight Rating	82,000 lb
Front Axle Weight Rating	20,000 lb
Rear Axle Weight Rating	46,000 lb
Pusher (2)	8,000 lb each
Tag	8,000 lb
Wheelbase	291 in
Cab to Axle	225 in
Afterframe	124 in
RBM per Frame Rail	3,300,000 lb-in
Frame Height (Unloaded)	40±3 in

Base machine	69,115 lb
Crane mounted on 2015 Freightliner 114SD chassis	
configured per minimum chassis specification.	

#### Estimated minimum chassis weight:

Front axle	9,650 lb*
Tandem axles	10,840 lb*
Total weight	20,490 lb
Maximum weight	22,000 lb
Total weight	20,490 lb

\* Minimum bare chassis weight requirements. Ballast is required if below minimum weight.



## **SPECIFICATIONS**

## **CROSSOVER 4500L**

## **Approximate Crane Weights**

Mounted on with 6 axle co	2015 Freightliner 114SD onfiguration	<b>↓</b> GvW		1		
Configuration	n: 1/4 tank fuel 200 lb operator seated in cab 129 ft boom/no jib 2,000 lb rear counterweight	68,843	14,102	8,000 per axle	32,841	5,900
Options:						
	Full tank of fuel	+ 370	+ 290		+ 72	
2	Auxiliary hoist with drum roller and 500 ft wire rope	+0	+ 0		+ 0	
	Spin resistant wire rope — main hoist	+ 30	- 9		+ 39	
	Spin resistant wire rope — auxiliary hoist	+ 30	- 13		+ 43	
k	32 ft swing-on jib	+ 1368	+ 936		+ 432	
	32 ft to 49 ft extendable swing-on jib	+ 1789	+ 1143		+ 646	
	Auxiliary boom head	+ 105	+ 130		- 25	
	45 USt hook block on bumper 4 sheaves, quick reeving	+ 736	+ 855		- 119	
J	7 USt overhaul ball on bumper	+ 340	+ 197		+ 143	
	600 lb capacity man basket on deck	+ 450	+ 160		+ 290	



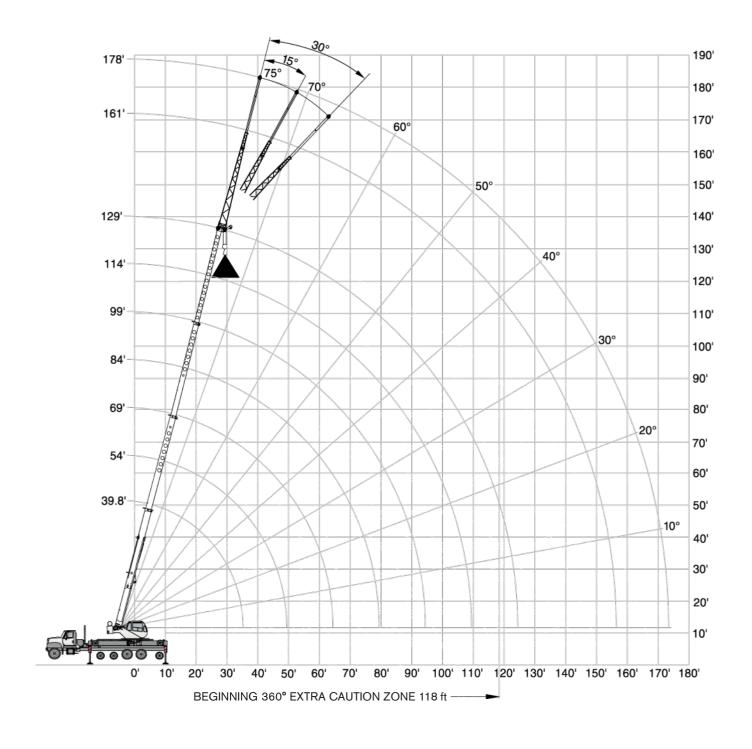


## **RANGE DIAGRAM**

## **CROSSOVER 4500L**

**Outriggers Fully Extended (100%)** 







## **BOOM LOAD CHART**

## **CROSSOVER 4500L**

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











Standard ASME B30.5

															Воо.о
	Boom Length														
	39.	8 ft	54.	0 ft	69.	0 ft	84.	0 ft	99.	0 ft	114	.0 ft	129	.0 ft	_
ft	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	ft
9	90,000	90,000													9
10	81,600	81,600	46,500	46,500											10
12	66,500	66,500	46,500	46,500	40,600	40,600									12
15	51,500	51,500	46,500	46,500	37,300	37,300	32,100	32,100							15
20	36,400	36,400	37,800	37,800	33,100	33,100	28,300	28,300	21,700	21,700					20
25	27,300	27,300	28,500	28,500	29,300	29,300	25,100	25,100	18,700	18,700	16,600	16,600			25
30	21,000	21,000	22,500	22,500	23,100	23,100	22,700	22,700	16,100	16,100	14,500	14,500	12,700	12,700	30
35			18,000	18,000	18,800	18,800	19,200	19,200	14,300	14,300	12,700	12,700	11,300	11,300	35
40			14,700	14,700	15,400	15,400	15,900	15,900	12,600	12,600	11,300	11,300	9,900	9,900	40
45			12,000	12,000	12,900	12,900	13,300	13,300	11,400	11,400	10,000	10,000	8,900	8,900	45
50					10,800	10,800	11,300	11,300	10,300	10,300	9,000	9,000	7,800	7,800	50
55					9,100	9,100	9,500	9,500	9,400	9,400	8,100	8,100	7,200	7,200	55
60					7,600	7,600	8,100	8,100	8,400	8,400	7,400	7,400	6,500	6,500	60
65							6,900	6,900	7,200	7,200	6,800	6,800	5,800	5,800	65
70							5,800	5,700	6,200	6,000	6,200	6,200	5,300	5,300	70
75							4,900	4,700	5,300	5,100	5,500	5,200	4,800	4,800	75
80									4,400	4,200	4,700	4,400	4,400	4,400	80
85									3,800	3,500	3,900	3,700	4,000	3,800	85
90									3,100	2,800	3,400	3,100	3,500	3,200	90
95											2,800	2,500	2,900	2,600	95
100											2,200	2,000	2,400	2,100	100
105											1,800	1,600	1,900	1,800	105
110													1,600	1,400	110
115													1,200	1,000	115
120													900	600	120

#### **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.





## **BOOM LOAD CHART**

## **CROSSOVER 4500L**

#### **Mid Position Outriggers (50%)**

2,000 lbs



360°



Standard ASME B30.5

	Boom Length								
	39.8 ft	54.0 ft	69.0 ft	84.0 ft	99.0 ft	114.0 ft	129.0 ft		
ft	lbs	lbs	lbs	lbs	lbs	lbs	lbs	ft	
9								9	
10	81,600	46,500						10	
12	66,500	46,500	40,600					12	
15	51,500	46,500	37,300	32,100				15	
20	35,900	37,300	33,100	28,300	21,700			20	
25	22,200	23,500	24,300	24,700	18,700	16,600		25	
30	14,500	16,100	16,900	17,300	16,100	14,500	12,700	30	
35		11,000	11,600	12,000	12,300	12,600	11,300	35	
40		7,600	8,300	8,700	9,000	9,200	9,400	40	
45		5,200	6,000	6,400	6,700	6,900	7,000	45	
50			4,300	4,700	5,000	5,100	5,300	50	
55			3,000	3,400	3,700	3,800	3,900	55	
60			1,900	2,300	2,600	2,800	2,900	60	
65				1,500	1,800	1,900	2,000	65	

#### **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.



## **BOOM LOAD CHART**

## **CROSSOVER 4500L**

#### **Outriggers Fully Retracted (0%)**









Standard ASME B30.5

				Boom Length				
	39.8 ft	54.0 ft	69.0 ft	84.0 ft	99.0 ft	114.0 ft	129.0 ft	
ft	lbs	lbs	lbs	lbs	lbs	lbs	lbs	ft
9	90,000							9
10	81,600	44,100						10
12	66,500	44,100	40,600					12
15	51,500	44,100	37,300	32,100				15
20	36,400	37,800	33,100	28,300	21,700			20
25	27,300	28,500	29,300	25,100	18,700	16,600		25
30	21,000	22,500	23,100	22,700	16,100	14,500	12,700	30
35		18,000	18,800	19,200	14,300	12,700	11,300	35
40		14,700	15,400	15,900	12,600	11,300	9,900	40
45		12,000	12,900	13,300	11,400	10,000	8,900	45
50			10,800	11,300	10,300	9,000	7,800	50
55			9,100	9,500	9,400	8,100	7,200	55
60			7,600	8,100	8,400	7,400	6,500	60
65				6,900	7,300	6,800	5,800	65
70				5,800	6,200	6,200	5,300	70
75				4,900	5,300	5,600	4,800	75
80					4,500	4,800	4,400	80
85					3,800	4,000	4,000	85
90					3,200	3,500	3,700	90
95						2,900	3,100	95
100						2,400	2,500	100
105						1,900	2,100	105
110							1,700	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.





## **LOAD CHART**

## **CROSSOVER 4500L**

#### With Jib, Outriggers Fully Extended (100%)







Standard ASME B30.5

32 ft Offsettable Jib										
	0°	1:	5°	30°						
ft ft	lbs	ft ft	lbs	ft ft	lbs					
44	5500	53	5000	59	3900					
48	5200	57	4800	63	3700					
52	5000	61	4600	67	3700					
59	4600	67	4300	73	3500					
66	4300	73	4200	79	3400					
72	3900	79	3700	84	3300					
79	3600	85	3300	89	3000					
87	2900	92	2700	97	2500					
95	2400	99	2200	104	2100					
102	1800	106	1600	110	1600					
109	1200	112	1100	118	1000					
118	600	120	500	126	500					

49 ft Offsettable Jib										
	0°	1	5°	30°						
ft	lbs	ft ft	lbs	ft ft	lbs					
48	3000	59	1900	69	1500					
53	2800	64	1900	74	1500					
58	2600	69	1800	79	1500					
67	2400	77	1700	87	1400					
74	2200	85	1600	94	1400					
82	2100	92	1600	100	1300					
90	1900	99	1500	107	1300					
99	1800	108	1500	115	1300					
108	1600	117	1400	123	1300					
117	1400	125	1300	130	1200					
125	900	132	800	136	800					

#### **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.



## **LOAD CHART**

## **CROSSOVER 4500L**

#### With Jib, Mid Position Outriggers (50%)







Standard ASME B30.5

32 ft Offsettable Jib									
	0°	1:	5°	30°					
ft	lbs	ft ft	lbs	ft ft	lbs				
44	5500	53	5000	59	3900				
48	5200	57	4800	63	3700				
52	4600	61	3900	67	3500				
59	3300	67	2800	73	2500				
66	2200	73	1900	79	1600				
72	1200	79	1000	84	900				

		49 ft Offs	ettable Jib		
	0°	1:	5°	3	0°
ft	lbs	ft ft	lbs	ft ft	lbs
48	3000	59	1900	69	1500
53	2800	64	1800	74	1500
58	2600	69	1700	79	1500
67	2400	77	1500	87	1400
74	1800	85	1200	94	1400
82	1100				

#### 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.





# **TECHNICAL DESCRIPTION**

## **CROSSOVER 4500L**

#### **Boom, Jib and Rotation**

	on and note		
1	Four-section full pow	wer fully synchronized telelscopic boom	
	Boom length	Retracted Extended	39.8 ft 129 ft
/3 <sup>*</sup> 1	Boom maximum tip h	height	136 ft
A	Boom elevation angl	le range (min. / max.)	-3° / 77.5°
	Boom head		quick reeving
	360° continuous rota	ation	
	Load moment / Rate ATB system	ed capacity indicator with work area definition	
		Optional	
	Maximum tip height	ustable length - can be offset to 0°, 15° or 30°	32 ft 167 ft 32 ft / 49 ft 183 ft
	4 metallic sheaves Quick reeving design	n	45 T
	Top swivel ball with	hook and latch	7 T
	Two person man bas	sket	

## **Hoists and Rope**

1	Two speeds First layer (no load speed) Fifth layer (no load speed)	Low Speed: 167 ft/min 242 ft/min	High Speed: 335 ft/min 487 ft/min
	First layer Fifth layer	Low Speed: 15,639 lb 10,827 lb	High Speed: 7,298 lb 5,052 lb
<b>←23333</b> →	Permissible line pull		9,000 lb
		6 x <sup>-</sup>	19 IWRC XIPS
	Maximum useable		490 ft
			0.625 in



## **TECHNICAL DESCRIPTION**

#### **CROSSOVER 4500L**

		Optional	
2	Two speeds First layer (no load speed) Fifth layer (no load speed)	Low Speed: 167 ft/min 242 ft/min	High Speed: 335 ft/min 487 ft/min
	First layer Fifth layer	Low Speed: 15,639 lb 10,827 lb	High Speed: 7,298 lb 5,052 lb
<b>←</b>	Permissible line pull		9,000 lb
		6 x	19 IWRC XIPS
			0.625 in

#### **Hydraulics**

(
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Triple pump: 60.3 gal/min @ 3,500 psi Boom lift / telescope 45.1 gal/min @ 3,500 psi 22 gal/min @ 2,500 psi Outrigger / swing Single pump: Power steering 8 gal/min @ 2,000 psi Full flow filtration with bypass protection: Suction 250 micron screen Return 5 micron filter Pressurized tank with sight level gauge 91 gal

#### **Upper Operator Cab**



Upper cab
Sliding door on left side
Sliding window on the right side
Tilting, tinted glass skylight
Removable front windshield
Six-way adjustable seat with armrest dual-axis electro-proportional joysticks
Joystick control for hoist(s), swing and boom elevation
Foot pedals for swing brake, boom telescope and engine rpm
Hand control for engine rpm



Optional features for upper cab
Air conditioning – hydraulically powered
Heater and air conditioning package – hydraulically powered
Liquid propane (LP) cab heater
Single-axis armrest mounted controls
Work lights



Rated capacity indicator with pictograph display of boom radius, boom angle, boom length, allowable load, actual load and % of allowable load
Settable alarms for swing angle, boom length, boom angle, tip height and work area exclusion zone





## **TECHNICAL DESCRIPTION**

## **CROSSOVER 4500L**

#### **Boom Rotation**



Foot pedal actuated multi-disc brake and air actuated 360° house lock



Hydraulic driven double planetary reduction gear drive

2.8 rev/min

## **Counterweight**



Main counterweight, non removable, bolted to upper crane structure

2,000 lb counterweight package

## **Outriggers**



λ-pattern ΜΛΥ Front

MAX Front: Swing, Out and Down
To outer edge of pad
Rear: Swing, Out and Down

26 ft

To outer edge of pad

20 ft

26 ft

Front: Swing, Out and Down Rear: Swing, Out and Down

19.5 ft



Effective Date: January 2014.

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. Terex. The control of the countries of Terex Corporation in the USA and many other countries.

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