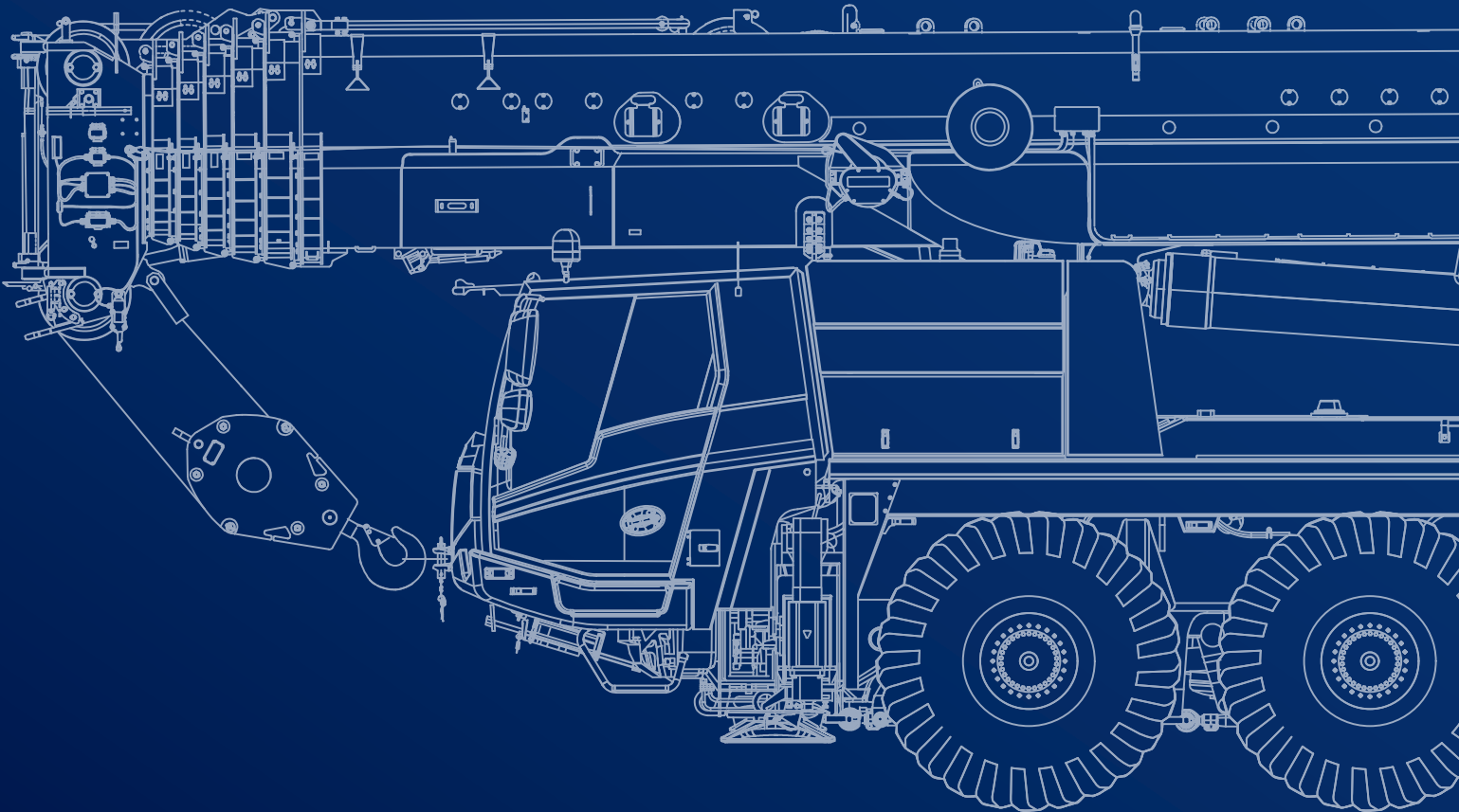


# AC 4.110-1

120 US TON MAX. CRANE CAPACITY



- Suitable for alternative fuels





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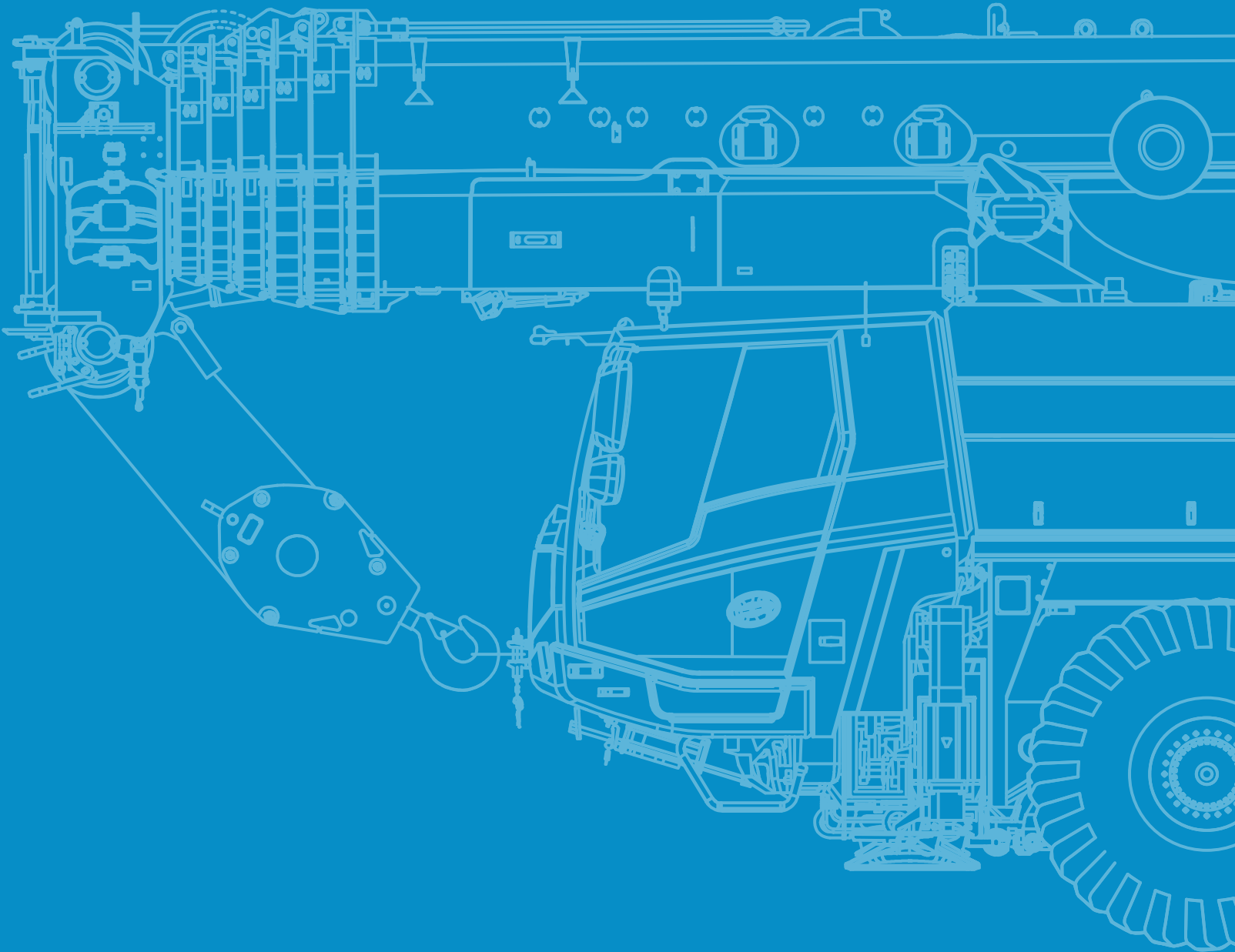
# Key



	Counterweight		Boom telescoping
	Lifting capacities on outriggers · 360°		Boom elevation
	Radius		Working speeds
	Main boom		Slewing
	Folding swing-away jib		Max. line pull
	Runner		Rope diameter
	Max. axle loads		Rope length
	Mechanism		Hook block
	Tires		Number of lines
	Hook block		Possible load of hook block
	Hoist		Weight of hook block
	Travel speed		Distance head sheave axle – hook ground
	Gradeability %		Number of sheaves in hook block
	Off road / On road		Max. outrigger load
			Length of stroke (support cylinders)

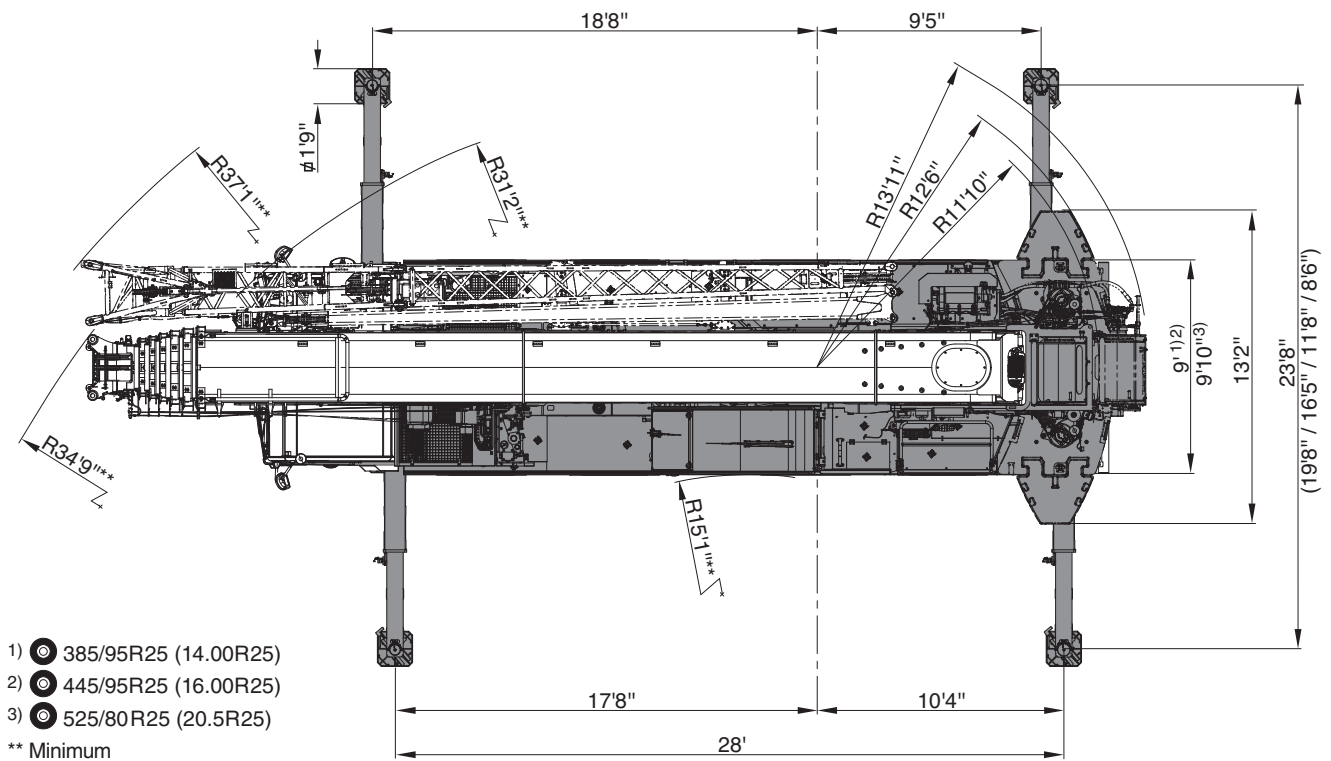
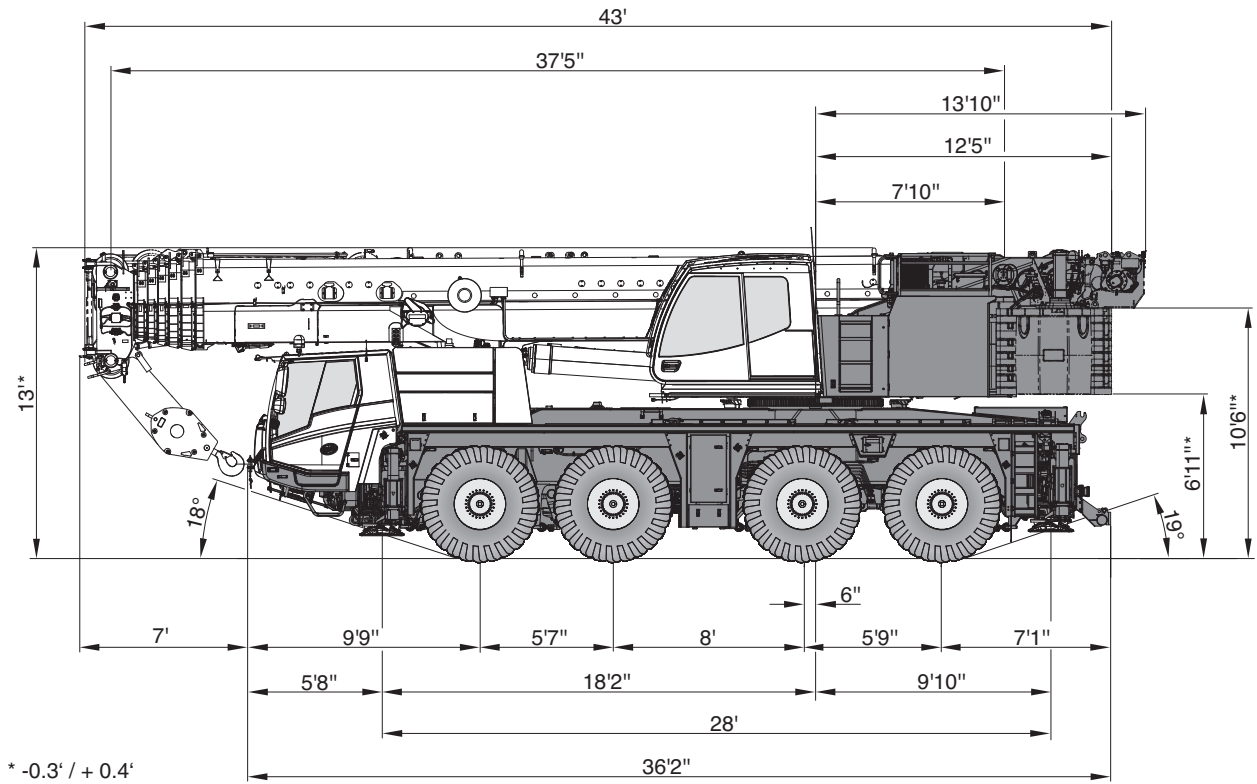


# GENERAL TECHNICAL DATA



# General

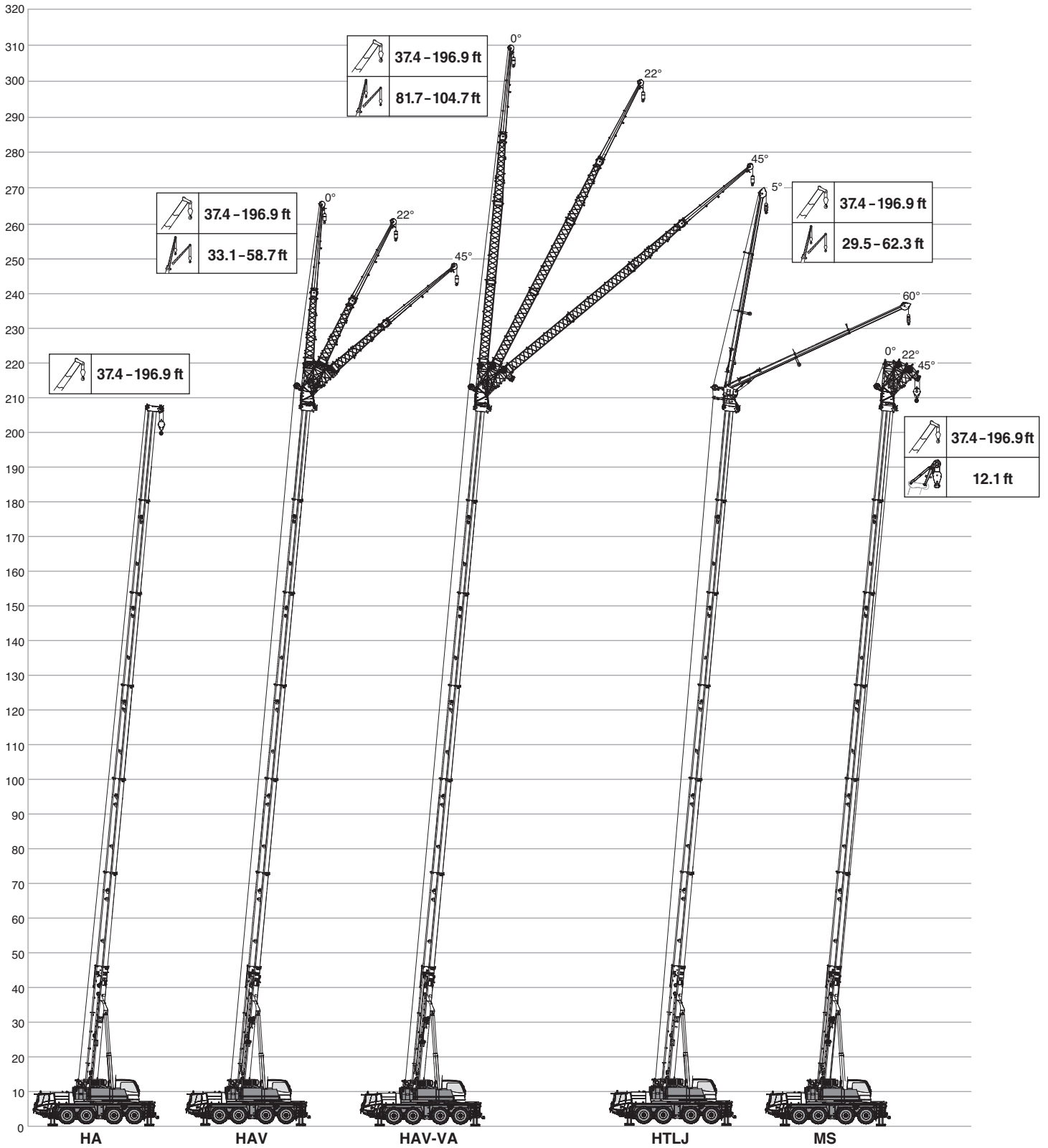
## Vehicle dimensions



- 1) 385/95R25 (14.00R25)
  - 2) 445/95R25 (16.00R25)
  - 3) 525/80R25 (20.5R25)
- \*\* Minimum

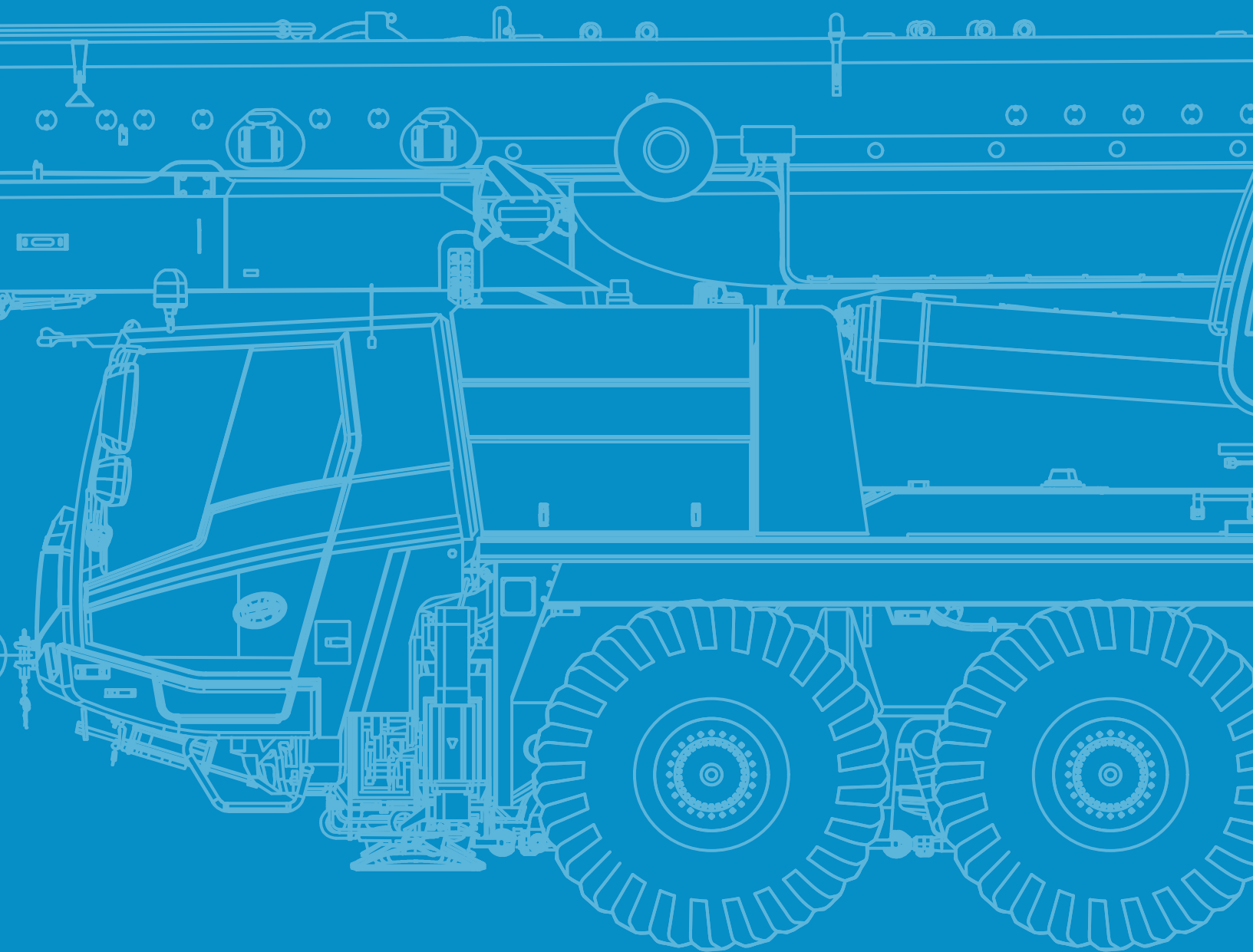
# General

## Boom combinations


















# TECHNICAL DATA FOR ON-ROAD AND OFF-ROAD DRIVING












# On-road and off-road driving

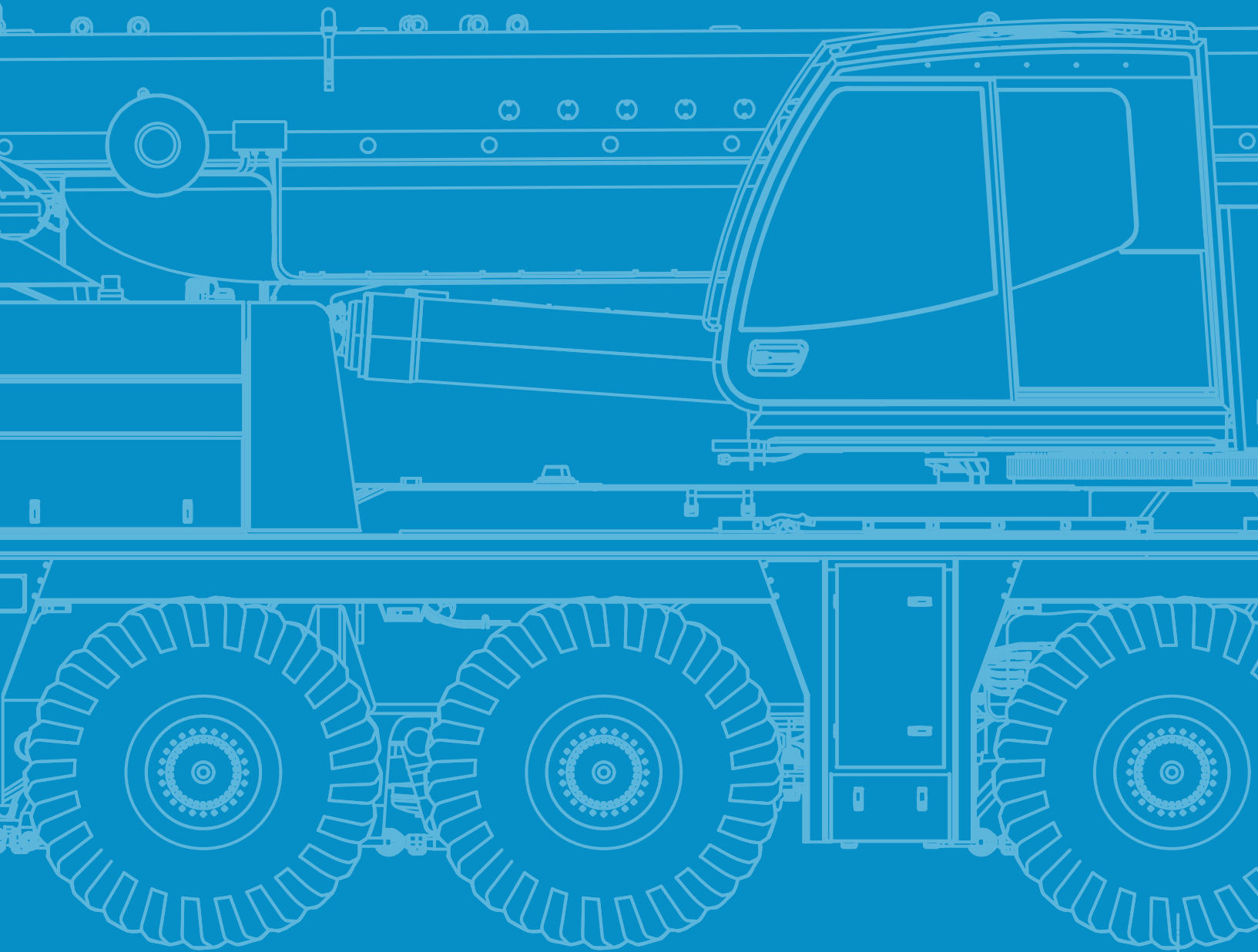
Axle loads						
	Total					
< 26,500 lbs	< 105,800 lbs	8 x 6	445/95R25	70,600 lbs	—	6,900 lbs
< 28,700 lbs	< 114,600 lbs	8 x 6	445/95R25	138,900/22,050 lbs	58.7 ft	10,600 lbs
< 36,400 lbs	< 132,300 lbs	8 x 6	445/95R25	138,900/22,050 lbs	58.7 ft	40,500 lbs

Speeds and gradeability			
	385/95 R 25 14.00 R 25	445/95 R 25 16.00 R 25	525/80 R 25 20.50 R 25
 %	33 %	30 %	30 %
 %	74 %	65 %	65 %
 	49.7 mph <sup>1)</sup>	52.8 mph <sup>1)</sup>	52.8 mph <sup>1)</sup>
 	29.2 mph <sup>1)</sup>	31.7 mph <sup>1)</sup>	31.7 mph <sup>1)</sup>

<sup>1)</sup> Depending on tire type, size and country specific legislation

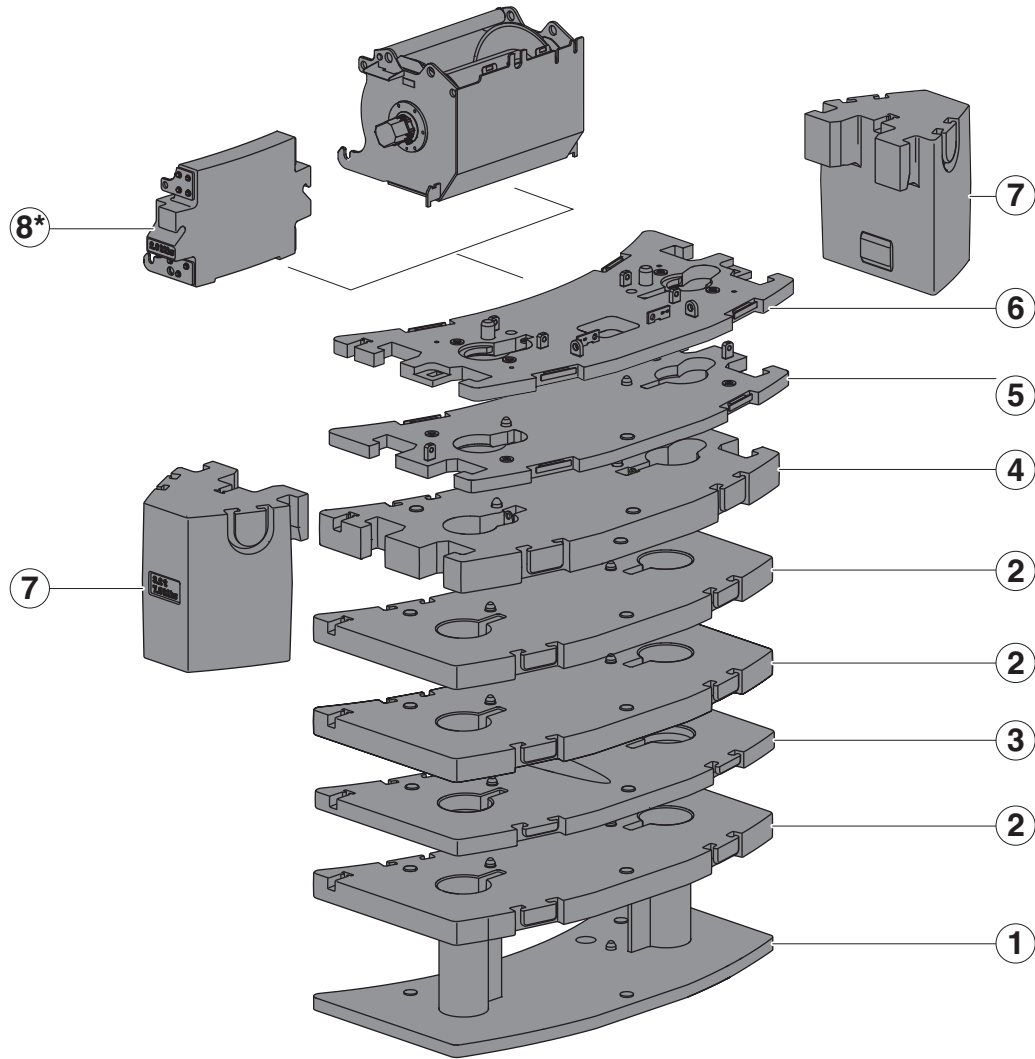
Steering	
	 v < 15.5 mph
	 15.5 mph ≤ v ≤ 24.9 mph
	 v > 24.9 mph
	 Manually steered
	 Minimum turning radius
	 Crab steer mode
	 Rear veering suppression

# TECHNICAL DATA FOR TRANSPORT



# Transportation

## Counterweight



### Configurations

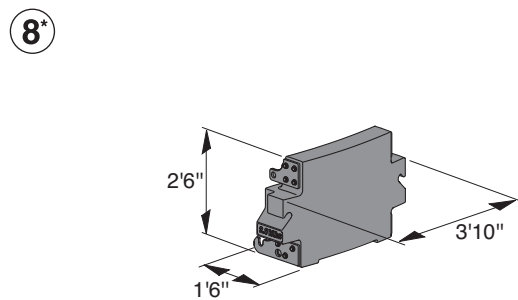
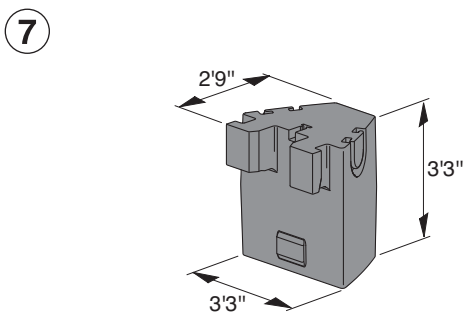
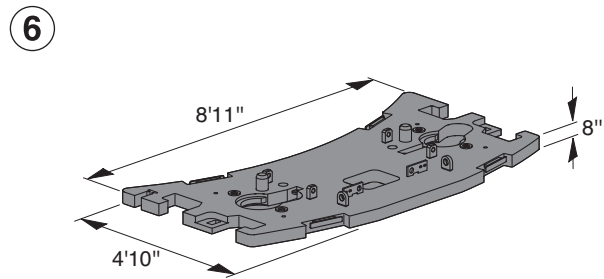
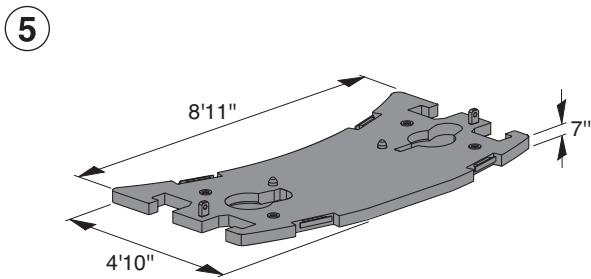
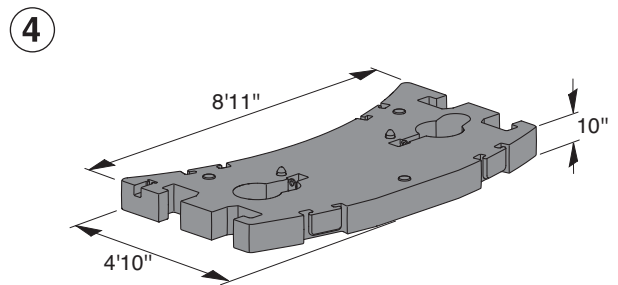
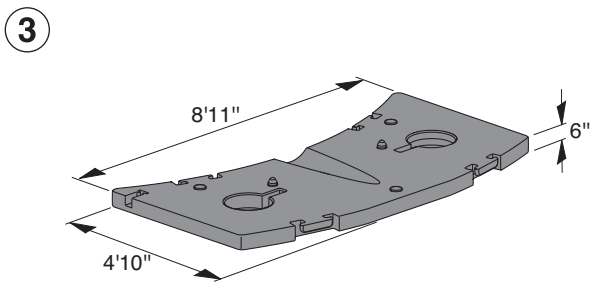
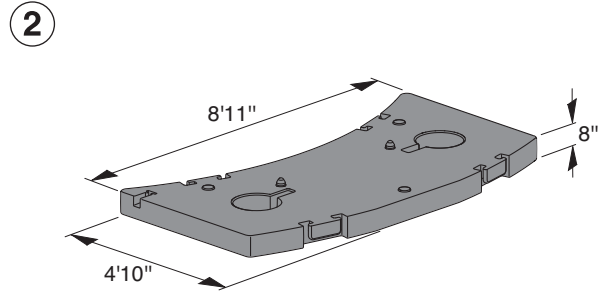
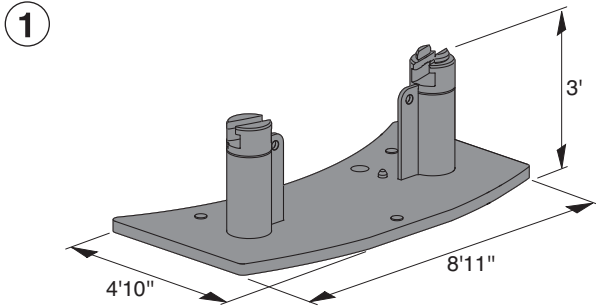
	6,900 lbs	10,600 lbs	12,900 lbs	16,600 lbs	20,400 lbs	24,100 lbs	25,500 lbs	29,200 lbs	33,000 lbs	36,700 lbs	40,500 lbs	44,200 lbs	49,300 lbs	53,000 lbs	67,000 lbs
① 6,000 lbs			1	1	1	1	1	1	1	1	1	1	1	1	1
② 7,500 lbs					1	1	1	1	2	2	3	3	3	3	3
③ 5,100 lbs							1	1	1	1	1	1	1	1	1
④ 8,800 lbs													1	1	1
⑤ 3,700 lbs		1		1		1		1		1		1		1	1
⑥ 4,000 lbs	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
⑦ 7,100 lbs															2
⑧* 2,900 lbs	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

\* Can be replaced by 2<sup>nd</sup> hoist



# Transportation

## Counterweight

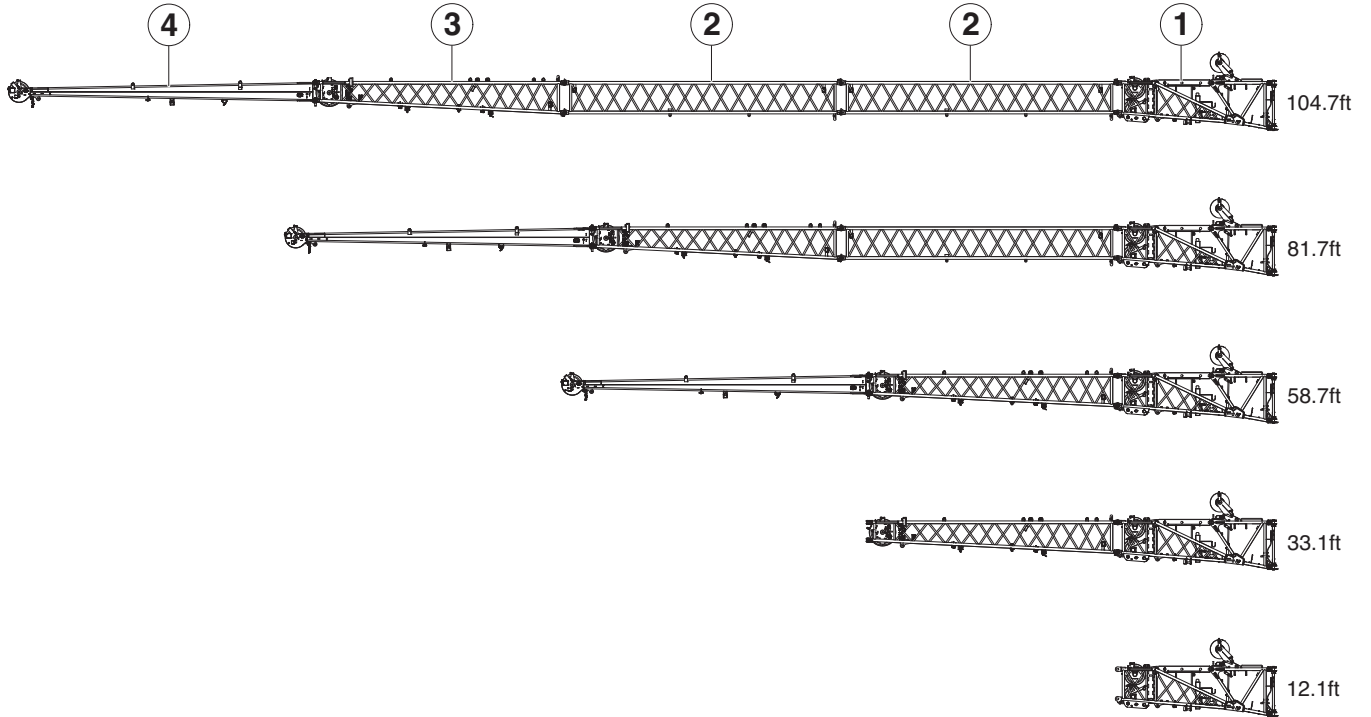


\* Can be replaced by 2<sup>nd</sup> hoist

# Transportation

Jib

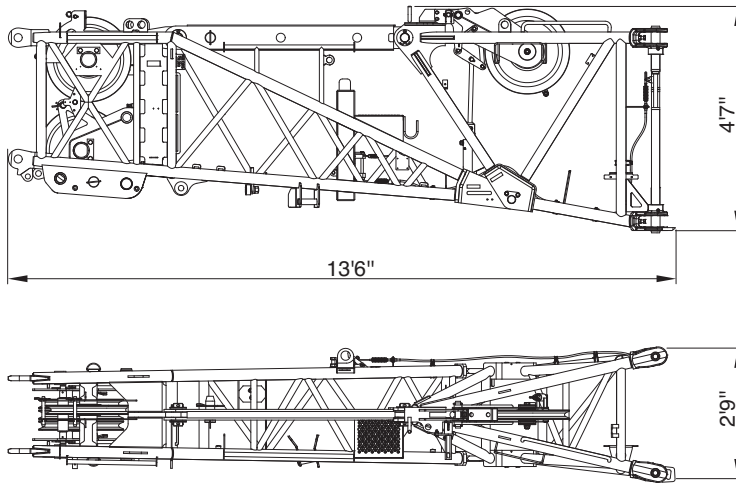
HAV



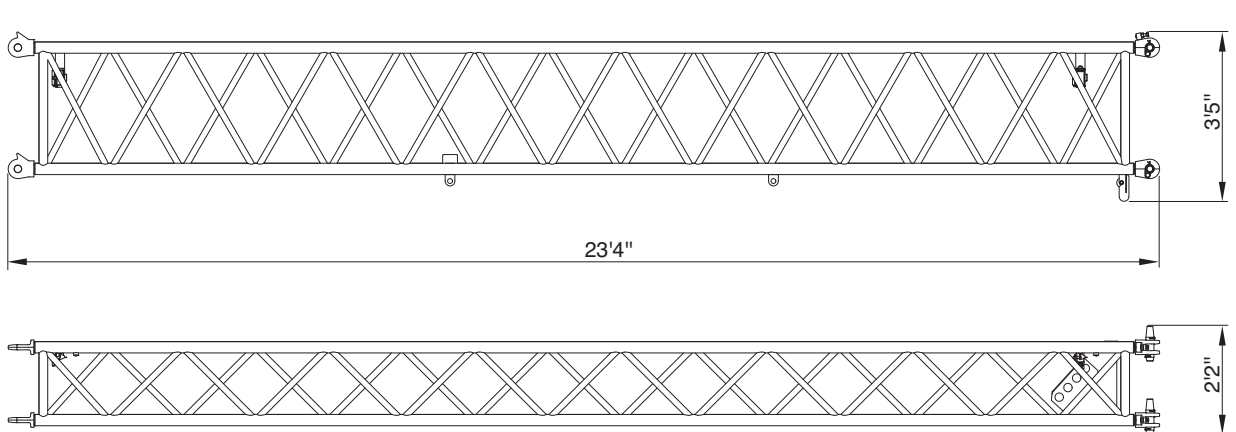
# Transportation

## Jib

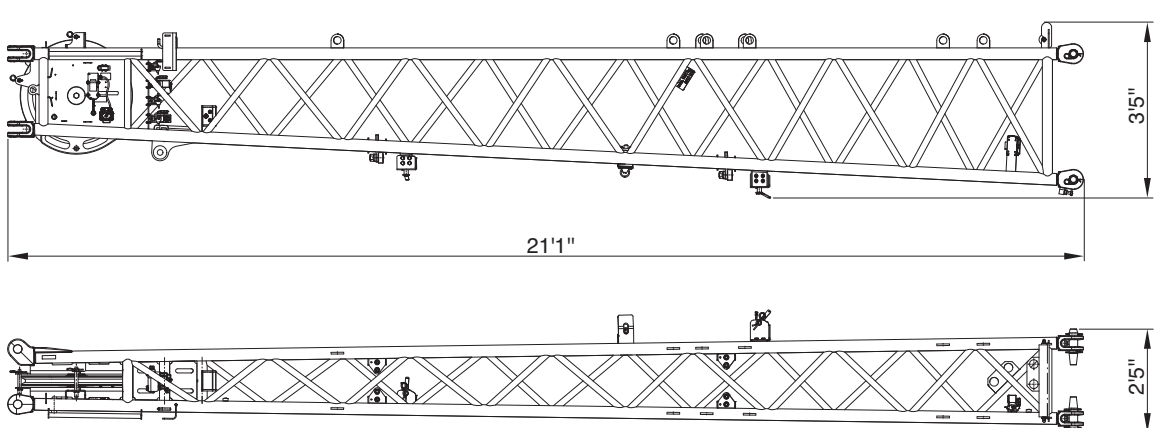
1  
lbs  
1,850



2  
lbs  
1,100



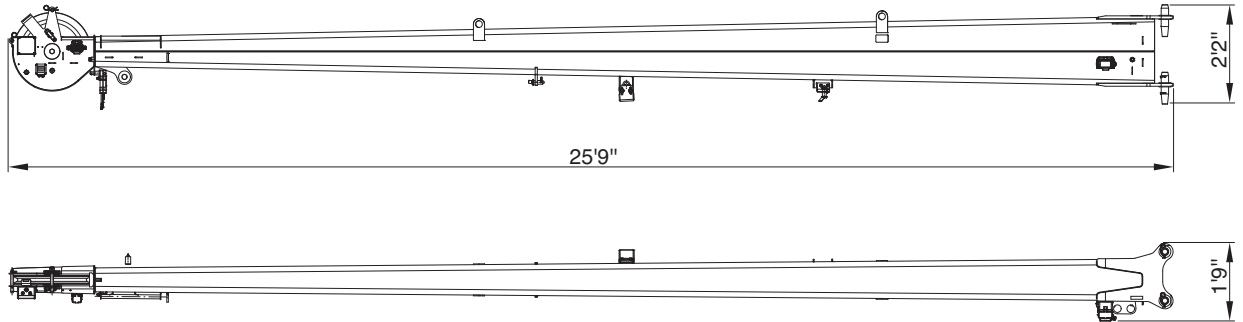
3  
lbs  
1,000



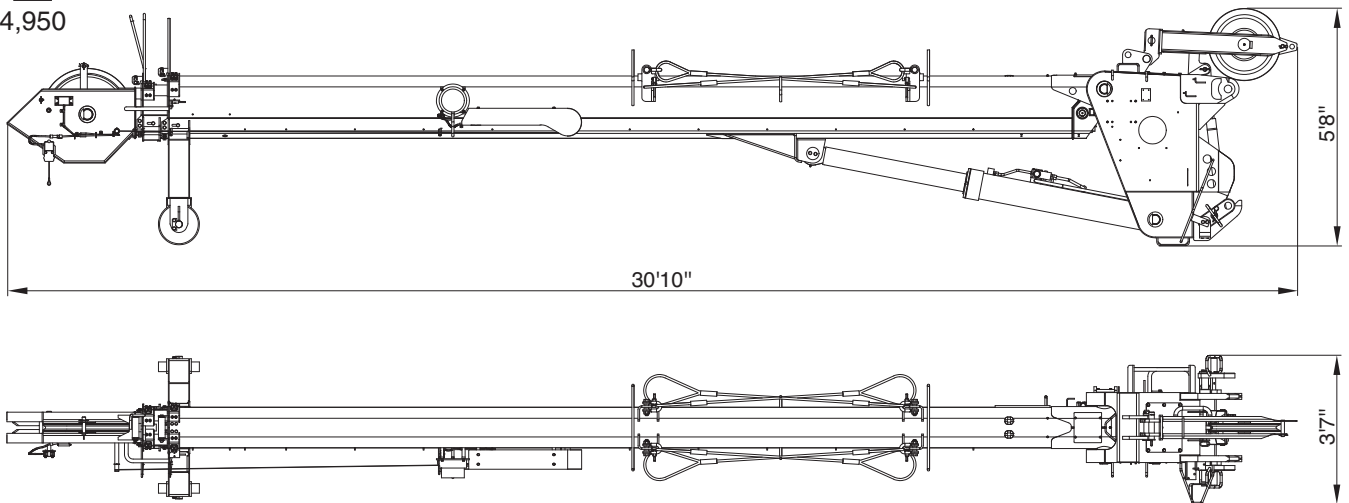
# Transportation

## Jib

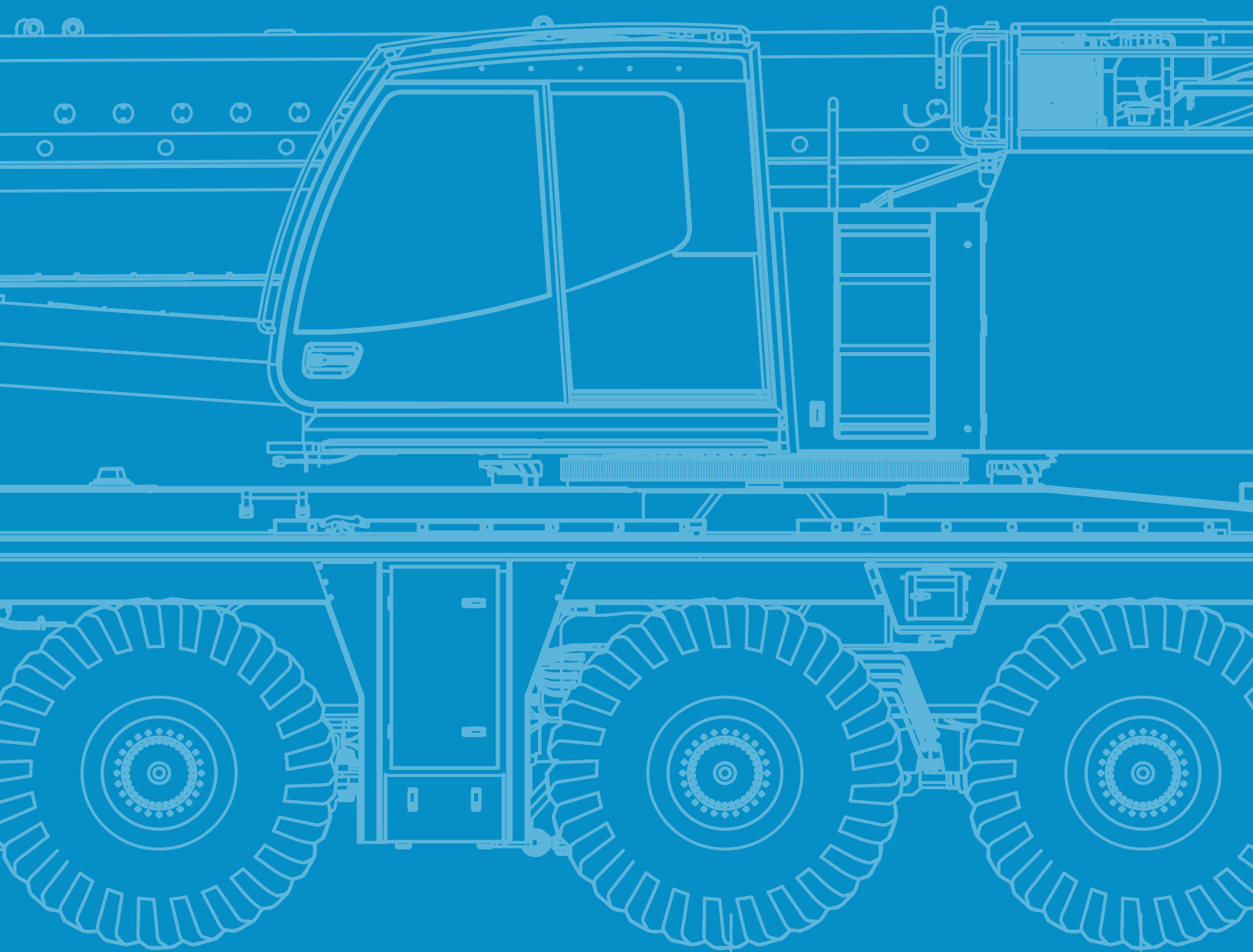
4  
lbs  
1,000



lbs  
4,950



# TECHNICAL DATA FOR OPERATION





# Operation

## Main boom



approx. 560 s (37.4 ft - 196.9 ft)



approx. 45 s (-1° - 84,7°)

## Slewing



0 - 2 min<sup>-1</sup>

## Hoist



1

377 ft/min

19,109 lbf

0.83"

820 ft

2

377 ft/min

19,109 lbf

0.83"

820 ft

## Outrigger cylinders



105,800 lbs

143,300 lbs



23.6"

23.6"

## Hook Blocks



22,050 lbs

19,100

-

1

660

70,600 lbs

56,400

1

3

990

138,900 lbs

130,100

3

7

1,320

220,500 lbs

202,200

5

11

1,760

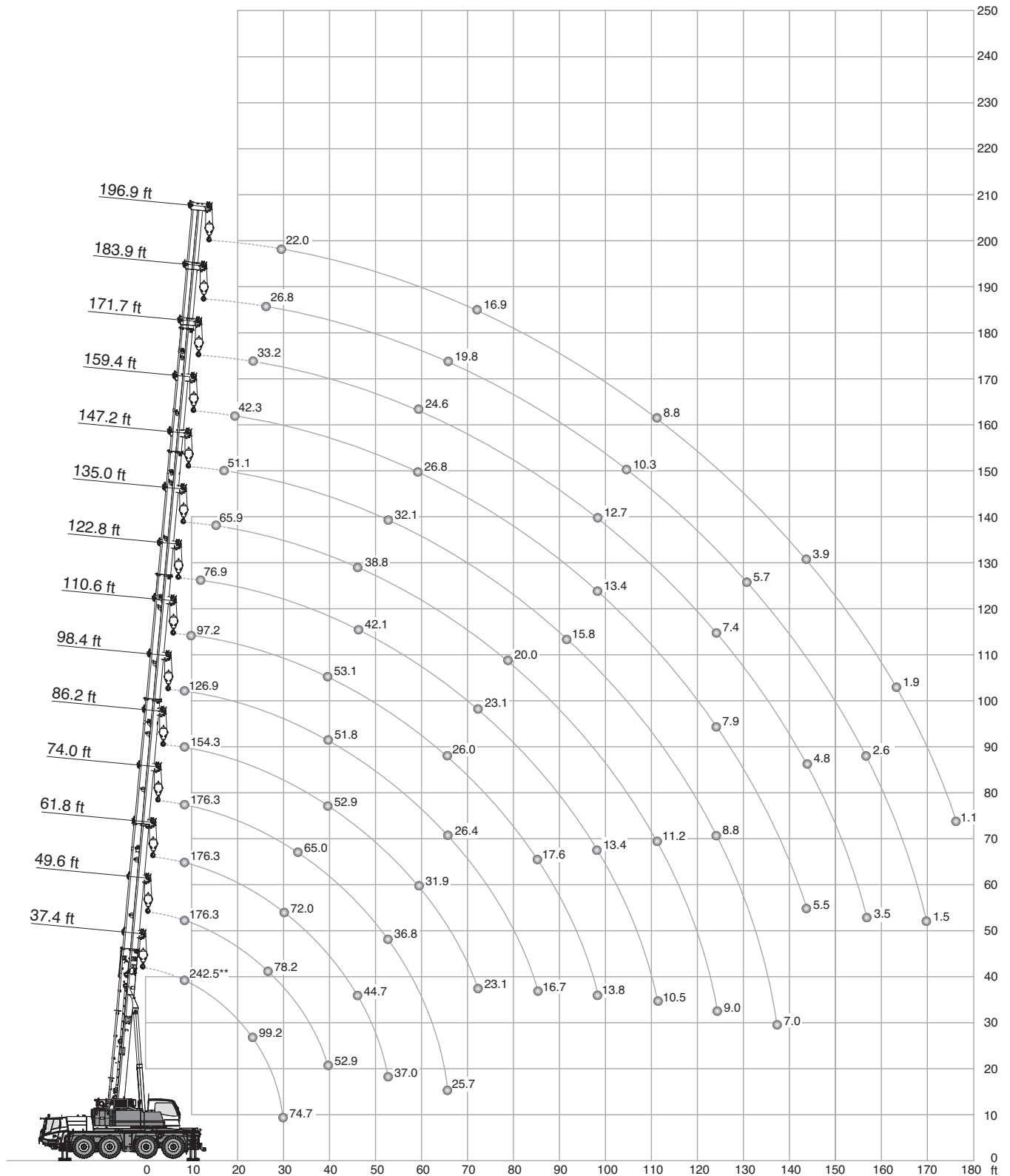
352,800 lbs

220,500

7

12

2,870



\*\* Max. crane capacity – with additional special equipment



# Operation

HA

67,000 lbs		23.6 ft x 28.0 ft														360°		ASME B30.5	
37.4*		37.4	49.6	61.8	74.0	86.2	98.4	110.6	122.8	135.0	147.2	159.4	171.7	183.9	196.9				
ft		1,000 lbs														ft			
8.2	242.5**	182.1	176.3	176.3	176.3	154.3	126.9	-	-	-	-	-	-	-	-	-	8.2		
9.8	196.8	164.6	164.6	164.4	163.8	154.3	126.9	97.2	-	-	-	-	-	-	-	-	9.8		
11.5	185.1	149.9	150.1	150.7	150.3	149.6	126.9	95.0	76.9	-	-	-	-	-	-	-	11.5		
13.1	174.6	137.3	137.3	138.2	137.7	136.9	126.1	91.2	79.1	-	-	-	-	-	-	-	13.1		
14.8	160.0	126.3	126.5	127.4	126.9	126.1	123.6	87.5	76.2	65.9	-	-	-	-	-	-	14.8		
16.4	143.0	116.8	116.8	117.7	117.5	118.3	117.5	83.7	73.6	64.5	51.1	-	-	-	-	-	16.4		
19.7	117.7	100.9	101.1	102.0	103.1	102.7	101.8	78.9	67.9	59.9	52.2	42.3	-	-	-	-	19.7		
23.0	99.2	88.4	88.4	89.5	90.8	90.1	89.2	73.4	62.8	55.7	49.3	41.0	33.2	-	-	-	23.0		
26.2	85.5	78.2	78.2	80.4	80.4	80.0	78.9	70.3	58.4	51.8	46.5	39.4	33.2	26.8	-	-	26.2		
29.5	74.7	69.8	69.8	72.0	72.0	71.4	70.5	65.0	58.4	48.5	43.6	38.1	32.1	26.8	22.0	-	29.5		
32.8	-	-	62.8	65.0	65.0	64.5	63.4	60.8	54.8	48.0	41.2	37.2	31.3	26.8	22.0	-	32.8		
36.1	-	-	57.0	59.0	59.0	58.4	57.5	57.5	51.5	46.0	39.0	35.0	30.2	26.8	22.0	-	36.1		
39.4	-	-	52.9	53.5	53.5	52.9	51.8	53.1	48.5	43.4	38.8	33.5	30.2	26.0	22.0	-	39.4		
45.9	-	-	-	44.7	44.7	44.0	45.4	43.8	42.1	38.8	35.2	32.4	27.3	24.4	22.0	-	45.9		
52.5	-	-	-	37.0	36.8	38.3	37.6	36.3	35.2	34.3	32.1	29.5	27.1	22.9	20.5	-	52.5		
59.1	-	-	-	-	32.1	31.9	31.0	30.8	29.9	29.3	29.5	26.8	24.6	21.3	19.1	-	59.1		
65.6	-	-	-	-	25.7	26.8	26.4	26.0	25.1	25.7	25.5	24.6	22.9	19.8	18.0	-	65.6		
72.2	-	-	-	-	-	23.1	22.4	22.9	23.1	23.1	21.8	21.8	21.1	18.5	16.9	-	72.2		
78.7	-	-	-	-	-	-	19.4	20.2	19.8	20.0	19.1	18.9	19.4	17.1	15.8	-	78.7		
85.3	-	-	-	-	-	-	16.7	17.6	17.6	17.4	17.6	17.4	16.9	15.8	14.7	-	85.3		
91.9	-	-	-	-	-	-	-	15.6	15.4	15.4	15.8	15.2	14.7	13.8	13.6	-	91.9		
98.4	-	-	-	-	-	-	-	13.8	13.4	14.3	14.1	13.4	12.7	11.9	11.9	-	98.4		
105.0	-	-	-	-	-	-	-	-	11.9	12.5	12.3	11.6	11.2	10.3	10.3	-	105.0		
111.5	-	-	-	-	-	-	-	-	10.5	11.2	11.0	10.3	9.7	9.0	8.8	-	111.5		
118.1	-	-	-	-	-	-	-	-	-	10.1	9.7	9.0	8.5	7.7	7.7	-	118.1		
124.7	-	-	-	-	-	-	-	-	-	9.0	8.8	7.9	7.4	6.6	6.6	-	124.7		
131.2	-	-	-	-	-	-	-	-	-	-	7.7	7.0	6.3	5.7	5.5	-	131.2		
137.8	-	-	-	-	-	-	-	-	-	-	-	7.0	6.1	5.7	4.8	-	137.8		
144.4	-	-	-	-	-	-	-	-	-	-	-	-	5.5	4.8	3.9	-	144.4		
150.9	-	-	-	-	-	-	-	-	-	-	-	-	-	4.1	3.3	-	150.9		
157.5	-	-	-	-	-	-	-	-	-	-	-	-	-	3.5	2.6	-	157.5		
164.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.2	-	164.0		
170.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.5	-	170.6		
177.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.1	177.2		

\* over rear

\*\* Max. crane capacity – with additional special equipment

# Operation

HA

53,000 lbs		23.6 ft x 28.0 ft														360°		ASME B30.5	
		(ft)																	
		37.4*	37.4	49.6	61.8	74.0	86.2	98.4	110.6	122.8	135.0	147.2	159.4	171.7	183.9	196.9			
ft		1,000 lbs														ft			
8.2	214.2	181.4	176.3	176.3	176.3	154.3	126.9	-	-	-	-	-	-	-	-	-	8.2		
9.8	200.8	164.0	164.0	163.8	162.9	154.3	126.9	97.2	-	-	-	-	-	-	-	-	9.8		
11.5	188.9	149.0	149.2	150.1	149.6	148.8	126.9	95.0	76.9	-	-	-	-	-	-	-	11.5		
13.1	173.2	136.4	136.4	137.3	136.9	136.0	126.1	91.2	79.1	-	-	-	-	-	-	-	13.1		
14.8	153.2	125.4	125.4	126.3	125.8	125.0	123.6	87.5	76.2	65.9	-	-	-	-	-	-	14.8		
16.4	136.9	115.7	115.9	116.8	116.4	117.5	116.6	83.7	73.6	64.5	51.1	-	-	-	-	-	16.4		
19.7	112.4	99.8	99.8	100.9	102.0	101.6	100.7	78.9	67.9	59.9	52.2	42.3	-	-	-	-	19.7		
23.0	95.0	87.3	87.3	88.8	89.5	89.0	87.9	73.4	62.8	55.7	49.3	41.0	33.2	-	-	-	23.0		
26.2	81.5	77.1	77.1	79.3	79.3	78.7	77.8	70.3	58.4	51.8	46.5	39.4	33.2	26.8	-	-	26.2		
29.5	71.4	68.5	68.5	70.9	70.9	70.3	67.4	64.5	58.4	48.5	43.6	38.1	32.1	26.8	22.0	-	29.5		
32.8	-	-	61.0	63.2	63.2	62.6	58.8	58.6	54.8	48.0	41.2	37.2	31.3	26.8	22.0	-	32.8		
36.1	-	-	55.9	56.8	56.8	55.3	54.6	51.8	49.6	46.0	39.0	35.0	30.2	26.8	22.0	-	36.1		
39.4	-	-	49.8	50.9	50.9	49.1	49.3	46.2	44.3	43.2	38.8	33.5	30.2	26.0	22.0	-	39.4		
45.9	-	-	-	39.6	39.4	41.2	40.3	39.0	37.0	35.2	35.0	32.4	27.3	24.4	22.0	-	45.9		
52.5	-	-	-	31.7	33.5	33.0	32.6	32.1	30.8	31.0	29.7	29.1	27.1	22.9	20.5	-	52.5		
59.1	-	-	-	-	27.5	27.3	26.6	27.1	27.1	27.3	25.7	24.6	24.6	21.3	19.1	-	59.1		
65.6	-	-	-	-	21.8	22.9	22.2	23.3	23.1	22.9	22.2	22.2	21.3	19.8	18.0	-	65.6		
72.2	-	-	-	-	-	19.6	19.4	19.8	19.6	19.4	20.0	19.6	18.5	17.1	16.7	-	72.2		
78.7	-	-	-	-	-	-	17.4	16.9	16.7	17.6	17.4	16.7	16.3	14.9	14.5	-	78.7		
85.3	-	-	-	-	-	-	15.2	14.7	14.5	15.2	15.2	14.5	13.8	13.0	12.5	-	85.3		
91.9	-	-	-	-	-	-	-	13.4	12.5	13.4	13.2	12.5	11.9	11.2	11.0	-	91.9		
98.4	-	-	-	-	-	-	-	12.3	11.0	11.6	11.4	10.8	10.3	9.4	9.4	-	98.4		
105.0	-	-	-	-	-	-	-	-	9.7	10.3	10.1	9.4	8.8	7.9	7.9	-	105.0		
111.5	-	-	-	-	-	-	-	-	8.5	9.0	8.8	8.1	7.7	6.8	6.8	-	111.5		
118.1	-	-	-	-	-	-	-	-	-	8.1	7.7	7.0	6.6	5.7	5.7	-	118.1		
124.7	-	-	-	-	-	-	-	-	-	7.0	6.8	6.1	5.5	4.6	4.6	-	124.7		
131.2	-	-	-	-	-	-	-	-	-	-	5.9	5.2	4.6	3.9	3.7	-	131.2		
137.8	-	-	-	-	-	-	-	-	-	-	5.2	4.4	3.9	3.0	3.0	-	137.8		
144.4	-	-	-	-	-	-	-	-	-	-	-	3.7	3.3	2.4	2.4	-	144.4		
150.9	-	-	-	-	-	-	-	-	-	-	-	-	2.6	1.7	1.7	-	150.9		
157.5	-	-	-	-	-	-	-	-	-	-	-	-	1.9	1.3	1.1	-	157.5		

\* over rear

# Operation

HA

49,300 lbs		23.6 ft x 28.0 ft														360°		ASME B30.5	
37.4*		37.4	49.6	61.8	74.0	86.2	98.4	110.6	122.8	135.0	147.2	159.4	171.7	183.9	196.9				
ft		1,000 lbs														ft			
8.2	217.5	180.3	176.3	176.3	176.3	154.3	126.9	-	-	-	-	-	-	-	-	-	8.2		
9.8	204.1	162.7	162.9	162.7	161.8	154.3	126.9	97.2	-	-	-	-	-	-	-	-	9.8		
11.5	190.6	147.9	147.9	148.8	148.3	147.4	126.9	95.0	76.9	-	-	-	-	-	-	-	11.5		
13.1	166.0	135.1	135.1	136.0	135.5	134.7	126.1	91.2	79.1	-	-	-	-	-	-	-	13.1		
14.8	146.6	124.1	124.1	125.0	124.7	123.8	123.6	87.5	76.2	65.9	-	-	-	-	-	-	14.8		
16.4	131.1	114.4	114.4	115.5	115.0	116.1	115.3	83.7	73.6	64.5	51.1	-	-	-	-	-	16.4		
19.7	107.5	98.3	98.5	99.4	100.7	100.0	98.7	78.9	67.9	59.9	52.2	42.3	-	-	-	-	19.7		
23.0	90.6	85.7	85.9	88.1	88.1	87.3	81.1	73.4	62.8	55.7	49.3	41.0	33.2	-	-	-	23.0		
26.2	78.0	74.9	74.9	77.3	77.3	73.1	68.3	67.2	58.4	51.8	46.5	39.4	33.2	26.8	-	-	26.2		
29.5	67.9	65.6	65.6	68.3	66.3	62.6	61.7	57.9	55.3	48.5	43.6	38.1	32.1	26.8	22.0	-	29.5		
32.8	-	-	58.8	59.9	57.5	54.4	54.2	52.0	48.2	46.7	41.2	37.2	31.3	26.8	22.0	-	32.8		
36.1	-	-	49.6	50.9	50.4	50.4	47.8	46.0	43.6	41.4	39.0	35.0	30.2	26.8	22.0	-	36.1		
39.4	-	-	42.5	43.6	44.0	44.9	42.5	41.2	38.8	38.1	37.0	33.5	30.2	26.0	22.0	-	39.4		
45.9	-	-	-	34.6	35.2	35.0	34.3	34.1	32.1	32.6	31.0	29.5	27.3	24.4	22.0	-	45.9		
52.5	-	-	-	27.7	28.2	27.9	27.1	27.7	28.2	27.3	25.7	26.0	24.6	22.9	20.5	-	52.5		
59.1	-	-	-	-	23.1	22.9	23.1	23.1	22.9	22.9	23.3	22.0	20.9	19.4	18.9	-	59.1		
65.6	-	-	-	-	17.8	18.9	19.6	19.1	19.1	19.8	19.8	18.9	17.8	16.5	16.0	-	65.6		
72.2	-	-	-	-	-	16.0	16.5	16.5	16.0	16.7	16.7	16.0	15.2	13.8	13.6	-	72.2		
78.7	-	-	-	-	-	-	14.1	14.9	13.6	14.3	14.1	13.4	13.0	11.9	11.6	-	78.7		
85.3	-	-	-	-	-	-	12.1	13.0	11.6	12.3	12.1	11.4	11.0	10.1	9.9	-	85.3		
91.9	-	-	-	-	-	-	-	11.2	9.9	10.5	10.5	9.7	9.2	8.3	8.3	-	91.9		
98.4	-	-	-	-	-	-	-	9.9	8.5	9.2	9.0	8.3	7.9	7.0	7.0	-	98.4		
105.0	-	-	-	-	-	-	-	-	7.2	7.9	7.7	7.0	6.6	5.7	5.7	-	105.0		
111.5	-	-	-	-	-	-	-	-	6.3	7.0	6.8	6.1	5.5	4.8	4.6	-	111.5		
118.1	-	-	-	-	-	-	-	-	-	6.1	5.7	5.0	4.6	3.7	3.7	-	118.1		
124.7	-	-	-	-	-	-	-	-	-	5.2	5.0	4.4	3.7	2.8	2.8	-	124.7		
131.2	-	-	-	-	-	-	-	-	-	-	4.1	3.5	3.0	2.2	2.2	-	131.2		
137.8	-	-	-	-	-	-	-	-	-	-	3.7	2.8	2.4	1.5	1.5	-	137.8		
144.4	-	-	-	-	-	-	-	-	-	-	-	2.4	1.7	-	-	-	144.4		
150.9	-	-	-	-	-	-	-	-	-	-	-	-	1.1	-	-	-	150.9		

\* over rear

# Operation

HA

44,200 lbs		23.6 ft x 28.0 ft														360°		ASME B30.5	
37.4*		37.4	49.6	61.8	74.0	86.2	98.4	110.6	122.8	135.0	147.2	159.4	171.7	183.9	196.9				
ft		1,000 lbs														ft			
8.2	225.7	177.0	176.3	175.9	175.7	154.3	126.9	-	-	-	-	-	-	-	-	-	8.2		
9.8	200.6	159.1	159.3	159.1	158.2	154.3	126.9	97.2	-	-	-	-	-	-	-	-	9.8		
11.5	171.0	144.1	144.4	145.2	144.8	143.9	126.9	95.0	76.9	-	-	-	-	-	-	-	11.5		
13.1	148.8	131.1	131.1	132.0	131.8	126.7	113.3	91.2	79.1	-	-	-	-	-	-	-	13.1		
14.8	131.3	119.9	120.1	121.0	118.6	107.3	96.7	87.5	76.2	65.9	-	-	-	-	-	-	14.8		
16.4	117.2	110.2	110.4	107.5	101.6	92.5	83.9	80.9	73.6	64.5	51.1	-	-	-	-	-	16.4		
19.7	94.3	91.9	85.7	83.7	78.0	73.4	70.1	65.9	60.8	57.0	52.2	42.3	-	-	-	-	19.7		
23.0	72.5	71.2	69.6	66.5	63.0	61.2	57.3	55.1	50.2	49.6	46.2	41.0	33.2	-	-	-	23.0		
26.2	52.9	52.4	55.5	54.4	54.2	51.1	48.0	46.5	44.9	42.9	40.3	37.9	33.2	26.8	-	-	26.2		
29.5	40.7	40.7	44.3	46.5	45.8	43.6	41.0	40.5	39.0	37.0	36.8	33.2	30.4	26.8	22.0	-	29.5		
32.8	-	-	35.9	37.9	38.5	37.6	36.1	35.2	33.9	33.5	32.1	30.2	28.4	26.4	22.0	-	32.8		
36.1	-	-	29.5	31.5	32.1	31.9	32.6	31.0	29.7	29.7	28.4	26.6	24.9	22.9	22.0	-	36.1		
39.4	-	-	24.9	26.6	27.1	27.1	27.9	27.3	26.4	26.4	25.3	23.5	22.0	20.2	19.4	-	39.4		
45.9	-	-	-	19.8	21.3	20.0	20.9	22.0	20.2	21.1	20.0	18.7	17.4	15.6	15.2	-	45.9		
52.5	-	-	-	15.2	16.5	16.7	16.0	17.1	15.6	16.5	16.3	14.9	13.8	12.3	11.9	-	52.5		
59.1	-	-	-	-	13.2	13.4	12.7	13.6	12.1	13.0	12.7	12.1	11.0	9.7	9.2	-	59.1		
65.6	-	-	-	-	8.1	10.8	10.1	11.0	9.4	10.3	10.1	9.4	8.8	7.4	7.2	-	65.6		
72.2	-	-	-	-	-	8.8	8.1	9.0	7.4	8.3	8.1	7.4	6.8	5.7	5.5	-	72.2		
78.7	-	-	-	-	-	-	6.3	7.2	5.9	6.6	6.6	5.9	5.2	4.1	3.9	-	78.7		
85.3	-	-	-	-	-	-	5.2	5.9	4.6	5.2	5.0	4.4	3.9	3.0	2.8	-	85.3		
91.9	-	-	-	-	-	-	-	4.8	3.5	4.1	3.9	3.3	2.8	1.9	1.7	-	91.9		
98.4	-	-	-	-	-	-	-	3.9	2.6	3.3	3.0	2.4	1.9	1.1	-	-	98.4		
105.0	-	-	-	-	-	-	-	-	1.7	2.4	2.2	1.5	1.1	-	-	-	105.0		
111.5	-	-	-	-	-	-	-	-	1.3	1.7	1.5	-	-	-	-	-	111.5		
118.1	-	-	-	-	-	-	-	-	-	1.3	-	-	-	-	-	-	118.1		

\* over rear

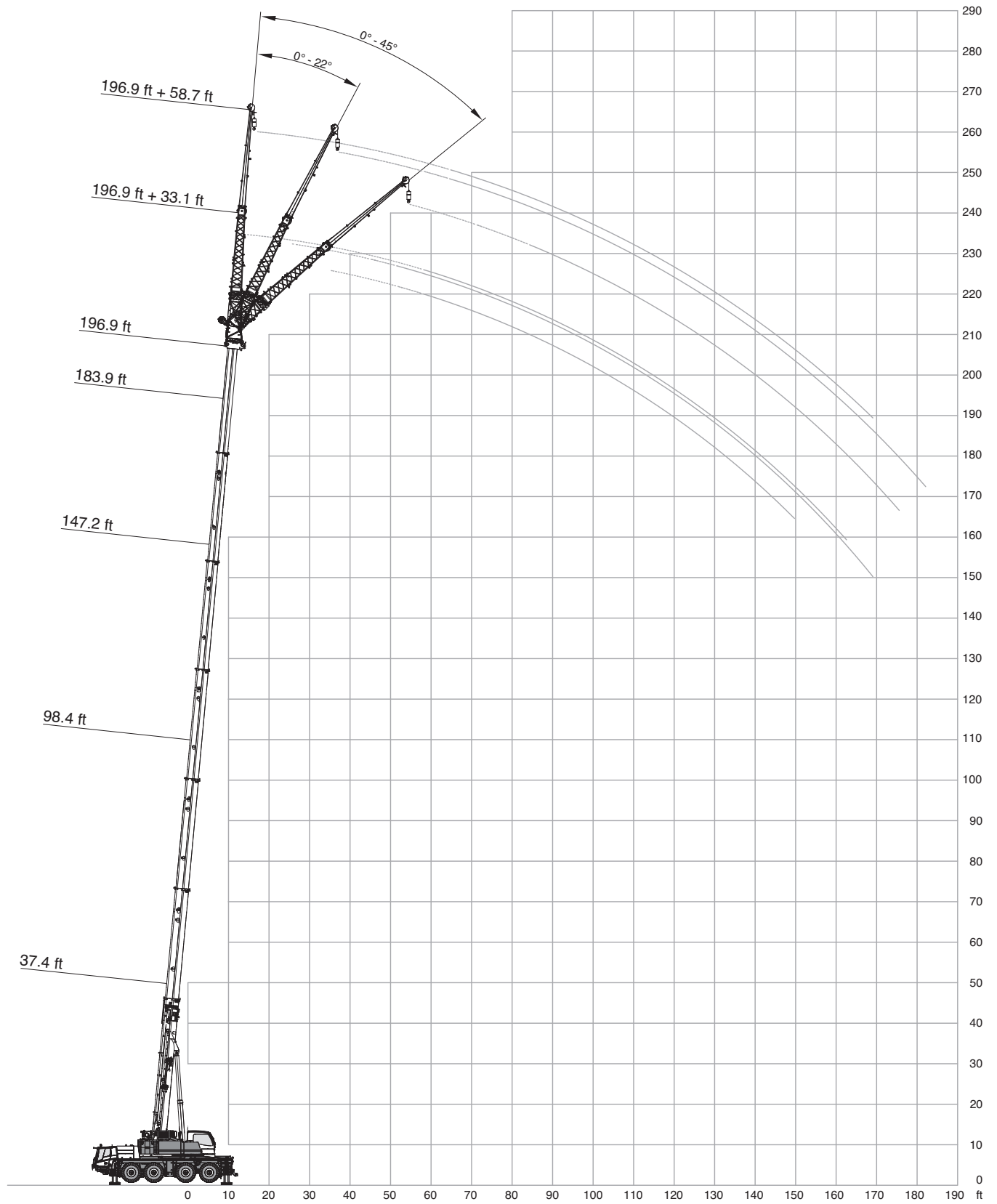
# Operation

HA

40,500 lbs		23.6 ft x 28.0 ft														360°	ASME B30.5
37.4*		37.4	49.6	61.8	74.0	86.2	98.4	110.6	122.8	135.0	147.2	159.4	171.7	183.9	196.9		
ft		1,000 lbs														ft	
8.2	226.8	176.5	175.9	175.4	175.2	154.3	126.9	-	-	-	-	-	-	-	-	8.2	
9.8	197.7	158.7	158.7	158.5	157.8	154.3	126.9	97.2	-	-	-	-	-	-	-	9.8	
11.5	168.6	143.5	143.7	144.6	144.1	139.1	126.9	95.0	76.9	-	-	-	-	-	-	11.5	
13.1	146.6	130.5	130.7	131.6	129.4	119.7	106.7	91.2	79.1	-	-	-	-	-	-	13.1	
14.8	129.4	119.2	119.4	120.1	111.9	101.1	91.0	83.7	76.2	65.9	-	-	-	-	-	14.8	
16.4	115.5	108.9	108.9	104.2	95.6	87.3	83.3	76.0	70.3	64.5	51.1	-	-	-	-	16.4	
19.7	88.4	88.4	83.3	78.7	73.4	71.2	66.1	61.9	57.3	54.6	51.3	42.3	-	-	-	19.7	
23.0	66.3	65.4	65.2	62.3	61.5	57.7	53.7	51.8	49.1	47.3	44.3	39.4	33.2	-	-	23.0	
26.2	48.0	48.0	52.0	52.0	50.9	48.2	44.9	44.0	42.3	40.3	37.6	35.2	32.8	26.8	-	26.2	
29.5	38.1	37.2	40.7	42.9	42.9	41.0	38.8	38.1	36.3	35.7	34.3	32.1	30.2	26.8	22.0	29.5	
32.8	-	-	32.8	34.8	35.4	35.2	34.8	33.0	31.7	31.5	29.9	27.9	26.2	24.0	22.0	32.8	
36.1	-	-	26.8	28.8	29.5	29.3	30.2	28.8	27.5	27.5	26.2	24.4	22.9	20.9	20.0	36.1	
39.4	-	-	22.4	24.4	26.0	24.6	25.5	26.6	24.2	24.2	23.1	21.6	20.0	18.2	17.6	39.4	
45.9	-	-	-	17.8	19.4	19.8	18.9	20.0	18.5	19.1	18.2	16.9	15.6	14.1	13.4	45.9	
52.5	-	-	-	13.6	14.9	15.2	14.5	15.6	14.1	14.9	14.7	13.4	12.3	10.8	10.3	52.5	
59.1	-	-	-	-	11.9	12.1	11.4	12.3	10.8	11.6	11.4	10.8	9.7	8.3	7.9	59.1	
65.6	-	-	-	-	7.0	9.7	8.8	9.7	8.3	9.2	9.0	8.3	7.4	6.3	5.9	65.6	
72.2	-	-	-	-	-	7.7	7.0	7.9	6.3	7.2	7.0	6.3	5.9	4.6	4.4	72.2	
78.7	-	-	-	-	-	-	5.5	6.3	5.0	5.7	5.5	4.8	4.4	3.3	3.0	78.7	
85.3	-	-	-	-	-	-	4.4	5.0	3.7	4.4	4.4	3.5	3.0	2.2	1.9	85.3	
91.9	-	-	-	-	-	-	-	3.9	2.6	3.5	3.3	2.6	1.9	1.1	-	91.9	
98.4	-	-	-	-	-	-	-	3.0	1.9	2.6	2.4	1.7	1.1	-	-	98.4	
105.0	-	-	-	-	-	-	-	-	1.1	1.7	1.5	-	-	-	-	105.0	
111.5	-	-	-	-	-	-	-	-	-	1.1	-	-	-	-	-	111.5	

\* over rear

# Operation



# Operation

67,000 lbs			23.6 ft x 28.0 ft			33.1 ft			360°			ASME B30.5			
37.4 ft		98.4 ft			147.2 ft			183.9 ft			196.9 ft				
0°	22°	45°	0°	22°	45°	0°	22°	45°	0°	22°	45°	0°	22°	45°	
1,000 lbs															
ft														ft	
11.5	-	33.0	-	-	-	-	-	-	-	-	-	-	-	-	11.5
13.1	-	33.0	-	-	-	-	-	-	-	-	-	-	-	-	13.1
14.8	-	33.0	-	-	-	-	-	-	-	-	-	-	-	-	14.8
16.4	-	33.0	-	-	-	-	-	-	-	-	-	-	-	-	16.4
19.7	-	32.8	-	-	33.0	-	-	-	-	-	-	-	-	-	19.7
23.0	-	30.2	20.9	-	32.1	-	-	-	-	-	-	-	-	-	23.0
26.2	33.0	27.7	20.0	-	30.6	-	-	-	-	-	-	-	-	-	26.2
29.5	31.7	25.7	19.1	-	29.5	20.5	-	-	-	-	-	-	-	-	29.5
32.8	28.4	24.2	18.2	-	28.2	20.0	-	15.4	-	-	-	-	-	-	32.8
36.1	25.7	22.7	17.6	-	28.2	19.6	-	15.4	-	-	-	-	-	-	36.1
39.4	23.5	21.3	16.9	-	27.1	19.1	-	15.4	-	-	-	-	-	-	39.4
45.9	20.0	19.4	16.0	-	25.3	18.2	15.4	15.4	15.4	-	12.5	-	-	-	45.9
52.5	17.4	17.8	15.6	31.5	23.8	17.4	15.4	15.4	15.4	-	12.5	-	-	11.2	52.5
59.1	15.2	16.7	-	29.1	22.4	16.7	15.4	15.4	15.4	12.5	12.5	12.5	11.2	11.2	59.1
65.6	-	-	-	25.5	21.1	16.3	15.4	15.4	15.2	12.5	12.5	12.5	11.2	11.2	65.6
72.2	-	-	-	21.6	20.2	15.8	15.4	15.4	14.5	12.5	12.5	12.5	11.2	10.8	72.2
78.7	-	-	-	18.5	18.9	15.4	15.4	15.4	13.8	12.5	12.5	11.9	11.0	10.1	78.7
85.3	-	-	-	15.8	16.9	14.9	14.5	14.5	13.4	11.9	11.9	11.2	10.3	9.7	85.3
91.9	-	-	-	14.3	14.5	14.7	13.6	14.1	13.0	11.2	11.2	10.8	9.7	9.2	91.9
98.4	-	-	-	13.4	12.5	-	12.5	12.7	12.5	10.5	10.5	10.1	9.2	8.8	98.4
105.0	-	-	-	12.5	11.4	-	11.0	11.0	11.6	9.7	9.9	9.7	8.8	8.3	105.0
111.5	-	-	-	11.2	11.0	-	9.7	10.3	10.1	8.3	9.4	9.2	8.1	7.9	111.5
118.1	-	-	-	9.9	-	-	9.0	9.0	9.4	7.2	8.1	8.8	7.0	7.7	118.1
124.7	-	-	-	-	-	-	8.3	8.1	8.1	6.1	7.0	7.4	5.9	6.8	124.7
131.2	-	-	-	-	-	-	7.2	7.7	-	5.2	5.9	6.3	5.0	5.9	131.2
137.8	-	-	-	-	-	-	6.3	6.8	-	4.4	5.0	5.5	4.1	4.8	137.8
144.4	-	-	-	-	-	-	5.7	6.1	-	3.5	4.1	4.6	3.5	3.9	144.4
150.9	-	-	-	-	-	-	5.0	5.2	-	2.8	3.5	-	2.6	3.3	150.9
157.5	-	-	-	-	-	-	4.4	4.6	-	2.2	2.6	-	1.9	2.6	157.5
164.0	-	-	-	-	-	-	3.7	-	-	1.7	2.2	-	1.5	1.9	164.0
170.6	-	-	-	-	-	-	3.3	-	-	1.1	1.5	-	-	1.3	170.6

# Operation

HAV

53,000 lbs			23.6 ft x 28.0 ft			33.1 ft			360°			ASME B30.5					
37.4 ft			98.4 ft			147.2 ft			183.9 ft			196.9 ft					
0°			22°			45°			0°			22°			45°		
ft	1,000 lbs															ft	
11.5	-	33.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.5
13.1	-	33.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.1
14.8	-	33.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.8
16.4	-	33.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.4
19.7	-	32.8	-	-	33.0	-	-	-	-	-	-	-	-	-	-	-	19.7
23.0	-	30.2	20.9	-	32.1	-	-	-	-	-	-	-	-	-	-	-	23.0
26.2	33.0	27.7	20.0	-	30.6	-	-	-	-	-	-	-	-	-	-	-	26.2
29.5	31.7	25.7	19.1	-	29.5	20.5	-	-	-	-	-	-	-	-	-	-	29.5
32.8	28.4	24.2	18.2	-	28.2	20.0	-	15.4	-	-	-	-	-	-	-	-	32.8
36.1	25.7	22.7	17.6	-	28.2	19.6	-	15.4	-	-	-	-	-	-	-	-	36.1
39.4	23.5	21.3	16.9	-	27.1	19.1	-	15.4	-	-	-	-	-	-	-	-	39.4
45.9	20.0	19.4	16.0	-	25.3	18.2	15.4	15.4	15.4	-	12.5	-	-	-	-	-	45.9
52.5	17.4	17.8	15.6	30.2	23.8	17.4	15.4	15.4	15.4	-	12.5	-	-	11.2	-	-	52.5
59.1	15.2	16.7	-	25.5	22.4	16.7	15.4	15.4	15.4	12.5	12.5	12.5	11.2	11.2	11.2	-	59.1
65.6	-	-	-	21.6	20.7	16.3	15.4	15.4	15.2	12.5	12.5	12.5	11.2	11.2	11.0	-	65.6
72.2	-	-	-	18.2	19.6	15.8	15.4	15.4	14.5	12.5	12.5	12.5	11.2	10.8	10.3	-	72.2
78.7	-	-	-	16.3	16.5	15.2	15.4	14.9	13.8	12.5	12.5	11.9	11.0	10.1	9.9	-	78.7
85.3	-	-	-	15.2	14.1	14.7	13.6	13.8	13.4	11.6	11.9	11.2	10.3	9.7	9.4	-	85.3
91.9	-	-	-	13.4	12.5	12.5	11.9	12.3	12.7	9.9	11.2	10.8	9.4	9.2	9.0	-	91.9
98.4	-	-	-	11.6	11.9	-	11.0	11.2	11.0	8.5	9.7	10.1	8.1	8.8	8.5	-	98.4
105.0	-	-	-	10.3	10.8	-	9.9	9.7	10.1	7.2	8.3	9.0	7.0	7.9	8.1	-	105.0
111.5	-	-	-	9.0	9.4	-	8.5	9.0	8.8	6.1	7.0	7.7	5.9	6.8	7.4	-	111.5
118.1	-	-	-	8.3	-	-	7.4	8.1	8.1	5.2	5.9	6.6	4.8	5.7	6.3	-	118.1
124.7	-	-	-	-	-	-	6.3	7.0	7.2	4.1	5.0	5.5	3.9	4.8	5.2	-	124.7
131.2	-	-	-	-	-	-	5.5	5.9	-	3.5	4.1	4.6	3.0	3.9	4.4	-	131.2
137.8	-	-	-	-	-	-	4.8	5.2	-	2.6	3.3	3.7	2.4	3.0	3.5	-	137.8
144.4	-	-	-	-	-	-	4.1	4.4	-	1.9	2.6	2.8	1.7	2.4	2.8	-	144.4
150.9	-	-	-	-	-	-	3.5	3.7	-	1.3	1.9	-	1.1	1.7	2.2	-	150.9
157.5	-	-	-	-	-	-	2.8	3.0	-	-	1.3	-	-	1.1	-	-	157.5
164.0	-	-	-	-	-	-	2.4	-	-	-	-	-	-	-	-	-	164.0
170.6	-	-	-	-	-	-	1.9	-	-	-	-	-	-	-	-	-	170.6



# Operation

40,500 lbs		23.6 ft x 28.0 ft						33.1 ft			360°			ASME B30.5		
37.4 ft		98.4 ft			147.2 ft			183.9 ft			196.9 ft					
0° 22° 45°		0° 22° 45°			0° 22° 45°			0° 22° 45°			0° 22° 45°					
ft	1,000 lbs															ft
11.5	-	33.0	-	-	-	-	-	-	-	-	-	-	-	-	-	11.5
13.1	-	33.0	-	-	-	-	-	-	-	-	-	-	-	-	-	13.1
14.8	-	33.0	-	-	-	-	-	-	-	-	-	-	-	-	-	14.8
16.4	-	33.0	-	-	-	-	-	-	-	-	-	-	-	-	-	16.4
19.7	-	32.8	-	-	33.0	-	-	-	-	-	-	-	-	-	-	19.7
23.0	-	30.2	20.9	-	32.1	-	-	-	-	-	-	-	-	-	-	23.0
26.2	33.0	27.7	20.0	-	30.6	-	-	-	-	-	-	-	-	-	-	26.2
29.5	31.7	25.7	19.1	-	29.5	20.5	-	-	-	-	-	-	-	-	-	29.5
32.8	28.4	24.2	18.2	-	28.2	20.0	-	15.4	-	-	-	-	-	-	-	32.8
36.1	25.7	22.7	17.6	-	28.2	19.6	-	15.4	-	-	-	-	-	-	-	36.1
39.4	23.5	21.3	16.9	-	27.1	19.1	-	15.4	-	-	-	-	-	-	-	39.4
45.9	20.0	19.4	16.0	-	25.3	18.2	15.4	15.4	15.4	-	12.5	-	-	-	-	45.9
52.5	17.4	17.8	15.6	25.5	23.8	17.4	15.4	15.4	15.4	-	12.5	-	-	11.2	-	52.5
59.1	15.2	16.7	-	21.3	21.8	16.7	15.4	15.4	15.4	12.5	12.5	12.5	11.2	11.2	11.2	59.1
65.6	-	-	-	19.1	19.1	16.3	15.4	15.4	15.2	12.5	12.5	12.5	11.2	11.2	11.0	65.6
72.2	-	-	-	16.9	16.0	15.6	14.7	14.9	14.5	12.5	12.5	12.5	11.2	10.8	10.3	72.2
78.7	-	-	-	14.3	13.8	14.1	13.6	13.8	13.8	10.5	12.1	11.9	10.1	10.1	9.9	78.7
85.3	-	-	-	12.3	13.0	12.1	12.1	11.9	12.1	8.8	10.1	11.2	8.5	9.7	9.4	85.3
91.9	-	-	-	10.5	11.2	11.4	10.3	10.5	11.0	7.4	8.5	9.7	7.0	8.3	9.0	91.9
98.4	-	-	-	9.4	9.7	-	8.8	9.7	9.4	6.1	7.2	8.1	5.7	7.0	7.9	98.4
105.0	-	-	-	8.3	8.8	-	7.4	8.3	8.8	5.0	6.1	6.8	4.6	5.7	6.6	105.0
111.5	-	-	-	7.2	7.4	-	6.3	7.0	7.4	3.9	5.0	5.7	3.7	4.6	5.5	111.5
118.1	-	-	-	6.6	-	-	5.5	6.1	6.3	3.0	3.9	4.6	2.8	3.7	4.4	118.1
124.7	-	-	-	-	-	-	4.6	5.2	5.5	2.4	3.0	3.7	1.9	2.8	3.5	124.7
131.2	-	-	-	-	-	-	3.9	4.4	-	1.7	2.4	2.8	1.3	2.2	2.6	131.2
137.8	-	-	-	-	-	-	3.3	3.5	-	1.1	1.5	1.9	-	1.3	1.7	137.8
144.4	-	-	-	-	-	-	2.6	2.8	-	1.1	1.3	-	-	-	1.1	144.4
150.9	-	-	-	-	-	-	1.9	2.4	-	-	-	-	-	-	-	150.9
157.5	-	-	-	-	-	-	1.5	1.7	-	-	-	-	-	-	-	157.5
164.0	-	-	-	-	-	-	1.1	-	-	-	-	-	-	-	-	164.0

10,600 lbs		23.6 ft x 28.0 ft						33.1 ft			360°			ASME B30.5		
37.4 ft		98.4 ft			147.2 ft			183.9 ft			196.9 ft					
0° 22° 45°		0° 22° 45°			0° 22° 45°			0° 22° 45°			0° 22° 45°					
ft	1,000 lbs															ft
11.5	-	33.0	-	-	-	-	-	-	-	-	-	-	-	-	-	11.5
13.1	-	33.0	-	-	-	-	-	-	-	-	-	-	-	-	-	13.1
14.8	-	33.0	-	-	-	-	-	-	-	-	-	-	-	-	-	14.8
16.4	-	33.0	-	-	-	-	-	-	-	-	-	-	-	-	-	16.4
19.7	-	32.8	-	-	33.0	-	-	-	-	-	-	-	-	-	-	19.7
23.0	-	30.2	20.9	-	32.1	-	-	-	-	-	-	-	-	-	-	23.0
26.2	33.0	27.7	20.0	-	30.6	-	-	-	-	-	-	-	-	-	-	26.2
29.5	31.7	25.7	19.1	-	29.5	20.5	-	-	-	-	-	-	-	-	-	29.5
32.8	28.4	24.2	18.2	-	28.2	20.0	-	15.4	-	-	-	-	-	-	-	32.8
36.1	25.7	22.7	17.6	-	27.3	19.6	-	15.4	-	-	-	-	-	-	-	36.1
39.4	23.5	21.3	16.9	-	26.2	19.1	-	15.4	-	-	-	-	-	-	-	39.4
45.9	20.0	19.4	16.0	-	20.9	18.2	15.4	15.4	15.4	-	12.5	-	-	-	-	45.9
52.5	17.4	17.8	15.6	16.9	17.8	17.4	14.7	15.4	15.4	-	12.5	-	-	11.2	-	52.5
59.1	14.3	14.7	-	13.8	14.7	14.5	11.9	13.6	14.1	8.3	10.3	12.1	7.7	9.9	11.2	59.1
65.6	-	-	-	11.6	12.1	12.7	9.7	11.2	12.5	6.3	8.1	9.7	5.9	7.7	9.2	65.6
72.2	-	-	-	9.4	10.5	10.5	7.9	9.2	10.3	4.6	6.1	7.7	4.1	5.9	7.2	72.2
78.7	-	-	-	7.9	8.5	9.2	6.3	7.4	8.3	3.3	4.6	5.9	2.8	4.4	5.7	78.7
85.3	-	-	-	6.3	7.2	7.7	5.0	5.9	6.8	1.9	3.3	4.4	1.7	3.0	4.1	85.3
91.9	-	-	-	5.2	5.9	6.3	3.9	4.8	5.5	1.1	2.2	3.3	-	1.9	2.8	91.9
98.4	-	-	-	4.4	4.8	-	2.8	3.7	4.1	-	1.3	2.2	-	-	1.9	98.4
105.0	-	-	-	3.5	3.9	-	1.9	2.8	3.3	-	-	1.1	-	-	-	105.0
111.5	-	-	-	2.8	3.0	-	1.3	1.9	2.4	-	-	-	-	-	-	111.5
118.1	-	-	-	2.2	-	-	-	1.3	1.5	-	-	-	-	-	-	118.1

# Operation

HAV

67,000 lbs			23.6 ft x 28.0 ft			58.7 ft			360°			ASME B30.5			
37.4 ft		98.4 ft			147.2 ft			183.9 ft			196.9 ft				
0°	22°	45°	0°	22°	45°	0°	22°	45°	0°	22°	45°	0°	22°	45°	
1,000 lbs															
ft														ft	
14.8	14.5	-	-	-	-	-	-	-	-	-	-	-	-	-	14.8
16.4	13.8	-	-	-	-	-	-	-	-	-	-	-	-	-	16.4
19.7	12.7	-	-	-	-	-	-	-	-	-	-	-	-	-	19.7
23.0	11.6	-	-	-	-	-	-	-	-	-	-	-	-	-	23.0
26.2	10.8	8.3	-	12.3	-	-	-	-	-	-	-	-	-	-	26.2
29.5	10.1	7.7	-	11.9	-	-	-	-	-	-	-	-	-	-	29.5
32.8	9.4	7.2	-	11.4	7.4	-	-	-	-	-	-	-	-	-	32.8
36.1	8.8	7.0	-	11.0	7.4	-	8.5	-	-	-	-	-	-	-	36.1
39.4	8.3	6.6	-	10.8	7.2	-	8.5	-	-	-	-	-	-	-	39.4
45.9	7.2	5.9	5.2	9.9	6.8	-	8.5	6.3	-	7.7	-	-	7.2	-	45.9
52.5	6.6	5.5	4.8	9.0	6.3	5.0	8.5	6.1	-	7.7	-	-	7.0	-	52.5
59.1	5.9	5.2	4.6	8.3	5.9	4.8	8.3	5.9	-	7.4	5.5	-	7.0	-	59.1
65.6	5.5	4.8	4.4	7.7	5.7	4.8	7.9	5.7	4.6	7.2	5.2	-	6.8	5.2	65.6
72.2	5.0	4.6	4.4	7.2	5.5	4.6	7.4	5.5	4.4	6.8	5.0	-	6.6	5.0	72.2
78.7	4.8	4.4	4.4	6.8	5.2	4.4	7.0	5.2	4.4	6.6	5.0	4.1	6.3	4.8	78.7
85.3	4.6	4.4	-	6.3	5.0	4.4	6.8	5.0	4.1	6.3	4.8	4.1	6.1	4.8	85.3
91.9	-	-	-	5.9	4.8	4.1	6.3	4.8	4.1	6.1	4.6	3.9	5.9	4.6	91.9
98.4	-	-	-	5.7	4.6	4.1	6.1	4.6	4.1	5.9	4.6	3.9	5.7	4.4	98.4
105.0	-	-	-	5.5	4.4	4.1	5.9	4.6	3.9	5.7	4.4	3.9	5.7	4.4	105.0
111.5	-	-	-	5.2	4.4	4.1	5.7	4.4	3.9	5.5	4.4	3.7	5.5	4.1	111.5
118.1	-	-	-	5.0	4.1	3.9	5.5	4.4	3.9	5.2	4.1	3.7	5.2	4.1	118.1
124.7	-	-	-	4.8	4.1	-	5.2	4.1	3.7	5.0	4.1	3.7	5.0	3.9	124.7
131.2	-	-	-	4.6	4.1	-	5.0	4.1	3.7	5.0	3.9	3.7	5.0	3.9	131.2
137.8	-	-	-	4.4	3.9	-	4.8	3.9	3.7	4.8	3.9	3.5	4.6	3.9	137.8
144.4	-	-	-	4.4	-	-	4.6	3.9	3.7	4.1	3.7	3.5	3.9	3.7	144.4
150.9	-	-	-	-	-	-	4.6	3.9	3.7	3.5	3.7	3.5	3.3	3.7	150.9
157.5	-	-	-	-	-	-	4.4	3.7	-	2.8	3.7	3.5	2.6	3.5	157.5
164.0	-	-	-	-	-	-	4.1	3.7	-	2.2	3.0	3.5	1.9	2.8	164.0
170.6	-	-	-	-	-	-	3.7	3.7	-	1.7	2.4	2.8	1.5	2.4	170.6
177.2	-	-	-	-	-	-	3.3	3.5	-	1.1	1.9	-	-	1.7	177.2
183.7	-	-	-	-	-	-	2.8	3.0	-	-	1.3	-	-	1.3	183.7
190.3	-	-	-	-	-	-	2.4	-	-	-	-	-	-	-	190.3
196.9	-	-	-	-	-	-	1.9	-	-	-	-	-	-	-	196.9

# Operation

53,000 lbs			23.6 ft x 28.0 ft			58.7 ft			360°			ASME B30.5			
37.4 ft		98.4 ft			147.2 ft			183.9 ft			196.9 ft				
0°	22°	45°	0°	22°	45°	0°	22°	45°	0°	22°	45°	0°	22°	45°	
1,000 lbs															
ft														ft	
14.8	14.5	-	-	-	-	-	-	-	-	-	-	-	-	-	14.8
16.4	13.8	-	-	-	-	-	-	-	-	-	-	-	-	-	16.4
19.7	12.7	-	-	-	-	-	-	-	-	-	-	-	-	-	19.7
23.0	11.6	-	-	-	-	-	-	-	-	-	-	-	-	-	23.0
26.2	10.8	8.3	-	12.3	-	-	-	-	-	-	-	-	-	-	26.2
29.5	10.1	7.7	-	11.9	-	-	-	-	-	-	-	-	-	-	29.5
32.8	9.4	7.2	-	11.4	7.4	-	-	-	-	-	-	-	-	-	32.8
36.1	8.8	7.0	-	11.0	7.4	-	8.5	-	-	-	-	-	-	-	36.1
39.4	8.3	6.6	-	10.8	7.2	-	8.5	-	-	-	-	-	-	-	39.4
45.9	7.2	5.9	5.2	9.9	6.8	-	8.5	6.3	-	7.7	-	-	7.2	-	45.9
52.5	6.6	5.5	4.8	9.0	6.3	5.0	8.5	6.1	-	7.7	-	-	7.0	-	52.5
59.1	5.9	5.2	4.6	8.3	5.9	4.8	8.3	5.9	-	7.4	5.5	-	7.0	-	59.1
65.6	5.5	4.8	4.4	7.7	5.7	4.8	7.9	5.7	4.6	7.2	5.2	-	6.8	5.2	65.6
72.2	5.0	4.6	4.4	7.2	5.5	4.6	7.4	5.5	4.4	6.8	5.0	-	6.6	5.0	72.2
78.7	4.8	4.4	4.4	6.8	5.2	4.4	7.0	5.2	4.4	6.6	5.0	4.1	6.3	4.8	78.7
85.3	4.6	4.4	-	6.3	5.0	4.4	6.8	5.0	4.1	6.3	4.8	4.1	6.1	4.8	85.3
91.9	-	-	-	5.9	4.8	4.1	6.3	4.8	4.1	6.1	4.6	3.9	5.9	4.6	91.9
98.4	-	-	-	5.7	4.6	4.1	6.1	4.6	4.1	5.9	4.6	3.9	5.7	4.4	98.4
105.0	-	-	-	5.5	4.4	4.1	5.9	4.6	3.9	5.7	4.4	3.9	5.7	4.4	105.0
111.5	-	-	-	5.2	4.4	4.1	5.7	4.4	3.9	5.5	4.4	3.7	5.5	4.1	111.5
118.1	-	-	-	5.0	4.1	3.9	5.5	4.4	3.9	5.2	4.1	3.7	5.2	4.1	118.1
124.7	-	-	-	4.8	4.1	-	5.2	4.1	3.7	4.6	4.1	3.7	4.4	3.9	124.7
131.2	-	-	-	4.6	4.1	-	5.0	4.1	3.7	3.9	3.9	3.7	3.5	3.9	131.2
137.8	-	-	-	4.4	3.9	-	4.8	3.9	3.7	3.0	3.9	3.5	2.8	3.9	137.8
144.4	-	-	-	4.4	-	-	4.6	3.9	3.7	2.4	3.7	3.5	2.2	3.3	144.4
150.9	-	-	-	-	-	-	3.9	3.7	3.7	1.9	2.8	3.5	1.5	2.6	150.9
157.5	-	-	-	-	-	-	3.3	3.7	-	1.3	2.2	2.8	1.1	1.9	157.5
164.0	-	-	-	-	-	-	2.8	3.5	-	-	1.7	2.2	-	1.5	164.0
170.6	-	-	-	-	-	-	2.4	2.8	-	-	1.1	1.5	-	-	170.6
177.2	-	-	-	-	-	-	1.9	2.4	-	-	-	-	-	-	177.2
183.7	-	-	-	-	-	-	1.5	1.7	-	-	-	-	-	-	183.7
190.3	-	-	-	-	-	-	1.1	-	-	-	-	-	-	-	190.3

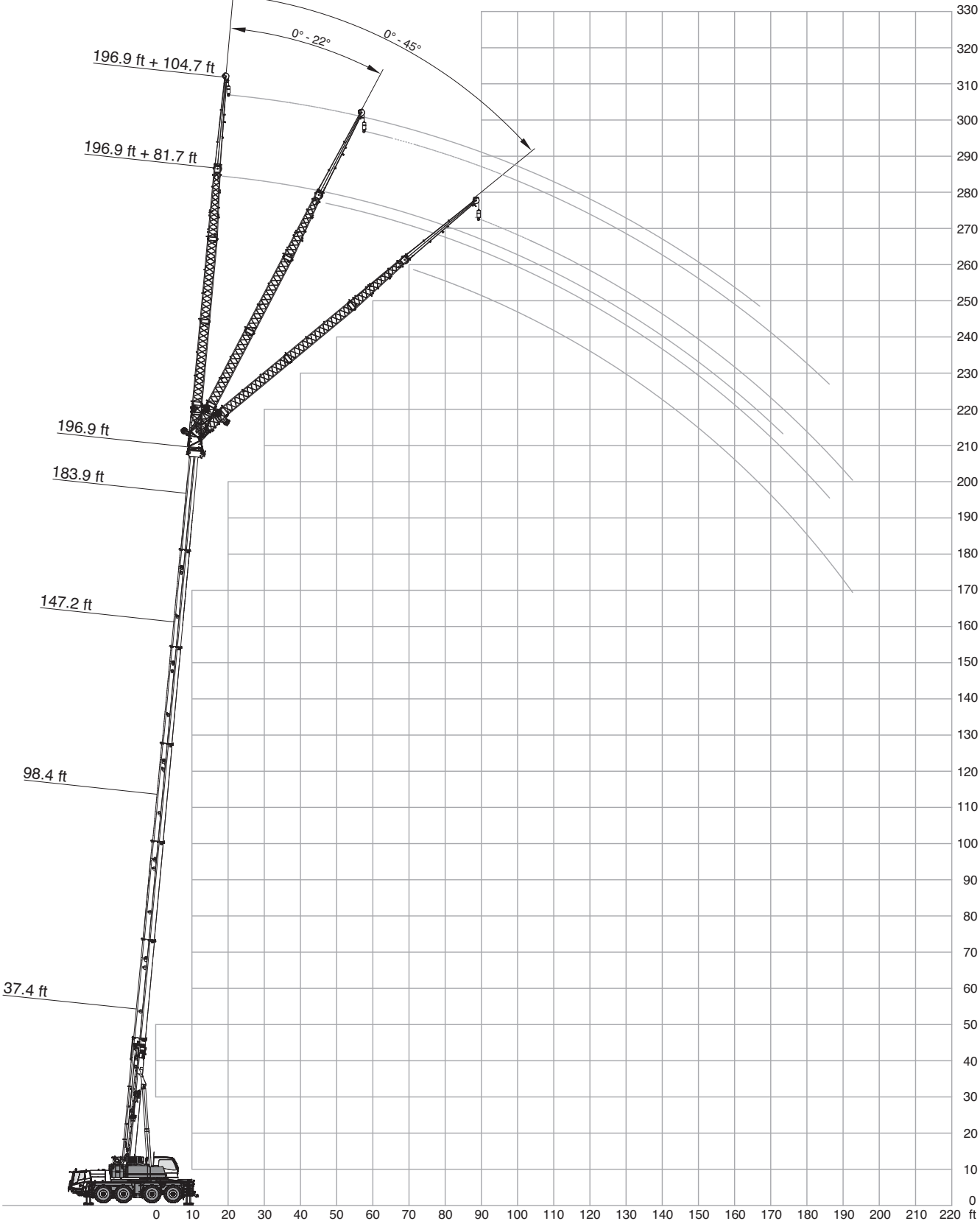
# Operation

HAV

40,500 lbs			23.6 ft x 28.0 ft			58.7 ft			360°			ASME B30.5		
37.4 ft		98.4 ft			147.2 ft			183.9 ft			196.9 ft			
0°	22°	45°	0°	22°	45°	0°	22°	45°	0°	22°	45°	0°	22°	45°
1,000 lbs														
ft														ft
14.8	14.5	-	-	-	-	-	-	-	-	-	-	-	-	14.8
16.4	13.8	-	-	-	-	-	-	-	-	-	-	-	-	16.4
19.7	12.7	-	-	-	-	-	-	-	-	-	-	-	-	19.7
23.0	11.6	-	-	-	-	-	-	-	-	-	-	-	-	23.0
26.2	10.8	8.3	-	12.3	-	-	-	-	-	-	-	-	-	26.2
29.5	10.1	7.7	-	11.9	-	-	-	-	-	-	-	-	-	29.5
32.8	9.4	7.2	-	11.4	7.4	-	-	-	-	-	-	-	-	32.8
36.1	8.8	7.0	-	11.0	7.4	-	8.5	-	-	-	-	-	-	36.1
39.4	8.3	6.6	-	10.8	7.2	-	8.5	-	-	-	-	-	-	39.4
45.9	7.2	5.9	5.2	9.9	6.8	-	8.5	6.3	-	-	-	7.2	-	45.9
52.5	6.6	5.5	4.8	9.0	6.3	5.0	8.5	6.1	-	-	-	7.0	-	52.5
59.1	5.9	5.2	4.6	8.3	5.9	4.8	8.3	5.9	-	5.5	-	7.0	-	59.1
65.6	5.5	4.8	4.4	7.7	5.7	4.8	7.9	5.7	4.6	5.2	-	6.8	5.2	65.6
72.2	5.0	4.6	4.4	7.2	5.5	4.6	7.4	5.5	4.4	5.0	-	6.6	5.0	72.2
78.7	4.8	4.4	4.4	6.8	5.2	4.4	7.0	5.2	4.4	5.0	4.1	6.3	4.8	78.7
85.3	4.6	4.4	-	6.3	5.0	4.4	6.8	5.0	4.1	4.8	4.1	6.1	4.8	85.3
91.9	-	-	-	5.9	4.8	4.1	6.3	4.8	4.1	4.6	3.9	5.9	4.6	91.9
98.4	-	-	-	5.7	4.6	4.1	6.1	4.6	4.1	4.6	3.9	5.7	4.4	98.4
105.0	-	-	-	5.2	4.4	4.1	5.9	4.6	3.9	4.4	3.9	5.0	4.4	105.0
111.5	-	-	-	5.0	4.4	4.1	5.5	4.4	3.9	4.4	3.7	4.1	4.1	111.5
118.1	-	-	-	4.8	4.1	3.9	5.2	4.4	3.9	4.1	3.7	3.3	4.1	118.1
124.7	-	-	-	4.6	4.1	-	5.0	4.1	3.7	4.1	3.7	2.4	3.9	124.7
131.2	-	-	-	4.6	4.1	-	4.4	3.9	3.7	3.5	3.7	1.7	3.0	131.2
137.8	-	-	-	4.4	3.9	-	3.7	3.9	3.7	2.6	3.5	1.1	2.4	137.8
144.4	-	-	-	4.4	-	-	3.0	3.7	3.7	1.9	2.8	-	1.7	144.4
150.9	-	-	-	-	-	-	2.6	3.3	2.8	1.3	2.2	-	1.1	150.9
157.5	-	-	-	-	-	-	1.9	2.6	-	-	1.5	-	-	157.5
164.0	-	-	-	-	-	-	1.5	2.2	-	-	-	-	-	164.0
170.6	-	-	-	-	-	-	1.1	1.5	-	-	-	-	-	170.6
177.2	-	-	-	-	-	-	-	1.1	-	-	-	-	-	177.2

# Operation

10,600 lbs		23.6 ft x 28.0 ft						58.7 ft						360°			ASME B30.5						
37.4 ft		98.4 ft						147.2 ft						183.9 ft			196.9 ft						
0°		22°		45°		0°		22°		45°		0°		22°		45°		0°		22°		45°	
ft	1,000 lbs																						ft
14.8	14.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.8
16.4	13.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.4
19.7	12.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.7
23.0	11.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.0
26.2	10.8	8.3	-	12.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26.2
29.5	10.1	7.7	-	11.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29.5
32.8	9.4	7.2	-	11.4	7.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32.8
36.1	8.8	7.0	-	11.0	7.4	-	8.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36.1
39.4	8.3	6.6	-	10.8	7.2	-	8.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39.4
45.9	7.2	5.9	5.2	9.9	6.8	-	8.5	6.3	-	7.7	-	-	7.2	-	-	-	-	-	-	-	-	-	45.9
52.5	6.6	5.5	4.8	9.0	6.3	5.0	8.5	6.1	-	7.7	-	-	7.0	-	-	-	-	-	-	-	-	-	52.5
59.1	5.9	5.2	4.6	8.3	5.9	4.8	8.3	5.9	-	7.4	5.5	-	7.0	-	-	-	-	-	-	-	-	-	59.1
65.6	5.5	4.8	4.4	7.7	5.7	4.8	7.7	5.7	4.6	6.6	5.2	-	6.1	5.2	-	-	-	-	-	-	-	-	65.6
72.2	5.0	4.6	4.4	7.0	5.5	4.6	7.0	5.5	4.4	5.0	5.0	-	4.6	5.0	-	-	-	-	-	-	-	-	72.2
78.7	4.8	4.4	4.4	6.6	5.2	4.4	6.6	5.2	4.4	3.7	5.0	4.1	3.3	4.8	-	-	-	-	-	-	-	-	78.7
85.3	4.6	4.4	-	6.1	4.8	4.4	5.5	5.0	4.1	2.6	4.8	4.1	2.2	4.6	4.1	-	-	-	-	-	-	-	85.3
91.9	-	-	-	5.7	4.8	4.1	4.4	4.8	4.1	1.5	3.7	3.9	1.1	3.3	3.9	-	-	-	-	-	-	-	91.9
98.4	-	-	-	5.2	4.6	4.1	3.5	4.6	4.1	-	2.6	3.9	-	2.4	3.9	-	-	-	-	-	-	-	98.4
105.0	-	-	-	4.4	4.4	3.9	2.6	3.9	3.9	-	1.7	3.3	-	1.3	3.0	-	-	-	-	-	-	-	105.0
111.5	-	-	-	3.7	4.1	3.9	1.9	3.0	3.9	-	-	2.2	-	-	1.9	-	-	-	-	-	-	-	111.5
118.1	-	-	-	3.0	3.7	3.9	1.3	2.4	3.0	-	-	1.3	-	-	1.1	-	-	-	-	-	-	-	118.1
124.7	-	-	-	2.4	3.0	-	-	1.7	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	124.7
131.2	-	-	-	1.9	2.4	-	-	1.1	1.7	-	-	-	-	-	-	-	-	-	-	-	-	-	131.2
137.8	-	-	-	1.5	1.7	-	-	-	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	137.8
144.4	-	-	-	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	144.4



# Operation

HAV-VA

67,000 lbs			23.6 ft x 28.0 ft			81.7 ft			360°			ASME B30.5					
37.4 ft		98.4 ft			147.2 ft			183.9 ft			196.9 ft						
0°		22°		45°		0°		22°		45°		0°		22°		45°	
ft	1,000 lbs																ft
19.7	11.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.7
23.0	11.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.0
26.2	10.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26.2
29.5	10.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29.5
32.8	9.9	-	-	9.4	-	-	-	-	-	-	-	-	-	-	-	-	32.8
36.1	9.4	7.9	-	9.4	-	-	-	-	-	-	-	-	-	-	-	-	36.1
39.4	9.0	7.4	-	9.4	-	-	6.6	-	-	-	-	-	-	-	-	-	39.4
45.9	8.1	6.8	-	9.2	-	-	6.8	-	-	5.2	-	-	-	-	-	-	45.9
52.5	7.4	6.3	-	8.8	6.6	-	6.8	-	-	5.2	-	-	4.8	-	-	-	52.5
59.1	6.8	5.9	-	8.1	6.1	-	6.8	-	-	5.2	-	-	4.8	-	-	-	59.1
65.6	6.3	5.5	5.0	7.7	5.9	-	6.8	5.7	-	5.2	-	-	4.8	-	-	-	65.6
72.2	5.9	5.2	4.8	7.2	5.7	4.8	6.8	5.5	-	5.2	-	-	4.8	-	-	-	72.2
78.7	5.7	5.0	4.6	7.0	5.5	4.8	6.6	5.2	-	5.2	4.8	-	4.8	-	-	-	78.7
85.3	5.0	4.8	4.4	6.6	5.2	4.6	6.3	5.0	-	5.2	4.8	-	4.8	4.6	-	-	85.3
91.9	4.6	4.6	4.4	6.3	5.0	4.4	6.1	4.8	4.4	5.2	4.6	-	4.8	4.6	-	-	91.9
98.4	4.1	4.4	4.4	5.9	4.8	4.4	5.9	4.8	4.1	5.2	4.4	-	4.8	4.4	-	-	98.4
105.0	3.9	4.4	-	5.7	4.8	4.4	5.7	4.6	4.1	5.2	4.4	3.9	4.8	4.4	-	-	105.0
111.5	-	-	-	5.5	4.6	4.1	5.7	4.6	4.1	5.2	4.1	3.9	4.8	4.1	3.7	-	111.5
118.1	-	-	-	5.2	4.4	4.1	5.5	4.4	3.9	5.0	4.1	3.7	4.8	4.1	3.7	-	118.1
124.7	-	-	-	5.0	4.4	4.1	5.2	4.4	3.9	5.0	4.1	3.7	4.8	3.9	3.7	-	124.7
131.2	-	-	-	4.8	4.1	3.9	5.0	4.1	3.9	4.8	3.9	3.7	4.6	3.9	3.7	-	131.2
137.8	-	-	-	4.6	4.1	3.9	4.8	4.1	3.7	4.6	3.9	3.7	4.6	3.9	3.5	-	137.8
144.4	-	-	-	4.4	4.1	-	4.8	3.9	3.7	4.1	3.7	3.5	3.9	3.7	3.5	-	144.4
150.9	-	-	-	4.1	3.9	-	4.6	3.9	3.7	3.5	3.7	3.5	3.3	3.7	3.5	-	150.9
157.5	-	-	-	3.9	3.9	-	4.1	3.9	3.7	2.8	3.7	3.5	2.6	3.7	3.5	-	157.5
164.0	-	-	-	3.7	3.9	-	3.9	3.7	3.7	2.4	3.7	3.5	1.9	3.5	3.3	-	164.0
170.6	-	-	-	3.5	-	-	3.7	3.7	3.7	1.7	3.0	3.5	1.5	2.8	3.3	-	170.6
177.2	-	-	-	-	-	-	3.3	3.3	-	1.3	2.4	3.3	1.1	2.2	3.0	-	177.2
183.7	-	-	-	-	-	-	2.8	3.0	-	-	1.7	2.6	-	1.7	2.4	-	183.7
190.3	-	-	-	-	-	-	2.4	2.8	-	-	1.3	1.9	-	1.1	1.9	-	190.3
196.9	-	-	-	-	-	-	1.9	2.4	-	-	-	-	-	-	1.3	-	196.9
210.0	-	-	-	-	-	-	1.3	-	-	-	-	-	-	-	-	-	210.0

# Operation

HAV-VA

53,000 lbs			23.6 ft x 28.0 ft			81.7 ft			360°			ASME B30.5						
37.4 ft		98.4 ft			147.2 ft			183.9 ft			196.9 ft							
0°		22°		45°		0°		22°		45°		0°		22°		45°		
ft		1,000 lbs															ft	
19.7	11.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.7
23.0	11.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.0
26.2	10.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26.2
29.5	10.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29.5
32.8	9.9	-	-	9.4	-	-	-	-	-	-	-	-	-	-	-	-	-	32.8
36.1	9.4	7.9	-	9.4	-	-	-	-	-	-	-	-	-	-	-	-	-	36.1
39.4	9.0	7.4	-	9.4	-	-	6.6	-	-	-	-	-	-	-	-	-	-	39.4
45.9	8.1	6.8	-	9.2	-	-	6.8	-	-	5.2	-	-	-	-	-	-	-	45.9
52.5	7.4	6.3	-	8.8	6.6	-	6.8	-	-	5.2	-	-	4.8	-	-	-	-	52.5
59.1	6.8	5.9	-	8.1	6.1	-	6.8	-	-	5.2	-	-	4.8	-	-	-	-	59.1
65.6	6.3	5.5	5.0	7.7	5.9	-	6.8	5.7	-	5.2	-	-	4.8	-	-	-	-	65.6
72.2	5.9	5.2	4.8	7.2	5.7	4.8	6.8	5.5	-	5.2	-	-	4.8	-	-	-	-	72.2
78.7	5.7	5.0	4.6	7.0	5.5	4.8	6.6	5.2	-	5.2	4.8	-	4.8	-	-	-	-	78.7
85.3	5.0	4.8	4.4	6.6	5.2	4.6	6.3	5.0	-	5.2	4.8	-	4.8	4.6	-	-	-	85.3
91.9	4.6	4.6	4.4	6.3	5.0	4.4	6.1	4.8	4.4	5.2	4.6	-	4.8	4.6	-	-	-	91.9
98.4	4.1	4.4	4.4	5.9	4.8	4.4	5.9	4.8	4.1	5.2	4.4	-	4.8	4.4	-	-	-	98.4
105.0	3.9	4.4	-	5.7	4.8	4.4	5.7	4.6	4.1	5.2	4.4	3.9	4.8	4.4	-	-	-	105.0
111.5	-	-	-	5.5	4.6	4.1	5.7	4.6	4.1	5.2	4.1	3.9	4.8	4.1	3.7	-	-	111.5
118.1	-	-	-	5.2	4.4	4.1	5.5	4.4	3.9	5.0	4.1	3.7	4.8	4.1	3.7	-	-	118.1
124.7	-	-	-	5.0	4.4	4.1	5.2	4.4	3.9	4.6	4.1	3.7	4.1	3.9	3.7	-	-	124.7
131.2	-	-	-	4.8	4.1	3.9	5.0	4.1	3.9	3.9	3.9	3.7	3.5	3.9	3.7	-	-	131.2
137.8	-	-	-	4.6	4.1	3.9	4.6	4.1	3.7	3.0	3.9	3.7	2.8	3.9	3.5	-	-	137.8
144.4	-	-	-	4.4	4.1	-	4.6	3.9	3.7	2.4	3.7	3.5	2.2	3.7	3.5	-	-	144.4
150.9	-	-	-	4.1	3.9	-	4.1	3.9	3.7	1.9	3.5	3.5	1.5	3.0	3.5	-	-	150.9
157.5	-	-	-	3.9	3.9	-	3.5	3.7	3.7	1.3	2.8	3.5	1.1	2.4	3.5	-	-	157.5
164.0	-	-	-	3.7	3.9	-	2.8	3.7	3.5	-	2.2	3.0	-	1.7	2.8	-	-	164.0
170.6	-	-	-	3.5	-	-	2.4	3.3	3.3	-	1.5	2.4	-	1.3	2.2	-	-	170.6
177.2	-	-	-	-	-	-	1.9	2.8	-	-	1.1	1.9	-	-	1.7	-	-	177.2
183.7	-	-	-	-	-	-	1.5	2.2	-	-	-	1.3	-	-	1.1	-	-	183.7
190.3	-	-	-	-	-	-	1.1	1.7	-	-	-	-	-	-	-	-	-	190.3
196.9	-	-	-	-	-	-	-	1.3	-	-	-	-	-	-	-	-	-	196.9



# Operation

HAV-VA

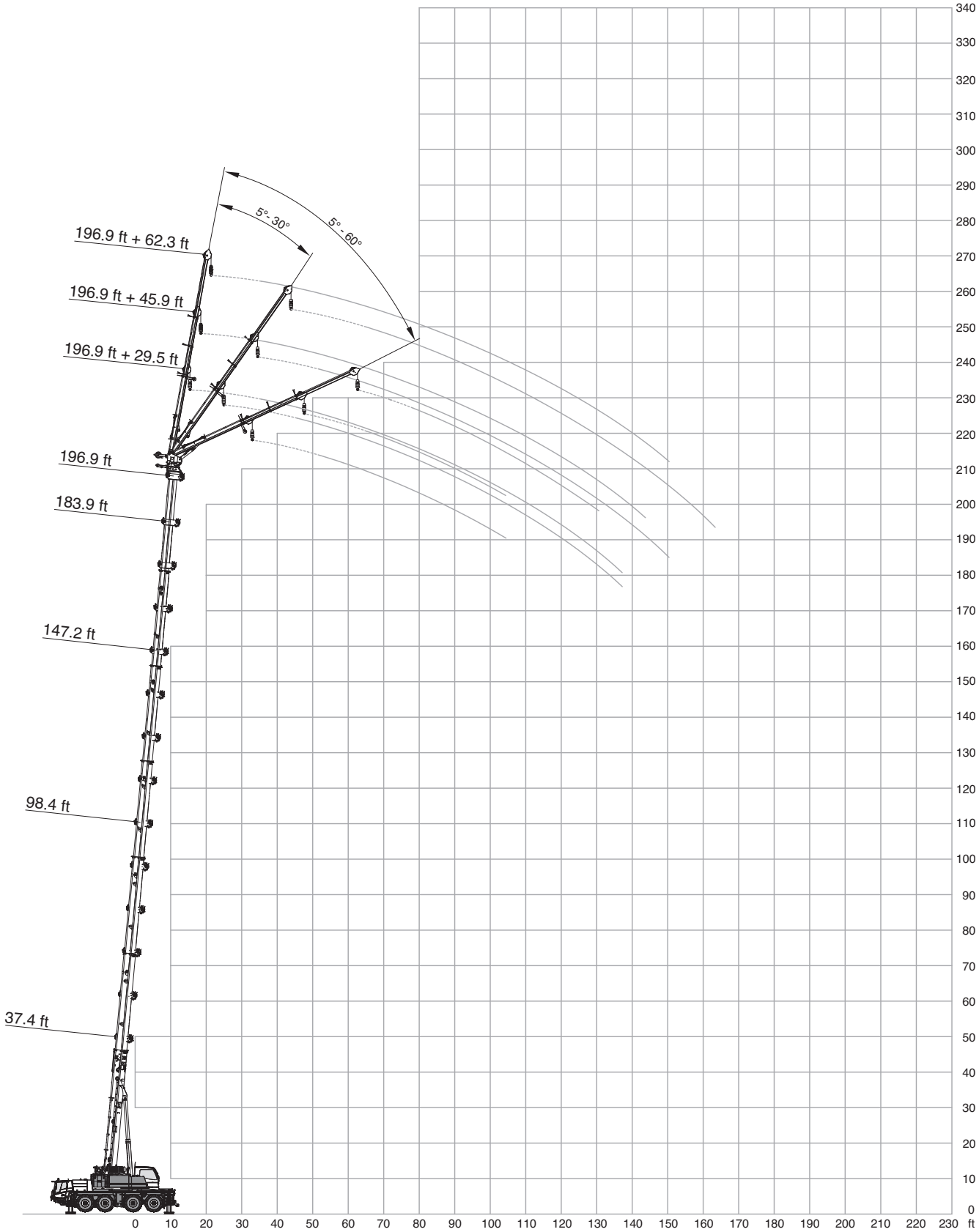
67,000 lbs		23.6 ft x 28.0 ft						104.7 ft			360°			ASME B30.5					
37.4 ft		98.4 ft						147.2 ft			183.9 ft			196.9 ft					
0°		22°		45°		0°		22°		45°	0°		22°	45°	0°		22°	45°	
ft	1,000 lbs																		ft
26.2	8.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26.2
29.5	8.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29.5
32.8	8.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32.8
36.1	8.8	-	-	6.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36.1
39.4	8.5	-	-	6.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39.4
45.9	7.9	-	-	6.8	-	-	5.0	-	-	-	-	-	-	-	-	-	-	-	45.9
52.5	7.4	6.6	-	6.8	-	-	5.0	-	-	3.9	-	-	-	-	-	-	-	-	52.5
59.1	7.0	6.3	-	6.8	-	-	5.0	-	-	3.9	-	-	3.5	-	-	-	-	-	59.1
65.6	6.1	5.9	-	6.8	5.9	-	5.0	-	-	3.9	-	-	3.5	-	-	-	-	-	65.6
72.2	5.2	5.2	-	6.8	5.7	-	5.0	-	-	3.9	-	-	3.5	-	-	-	-	-	72.2
78.7	4.6	4.8	-	6.6	5.5	-	5.0	5.0	-	3.9	-	-	3.5	-	-	-	-	-	78.7
85.3	4.1	4.4	3.5	6.3	5.2	-	5.0	4.8	-	3.9	-	-	3.5	-	-	-	-	-	85.3
91.9	3.7	3.9	3.0	5.9	5.0	3.3	5.0	4.6	-	3.9	-	-	3.5	-	-	-	-	-	91.9
98.4	3.3	3.7	2.8	5.5	4.6	3.0	5.0	4.6	-	3.9	3.9	-	3.5	3.5	-	-	-	-	98.4
105.0	3.0	3.3	2.6	5.0	4.4	3.0	5.0	4.4	-	3.9	3.9	-	3.5	3.5	-	-	-	-	105.0
111.5	2.6	3.0	2.6	4.6	4.1	2.8	5.0	4.1	2.8	3.9	3.9	-	3.5	3.5	-	-	-	-	111.5
118.1	2.4	2.8	2.4	4.1	3.7	2.6	5.0	4.1	2.8	3.9	3.7	-	3.5	3.5	-	-	-	-	118.1
124.7	2.2	2.6	2.4	3.9	3.5	2.6	4.8	3.9	2.6	3.9	3.7	2.6	3.5	3.5	-	-	-	-	124.7
131.2	1.9	2.6	-	3.5	3.5	2.4	4.6	3.7	2.6	3.9	3.5	2.4	3.5	3.5	2.4	-	-	-	131.2
137.8	-	-	-	3.3	3.3	2.4	4.1	3.5	2.4	3.9	3.5	2.4	3.5	3.5	2.4	-	-	-	137.8
144.4	-	-	-	3.0	3.0	2.4	3.9	3.3	2.4	3.9	3.3	2.4	3.5	3.3	2.4	-	-	-	144.4
150.9	-	-	-	2.8	2.8	2.2	3.7	3.3	2.2	3.5	3.3	2.2	3.0	3.3	2.2	-	-	-	150.9
157.5	-	-	-	2.6	2.8	2.2	3.5	3.0	2.2	2.8	3.0	2.2	2.4	3.0	2.2	-	-	-	157.5
164.0	-	-	-	2.4	2.6	2.2	3.3	2.8	2.2	2.2	3.0	2.2	1.9	3.0	2.2	-	-	-	164.0
170.6	-	-	-	2.2	2.6	-	3.0	2.8	1.9	1.7	2.8	1.9	1.3	2.8	1.9	-	-	-	170.6
177.2	-	-	-	2.2	2.4	-	2.6	2.6	1.9	1.3	2.6	1.9	-	2.4	1.9	-	-	-	177.2
183.7	-	-	-	1.9	2.4	-	2.2	2.6	1.9	-	2.2	1.9	-	1.9	1.9	-	-	-	183.7
190.3	-	-	-	1.9	-	-	1.9	2.4	1.9	-	1.7	1.9	-	1.5	1.7	-	-	-	190.3
196.9	-	-	-	-	-	-	1.7	2.2	-	-	1.1	1.7	-	-	1.7	-	-	-	196.9
210.0	-	-	-	-	-	-	1.3	1.3	-	-	-	1.1	-	-	-	-	-	-	210.0
223.1	-	-	-	-	-	-	-	1.1	-	-	-	-	-	-	-	-	-	-	223.1

# Operation

HAV-VA

53,000 lbs			23.6 ft x 28.0 ft			104.7 ft			360°			ASME B30.5					
37.4 ft		98.4 ft			147.2 ft			183.9 ft			196.9 ft						
0°		22°		45°		0°		22°		45°		0°		22°		45°	
1,000 lbs																	
ft																	ft
26.2	8.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26.2
29.5	8.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29.5
32.8	8.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32.8
36.1	8.8	-	-	6.8	-	-	-	-	-	-	-	-	-	-	-	-	36.1
39.4	8.5	-	-	6.8	-	-	-	-	-	-	-	-	-	-	-	-	39.4
45.9	7.9	-	-	6.8	-	-	5.0	-	-	-	-	-	-	-	-	-	45.9
52.5	7.4	6.6	-	6.8	-	-	5.0	-	-	3.9	-	-	-	-	-	-	52.5
59.1	7.0	6.3	-	6.8	-	-	5.0	-	-	3.9	-	-	3.5	-	-	-	59.1
65.6	6.1	5.9	-	6.8	5.9	-	5.0	-	-	3.9	-	-	3.5	-	-	-	65.6
72.2	5.2	5.2	-	6.8	5.7	-	5.0	-	-	3.9	-	-	3.5	-	-	-	72.2
78.7	4.6	4.8	-	6.6	5.5	-	5.0	5.0	-	3.9	-	-	3.5	-	-	-	78.7
85.3	4.1	4.4	3.5	6.3	5.2	-	5.0	4.8	-	3.9	-	-	3.5	-	-	-	85.3
91.9	3.7	3.9	3.0	5.9	5.0	3.3	5.0	4.6	-	3.9	-	-	3.5	-	-	-	91.9
98.4	3.3	3.7	2.8	5.5	4.6	3.0	5.0	4.6	-	3.9	3.9	-	3.5	3.5	-	-	98.4
105.0	3.0	3.3	2.6	5.0	4.4	3.0	5.0	4.4	-	3.9	3.9	-	3.5	3.5	-	-	105.0
111.5	2.6	3.0	2.6	4.6	4.1	2.8	5.0	4.1	2.8	3.9	3.9	-	3.5	3.5	-	-	111.5
118.1	2.4	2.8	2.4	4.1	3.7	2.6	5.0	4.1	2.8	3.9	3.7	-	3.5	3.5	-	-	118.1
124.7	2.2	2.6	2.4	3.9	3.5	2.6	4.8	3.9	2.6	3.9	3.7	2.6	3.5	3.5	-	-	124.7
131.2	1.9	2.6	-	3.5	3.5	2.4	4.6	3.7	2.6	3.7	3.5	2.4	3.3	3.5	2.4	-	131.2
137.8	-	-	-	3.3	3.3	2.4	4.1	3.5	2.4	3.0	3.5	2.4	2.6	3.5	2.4	-	137.8
144.4	-	-	-	3.0	3.0	2.4	3.9	3.3	2.4	2.4	3.3	2.4	1.9	3.3	2.4	-	144.4
150.9	-	-	-	2.8	2.8	2.2	3.5	3.3	2.2	1.7	3.3	2.2	1.3	3.3	2.2	-	150.9
157.5	-	-	-	2.6	2.8	2.2	3.3	3.0	2.2	1.3	3.0	2.2	-	2.8	2.2	-	157.5
164.0	-	-	-	2.4	2.6	2.2	2.8	2.8	2.2	-	2.4	2.2	-	2.2	2.2	-	164.0
170.6	-	-	-	2.2	2.6	-	2.4	2.8	1.9	-	1.9	1.9	-	1.5	1.9	-	170.6
177.2	-	-	-	2.2	2.4	-	1.9	2.4	1.9	-	1.3	1.9	-	1.1	1.9	-	177.2
183.7	-	-	-	1.9	2.4	-	1.5	2.2	1.9	-	-	1.9	-	-	1.7	-	183.7
190.3	-	-	-	1.9	-	-	1.1	1.9	1.9	-	-	1.3	-	-	1.1	-	190.3
196.9	-	-	-	-	-	-	-	1.5	-	-	-	-	-	-	-	-	196.9





# Operation

HTLJ

67,000 lbs			23.6 ft x 28.0 ft			29.5 ft			360°			ASME B30.5					
37.4 ft		98.4 ft			147.2 ft			183.9 ft			196.9 ft						
5°		30°		60°		5°		30°		60°		5°		30°		60°	
1,000 lbs																	
ft																	ft
9.8	16.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.8
11.5	16.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.5
13.1	16.0	16.0	-	16.0	-	-	-	-	-	-	-	-	-	-	-	-	13.1
14.8	16.0	16.0	-	16.0	-	-	-	-	-	-	-	-	-	-	-	-	14.8
16.4	16.0	16.0	-	16.0	-	-	-	-	-	-	-	-	-	-	-	-	16.4
19.7	16.0	16.0	11.4	16.0	-	-	-	-	-	-	-	-	-	-	-	-	19.7
23.0	16.0	16.0	11.0	16.0	16.0	-	16.0	-	-	-	-	-	-	-	-	-	23.0
26.2	16.0	16.0	10.8	16.0	16.0	-	16.0	-	-	-	-	-	-	-	-	-	26.2
29.5	16.0	15.8	10.5	16.0	16.0	11.0	16.0	-	-	-	-	-	-	-	-	-	29.5
32.8	16.0	15.2	10.3	16.0	16.0	11.0	16.0	16.0	-	9.4	-	-	-	-	-	-	32.8
36.1	16.0	14.5	10.3	16.0	16.0	10.8	16.0	15.6	-	9.4	-	-	8.3	-	-	-	36.1
39.4	16.0	13.8	-	16.0	16.0	10.8	16.0	15.2	11.0	9.4	-	-	8.3	-	-	-	39.4
45.9	14.1	13.0	-	16.0	16.0	10.5	16.0	14.3	10.8	9.4	9.4	-	8.3	8.3	-	-	45.9
52.5	12.5	12.3	-	16.0	15.8	10.3	15.8	13.4	10.5	9.4	9.4	9.4	8.3	8.3	8.3	-	52.5
59.1	11.2	-	-	16.0	15.2	10.3	14.9	13.0	10.5	9.4	9.4	9.0	8.3	7.9	7.7	-	59.1
65.6	-	-	-	16.0	14.5	10.3	13.8	12.3	10.3	9.4	9.2	8.8	7.7	7.4	7.2	-	65.6
72.2	-	-	-	16.0	13.8	-	12.5	11.9	10.3	9.4	8.8	8.3	7.2	7.0	6.8	-	72.2
78.7	-	-	-	15.8	13.4	-	11.6	11.4	10.1	9.0	8.3	8.1	6.8	6.6	6.3	-	78.7
85.3	-	-	-	14.1	13.0	-	10.5	10.8	10.1	8.3	8.1	7.9	6.3	6.1	5.9	-	85.3
91.9	-	-	-	12.7	12.5	-	9.7	9.9	-	7.7	7.7	7.4	5.9	5.7	5.7	-	91.9
98.4	-	-	-	10.8	11.2	-	9.2	8.8	-	7.2	7.2	7.0	5.5	5.5	5.2	-	98.4
105.0	-	-	-	9.2	9.4	-	8.3	8.1	-	6.6	6.8	-	5.2	5.0	5.0	-	105.0
111.5	-	-	-	7.7	-	-	7.2	7.7	-	5.9	6.3	-	4.8	4.8	-	-	111.5
118.1	-	-	-	6.8	-	-	6.3	6.6	-	4.6	5.5	-	4.4	4.6	-	-	118.1
124.7	-	-	-	-	-	-	5.9	5.7	-	3.7	4.4	-	3.3	3.9	-	-	124.7
131.2	-	-	-	-	-	-	5.0	5.2	-	2.8	3.3	-	2.4	3.0	-	-	131.2
137.8	-	-	-	-	-	-	4.1	4.4	-	1.9	2.4	-	-	2.2	-	-	137.8
144.4	-	-	-	-	-	-	3.3	3.5	-	-	-	-	-	-	-	-	144.4
150.9	-	-	-	-	-	-	2.6	-	-	-	-	-	-	-	-	-	150.9
157.5	-	-	-	-	-	-	1.9	-	-	-	-	-	-	-	-	-	157.5

# Operation

HTLJ

53,000 lbs		23.6 ft x 28.0 ft						29.5 ft			360°			ASME B30.5				
37.4 ft		98.4 ft						147.2 ft			183.9 ft			196.9 ft				
5°		30°		60°		5°		30°		60°		5°		30°		60°		
ft	1,000 lbs																ft	
9.8	16.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.8
11.5	16.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.5
13.1	16.0	16.0	-	16.0	-	-	-	-	-	-	-	-	-	-	-	-	-	13.1
14.8	16.0	16.0	-	16.0	-	-	-	-	-	-	-	-	-	-	-	-	-	14.8
16.4	16.0	16.0	-	16.0	-	-	-	-	-	-	-	-	-	-	-	-	-	16.4
19.7	16.0	16.0	11.4	16.0	-	-	-	-	-	-	-	-	-	-	-	-	-	19.7
23.0	16.0	16.0	11.0	16.0	16.0	-	16.0	-	-	-	-	-	-	-	-	-	-	23.0
26.2	16.0	16.0	10.8	16.0	16.0	-	16.0	-	-	-	-	-	-	-	-	-	-	26.2
29.5	16.0	15.8	10.5	16.0	16.0	11.0	16.0	-	-	-	-	-	-	-	-	-	-	29.5
32.8	16.0	15.2	10.3	16.0	16.0	11.0	16.0	16.0	-	9.4	-	-	-	-	-	-	-	32.8
36.1	16.0	14.5	10.3	16.0	16.0	10.8	16.0	15.6	-	9.4	-	-	8.3	-	-	-	-	36.1
39.4	16.0	13.8	-	16.0	16.0	10.8	16.0	15.2	11.0	9.4	-	-	8.3	-	-	-	-	39.4
45.9	14.1	13.0	-	16.0	16.0	10.5	16.0	14.3	10.8	9.4	9.4	-	8.3	8.3	-	-	-	45.9
52.5	12.5	12.3	-	16.0	15.8	10.3	15.8	13.4	10.5	9.4	9.4	9.4	8.3	8.3	8.3	-	-	52.5
59.1	11.2	-	-	16.0	15.2	10.3	14.9	13.0	10.5	9.4	9.4	9.0	8.3	7.9	7.7	-	-	59.1
65.6	-	-	-	16.0	14.5	10.3	13.8	12.3	10.3	9.4	9.2	8.8	7.7	7.4	7.2	-	-	65.6
72.2	-	-	-	16.0	13.8	-	12.5	11.9	10.3	9.4	8.8	8.3	7.2	7.0	6.8	-	-	72.2
78.7	-	-	-	14.5	13.4	-	11.0	11.4	10.1	9.0	8.3	8.1	6.8	6.6	6.3	-	-	78.7
85.3	-	-	-	12.1	13.0	-	10.3	9.7	10.1	8.3	8.1	7.9	6.3	6.1	5.9	-	-	85.3
91.9	-	-	-	10.1	10.8	-	9.4	9.0	-	7.4	7.7	7.4	5.9	5.7	5.7	-	-	91.9
98.4	-	-	-	8.3	8.8	-	7.7	8.5	-	5.9	7.0	7.0	5.5	5.5	5.2	-	-	98.4
105.0	-	-	-	7.9	7.7	-	7.2	7.2	-	4.6	5.7	-	4.4	5.0	5.0	-	-	105.0
111.5	-	-	-	7.0	-	-	6.1	6.6	-	3.5	4.4	-	3.3	4.1	-	-	-	111.5
118.1	-	-	-	5.9	-	-	5.0	5.5	-	2.4	3.3	-	2.2	3.0	-	-	-	118.1
124.7	-	-	-	-	-	-	3.9	4.4	-	-	2.2	-	-	1.9	-	-	-	124.7
131.2	-	-	-	-	-	-	3.0	3.5	-	-	-	-	-	-	-	-	-	131.2
137.8	-	-	-	-	-	-	2.4	2.6	-	-	-	-	-	-	-	-	-	137.8
144.4	-	-	-	-	-	-	-	1.9	-	-	-	-	-	-	-	-	-	144.4

# Operation

HTLJ

67,000 lbs		23.6 ft x 28.0 ft			45.9 ft			360°			ASME B30.5						
37.4 ft		98.4 ft			147.2 ft			183.9 ft			196.9 ft						
5°		30°			60°			5°			30°			60°			
ft	1,000 lbs															ft	
9.8	9.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.8
11.5	9.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.5
13.1	9.4	-	-	9.4	-	-	-	-	-	-	-	-	-	-	-	-	13.1
14.8	9.4	-	-	9.4	-	-	-	-	-	-	-	-	-	-	-	-	14.8
16.4	9.4	-	-	9.4	-	-	-	-	-	-	-	-	-	-	-	-	16.4
19.7	9.4	-	-	9.4	-	-	9.4	-	-	-	-	-	-	-	-	-	19.7
23.0	9.4	9.4	-	9.4	-	-	9.4	-	-	-	-	-	-	-	-	-	23.0
26.2	9.4	9.4	-	9.4	-	-	9.4	-	-	-	-	-	-	-	-	-	26.2
29.5	9.4	9.4	-	9.4	9.4	-	9.4	-	-	6.8	-	-	-	-	-	-	29.5
32.8	9.4	9.2	-	9.4	9.4	-	9.4	-	-	6.8	-	-	6.1	-	-	-	32.8
36.1	9.4	8.5	5.9	9.4	9.4	-	9.4	-	-	6.8	-	-	6.1	-	-	-	36.1
39.4	9.4	8.3	5.9	9.4	9.2	-	9.4	8.8	-	6.8	-	-	6.1	-	-	-	39.4
45.9	9.4	7.7	5.7	9.4	8.5	5.9	9.4	8.3	-	6.8	-	-	6.1	-	-	-	45.9
52.5	8.3	7.0	5.5	9.4	8.1	5.7	9.4	8.1	5.9	6.8	6.8	-	6.1	6.1	-	-	52.5
59.1	7.4	6.6	-	9.4	7.7	5.7	9.4	7.7	5.7	6.8	6.8	5.7	6.1	6.1	-	-	59.1
65.6	6.6	6.3	-	9.4	7.4	5.5	9.4	7.4	5.7	6.8	6.8	5.7	6.1	6.1	5.7	-	65.6
72.2	5.9	-	-	9.4	7.0	5.5	9.4	7.2	5.5	6.8	6.8	5.5	6.1	6.1	5.7	-	72.2
78.7	-	-	-	9.2	6.8	5.5	9.4	6.8	5.5	6.8	6.6	5.5	6.1	5.9	5.5	-	78.7
85.3	-	-	-	8.8	6.6	-	9.2	6.6	5.5	6.8	6.3	5.5	5.7	5.5	5.5	-	85.3
91.9	-	-	-	8.1	6.3	-	8.8	6.3	5.5	6.8	6.1	5.5	5.5	5.2	5.2	-	91.9
98.4	-	-	-	7.7	6.1	-	8.3	6.3	5.2	6.8	5.9	5.5	5.0	5.0	5.0	-	98.4
105.0	-	-	-	7.4	6.1	-	7.7	6.1	-	6.6	5.7	5.2	4.8	4.6	4.6	-	105.0
111.5	-	-	-	7.0	5.9	-	7.2	5.9	-	6.1	5.7	5.2	4.6	4.4	4.4	-	111.5
118.1	-	-	-	6.6	5.9	-	6.8	5.7	-	5.7	5.5	-	4.4	4.1	4.1	-	118.1
124.7	-	-	-	6.1	-	-	6.1	5.5	-	4.8	5.2	-	4.1	3.9	-	-	124.7
131.2	-	-	-	5.9	-	-	5.0	5.5	-	3.7	4.8	-	3.5	3.7	-	-	131.2
137.8	-	-	-	-	-	-	4.8	4.8	-	3.0	3.9	-	2.6	3.5	-	-	137.8
144.4	-	-	-	-	-	-	4.4	4.1	-	2.2	3.0	-	1.9	2.8	-	-	144.4
150.9	-	-	-	-	-	-	3.5	3.9	-	-	2.4	-	-	1.9	-	-	150.9
157.5	-	-	-	-	-	-	2.8	3.3	-	-	-	-	-	-	-	-	157.5
164.0	-	-	-	-	-	-	2.4	-	-	-	-	-	-	-	-	-	164.0

# Operation

HTLJ

53,000 lbs			23.6 ft x 28.0 ft			45.9 ft			360°			ASME B30.5					
37.4 ft		98.4 ft			147.2 ft			183.9 ft			196.9 ft						
5°		30°		60°		5°		30°		60°		5°		30°		60°	
1,000 lbs																	
ft																	ft
9.8	9.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.8
11.5	9.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.5
13.1	9.4	-	-	9.4	-	-	-	-	-	-	-	-	-	-	-	-	13.1
14.8	9.4	-	-	9.4	-	-	-	-	-	-	-	-	-	-	-	-	14.8
16.4	9.4	-	-	9.4	-	-	-	-	-	-	-	-	-	-	-	-	16.4
19.7	9.4	-	-	9.4	-	-	9.4	-	-	-	-	-	-	-	-	-	19.7
23.0	9.4	9.4	-	9.4	-	-	9.4	-	-	-	-	-	-	-	-	-	23.0
26.2	9.4	9.4	-	9.4	-	-	9.4	-	-	-	-	-	-	-	-	-	26.2
29.5	9.4	9.4	-	9.4	9.4	-	9.4	-	-	6.8	-	-	-	-	-	-	29.5
32.8	9.4	9.2	-	9.4	9.4	-	9.4	-	-	6.8	-	-	6.1	-	-	-	32.8
36.1	9.4	8.5	5.9	9.4	9.4	-	9.4	-	-	6.8	-	-	6.1	-	-	-	36.1
39.4	9.4	8.3	5.9	9.4	9.2	-	9.4	8.8	-	6.8	-	-	6.1	-	-	-	39.4
45.9	9.4	7.7	5.7	9.4	8.5	5.9	9.4	8.3	-	6.8	-	-	6.1	-	-	-	45.9
52.5	8.3	7.0	5.5	9.4	8.1	5.7	9.4	8.1	5.9	6.8	6.8	-	6.1	6.1	-	-	52.5
59.1	7.4	6.6	-	9.4	7.7	5.7	9.4	7.7	5.7	6.8	6.8	5.7	6.1	6.1	-	-	59.1
65.6	6.6	6.3	-	9.4	7.4	5.5	9.4	7.4	5.7	6.8	6.8	5.7	6.1	6.1	5.7	-	65.6
72.2	5.9	-	-	9.4	7.0	5.5	9.4	7.2	5.5	6.8	6.8	5.5	6.1	6.1	5.7	-	72.2
78.7	-	-	-	9.2	6.8	5.5	9.4	6.8	5.5	6.8	6.6	5.5	6.1	5.9	5.5	-	78.7
85.3	-	-	-	8.8	6.6	-	9.2	6.6	5.5	6.8	6.3	5.5	5.7	5.5	5.5	-	85.3
91.9	-	-	-	8.1	6.3	-	8.3	6.3	5.5	6.8	6.1	5.5	5.5	5.2	5.2	-	91.9
98.4	-	-	-	7.7	6.1	-	8.1	6.3	5.2	6.8	5.9	5.5	5.0	5.0	5.0	-	98.4
105.0	-	-	-	7.2	6.1	-	7.7	6.1	-	5.7	5.7	5.2	4.8	4.6	4.6	-	105.0
111.5	-	-	-	7.0	5.9	-	6.3	5.7	-	4.6	5.7	5.2	4.1	4.4	4.4	-	111.5
118.1	-	-	-	6.1	5.7	-	5.9	5.7	-	3.5	4.8	-	3.3	4.1	4.1	-	118.1
124.7	-	-	-	5.7	-	-	5.2	5.2	-	2.6	3.9	-	2.4	3.5	-	-	124.7
131.2	-	-	-	5.2	-	-	4.4	4.8	-	1.9	2.8	-	-	2.6	-	-	131.2
137.8	-	-	-	-	-	-	3.5	4.1	-	-	2.2	-	-	-	-	-	137.8
144.4	-	-	-	-	-	-	2.6	3.3	-	-	-	-	-	-	-	-	144.4
150.9	-	-	-	-	-	-	1.9	2.6	-	-	-	-	-	-	-	-	150.9



# Operation

HTLJ

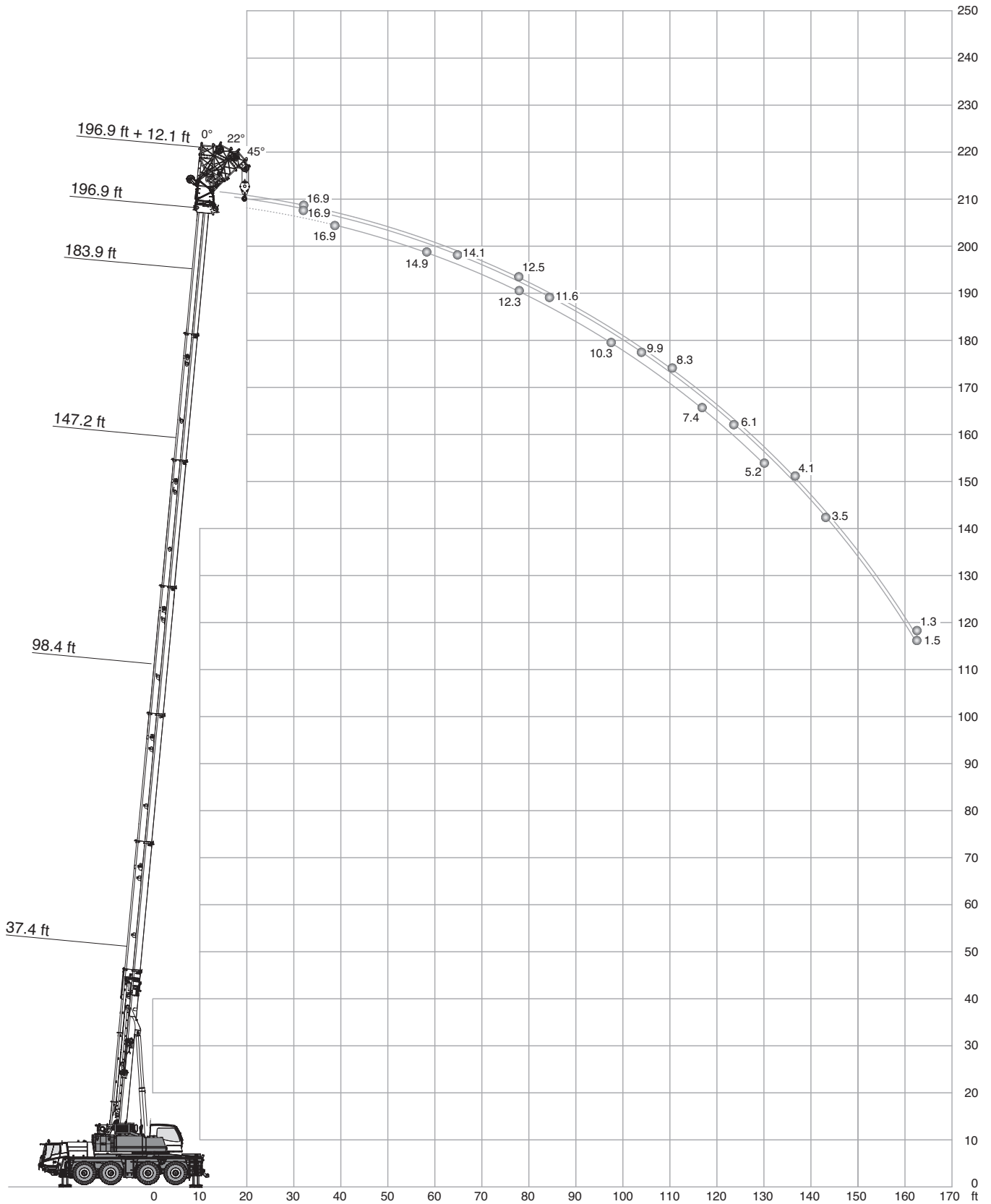
67,000 lbs			23.6 ft x 28.0 ft			62.3 ft			360°			ASME B30.5		
37.4 ft		98.4 ft			147.2 ft			183.9 ft			196.9 ft			
5°	30°	60°	5°	30°	60°	5°	30°	60°	5°	30°	60°	5°	30°	60°
1,000 lbs														
ft														ft
9.8	7.2	-	-	-	-	-	-	-	-	-	-	-	-	9.8
11.5	7.2	-	-	-	-	-	-	-	-	-	-	-	-	11.5
13.1	7.2	-	-	-	-	-	-	-	-	-	-	-	-	13.1
14.8	7.2	-	-	-	-	-	-	-	-	-	-	-	-	14.8
16.4	7.2	-	-	7.2	-	-	-	-	-	-	-	-	-	16.4
19.7	7.2	-	-	7.2	-	-	-	-	-	-	-	-	-	19.7
23.0	7.2	-	-	7.2	-	-	-	-	-	-	-	-	-	23.0
26.2	7.2	-	-	7.2	-	-	5.5	-	-	-	-	-	-	26.2
29.5	7.2	-	-	7.2	-	-	5.5	-	-	-	-	-	-	29.5
32.8	7.2	5.9	-	7.2	-	-	5.5	-	-	4.1	-	-	-	32.8
36.1	7.2	5.7	-	7.2	-	-	5.5	-	-	4.1	-	-	3.9	36.1
39.4	7.0	5.5	-	7.2	-	-	5.5	-	-	4.1	-	-	3.9	39.4
45.9	6.3	5.0	-	7.2	5.2	-	5.5	-	-	4.1	-	-	3.9	45.9
52.5	5.7	4.6	3.7	7.2	5.0	-	5.5	4.8	-	4.1	-	-	3.9	52.5
59.1	5.2	4.4	3.7	6.8	4.8	3.7	5.5	4.6	-	4.1	4.1	-	3.9	59.1
65.6	4.8	3.9	3.5	6.3	4.6	3.7	5.5	4.4	3.7	4.1	4.1	-	3.9	65.6
72.2	4.4	3.7	-	5.9	4.4	3.5	5.5	4.4	3.5	4.1	4.1	-	3.9	72.2
78.7	4.1	3.7	-	5.5	4.1	3.5	5.5	4.1	3.5	4.1	3.9	3.5	3.9	78.7
85.3	3.9	3.5	-	5.2	3.9	3.5	5.5	3.9	3.5	4.1	3.9	3.3	3.9	85.3
91.9	3.5	-	-	5.0	3.9	3.5	5.2	3.9	3.5	4.1	3.7	3.3	3.9	91.9
98.4	-	-	-	4.8	3.7	3.5	5.0	3.7	3.3	4.1	3.7	3.3	3.9	98.4
105.0	-	-	-	4.6	3.5	-	4.8	3.7	3.3	4.1	3.5	3.3	3.9	105.0
111.5	-	-	-	4.4	3.5	-	4.6	3.5	3.3	4.1	3.5	3.0	3.9	111.5
118.1	-	-	-	4.1	3.5	-	4.4	3.5	3.3	4.1	3.3	3.0	3.9	118.1
124.7	-	-	-	3.9	3.5	-	4.4	3.5	-	4.1	3.3	3.0	3.7	124.7
131.2	-	-	-	3.9	3.3	-	4.1	3.3	-	4.1	3.3	3.0	3.5	131.2
137.8	-	-	-	3.7	3.3	-	3.9	3.3	-	3.9	3.0	-	3.5	137.8
144.4	-	-	-	3.7	-	-	3.7	3.3	-	3.0	3.0	-	2.8	144.4
150.9	-	-	-	3.5	-	-	3.7	3.0	-	2.4	3.0	-	2.2	150.9
157.5	-	-	-	-	-	-	3.5	3.0	-	-	2.8	-	-	157.5
164.0	-	-	-	-	-	-	3.3	3.0	-	-	2.2	-	-	164.0
170.6	-	-	-	-	-	-	2.6	2.8	-	-	-	-	-	170.6
177.2	-	-	-	-	-	-	2.2	-	-	-	-	-	-	177.2

# Operation

HTLJ

53,000 lbs		23.6 ft x 28.0 ft						62.3 ft						360°			ASME B30.5						
37.4 ft		98.4 ft						147.2 ft						183.9 ft			196.9 ft						
5°		30°		60°		5°		30°		60°		5°		30°		60°		5°		30°		60°	
ft	1,000 lbs																						ft
9.8	7.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.8
11.5	7.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.5
13.1	7.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.1
14.8	7.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.8
16.4	7.2	-	-	7.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.4
19.7	7.2	-	-	7.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.7
23.0	7.2	-	-	7.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.0
26.2	7.2	-	-	7.2	-	-	5.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26.2
29.5	7.2	-	-	7.2	-	-	5.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29.5
32.8	7.2	5.9	-	7.2	-	-	5.5	-	-	4.1	-	-	-	-	-	-	-	-	-	-	-	-	32.8
36.1	7.2	5.7	-	7.2	-	-	5.5	-	-	4.1	-	-	3.9	-	-	-	-	-	-	-	-	-	36.1
39.4	7.0	5.5	-	7.2	-	-	5.5	-	-	4.1	-	-	3.9	-	-	-	-	-	-	-	-	-	39.4
45.9	6.3	5.0	-	7.2	5.2	-	5.5	-	-	4.1	-	-	3.9	-	-	-	-	-	-	-	-	-	45.9
52.5	5.7	4.6	3.7	7.2	5.0	-	5.5	4.8	-	4.1	-	-	3.9	-	-	-	-	-	-	-	-	-	52.5
59.1	5.2	4.4	3.7	6.8	4.8	3.7	5.5	4.6	-	4.1	4.1	-	3.9	-	-	-	-	-	-	-	-	-	59.1
65.6	4.8	3.9	3.5	6.3	4.6	3.7	5.5	4.4	3.7	4.1	4.1	-	3.9	3.9	-	-	-	-	-	-	-	-	65.6
72.2	4.4	3.7	-	5.9	4.4	3.5	5.5	4.4	3.5	4.1	4.1	-	3.9	3.9	-	-	-	-	-	-	-	-	72.2
78.7	4.1	3.7	-	5.5	4.1	3.5	5.5	4.1	3.5	4.1	3.9	3.5	3.9	3.9	3.3	-	-	-	-	-	-	-	78.7
85.3	3.9	3.5	-	5.2	3.9	3.5	5.5	3.9	3.5	4.1	3.9	3.3	3.9	3.7	3.3	-	-	-	-	-	-	-	85.3
91.9	3.5	-	-	5.0	3.9	3.5	5.2	3.9	3.5	4.1	3.7	3.3	3.9	3.7	3.3	-	-	-	-	-	-	-	91.9
98.4	-	-	-	4.8	3.7	3.5	5.0	3.7	3.3	4.1	3.7	3.3	3.9	3.5	3.3	-	-	-	-	-	-	-	98.4
105.0	-	-	-	4.6	3.5	-	4.8	3.7	3.3	4.1	3.5	3.3	3.9	3.5	3.0	-	-	-	-	-	-	-	105.0
111.5	-	-	-	4.4	3.5	-	4.6	3.5	3.3	4.1	3.5	3.0	3.9	3.5	3.0	-	-	-	-	-	-	-	111.5
118.1	-	-	-	4.1	3.5	-	4.4	3.5	3.3	4.1	3.3	3.0	3.9	3.3	3.0	-	-	-	-	-	-	-	118.1
124.7	-	-	-	3.9	3.5	-	4.1	3.5	-	3.7	3.3	3.0	3.3	3.3	3.0	-	-	-	-	-	-	-	124.7
131.2	-	-	-	3.9	3.3	-	4.1	3.3	-	2.8	3.3	3.0	2.4	3.3	3.0	-	-	-	-	-	-	-	131.2
137.8	-	-	-	3.7	3.3	-	3.9	3.3	-	2.2	3.0	-	-	3.0	-	-	-	-	-	-	-	-	137.8
144.4	-	-	-	3.7	-	-	3.7	3.0	-	-	2.6	-	-	2.4	-	-	-	-	-	-	-	-	144.4
150.9	-	-	-	3.5	-	-	3.0	3.0	-	-	1.9	-	-	-	-	-	-	-	-	-	-	-	150.9
157.5	-	-	-	-	-	-	2.4	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	157.5
164.0	-	-	-	-	-	-	-	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	164.0





# Operation

MS

67,000 lbs		23.6 ft x 28.0 ft						12.1 ft			360°			ASME B30.5			
		37.4 ft			98.4 ft			147.2 ft			183.9 ft			196.9 ft			
		0°	22°	45°	0°	22°	45°	0°	22°	45°	0°	22°	45°	0°	22°	45°	
ft	1,000 lbs															ft	
9.8	110.8	78.0	56.6	-	-	-	-	-	-	-	-	-	-	-	-	-	9.8
11.5	103.3	75.1	55.7	-	-	-	-	-	-	-	-	-	-	-	-	-	11.5
13.1	96.7	72.5	54.6	-	82.2	-	-	-	-	-	-	-	-	-	-	-	13.1
14.8	90.8	70.3	53.7	-	80.0	58.6	-	-	-	-	-	-	-	-	-	-	14.8
16.4	85.7	68.3	53.1	-	78.2	57.9	-	-	-	-	-	-	-	-	-	-	16.4
19.7	77.3	64.5	52.0	77.8	73.4	56.6	-	-	-	-	-	-	-	-	-	-	19.7
23.0	70.5	61.7	51.1	77.8	68.5	55.5	-	33.7	-	-	-	-	-	-	-	-	23.0
26.2	64.8	59.3	50.7	77.8	66.1	54.4	-	33.7	33.7	-	-	-	-	-	-	-	26.2
29.5	60.4	56.4	50.7	70.5	63.7	53.5	-	33.7	33.7	-	-	-	-	-	-	-	29.5
32.8	56.4	54.2	-	63.4	61.7	52.2	-	33.7	33.7	-	19.4	-	-	-	-	-	32.8
36.1	53.5	52.6	-	57.5	58.2	50.9	33.7	33.7	33.7	-	19.4	19.4	16.9	16.9	-	-	36.1
39.4	51.3	52.2	-	52.0	52.6	50.2	32.4	32.4	33.5	-	19.4	19.4	16.9	16.9	16.9	-	39.4
45.9	-	-	-	42.5	43.4	43.8	31.5	31.0	30.8	19.4	19.4	19.4	16.9	16.9	16.7	-	45.9
52.5	-	-	-	35.2	35.9	36.3	28.4	28.2	27.9	19.4	19.4	19.4	16.3	16.0	15.8	-	52.5
59.1	-	-	-	29.1	29.7	29.9	26.0	25.5	25.5	19.4	19.4	19.4	15.2	14.9	14.9	-	59.1
65.6	-	-	-	26.2	24.9	24.9	23.5	23.5	23.5	18.0	18.2	18.0	14.3	14.1	14.1	-	65.6
72.2	-	-	-	22.2	22.4	22.7	20.7	21.1	21.3	16.9	16.9	16.9	13.4	13.2	13.2	-	72.2
78.7	-	-	-	19.6	19.4	-	18.0	18.0	18.2	15.8	15.8	15.8	12.5	12.5	12.3	-	78.7
85.3	-	-	-	17.4	17.4	-	16.0	16.5	16.5	14.7	14.7	14.7	11.9	11.6	11.6	-	85.3
91.9	-	-	-	15.2	15.2	-	13.8	14.1	14.3	12.7	13.2	13.4	11.2	11.0	11.0	-	91.9
98.4	-	-	-	13.2	-	-	12.7	12.3	12.3	11.0	11.4	11.6	10.5	10.5	10.3	-	98.4
105.0	-	-	-	-	-	-	11.6	11.6	11.6	9.4	9.7	9.9	9.4	9.9	9.9	-	105.0
111.5	-	-	-	-	-	-	10.1	10.3	-	8.1	8.3	8.3	8.3	8.5	8.5	-	111.5
118.1	-	-	-	-	-	-	9.0	9.0	-	6.8	7.0	7.2	7.0	7.2	7.4	-	118.1
124.7	-	-	-	-	-	-	7.9	7.9	-	5.7	5.9	5.9	5.9	6.1	6.1	-	124.7
131.2	-	-	-	-	-	-	6.8	7.0	-	4.8	5.0	-	5.0	5.0	5.2	-	131.2
137.8	-	-	-	-	-	-	6.1	6.1	-	3.9	4.1	-	4.1	4.1	-	-	137.8
144.4	-	-	-	-	-	-	5.2	-	-	3.0	3.3	-	3.3	3.5	-	-	144.4
150.9	-	-	-	-	-	-	-	-	-	2.4	2.6	-	2.6	2.6	-	-	150.9
157.5	-	-	-	-	-	-	-	-	-	1.7	1.9	-	1.9	1.9	-	-	157.5
164.0	-	-	-	-	-	-	-	-	-	1.3	1.3	-	1.3	1.5	-	-	164.0

# Operation

MS

53,000 lbs		23.6 ft x 28.0 ft						12.1 ft			360°			ASME B30.5				
		37.4 ft			98.4 ft			147.2 ft			183.9 ft			196.9 ft				
		0°	22°	45°	0°	22°	45°	0°	22°	45°	0°	22°	45°	0°	22°	45°		
ft		1,000 lbs															ft	
9.8	110.8	78.0	56.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.8
11.5	103.3	75.1	55.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.5
13.1	96.7	72.5	54.6	-	82.2	-	-	-	-	-	-	-	-	-	-	-	-	13.1
14.8	90.8	70.3	53.7	-	80.0	58.6	-	-	-	-	-	-	-	-	-	-	-	14.8
16.4	85.7	68.3	53.1	-	78.2	57.9	-	-	-	-	-	-	-	-	-	-	-	16.4
19.7	77.3	64.5	52.0	77.8	73.4	56.6	-	-	-	-	-	-	-	-	-	-	-	19.7
23.0	70.5	61.7	51.1	77.8	68.5	55.5	-	33.7	-	-	-	-	-	-	-	-	-	23.0
26.2	64.8	59.3	50.7	76.0	66.1	54.4	-	33.7	33.7	-	-	-	-	-	-	-	-	26.2
29.5	60.4	56.4	50.7	65.6	63.7	53.5	-	33.7	33.7	-	-	-	-	-	-	-	-	29.5
32.8	56.4	54.2	-	57.3	58.6	52.2	-	33.7	33.7	-	19.4	-	-	-	-	-	-	32.8
36.1	53.5	52.6	-	50.7	51.8	50.9	33.7	33.7	33.7	-	19.4	19.4	16.9	16.9	-	-	-	36.1
39.4	51.3	51.5	-	45.4	46.0	46.9	32.4	32.4	33.5	-	19.4	19.4	16.9	16.9	16.9	-	-	39.4
45.9	-	-	-	36.8	37.6	38.1	31.5	31.0	30.8	19.4	19.4	19.4	16.9	16.9	16.7	-	-	45.9
52.5	-	-	-	31.5	31.0	31.5	27.9	28.2	27.9	19.4	19.4	19.4	16.3	16.0	15.8	-	-	52.5
59.1	-	-	-	26.6	26.6	25.5	23.5	24.0	24.4	19.4	19.4	19.4	15.2	14.9	14.9	-	-	59.1
65.6	-	-	-	22.9	22.7	22.7	21.1	20.7	20.7	18.0	18.2	18.0	14.3	14.1	14.1	-	-	65.6
72.2	-	-	-	19.4	19.8	19.8	18.0	18.5	18.7	16.0	16.5	16.7	13.4	13.2	13.2	-	-	72.2
78.7	-	-	-	16.7	16.9	-	15.6	15.8	16.0	13.6	14.1	14.3	12.5	12.5	12.3	-	-	78.7
85.3	-	-	-	14.3	14.5	-	14.5	14.1	13.8	11.6	12.1	12.3	11.4	11.6	11.6	-	-	85.3
91.9	-	-	-	12.7	12.7	-	12.5	12.7	12.7	10.1	10.3	10.5	9.9	10.1	10.3	-	-	91.9
98.4	-	-	-	11.2	-	-	10.8	11.0	11.0	8.5	8.8	9.0	8.3	8.8	8.8	-	-	98.4
105.0	-	-	-	-	-	-	9.2	9.4	9.4	7.2	7.4	7.4	7.0	7.4	7.4	-	-	105.0
111.5	-	-	-	-	-	-	8.1	8.1	-	5.9	6.1	6.3	5.9	6.1	6.3	-	-	111.5
118.1	-	-	-	-	-	-	7.0	7.0	-	4.8	5.0	5.0	5.0	5.2	5.2	-	-	118.1
124.7	-	-	-	-	-	-	5.9	6.1	-	3.9	3.9	4.1	3.9	4.1	4.4	-	-	124.7
131.2	-	-	-	-	-	-	5.0	5.2	-	3.0	3.0	-	3.0	3.3	3.5	-	-	131.2
137.8	-	-	-	-	-	-	4.4	4.4	-	2.2	2.4	-	2.4	2.6	-	-	-	137.8
144.4	-	-	-	-	-	-	3.7	-	-	1.5	1.7	-	1.7	1.7	-	-	-	144.4
150.9	-	-	-	-	-	-	-	-	-	-	1.1	-	1.1	1.1	-	-	-	150.9

# Operation

MS

40,500 lbs		23.6 ft x 28.0 ft						12.1 ft			360°			ASME B30.5				
		37.4 ft			98.4 ft			147.2 ft			183.9 ft			196.9 ft				
		0°	22°	45°	0°	22°	45°	0°	22°	45°	0°	22°	45°	0°	22°	45°		
ft		1,000 lbs															ft	
9.8	110.8	78.0	56.6	-	-	-	-	-	-	-	-	-	-	-	-	-	9.8	
11.5	103.3	75.1	55.7	-	-	-	-	-	-	-	-	-	-	-	-	-	11.5	
13.1	96.7	72.5	54.6	-	82.2	-	-	-	-	-	-	-	-	-	-	-	13.1	
14.8	90.8	70.3	53.7	-	80.0	58.6	-	-	-	-	-	-	-	-	-	-	14.8	
16.4	85.7	68.3	53.1	-	78.2	57.9	-	-	-	-	-	-	-	-	-	-	16.4	
19.7	77.3	64.5	52.0	77.8	73.4	56.6	-	-	-	-	-	-	-	-	-	-	19.7	
23.0	70.5	61.7	51.1	77.8	68.5	55.5	-	33.7	-	-	-	-	-	-	-	-	23.0	
26.2	64.8	59.3	50.7	66.1	66.1	54.4	-	33.7	33.7	-	-	-	-	-	-	-	26.2	
29.5	60.4	56.4	50.7	56.8	58.2	53.5	-	33.7	33.7	-	-	-	-	-	-	-	29.5	
32.8	56.4	54.2	-	49.8	51.1	51.5	-	33.7	33.7	-	19.4	-	-	-	-	-	32.8	
36.1	51.5	52.0	-	43.8	44.9	45.8	33.7	33.7	33.7	-	19.4	19.4	16.9	16.9	-	-	36.1	
39.4	44.3	44.5	-	39.0	39.9	40.7	32.4	32.4	33.5	-	19.4	19.4	16.9	16.9	16.9	-	39.4	
45.9	-	-	-	33.7	31.9	32.6	28.4	29.1	29.7	19.4	19.4	19.4	16.9	16.9	16.7	-	45.9	
52.5	-	-	-	27.9	27.9	27.1	24.6	24.2	24.4	19.4	19.4	19.4	16.3	16.0	15.8	-	52.5	
59.1	-	-	-	22.9	23.3	23.5	20.7	21.1	21.6	18.0	18.7	19.1	15.2	14.9	14.9	-	59.1	
65.6	-	-	-	18.9	19.4	19.4	18.0	17.8	18.2	15.2	15.6	16.0	14.3	14.1	14.1	-	65.6	
72.2	-	-	-	15.8	16.0	16.3	16.0	16.0	15.6	12.7	13.2	13.6	12.5	13.0	13.2	-	72.2	
78.7	-	-	-	13.8	14.1	-	13.6	13.8	14.1	10.8	11.2	11.4	10.5	11.0	11.2	-	78.7	
85.3	-	-	-	11.9	11.9	-	11.4	11.6	11.9	9.0	9.2	9.4	8.8	9.2	9.4	-	85.3	
91.9	-	-	-	10.1	10.3	-	9.9	9.9	10.1	7.4	7.7	7.9	7.2	7.7	7.9	-	91.9	
98.4	-	-	-	9.4	-	-	8.3	8.5	8.5	6.1	6.3	6.6	5.9	6.3	6.6	-	98.4	
105.0	-	-	-	-	-	-	7.0	7.2	7.2	5.0	5.2	5.5	4.8	5.0	5.2	-	105.0	
111.5	-	-	-	-	-	-	5.9	6.1	-	3.9	4.1	4.4	3.9	4.1	4.1	-	111.5	
118.1	-	-	-	-	-	-	5.0	5.2	-	3.0	3.0	3.3	2.8	3.0	3.3	-	118.1	
124.7	-	-	-	-	-	-	4.1	4.4	-	2.2	2.2	2.4	2.2	2.4	2.4	-	124.7	
131.2	-	-	-	-	-	-	3.5	3.5	-	1.3	1.5	-	1.3	1.5	1.5	-	131.2	
137.8	-	-	-	-	-	-	2.8	2.8	-	-	-	-	-	-	-	-	137.8	
144.4	-	-	-	-	-	-	2.2	-	-	-	-	-	-	-	-	-	144.4	

10,600 lbs		23.6 ft x 28.0 ft						12.1 ft			360°			ASME B30.5				
		37.4 ft			98.4 ft			147.2 ft			183.9 ft			196.9 ft				
		0°	22°	45°	0°	22°	45°	0°	22°	45°	0°	22°	45°	0°	22°	45°		
ft		1,000 lbs															ft	
9.8	110.8	78.0	56.6	-	-	-	-	-	-	-	-	-	-	-	-	-	9.8	
11.5	103.3	75.1	55.7	-	-	-	-	-	-	-	-	-	-	-	-	-	11.5	
13.1	96.7	72.5	54.6	-	82.2	-	-	-	-	-	-	-	-	-	-	-	13.1	
14.8	90.8	70.3	53.7	-	80.0	58.6	-	-	-	-	-	-	-	-	-	-	14.8	
16.4	85.7	68.3	53.1	-	78.0	57.9	-	-	-	-	-	-	-	-	-	-	16.4	
19.7	77.3	64.5	52.0	63.0	65.4	56.6	-	-	-	-	-	-	-	-	-	-	19.7	
23.0	70.5	61.7	51.1	52.0	53.7	55.5	-	33.7	-	-	-	-	-	-	-	-	23.0	
26.2	58.2	59.3	50.7	47.3	44.9	46.2	-	33.7	33.7	-	-	-	-	-	-	-	26.2	
29.5	45.6	46.7	47.1	40.5	38.5	39.2	-	33.7	33.7	-	-	-	-	-	-	-	29.5	
32.8	37.0	37.6	-	35.0	36.1	33.7	-	29.9	30.2	-	19.4	-	-	-	-	-	32.8	
36.1	30.6	31.0	-	30.8	31.7	31.9	25.3	26.2	26.8	-	19.4	19.4	16.9	16.9	-	-	36.1	
39.4	25.7	26.0	-	27.1	27.9	28.4	23.8	24.6	23.8	-	19.4	19.4	16.9	16.9	16.9	-	39.4	
45.9	-	-	-	20.9	21.3	21.6	18.9	19.4	20.0	14.5	15.2	15.8	14.1	14.7	15.4	-	45.9	
52.5	-	-	-	17.1	16.7	16.7	15.2	15.6	16.0	11.2	11.9	12.3	10.8	11.4	12.1	-	52.5	
59.1	-	-	-	13.6	13.8	14.1	12.1	12.5	13.0	8.5	9.0	9.4	8.3	8.8	9.2	-	59.1	
65.6	-	-	-	11.0	11.2	11.4	9.7	10.1	10.3	6.3	6.8	7.2	6.1	6.8	7.0	-	65.6	
72.2	-	-	-	8.8	9.0	9.2	7.4	7.9	8.1	4.6	5.0	5.5	4.6	5.0	5.2	-	72.2	
78.7	-	-	-	7.2	7.2	-	5.9	6.1	6.3	3.3	3.5	3.9	3.0	3.5	3.7	-	78.7	
85.3	-	-	-	5.7	5.9	-	4.6	4.8	4.8	1.9	2.4	2.6	1.9	2.2	2.4	-	85.3	
91.9	-	-	-	4.6	4.8	-	3.3	3.5	3.7	-	1.3	1.5	-	1.1	1.3	-	91.9	
98.4	-	-	-	3.7	-	-	2.4	2.6	2.6	-	-	-	-	-	-	-	98.4	
105.0	-	-	-	-	-	-	1.5	1.7	1.7	-	-	-	-	-	-	-	105.0	
111.5	-	-	-	-	-	-	-	1.1	-	-	-	-	-	-	-	-	111.5	

# Notes to Lifting Capacity

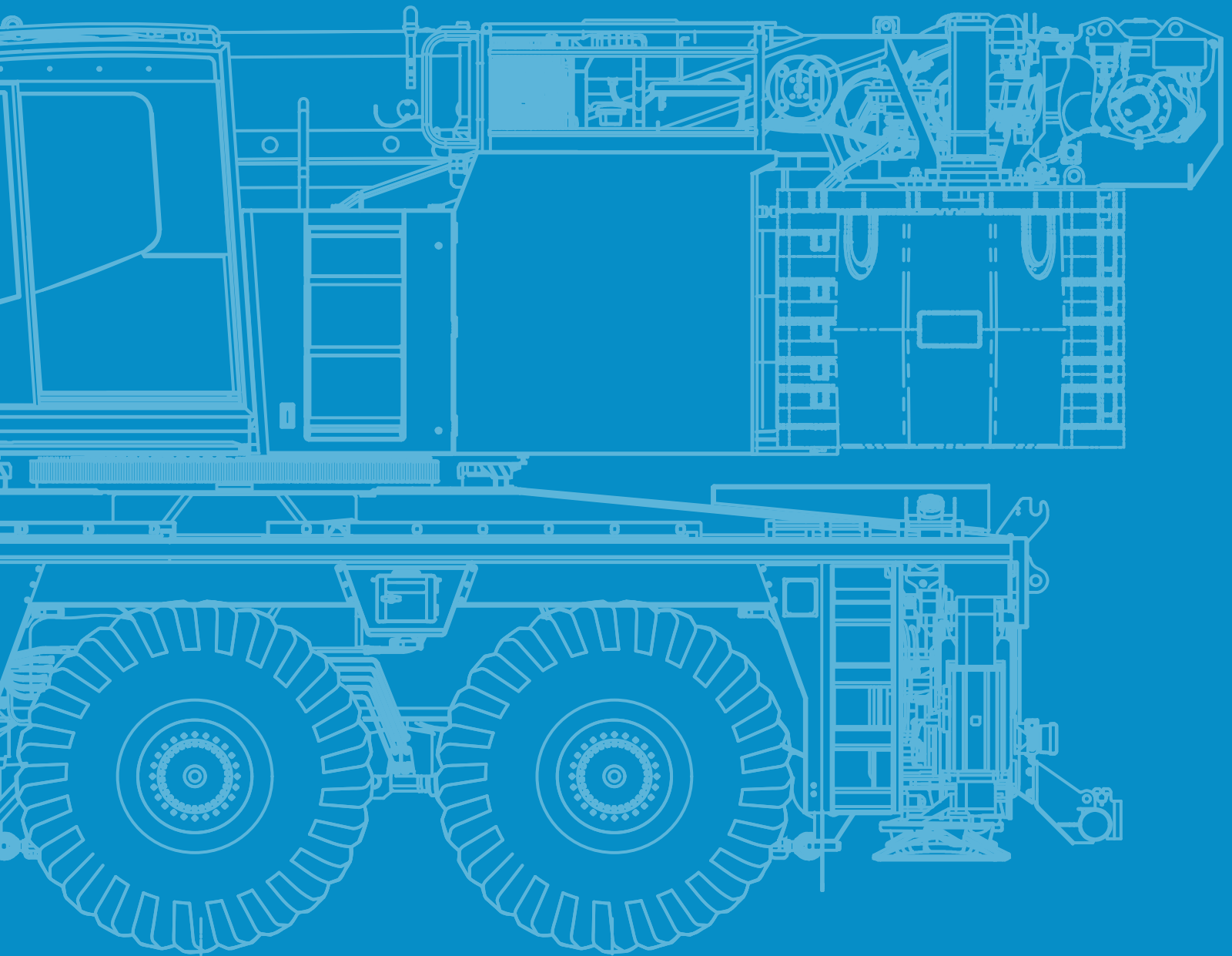
Ratings are in compliance with ASME B30.5.  
Lifting capacities do not exceed 85 % of tipping load.

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.

**Note:** Data published herein is intended as a guide only and shall not be construed to warrant applicability for lifting purposes.  
Crane operation is subject to the computer charts and operation manual both supplied with the crane.



# TECHNICAL DESCRIPTION



# Technical Description

## Basic machine

### Equipment carrier

<b>Engine 340-5</b>	Mercedes-Benz OM471LA; Diesel engine; Output 340 kW / 1600 1/min (462 HP), torque 2200 Nm / 1300 1/min; The engine complies with EU Stage V/Tier 4F; Exhaust system complete stainless steel with SCR catalyzer.
<b>Fuel tank</b>	106 gallons Diesel (no RME / biodiesel); 11 gallons Ad-Blue tank.
<b>Transmission ZF TraXon</b>	Automated gearbox with 12 forward speeds and 2 reverse; 2-stage transfer case with switchable longitudinal lock.
<b>Axles 8 x 6 x 8</b>	All 4 axles steered, axles 2-4 driven and equipped with selectable transverse lock.
<b>Suspension</b>	Hydropneumatic suspension with axle load compensation; Hydraulically lockable; Manual or automatic levelling alternatively.
<b>Steering</b>	Dual circuit hydro servocom steering with emergency steering pump; Active rear axle steering.
<b>Brakes</b>	Pneumatic dual circuit service brake with antilock system, acting on all wheels; Disc brakes; Additional, double-speed decompression brake; Spring-loaded parking brake.
<b>Tires</b>	Tires size 385/95 R25 (14.00R25); Steel rim 9,5-25/1,7"
<b>Cab 2490</b>	Type 8.2 ft; Adjustable driver seat, armrests and pneumatic suspension; Height and tilt-adjustable steering wheel; Auxiliary/passenger seat; Powered door windows; Tinted glass; Radio; Seat heating; Heating engine-dependent; Aircondition.
<b>Rear view camera</b>	Display in carrier cab; Cameras installed on rear of vehicle.
<b>Drive lights</b>	Including low beam, upper beam, daytime running lights, fog lights and cornering lights.
<b>Central lubrication</b>	Automatic central lubrication system for the lubricating points at the carrier.
<b>Outriggers</b>	H-4-Point design; Vertical and horizontal movement fully hydraulic; Manual or automatic levelling alternatively; 5 outrigger bases: 8.5 ft, 11.8 ft, 16.4 ft, 19.7 ft and 23.6 ft. 4 square outrigger pads with transport position at vertical cylinder.
<b>Outrigger basis monitoring</b>	Individual monitoring of horizontal stroke; Deviation warning in crane cab.
<b>Outrigger load indicator</b>	The outrigger load is indicated in the operator cab and the outrigger control box.
<b>Electronic immobiliser system</b>	Prevents uncontrolled carrier mobilisation; Incl. 4 ignition keys.
<b>Pneumatic tire filling plug</b>	For self-filling of the wheels.

### Equipment superstructure

<b>Engine 129-5</b>	Mercedes-Benz OM934LA; Diesel engine; Output 129 kW / 2200 1/min (175 HP), torque 750 Nm / 1200-1600 1/min; The engine complies with EU Stage V/Tier 4F; Exhaust system complete stainless steel with SCR catalyzer.
<b>Telescopic boom HA60</b>	37.4 ft -196.9 ft; Single cylinder telescoping system, automatic telescoping; Attachments for all equipment and extensions; 6 sheaves integrated in boom head for max. capacity of 209,000 lbs.
<b>Boom luffing</b>	1 luffing cylinder with automatic lowering brake valve.
<b>Rotary drive</b>	Single slewing gear unit with spring-loaded multi-disc brake.
<b>H1</b>	Hoist with spring-loaded multi-disc brake; Resolver (hoist rotation indicator).
<b>Counterweight 6,900 lbs</b>	2 pieces (⊕ + ⊗).
<b>Control system</b>	Enabling 4 simultaneous working movements; Electric pilot controls via 2 two-axis joysticks; Different control modes selectable for hydraulic circuits.
<b>Operator aids</b>	AML-F, with integrated electronic load moment indicator in accordance with EN13000; Color display; Displaying of current operating conditions, load charts, fault indicator; Signal lights indicating LMI-load; Crane data logger.
<b>SmartChart</b>	Smart crane control system for main boom and rooster sheave operation enabling higher lifting capacities especially over outriggers. Enables safe use of the full capacity of the crane even in asymmetric outrigger configurations. Visualization of full working area in operator cabin. In-cab lift simulation.
<b>Hello-Net</b>	Tadano telematic system.
<b>Working range limiter</b>	Displaying and programmability of the work range limits by AML-F.
<b>Lift adjuster</b>	Safety device which prevents the load from swinging out when the load is picked up and the released hook block from swinging when the load is set down; Activated by switch in operator cabin.
<b>Cab 872</b>	Type 2.86 ft; 12° tiltable seat incl. control panel; Fold-out front window; Extendable side pedestal, front pedestal; Handrails; Tinted safety glass; Pull-down sun visor; Radio; Seat heating; Heating engine-dependent and engine-independent; Aircondition.
<b>Central lubrication</b>	Automatic central lubrication system for the lubricating points at the superstructure.

# Technical Description

## Additional equipment

### Carrier

<b>Axles 8 x 8 x 8</b>	All 4 axles steered, all axles driven and equipped with selectable transverse lock.
<b>Wear-free auxiliary brake</b>	Wear-free auxiliary eddy-current brake.
<b>Tires</b>	8 tires; Tire size 445/95R25 (16.00R25) or 525/80 (20.5R25).

### Superstructure

<b>2. hoist (H2)</b>	Spring-loaded multi-disc brake; Integrated resolver (hoist rotation indicator); Quick couplings; Incl. hoist monitoring.
<b>Additional counterweight 60,200 lbs</b>	9 pieces; for total 67,000 lbs, 11 pieces.
<b>Load supervision camera</b>	Camera mounted on main boom head to supervise the hook block and load from above; Incl. boom head light on boom head.

### Handling

<b>Remote control</b>	Control of superstructure movements via wireless remote control.
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### Extensions

<b>HAV 58.7 ft</b>	Double folding swing-away jib, manual offset 22°/45°; 1-sheave head; Incl. transport storage.
<b>HAV-VA 104.7 ft</b>	Variable extension; 2 x 23.0 ft lattice boom extension and double folding swing-away jib, manual offset 22°/45°; 1-sheaved head; Incl. transport storage for double folding swing-away jib; Includes HAV 58.7 ft and HAV-VA 81.7 ft.
<b>HAV-HY</b>	Hydraulic, stepless offset 0°-40°, instead of the manual offset; Available for HAV and HAV-VA.
<b>HTLJ 62.3 ft</b>	Hydraulically telescopable and offsetable main boom extension; Length 29.5 ft - 62.3 ft; Hydraulic offset 5°-60°.
<b>MS (runner)</b>	12.1 ft; Variable assembly jib with manual offset; 3-sheaves, for max. 110,800 lbs lifting capacity.

### Hook Blocks

<b>Hook block 352,800 lbs, 7-sheaves</b>	Max. capacity 220,500 lbs; 2,870 lbs; Double hook, red with white signal stripes.
<b>Hook block 220,500 lbs, 5-sheaves</b>	Max. capacity 202,200 lbs; 1,760 lbs; Double hook, red with white signal stripes.
<b>Hook block 138,900 lbs, 3-sheaves</b>	Max. capacity 130,100 lbs; 1,320 lbs; Double hook, red with white signal stripes.
<b>Hook block 70,600 lbs, 1-sheave</b>	Max. capacity 56,400 lbs; 990 lbs; Single hook, red with white signal stripes.
<b>Hook 22,050 lbs</b>	Max. capacity 19,100 lbs; 660 lbs; Single hook, red.

Further additional equipment on request!

Weight data may deviate from posted values based on road / travel configuration, equipment configuration, and component weight tolerances.

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