

RATED LIFTING CAPACITIES

ISO 4305

ON OUTRIGGERS MID EXTENDED 6.5m SPREAD							360° ROTATION						
C	34.7m Boom + 8.8m Jib						C	34.7m Boom + 15.2m Jib					
	5°Tilt		25°Tilt		45°Tilt			5°Tilt		25°Tilt		45°Tilt	
	R	W	R	W	R	W		R	W	R	W	R	W
80°	7.6	5.6	10.5	3.8	12.5	2.75	80°	9.7	2.88	14.4	1.85	17.8	1.25
77.5°	9.8	5.18	12.5	3.63	14.3	2.65	77.5°	12.2	2.8	16.6	1.75	19.7	1.2
75°	11.8	4.78	14.3	3.48	16.1	2.58	75°	14.7	2.75	18.7	1.68	21.7	1.18
72.5°	13.7	4.38	16.2	3.33	17.7	2.5	72.5°	16.9	2.53	20.7	1.6	23.4	1.15
70°	15.5	4.03	17.9	3.2	19.3	2.45	70°	19.0	2.35	22.6	1.53	25.2	1.13
67.5°	17.3	3.73	19.7	3.05	20.9	2.4	67.5°	21.0	2.2	24.5	1.45	26.8	1.1
65°	19.1	3.5	21.3	2.93	22.4	2.35	65°	23.0	2.08	26.3	1.4	28.4	1.1
62.5°	20.6	3.0	22.8	2.6	23.8	2.25	62.5°	24.9	1.98	28.0	1.35	30.0	1.08
60°	22.1	2.55	24.2	2.3	25.3	2.15	60°	26.7	1.88	29.7	1.3	31.4	1.05
57.5°	23.6	2.2	25.6	1.98	26.6	1.88	57.5°	28.3	1.58	31.4	1.2	32.9	1.03
55°	25.1	1.88	27.0	1.7	27.8	1.63	55°	29.9	1.33	32.9	1.15	34.2	1.03
52.5°	26.5	1.6	28.3	1.48	28.9	1.4	52.5°	31.4	1.1	34.2	0.95	35.3	0.88
50°	27.9	1.38	29.6	1.28	30.1	1.23	50°	33.0	0.93	35.5	0.8	36.4	0.75
47.5°	29.2	1.2	30.8	1.1	31.2	1.05	47.5°	34.4	0.78	36.8	0.65	37.5	0.63
45°	30.5	1.03	31.9	0.95	32.3	0.93	45°	35.8	0.65	37.9	0.55	38.5	0.53
42.5°	31.7	0.88	33.0	0.8									
40°	32.9	0.75	34.0	0.7									
37.5°	33.9	0.63	35.0	0.6									
35°	34.9	0.55	35.9	0.5									

C :Boom angle (°)
R :Load radius (m)
W :Rated lifting capacity (Unit:x1000kg)

RATED LIFTING CAPACITIES

ISO 4305

ON OUTRIGGERS MID EXTENDED 5.0m SPREAD									
360° ROTATION (Unit: x1000kg)									
B \ A	10.7m		18.7m		26.7m		34.7m		
	C		C		C		C		
2.5	69.3	50.0							
3.0	66.4	46.2	76.9	21.6					
3.5	63.6	41.3	75.4	21.6	80.8	18.7			
4.0	60.2	36.4	73.8	21.6	79.8	18.7			
4.5	56.9	29.7	72.2	21.6	78.8	18.3			
5.0	53.4	24.9	70.7	21.6	77.7	17.8			
5.5	49.7	21.3	69.0	18.3	76.6	16.0			
6.0	45.7	18.4	67.3	16.1	75.5	14.3	79.7	11.4	
6.5	41.5	15.7	65.6	14.4	74.3	12.9	79.0	11.4	
7.0	36.7	13.6	63.9	13.0	73.2	11.7	78.2	10.5	
8.0	24.4	10.6	60.3	10.8	70.8	9.6	76.5	8.9	
9.0			56.6	8.95	68.5	8.3	74.6	7.6	
10.0			52.8	7.35	66.1	7.1	72.8	6.5	
11.0			48.6	6.25	63.6	6.3	71.0	5.8	
12.0			44.2	5.2	61.1	5.5	69.1	5.1	
13.0			39.3	4.45	58.4	4.75	67.2	4.5	
14.0			33.8	3.8	55.8	4.05	65.2	4.0	
15.0			27.2	3.2	53.0	3.5	63.4	3.55	
16.0			18.0	2.8	50.2	3.05	61.3	3.1	
17.0					47.1	2.6	59.3	2.65	
18.0					43.9	2.3	57.3	2.35	
19.0					40.5	1.95	55.1	2.0	
20.0					36.8	1.75	52.9	1.75	
22.0					28.0	1.25	48.5	1.3	
24.0					14.4	0.9	43.6	0.9	
26.0							38.3	0.6	
D	0°						25°		

Unit: x1000kg

LIFTING CAPACITIES AT ZERO DEGREE BOOM ANGLE									
ON OUTRIGGERS MID EXTENDED 5.0m SPREAD 360° ROTATION									
C \ A	10.7m		18.7m		26.7m				
	B		B		B				
0°	8.6	7.5	16.6	2.5	24.5	0.8			

A : Boom length (m)

B : Load radius (m)

C : Loaded boom angle (°)

D : Minimum boom angle (°) for indicated length (no load)

RATED LIFTING CAPACITIES

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ON OUTRIGGERS MID EXTENDED 5.0m SPREAD							360° ROTATION						
C	34.7m Boom + 8.8m Jib						C	34.7m Boom + 15.2m Jib					
	5°Tilt		25°Tilt		45°Tilt			5°Tilt		25°Tilt		45°Tilt	
	R	W	R	W	R	W		R	W	R	W	R	W
80°	7.6	5.6	10.5	3.8	12.5	2.75	80°	9.7	2.88	14.4	1.85	17.8	1.25
77.5°	9.8	5.18	12.5	3.63	14.3	2.65	77.5°	12.2	2.8	16.6	1.75	19.7	1.2
75°	11.8	4.78	14.3	3.48	16.1	2.58	75°	14.7	2.75	18.7	1.68	21.7	1.18
72.5°	13.6	4.0	16.2	3.16	17.7	2.5	72.5°	16.8	2.5	20.7	1.6	23.4	1.15
70°	15.3	3.3	17.8	2.85	19.3	2.45	70°	18.9	2.3	22.5	1.53	25.2	1.13
67.5°	16.9	2.73	19.4	2.38	20.8	2.1	67.5°	20.7	1.85	24.6	1.38	26.8	1.1
65°	18.7	2.2	20.9	1.95	22.2	1.78	65°	22.5	1.48	26.2	1.25	28.4	1.1
62.5°	20.2	1.8	22.4	1.6	23.6	1.48	62.5°	24.3	1.18	27.8	1.0	29.9	0.9
60°	21.8	1.48	23.8	1.3	25.0	1.23	60°	25.9	0.93	29.4	0.8	31.2	0.73
57.5°	23.3	1.18	25.3	1.05	26.3	1.0	57.5°	27.7	0.7	30.9	0.6	32.6	0.55
55°	24.7	0.95	26.7	0.85	27.5	0.8	55°	29.3	0.55	32.4	0.45	33.8	0.4
52.5°	26.2	0.75	28.0	0.68	28.8	0.63							
50°	27.6	0.58	29.3	0.53	29.9	0.5							

C :Boom angle (°)

R :Load radius (m)

W :Rated lifting capacity (Unit:x1000kg)

RATED LIFTING CAPACITIES

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ON OUTRIGGERS MIN EXTENDED 2.48m SPREAD 360° ROTATION (Unit: x1000kg)									
B A	10.7m		18.7m		26.7m		34.7m		C
	C	C	C	C	C	C	C		
2.5	69.1	23.0							
3.0	66.2	18.2	76.9	14.9					
3.5	63.1	14.8	75.3	12.5	80.5	10.7			
4.0	59.9	12.4	73.8	10.7	79.3	9.3			
4.5	56.6	10.3	72.2	9.3	78.2	8.2			
5.0	53.2	8.5	70.6	8.2	77.1	7.3			
5.5	49.5	7.05	68.9	7.1	76.1	6.5			
6.0	45.5	5.95	67.2	6.4	74.9	5.8	78.9	5.2	
6.5	41.2	5.05	65.5	5.7	73.8	5.2	78.0	4.7	
7.0	36.4	4.3	63.8	5.1	72.7	4.7	77.2	4.2	
8.0	24.1	3.15	60.2	3.9	70.3	3.8	75.4	3.5	
9.0			56.5	3.0	68.0	3.2	73.6	2.9	
10.0			52.6	2.3	65.6	2.5	71.8	2.4	
11.0			48.5	1.75	63.1	2.05	70.0	1.9	
12.0			44.0	1.35	60.7	1.6	68.2	1.5	
13.0			39.1	0.95	58.1	1.2	66.3	1.15	
14.0			33.6	0.65	55.4	0.9	64.4	0.9	
15.0					52.7	0.65	62.5	0.65	
D	0°		18°		44°		57°		

Unit: x1000kg

LIFTING CAPACITIES AT ZERO DEGREE BOOM ANGLE ON OUTRIGGERS MIN EXTENDED 2.48m SPREAD 360° ROTATION									
C A	10.7m								C
	B	C	C	C	C	C	C		
0°	8.6	2.6							

A : Boom length (m)

B : Load radius (m)

C : Loaded boom angle (°)

D : Minimum boom angle (°) for indicated length (no load)

NOTES FOR "ON OUTRIGGERS" TABLE

1. Rated lifting capacities shown in the table are based on condition that crane is set on firm level surface. Those above bold lines are based on crane strength and those below, on its stability.
2. Rated lifting capacities based on crane stability are according to ISO 4305.
3. The mass of the hook (500kg for 50 t capacity, 150kg for 5.6 t capacity), slings and all similarly used load handling devices must be considered as part of the load and must be deducted from the lifting capacities.
4. For rated lifting capacity of single top, reduce the rated lifting capacities of relevant boom according to a weight reduction for auxiliary load handling equipment. Capacities of single top shall not exceed 5,600 kg including main boom hook mass and the net capacity must be so reduced.
5. Standard number of parts of line for each boom length is as shown below. Load per line should not surpass 54.9 kN {5,600 kgf} for main winch and auxiliary winch.

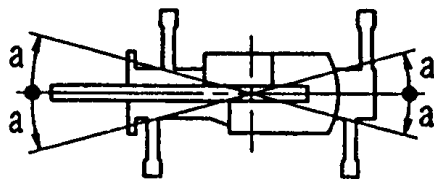
Boom length	10.7m	10.7m to 18.7m	18.7m to 34.7m	Single top Jib
Number of parts of line	10	6	4	1

The lifting capacity data stored in the AUTOMATIC MOMENT LIMITER (AML) is based on the standard number of parts of line listed in the chart.

Maximum lifting capacity is restricted by the number of parts of line of AUTOMATIC MOMENT LIMITER (AML).

6. The lifting capacity for over-side area differs depending on the outrigger extension width. Work with the capacity corresponding to the extension width. The lifting capacities for over-front and over-rear areas are for "outriggers fully extended". However, the areas (angle **a**) differ depending on the outrigger extension width.

Outriggers extended width	6.5m (middle)	5.0m (middle)	2.48m (minimum)
Angle a ^o	45	25	5



RATED LIFTING CAPACITIES

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ON RUBBER STATIONARY (Unit: x1000kg)												
B	A	Over Front						360° Rotation				
		10.7m		18.7m		26.7m		10.7m		18.7m		26.7m
		C		C		C		C		C		C
3.0	66.2	22.1					66.1	12.6				
3.5	63.2	19.7					63.1	10.4				
4.0	60.0	17.5	73.8	15.6			59.9	7.95	73.8	8.65		
4.5	56.7	15.8	72.2	14.0			56.5	6.25	72.1	7.15		
5.0	53.2	14.3	70.6	12.5			53.1	5.15	70.5	5.85		
5.5	49.6	13.0	69.0	11.6			49.4	4.25	68.9	4.95		
6.0	45.6	11.9	67.3	10.7			45.5	3.5	67.2	4.25		
6.5	41.4	11.0	65.6	9.95	73.9	7.4	41.2	2.85	65.5	3.65	73.6	3.95
7.0	36.6	9.65	63.9	9.15	72.7	6.8	36.4	2.3	63.8	3.05	72.5	3.35
8.0	24.3	7.4	60.3	7.85	70.5	5.8	24.1	1.5	60.2	2.15	70.2	2.45
9.0			56.5	6.7	68.1	5.05			56.5	1.55	67.9	1.8
10.0			52.7	5.55	65.7	4.45			52.6	1.1	65.5	1.35
11.0			48.6	4.5	63.3	4.0			48.4	0.7	63.0	0.95
12.0			44.1	3.75	60.8	3.7					60.5	0.6
13.0			39.2	3.15	58.4	3.4						
14.0			33.7	2.65	55.6	2.9						
15.0			27.1	2.25	52.9	2.5						
16.0			17.6	1.9	50.1	2.15						
17.0					47.0	1.85						
18.0					43.8	1.55						
19.0					40.4	1.3						
20.0					36.7	1.1						
22.0					27.9	0.75						
D	0°						39°			55°		

Unit: x1000kg

LIFTING CAPACITY AT ZERO DEGREE BOOM ANGLE ON RUBBER STATIONARY												
C	A	Over Front						360° Rotation				
		10.7m		18.7m		26.7m		10.7m				
		B		B		B		B				
0°	8.6	6.7	16.6	1.7	24.5	0.4	8.6	1.2				

A : Boom length (m)

B : Load radius (m)

C : Loaded boom angle (°)

D : Minimum boom angle (°) for indicated length (no load)

RATED LIFTING CAPACITIES

ISO 4305

ON RUBBER CREEP (Unit: x1000kg)												
B	A	Over Front						360° Rotation				
		10.7m		18.7m		26.7m		10.7m		18.7m		26.7m
		C		C		C		C		C		C
3.0	66.2	16.4					66.1	9.55				
3.5	63.1	14.4					63.0	8.0				
4.0	59.9	12.7	73.7	13.4			59.8	6.7	73.7	7.5		
4.5	56.6	11.4	72.1	12.1			56.5	5.35	72.1	6.35		
5.0	53.2	10.3	70.5	10.9			53.1	4.5	70.5	5.2		
5.5	49.5	9.4	68.9	9.95			49.4	3.65	68.9	4.25		
6.0	45.6	8.5	67.2	9.05			45.5	3.0	67.2	3.5		
6.5	41.3	7.75	65.5	8.25	73.9	7.4	41.2	2.4	65.5	2.95	73.6	3.4
7.0	36.5	7.05	63.8	7.6	72.7	6.8	36.4	1.95	63.8	2.55	72.5	2.85
8.0	24.2	5.95	60.3	6.5	70.5	5.7	24.1	1.25	60.2	1.9	70.2	2.05
9.0			56.5	5.6	68.1	4.75			56.5	1.35	67.8	1.55
10.0			52.7	4.65	65.7	4.2			52.6	0.9	65.4	1.15
11.0			48.5	3.8	63.3	3.65			48.4	0.55	63.0	0.8
12.0			44.1	3.15	60.8	3.15					60.5	0.5
13.0			39.2	2.65	58.3	2.75						
14.0			33.7	2.2	55.6	2.45						
15.0			27.1	1.85	52.9	2.05						
16.0			17.6	1.55	50.1	1.75						
17.0					47.0	1.5						
18.0					43.8	1.3						
19.0					40.4	1.05						
20.0					36.7	0.9						
22.0					27.8	0.55						
D	0°		14°				0°		44°		58°	

Unit: x1000kg

LIFTING CAPACITY AT ZERO DEGREE BOOM ANGLE ON RUBBER CREEP												
C	A	Over Front						360° Rotation				
		10.7m		18.7m				10.7m				
		B		B				B				
0°	8.6	5.4	16.6	1.4			8.6	0.9				

A : Boom length (m)

B : Load radius (m)

C : Loaded boom angle (°)

D : Minimum boom angle (°) for indicated length (no load)

NOTES FOR "ON RUBBER" TABLES

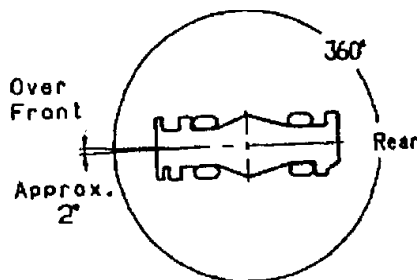
1. Rated lifting capacities shown in the table are based on condition that crane is set on firm level surface, with suspension lock applied. Those above bold lines are based on tire capacity and those below, on crane stability. They are based on actual working radii increased by tire deformation and boom deflection.
2. Rated lifting capacities based on crane stability are according to ISO 4305.
3. The mass of the hook (500 kg for 50 t capacity, 150 kg for 5.6 t capacity), slings and all similarly used load handling devices must be considered as part of the load and must be deducted from the lifting capacities.
4. For rated lifting capacity of single top, reduce the rated lifting capacities of relevant boom according to a weight reductions for auxiliary load handling equipment. Capacities of single top shall not exceed 5,600 kg including main hook.
5. On tires lifting with "jib" is not permitted. Maximum permissible boom length is 26.7 m.
6. CREEP is motion for crane not to travel more than 60 m in any 30 minute period and to travel at the speed of less than 1.6 km/h.
7. During "CREEP" duties travel slowly and keep the lifting load as close to the ground as possible, and especially avoid any abrupt steering, accelerating or braking.
8. Do not operate the crane while carrying the load.
9. Tires should be inflated to their correct air pressure of 450 kPa.
10. For CREEP operation, choose the drive mode and proper gear according to the road or working condition.
11. Standard number of parts of line for on tires operation should be according to the following table.
Load per line should not surpass 54.9 kN {5,600 kgf} for main winch and auxiliary winch.

Boom length	10.7m	18.7m to 26.7m	Single top
Number of parts of line	6	4	1

The lifting capacity data stowed in the AUTOMATIC MOMENT LIMITER (AML) is based on the standard number of parts of line listed in the chart.

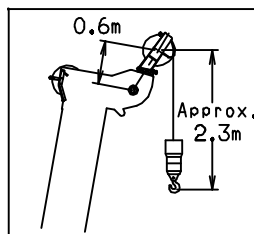
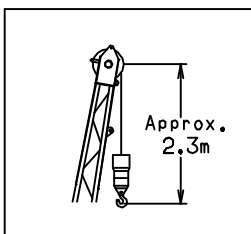
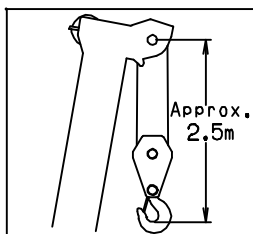
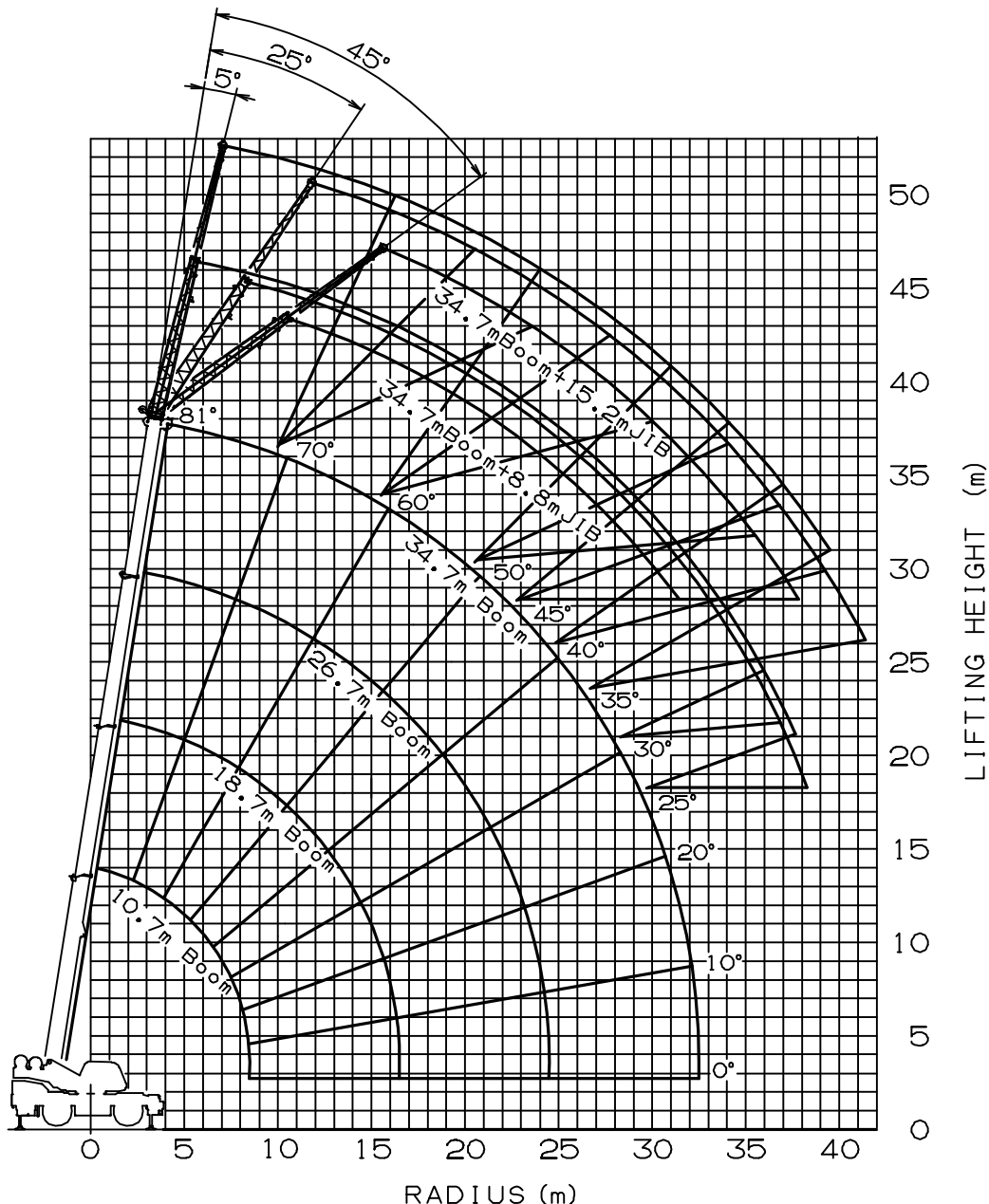
Maximum lifting capacity is restricted by the number of parts of line of AUTOMATIC MOMENT LIMITER (AML).

WORKING AREA



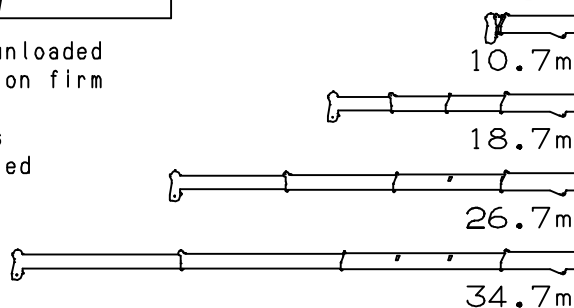
Without outriggers "Over front" operation should be performed within 2 degrees in front of chassis.

WORKING RANGE CHART

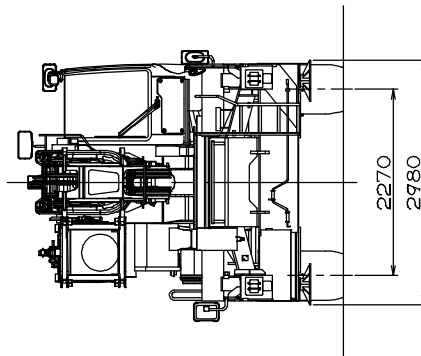
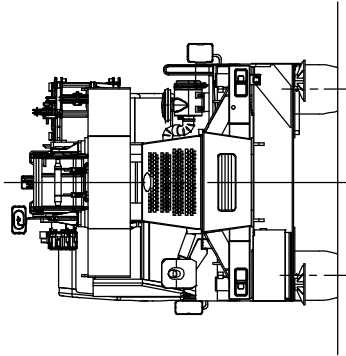
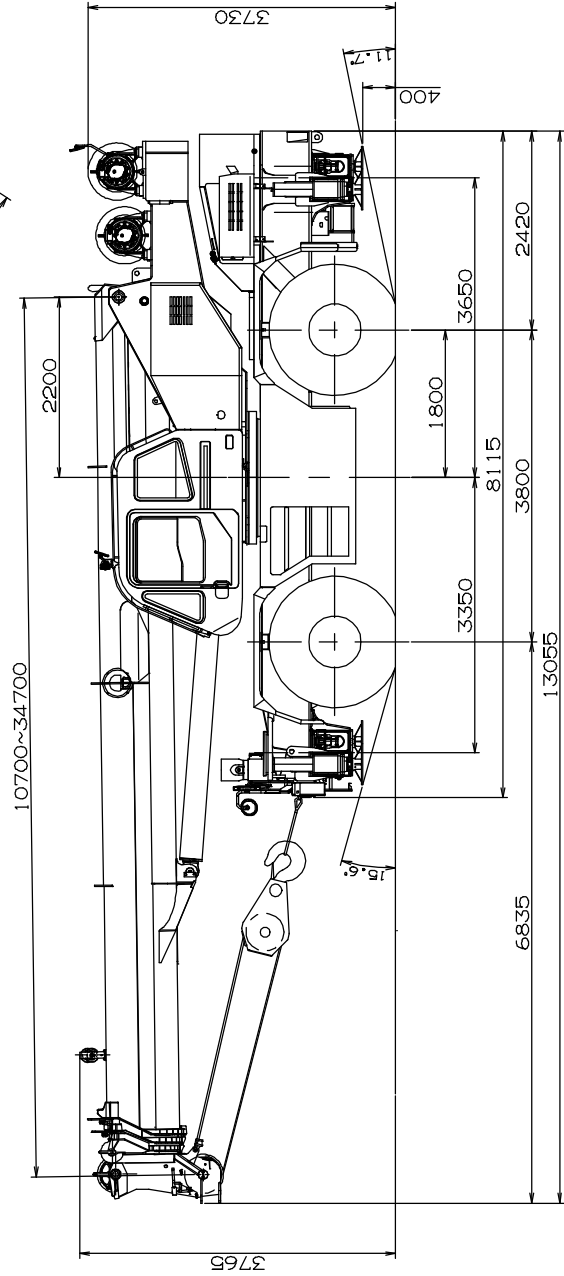
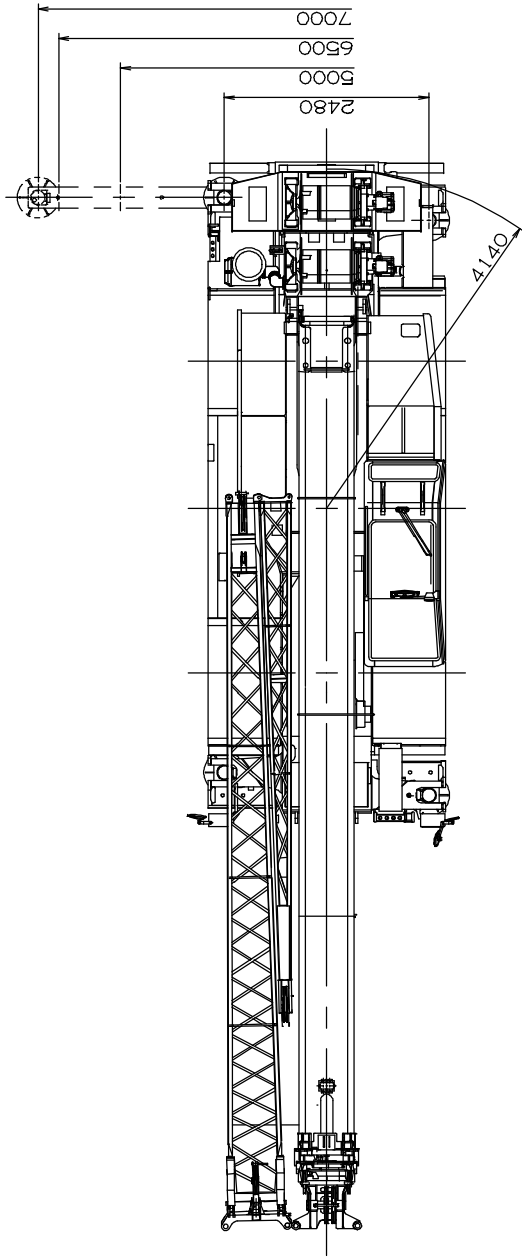


NOTE: Boom and jib geometry shown are for unloaded condition and machine standing level on firm supporting surface. Boom deflection and subsequent radius and boom angle change must be accounted for when applying load to hook.

Boom Length



DIMENSIONS



Note : Dimension is with boom angle at -0.8 °

GR-500EX Axle Weight Distribution Chart

UNIT : kg

	GVW	Front	Rear
Basic standard machine includes: 4-section boom (10.7 m - 34.7 m) 2-stage jib (8.8 m, 15.2 m) Single top 5.6 ton hook ball	33,420	16,440	16,980
Add: 50 ton 5 sheaves hook block	+500	+920	-420
Remove: 1. 5.6 ton hook ball 2. Top jib 3. Base jib	-150 -225 -625	-210 -285 -1,140	+60 +60 +515