

# **SCX 1000A-3**

BOOK No. **RHF90-EN-SP-C3-003**

SERIAL NO. **SC10A – 8016 and up**

***Luffing Towercrane & Liftcrane***

## ***Specifications & Lifting Capacities***

***(JIS 78%)***

Hoist Rope 26mm

**Read This Manual Before  
Operating The Machine.**

# **HITACHI SUMITOMO**

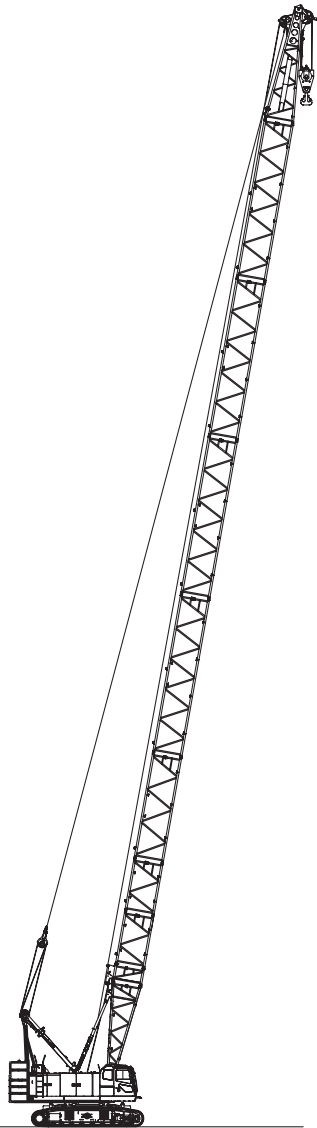
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# Variation of The Attachment

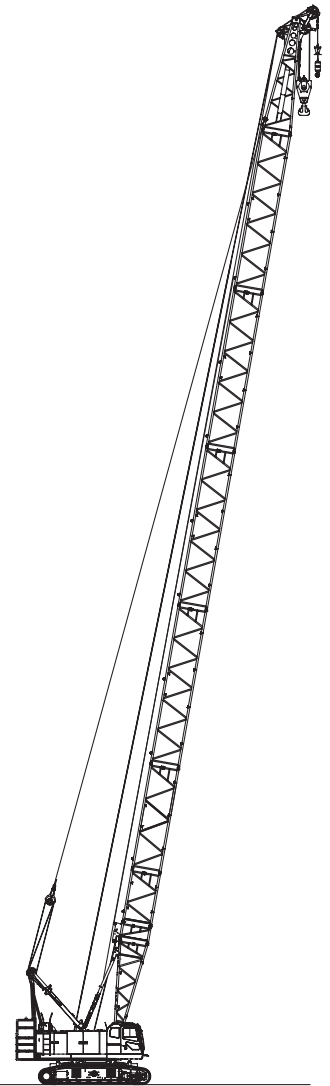
Line Speed *	Front / Rear Winch (Rated with 12 t load)	m/min	110 (45)
	Third Winch (Rated with 12 t load)		95 (30)
Swing Speed		min <sup>-1</sup> (rpm)	2.3
Travel Speed High / Low *		km/h	2.0 / 1.1
Gradeability		% (Degree)	30 (17)
Engine Model	ISUZU 6HK1 (Stage III A, Tier 3)		
Engine Rated Output Power		kW/min <sup>-1</sup> (ps/rpm)	200.6 / 1850 (272 / 1850)

Note : Speeds marked with "\*" may vary depending on load applied.



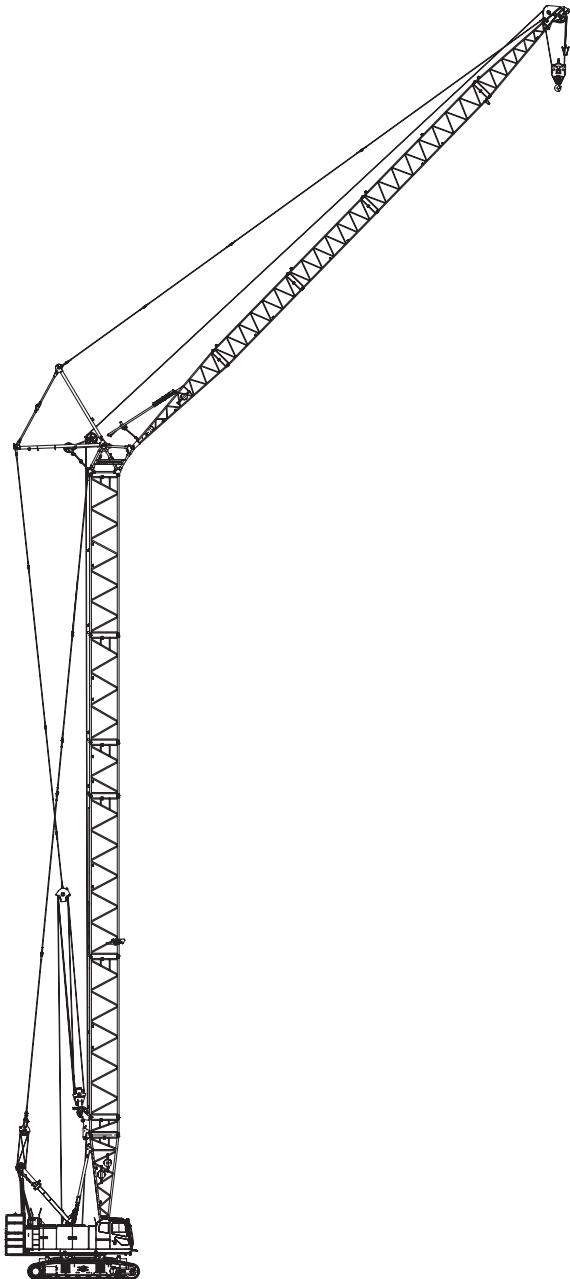
**Crane Specification  
(Boom Longest Length)**

Boom Length	m	13 to 61
Ground Contact Pressure	kPa (kgf/cm <sup>2</sup> )	124 (1.26) (Boom longest length with 35 t hook)
Overall Operating Weight	t	Approximately 110 (Boom longest length with 35 t hook)



**Crane Specification  
(Boom Longest Length with Aux. Sheave)**

Boom Length	m	13 to 58
Ground Contact Pressure	kPa (kgf/cm <sup>2</sup> )	124 (1.27) (Boom longest length + 35 t aux. sheave + 12 t hook attached)
Overall Operating Weight	t	Approximately 111 (Boom longest length + 35 t aux. sheave + 12 t hook attached)



**Tower Specification  
(Boom Longest Length with Tower Jib)**

Boom Length	m	26.5 to 44.5
Crane Jib Length	m	19 ~ 37
Boom + Crane Jib Longest Length	m	44.5 + 37
Ground Contact Pressure	kPa (kgf/cm <sup>2</sup> )	129 (1.32) (Tower boom + tower jib longest length 35 t hook attached)
Overall Operating Weight	t	Approximately 115 (Tower boom + tower jib longest length 35 t hook attached)

**VARIATION**

<b>Variation of The Attachment</b>	<b>2</b>
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# Specifications



## Engine

Model	ISUZU 6HK1
Type	4-cycle, Water-cooled, Direct injection, Turbo-charged, Diesel engine
Displacement	7.79 liters
Rated Output	200.6 kW / 1,850 min <sup>-1</sup> (272 ps / 1,850 rpm)
Fuel Tank Capacity	460 liters
Notes	Engine meets Stage III A / Tier 3 of engine exhaust gas emission regulations in USA, Europe, and Japan. Engine rated horsepower is based on international rating formula that includes engine alternator and without fan.



## Control

Control System	Main actuators are actuated by main hydraulic system controlled with pilot hydraulic system. Safety devices are securely operated by combined various electronic control with hydraulic system. Working speed can be precisely controlled according to control lever stroke and control dials depending on work.
Control Levers	Designed and positioned based on ergonomics. Arm-chair lever type is standard. Cross operation lever type and front lever type are available as option.
Display Panel Design	8 inches size. Located to check work state easily without disturbing the view of the operator.



## Hydraulic System

Hydraulic Oil Tank Capacity	320 liters		
Hydraulic Pump Capacity	Max.	31.4 MPa	
	P1	266 liters / min	for Front, Rear, boom hoist winch and travel
	P2	266 liters / min	for Front, Rear, third winch and travel
	P3	152 liters / min	for Swing, Jack, Sideframe retract and Gantry cyl.
	P4	38 liters / min	Pilot control, Brake cooling, Reeving tagline, etc.
	P5	38 liters / min	
	P6	38 liters / min	
P7	30 liters / min		



## Winch

Front and Rear Winch				
Winch	Front	Rear		
Rope Diameter	26 mm	26 mm		
Rope Length	Standard	205 m	145 m	for Aux. sheave
	Winding Capacity	-	170 m	for Crane jib
Line Pull	Rated	360 m	360 m	
Line Pull	Rated	117 kN	117 kN	
Standard Equipment	High-speed winching is possible by ECO winch mode with low engine speed under light loads.			
Optional Equipment	Free fall winch with brake controlled by pedal operation.			
Boom Hoist Winch				
Rope Diameter	22.4 mm			
Rope Length	Incorporated	160 m		
Hydraulic motor with multi-disc brakes.				

### Third Winch (Optional)

Rope Diameter	26 mm	
Rope Length	Standard	205 m
	Winding Capacity	220 m
Line Pull	Rated	117 kN
Free fall winch with brake controlled by pedal operation.		



## Swing System

Consisted of 2 hydraulic motors with reduction gear and multi-disc brakes and a swing bearing which has inner tooth. Optional swing brake pedal enables operator to control swing precisely.



## Gantry

Gantry is welded steel construction. Raised and lowered by power hydraulic cylinders.



## Counterweight

Upper Weight	Total Weight	37.5 ton
	9.5 ton Base Weight	1 piece
	6.6 ton Insert Weight	2 pieces
	9.0 ton Insert Weight	1 piece
	2.8 ton Top Weight	1 piece
Lower Weight	3.0 ton Top Weight	1 piece
	Total Weight	12.0 ton
	6.0 ton Lower Weight	2 pieces



## Carbody Frame

Welded steel construction with jack up device and crawler sideframe extend-retract cylinders.

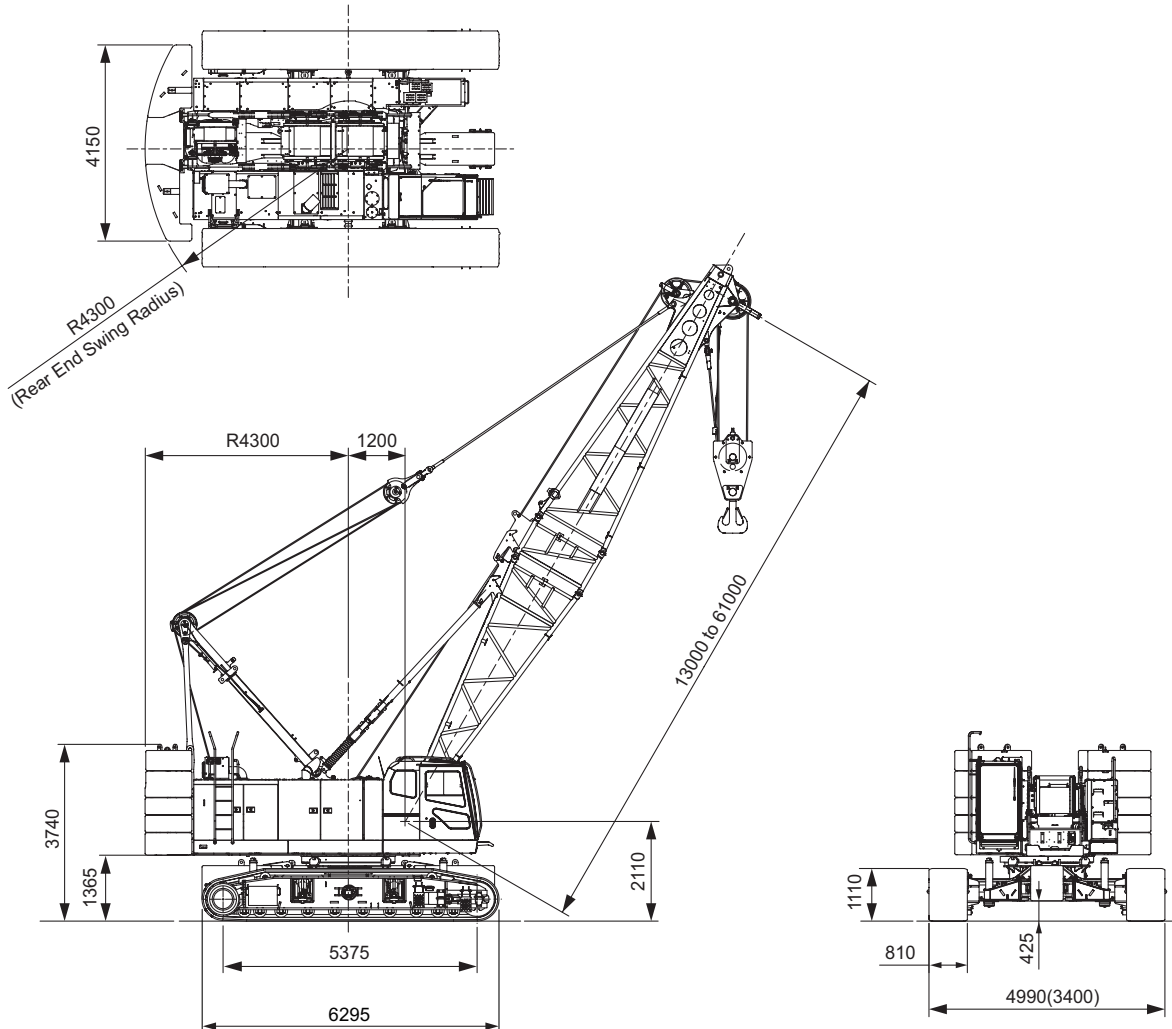


## Crawler Sideframe

Frame	Welded steel box construction, and can be retracted.	
Crawler Shoe	Cast iron 810 mm width shoes each side.	
Upper Roller	2 pieces double flange type for each side.	
Lower Roller	10 pieces each side.	
	Forging heat treated steel with double flange type. 2 plane bearing with floating seal for lifetime lubrication.	
Travel Device	1 piece each side.	
	Hydraulic travel device (Hydraulic motor and reducer)	
	Travel speed (Gradability : 30%)	High : 2.0 km/h Low : 1.1 km/h

# Crane Specifications

## Dimensions and Specifications



### Crane Specifications

Max. Lifting Load × Working Radius	t × m	92.5×4.1
Basic Boom Length	m	13
Max. Boom Length	m	61
Ground Contact Pressure	kPa (kgf/cm <sup>2</sup> )	117 (1.20) (w / Basic Boom, 100 t Hook)
Overall Operating Weight	t	Approximately 104 (w / Basic Boom, 100 t Hook)

### Hook Weight

100 t	1,200 kg
50 t	1,170 kg
35 t	900 kg
12 t	510 kg

NOTE : Data is expressed in SI units followed by conventional units in ( ).

# Boom and Crane Jib Configurations

Boom	
Boom Length (m)	Boom Configurations
13	
16	
19	
22	
25	
28	
31	
34	
37	

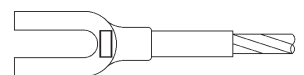
Boom	
Boom Length (m)	Boom Configurations
40	
43	
46	
49	
52	
55	
58	
61	

Aux. Sheave Installable Boom Length																	
Boom Length (m)	13	16	19	22	25	28	31	34	37	40	43	46	49	52	55	58	61
With Aux. Sheave	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	×

(○ : Attachable × : Not Attachable)

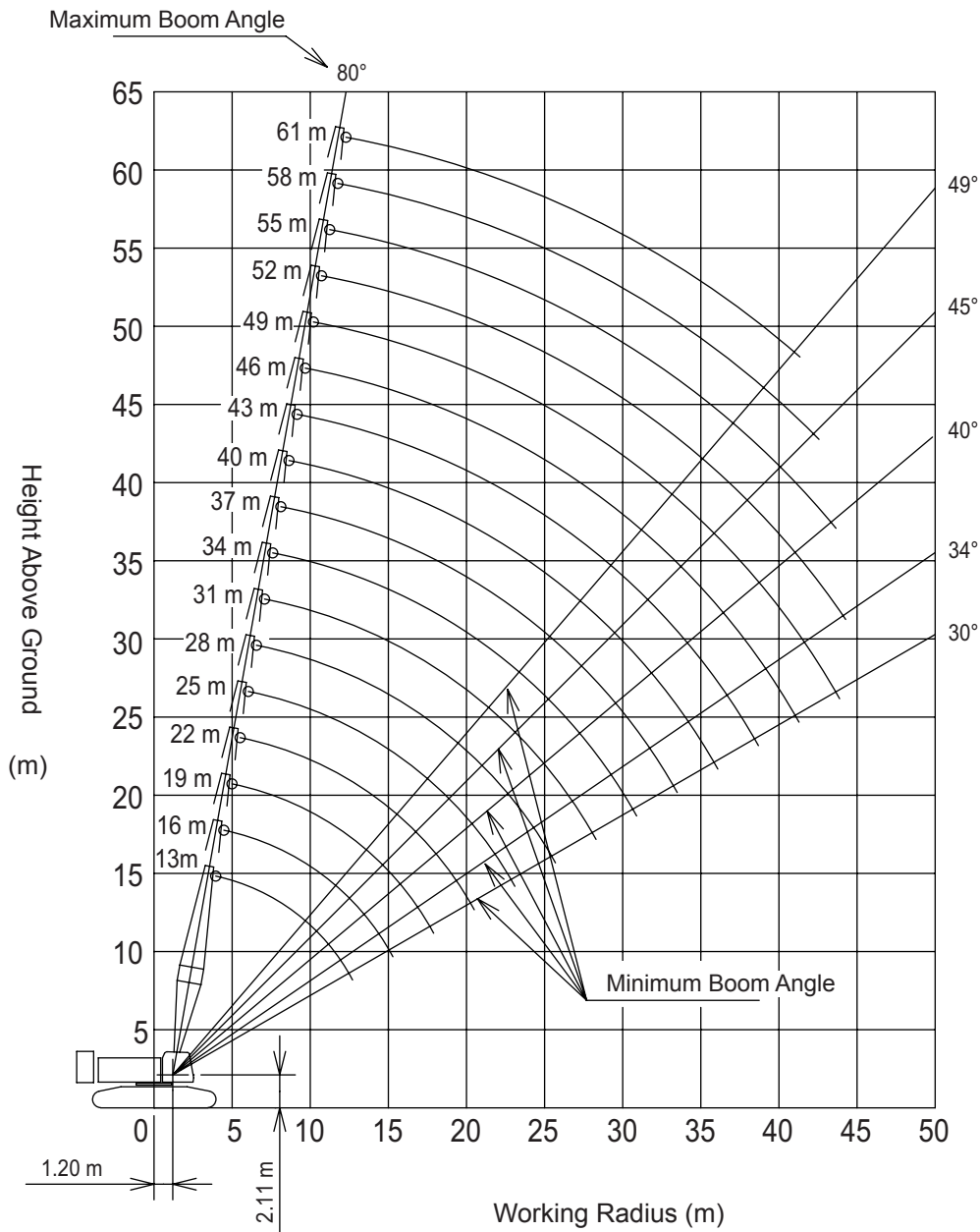
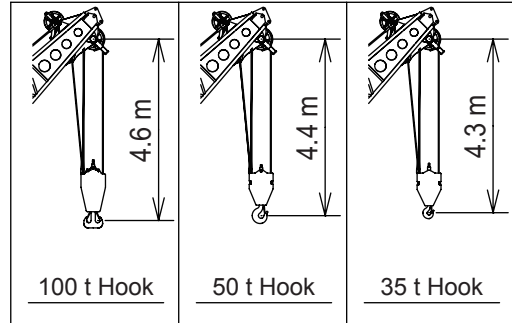
Check the pendant rope with referring to the imprints on the rope end.

Dimensions Not Shown In The Figure		Pendant Rope		
Symbols	Boom Length (m)	Length (m)	Rope Diameter (mm)	Imprint
3	3	3	35.5	□ · △ · 35.5 · 3 · C
6	6	5.3	35.5	□ · △ · 35.5 · 5.3 · C
9	9	6	35.5	□ · △ · 35.5 · 6 · C
		9	35.5	□ · △ · 35.5 · 9 · C

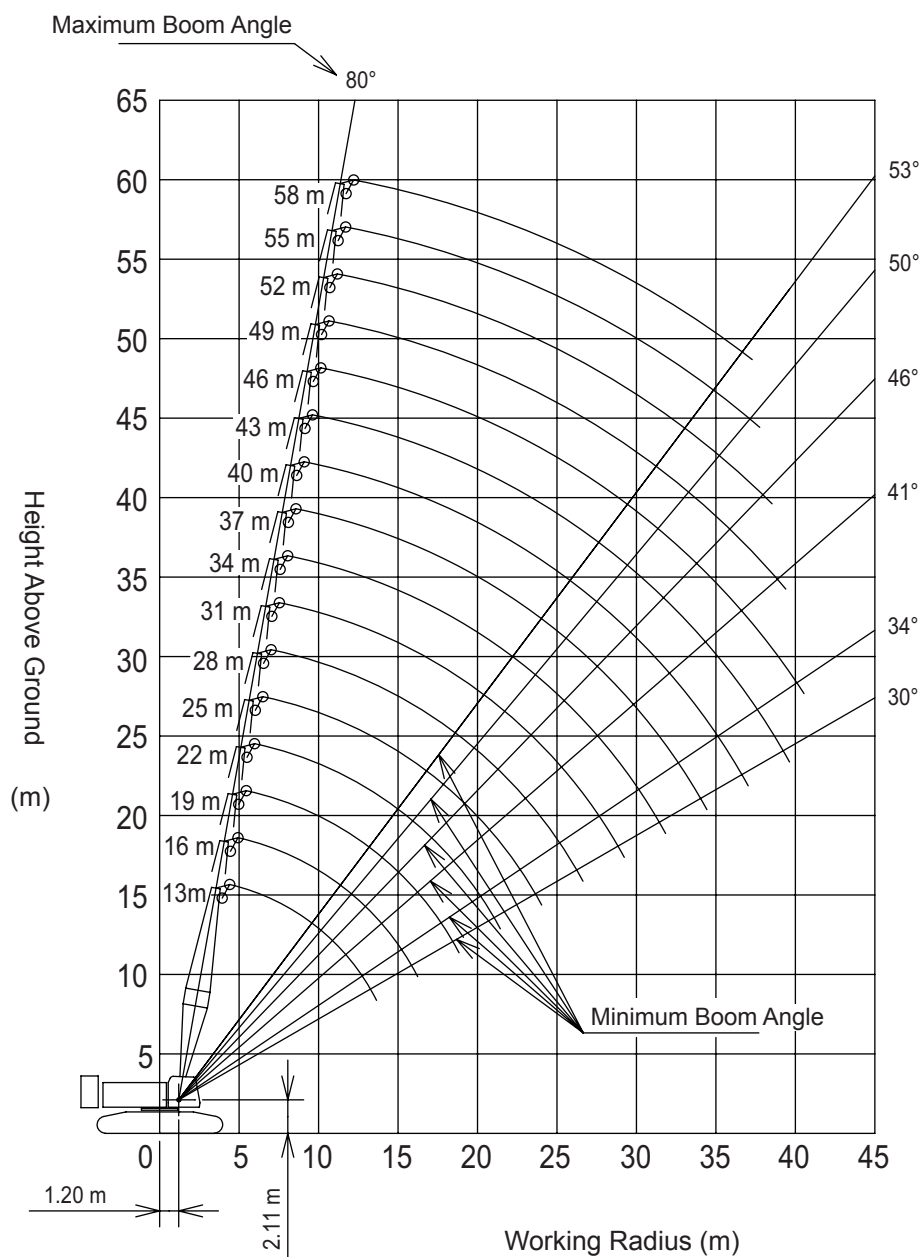
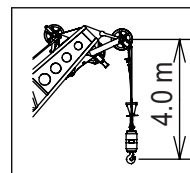


# Working Ranges

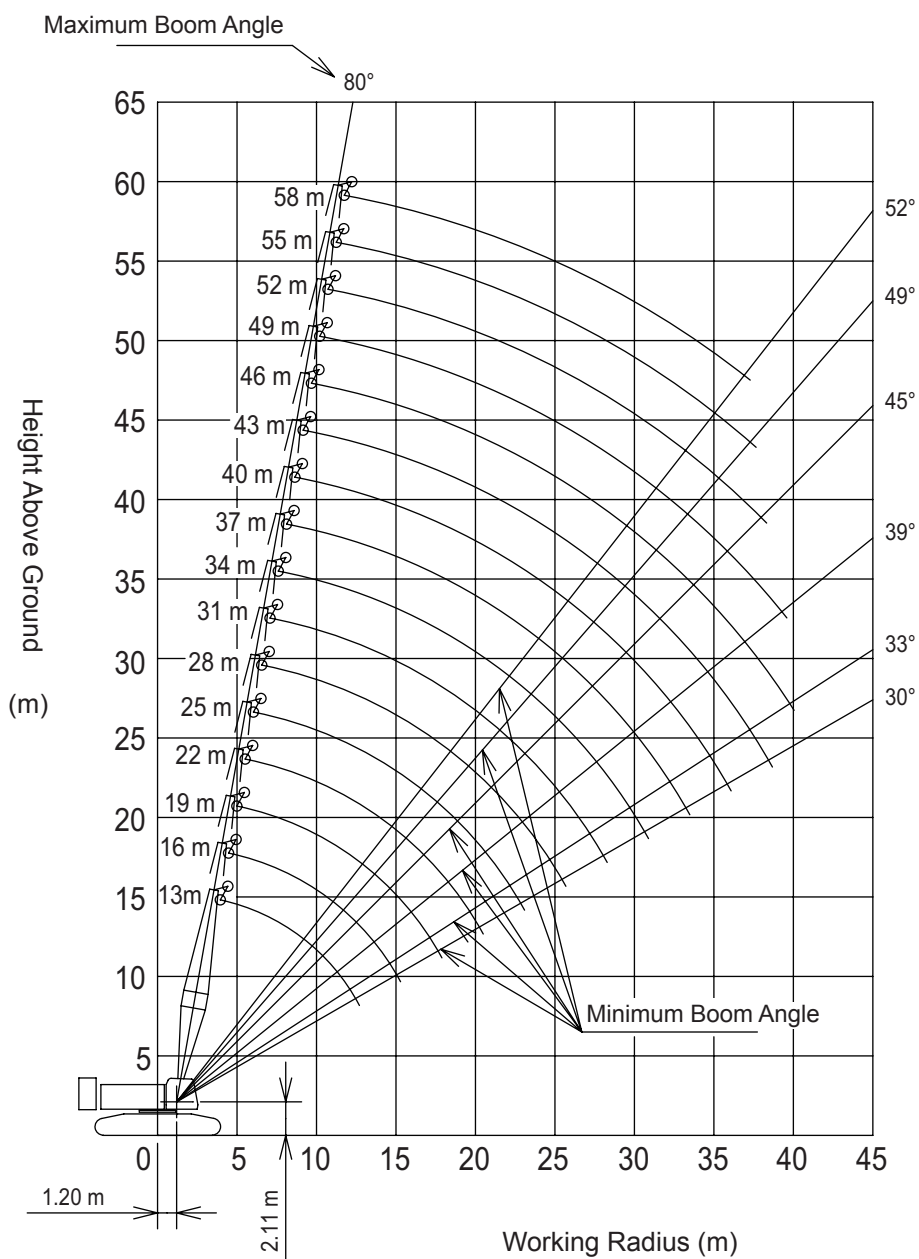
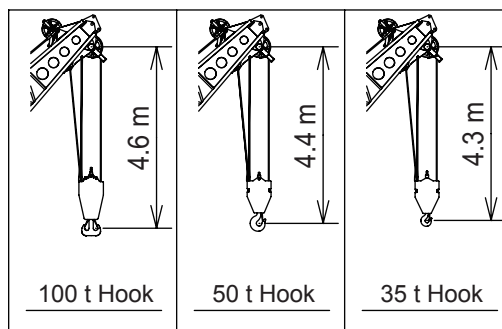
## ■ Main Boom (With Tower Boom Extensions)



■ Aux. Sheave (With Tower Boom Extensions)



■ Main Boom with Aux. Sheave (With Tower Boom Extensions)



# Gross Rated Load Table

## ■ Main Boom (With Tower Boom Extensions)



Unit: ton

Working Radius(m)	Boom length (m)										Working Radius(m)	
	13	16	19	22	25	28	31	34	37	40		
4.1	92.50											4.1
4.5	84.20	80.60 /4.7										4.5
5.0	75.70	75.70	72.70 /5.2									5.0
5.5	68.70	68.70	68.70	65.10 /5.8								5.5
6.0	62.90	62.90	62.90	62.90	59.30 /6.3	52.75 /6.8						6.0
7.0	51.90	51.90	51.80	51.75	51.20	50.70	46.40 /7.4	42.10 /7.9				7.0
8.0	42.75	42.70	42.60	42.55	42.45	42.30	41.80	41.40	36.00 /8.5			8.0
9.0	36.25	36.20	36.05	36.00	35.90	35.80	35.60	35.40	34.95	34.70		9.0
10.0	31.35	31.30	31.20	31.15	31.00	30.95	30.70	30.55	30.35	30.25		10.0
12.0	24.60	24.55	24.35	24.30	24.20	24.10	23.90	23.75	23.50	23.50		12.0
14.0	22.85 /12.7	20.05	19.85	19.80	19.65	19.60	19.35	19.20	19.00	18.95		14.0
16.0		17.85 /15.3	16.65	16.60	16.45	16.35	16.15	16.00	15.75	15.75		16.0
18.0			14.40 /17.9	14.20	14.05	13.95	13.75	13.60	13.35	13.30		18.0
20.0				12.35	12.20	12.10	11.85	11.70	11.50	11.45		20.0
22.0				11.95 /20.5	10.70	10.60	10.40	10.20	10.00	9.95		22.0
24.0					10.00 /23.1	9.40	9.15	9.00	8.75	8.75		24.0
26.0						8.60 /25.6	8.15	8.00	7.75	7.70		26.0
28.0							7.35	7.15	6.90	6.85		28.0
30.0							7.25 /28.2	6.40	6.20	6.15		30.0
32.0								6.15 /30.8	5.55	5.50		32.0
34.0									5.20 /33.4	4.95		34.0
36.0										4.50		36.0

Unit: ton

Working Radius(m)	Boom length (m)							Working Radius(m)
	43	46	49	52	55	58	61	
9.0	31.50 /9.6							9.0
10.0	29.85	29.20 /10.1	26.50 /10.7	22.90 /11.3	20.20 /11.8			10.0
12.0	23.25	23.10	22.95	22.55	20.10	17.70 /12.3	15.35 /12.9	12.0
14.0	18.75	18.55	18.40	18.30	18.15	17.00	14.95	14.0
16.0	15.50	15.35	15.20	15.10	14.90	14.75	14.20	16.0
18.0	13.10	12.95	12.80	12.70	12.50	12.35	12.10	18.0
20.0	11.20	11.05	10.90	10.80	10.65	10.50	10.25	20.0
22.0	9.75	9.60	9.45	9.30	9.15	9.00	8.75	22.0
24.0	8.50	8.35	8.20	8.10	7.95	7.80	7.55	24.0
26.0	7.50	7.35	7.20	7.10	6.90	6.75	6.55	26.0
28.0	6.65	6.50	6.35	6.20	6.05	5.90	5.70	28.0
30.0	5.90	5.75	5.60	5.50	5.35	5.20	4.95	30.0
32.0	5.30	5.15	5.00	4.85	4.70	4.55	4.35	32.0
34.0	4.75	4.60	4.45	4.30	4.15	4.00	3.80	34.0
36.0	4.25	4.10	3.95	3.80	3.65	3.50	3.30	36.0
38.0	3.85	3.70	3.55	3.40	3.25	3.10	2.85	38.0
40.0	3.70 /38.6	3.30	3.15	3.00	2.85	2.70	2.50	40.0
42.0		3.10 /41.2	2.85	2.65	2.50	2.35	2.10	42.0
44.0			2.55 /43.8	2.35	2.15	2.00	1.70	44.0
46.0				2.05	1.85	1.70 /45.7		46.0
48.0				2.00 /46.1	1.70 /47.0			48.0

## Notes:

- Capacities are the maximum allowable and based on machine standing level on firm supporting surface under ideal job conditions.
- Capacities are in metric tones, and are not more than 78% of minimum tipping loads except the figures surrounded by bold lines which are based on other factor of machine structural strength limitation; the design codes/standards applied to the capacities are from "Construction Codes for Mobile Crane" and "Ordinance on Safety of Crane and Similar Equipment" issued by Ministry of Health, Labour and Welfare, Japan.
- Capacities are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stop of loads, supporting surface conditions and operating speed. Operator must reduce load ratings to take such conditions into account.
- Deduction from rated capacities must be made for weight of hook block, hook ball, sling, spreader bar or any suspended gear.
- 37.5ton counterweight and 12.0ton lowerweight are required for all capacities on this chart.
- Correlation between the number of reeved lines, maximum rated loads, hook weights are shown in the table below.

Hook Capacity	Hook Weight (t)	Maximum Rated Load (t)								
		8 Parts	7 Parts	6 Parts	5 Parts	4 Parts	3 Parts	2 Parts	1 Part	
100t	4 sheaves	1.20	100	84	72	60	48	-	-	-
50t	3 sheaves	1.17	-	-	-	50	48	36	24	-
35t	1 sheaves	0.9	-	-	-	-	-	35	24	-
12t		0.51	-	-	-	-	-	-	-	12



■ Aux. Sheave (With Tower Boom Extensions)



Unit: ton

Radius (m)	Boom length (m)										Radius (m)	
	13	16	19	22	25	28	31	34	37	40		
4.9	12.00											4.9
5.0	12.00	12.00 /5.4										5.0
5.5	12.00	12.00										5.5
6.0	12.00	12.00	12.00	12.00 /6.5								6.0
7.0	12.00	12.00	12.00	12.00	12.00 /7.1	12.00 /7.6						7.0
8.0	12.00	12.00	12.00	12.00	12.00	12.00	12.00 /8.2	12.00 /8.7				8.0
9.0	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00 /9.3	12.00 /9.8		9.0
10.0	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	10.0
12.0	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.0
14.0	12.00 /13.9	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	14.0
16.0		12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	16.0
18.0		12.00 /16.5	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	18.0
20.0			12.00 /19.1	12.00	12.00	11.85	11.65	11.50	11.25	11.20		20.0
22.0				10.90 /21.7	10.50	10.40	10.15	10.00	9.75	9.70		22.0
24.0					9.30	9.15	8.95	8.75	8.50	8.45		24.0
26.0					9.10 /24.3	8.15	7.90	7.75	7.50	7.45		26.0
28.0						7.75 /26.9	7.10	6.90	6.65	6.60		28.0
30.0							6.55 /29.5	6.15	5.90	5.85		30.0
32.0								5.55	5.30	5.20		32.0
34.0								5.50 /32.1	4.75	4.65		34.0
36.0									4.60 /34.7	4.20		36.0
38.0										3.90 /37.3		38.0

Unit: ton

Radius (m)	Boom length (m)						Radius (m)
	43	46	49	52	55	58	
10.0	12.00 /10.4	12.00 /10.9	12.00 /11.5				10.0
12.0	12.00	12.00	12.00	12.00	12.00 /12.5	12.00 /13.1	12.0
14.0	12.00	12.00	12.00	12.00	12.00	12.00	14.0
16.0	12.00	12.00	12.00	12.00	12.00	12.00	16.0
18.0	12.00	12.00	12.00	12.00	12.00	11.90	18.0
20.0	10.95	10.80	10.65	10.55	10.35	10.20	20.0
22.0	9.45	9.30	9.15	9.05	8.85	8.70	22.0
24.0	8.25	8.05	7.90	7.80	7.65	7.45	24.0
26.0	7.20	7.05	6.90	6.80	6.60	6.45	26.0
28.0	6.35	6.20	6.05	5.90	5.75	5.60	28.0
30.0	5.60	5.45	5.30	5.20	5.00	4.85	30.0
32.0	5.00	4.80	4.65	4.55	4.40	4.20	32.0
34.0	4.45	4.25	4.10	4.00	3.80	3.65	34.0
36.0	3.95	3.80	3.65	3.50	3.35	3.20	36.0
38.0	3.55	3.35	3.20	3.05	2.90	2.75	38.0
40.0	3.20 /39.9	3.00	2.85	2.70	2.50	2.35	40.0
42.0		2.65	2.50	2.35	2.20 /41.7	2.20 /40.7	42.0
44.0		2.60 /42.5	2.20	2.20 /42.8			44.0

Notes:

1. Capacities are the maximum allowable and based on machine standing level on firm supporting surface under ideal job conditions.
2. Capacities are in metric tones, and are not more than 78% of minimum tipping loads except the figures surrounded by bold lines which are based on other factor of machine structural strength limitation; the design codes/standards applied to the capacities are from "Construction Codes for Mobile Crane" and "Ordinance on Safety of Crane and Similar Equipment" issued by Ministry of Health, Labour and Welfare, Japan.
3. Capacities are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stop of loads, supporting surface conditions and operating speed. Operator must reduce load ratings to take such conditions into account.
4. Deduction from rated capacities must be made for weight of hook block, hook ball, sling, spreader bar or any suspended gear.
5. 37.5ton counterweight and 12.0ton lowerweight are required for all capacities on this chart.
6. Hook weights are shown in the table below.

Hook Capacity	Hook Weight (t)
100t 4 sheaves	1.20
50t 3 sheaves	1.17
35t 1 sheaves	0.9
12t	0.51

■ Main Boom with Aux. Sheave (With Tower Boom Extensions)



Unit: ton

Working Radius(m)	Boom length (m)										Working Radius(m)	
	13	16	19	22	25	28	31	34	37	40		
4.1	92.30 /4.1											4.1
4.5	84.00	80.40 /4.7										4.5
5.0	75.50	75.50	72.50 /5.2									5.0
5.5	68.50	68.50	68.50	64.90 /5.8								5.5
6.0	62.70	62.70	62.70	62.70	58.90 /6.3	52.40 /6.8						6.0
7.0	51.50	51.50	51.40	51.30	50.80	50.30	46.00 /7.4	41.70 /7.9				7.0
8.0	42.40	42.30	42.20	42.10	42.00	41.90	41.40	41.00	36.00 /8.5			8.0
9.0	35.90	35.80	35.70	35.60	35.50	35.40	35.20	35.00	34.60	34.10		9.0
10.0	31.00	30.90	30.80	30.70	30.60	30.50	30.30	30.10	29.90	29.80		10.0
12.0	24.30	24.20	24.00	23.90	23.80	23.70	23.50	23.30	23.10	23.00		12.0
14.0	22.50 /12.7	19.70	19.50	19.40	19.30	19.20	19.00	18.80	18.60	18.50		14.0
16.0		17.50 /15.3	16.30	16.20	16.10	16.00	15.70	15.60	15.30	15.30		16.0
18.0			14.00 /17.9	13.80	13.70	13.60	13.30	13.20	12.90	12.90		18.0
20.0				12.00	11.80	11.70	11.50	11.30	11.10	11.00		20.0
22.0				11.60 /20.5	10.30	10.20	10.00	9.80	9.60	9.50		22.0
24.0					9.70 /23.1	9.00	8.80	8.60	8.40	8.30		24.0
26.0						8.20 /25.6	7.80	7.60	7.40	7.30		26.0
28.0							7.00	6.80	6.50	6.50		28.0
30.0							6.90 /28.2	6.10	5.80	5.70		30.0
32.0								5.80 /30.8	5.20	5.10		32.0
34.0									4.80 /33.4	4.60		34.0
36.0										4.10		36.0

Unit: ton

Working Radius(m)	Boom length (m)						Working Radius(m)
	43	46	49	52	55	58	
9.0	30.90 /9.6						9.0
10.0	29.40	28.60 /10.1	25.30 /10.7	21.70 /11.3	19.10 /11.8		10.0
12.0	22.80	22.60	22.40	21.50	19.00	16.70 /12.3	12.0
14.0	18.30	18.10	17.90	17.80	17.60	16.00	14.0
16.0	15.10	14.90	14.70	14.60	14.40	14.20	16.0
18.0	12.60	12.50	12.30	12.20	12.00	11.80	18.0
20.0	10.80	10.60	10.50	10.30	10.20	10.00	20.0
22.0	9.30	9.10	9.00	8.80	8.70	8.50	22.0
24.0	8.10	7.90	7.80	7.60	7.40	7.30	24.0
26.0	7.10	6.90	6.70	6.60	6.40	6.30	26.0
28.0	6.20	6.00	5.90	5.70	5.60	5.40	28.0
30.0	5.50	5.30	5.20	5.00	4.90	4.70	30.0
32.0	4.90	4.70	4.50	4.40	4.20	4.10	32.0
34.0	4.30	4.20	4.00	3.80	3.70	3.50	34.0
36.0	3.90	3.70	3.50	3.40	3.20	3.00	36.0
38.0	3.40	3.30	3.10	2.90	2.80	2.60	38.0
40.0	3.30 /38.6	2.90	2.70	2.50	2.30	2.20 /39.6	40.0
42.0		2.70 /41.2	2.40	2.20 /41.5	2.20 /40.5		42.0
44.0			2.20 /43.2				44.0

Notes:

1. Capacities are the maximum allowable and based on machine standing level on firm supporting surface under ideal job conditions.
2. Capacities are in metric tones, and are not more than 78% of minimum tipping loads except the figures surrounded by bold lines which are based on other factor of machine structural strength limitation; the design codes/standards applied to the capacities are from "Construction Codes for Mobile Crane" and "Ordinance on Safety of Crane and Similar Equipment" issued by Ministry of Health, Labour and Welfare, Japan.
3. Capacities are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stop of loads, supporting surface conditions and operating speed. Operator must reduce load ratings to take such conditions into account.
4. Deduction from rated capacities must be made for weight of hook block, hook ball, sling, spreader bar or any suspended gear.
5. 37.5ton counterweight and 12.0ton lowerweight are required for all capacities on this chart.
6. Correlation between the number of reeved lines, maximum rated loads, hook weights are shown in the table below.

Hook Capacity	Hook Weight (t)	Maximum Rated Load (t)								
		8 Parts	7 Parts	6 Parts	5 Parts	4 Parts	3 Parts	2 Parts	1 Part	
100t	4 sheaves	1.20	100	84	72	60	48	-	-	-
50t	3 sheaves	1.17	-	-	-	50	48	36	24	-
35t	1 sheaves	0.9	-	-	-	-	-	35	24	-
12t		0.51	-	-	-	-	-	-	-	12

■ Main Boom (Using Third Winch) (With Tower Boom Extensions)



Unit: ton

Working Radius(m)	Boom length (m)										Working Radius(m)	
	13	16	19	22	25	28	31	34	37	40		
4.1	90.00											4.1
4.5	84.20	80.60 /4.7										4.5
5.0	75.70	75.70	72.00 /5.2									5.0
5.5	68.70	68.70	68.70	65.10 /5.8								5.5
6.0	62.90	62.90	62.90	62.90	59.25 /6.3	52.70 /6.8						6.0
7.0	51.85	51.85	51.70	51.70	51.15	50.60	46.35 /7.4	42.00 /7.9				7.0
8.0	42.65	42.65	42.55	42.50	42.35	42.25	41.75	41.30	36.00 /8.5			8.0
9.0	36.15	36.15	36.00	35.95	35.85	35.75	35.55	35.30	34.90	34.60		9.0
10.0	31.30	31.25	31.10	31.05	30.95	30.85	30.65	30.50	30.25	30.15		10.0
12.0	24.55	24.45	24.30	24.25	24.10	24.05	23.85	23.70	23.45	23.40		12.0
14.0	22.75 /12.7	19.95	19.80	19.75	19.60	19.50	19.30	19.15	18.90	18.90		14.0
16.0		17.80 /15.3	16.60	16.50	16.35	16.30	16.10	15.90	15.70	15.65		16.0
18.0			14.30 /17.9	14.10	13.95	13.90	13.65	13.50	13.30	13.25		18.0
20.0				12.30	12.10	12.00	11.80	11.65	11.40	11.40		20.0
22.0				11.90 /20.5	10.65	10.55	10.30	10.15	9.90	9.90		22.0
24.0					9.95 /23.1	9.35	9.10	8.95	8.70	8.65		24.0
26.0						8.50 /25.6	8.10	7.90	7.70	7.65		26.0
28.0							7.25	7.05	6.85	6.80		28.0
30.0							7.20 /28.2	6.35	6.10	6.05		30.0
32.0								6.10 /30.8	5.50	5.45		32.0
34.0									5.10 /33.4	4.90		34.0
36.0										4.40		36.0

Unit: ton

Working Radius(m)	Boom length (m)							Working Radius(m)
	43	46	49	52	55	58	61	
9.0	31.45 /9.6							9.0
10.0	29.80	29.10 /10.1	26.70 /10.7	23.40 /11.3	20.55 /11.8			10.0
12.0	23.20	23.00	22.85	22.75	20.50	18.05 /12.3	15.60 /12.9	12.0
14.0	18.65	18.50	18.35	18.25	18.05	17.35	15.20	14.0
16.0	15.45	15.30	15.15	15.00	14.85	14.70	14.45	16.0
18.0	13.00	12.85	12.70	12.60	12.45	12.30	12.05	18.0
20.0	11.15	11.00	10.85	10.75	10.60	10.40	10.20	20.0
22.0	9.65	9.50	9.35	9.25	9.10	8.95	8.70	22.0
24.0	8.45	8.30	8.15	8.00	7.85	7.70	7.50	24.0
26.0	7.40	7.25	7.15	7.00	6.85	6.70	6.50	26.0
28.0	6.55	6.40	6.30	6.15	6.00	5.85	5.60	28.0
30.0	5.85	5.70	5.55	5.40	5.25	5.10	4.90	30.0
32.0	5.20	5.05	4.90	4.80	4.65	4.50	4.25	32.0
34.0	4.65	4.50	4.35	4.25	4.10	3.95	3.70	34.0
36.0	4.20	4.05	3.90	3.75	3.60	3.45	3.20	36.0
38.0	3.75	3.60	3.45	3.30	3.15	3.00	2.80	38.0
40.0	3.65 /38.6	3.25	3.10	2.95	2.80	2.65	2.40	40.0
42.0		3.05 /41.2	2.75	2.60	2.45	2.25	2.00	42.0
44.0			2.50 /43.8	2.25	2.10	1.90	1.70 /43.7	44.0
46.0				1.95	1.75	1.70 /45.3		46.0
48.0				1.90 /46.1	1.70 /46.3			48.0

Notes:

1. Capacities are the maximum allowable and based on machine standing level on firm supporting surface under ideal job conditions.
2. Capacities are in metric tones, and are not more than 78% of minimum tipping loads except the figures surrounded by bold lines which are based on other factor of machine structural strength limitation; the design codes/standards applied to the capacities are from "Construction Codes for Mobile Crane" and "Ordinance on Safety of Crane and Similar Equipment" issued by Ministry of Health, Labour and Welfare, Japan.
3. Capacities are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stop of loads, supporting surface conditions and operating speed. Operator must reduce load ratings to take such conditions into account.
4. Deduction from rated capacities must be made for weight of hook block, hook ball, sling, spreader bar or any suspended gear.
5. 37.5ton counterweight and 12.0ton lowerweight are required for all capacities on this chart.
6. Correlation between the number of reeved lines, maximum rated loads, hook weights are shown in the table below.

Hook Capacity	Hook Weight (t)	Maximum Rated Load (t)								
		8 Parts	7 Parts	6 Parts	5 Parts	4 Parts	3 Parts	2 Parts	1 Part	
100t	4 sheaves	1.20	100	84	72	60	48	-	-	-
50t	3 sheaves	1.17	-	-	-	50	48	36	24	-
35t	1 sheaves	0.9	-	-	-	-	-	35	24	-
12t		0.51	-	-	-	-	-	-	-	12

## ■ Main Boom with Aux. Sheave (Using Third Winch) (With Tower Boom Extensions)



Radius (m)	Boom length (m)										Radius (m)
	13	16	19	22	25	28	31	34	37	40	
4.1	89.80										4.1
4.5	84.00	80.40 /4.7									4.5
5.0	75.50	75.50	71.80 /5.2								5.0
5.5	68.50	68.50	68.50	64.90 /5.8							5.5
6.0	62.70	62.70	62.70	62.70	58.90 /6.3	52.35 /6.8					6.0
7.0	51.45	51.45	51.35	51.30	50.80	50.25	46.00 /7.4	41.65 /7.9			7.0
8.0	42.30	42.30	42.15	42.10	42.00	41.90	41.35	40.95	36.00 /8.5		8.0
9.0	35.80	35.75	35.65	35.55	35.45	35.35	35.15	34.95	34.50	34.10	9.0
10.0	30.95	30.90	30.75	30.70	30.55	30.50	30.25	30.10	29.85	29.80	10.0
12.0	24.20	24.10	23.95	23.90	23.75	23.65	23.45	23.30	23.05	23.00	12.0
14.0	22.45 /12.7	19.65	19.45	19.40	19.25	19.15	18.90	18.75	18.50	18.45	14.0
16.0		17.45 /15.3	16.25	16.15	16.00	15.90	15.70	15.55	15.30	15.25	16.0
18.0			14.00 /17.9	13.80	13.60	13.50	13.30	13.10	12.90	12.85	18.0
20.0				11.95	11.75	11.65	11.45	11.25	11.00	10.95	20.0
22.0				11.55 /20.5	10.30	10.20	9.95	9.75	9.55	9.50	22.0
24.0					9.60 /23.1	9.00	8.75	8.55	8.30	8.25	24.0
26.0						8.20 /25.6	7.75	7.55	7.30	7.25	26.0
28.0							6.95	6.70	6.45	6.40	28.0
30.0							6.85 /28.2	6.00	5.75	5.70	30.0
32.0								5.75 /30.8	5.15	5.05	32.0
34.0									4.75 /33.4	4.55	34.0
36.0										4.00	36.0

Radius (m)	Boom length (m)						Radius (m)
	43	46	49	52	55	58	
9.0	30.85 /9.6						9.0
10.0	29.40	28.50 /10.1	25.65 /10.7	22.15 /11.3	19.55 /11.8		10.0
12.0	22.75	22.55	22.40	22.00	19.45	17.00 /12.3	12.0
14.0	18.25	18.05	17.90	17.75	17.60	16.30	14.0
16.0	15.00	14.85	14.65	14.55	14.40	14.20	16.0
18.0	12.60	12.45	12.25	12.15	11.95	11.80	18.0
20.0	10.75	10.55	10.40	10.30	10.10	9.95	20.0
22.0	9.25	9.10	8.90	8.80	8.60	8.45	22.0
24.0	8.05	7.85	7.70	7.55	7.40	7.25	24.0
26.0	7.00	6.85	6.70	6.55	6.40	6.25	26.0
28.0	6.15	6.00	5.85	5.70	5.55	5.40	28.0
30.0	5.45	5.30	5.15	4.95	4.80	4.65	30.0
32.0	4.80	4.65	4.50	4.35	4.20	4.00	32.0
34.0	4.30	4.10	3.95	3.80	3.65	3.45	34.0
36.0	3.80	3.65	3.50	3.30	3.15	3.00	36.0
38.0	3.40	3.20	3.05	2.90	2.70	2.50	38.0
40.0	3.30 /38.6	2.85	2.70	2.50	2.25	2.20 /39.5	40.0
42.0		2.65 /41.2	2.35	2.20 /41.5	2.20 /40.2		42.0
44.0			2.20 /42.9				42.9

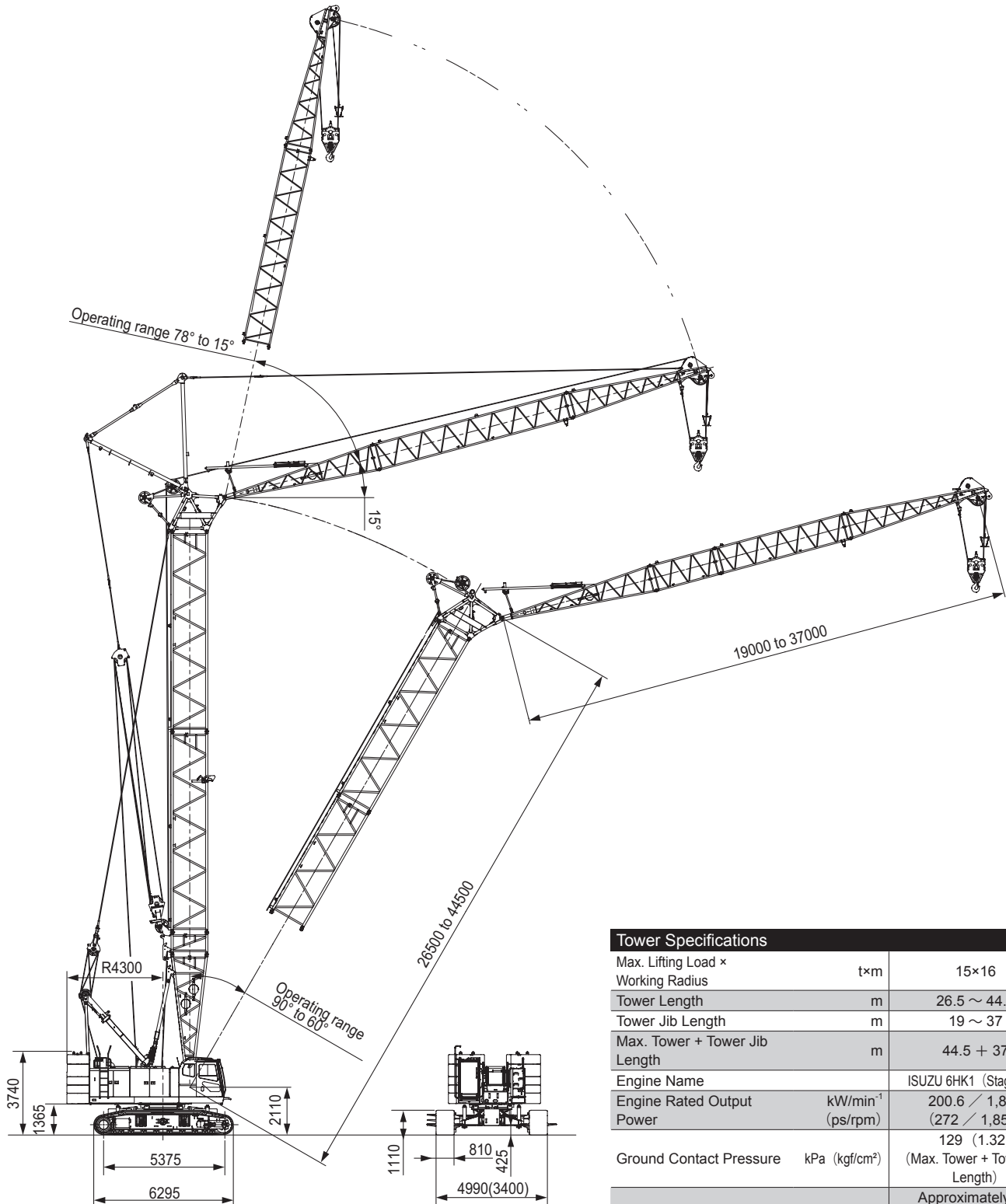
## Notes:

- Capacities are the maximum allowable and based on machine standing level on firm supporting surface under ideal job conditions.
- Capacities are in metric tones, and are not more than 78% of minimum tipping loads except the figures surrounded by bold lines which are based on other factor of machine structural strength limitation; the design codes/standards applied to the capacities are from "Construction Codes for Mobile Crane" and "Ordinance on Safety of Crane and Similar Equipment" issued by Ministry of Health, Labour and Welfare, Japan.
- Capacities are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stop of loads, supporting surface conditions and operating speed. Operator must reduce load ratings to take such conditions into account.
- Deduction from rated capacities must be made for weight of hook block, hook ball, sling, spreader bar or any suspended gear.
- 37.5ton counterweight and 12.0ton lowerweight are required for all capacities on this chart.
- Correlation between the number of reeved lines, maximum rated loads, hook weights are shown in the table below.

Hook Capacity	Hook Weight (t)	Maximum Rated Load (t)								
		8 Parts	7 Parts	6 Parts	5 Parts	4 Parts	3 Parts	2 Parts	1 Part	
100t	4 sheaves	1.20	100	84	72	60	48	-	-	-
50t	3 sheaves	1.17	-	-	-	50	48	36	24	-
35t	1 sheaves	0.9	-	-	-	-	-	35	24	-
12t	0.51	-	-	-	-	-	-	-	-	12

# Tower Specifications

## Dimensions and Specifications



### Tower Specifications

Max. Lifting Load × Working Radius	t×m	15×16
Tower Length	m	26.5 ~ 44.5
Tower Jib Length	m	19 ~ 37
Max. Tower + Tower Jib Length	m	44.5 + 37
Engine Name		ISUZU 6HK1 (Stage IIIA)
Engine Rated Output Power	kW/min <sup>-1</sup> (ps/rpm)	200.6 / 1,850 (272 / 1,850)
Ground Contact Pressure	kPa (kgf/cm <sup>2</sup> )	129 (1.32) (Max. Tower + Tower Jib Length)
Overall Operating Weight	t	Approximately 115 (Max. Tower + Tower Jib Length)

Note :

- Speeds marked with "\*" may vary depending on load applied.
- SI units are used for specifications. In parenthesis, conventional units are also indicated.

# Tower and Tower Jib Configurations

Tower	
Tower Length (m)	Tower Boom Configurations
26.5	
29.5	
32.5	
35.5	
38.5	
41.5	
44.5	

Tower	
Tower Length (m)	Tower Boom Configurations
19	
22	
25	
28	
31	
34	
37	

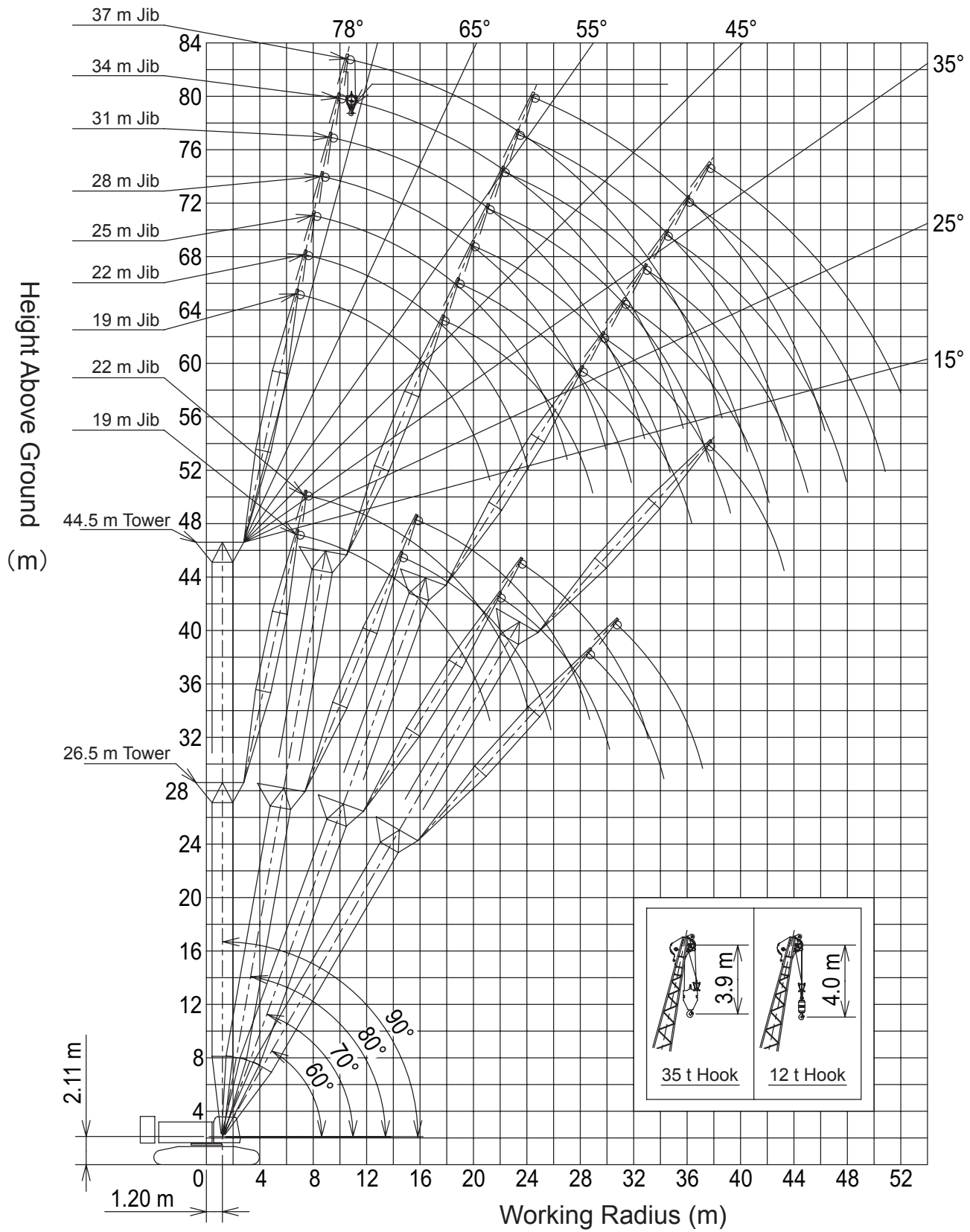
▽ indicates the midpoint pendant rope connection position.

Dimensions Not Shown In The Figure	
Symbols	Tower Boom Length (m)
1.85	1.85
3	3
6	6
7.5	7.5
9	9
9B	9
9 with Rail	9

Dimensions Not Shown In The Figure	
Symbols	Tower Jib Length (m)
3	3
6	6
9	9

# Working Ranges

## Tower Boom



# Gross Rated Load Table

## 26.5 m Tower



Unit: ton

Tower Length (m)	26.5								Tower Length (m)
Jib length (m)	19				22				Jib length (m)
Offset angle (deg)	90	80	70	60	90	80	70	60	Offset angle (deg)
Radius (m)									Radius (m)
8.0	15.00 / 8.4								8.0
9.0	15.00				15.00 / 9.2				9.0
10.0	15.00				15.00				10.0
12.0	15.00				15.00				12.0
14.0	15.00	15.00 / 15.7			15.00				14.0
16.0	13.80	15.00			13.80	13.90 / 16.9			16.0
18.0	12.00	13.00			11.90	12.90			18.0
20.0	10.70	11.50			10.50	11.30			20.0
22.0	8.15 / 21.7	10.20	8.65 / 22.8		9.30	10.10			22.0
24.0		9.20	8.10		8.10	9.10	7.80 / 24.5		24.0
26.0		8.20	7.50		7.40 / 24.6	8.20	7.30		26.0
28.0		8.10 / 26.1	6.80	5.60 / 29.3		7.30	6.70		28.0
30.0			6.10	5.50		6.85 / 29.0	6.20	4.95 / 31.5	30.0
32.0			5.95 / 30.4	5.10			5.70	4.90	32.0
34.0				4.70			5.35 / 33.3	4.60	34.0
36.0				4.60 / 34.5				4.30	36.0
38.0							4.05 / 37.4		38.0

- Capacities are the maximum allowable and based on machine standing level on firm supporting surface under ideal job conditions.
- Capacities are in metric tones, and are not more than 78% of minimum tipping loads except the figures surrounded by bold lines which are based on other factor of machine structural strength limitation; the design codes/standards applied to the capacities are from "Construction Codes for Mobile Crane" and "Ordinance on Safety of Crane and Similar Equipment" issued by Ministry of Health, Labor and Welfare, Japan.
- Capacities are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stop of loads, supporting surface conditions and operating speed. Operator must reduce load ratings to take such conditions into account.
- Deduction from rated capacities must be made for weight of hook block, hook ball, sling, spreader bar or any suspended gear.  
35t Hook (1sheave) ---0.9t  
12t Hook ---0.51t
- 37.5ton counterweight and 12.0ton lowerweight are required for all capacities on this chart.
- Deduction from rated capacities must be made for weights in the table below with tower boom with sky walk.

Tower Length (m)	26.5m	29.5m	32.5m	35.5m	38.5m	41.5m	44.5m
Deduction Weight (t)	0.1t	0.1t	0.1t	0.2t	0.2t	0.2t	0.2t



■ 29.5 m Tower



Unit: ton

Tower Length (m)	29.5								Tower Length (m)
Jib length (m)	19				22				Jib length (m)
Offset angle (deg)	90	80	70	60	90	80	70	60	Offset angle (deg)
Radius (m)									Radius (m)
8.0	15.00 / 8.5								8.0
9.0	15.00				15.00 / 9.3				9.0
10.0	15.00				15.00				10.0
12.0	15.00				15.00				12.0
14.0	15.00				15.00				14.0
16.0	13.80	14.60 / 16.2			13.80	13.15 / 17.4			16.0
18.0	12.00	12.80			11.90	12.70			18.0
20.0	10.50	11.30			10.50	11.10			20.0
22.0	8.50 / 21.7	10.00	7.85 / 23.8		9.30	9.90			22.0
24.0		9.00	7.80		8.10	8.90	7.00 / 25.6		24.0
26.0		8.00	7.20		7.60 / 24.6	8.10	6.90		26.0
28.0		7.65 / 26.6	6.50			7.40	6.40		28.0
30.0			6.00	4.85 / 30.8		6.85 / 29.5	5.90		30.0
32.0			5.60 / 31.5	4.70			5.40	4.30 / 33.0	32.0
34.0				4.40			4.90	4.20	34.0
36.0				4.10			4.75 / 34.4	4.00	36.0
38.0								3.80	38.0
40.0								3.65 / 38.9	40.0

Unit: ton

Tower Length (m)	29.5				Tower Length (m)
Jib length (m)	25				Jib length (m)
Offset angle (deg)	90	80	70	60	Offset angle (deg)
Radius (m)					Radius (m)
10.0	15.00 / 10.1				10.0
12.0	15.00				12.0
14.0	15.00				14.0
16.0	13.70				16.0
18.0	11.90	11.70 / 18.7			18.0
20.0	10.40	11.00			20.0
22.0	9.30	9.90			22.0
24.0	8.40	8.90			24.0
26.0	7.60	8.05	6.30 / 27.3		26.0
28.0	6.25 / 27.5	7.30	6.20		28.0
30.0		6.70	5.80		30.0
32.0		6.15	5.35		32.0
34.0		6.05 / 32.4	4.95	3.85 / 35.1	34.0
36.0			4.60	3.80	36.0
38.0			4.30 / 37.3	3.60	38.0
40.0				3.40	40.0
42.0				3.20 / 41.8	42.0

- Capacities are the maximum allowable and based on machine standing level on firm supporting surface under ideal job conditions.
- Capacities are in metric tones, and are not more than 78% of minimum tipping loads except the figures surrounded by bold lines which are based on other factor of machine structural strength limitation; the design codes/standards applied to the capacities are from "Construction Codes for Mobile Crane" and "Ordinance on Safety of Crane and Similar Equipment" issued by Ministry of Health, Labor and Welfare, Japan.
- Capacities are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stop of loads, supporting surface conditions and operating speed. Operator must reduce load ratings to take such conditions into account.
- Deduction from rated capacities must be made for weight of hook block, hook ball, sling, spreader bar or any suspended gear.  
 35t Hook (1sheave) ---0.9t  
 12t Hook ---0.51t
- 37.5ton counterweight and 12.0ton lowerweight are required for all capacities on this chart.
- Deduction from rated capacities must be made for weights in the table below with tower boom with sky walk.

Tower Length (m)	26.5m	29.5m	32.5m	35.5m	38.5m	41.5m	44.5m
Deduction Weight (t)	0.1t	0.1t	0.1t	0.2t	0.2t	0.2t	0.2t

## ■ 32.5 m Tower



Unit: ton

Tower Length (m)	32.5								Tower Length (m)
Jib length (m)	19				22				Jib length (m)
Offset angle (deg) Radius (m)	90	80	70	60	90	80	70	60	Offset angle (deg) Radius (m)
8.0	15.00 / 8.5								8.0
9.0	15.00				15.00 / 9.3				9.0
10.0	15.00				15.00				10.0
12.0	15.00				15.00				12.0
14.0	15.00				15.00				14.0
16.0	13.90	13.45 / 16.7			13.80				16.0
18.0	12.00	12.50			12.00	12.40			18.0
20.0	10.50	11.00			10.50	10.90			20.0
22.0	8.55 / 21.8	9.80			9.30	9.70			22.0
24.0		8.80	6.95 / 24.9		8.10	8.70			24.0
26.0		8.00	6.70		7.65 / 24.7	7.90	6.25 / 26.6		26.0
28.0		7.55 / 27.1	6.20			7.20	6.00		28.0
30.0			5.70			6.50	5.60		30.0
32.0			5.20	4.30 / 32.3			5.20		32.0
34.0			5.05 / 32.5	4.00			4.80	3.75 / 34.5	34.0
36.0				3.70			4.50 / 35.4	3.60	36.0
38.0				3.45 / 37.5				3.40	38.0
40.0								3.20	40.0
42.0								3.15 / 40.4	42.0

Unit: ton

Tower Length (m)	32.5								Tower Length (m)
Jib length (m)	25				28				Jib length (m)
Offset angle (deg) Radius (m)	90	80	70	60	90	80	70	60	Offset angle (deg) Radius (m)
10.0	15.00 / 10.1				15.00 / 10.9				10.0
12.0	15.00				15.00				12.0
14.0	15.00				15.00				14.0
16.0	13.80				13.70				16.0
18.0	11.90	11.20 / 19.2			11.80				18.0
20.0	10.50	10.80			10.40	10.10 / 20.5			20.0
22.0	9.30	9.70			9.20	9.50			22.0
24.0	8.40	8.75			8.30	8.65			24.0
26.0	7.60	7.90			7.50	7.80			26.0
28.0	6.20 / 27.6	7.20	5.80 / 28.3		6.90	7.10			28.0
30.0		6.55	5.50		6.10	6.50	5.30		30.0
32.0		6.05	5.10		5.60 / 30.5	5.95	5.00		32.0
34.0		5.80 / 32.9	4.70			5.50	4.60		34.0
36.0			4.40	3.40 / 36.6		5.15 / 35.8	4.30		36.0
38.0			4.05	3.30			4.00	3.10 / 38.7	38.0
40.0			4.00 / 38.3	3.10			3.70	3.00	40.0
42.0				2.90			3.50 / 41.2	2.80	42.0
44.0				2.75 / 43.3				2.60	44.0
46.0								2.40	46.0
48.0								2.35 / 46.2	48.0

- Capacities are the maximum allowable and based on machine standing level on firm supporting surface under ideal job conditions.
- Capacities are in metric tones, and are not more than 78% of minimum tipping loads except the figures surrounded by bold lines which are based on other factor of machine structural strength limitation; the design codes/standards applied to the capacities are from "Construction Codes for Mobile Crane" and "Ordinance on Safety of Crane and Similar Equipment" issued by Ministry of Health, Labor and Welfare, Japan.
- Capacities are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stop of loads, supporting surface conditions and operating speed. Operator must reduce load ratings to take such conditions into account.
- Deduction from rated capacities must be made for weight of hook block, hook ball, sling, spreader bar or any suspended gear.
  - 35t Hook (1sheave) ---0.9t
  - 12t Hook ---0.51t
- 37.5ton counterweight and 12.0ton lowerweight are required for all capacities on this chart.
- Deduction from rated capacities must be made for weights in the table below with tower boom with sky walk.

Tower Length (m)	26.5m	29.5m	32.5m	35.5m	38.5m	41.5m	44.5m
Deduction Weight (t)	0.1t	0.1t	0.1t	0.2t	0.2t	0.2t	0.2t

■ 35.5 m Tower



Unit: ton

Tower Length (m)	35.5								Tower Length (m)
Jib length (m)	19				22				Jib length (m)
Offset angle (deg) Radius (m)	90	80	70	60	90	80	70	60	Offset angle (deg) Radius (m)
8.0	15.00 / 8.5								8.0
9.0	15.00				15.00 / 9.3				9.0
10.0	15.00				15.00				10.0
12.0	15.00				15.00				12.0
14.0	15.00				15.00				14.0
16.0	14.00	13.00 / 17.2			13.90				16.0
18.0	12.10	12.40			12.10	11.55 / 18.5			18.0
20.0	10.60	10.90			10.60	10.80			20.0
22.0	8.65 / 21.8	9.80			9.50	9.75			22.0
24.0		8.80	6.50 / 25.9		8.40	8.75			24.0
26.0		8.00	6.50		7.05 / 24.7	7.90	5.85 / 27.6		26.0
28.0		7.35 / 27.6	6.10			7.20	5.80		28.0
30.0			5.60			6.60	5.50		30.0
32.0			5.10	3.80 / 33.8		6.40 / 30.5	5.00		32.0
34.0			4.70 / 33.5	3.80			4.70		34.0
36.0				3.60			4.35	3.40	36.0
38.0				3.40			4.30 / 36.4	3.20	38.0
40.0				3.30 / 39.0				3.00	40.0
42.0								2.80 / 41.9	42.0

Unit: ton

Tower Length (m)	35.5								Tower Length (m)
Jib length (m)	25				28				Jib length (m)
Offset angle (deg) Radius (m)	90	80	70	60	90	80	70	60	Offset angle (deg) Radius (m)
10.0	15.00 / 10.1				15.00 / 10.9				10.0
12.0	15.00				15.00				12.0
14.0	15.00				15.00				14.0
16.0	13.90				13.80				16.0
18.0	12.00	10.80 / 19.8			11.90				18.0
20.0	10.60	10.70			10.50	9.80 / 21.0			20.0
22.0	9.40	9.60			9.40	9.40			22.0
24.0	8.50	8.60			8.40	8.50			24.0
26.0	7.70	7.75			7.60	7.70			26.0
28.0	6.25 / 27.6	7.05	5.40 / 29.3		7.00	7.00			28.0
30.0		6.45	5.30		6.15	6.40	4.75 / 31.1		30.0
32.0		5.95	4.95		5.65 / 30.5	5.85	4.70		32.0
34.0		5.60 / 33.4	4.55			5.40	4.45		34.0
36.0			4.20			5.00	4.10		36.0
38.0			3.90	3.05 / 38.1		4.95 / 36.3	3.80		38.0
40.0			3.75 / 39.3	2.90			3.55	2.65 / 40.2	40.0
42.0				2.70			3.30	2.50	42.0
44.0				2.50			3.25 / 42.2	2.30	44.0
46.0				2.40 / 44.8				2.10	46.0
48.0								1.90 / 47.7	48.0

- Capacities are the maximum allowable and based on machine standing level on firm supporting surface under ideal job conditions.
- Capacities are in metric tones, and are not more than 78% of minimum tipping loads except the figures surrounded by bold lines which are based on other factor of machine structural strength limitation; the design codes/standards applied to the capacities are from "Construction Codes for Mobile Crane" and "Ordinance on Safety of Crane and Similar Equipment" issued by Ministry of Health, Labor and Welfare, Japan.
- Capacities are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stop of loads, supporting surface conditions and operating speed. Operator must reduce load ratings to take such conditions into account.
- Deduction from rated capacities must be made for weight of hook block, hook ball, sling, spreader bar or any suspended gear.  
35t Hook (1sheave) ---0.9t  
12t Hook ---0.51t
- 37.5ton counterweight and 12.0ton lowerweight are required for all capacities on this chart.
- Deduction from rated capacities must be made for weights in the table below with tower boom with sky walk.

Tower Length (m)	26.5m	29.5m	32.5m	35.5m	38.5m	41.5m	44.5m
Deduction Weight (t)	0.1t	0.1t	0.1t	0.2t	0.2t	0.2t	0.2t

## ■ 35.5 m Tower



Unit: ton

Tower Length (m)	35.5				Tower Length (m)
Jib length (m)	31				Jib length (m)
Offset angle (deg)	90	80	70	60	Offset angle (deg)
Radius (m)					Radius (m)
10.0	13.50 /11.7				10.0
12.0	13.50				12.0
14.0	13.50				14.0
16.0	13.50				16.0
18.0	11.90				18.0
20.0	10.40				20.0
22.0	9.30	9.15 /22.3			22.0
24.0	8.40	8.40			24.0
26.0	7.60	7.55			26.0
28.0	6.90	6.85			28.0
30.0	6.40	6.30			30.0
32.0	5.90	5.75	4.40 /32.8		32.0
34.0	4.80 /33.4	5.30	4.30		34.0
36.0		4.90	4.00		36.0
38.0		4.55	3.70		38.0
40.0		4.40 /39.2	3.45		40.0
42.0			3.20	2.25 /42.3	42.0
44.0			3.00	2.10	44.0
46.0			2.85 /45.1	2.00	46.0
48.0				1.90	48.0
50.0				1.80	50.0
52.0				1.75 /50.6	52.0

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2. Capacities are in metric tones, and are not more than 78% of minimum tipping loads except the figures surrounded by bold lines which are based on other factor of machine structural strength limitation; the design codes/standards applied to the capacities are from "Construction Codes for Mobile Crane" and "Ordinance on Safety of Crane and Similar Equipment" issued by Ministry of Health, Labor and Welfare, Japan.
3. Capacities are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stop of loads, supporting surface conditions and operating speed. Operator must reduce load ratings to take such conditions into account.
4. Deduction from rated capacities must be made for weight of hook block, hook ball, sling, spreader bar or any suspended gear.
  - 35t Hook (1sheave) ---0.9t
  - 12t Hook ---0.51t
5. 37.5ton counterweight and 12.0ton lowerweight are required for all capacities on this chart.
6. Deduction from rated capacities must be made for weights in the table below with tower boom with sky walk.

Tower Length (m)	26.5m	29.5m	32.5m	35.5m	38.5m	41.5m	44.5m
Deduction Weight (t)	0.1t	0.1t	0.1t	0.2t	0.2t	0.2t	0.2t

38.5 m Tower



Unit: ton

Tower Length (m)	38.5								Tower Length (m)
Jib length (m)	19				22				Jib length (m)
Offset angle (deg)	90	80	70	60	90	80	70	60	Offset angle (deg)
Radius (m)									Radius (m)
8.0	15.00 / 8.6								8.0
9.0	15.00				15.00 / 9.4				9.0
10.0	15.00				15.00				10.0
12.0	15.00				15.00				12.0
14.0	15.00				15.00				14.0
16.0	14.00	12.40 / 17.7			14.00				16.0
18.0	12.10	12.20			12.10	11.15 / 19.0			18.0
20.0	10.70	10.70			10.60	10.60			20.0
22.0	8.85 / 21.8	9.50			9.50	9.50			22.0
24.0		8.60			8.40	8.60			24.0
26.0		7.80	5.75 / 26.9		7.15 / 24.7	7.75			26.0
28.0		7.00	5.60			7.05	5.10 / 28.6		28.0
30.0		6.95 / 28.1	5.30			6.45	5.00		30.0
32.0			4.90			6.20 / 31.0	4.80		32.0
34.0			4.50	3.15 / 35.3			4.40		34.0
36.0			4.40 / 34.5	3.10			4.10	2.75 / 37.5	36.0
38.0				2.90			3.85 / 37.4	2.70	38.0
40.0				2.70				2.50	40.0
42.0				2.65 / 40.5				2.30	42.0
44.0								2.15 / 43.4	44.0

Unit: ton

Tower Length (m)	38.5								Tower Length (m)
Jib length (m)	25				28				Jib length (m)
Offset angle (deg)	90	80	70	60	90	80	70	60	Offset angle (deg)
Radius (m)									Radius (m)
10.0	15.00 / 10.2				15.00 / 11.0				10.0
12.0	15.00				15.00				12.0
14.0	15.00				15.00				14.0
16.0	13.90				13.80				16.0
18.0	12.00				12.00				18.0
20.0	10.60	10.30 / 20.3			10.50	9.40 / 21.5			20.0
22.0	9.40	9.40			9.40	9.20			22.0
24.0	8.50	8.45			8.40	8.35			24.0
26.0	7.70	7.60			7.60	7.55			26.0
28.0	6.35 / 27.6	6.95			7.00	6.85			28.0
30.0		6.35	4.90 / 30.4		6.25	6.25			30.0
32.0		5.80	4.60		5.75 / 30.5	5.75	4.45 / 32.1		32.0
34.0		5.40 / 33.9	4.30			5.30	4.20		34.0
36.0			4.00			4.90	3.90		36.0
38.0			3.70	2.40 / 39.6		4.75 / 36.8	3.60		38.0
40.0			3.40	2.40			3.35	2.00 / 41.7	40.0
42.0			3.35 / 40.3	2.20			3.10	2.00	42.0
44.0				2.00			3.00 / 43.2	1.70	44.0
46.0				1.80				1.40	46.0
48.0				1.75 / 46.3					48.0

- Capacities are the maximum allowable and based on machine standing level on firm supporting surface under ideal job conditions.
- Capacities are in metric tones, and are not more than 78% of minimum tipping loads except the figures surrounded by bold lines which are based on other factor of machine structural strength limitation; the design codes/standards applied to the capacities are from "Construction Codes for Mobile Crane" and "Ordinance on Safety of Crane and Similar Equipment" issued by Ministry of Health, Labor and Welfare, Japan.
- Capacities are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stop of loads, supporting surface conditions and operating speed. Operator must reduce load ratings to take such conditions into account.
- Deduction from rated capacities must be made for weight of hook block, hook ball, sling, spreader bar or any suspended gear.  
 35t Hook (1sheave) ---0.9t  
 12t Hook ---0.51t
- 37.5ton counterweight and 12.0ton lowerweight are required for all capacities on this chart.
- Deduction from rated capacities must be made for weights in the table below with tower boom with sky walk.

Tower Length (m)	26.5m	29.5m	32.5m	35.5m	38.5m	41.5m	44.5m
Deduction Weight (t)	0.1t	0.1t	0.1t	0.2t	0.2t	0.2t	0.2t

## ■ 38.5 m Tower



Unit: ton

Tower Length (m)	38.5						Tower Length (m)
Jib length (m)	31			34			Jib length (m)
Offset angle (deg) Radius (m)	90	80	70	90	80	70	Offset angle (deg) Radius (m)
10.0	13.50 /11.8						10.0
12.0	13.50			11.50 /12.6			12.0
14.0	13.50			11.50			14.0
16.0	13.50			11.50			16.0
18.0	11.90			11.50			18.0
20.0	10.50			10.40			20.0
22.0	9.30	8.60 /22.8		9.30			22.0
24.0	8.40	8.20		8.30	8.05 /24.1		24.0
26.0	7.60	7.40		7.50	7.30		26.0
28.0	6.90	6.75		6.90	6.60		28.0
30.0	6.40	6.15		6.30	6.00		30.0
32.0	5.90	5.65	4.10 /33.8	5.80	5.50		32.0
34.0	4.85 /33.4	5.20	4.10	5.40	5.05	3.70 /35.5	34.0
36.0		4.80	3.80	4.50	4.65	3.65	36.0
38.0		4.45	3.50	4.25 /36.3	4.35	3.35	38.0
40.0		4.20 /39.7	3.25		4.05	3.10	40.0
42.0			3.00		3.75	2.85	42.0
44.0			2.80		3.70 /42.6	2.65	44.0
46.0			2.60			2.45	46.0
48.0			2.60 /46.1			2.30	48.0
50.0						2.25 /49.0	50.0

- Capacities are the maximum allowable and based on machine standing level on firm supporting surface under ideal job conditions.
- Capacities are in metric tones, and are not more than 78% of minimum tipping loads except the figures surrounded by bold lines which are based on other factor of machine structural strength limitation; the design codes/standards applied to the capacities are from "Construction Codes for Mobile Crane" and "Ordinance on Safety of Crane and Similar Equipment" issued by Ministry of Health, Labor and Welfare, Japan.
- Capacities are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stop of loads, supporting surface conditions and operating speed. Operator must reduce load ratings to take such conditions into account.
- Deduction from rated capacities must be made for weight of hook block, hook ball, sling, spreader bar or any suspended gear.
  - 35t Hook (1sheave) ---0.9t
  - 12t Hook ---0.51t
- 37.5ton counterweight and 12.0ton lowerweight are required for all capacities on this chart.
- Deduction from rated capacities must be made for weights in the table below with tower boom with sky walk.

Tower Length (m)	26.5m	29.5m	32.5m	35.5m	38.5m	41.5m	44.5m
Deduction Weight (t)	0.1t	0.1t	0.1t	0.2t	0.2t	0.2t	0.2t

41.5 m Tower



Unit: ton

Tower Length (m)	41.5								Tower Length (m)
Jib length (m)	19				22				Jib length (m)
Offset angle (deg)	90	80	70	60	90	80	70	60	Offset angle (deg)
Radius (m)									Radius (m)
8.0	15.00 /8.6				15.00 /9.4				8.0
9.0	15.00				15.00				9.0
10.0	15.00				15.00				10.0
12.0	15.00				15.00				12.0
14.0	15.00				15.00				14.0
16.0	14.00				14.00				16.0
18.0	12.10	11.65 /18.3			12.10	10.65 /19.5			18.0
20.0	10.70	10.50			10.60	10.40			20.0
22.0	9.05 /21.8	9.30			9.50	9.30			22.0
24.0		8.40			8.40	8.40			24.0
26.0		7.60	5.40 /27.9		7.25 /24.7	7.60			26.0
28.0		6.80	5.40			6.95	4.95 /29.7		28.0
30.0		6.50 /28.7	5.00			6.35	4.90		30.0
32.0			4.60			5.90 /31.6	4.50		32.0
34.0			4.30				4.20		34.0
36.0			4.05 /35.6	2.95 /36.8			3.90		36.0
38.0				2.80			3.60	2.50 /39.0	38.0
40.0				2.60			3.50 /38.5	2.40	40.0
42.0				2.40				2.20	42.0
44.0								2.00	44.0
46.0								1.90 /44.9	46.0

Unit: ton

Tower Length (m)	41.5									Tower Length (m)
Jib length (m)	25			28			31			Jib length (m)
Offset angle (deg)	90	80	70	90	80	70	90	80	70	Offset angle (deg)
Radius (m)										Radius (m)
10.0	15.00 /10.2			15.00 /11.0			13.50 /11.8			10.0
12.0	15.00			15.00			13.50			12.0
14.0	15.00			15.00			13.50			14.0
16.0	13.90			13.80			13.50			16.0
18.0	12.00			12.00			11.90			18.0
20.0	10.60	9.55 /20.8		10.50			10.50			20.0
22.0	9.40	9.10		9.40	8.95 /22.1		9.30	8.20 /23.3		22.0
24.0	8.50	8.30		8.40	8.20		8.40	8.00		24.0
26.0	7.70	7.50		7.60	7.40		7.60	7.25		26.0
28.0	6.45 /27.6	6.80		7.00	6.70		6.90	6.60		28.0
30.0		6.20	4.45 /31.4	6.30	6.10		6.40	6.00		30.0
32.0		5.70	4.40	5.85 /30.5	5.60	4.10 /33.1	5.90	5.50		32.0
34.0		5.25	4.10		5.20	4.00	4.90 /33.4	5.10	3.75 /34.8	34.0
36.0		5.15 /34.5	3.80		4.80	3.70		4.70	3.60	36.0
38.0			3.50		4.55 /37.4	3.40		4.35	3.30	38.0
40.0			3.25			3.15		4.05	3.05	40.0
42.0			3.10 /41.4			2.95		4.00 /40.3	2.80	42.0
44.0						2.75			2.60	44.0
46.0						2.70 /44.3			2.45	46.0
48.0									2.35 /47.2	48.0

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3. Capacities are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stop of loads, supporting surface conditions and operating speed. Operator must reduce load ratings to take such conditions into account.
4. Deduction from rated capacities must be made for weight of hook block, hook ball, sling, spreader bar or any suspended gear.  
35t Hook (1sheave) ---0.9t  
12t Hook ---0.51t
5. 37.5ton counterweight and 12.0ton lowerweight are required for all capacities on this chart.
6. Deduction from rated capacities must be made for weights in the table below with tower boom with sky walk.

Tower Length (m)	26.5m	29.5m	32.5m	35.5m	38.5m	41.5m	44.5m
Deduction Weight (t)	0.1t	0.1t	0.1t	0.2t	0.2t	0.2t	0.2t

## ■ 41.5 m Tower



Unit: ton

Tower Length (m)	41.5						Tower Length (m)
Jib length (m)	34			37			Jib length (m)
Offset angle (deg)	90	80	70	90	80	70	Offset angle (deg)
Radius (m)							Radius (m)
12.0	11.50 /12.6			9.50 /13.4			12.0
14.0	11.50			9.50			14.0
16.0	11.50			9.50			16.0
18.0	11.50			9.50			18.0
20.0	10.40			9.30			20.0
22.0	9.30			8.90			22.0
24.0	8.30	7.45 /24.6		8.40	7.05 /25.9		24.0
26.0	7.50	7.10		7.60	7.00		26.0
28.0	6.90	6.45		6.90	6.35		28.0
30.0	6.30	5.90		6.40	5.75		30.0
32.0	5.80	5.40		5.90	5.25		32.0
34.0	5.40	4.95		5.40	4.85		34.0
36.0	4.55	4.55	3.30 /36.6	5.10	4.45		36.0
38.0	4.30 /36.3	4.25	3.15	4.60	4.10	3.00 /38.3	38.0
40.0		3.95	2.90	3.70 /39.2	3.80	2.80	40.0
42.0		3.65	2.70		3.55	2.55	42.0
44.0		3.55 /43.1	2.50		3.30	2.35	44.0
46.0			2.30		3.10	2.20	46.0
48.0			2.15			2.00	48.0
50.0			2.00			1.85	50.0
52.0			1.95 /50.1			1.70	52.0
54.0						1.65 /53.0	54.0

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- Deduction from rated capacities must be made for weight of hook block, hook ball, sling, spreader bar or any suspended gear.
  - 35t Hook (1sheave) ---0.9t
  - 12t Hook ---0.51t
5. 37.5ton counterweight and 12.0ton lowerweight are required for all capacities on this chart.
6. Deduction from rated capacities must be made for weights in the table below with tower boom with sky walk.

Tower Length (m)	26.5m	29.5m	32.5m	35.5m	38.5m	41.5m	44.5m
Deduction Weight (t)	0.1t	0.1t	0.1t	0.2t	0.2t	0.2t	0.2t



■ 44.5 m Tower



Unit: ton

Tower Length (m)	44.5						Tower Length (m)	
Jib length (m)	19			22			Jib length (m)	
Offset angle (deg) Radius (m)	90	80	70	60	90	80	70	Offset angle (deg) Radius (m)
8.0	15.00 / 8.6							8.0
9.0	15.00				15.00 / 9.4			9.0
10.0	15.00				15.00			10.0
12.0	15.00				15.00			12.0
14.0	15.00				15.00			14.0
16.0	14.00				14.00			16.0
18.0	12.10	10.90 / 18.8			12.10			18.0
20.0	10.70	10.30			10.60	10.05 / 20.1		20.0
22.0	8.85 / 21.9	9.30			9.50	9.10		22.0
24.0		8.30			8.40	8.20		24.0
26.0		7.60			7.10 / 24.8	7.50		26.0
28.0		6.90	4.85 / 29.0			6.80		28.0
30.0		6.45 / 29.2	4.70			6.20	4.35 / 30.7	30.0
32.0			4.40			5.70	4.20	32.0
34.0			4.00			5.70 / 32.1	3.90	34.0
36.0			3.60				3.60	36.0
38.0			3.45 / 36.6	2.45 / 38.3			3.40	38.0
40.0				2.30			3.25 / 39.5	40.0
42.0				2.10				42.0
44.0				1.90 / 43.5				44.0

Unit: ton

Tower Length (m)	44.5									Tower Length (m)
Jib length (m)	25			28			31			Jib length (m)
Offset angle (deg) Radius (m)	90	80	70	90	80	70	90	80	70	Offset angle (deg) Radius (m)
10.0	15.00 / 10.2			15.00 / 11.0			13.50 / 11.8			10.0
12.0	15.00			15.00			13.50			12.0
14.0	15.00			15.00			13.50			14.0
16.0	13.90			13.70			12.85			16.0
18.0	12.10			12.00			11.90			18.0
20.0	10.60	9.15 / 21.3		10.50			10.50			20.0
22.0	9.40	8.90		9.40	8.30 / 22.6		9.30	7.80 / 23.9		22.0
24.0	8.50	8.10		8.40	7.90		8.40	7.80		24.0
26.0	7.70	7.35		7.70	7.25		7.60	7.15		26.0
28.0	6.40 / 27.7	6.65		7.00	6.55		6.90	6.45		28.0
30.0		6.10		6.30	6.00		6.40	5.90		30.0
32.0		5.60	4.00 / 32.4	5.85 / 30.6	5.50		5.90	5.40		32.0
34.0		5.15	3.80		5.05	3.65 / 34.1	4.85 / 33.5	4.95	3.30 / 35.9	34.0
36.0		4.95 / 35.0	3.60		4.70	3.40		4.60	3.30	36.0
38.0			3.30		4.35 / 37.9	3.20		4.25	3.10	38.0
40.0			3.10			3.00		3.95	2.85	40.0
42.0			2.85			2.75		3.85 / 40.8	2.60	42.0
44.0			2.80 / 42.4			2.50			2.40	44.0
46.0						2.30 / 45.3			2.30	46.0
48.0									2.10	48.0
50.0									2.10 / 48.2	50.0

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12t Hook ---0.51t
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- Deduction from rated capacities must be made for weights in the table below with tower boom with sky walk.

Tower Length (m)	26.5m	29.5m	32.5m	35.5m	38.5m	41.5m	44.5m
Deduction Weight (t)	0.1t	0.1t	0.1t	0.2t	0.2t	0.2t	0.2t

## 44.5 m Tower



Unit: ton

Tower Length (m)	44.5						Tower Length (m)
Jib length (m)	34			37			Jib length (m)
Offset angle (deg)	90	80	70	90	80	70	Offset angle (deg)
Radius (m)							Radius (m)
12.0	11.50 /12.6			9.50 /13.4			12.0
14.0	11.50			9.50			14.0
16.0	11.50			9.50			16.0
18.0	11.35			9.50			18.0
20.0	10.40			9.20			20.0
22.0	9.30			8.90			22.0
24.0	8.30	7.05 /25.1		8.40			24.0
26.0	7.50	6.90		7.60	6.75 /26.4		26.0
28.0	6.90	6.30		6.90	6.20		28.0
30.0	6.30	5.75		6.40	5.65		30.0
32.0	5.80	5.25		5.90	5.15		32.0
34.0	5.40	4.85		5.50	4.70		34.0
36.0	4.60	4.45	2.90 /37.6	5.10	4.35		36.0
38.0	4.30 /36.4	4.10	2.90	4.65	4.00	2.55 /39.3	38.0
40.0		3.80	2.70	3.70 /39.3	3.70	2.50	40.0
42.0		3.55	2.50		3.45	2.30	42.0
44.0		3.35 /43.7	2.30		3.20	2.15	44.0
46.0			2.15		3.00	2.00	46.0
48.0			1.95		2.95 /46.6	1.80	48.0
50.0			1.80			1.60	50.0
52.0			1.65 /51.1			1.40	52.0

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6. Deduction from rated capacities must be made for weights in the table below with tower boom with sky walk.

Tower Length (m)	26.5m	29.5m	32.5m	35.5m	38.5m	41.5m	44.5m
Deduction Weight (t)	0.1t	0.1t	0.1t	0.2t	0.2t	0.2t	0.2t

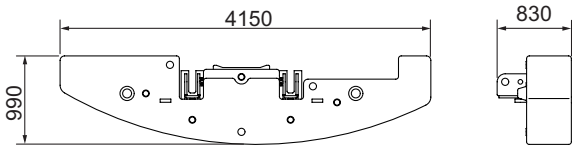
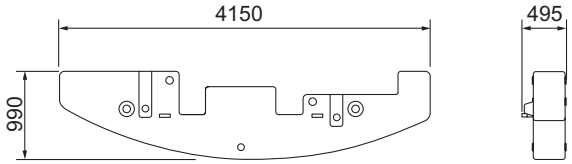
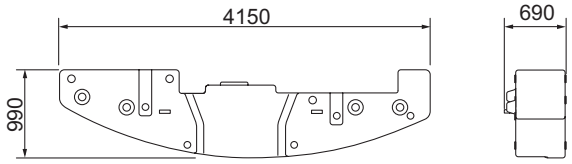
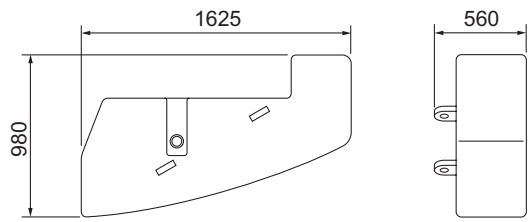
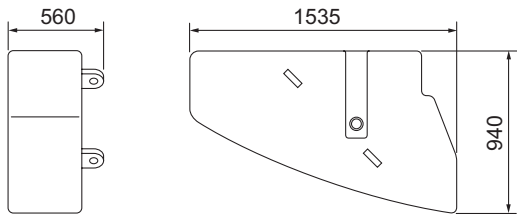
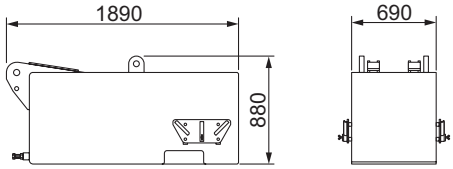
# Weights and Dimensions of Disassembled Units

## Weights and Dimensions List

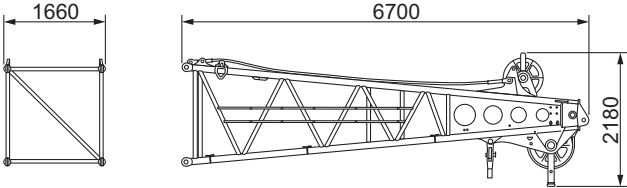
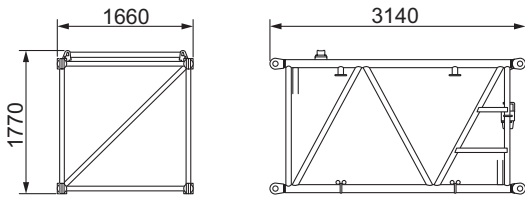
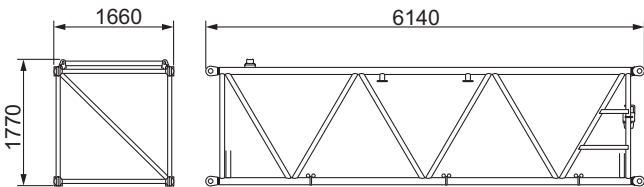
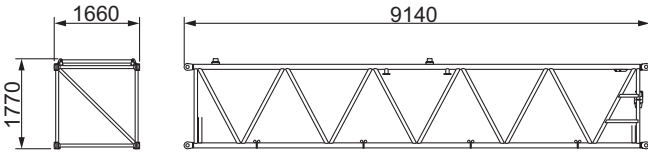
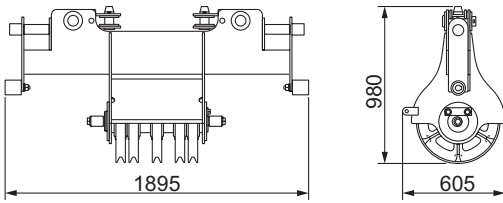
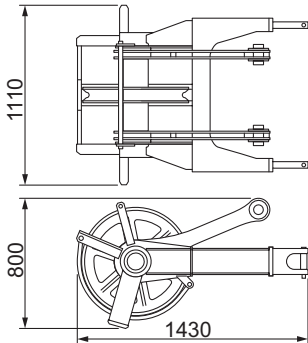
Weights and Dimensions of Disassembled Units

Description	Qty	Dimensions (mm)	Weight (kg)
Base Crane with: Boom Base Tower Back Stop Front Winch Wire Rope Rear Winch Wire Rope Boom Hoist Winch Wire Rope Crawlers Jack Without: Floats	1		51000
Base Crane with: Front Winch Wire Rope Rear Winch Wire Rope Boom Hoist Winch Wire Rope Crawlers Jack Without: Floats	1		48600
Base Crane with: Boom Base Tower Back Stop Front Winch Wire Rope Rear Winch Wire Rope Boom Hoist Winch Wire Rope Jack Without: Floats	1		31900
Base Crane with: Front Winch Wire Rope Rear Winch Wire Rope Boom Hoist Winch Wire Rope Jack Without: Floats	1		29500
Crawler	2		9600

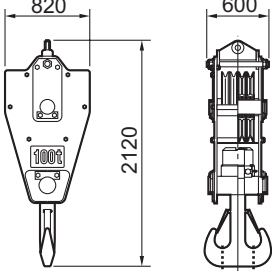
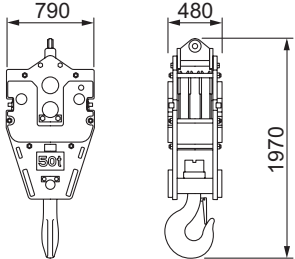
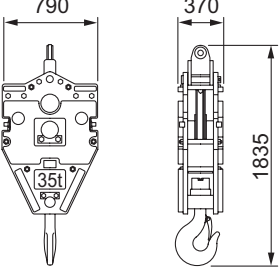
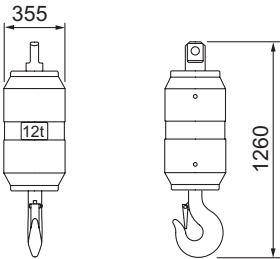
Weights and Dimensions of Disassembled Units

Description	Qty	Dimensions (mm)	Weight (kg)
Counter Weight (Base)	1		9420
Counter Weight	2		6640
Counter Weight	1		8980
Counter Weight	1		2810
Counter Weight	1		3000
Lower Weight	2		6040

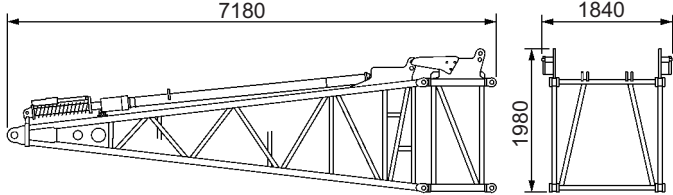
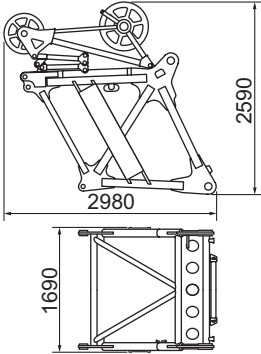
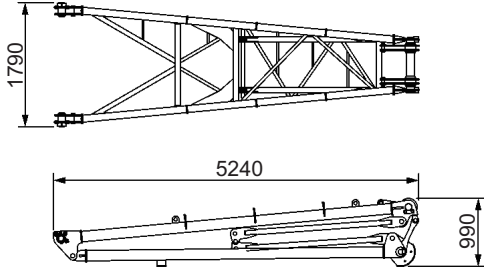
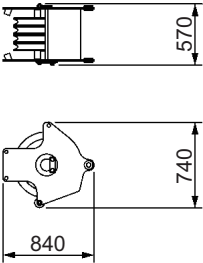
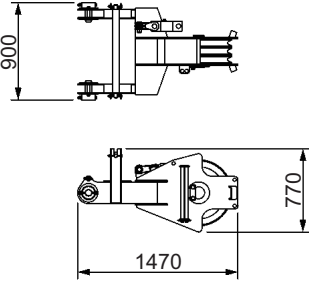
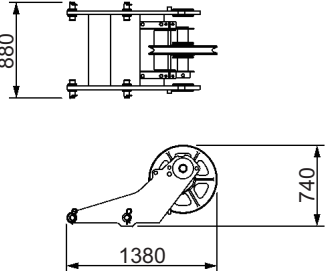
Weights and Dimensions of Disassembled Units

Description	Qty	Dimensions (mm)	Weight (kg)
Boom Top	1		1650
3 m Boom Insert	1		430
6 m Boom Insert	1		690
9 m Boom Insert	1		1000
Upper Spreader	1		490
Aux. Sheave	1		340

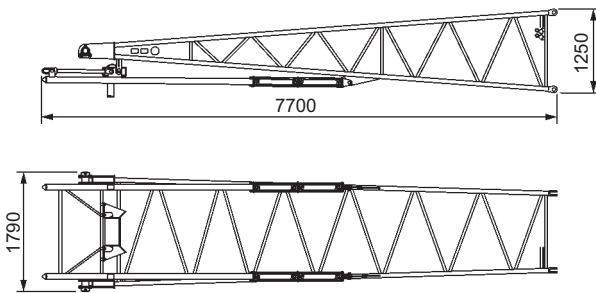
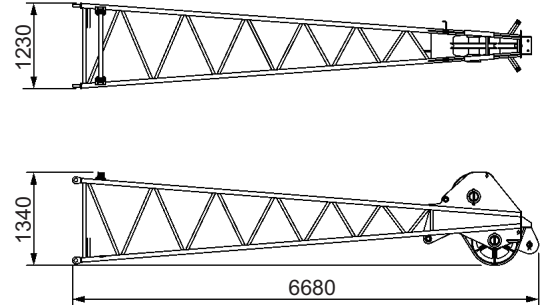
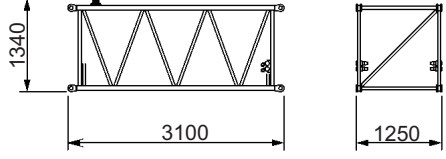
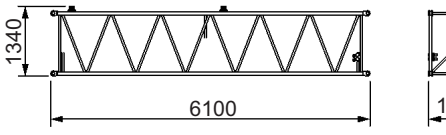
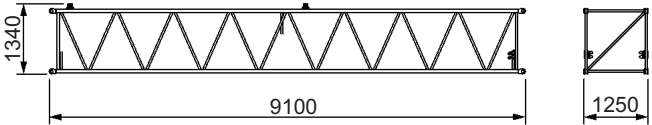
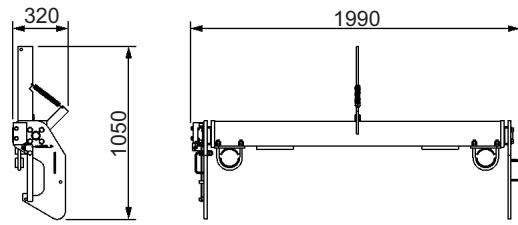
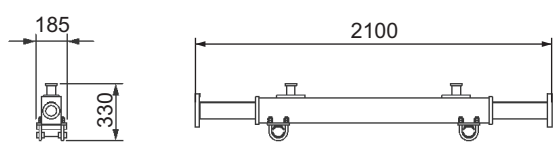
Weights and Dimensions of Disassembled Units

Description	Qty	Dimensions (mm)	Weight (kg)
100 t Hook	1		1200
50 t Hook	1		1170
35 t Hook	1		900
12 t Hook	1		510

Weights and Dimensions of Disassembled Units

Description	Qty	Dimensions (mm)	Weight (kg)
Tower/Luffing Base with 1m Boom Insert (with Tower Backstop)	1		2180
Tower/Luffing Top with Tower Guide Roller	1		1060
Tower Strut	1		990
Tower Upper Spreader	1		330
Tower Lower Spreader	1		420
Tower Guide Sheave	1		340

Weights and Dimensions of Disassembled Units

Description	Qty	Dimensions (mm)	Weight (kg)
Tower/Luffing Jib Base (with Tower/Luffing Jib Tower Backstop)	1		720
Tower/Luffing Jib Top	1		700
3 m Tower/Luffing Jib Insert	1		210
6 m Tower/Luffing Jib Insert	1		360
9 m Tower/Luffing Jib Insert	1		490
TOWER LATCH (Tower/Luffing Boom Side)	1		120
TOWER LATCH (Tower/Luffing Jib Side)	1		100



# Equipment List

## Standard and Optional Equipment

○ : Standard ● : Optional — : No setting

Item		Crane & Tower
Lower Structure	810 mm Crawler Shoe	○
	Jack Up Unit	○
	Crawler Extension / Retraction System	○
	Steps	○
	Shoe Tension Unit (Hydraulic)	●
	Low Wear Shoe (Contiguous Surface of Roller)	●
Upper Structure	Cab Up / Down Catwalk	○
	Upper House Handrails (for Catwalk)	○
	Under Cover (Bed Lower Surface)	○
	Working Light (× 2)	○
	Back Mirror (Left / Right)	○
	Central Lubrication Unit (for Turntable Bearing)	○
	Drum Flange Cover	○
	Auto Idle Stop	○
	Eco Winch	○
	Drum Mirror	●
	Drum Light (Front Winch)	●
	Winch Rope Retainer (Front Winch)	●
	Winch Rope Retainer (Rear Winch)	●
	Catwalk (Folding Type, Left / Right)	●
	Electric Fuel Pump	●
	Upper House Handrails (Folding Type)	●
Winch with Front and Rear Free Mechanism	●	
Third Winch (Rope not Included)	● <sup>*3</sup>	
Cab	Air Conditioner	○
	Sunvisor	○
	Sunshade	○
	Wiper with Washer (Front Window, Cab Roof Window)	○
	Microphone & Loud-speaker	●
	AM / FM Radio (with Clock)	○
	Room Lamp	○
	Cup Holder	○
	24 V Power Socket (× 2)	○
	Floor Carpet	○
	Level Gauge (in Cab & Lower Frame)	○
	Accelerator Pedal (Right Side)	●
	Arm Chair Lever	○
	Cross Operation Lever (Lever Lock not Attached)	●
	Front Operation Lever (with Lever Lock)	●
	Seat without Suspension	○
	Seat with Suspension	●
	Travel Operation Pedal (Cannot be installed when winch with free mechanism attached)	●
	Boom Hoist Operation Pedal <sup>*1</sup>	●
	Swing Brake Operation Pedal <sup>*1</sup>	●
	Fan	●
	Front / Rear Operation Lever, Brake Pedal Permutation	●
	Fuel Burning Heater	●
Accelerator Grip	○	
Drum Rotation Sensor (Front / Rear / Boom Hoist) <sup>*2</sup>	○	
Speed Control Dial (Front / Rear/Boom Hoist / Swing)	○	
Life Hammer	○	

\*1 Cannot be installed at the same time.

\*2 Cannot be equipped when the cross operation lever or front operation lever is installed.

\*3 Only available in crane operation. Cannot be used in tower operation.

○ : Standard ● : Optional — : No setting

Item		Crane & Tower	
Attachment	13 m Basic Boom (Boom Base: 6 m, Top: 6 m, 1m Boom Insert)	○	
	3 m Boom Insert	●	
	6 m Boom Insert	●	
	9 m Boom Insert	●	
	Parts Set for 10 m Crane Jib [10 m Basic Jib, Anti-two Block, Jib Mast]	●	
	6 m Crane Jib Insert	●	
	44.5 m Tower Boom (Tower/Luffing Base: 6 m, Tower/Luffing Insert: 3 m×2, 6 m, 9 m×3, Tower/Luffing Top: 1.5 m)	○	
	37 m Tower Jib (Tower/Luffing Jib Base: 7 m, Tower/Luffing Jib Insert: 9 m, 6 m×2, 3 m×2, Tower/Luffing Jib Top: 6 m)	○	
	Parts Set for Auxiliary Sheave [Auxiliary Sheave, Auxiliary Sheave Anti-two Block]	●	
	100 t Hook (4 Sheaves)	●	
	50 t Hook (3 Sheaves)	●	
	35 t Hook (1 Sheave)	●	
	12 t Hook	●	
Wire Rope	Front Winch ( φ 26)	P · S (19) + 39XP · 7 ○	
	Rear Winch ( φ 26)	Mono Rope EP 3XF (40)	●
		P · S (19) + 39XP · 7 IWRC 6 X P · WS (31)	● <sup>*6</sup>
	Third Winch ( φ 26)	Mono Rope EP 3XF (40)	●
		P · S (19) + 39XP · 7	●
Boom Hoist Winch ( φ 22.4)	IWRC 6 X P · WS (31)	○	
Safety Device	Moment Limiter	○	
	3 Color Percentage Indicator Light	●	
	Gate Lock Lever	○	
	Individual Operation Lever Lock (Front, Rear, Hoist, Travel) <sup>*4</sup>	○	
	Automatic Drum Lock (Boom Hoist)	○	
	Winch Drum Lock (Front/Rear)	○	
	Swing Lock	○	
	Swing Alarm	○	
	Travel Alarm	○	
	Auto Slowdown (Slow Stop)	○	
	Boom Hoist Limiting Device	○	
	Secondary Boom Over Hoist Prevent Device	○	
	Warning Alarm	○	
	Monitor Panel (Machine Monitoring)	○	
	Engine Start Interlock System	○	
	Emergency Engine Stop Switch (In cab)	○	
	Lifting Height Indication Device	○	
	Anti-two Block Device	○	
	Tower Strut Hoist Limiter	○	
	Tower/Luffing Jib Hoist Limiter	○	
	Secondary Tower/Luffing Jib Overhoist Prevention Device	○	
	Tower/Luffing Jib Posture Detector	○	
	Tower/Luffing Jib Posture Detector	○	
	Moment Limiter (M/L) Mode Selector (In Left House)	●	
	Swing Restriction Unit	●	
	Lowering Limiter	●	
	Anemometer	●	
Obstacle Lights (Fixed lights)	●		
Tower/Luffing Jib Top Camera Monitor System (TV Monitor)	●		
Drum and Rear View Monitor System (3 Cameras)	●		
Cab Roof Window Guard	●		

\*4 An operation lever lock is not attached to the front, rear or hoist when the cross operation lever is installed.

\*5 Used for opening/closing rope. 82 m length rope required for 12 m digging depth with 21 m boom length.

\*6 Necessary as a tower/luffing jib hoisting winch wire rope. Can also be used as a crane jib and hoisting rope for aux. sheave in crane jib operation.

\*7 Used for supporting rope. 70 m length rope required for 12 m digging depth with 21 m boom length.

○ : Standard ● : Optional — : No setting

Item		Crane & Tower	
Common parts	Boom Back Stop	○	
	Boom Angle Sensor	○	
	Boom Lifting Piece	○	
	Assembly Pad <sup>*8</sup>	●	
	Skywalk (with Stanchion)	●	
	Skywalk (without Stanchion)	●	
	Boom Top Under Surface Buffer (Protector)	●	
	Load Table Sign (Whiteboard, Boom Base Installation)	●	
	Insertable Company Name Plate (Both Side Surfaces of the Machine)	● <sup>*9</sup>	
	Opening / Closing / Support Rope Stopper	-	
	Reeving Winch (4 × F (30) φ 8 mm × 250 m)	● <sup>*10</sup>	
	Reeving Winch Cum Hydraulic Tagline	for Hydraulic Tagline (6 × Fi (29) φ 10 mm × 55 m)	● <sup>*10</sup>
		for Reeving (6 × Fi (29) φ 10 mm × 220 m)	● <sup>*10</sup>
	Reduction Counterweight Specification	● <sup>*11</sup>	
	Sling Ropes for Disassembly and Assembly (for Counterweights, Crawlers)	●	
	Air Cleaner Single Element	○	
	Air Cleaner Double Element	●	
Additional Fuel Filter (Triple Filter)	●		
Additional Spare Parts (Hydraulic Oil Filter)	●		
Additional Tools (Large Hammer, Crowbar, Chisel)	●		
Other	Standard Supplied Tools	○	
	Standard Spare Parts	○	

\*8 The assembly pad is required for the following attachments.

- Crane Boom Length 58 m, 61 m
- Crane Boom Length 55 m+Aux. Sheave

\*9 When it chooses, the width at the time of transportation is set to not less than 3 m.

\*10 (1) Reeving winch unit (maximum line pull: 11.8 ZkN (1,200 kg))

(2) Reeving winch and hydraulic tagline

(Line pull: For hydraulic tagline (maximum line pull: 1.5 kN (150 kg)) /for reeving winch (maximum line pull: 2.9 kN (300 kg))

\*11 The reduction counterweight specification can only be used for the crane specification, with the exception of the tower jib.

