SCX 1000HD-3

HYDRAULIC CRAWLER CRANE

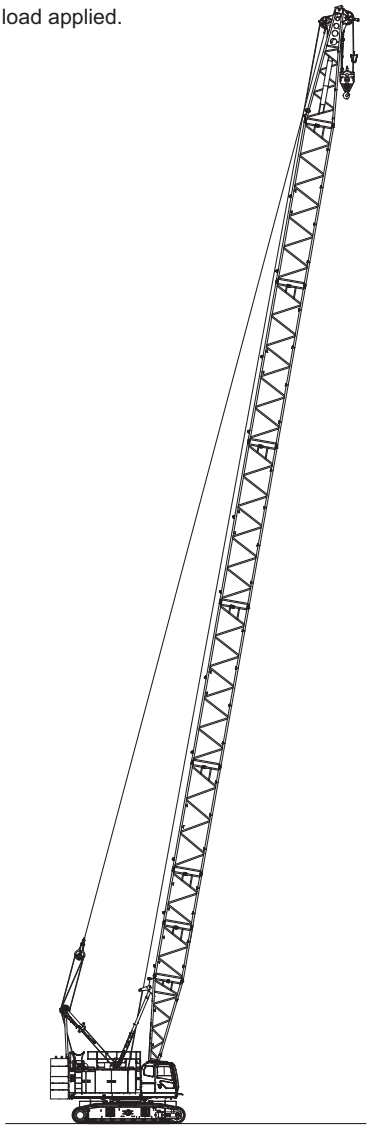
HSC CRANES

2203 Ⓔ 05H.EA375-1a

Variation of The Attachment

Line Speed *	28 mm	Front / Rear Winch (Rated with 13.5 t load)	m/min	110 (45)
	30 mm (Optional)	Front / Rear Winch (Rated with 15.5 t load)		
		Third Winch (Rated with 12 t load)		95 (30)
		Boom Hoist Winch		44
Swing Speed			min^{-1} (rpm)	2.4
Travel Speed High / Low *			km/h	2.0/1.1
Gradeability			% (Degree)	30 (17)
Engine Model				Cummins QSL9 (Stage III A, Tier 3)
Engine Rated Output Power			kW/min^{-1} (ps/rpm)	280/2000 (380/2000)

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



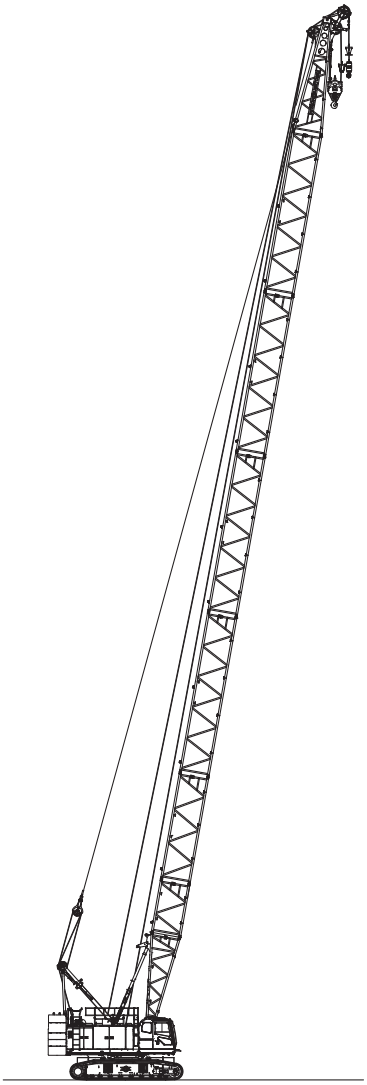
Crane Specification (Boom Longest Length)

Hoist Wire Rope Diameter 28 mm

Boom Length	m	12 to 60
Specification		Boom longest length with 35 t hook (without additional hydraulic oil cooler)
Ground Contact Pressure	kPa (kgf/cm²)	125 (1.28)
Overall Operating Weight	t	Approximately 111

Hoist Wire Rope Diameter 30 mm (Optional)

Boom Length	m	12 to 60
Specification		Boom longest length with 35 t hook (with additional hydraulic oil cooler)
Ground Contact Pressure	kPa (kgf/cm²)	126 (1.28)
Overall Operating Weight	t	Approximately 112



Crane Specification
(Boom Longest Length with Aux. Sheave)

Hoist Wire Rope Diameter 28 mm

Boom Length	m	12 to 57
Specification		Boom longest length + 35 t aux. sheave + 13.5 t hook attached (without additional hydraulic oil cooler)
Ground Contact Pressure	kPa (kgf/cm²)	126 (1.28)
Overall Operating Weight	t	Approximately 112

Hoist Wire Rope Diameter 30 mm (Optional)

Boom Length	m	12 to 57
Specification		Boom longest length + 35 t aux. sheave + 15.5 t hook attached (with additional hydraulic oil cooler)
Ground Contact Pressure	kPa (kgf/cm²)	126 (1.29)
Overall Operating Weight	t	Approximately 113

VARIATION

SPECIFICATIONS

TECHNICAL DATA

Specifications

Engine

Model	Cummins QSL9
Type	4-cycle, Water-cooled, Direct injection, Turbo-charged, Diesel engine
Displacement	8.9 L
Rated Output	280 kW / 2,000 min^{-1} (380 ps / 2,000 rpm)
Fuel Tank Capacity	457 L
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.
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 L		
Hydraulic Pump Capacity	Max.	31.4 MPa	
	P1	280 L/min	for Front, Rear, Boom hoist winch and travel
	P2	280 L/min	for Front, Rear, third winch and travel
	P3	160 L/min	for Swing, Sideframe retract and Gantry cylinders.
	P4	44 L/min	Pilot control, Brake cooling, Reeving tagline, etc.
	P5	40 L/min	
	P6	40 L/min	
	P7	31 L/min	

Winch

Front and Rear Winch						
Winch		Front		Rear		
Rope Diameter		28 mm	30 mm (Optional)	28 mm	30 mm (Optional)	
Rope Length	Standard	205 m	200 m	125 m	125 m	for Aux. sheave
	Winding Capacity	290 m	219 m	290 m	219 m	
Line Pull	Rated	132 kN	152 kN	132 kN	152 kN	
Standard Equipment		Free fall winch with brake controlled by pedal operation.				
		High-speed winching is possible by ECO winch mode with low engine speed under light loads.				

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.

Counter Weight

Upper Weight	Total Weight	37.5 t
	9.5 t Base Weight	1 piece
	6.6 t Insert Weight	2 pieces
	9.0 t Insert Weight	1 piece
	2.8 t Top Weight	1 piece
	3.0 t Top Weight	1 piece
Lower Weight	Total Weight	13.6 t
	6.8 t Lower Weight	2 pieces

Carbody Frame

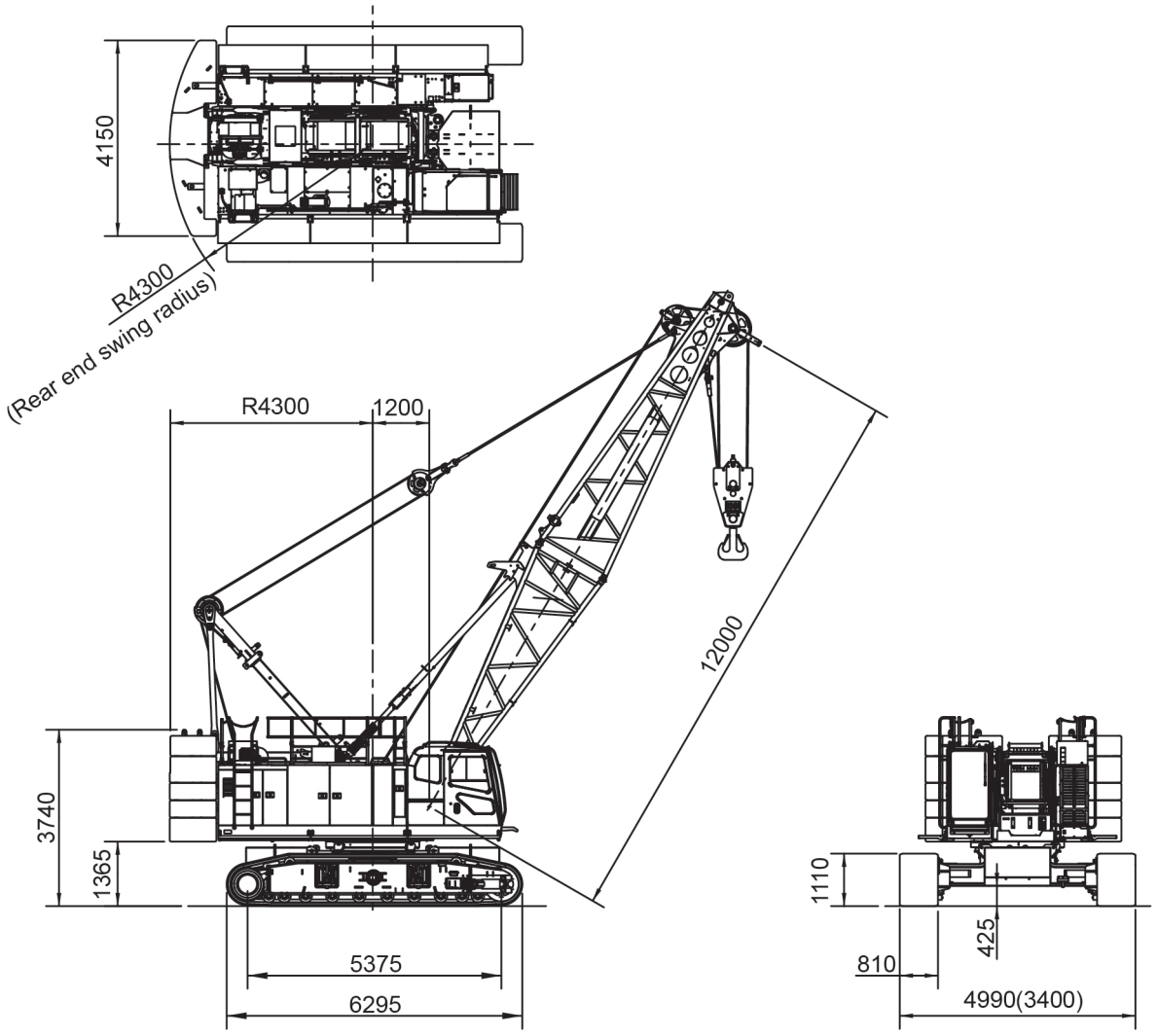
Welded steel construction with crawler sideframe extend-retract cylinders.

Crawler Sideframe

Frame	Welded steel box construction, and can be retracted.	
Shoe	Cast iron 810 mm width shoe 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 peace each side.	
	Hydraulic travel device (Hydraulic motor and reducer)	
	Travel speed (Grandability : 30%)	High : 2.0 km/h
		Low : 1.1 km/h

Crane Specifications

Dimensions and Specifications

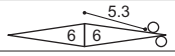
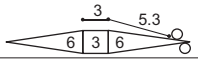
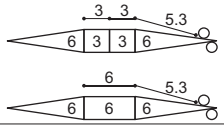
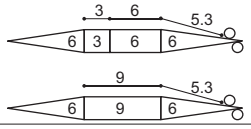
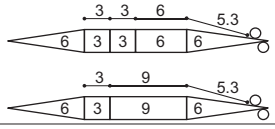
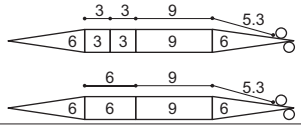
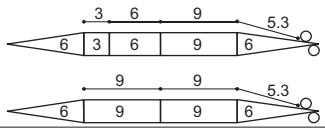
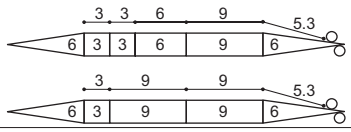
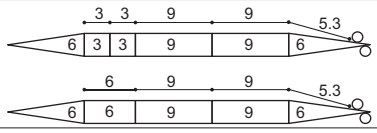
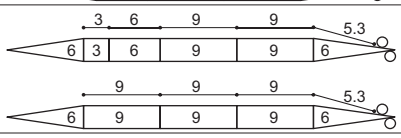
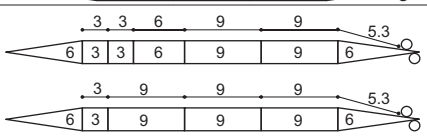


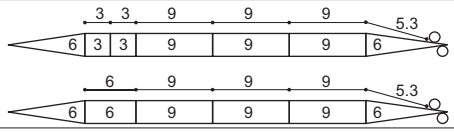
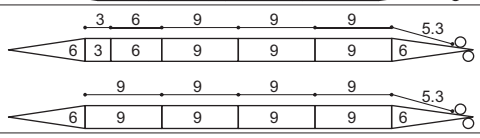
Crane Specifications		
Max. Lifting Load × Working Radius	t × m	100×3.8
Basic Boom Length	m	12
Max. Boom Length	m	60
Ground Contact Pressure	kPa (kgf/cm²)	118 (1.21) (w / Basic Boom, 100 t Hook)
Overall Operating Weight	t	Approximately 105 (w / Basic Boom, 100 t Hook)

Hook Weight	
100 t	1,610 kg
80 t	1,350 kg
50 t	1,170 kg
35 t	900 kg
15.5 t (ϕ 30 mm)	620 kg
13.5 t (ϕ 28 mm)	620 kg

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

Boom Configurations

Boom	
Boom Length (m)	Boom Configurations
12	
15	
18	
21	
24	
27	
30	
33	
36	
39	
42	

Boom	
Boom Length (m)	Boom Configurations
45	
48	
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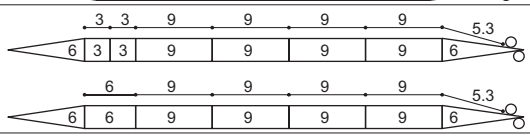
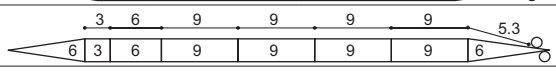
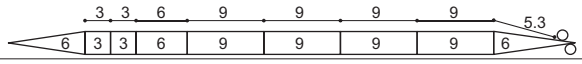
54	
57	
60	

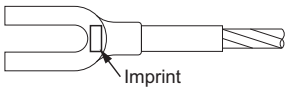
Aux. Sheave Installable Boom Length																	
Boom Length (m)	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60
With Aux. Sheave	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	×

(○: Attachable ×: Not Attachable)

Dimensions Not Shown In The Figure		
Symbols	Boom Length (m)	Note
3	3	
6	6	
9	9	

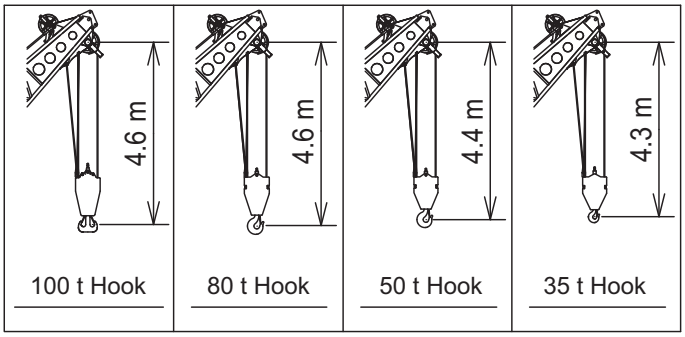
Check the pendant rope with referring to the imprints on the rope end.

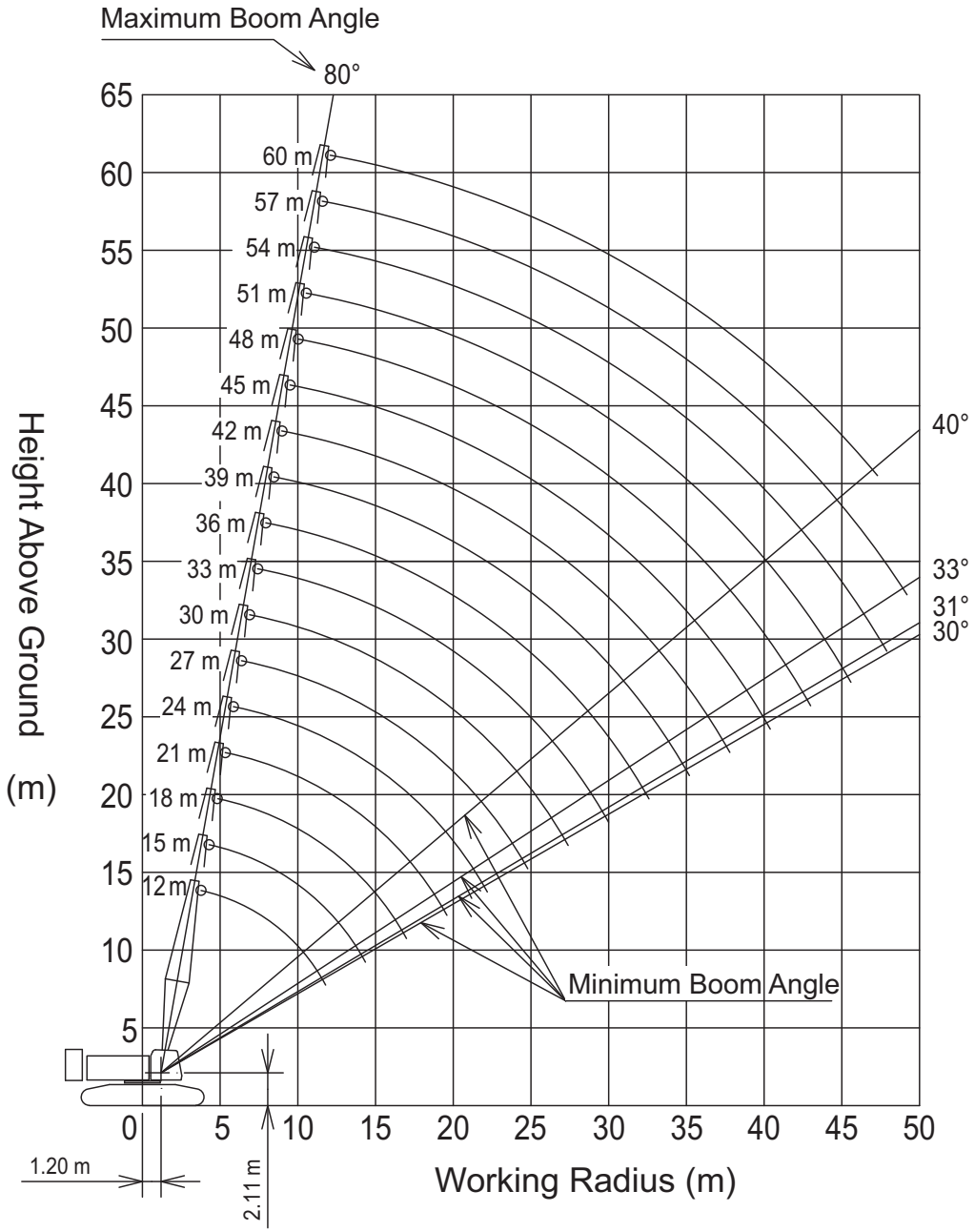
Pendant Rope			
Symbols	Length (m)	Rope Diameter (mm)	Imprint
3	3	35.5	□ • △ • 35.5 • 3 • C
5.3	5.3	35.5	□ • △ • 35.5 • 5.3 • C
6	6	35.5	□ • △ • 35.5 • 6 • C
9	9	35.5	□ • △ • 35.5 • 9 • C



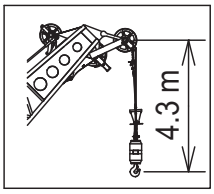
Working Ranges

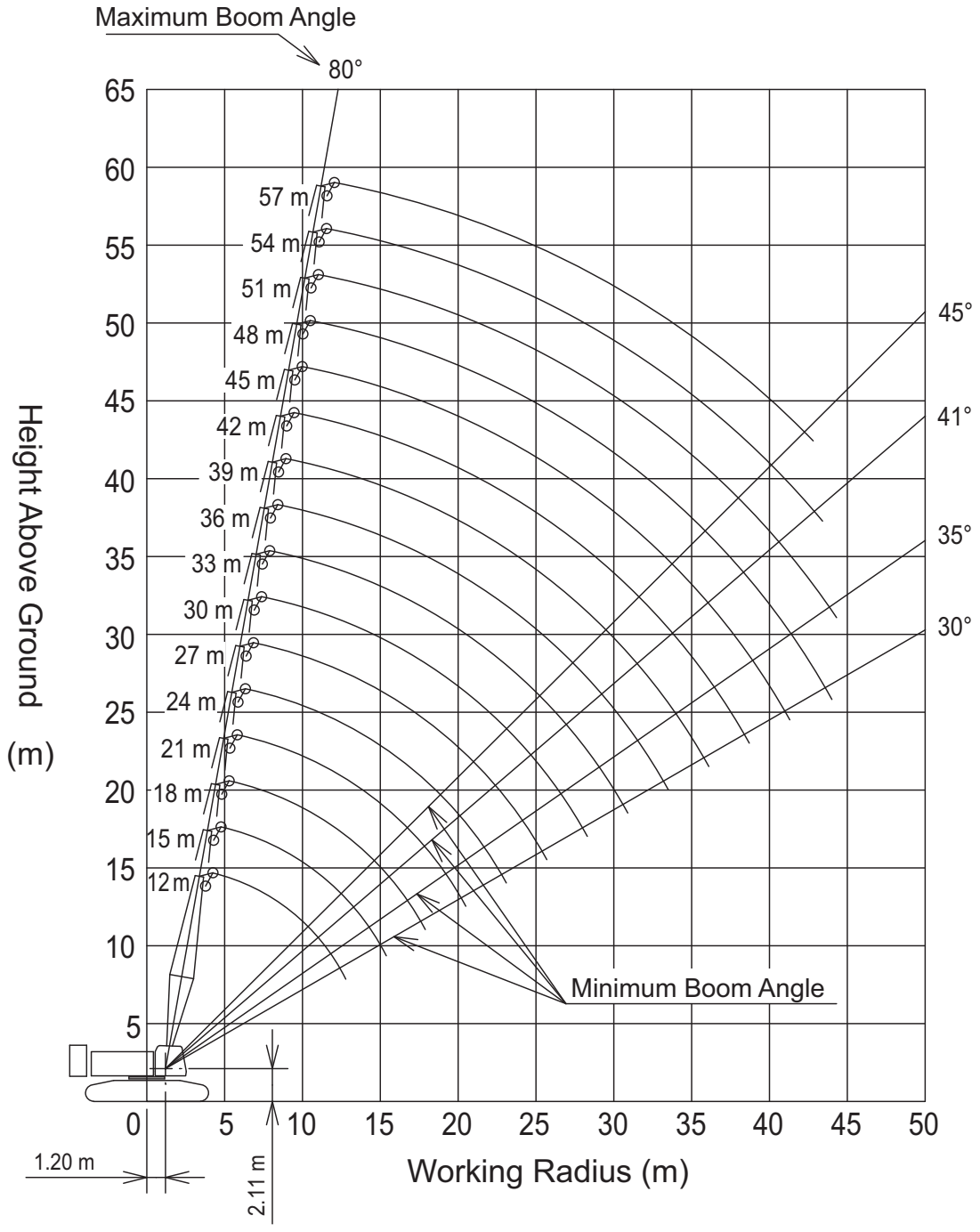
Main Boom



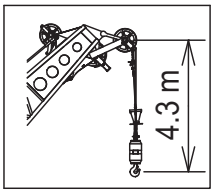


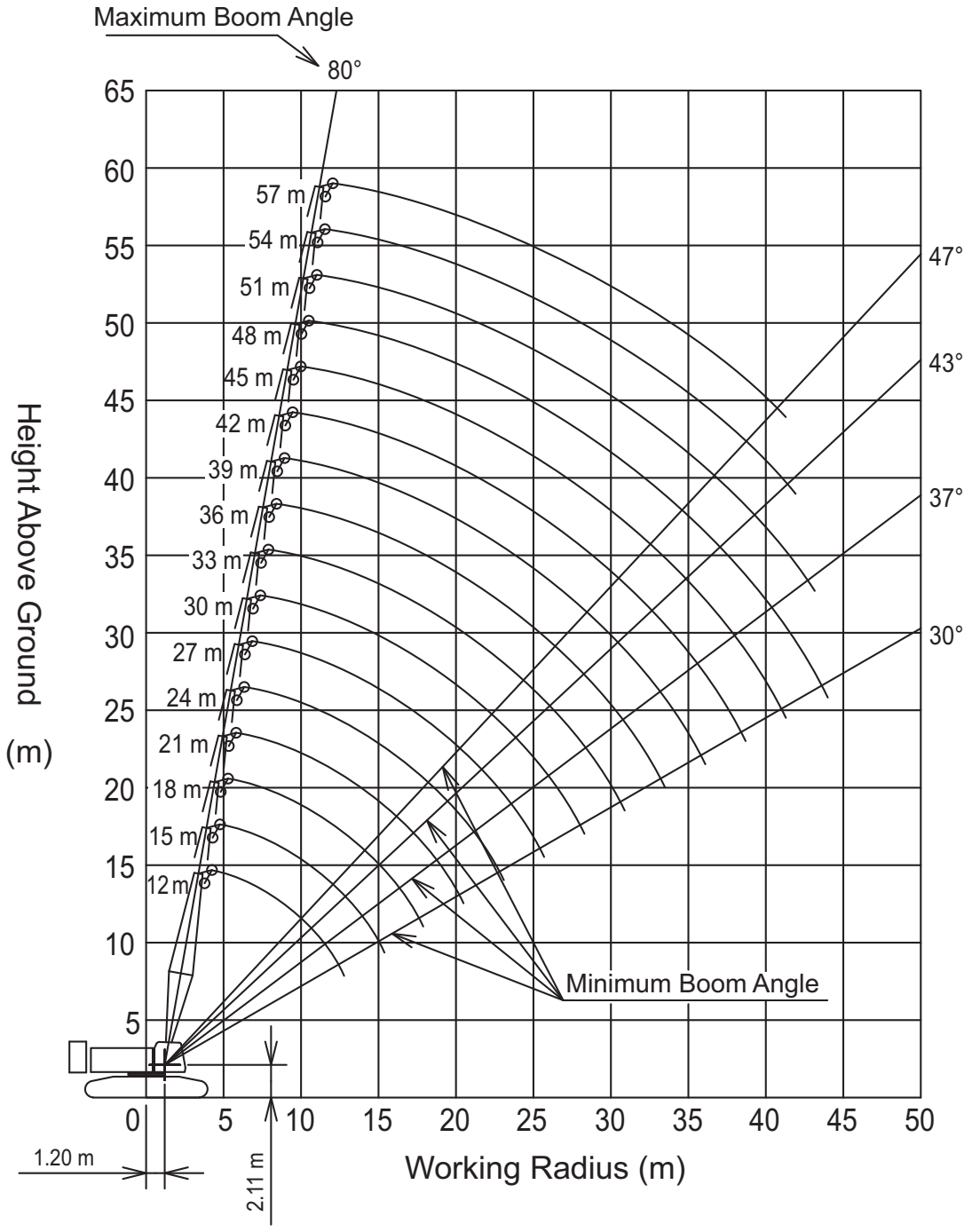
Aux. Sheave (1 Sheave)



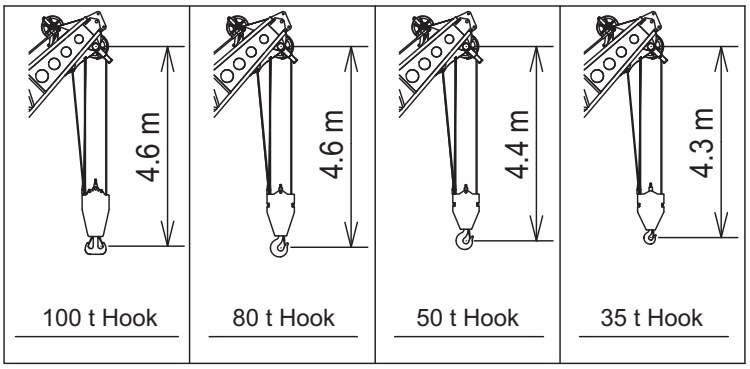


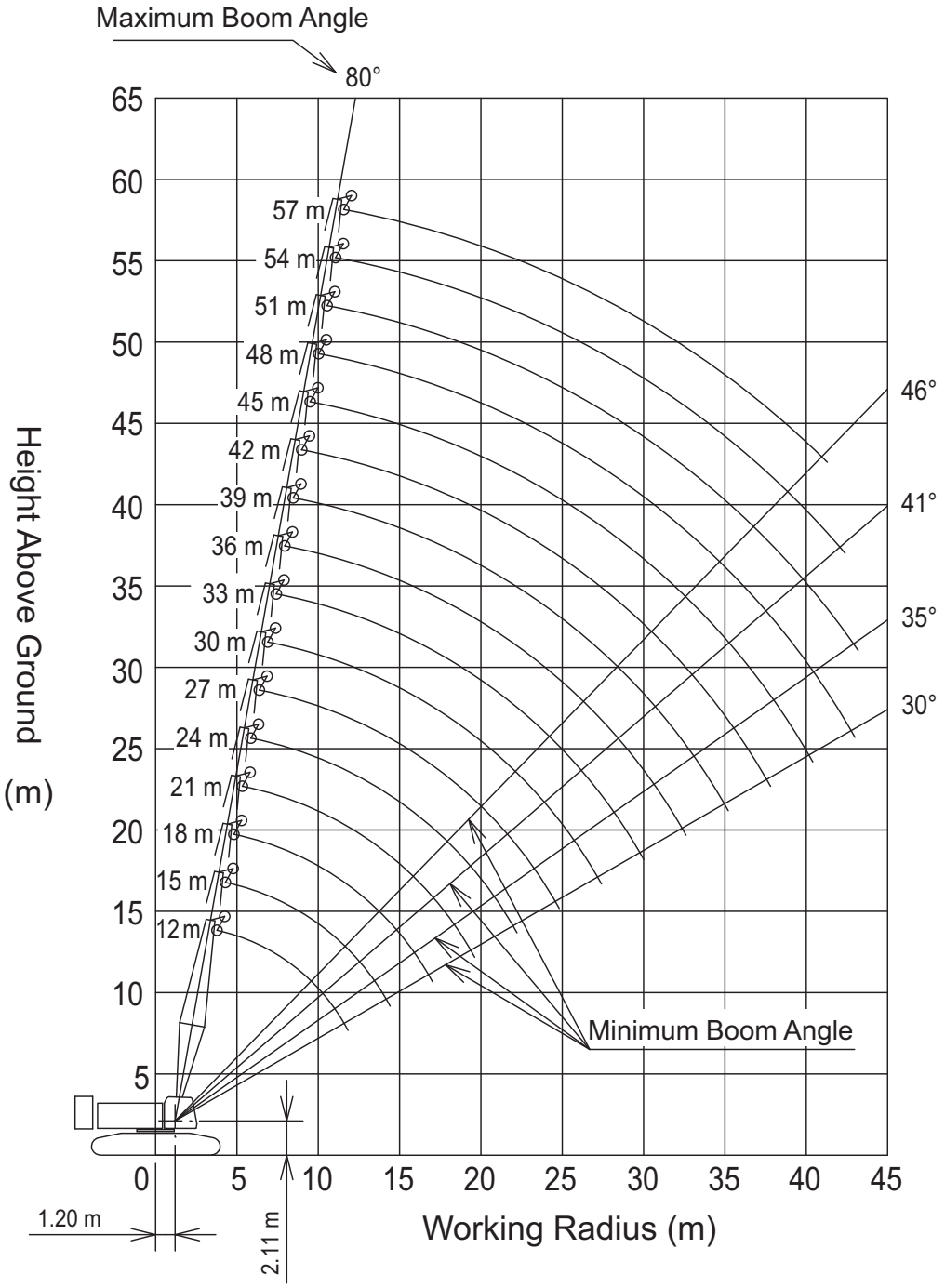
■ Aux. Sheave (2 Sheaves)



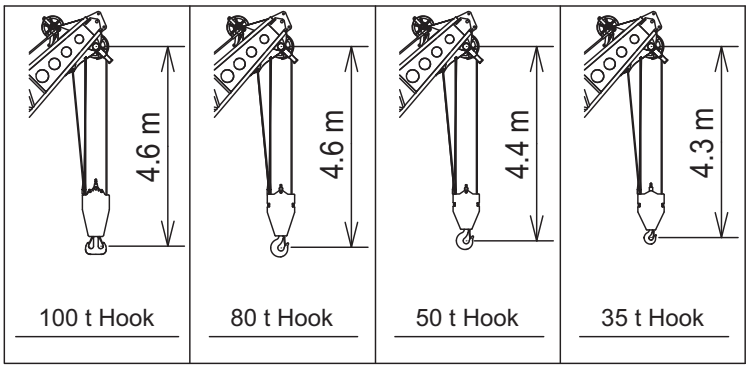


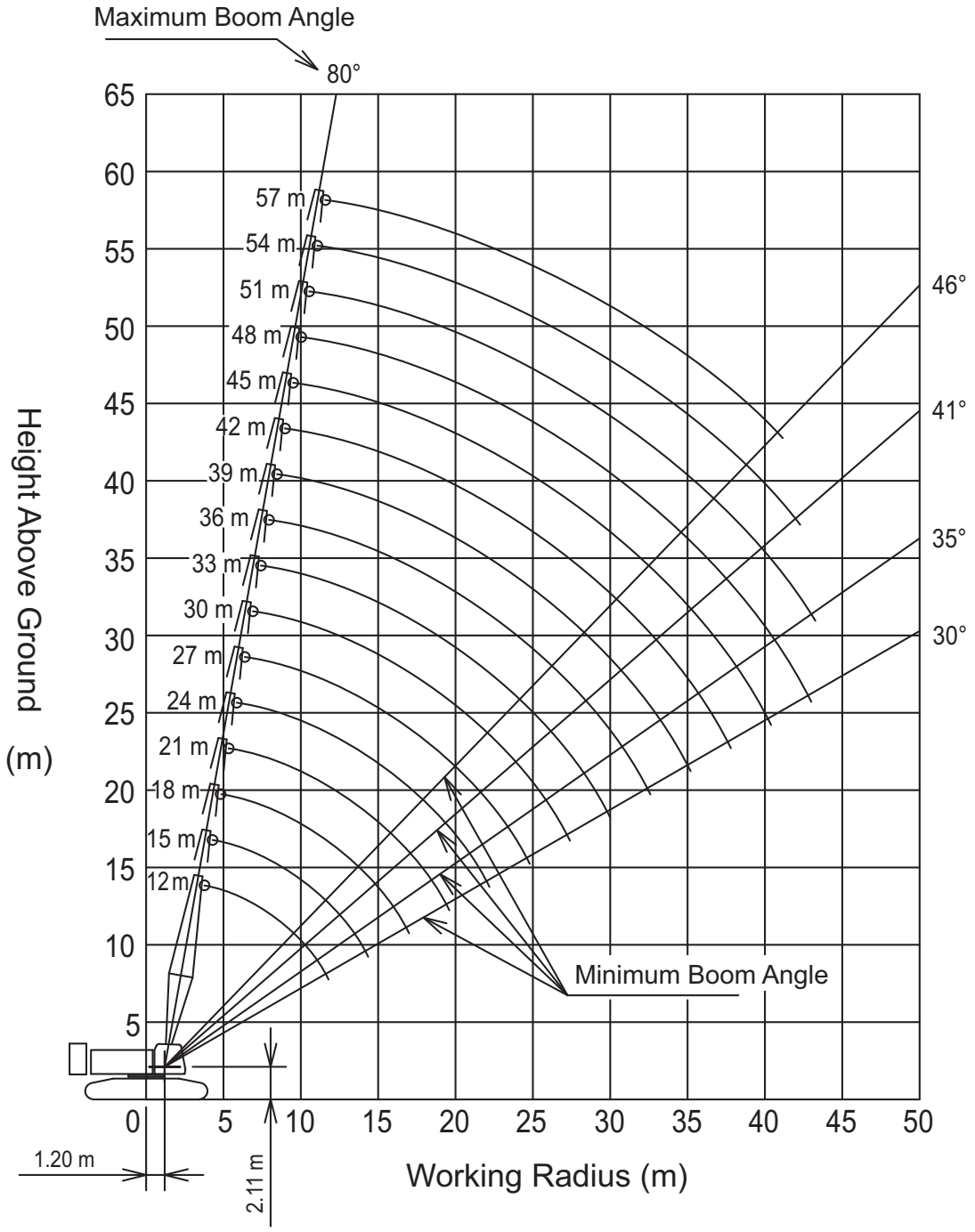
Main Boom with Aux. Sheave (1 Sheave)





■ Main Boom with Aux. Sheave (2 Sheaves)





Gross Rated Load Table

Main Boom

Unit: ton

Working Radius(m)	Boom Length (m)										Working Radius(m)
	12	15	18	21	24	27	30	33	36	39	
3.8	100.00										3.8
4	94.95										4
4.5	84.40	84.40									4.5
5	75.95	75.95	75.95	5.6 m x							5
5.5	69.05	69.05	68.80	65.70 t	6.1 m x	6.7 m x					5.5
6	63.30	63.30	62.85	60.75	57.25 t	49.85 t	7.2 m x	7.8 m x			6
7	54.10	54.10	53.00	51.15	49.30	47.60	44.65 t	39.65 t	8.3 m x	8.8 m x	7
8	44.90	44.90	44.75	44.05	42.60	41.25	39.95	38.65	36.00 t	32.95 t	8
9	38.10	38.05	37.90	37.85	37.45	36.35	35.30	34.15	33.15	32.20	9
10	33.00	32.90	32.75	32.70	32.60	32.40	31.55	30.55	29.70	28.90	10
12	11.8 m x	25.80	25.60	25.55	25.40	25.35	25.15	25.00	24.40	23.80	12
14	26.50 t	21.10	20.90	20.80	20.65	20.60	20.40	20.25	20.00	20.00	14
16		14.4 m x	17.55	17.45	17.25	17.20	17.00	16.85	16.60	16.55	16
18		20.30 t	17.0 m x	14.90	14.75	14.65	14.45	14.30	14.05	14.00	18
20			16.20 t	19.6 m x	12.80	12.70	12.50	12.30	12.05	12.05	20
22				13.35 t	11.25	11.10	10.90	10.70	10.50	10.45	22
24					22.2 m x	9.85	9.65	9.45	9.20	9.15	24
26					11.10 t	24.8 m x	8.60	8.35	8.15	8.10	26
28						9.40 t	27.4 m x	7.45	7.25	7.15	28
30							7.95 t	6.70	6.45	6.40	30
32									5.80	5.75	32
34									32.6 m x	5.15	34
36									5.60 t	35.2 m x	36
										4.85 t	

Unit: ton

Working Radius(m)	Boom Length (m)							Working Radius(m)
	42	45	48	51	54	57	60	
8	9.4 m x	9.9 m x						8
9	29.90 t	27.60 t	10.5 m x	11.1 m x	11.6 m x			9
10	28.05	27.35	25.35 t	22.45 t	19.35 t	12.2 m x	12.7 m x	10
12	23.15	22.60	22.05	21.35	19.15	18.05 t	14.55 t	12
14	19.50	19.05	18.65	18.05	17.60	17.15	14.10	14
16	16.35	16.20	16.00	15.45	15.10	14.70	13.40	16
18	13.80	13.65	13.50	13.40	13.05	12.75	12.35	18
20	11.80	11.65	11.50	11.40	11.25	11.15	10.75	20
22	10.20	10.05	9.95	9.80	9.65	9.55	9.30	22
24	8.90	8.75	8.65	8.50	8.35	8.20	8.00	24
26	7.85	7.70	7.55	7.40	7.25	7.15	6.90	26
28	6.95	6.80	6.65	6.50	6.35	6.20	6.00	28
30	6.15	6.00	5.85	5.70	5.55	5.40	5.20	30
32	5.50	5.35	5.20	5.05	4.90	4.75	4.50	32
34	4.90	4.75	4.60	4.45	4.30	4.15	3.90	34
36	4.40	4.25	4.10	3.90	3.75	3.60	3.40	36
38	37.8 m x	3.80	3.65	3.45	3.30	3.15	2.90	38
40	4.00 t	3.40	3.25	3.05	2.90	2.75	2.50	40
42		40.4 m x	2.85	2.65	2.50	2.35	2.15	42
44		3.30 t	43.0 m x	2.35	2.20	2.05	1.80	44
46			2.70 t	45.3 m x	1.90	1.75	44.6 m x	46
48				2.15 t	47.2 m x	46.3 m x	1.70 t	48
					1.70 t	1.70 t		

1. The rated loads are determined according to EN13000 rating on the condition that the machine is stationed on firm, level ground.
2. The figures surrounded by bold lines are based on factors other than those which would cause a tipping condition.
3. To calculate the maximum load that can actually be lifted, deduct weight of all lifting accessories, such as boom hook and jib hook, from figures shown above.
4. Working radius is the horizontal distance from the slewing center to the center of gravity of a lifted load.
5. The counterweight is 51.1 ton. (Superstructure 37.5 ton + Lower Weight 13.6 ton)
6. Figures described as OO m x OO t in the tables indicate "working radius" m x "rated load" ton.
7. Correlation between the number of reeved lines, maximum rated loads, hook weights are shown in the table below.

Hook Capacity (t)	Hook Weight (t)	Maximum Rated Loads (t)							
		8 falls	7 falls	6 falls	5 falls	4 falls	3 falls	2 falls	1 fall
100	1.61	100	94.5	81	67.5	54	40.5	27	-
80	1.35	-	-	80	67.5	54	40.5	27	-
50	1.17	-	-	-	-	50	40.5	27	-
35	0.90	-	-	-	-	-	35	27	-
15.5	0.62	-	-	-	-	-	-	-	15.5
13.5	0.62	-	-	-	-	-	-	-	13.5

8. To calculate the rated load when the operation is being performed with a skywalk attached to the boom, deduct the value in chart below from the rated load shown above.

Boom Length (m)	12	15	18	21	24	27	30	33	36
Equivalent Mass (t)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2

Boom Length (m)	39	42	45	48	51	54	57	60
Equivalent Mass (t)	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3

Aux. Sheave (1 Sheave) (13.5 t)/Wire Rope Diameter 28 mm

Unit: ton

Working Radius(m)	Boom Length (m)										Working Radius(m)
	12	15	18	21	24	27	30	33	36	39	
4.7	13.50	5.3 m x									4.7
5	13.50	13.50 t	5.8 m x								5
5.5	13.50	13.50	13.50 t	6.3 m x	6.9 m x						5.5
6	13.50	13.50	13.50	13.50 t	13.50 t	7.4 m x					6
7	13.50	13.50	13.50	13.50	13.50	13.50 t		8.5 m x			7
8	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50 t	9.1 m x	9.6 m x	8
9	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50 t	13.50 t	9
10	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	10
12	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	12
14	13.1 m x	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	14
16	13.50 t	15.7 m x	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	16
18		13.50 t	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	18
20			18.2 m x	12.75	12.55	12.45	12.25	12.05	11.80	11.75	20
22			13.50 t	20.8 m x	11.00	10.85	10.65	10.45	10.20	10.15	22
24				12.10 t	23.4 m x	9.60	9.35	9.15	8.90	8.85	24
26					10.10 t	8.50	8.30	8.10	7.85	7.80	26
28							7.40	7.20	6.95	6.85	28
30							28.6 m x	6.40	6.15	6.10	30
32							7.20 t	31.2 m x	5.50	5.40	32
34								6.00 t	33.8 m x	4.85	34
36									5.00 t	4.30	36
38										36.4 m x	38
										4.25 t	

Unit: ton

Working Radius(m)	Boom Length (m)						Working Radius(m)
	42	45	48	51	54	57	
9	10.2 m x	10.7 m x	11.3 m x	11.8 m x			9
10	13.50 t	13.50 t	13.50 t	13.50 t	12.4 m x	12.9 m x	10
12	13.50	13.50	13.50	13.50	13.50 t	13.50 t	12
14	13.50	13.50	13.50	13.50	13.50	13.50	14
16	13.50	13.50	13.50	13.50	13.50	13.50	16
18	13.50	13.40	13.10	12.80	12.40	12.05	18
20	11.55	11.35	11.25	11.10	10.80	10.45	20
22	9.90	9.75	9.60	9.50	9.35	9.10	22
24	8.60	8.45	8.30	8.20	8.05	7.90	24
26	7.55	7.35	7.20	7.10	6.95	6.80	26
28	6.60	6.45	6.30	6.15	6.00	5.85	28
30	5.85	5.65	5.50	5.40	5.20	5.05	30
32	5.15	5.00	4.85	4.70	4.55	4.40	32
34	4.55	4.40	4.25	4.10	3.95	3.80	34
36	4.05	3.90	3.75	3.60	3.40	3.25	36
38	3.60	3.45	3.25	3.10	2.95	2.80	38
40	39.0 m x	3.05	2.85	2.70	2.55	2.35	40
42	3.40 t	41.6 m x	2.50	2.35	41.7 m x	40.8 m x	42
44		2.75 t	2.20	42.8 m x	2.20 t	2.20 t	44
				2.20 t			

1. The rated loads are determined according to EN13000 rating on the condition that the machine is stationed on firm, level ground.
2. The figures surrounded by bold lines are based on factors other than those which would cause a tipping condition.
3. To calculate the maximum load that can actually be lifted, deduct weight of all lifting accessories, such as boom hook and jib hook, from figures shown above.
4. Working radius is the horizontal distance from the slewing center to the center of gravity of a lifted load.
5. The counterweight is 51.1 ton. (Superstructure 37.5 ton + Lower Weight 13.6 ton)
6. Figures described as OO m x OO t in the tables indicate "working radius" m x "rated load" ton.
7. Hook mass are shown in the table below.

Hook Capacity (t)	Hook Weight (t)
100	1.61
80	1.35
50	1.17
35	0.90
13.5	0.62

8. To calculate the rated load when the operation is being performed with a skywalk attached to the boom, deduct the value in chart below from the rated load shown above.

Boom Length (m)	12	15	18	21	24	27	30	33	36
Equivalent Mass (t)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2

Boom Length (m)	39	42	45	48	51	54	57
Equivalent Mass (t)	0.2	0.2	0.2	0.2	0.3	0.3	0.3

■ Aux. Sheave (1 Sheave) (15.5 t)/Wire Rope Diameter 30 mm (Optional)

Unit: ton

Working Radius(m)	Boom Length (m)										Working Radius(m)
	12	15	18	21	24	27	30	33	36	39	
4.7	15.50	5.3 m x									4.7
5	15.50	15.50 t	5.8 m x								5
5.5	15.50	15.50	15.50 t	6.3 m x	6.9 m x						5.5
6	15.50	15.50	15.50	15.50 t	15.50 t	7.4 m x					6
7	15.50	15.50	15.50	15.50	15.50	15.50 t		8.5 m x			7
8	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50 t	9.1 m x	9.6 m x	8
9	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50 t	15.50 t	9
10	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	10
12	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	12
14	13.1 m x	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	14
16	15.50 t	15.7 m x	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	16
18		15.50 t	15.50	14.70	14.55	14.40	14.20	14.05	13.80	13.75	18
20			18.2 m x	12.75	12.55	12.45	12.25	12.05	11.80	11.75	20
22			14.60 t	20.8 m x	11.00	10.85	10.65	10.45	10.20	10.15	22
24				12.10 t	23.4 m x	9.60	9.35	9.15	8.90	8.85	24
26					10.10 t	8.50	8.30	8.10	7.85	7.80	26
28							7.40	7.20	6.95	6.85	28
30							28.6 m x	6.40	6.15	6.10	30
32							7.20 t	31.2 m x	5.50	5.40	32
34								6.00 t	33.8 m x	4.85	34
36									5.00 t	4.30	36
38										36.4 m x	38
										4.25 t	

Unit: ton

Working Radius(m)	Boom Length (m)						Working Radius(m)
	42	45	48	51	54	57	
9	10.2 m x	10.7 m x	11.3 m x	11.8 m x			9
10	15.50 t	15.50 t	15.50 t	15.50 t	12.4 m x	12.9 m x	10
12	15.50	15.50	15.50	15.50	15.50 t	15.50 t	12
14	15.50	15.50	15.50	15.50	15.50	15.50	14
16	15.50	15.50	15.20	14.85	14.45	14.05	16
18	13.55	13.40	13.10	12.80	12.40	12.05	18
20	11.55	11.35	11.25	11.10	10.80	10.45	20
22	9.90	9.75	9.60	9.50	9.35	9.10	22
24	8.60	8.45	8.30	8.20	8.05	7.90	24
26	7.55	7.35	7.20	7.10	6.95	6.80	26
28	6.60	6.45	6.30	6.15	6.00	5.85	28
30	5.85	5.65	5.50	5.40	5.20	5.05	30
32	5.15	5.00	4.85	4.70	4.55	4.40	32
34	4.55	4.40	4.25	4.10	3.95	3.80	34
36	4.05	3.90	3.75	3.60	3.40	3.25	36
38	3.60	3.45	3.25	3.10	2.95	2.80	38
40	39.0 m x	3.05	2.85	2.70	2.55	2.35	40
42	3.40 t	41.6 m x	2.50	2.35	41.7 m x	40.8 m x	42
44		2.75 t	2.20	42.8 m x	2.20 t	2.20 t	44
				2.20 t			

1. The rated loads are determined according to EN13000 rating on the condition that the machine is stationed on firm, level ground.
2. The figures surrounded by bold lines are based on factors other than those which would cause a tipping condition.
3. To calculate the maximum load that can actually be lifted, deduct weight of all lifting accessories, such as boom hook and jib hook, from figures shown above.
4. Working radius is the horizontal distance from the slewing center to the center of gravity of a lifted load.
5. The counterweight is 51.1 ton. (Superstructure 37.5 ton + Lower Weight 13.6 ton)
6. Hook mass are shown in the table below.

Hook Capacity (t)	Hook Weight (t)
100	1.61
80	1.35
50	1.17
35	0.90
15.5	0.62

7. To calculate the rated load when the operation is being performed with a skywalk attached to the boom, deduct the value in chart below from the rated load shown above.

Boom Length (m)	12	15	18	21	24	27	30	33	36
Equivalent Mass (t)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2

Boom Length (m)	39	42	45	48	51	54	57
Equivalent Mass (t)	0.2	0.2	0.2	0.2	0.3	0.3	0.3

■ Main Boom with Aux. Sheave (1 Sheave)

Unit: ton

Working Radius(m)	Boom Length (m)										Working Radius(m)
	12	15	18	21	24	27	30	33	36	39	
3.8	97.60										3.8
4	94.95										4
4.5	84.40	84.40									4.5
5	75.95	75.95	75.95	5.6 m x							5
5.5	69.05	69.05	68.80	65.10 t	6.1 m x	6.7 m x					5.5
6	63.30	63.30	62.80	60.20	56.60 t	49.20 t	7.2 m x	7.8 m x			6
7	54.10	54.10	52.40	50.50	48.70	47.00	44.00 t	39.00 t	8.3 m x	8.8 m x	7
8	44.50	44.40	44.30	43.50	42.00	40.70	39.40	38.00	35.40 t	32.30 t	8
9	37.70	37.60	37.50	37.40	36.80	35.70	34.70	33.50	32.50	31.60	9
10	32.60	32.50	32.30	32.30	32.10	31.80	30.90	29.90	29.00	28.20	10
12	11.8 m x	25.40	25.20	25.10	25.00	24.90	24.70	24.50	23.80	23.20	12
14	26.10 t	20.70	20.50	20.40	20.20	20.10	19.90	19.80	19.50	19.40	14
16		14.4 m x	17.10	17.00	16.80	16.70	16.50	16.40	16.10	16.10	16
18		19.90 t	17.0 m x	14.50	14.30	14.20	14.00	13.80	13.60	13.50	18
20			15.80 t	19.6 m x	12.40	12.30	12.00	11.80	11.60	11.60	20
22				12.90 t	10.80	10.70	10.50	10.30	10.00	10.00	22
24					22.2 m x	9.40	9.20	9.00	8.70	8.70	24
26					10.70 t	24.8 m x	8.20	7.90	7.70	7.60	26
28						9.00 t	27.4 m x	7.00	6.80	6.70	28
30							7.50 t	6.30	6.00	5.90	30
32									5.40	5.30	32
34									32.6 m x	4.70	34
36									5.20 t	35.2 m x	36
										4.40 t	

Unit: ton

Working Radius(m)	Boom Length (m)						Working Radius(m)
	42	45	48	51	54	57	
8	9.4 m x	9.9 m x					8
9	29.20 t	26.90 t	10.5 m x	11.1 m x	11.6 m x		9
10	27.40	26.70	24.70 t	21.40 t	18.30 t	12.2 m x	10
12	22.50	21.90	21.40	20.70	18.10	17.00 t	12
14	18.90	18.40	17.90	17.30	16.90	16.30	14
16	15.80	15.70	15.30	14.80	14.40	14.00	16
18	13.30	13.10	13.00	12.70	12.40	12.00	18
20	11.30	11.10	11.00	10.90	10.70	10.40	20
22	9.70	9.60	9.40	9.30	9.10	9.00	22
24	8.40	8.30	8.10	8.00	7.80	7.70	24
26	7.40	7.20	7.00	6.90	6.70	6.60	26
28	6.50	6.30	6.10	6.00	5.80	5.70	28
30	5.70	5.50	5.40	5.20	5.00	4.90	30
32	5.00	4.80	4.70	4.50	4.40	4.20	32
34	4.40	4.30	4.10	3.90	3.80	3.60	34
36	3.90	3.80	3.60	3.40	3.20	3.10	36
38	37.8 m x	3.30	3.20	3.00	2.80	2.60	38
40	3.50 t	2.90	2.80	2.50	2.40	2.20	40
42		40.4 m x	2.40	2.20	41.0 m x		42
44		2.90 t	43.0 m x		2.20 t		44
			2.20 t				

1. The rated loads are determined according to EN13000 rating on the condition that the machine is stationed on firm, level ground.
2. The figures surrounded by bold lines are based on factors other than those which would cause a tipping condition.
3. To calculate the maximum load that can actually be lifted, deduct weight of all lifting accessories, such as boom hook and jib hook, from figures shown above.
4. Working radius is the horizontal distance from the slewing center to the center of gravity of a lifted load.
5. The counterweight is 51.1 ton. (Superstructure 37.5 ton + Lower Weight 13.6 ton)
6. Figures described as OO m x OO t in the tables indicate "working radius" m x "rated load" ton.
7. Correlation between the number of reeved lines, maximum rated loads, hook weights are shown in the table below.

Hook Capacity (t)	Hook Weight (t)	Maximum Rated Loads (t)							
		8 falls	7 falls	6 falls	5 falls	4 falls	3 falls	2 falls	1 fall
100	1.61	100	94.5	81	67.5	54	40.5	27	-
80	1.35	-	-	80	67.5	54	40.5	27	-
50	1.17	-	-	-	-	50	40.5	27	-
35	0.90	-	-	-	-	-	35	27	-
15.5	0.62	-	-	-	-	-	-	-	15.5
13.5	0.62	-	-	-	-	-	-	-	13.5

8. To calculate the rated load when the operation is being performed with a skywalk attached to the boom, deduct the value in chart below from the rated load shown above.

Boom Length (m)	12	15	18	21	24	27	30	33	36
Equivalent Mass (t)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2

Boom Length (m)	39	42	45	48	51	54	57
Equivalent Mass (t)	0.2	0.2	0.2	0.2	0.3	0.3	0.3

Main Boom (Using Third Winch)

Unit: ton

Working Radius(m)	Boom Length (m)										Working Radius(m)
	12	15	18	21	24	27	30	33	36	39	
3.8	90.00										3.8
4	90.00										4
4.5	84.40	84.40									4.5
5	75.95	75.95	75.95	5.6 m x							5
5.5	69.05	69.05	68.80	65.70 t	6.1 m x	6.7 m x					5.5
6	63.30	63.30	62.85	60.75	57.25 t	49.85 t	7.2 m x	7.8 m x			6
7	54.10	54.10	53.00	51.15	49.30	47.60	44.65 t	39.65 t	8.3 m x	8.8 m x	7
8	44.90	44.90	44.75	44.05	42.60	41.25	39.95	38.65	36.00 t	32.95 t	8
9	38.10	38.05	37.90	37.85	37.45	36.35	35.30	34.15	33.15	32.20	9
10	33.00	32.90	32.75	32.70	32.60	32.40	31.55	30.55	29.70	28.90	10
12	11.8 m x	25.80	25.60	25.55	25.40	25.35	25.15	25.00	24.40	23.80	12
14	26.50 t	21.10	20.90	20.80	20.65	20.60	20.40	20.25	20.00	20.00	14
16		14.4 m x	17.50	17.45	17.25	17.20	17.00	16.85	16.60	16.55	16
18		20.30 t	17.0 m x	14.90	14.75	14.65	14.45	14.30	14.05	14.00	18
20			16.20 t	19.6 m x	12.80	12.70	12.50	12.30	12.05	12.05	20
22				13.35 t	11.25	11.10	10.90	10.70	10.50	10.45	22
24					22.2 m x	9.85	9.65	9.45	9.20	9.15	24
26					11.10 t	24.8 m x	8.60	8.35	8.10	8.10	26
28						9.40 t	27.4 m x	7.45	7.20	7.15	28
30							7.95 t	6.70	6.45	6.40	30
32									5.80	5.75	32
34									32.6 m x	5.15	34
36									5.60 t	35.2 m x	36
										4.85 t	

Unit: ton

Working Radius(m)	Boom Length (m)							Working Radius(m)
	42	45	48	51	54	57	60	
8	9.4 m x	9.9 m x						8
9	29.90 t	27.60 t	10.5 m x	11.1 m x	11.6 m x			9
10	28.05	27.35	25.35 t	23.10 t	19.85 t	12.2 m x	12.7 m x	10
12	23.15	22.55	22.05	21.35	19.65	18.55 t	14.90 t	12
14	19.50	19.05	18.65	18.05	17.60	17.15	14.40	14
16	16.35	16.20	16.00	15.45	15.10	14.70	13.70	16
18	13.80	13.65	13.50	13.40	13.05	12.75	12.35	18
20	11.80	11.65	11.50	11.40	11.25	11.15	10.75	20
22	10.20	10.05	9.95	9.80	9.65	9.55	9.30	22
24	8.90	8.75	8.65	8.50	8.35	8.20	8.00	24
26	7.85	7.70	7.55	7.40	7.25	7.15	6.90	26
28	6.95	6.80	6.65	6.50	6.35	6.20	6.00	28
30	6.15	6.00	5.85	5.70	5.55	5.40	5.20	30
32	5.50	5.35	5.20	5.05	4.90	4.75	4.50	32
34	4.90	4.75	4.60	4.45	4.30	4.15	3.90	34
36	4.40	4.25	4.10	3.90	3.75	3.60	3.40	36
38	37.8 m x	3.75	3.65	3.45	3.30	3.15	2.90	38
40	4.00 t	3.35	3.20	3.05	2.90	2.75	2.50	40
42		40.4 m x	2.85	2.65	2.50	2.35	2.15	42
44		3.30 t	43.0 m x	2.35	2.20	2.05	1.80	44
46			2.70 t	45.3 m x	1.90	1.75	44.8 m x	46
48				2.15 t	47.4 m x	46.3 m x	1.70 t	48
					1.70 t	1.70 t		

1. The rated loads are determined according to EN13000 rating on the condition that the machine is stationed on firm, level ground.
2. The figures surrounded by bold lines are based on factors other than those which would cause a tipping condition.
3. To calculate the maximum load that can actually be lifted, deduct weight of all lifting accessories, such as boom hook and jib hook, from figures shown above.
4. Working radius is the horizontal distance from the slewing center to the center of gravity of a lifted load.
5. The counterweight is 51.1 ton. (Superstructure 37.5 ton + Lower Weight 13.6 ton)
6. Figures described as OO m x OO t in the tables indicate "working radius" m x "rated load" ton.
7. Correlation between the number of reeved lines, maximum rated loads, hook weights are shown in the table below.

Hook Capacity (t)	Hook Weight (t)	Maximum Rated Loads (t)						
		8 falls	7 falls	6 falls	5 falls	4 falls	3 falls	2 falls
100	1.61	90	84	72	60	48	-	-
80	1.35	-	80	72	60	48	36	24
50	1.17	-	-	-	50	48	36	24
35	0.90	-	-	-	-	-	35	24

8. To calculate the rated load when the operation is being performed with a skywalk attached to the boom, deduct the value in chart below from the rated load shown above.

Boom Length (m)	12	15	18	21	24	27	30	33	36
Equivalent Mass (t)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2

Boom Length (m)	39	42	45	48	51	54	57	60
Equivalent Mass (t)	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3

■ Main Boom with Aux. Sheave (1 Sheave) (Using Third Winch)

Unit: ton

Working Radius(m)	Boom Length (m)										Working Radius(m)
	12	15	18	21	24	27	30	33	36	39	
3.8	90.00										3.8
4	90.00										4
4.5	84.40	84.40									4.5
5	75.95	75.95	75.95	5.6 m x							5
5.5	69.05	69.05	68.80	65.10 t	6.1 m x	6.7 m x					5.5
6	63.30	63.30	62.80	60.20	56.65 t	49.25 t	7.2 m x	7.8 m x			6
7	54.10	54.10	52.45	50.55	48.70	47.00	44.05 t	39.05 t	8.3 m x	8.8 m x	7
8	44.50	44.45	44.30	43.50	42.00	40.70	39.40	38.05	35.40 t	32.35 t	8
9	37.70	37.65	37.45	37.40	36.85	35.75	34.70	33.55	32.55	31.60	9
10	32.60	32.55	32.35	32.30	32.15	31.85	30.95	29.95	29.05	28.25	10
12	11.8 m x	25.40	25.20	25.15	25.00	24.90	24.70	24.50	23.80	23.15	12
14	26.10 t	20.70	20.50	20.40	20.25	20.15	19.95	19.80	19.55	19.45	14
16		14.4 m x	17.15	17.05	16.85	16.75	16.55	16.40	16.15	16.10	16
18		19.95 t	17.0 m x	14.55	14.35	14.25	14.05	13.85	13.60	13.55	18
20			15.80 t	19.6 m x	12.40	12.25	12.05	11.85	11.60	11.55	20
22				12.95 t	10.85	10.70	10.50	10.30	10.05	10.00	22
24					22.2 m x	9.45	9.25	9.00	8.75	8.70	24
26					10.70 t	24.8 m x	8.20	7.95	7.70	7.65	26
28						9.00 t	27.4 m x	7.05	6.80	6.75	28
30							7.55 t	6.30	6.05	5.95	30
32									5.40	5.30	32
34									32.6 m x	4.75	34
36									5.20 t	35.2 m x	36
										4.45 t	

Unit: ton

Working Radius(m)	Boom Length (m)						Working Radius(m)
	42	45	48	51	54	57	
8	9.4 m x	9.9 m x					8
9	29.25 t	26.95 t	10.5 m x	11.1 m x	11.6 m x		9
10	27.40	26.70	24.70 t	22.10 t	18.85 t	12.2 m x	10
12	22.50	21.90	21.40	20.70	18.65	17.50 t	12
14	18.90	18.40	17.95	17.35	16.90	16.45	14
16	15.85	15.70	15.35	14.80	14.40	14.00	16
18	13.30	13.15	13.00	12.75	12.40	12.05	18
20	11.35	11.15	11.00	10.90	10.75	10.45	20
22	9.75	9.60	9.45	9.30	9.15	9.00	22
24	8.45	8.30	8.15	8.00	7.85	7.70	24
26	7.40	7.20	7.05	6.90	6.75	6.60	26
28	6.50	6.30	6.15	6.00	5.85	5.70	28
30	5.70	5.55	5.40	5.20	5.05	4.90	30
32	5.05	4.85	4.70	4.55	4.40	4.20	32
34	4.45	4.30	4.15	3.95	3.80	3.65	34
36	3.95	3.80	3.60	3.45	3.25	3.10	36
38	37.8 m x	3.35	3.15	3.00	2.80	2.65	38
40	3.55 t	2.95	2.80	2.55	2.40	2.25	40
42		40.4 m x	2.45	2.20	41.2 m x	40.3 m x	42
44		2.85 t	43.0 m x	42.2 m x	2.20 t	2.20 t	44
			2.25 t	2.20 t			

1. The rated loads are determined according to EN13000 rating on the condition that the machine is stationed on firm, level ground.
2. The figures surrounded by bold lines are based on factors other than those which would cause a tipping condition.
3. To calculate the maximum load that can actually be lifted, deduct weight of all lifting accessories, such as boom hook and jib hook, from figures shown above.
4. Working radius is the horizontal distance from the slewing center to the center of gravity of a lifted load.
5. The counterweight is 51.1 ton. (Superstructure 37.5 ton + Lower Weight 13.6 ton)
6. Figures described as OO m x OO t in the tables indicate "working radius" m x "rated load" ton.
7. Correlation between the number of reeved lines, maximum rated loads, hook weights are shown in the table below.

Hook Capacity (t)	Hook Weight (t)	Maximum Rated Loads (t)						
		8 falls	7 falls	6 falls	5 falls	4 falls	3 falls	2 falls
100	1.61	90	84	72	60	48	-	-
80	1.35	-	80	72	60	48	36	24
50	1.17	-	-	-	50	48	36	24
35	0.90	-	-	-	-	-	35	24

8. To calculate the rated load when the operation is being performed with a skywalk attached to the boom, deduct the value in chart below from the rated load shown above.

Boom Length (m)	12	15	18	21	24	27	30	33	36
Equivalent Mass (t)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2

Boom Length (m)	39	42	45	48	51	54	57
Equivalent Mass (t)	0.2	0.2	0.2	0.2	0.3	0.3	0.3

Aux. Sheave (2 Sheaves) (13.5 t)/Wire Rope Diameter 28 mm

Unit: ton

Working Radius(m)	Boom Length (m)										Working Radius(m)
	12	15	18	21	24	27	30	33	36	39	
4.7	13.50	5.3 m x									4.7
5	13.50	13.50 t	5.8 m x								5
5.5	13.50	13.50	13.50 t	6.3 m x	6.9 m x						5.5
6	13.50	13.50	13.50	13.50 t	13.50 t	7.4 m x					6
7	13.50	13.50	13.50	13.50	13.50	13.50 t		8.5 m x			7
8	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50 t	9.1 m x	9.6 m x	8
9	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50 t	13.50 t	9
10	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	10
12	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	12
14	13.1 m x	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	14
16	13.50 t	15.7 m x	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	16
18		13.50 t	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	18
20			18.2 m x	12.60	12.40	12.30	12.10	11.90	11.65	11.60	20
22			13.50 t	20.8 m x	10.85	10.75	10.50	10.30	10.10	10.05	22
24				11.95 t	23.4 m x	9.45	9.25	9.05	8.80	8.70	24
26					9.95 t	8.40	8.15	7.95	7.70	7.65	26
28							7.30	7.05	6.80	6.75	28
30							28.6 m x	6.30	6.00	5.95	30
32							7.05 t	31.2 m x	5.35	5.25	32
34								5.90 t	33.8 m x	4.70	34
36									4.85 t	4.20	36
38										36.4 m x	38
										4.10 t	

Unit: ton

Working Radius(m)	Boom Length (m)						Working Radius(m)
	42	45	48	51	54	57	
9	10.2 m x	10.7 m x	11.3 m x	11.8 m x			9
10	13.50 t	13.50 t	13.50 t	13.50 t	12.4 m x	12.9 m x	10
12	13.50	13.50	13.50	13.50	13.50 t	13.50 t	12
14	13.50	13.50	13.50	13.50	13.50	13.50	14
16	13.50	13.50	13.50	13.50	13.50	13.50	16
18	13.40	13.25	12.95	12.65	12.25	11.90	18
20	11.40	11.25	11.10	10.95	10.65	10.30	20
22	9.80	9.65	9.50	9.35	9.20	8.95	22
24	8.50	8.30	8.15	8.05	7.90	7.75	24
26	7.40	7.25	7.10	6.95	6.80	6.65	26
28	6.50	6.30	6.15	6.05	5.85	5.70	28
30	5.70	5.55	5.40	5.25	5.10	4.95	30
32	5.00	4.85	4.70	4.55	4.40	4.25	32
34	4.45	4.25	4.10	3.95	3.80	3.65	34
36	3.90	3.75	3.60	3.45	3.25	3.10	36
38	3.45	3.30	3.15	2.95	2.80	2.65	38
40	39.0 m x	2.90	2.75	2.55	2.40	39.5 m x	40
42	3.25 t	41.6 m x	2.35	41.1 m x	40.2 m x	2.35 t	42
		2.60 t		2.35 t	2.35 t		

1. The rated loads are determined according to EN13000 rating on the condition that the machine is stationed on firm, level ground.
2. The figures surrounded by bold lines are based on factors other than those which would cause a tipping condition.
3. To calculate the maximum load that can actually be lifted, deduct weight of all lifting accessories, such as boom hook and jib hook, from figures shown above.
4. Working radius is the horizontal distance from the slewing center to the center of gravity of a lifted load.
5. The counterweight is 51.1 ton. (Superstructure 37.5 ton + Lower Weight 13.6 ton)
6. Figures described as OO m x OO t in the tables indicate "working radius" m x "rated load" ton.
7. Hook mass are shown in the table below.

Hook Capacity (t)	Hook Weight (t)
100	1.61
80	1.35
50	1.17
35	0.90
13.5	0.62

8. To calculate the rated load when the operation is being performed with a skywalk attached to the boom, deduct the value in chart below from the rated load shown above.

Boom Length (m)	12	15	18	21	24	27	30	33	36
Equivalent Mass (t)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2

Boom Length (m)	39	42	45	48	51	54	57
Equivalent Mass (t)	0.2	0.2	0.2	0.2	0.3	0.3	0.3

■ Aux. Sheave (2 Sheaves) (15.5 t)/Wire Rope Diameter 30 mm (Optional)

Unit: ton

Working Radius(m)	Boom Length (m)										Working Radius(m)
	12	15	18	21	24	27	30	33	36	39	
4.7	15.50	5.3 m x									4.7
5	15.50	15.50 t	5.8 m x								5
5.5	15.50	15.50	15.50 t	6.3 m x	6.9 m x						5.5
6	15.50	15.50	15.50	15.50 t	15.50 t	7.4 m x					6
7	15.50	15.50	15.50	15.50	15.50	15.50 t		8.5 m x			7
8	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50 t	9.1 m x	9.6 m x	8
9	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50 t	15.50 t	9
10	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	10
12	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	12
14	13.1 m x	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	14
16	15.50 t	15.7 m x	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	16
18		15.50 t	14.70	14.60	14.40	14.30	14.10	13.90	13.65	13.65	18
20			18.2 m x	12.60	12.40	12.30	12.10	11.90	11.65	11.60	20
22			14.50 t	20.8 m x	10.85	10.75	10.50	10.30	10.10	10.05	22
24				11.95 t	23.4 m x	9.45	9.25	9.05	8.80	8.70	24
26					9.95 t	8.40	8.15	7.95	7.70	7.65	26
28							7.30	7.05	6.80	6.75	28
30							28.6 m x	6.30	6.00	5.95	30
32							7.05 t	31.2 m x	5.35	5.25	32
34								5.90 t	33.8 m x	4.70	34
36									4.85 t	4.20	36
38										36.4 m x	38
										4.10 t	

Unit: ton

Working Radius(m)	Boom Length (m)						Working Radius(m)
	42	45	48	51	54	57	
9	10.2 m x	10.7 m x	11.3 m x	11.8 m x			9
10	15.50 t	15.50 t	15.50 t	15.50 t	12.4 m x	12.9 m x	10
12	15.50	15.50	15.50	15.50	15.50 t	15.50 t	12
14	15.50	15.50	15.50	15.50	15.50	15.50	14
16	15.50	15.45	15.05	14.70	14.25	13.90	16
18	13.40	13.25	12.95	12.65	12.25	11.90	18
20	11.40	11.25	11.10	10.95	10.65	10.30	20
22	9.80	9.65	9.50	9.35	9.20	8.95	22
24	8.50	8.30	8.15	8.05	7.90	7.75	24
26	7.40	7.25	7.10	6.95	6.80	6.65	26
28	6.50	6.30	6.15	6.05	5.85	5.70	28
30	5.70	5.55	5.40	5.25	5.10	4.95	30
32	5.00	4.85	4.70	4.55	4.40	4.25	32
34	4.45	4.25	4.10	3.95	3.80	3.65	34
36	3.90	3.75	3.60	3.45	3.25	3.10	36
38	3.45	3.30	3.15	2.95	2.80	2.65	38
40	39.0 m x	2.90	2.75	2.55	2.40	39.5 m x	40
42	3.25 t	41.6 m x	2.35	41.1 m x	40.2 m x	2.35 t	42
		2.60 t		2.35 t	2.35 t		

1. The rated loads are determined according to EN13000 rating on the condition that the machine is stationed on firm, level ground.
2. The figures surrounded by bold lines are based on factors other than those which would cause a tipping condition.
3. To calculate the maximum load that can actually be lifted, deduct weight of all lifting accessories, such as boom hook and jib hook, from figures shown above.
4. Working radius is the horizontal distance from the slewing center to the center of gravity of a lifted load.
5. The counterweight is 51.1 ton. (Superstructure 37.5 ton + Lower Weight 13.6 ton)
6. Hook mass are shown in the table below.

Hook Capacity (t)	Hook Weight (t)
100	1.61
80	1.35
50	1.17
35	0.90
15.5	0.62

7. To calculate the rated load when the operation is being performed with a skywalk attached to the boom, deduct the value in chart below from the rated load shown above.

Boom Length (m)	12	15	18	21	24	27	30	33	36
Equivalent Mass (t)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2

Boom Length (m)	39	42	45	48	51	54	57
Equivalent Mass (t)	0.2	0.2	0.2	0.2	0.3	0.3	0.3

■ Main Boom with Aux. Sheave (2 Sheaves)

Unit: ton

Working Radius(m)	Boom Length (m)										Working Radius(m)
	12	15	18	21	24	27	30	33	36	39	
3.8	97.40										3.8
4	94.95										4
4.5	84.40	84.40									4.5
5	75.95	75.95	75.95	5.6 m x							5
5.5	69.05	69.05	68.80	64.90 t	6.1 m x	6.7 m x					5.5
6	63.30	63.30	62.60	60.00	56.50 t	49.10 t	7.2 m x	7.8 m x			6
7	53.90	53.90	52.30	50.40	48.50	46.80	43.80 t	38.90 t	8.3 m x	8.8 m x	7
8	44.30	44.30	44.10	43.30	41.80	40.50	39.20	37.80	35.20 t	32.10 t	8
9	37.50	37.50	37.30	37.20	36.70	35.60	34.50	33.40	32.30	31.40	9
10	32.40	32.30	32.20	32.10	32.00	31.70	30.70	29.80	28.90	28.10	10
12	11.8 m x	25.20	25.00	25.00	24.80	24.70	24.50	24.30	23.60	23.00	12
14	25.90 t	20.50	20.30	20.20	20.10	20.00	19.80	19.60	19.40	19.30	14
16		14.4 m x	17.00	16.90	16.70	16.60	16.40	16.20	16.00	15.90	16
18		19.80 t	17.0 m x	14.40	14.20	14.10	13.90	13.70	13.40	13.40	18
20			15.70 t	19.6 m x	12.20	12.10	11.90	11.70	11.40	11.40	20
22				12.80 t	10.70	10.50	10.30	10.10	9.90	9.80	22
24					22.2 m x	9.30	9.10	8.80	8.60	8.50	24
26					10.50 t	24.8 m x	8.00	7.80	7.50	7.50	26
28						8.80 t	27.4 m x	6.90	6.60	6.60	28
30							7.40 t	6.10	5.90	5.80	30
32									5.20	5.10	32
34									32.6 m x	4.60	34
36									5.10 t	35.2 m x	36
										4.30 t	

Unit: ton

Working Radius(m)	Boom Length (m)						Working Radius(m)
	42	45	48	51	54	57	
8	9.4 m x	9.9 m x					8
9	29.10 t	26.80 t	10.5 m x	11.1 m x	11.6 m x		9
10	27.20	26.50	24.50 t	21.30 t	18.20 t	12.2 m x	10
12	22.30	21.70	21.20	20.50	18.00	16.90 t	12
14	18.70	18.20	17.80	17.20	16.70	16.10	14
16	15.70	15.50	15.20	14.60	14.20	13.80	16
18	13.10	13.00	12.80	12.60	12.20	11.90	18
20	11.20	11.00	10.90	10.70	10.60	10.30	20
22	9.60	9.40	9.30	9.10	9.00	8.80	22
24	8.30	8.10	8.00	7.80	7.70	7.50	24
26	7.20	7.00	6.90	6.70	6.60	6.40	26
28	6.30	6.10	6.00	5.80	5.70	5.50	28
30	5.50	5.40	5.20	5.00	4.90	4.70	30
32	4.90	4.70	4.50	4.40	4.20	4.10	32
34	4.30	4.10	4.00	3.80	3.60	3.50	34
36	3.80	3.60	3.50	3.30	3.10	2.90	36
38	37.8 m x	3.20	3.00	2.80	2.60	2.50	38
40	3.40 t	2.80	2.60	2.40	39.2 m x	38.7 m x	40
42		40.4 m x	41.6 m x	40.2 m x	2.35 t	2.35 t	42
		2.70 t	2.35 t	2.35 t			

1. The rated loads are determined according to EN13000 rating on the condition that the machine is stationed on firm, level ground.
2. The figures surrounded by bold lines are based on factors other than those which would cause a tipping condition.
3. To calculate the maximum load that can actually be lifted, deduct weight of all lifting accessories, such as boom hook and jib hook, from figures shown above.
4. Working radius is the horizontal distance from the slewing center to the center of gravity of a lifted load.
5. The counterweight is 51.1 ton. (Superstructure 37.5 ton + Lower Weight 13.6 ton)
6. Figures described as OO m x OO t in the tables indicate "working radius" m x "rated load" ton.
7. Correlation between the number of reeved lines, maximum rated loads, hook weights are shown in the table below.

Hook Capacity (t)	Hook Weight (t)	Maximum Rated Loads (t)							
		8 falls	7 falls	6 falls	5 falls	4 falls	3 falls	2 falls	1 fall
100	1.61	100	94.5	81	67.5	54	40.5	27	-
80	1.35	-	-	80	67.5	54	40.5	27	-
50	1.17	-	-	-	-	50	40.5	27	-
35	0.90	-	-	-	-	-	35	27	-
15.5	0.62	-	-	-	-	-	-	-	15.5
13.5	0.62	-	-	-	-	-	-	-	13.5

8. To calculate the rated load when the operation is being performed with a skywalk attached to the boom, deduct the value in chart below from the rated load shown above.

Boom Length (m)	12	15	18	21	24	27	30	33	36
Equivalent Mass (t)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2

Boom Length (m)	39	42	45	48	51	54	57
Equivalent Mass (t)	0.2	0.2	0.2	0.2	0.3	0.3	0.3

Main Boom with Aux. Sheave (2 Sheaves) (Using Third Winch)

Unit: ton

Working Radius(m)	Boom Length (m)										Working Radius(m)
	12	15	18	21	24	27	30	33	36	39	
3.8	90.00										3.8
4	90.00										4
4.5	84.40	84.40									4.5
5	75.95	75.95	75.95	5.6 m x							5
5.5	69.05	69.05	68.80	64.90 t	6.1 m x	6.7 m x					5.5
6	63.30	63.30	62.60	60.00	56.50 t	49.10 t	7.2 m x	7.8 m x			6
7	53.95	53.95	52.30	50.40	48.55	46.80	43.85 t	38.90 t	8.3 m x	8.8 m x	7
8	44.35	44.30	44.15	43.30	41.85	40.50	39.20	37.85	35.25 t	32.15 t	8
9	37.55	37.50	37.30	37.25	36.70	35.60	34.55	33.40	32.35	31.40	9
10	32.45	32.35	32.20	32.15	32.00	31.70	30.75	29.80	28.90	28.10	10
12	11.8 m x	25.25	25.05	25.00	24.85	24.75	24.55	24.35	23.60	23.00	12
14	25.95 t	20.55	20.35	20.25	20.10	20.00	19.80	19.65	19.40	19.30	14
16		14.4 m x	17.00	16.90	16.70	16.60	16.40	16.25	16.00	15.95	16
18		19.80 t	17.0 m x	14.40	14.20	14.10	13.90	13.70	13.45	13.40	18
20			15.65 t	19.6 m x	12.25	12.15	11.90	11.70	11.45	11.45	20
22				12.80 t	10.70	10.55	10.35	10.15	9.90	9.85	22
24					22.2 m x	9.30	9.10	8.85	8.60	8.55	24
26					10.55 t	24.8 m x	8.05	7.80	7.55	7.50	26
28						8.85 t	27.4 m x	6.90	6.65	6.60	28
30							7.40 t	6.10	5.90	5.80	30
32									5.25	5.15	32
34									32.6 m x	4.60	34
36									5.05 t	35.2 m x	36
										4.30 t	

Unit: ton

Working Radius(m)	Boom Length (m)						Working Radius(m)
	42	45	48	51	54	57	
8	9.4 m x	9.9 m x					8
9	29.10 t	26.80 t	10.5 m x	11.1 m x	11.6 m x		9
10	27.25	26.50	24.55 t	21.95 t	18.70 t	12.2 m x	10
12	22.35	21.75	21.20	20.50	18.50	17.35 t	12
14	18.70	18.25	17.80	17.20	16.75	16.30	14
16	15.70	15.55	15.15	14.60	14.25	13.85	16
18	13.15	13.00	12.85	12.60	12.25	11.90	18
20	11.20	11.00	10.90	10.75	10.60	10.30	20
22	9.60	9.45	9.30	9.15	9.00	8.85	22
24	8.30	8.15	8.00	7.85	7.70	7.55	24
26	7.25	7.05	6.90	6.75	6.60	6.45	26
28	6.35	6.15	6.00	5.85	5.70	5.55	28
30	5.55	5.40	5.25	5.05	4.90	4.75	30
32	4.90	4.70	4.55	4.40	4.25	4.10	32
34	4.30	4.15	4.00	3.80	3.65	3.50	34
36	3.80	3.65	3.50	3.30	3.10	2.95	36
38	37.8 m x	3.20	3.05	2.85	2.65	2.50	38
40	3.40 t	2.80	2.65	2.45	39.6 m x	38.8 m x	40
42		40.4 m x	41.7 m x	40.5 m x	2.35 t	2.35 t	42
		2.75 t	2.35 t	2.35 t			

1. The rated loads are determined according to EN13000 rating on the condition that the machine is stationed on firm, level ground.
2. The figures surrounded by bold lines are based on factors other than those which would cause a tipping condition.
3. To calculate the maximum load that can actually be lifted, deduct weight of all lifting accessories, such as boom hook and jib hook, from figures shown above.
4. Working radius is the horizontal distance from the slewing center to the center of gravity of a lifted load.
5. The counterweight is 51.1 ton. (Superstructure 37.5 ton + Lower Weight 13.6 ton)
6. Figures described as OO m x OO t in the tables indicate "working radius" m x "rated load" ton.
7. Correlation between the number of reeved lines, maximum rated loads, hook weights are shown in the table below.

Hook Capacity (t)	Hook Weight (t)	Maximum Rated Loads (t)						
		8 falls	7 falls	6 falls	5 falls	4 falls	3 falls	2 falls
100	1.61	90	84	72	60	48	-	-
80	1.35	-	80	72	60	48	36	24
50	1.17	-	-	-	50	48	36	24
35	0.90	-	-	-	-	-	35	24

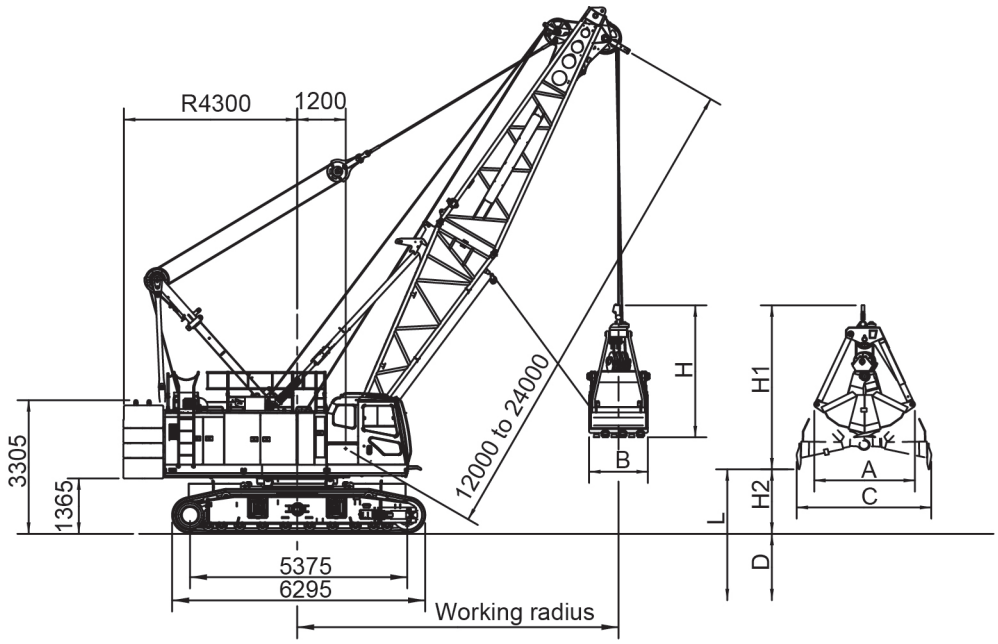
8. To calculate the rated load when the operation is being performed with a skywalk attached to the boom, deduct the value in chart below from the rated load shown above.

Boom Length (m)	12	15	18	21	24	27	30	33	36
Equivalent Mass (t)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2

Boom Length (m)	39	42	45	48	51	54	57
Equivalent Mass (t)	0.2	0.2	0.2	0.2	0.3	0.3	0.3

Clamshell Specifications

Dimensions and Specifications



Working Ranges

Boom Length	m	12				15				18				21				24			
Boom Angle	°	35	45	55	65	35	45	55	65	35	45	55	65	35	45	55	65	35	45	55	65
Working Radius	m	11.6	10.4	8.8	7.1	14.0	12.5	10.5	8.4	16.5	14.6	12.3	9.6	19.0	16.7	14.0	10.9	21.4	18.8	15.7	12.2
Gross Rated Load	t	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	11.25	12.35	12.5	12.5	9.5	11.35	12.5	12.5
Lift L (D + H2)	m	37.7	39.4	40.8	41.9	39.5	41.5	43.3	44.6	41.2	43.6	45.7	47.4	42.9	45.8	48.2	50.1	44.6	47.9	50.6	52.8
Max. Digging Depth D	m	36																			
Bucket Dumping Height H2	m	1.7	3.4	4.8	5.9	3.5	5.5	7.3	8.6	5.2	7.6	9.7	11.4	6.9	9.8	12.2	14.1	8.6	11.9	14.6	16.8

Specifications

		Clamshell Specifications
Bucket Capacity	m^3	3.0
Allowed Maximum Gross Weight for Clamshell Bucket and Captured Load Combined	t	12.5
Boom Length	m	12 to 24
Maximum Digging Depth	m	36
Ground Contact Pressure	kPa (kgf/cm^2)	118 (1.20) (w/ Basic Boom, 3.0 m^3 Clamshell Bucket)
Overall Operating Weight	t	Approximately 105 (w/ Basic Boom, 3.0 m^3 Clamshell Bucket)

NOTE : SI units are used for specifications. In parenthesis, conventional units are also indicated.

Clamshell Bucket

Capacity (m^3)	Weight (t)	A (mm)	B (mm)	C (mm)	H (mm)	H1 (mm)
3.0	6.5	2,980	1,650	3,500	3,550	4,550

Gross Rated Load Table (Wire Rope Diameter 28mm/30mm)

Unit : ton

Working Radius (m)	Boom Length (m)				
	12	15	18	21	24
7.1	7.1 m x 12.50 t	8.4 m x 12.50 t			
8	12.50	12.50 t	9.6 m x 12.50 t		
9	12.50	12.50	12.50 t	10.9 m x 12.50 t	
10	12.50	12.50	12.50	12.50 t	12.2 m x 12.50 t
12	11.6 m x 12.50 t	12.50	12.50	12.50	12.50
14		12.50	12.50	12.50	12.50
16			12.50	12.50	12.50
18			16.5 m x 12.50 t	12.10	12.00
20				19.0 m x 11.25 t	10.40
21.4					21.4 m x 9.50 t

1. Max. clamshell rating is 12.5 t.
2. Mass of bucket plus load should not exceed clamshell ratings shown above. Following data are for a general digging application buckets.

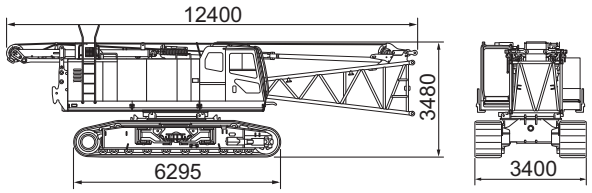
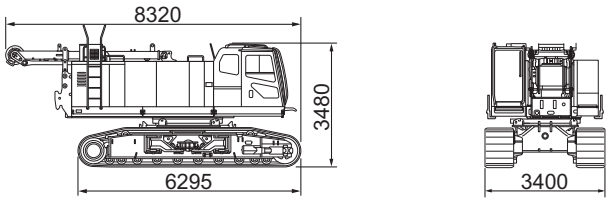
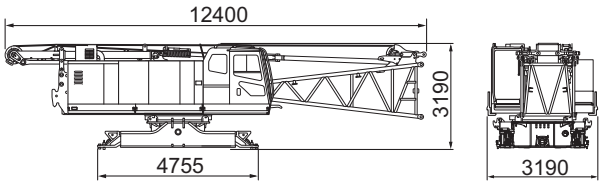
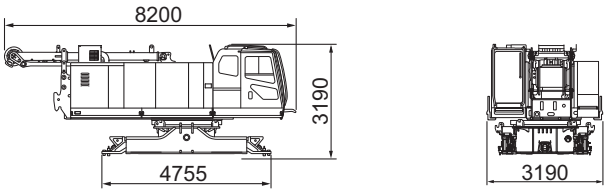
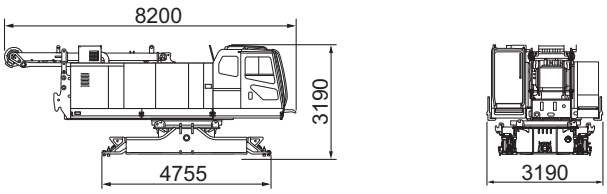
Bucket Capacity (m^3)	2.0	2.5	3.0
Bucket Mass (t)	4.5	5.5	6.5

3. In case of clamshell application, a 12 m boom is recomenned as minimum length of boom, and max. boom length shall not exceed 24 m.
4. Apparent specific gravity of lifting material :
   Earth ..... 1.7 to 1.8 t/m^3
   Gravel ..... 1.8 to 2.0 t/m^3
5. Upper weights should be used in an assembly configuration (31.7 t) excluding right and left top weights.
6. Max. digging depth below ground shall be 36 m.

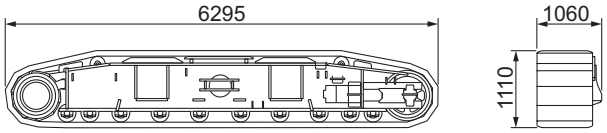
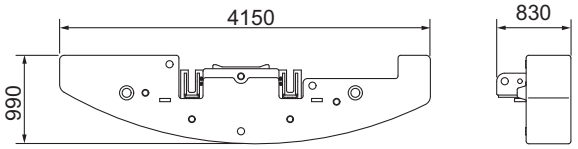
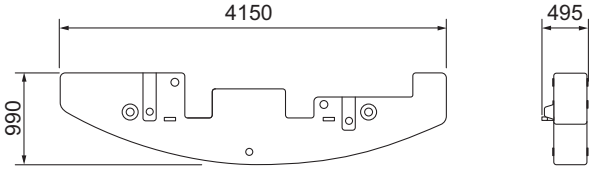
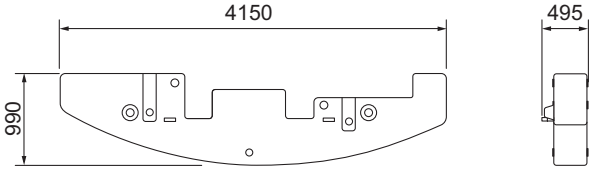
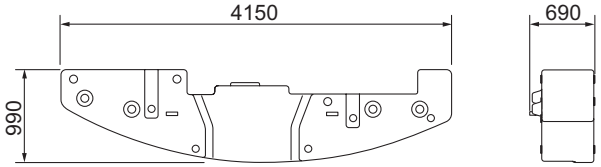
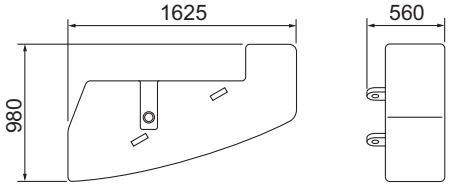
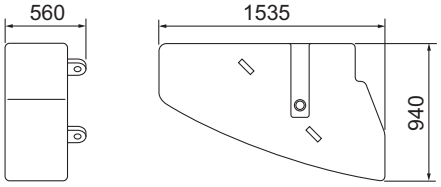
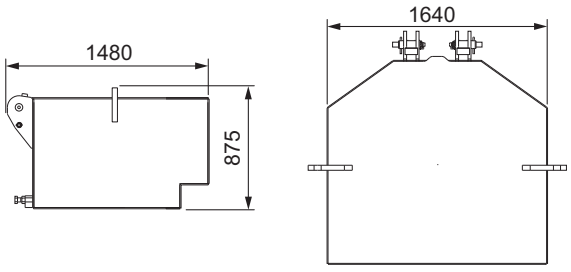
Weights and Dimensions of Disassembled Units

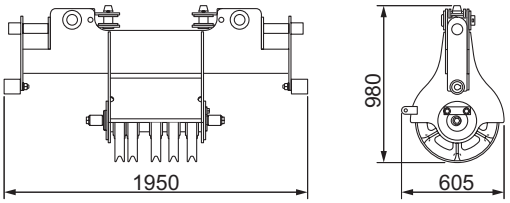
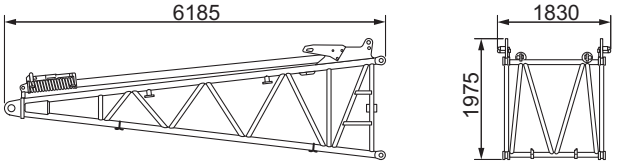
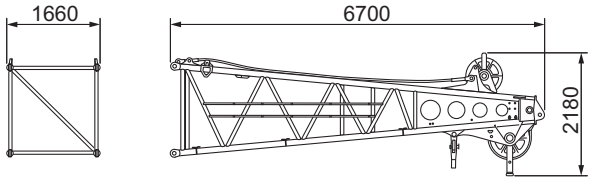
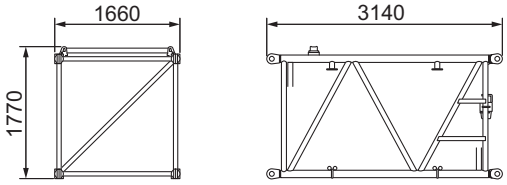
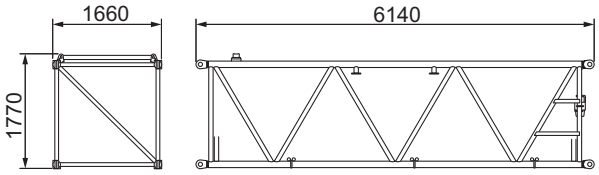
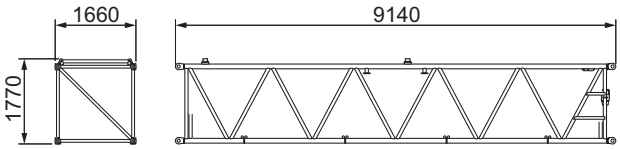
Weights and Dimensions List

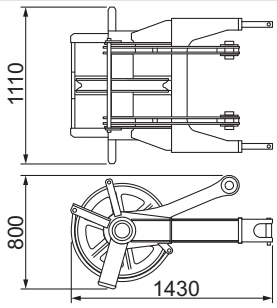
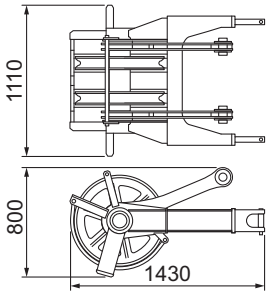
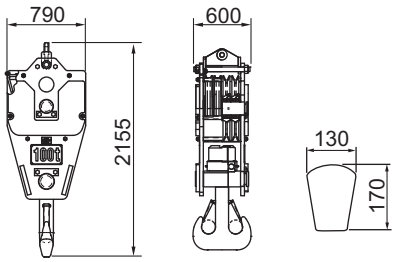
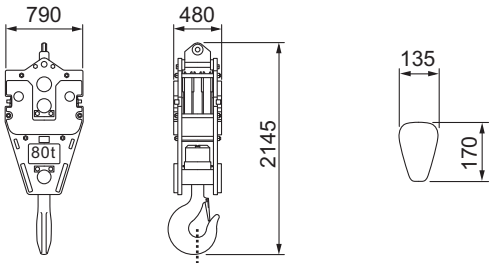
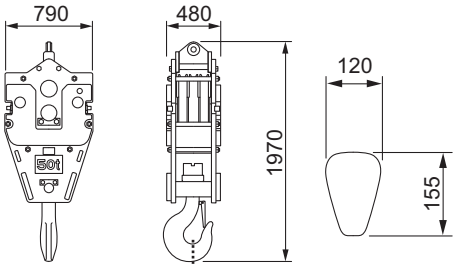
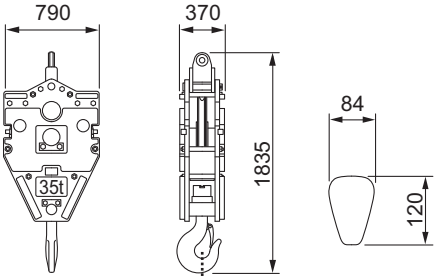
Comply with the regulations when transporting.
"Weight" refers to the mass of each single unit.

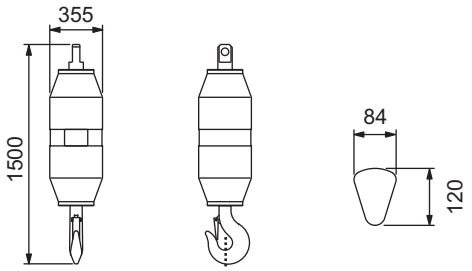
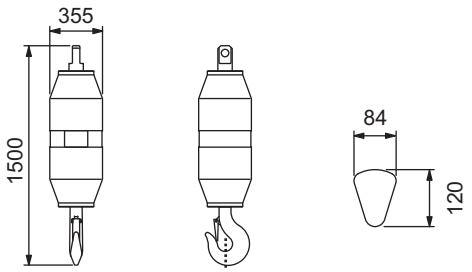
Description	Qty	Dimensions (mm)	Weight (kg)
Base Crane with: Boom Base Front Winch Wire Rope Rear Winch Wire Rope Boom Hoist Winch Wire Rope Crawlers Catwalks	1		51900
Base Crane with: Front Winch Wire Rope Rear Winch Wire Rope Boom Hoist Winch Wire Rope Crawlers Catwalks	1		49700
Base Crane with: Boom Base Front Winch Wire Rope Rear Winch Wire Rope Boom Hoist Winch Wire Rope Catwalks	1		32800
Base Crane with: Front Winch Wire Rope Rear Winch Wire Rope Boom Hoist Winch Wire Rope Catwalks	1		30600
Base Crane with: Catwalks without: Front Winch Wire Rope Rear Winch Wire Rope Boom Hoist Winch Wire Rope	1		28400

• With upper house handrails, the weight of the main unit increases by 120 kg.

Description	Qty	Dimensions (mm)	Weight (kg)
Crawlers (ASSY)	2		9600
Counter Weight "A"	1		9420
Counter Weight "B"	1		6640
Counter Weight "C"	1		6640
Counter Weight "D"	1		8980
Counter Weight "E" Right	1		2810
Counter Weight "E" Left	1		3000
Lower Weight	2		6800

Description	Qty	Dimensions (mm)	Weight (kg)
Upper Spreader	1		520
Boom Base with: Backstop	1		1710
Boom Top	1		1690
3 m Boom Insert	1		430
6 m Boom Insert	1		690
9 m Boom Insert	1		1000

Description	Qty	Dimensions (mm)	Weight (kg)
Aux. Sheave (1 Sheave)	1		340
Aux. Sheave (2 Sheaves)	1		420
100 t Hook	1		1610
80 t Hook	1		1350
50 t Hook	1		1170
35 t Hook	1		900

Description	Qty	Dimensions (mm)	Weight (kg)
15.5 t Hook	1		620
13.5 t Hook	1		620

Equipment List

Standard and Optional Equipment

○ : Standard ● : Optional — : No setting

Item		Crane	Clamshell
Lower Structure	810 mm Shoe	○	○
	Crawler Extension/Retraction System	○	○
	Steps	○	○
	Shoe Tension Unit (Hydraulic)	●	●
Upper Structure	Free-fall Assist System	○	○
	Cab Up/Down 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)	●	●
	Winch Rope Retainer (Third winch)	●	●
	Catwalk (Folding type, Left/Right)	○	○
	Catwalk with Handrails (Folding type, Left/Right)	●	●
	Electric Fuel Pump	●	●
	Handrails (Folding type)	○	○
	Winch with Front and Rear Free Mechanism	○	○
	Third Winch (Rope not included)	●	-
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	○	○
	Standard Seat	○	○
	Seat with Suspension	●	●
	Boom Hoist Operation Pedal *1	●	●
	Swing Brake Operation Pedal *1	●	●
	Front/Rear Operation Lever, Brake Pedal Permutation	●	●
	Fuel Burning Heater	●	●
	Accelerator Grip	○	○
	Select Switch for Pump Flow Rate Control	●	●
	Drum Rotation Sensor (Front/Rear/Boom Hoist)	○	○
	Speed Control Dial (Front/Rear/Boom Hoist/Swing)	○	○
	Life Hammer	○	○

*1 Cannot be installed at the same time.

○ : Standard ● : Optional — : No setting

Item				Crane	Clamshell
Attachment	12 m Basic Boom (Boom Base: 6 m, Top: 6 m)			○	○
	3 m Boom Insert			●	●
	6 m Boom Insert			●	●
	9 m Boom Insert			●	●
	Auxiliary Sheave (1 Sheave) [Including Auxiliary Sheave, Anti-Two Block]			●	-
	Auxiliary Sheave (2 Sheaves) [Including Auxiliary Sheave, Anti-Two Block]			●	-
	100 t Hook (4 Sheaves)			●	-
	80 t Hook (3 Sheaves)			●	-
	50 t Hook (3 Sheaves)			●	-
	35 t Hook (1 Sheave)			●	-
	15.5 t Hook			●	-
	13.5 t Hook			●	-
	13.5 t Light type Hook			●	-
	13.5 t Light type Hook with Latch Lock			●	-
Wire Rope	Front Winch	(ϕ 28)	Mono Rope EP 3 × F (40)	○	-
			P·S (19) + 39 × P·7	●	-
			X2 IWRC6 × P·WS (31)	●	○*2
			XP IWRC6 × WS (31)	●	●*2
		(ϕ 30)	Mono Rope EP 3 x F (40)	●	-
			P·S (19) + 39 x P·7	●	-
			X2 IWRC6 × P·WS (31)	●	●*2
			XP IWRC6 × WS (31)	●	●*2
	Rear Winch	(ϕ 28)	Mono Rope EP 3 × F (40)	●	-
			P·S (19) + 39 × P·7	●	-
			X2 IWRC6 × P·WS (31)	●	○*3
			XP IWRC6 × WS (31)	●	●*3
		(ϕ 30)	Mono Rope EP 3 × F (40)	●	-
			P·S (19) + 39 × P·7	●	-
			X2 IWRC6 × P·WS (31)	●	●*3
			XP IWRC6 × WS (31)	●	●*3
	Third Winch	(ϕ 26)	Mono Rope EP 3 × F (40)	●	-
			P·S (19) + 39 × P·7	●	-
			XP IWRC6 × WS (31)	●	-
	Boom Hoist Winch	(ϕ 22.4)	X2 IWRC6 × P·WS (31)	○	○
Safety Device	Moment Limiter			○	○
	3 Color Percentage Indicator Light			●	●
	Gate Lock Lever			○	○
	Individual Operation Lever Lock (Front, Rear, Boom Hoist, Travel)			○	○
	Automatic Drum Lock (Boom Hoist)			○	○
	Winch Drum Lock (Front/Rear)			○	○
	Lowering Limiter (Winch Drum Dead Turns Detective Device)			●	●
	Swing Lock			○	○
	Swing Alarm			○	○
	Travel Alarm			○	○
	Auto Slowdown (Slow Stop)			○	○
	Boom Hoist Limiting Device			○	○
	Secondary Boom Over Hoist Prevent Device			○	○
	Warning Alarm			○	○
	Engine Start Interlock System			○	○
	Emergency Engine Stop Switch (In Cab)			○	○
	Lifting Height Indication Device			○	○
	Swing Neutral Free/Brake Selection Switch			○	○
	Anti-two Block			○	-
	Moment Limiter (M/L) Mode Selector (In Right House)			●	○
	Swing Restriction Unit			●	●
	Anemometer			○	-
	Drum and Rear View Monitor System			●	●
	Cab Roof Window Guard			●	●

*2 Used for opening/closing rope. 82 m length rope required for 12 m digging depth with 21 m boom length.
*3 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	Clamshell
Common Parts	Boom Back Stop		○	○
	Boom Angle Sensor		○	○
	Remote Sensing (Mobile Communication Terminal, Data Logging Device)		○	○
	Boom Lifting Piece		○	○
	Assembly Pad *4		●	-
	Reduction Counter Weight Specification		●*5	-
	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)		●	●
	Opening/Closing/Support Rope Stopper		-	○
	Hydraulic Tagline (6 × Fi (29) ϕ 10 mm × 55 m)		●*6	○
	Reeving Winch (4 × F (30) ϕ 8 mm × 250 m)		●*6	-
	Reeving Winch Cum Hydraulic Tagline	for Hydraulic Tagline (6 × Fi (29) ϕ 10 mm × 55 m)	●*6	-
		for Reeving (6 × Fi (29) ϕ 10 mm × 220 m)		
	Sling Ropes for Assembly and Disassembly (for Counter Weights, Crawlers)		●	●
	Air Cleaner Double Element		○	○
	Additional Spare Parts (Hydraulic Oil Filter)		●	●
	Additional Tools (Large hammer, Crowbar, Chisel)		●	●
	Additional Hydraulic Oil Cooler (Fixed type)		●	●
	Front Protecter for Standard Hydraulic Oil Cooler		●	●
	Front Protecter for Additional Hydraulic Oil Cooler		●	●
Other	Standard Supplied Tools		○	○
	Standard Spare Parts		○	○

*4 The assembly pad is required for the following attachments.
Reduction Counter Weight Specification
- Crane Boom Length 45 m or more
- Crane Boom Length 42 m or more + Auxiliary Sheave

*5 The reduction counter weight specification can only be used for the crane specification.

*6 (1) Hydraulic tagline (maximum line pull: 2.9 kN (300 kg))
(2) Reeving winch unit (maximum line pull: 11.8 kN (1,200 kg))
(3) 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))

- We are constantly improving our products and therefore reserve the right to change designs and specifications without notice.
- Units in this specification are shown under International System of Units; the figures in parenthesis are under Gravitational System of Units as old one.

Sumitomo Heavy Industries Construction Cranes Co., Ltd.

9-3, Higashi-Ueno 6-chome, Taito-ku, Tokyo 110-0015, Japan
Phone: 81-3-3845-1387 Facsimile: 81-3-3845-1394

http://www.hsc-cranes.com