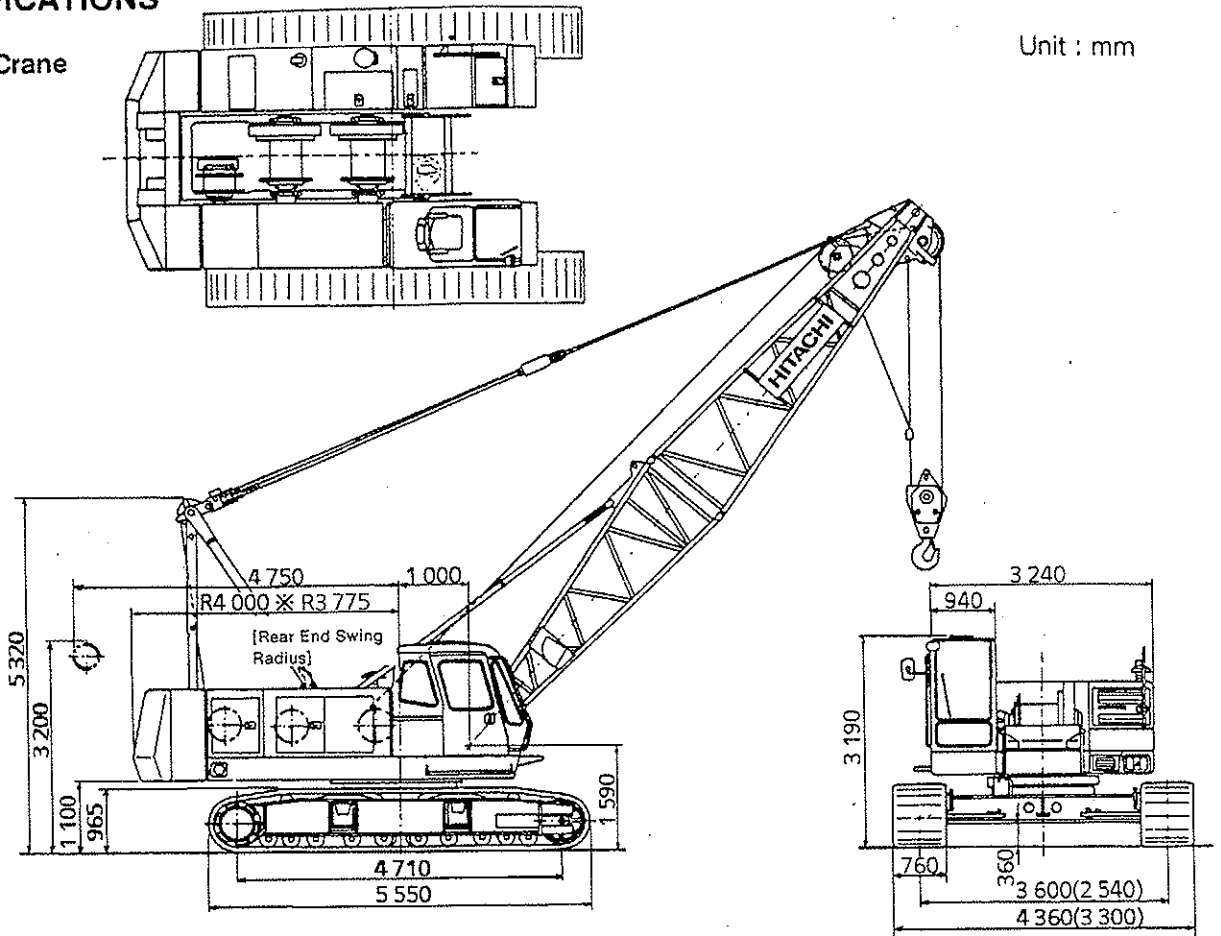


# SPECIFICATIONS

## SPECIFICATIONS

Crawler Crane

Unit : mm



M324-12-001

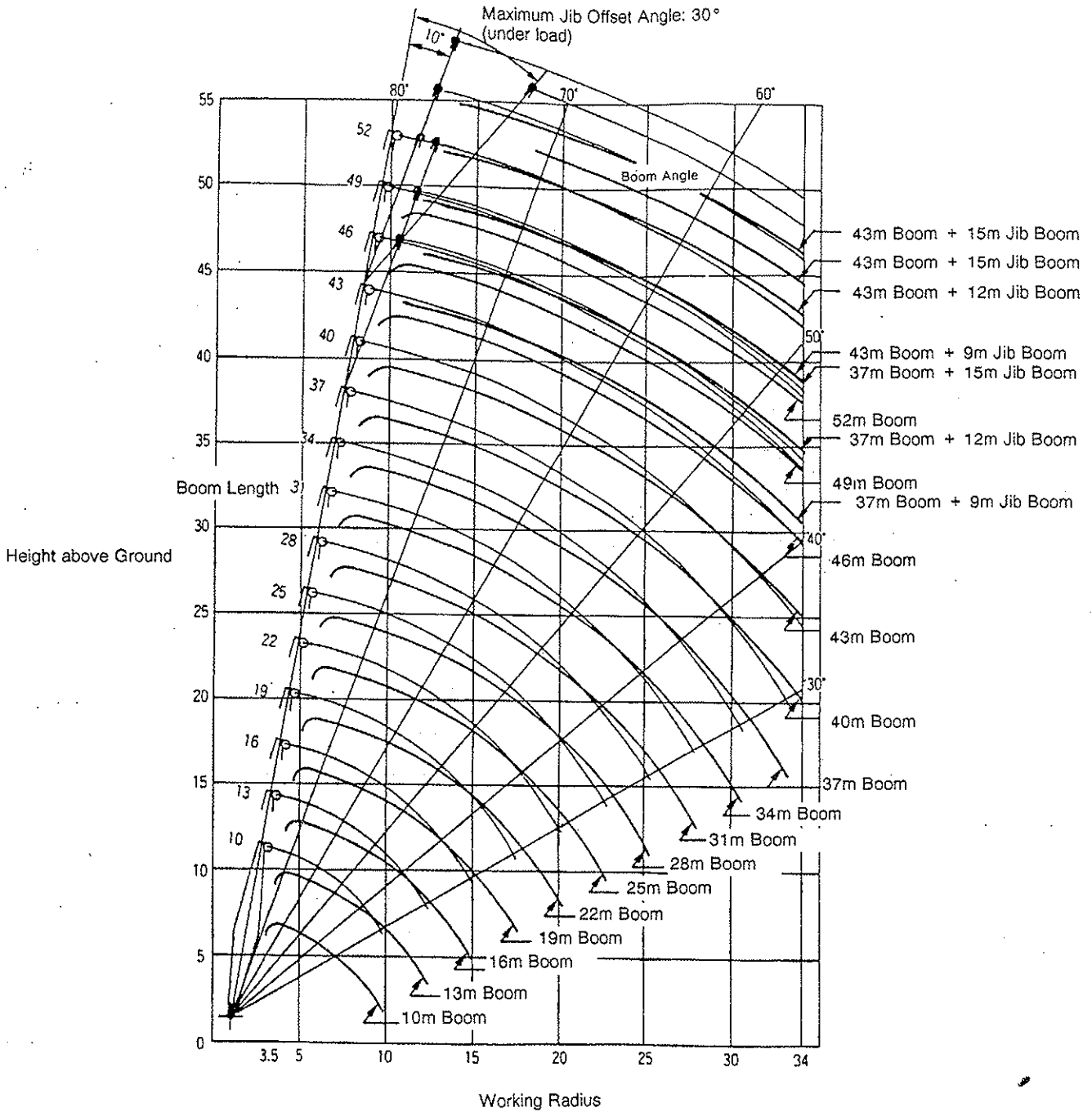
Maximum Lifting Load	t × m	50 × 3.8
Basic Boom Length	m	10
Maximum Boom Length	m	52
Jib Boom Length	m	6 to 15
Boom + Jib Boom Length	m	43 + 15
Main Hoist Wire Rope Speed (Hoist/Lower)	m/min	* 100 / 65 / 32
Aux. Hoist Wire Rope Speed (Hoist/Lower)	m/min	* 100 / 65 / 32
Boom Hoist Wire Rope Speed (Raise/Lower)	m/min	* 53
Swing Speed	min <sup>-1</sup> (rpm)	4.0 (4.0)
Travel Speed	km/h	* 1.7/1.4
Gradeability	% (Degree)	40 (22)
Engine Name		Hino Diesel Engine H07C-T
Engine Rated Horse Power	kW/min <sup>-1</sup> (PS/rpm)	132 / 2 000 (180 / 2 000)
Ground Pressure	kPa (kgf/cm <sup>2</sup> )	62.8 (0.64)
Operating Mass	t	49.0 (with 10 m boom + 50t hook)
		49.4 (with 10 m boom + 50t hook + casting counterweight)

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

Speeds marked with "\*" should be referred to only when the machine is used as a crane. Also, note that "\*" marked values may vary depending on load applied.

# SPECIFICATIONS

## WORKING RANGES



M324-12-002

# SPECIFICATIONS

## TUBULAR CHORD CRANE BOOM RATED LOAD (PCSA Rating)

Unit: t

Working Radius (m)	Boom Length (m)														
	10	13	16	19	22	25	28	31	34	37	40	43	46	49	52
3.5	50.00	3.8m × 50.00t													
4.0	46.70	46.65	4.4m × 39.70t												
4.5	38.30	38.25	38.20												
5.0	32.45	32.40	32.30	32.30											
5.5	28.10	28.05	28.00	27.95	27.60										
6.0	24.80	24.70	24.65	24.60	24.55	6.1m × 23.85t	6.7m × 20.90t								
7.0	20.00	19.90	19.80	19.75	19.70	19.70	19.60	7.3m × 18.60t	7.8m × 16.65t						
8.0	16.70	16.60	16.50	16.45	16.40	16.35	16.30	16.25	16.15	8.4m × 15.05t					
9.0	14.30	14.20	14.10	14.05	14.00	13.95	13.85	13.85	13.75	13.65	13.65	9.6m × 12.50t			
10.0	9.8m × 12.65t	12.40	12.30	12.25	12.20	12.15	12.05	12.00	11.90	11.85	11.80	11.75	10.1m × 11.45t	10.7m × 10.55t	11.3m × 9.45t
12.0		9.85	9.70	9.65	9.60	9.55	9.45	9.40	9.30	9.25	9.20	9.10	9.05	8.95	8.90
14.0		12.4m × 9.40t	8.00	7.90	7.85	7.80	7.70	7.65	7.55	7.45	7.45	7.35	7.30	7.20	7.10
16.0			15.0m × 7.30t	6.70	6.60	6.55	6.45	6.40	6.30	6.20	6.20	6.10	6.00	5.95	5.85
18.0				17.8m × 5.90t	5.65	5.60	5.50	5.40	5.35	5.25	5.20	5.15	5.05	4.95	4.90
20.0					4.90	4.85	4.75	4.70	4.60	4.50	4.45	4.40	4.30	4.20	4.15
22.0					20.2m × 4.85t	4.25	4.15	4.10	4.00	3.90	3.85	3.80	3.70	3.60	3.55
24.0						22.8m × 4.05t	3.65	3.60	3.50	3.40	3.40	3.30	3.20	3.10	3.05
26.0							25.4m × 3.40t	3.20	3.10	3.00	2.95	2.85	2.80	2.70	2.60
28.0								2.85	2.75	2.65	2.60	2.55	2.45	2.35	2.25
30.0									2.45	2.35	2.35	2.25	2.15	2.05	1.95
32.0									30.6m × 2.40t	2.10	2.05	1.95	1.85	1.75	1.65
34.0										33.2m × 1.90t	1.80	1.75	1.60	1.50	1.35

- NOTE:1.** The rated loads are determined according to PCSA (Power Crane and Shovel Association in USA) and do not exceed 75% of tipping load on condition that the machine is stationed on firm, level ground.
- 2.** The rated loads shown include the weight of all lifting attachments such as hook, bucket, etc. The load to be actually lifted will be the rated load minus the weight of all lifting attachments.

## SPECIFICATIONS

### JLAR CHORD CRANE BOOM RATED LOAD (BS Rating)

Unit: t

	Boom Length (m)													
	10	13	16	19	22	25	28	31	34	37	40	43	46	49
50.00	3.8m × 50.00t													
48.05	47.85	4.4m × 41.05t												
40.10	39.80	39.75												
33.75	33.70	33.60	33.60											
29.25	29.15	29.10	29.05	28.70										
25.75	25.70	25.60	25.60	25.50	6.1m × 24.80t	6.7m × 21.75t								
20.75	20.70	20.60	20.55	20.50	20.45	20.35	7.3m × 19.35t	7.8m × 17.30t						
17.35	17.25	17.20	17.15	17.05	17.00	16.95	16.90	16.80	8.4m × 15.65t					
14.90	14.80	14.70	14.65	14.55	14.50	14.45	14.45	14.30	14.20	14.20	9.6m × 13.00t			
9.8m × 12.65t	12.90	12.80	12.75	12.65	12.60	12.50	12.50	12.40	12.30	12.30	12.20	10.1m × 11.95t	10.7m × 10.70t	
	10.25	10.10	10.05	9.95	9.90	9.80	9.80	9.70	9.60	9.60	9.50	9.40	9.35	
	12.4m × 9.80t	8.30	8.25	8.15	8.10	8.00	7.95	7.85	7.75	7.75	7.65	7.55	7.50	
		15.0m × 7.60t	6.95	6.85	6.80	6.70	6.65	6.55	6.45	6.40	6.30	6.20	6.15	
			17.6m × 6.15t	5.85	5.80	5.70	5.65	5.55	5.45	5.40	5.30	5.20	5.10	
				5.10	5.05	4.90	4.85	4.75	4.65	4.60	4.50	4.40	4.30	
				20.2m × 5.05t	4.40	4.30	4.20	4.10	4.00	3.95	3.85	3.75	3.65	
					22.8m × 4.20t	3.75	3.70	3.60	3.50	3.45	3.30	3.25	3.15	
						25.4m × 3.45t	3.25	3.15	3.05	3.00	2.90	2.80	2.70	
							2.90	2.80	2.70	2.60	2.50	2.40	2.30	
								2.50	2.35	2.30	2.20	2.10	2.00	
									30.6m × 2.40t	2.10	2.05	1.90	1.80	1.75
										33.2m × 1.90t	1.80	1.70	1.60	1.50

The rated loads are determined according to BS (British Standard; 1981) on condition that the machine is stationed on firm, level ground.

The rated loads shown include the weight of all lifting attachments such as hook, bucket, etc. The load to be actually lifted will be the rated load minus the weight of all lifting attachments.

# SPECIFICATIONS

## AUX. JIB RATED LOAD (JIS Rating)

Unit : t

Working Radius (m)	Boom Length (m)													
	13	16	19	22	25	28	31	34	37	40	43	46	49	
4.5	4.7m × 6.50t													
5.0	6.50	5.2m × 6.50t												
5.5	6.50	6.50	5.8m × 6.50t											
6.0	6.50	6.50	6.50	6.4m × 6.50t										
7.0	6.50	6.50	6.50	6.50	6.50	7.5m × 6.50 t								
8.0	6.50	6.50	6.50	6.50	6.50	6.50	8.1m × 6.50t	8.7m × 6.50t						
9.0	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	9.2m × 6.50t	9.8m × 6.50t				
10.0	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	10.4m × 6.50t	10.9m × 6.50t	11.5m × 6.50t	
12.0	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	
14.0	13.5m × 6.50t	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	
16.0		6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.45	6.35	6.35	6.25	6.15	6.05
18.0		16.1m × 6.50t	5.85	5.75	5.70	5.60	5.55	5.45	5.35	5.30	5.20	5.15	5.05	
20.0			18.7m × 5.55t	5.00	4.95	4.80	4.75	4.65	4.55	4.55	4.45	4.35	4.25	
22.0				21.3m × 4.55 t	4.30	4.20	4.15	4.05	3.95	3.90	3.80	3.70	3.65	
24.0					23.9m × 3.80t	3.70	3.65	3.55	3.45	3.40	3.30	3.20	3.10	
26.0						3.30	3.20	3.10	3.00	2.95	2.85	2.75	2.65	
28.0							26.5m × 3.20 t	2.85	2.75	2.65	2.60	2.45	2.35	2.25
30.0								29.1m × 2.65 t	2.45	2.30	2.25	2.10	2.00	1.90
32.0									31.7m × 2.20t	2.05	1.95	1.80	1.70	1.60
34.0										1.80	1.65	1.55	1.45	1.30

- NOTE:**
- Crane capacities shown above are determined according to JIS and do not exceed 78 % of tipping load with crane standing on a firm, level surface. Forward stability is 1.15 or more.
  - To calculate the maximum load that can actually be lifted, deduct weight of all lifting accessories, such as main and aux. hooks, from figures shown above.

- Working radius is the horizontal distance from the swing center to the center of gravity of a lifted load.
- The can-type counterweight weighs 16.9 t while the casting counterweight weighs 17.3 t.
- Be sure to fully extend the side frames before operating the machine.

### Hook Weight

50 t Hook	0.61 t
30 t Hook	0.36 t
15 t Hook	0.32 t
6.5 t Hook	0.26 t

# SPECIFICATIONS

## MAIN BOOM RATED LOAD WITH AUX. JIB ATTACHED (JIS Rating)

Unit : t

Working Radius (m)	Boom Length (m)													
	13	16	19	22	25	28	31	34	37	40	43	46	49	
3.8	49.70													
4.0	47.55	4.4m × 41.20t												
4.5	39.50	39.45												
5.0	33.40	33.30	33.30											
5.5	28.85	28.80	28.75	28.40										
6.0	25.40	25.30	25.30	25.20	6.1m × 24.50t	6.7m × 21.45t								
7.0	20.40	20.30	20.25	20.20	20.15	20.05	7.3m × 19.05t	7.8m × 17.00t						
8.0	16.95	16.90	16.85	16.75	16.70	16.65	16.60	16.50	8.4m × 15.35t					
9.0	14.50	14.40	14.35	14.25	14.20	14.15	14.15	14.00	13.90	13.90	9.6m × 12.70t			
10.0	12.60	12.50	12.45	12.35	12.30	12.20	12.20	12.10	12.00	12.00	11.90	10.1m × 11.65t	10.7m × 10.40t	
12.0	9.95	9.80	9.75	9.65	9.60	9.50	9.50	9.40	9.30	9.30	9.20	9.10	9.05	
14.0	12.4m × 9.50t	8.00	7.95	7.85	7.80	7.70	7.65	7.55	7.45	7.45	7.35	7.25	7.20	
16.0		15.0m × 7.30t	6.65	6.55	6.50	6.40	6.35	6.25	6.15	6.10	6.05	5.95	5.85	
18.0			17.6m × 5.85t	5.55	5.50	5.40	5.35	5.25	5.15	5.15	5.05	4.95	4.85	
20.0				4.80	4.75	4.65	4.55	4.45	4.40	4.35	4.25	4.15	4.10	
22.0				20.2m × 4.75t	4.10	4.05	3.95	3.85	3.75	3.70	3.65	3.55	3.45	
24.0					22.2m × 3.90t	3.50	3.45	3.35	3.25	3.20	3.10	3.05	2.95	
26.0						25.4m × 3.20t	3.00	2.90	2.85	2.80	2.70	2.60	2.50	
28.0							2.65	2.55	2.45	2.40	2.35	2.20	2.10	
30.0								2.25	2.15	2.10	2.00	1.85	1.75	
32.0									30.6m × 2.10t	1.90	1.80	1.70	1.55	1.45
34.0										33.2m × 1.60t	1.50	1.45	1.30	1.20

- NOTE:**
1. Crane capacities shown above are determined according to JIS and do not exceed 78 % of tipping load with crane standing on a firm, level surface. Forward stability is 1.15 or more.
  2. To calculate the maximum load that can actually be lifted, deduct weight of all lifting accessories, such as main hook, from figures shown above.
  3. Working radius is the horizontal distance from the swing center to the center of gravity of a lifted load.
  4. The can-type counterweight weighs 16.9 t while the casting counterweight weighs 17.3 t.
  5. Be sure to fully extend the side frames before operating the machine.

6. Correlations between the number of falls, maximum rated loads, hook weights are shown in the table below.

Hook Capacity (t)	Hook Weight (t)	Maximum Rated Load (t)								
		8 Falls	7 Falls	6 Falls	5 Falls	4 Falls	3 Falls	2 Falls	1 Fall	
50.0	0.61	49.7	45.5	39.0	32.5	26.0	19.5	13.0	—	
30.0	0.36				30.0	26.0	19.5	13.0	—	
15.0	0.32						15.0	13.0	—	
6.5	0.26								6.5	

# SPECIFICATIONS

## JIB BOOM RATED LOAD (JIS Rating)

Unit : t

Main Boom Length (m)		22							
Jib Boom Length (m)		6.0		9.0		12.0		15.0	
Working Radius (m)	Offset Angle (°)	10	30	10	30	10	30	10	30
		8.1	6.50						
9.0	6.50	9.9m×6.50t	9.3m×5.00t						
10.0	6.50	6.50	5.00	11.9m×5.00t	10.4m×4.10t			11.5m×3.30t	
12.0	6.50	6.50	5.00	5.00	5.00	4.10	13.9m×4.10t	3.30	
14.0	6.50	6.50	5.00	5.00	5.00	4.10	4.10	3.30	15.9m×3.30t
16.0	6.50	6.50	5.00	5.00	5.00	4.10	4.10	3.30	3.30
18.0	5.80	5.90	5.00	5.00	5.00	4.10	4.00	3.30	3.25
20.0	5.00	5.10	5.00	4.85	4.10	3.75	3.30	3.30	3.05
22.0	4.40	4.45	4.45	4.55	4.10	3.55	3.30	3.30	2.85
24.0	3.90	3.90	3.95	4.00	4.00	3.35	3.30	3.30	2.70
26.0	3.45	3.50	3.50	3.60	3.55	3.20	3.30	3.30	2.55
28.0	26.1m×3.45t	26.5m×3.35t	3.15	3.20	3.20	3.05	3.10	3.10	2.45
30.0			28.9m×3.00t	29.5m×2.85t	2.90	2.95	2.90	2.90	2.30
32.0					31.8m×2.55t	2.65	2.65	2.65	2.25
34.0						32.5m×2.50t	2.40	2.40	2.20

Unit : t

Main Boom Length (m)		25							
Jib Boom Length (m)		6.0		9.0		12.0		15.0	
Working Radius (m)	Offset Angle (°)	10	30	10	30	10	30	10	30
		8.1	8.8m×6.50t						
9.0	6.50			9.9m×5.00t					
10.0	6.50	10.5m×6.50t	5.00			11.0m×4.10t			
12.0	6.50	6.50	5.00	12.5m×5.00t	4.10			12.1m×3.30t	
14.0	6.50	6.50	5.00	5.00	4.10	14.5m×4.10t	3.30		
16.0	6.50	6.50	5.00	5.00	4.10	4.10	3.30	16.5m×3.30t	
18.0	5.70	5.85	5.00	5.00	4.10	4.10	3.30	3.30	3.30
20.0	4.95	5.05	5.00	5.00	4.10	3.85	3.30	3.30	3.15
22.0	4.30	4.40	4.40	4.50	4.10	3.65	3.30	3.30	2.95
24.0	3.80	3.85	3.85	3.95	3.90	3.45	3.30	3.30	2.80
26.0	3.35	3.40	3.45	3.50	3.50	3.30	3.30	3.30	2.65
28.0	3.00	3.05	3.05	3.15	3.10	3.20	3.15	3.15	2.55
30.0	28.7m×2.80t	29.1m×2.75t	2.75	2.80	2.80	2.90	2.85	2.85	2.45
32.0			31.5m×2.45t	2.40	2.55	2.60	2.55	2.55	2.35
34.0				32.1m×2.40t	2.20	2.35	2.30	2.30	2.25

Unit : t

Main Boom Length (m)		28							
Jib Boom Length (m)		6.0		9.0		12.0		15.0	
Working Radius (m)	Offset Angle (°)	10	30	10	30	10	30	10	30
		9.4	6.50						
10.0	6.50	11.1m×6.50t	10.5m×5.00t			11.6m×4.10t			
12.0	6.50	6.50	5.00	13.2m×5.00t	4.10			12.7m×3.30t	
14.0	6.50	6.50	5.00	5.00	4.10	15.2m×4.10t	3.30		
16.0	6.50	6.50	5.00	5.00	4.10	4.10	3.30	17.2m×3.30t	
18.0	5.60	5.75	5.00	5.00	4.10	4.10	3.30	3.30	3.30
20.0	4.85	4.95	4.90	5.00	4.10	4.00	3.30	3.30	3.20
22.0	4.20	4.30	4.25	4.40	4.10	3.75	3.30	3.30	3.05
24.0	3.70	3.75	3.75	3.85	3.80	3.60	3.30	3.30	2.90
26.0	3.25	3.30	3.30	3.40	3.40	3.40	3.30	3.30	2.75
28.0	2.90	2.95	2.95	3.05	3.00	3.10	3.05	3.05	2.60
30.0	2.60	2.60	2.65	2.70	2.70	2.80	2.75	2.75	2.50
32.0	31.3m×2.30t	31.7m×2.30t	2.35	2.40	2.40	2.50	2.45	2.45	2.40
34.0			2.05	2.10	2.20	2.25	2.20	2.20	2.30

# SPECIFICATIONS

Unit : t

Main Boom Length (m)		31							
Jib Boom Length (m)		6.0		9.0		12.0		15.0	
Working Radius (m)	Offset Angle (°)	10	30	10	30	10	30	10	30
	9.4								
10.0		6.50	11.8m × 6.50t	11.1m × 5.00t					
12.0		6.50	6.50	5.00	13.8m × 5.00t	12.2m × 4.10t		13.4m × 3.30t	
14.0		6.50	6.50	5.00	5.00	4.10	15.8m × 4.10t	3.30	
16.0		6.50	6.50	5.00	5.00	4.10	4.10	3.30	17.8m × 3.30t
18.0		5.55	5.70	5.00	5.00	4.10	4.10	3.30	3.30
20.0		4.75	4.90	4.85	5.00	4.10	4.10	3.30	3.30
22.0		4.15	4.20	4.20	4.35	4.10	3.90	3.30	3.10
24.0		3.60	3.70	3.70	3.80	3.75	3.70	3.30	2.95
26.0		3.20	3.25	3.25	3.35	3.30	3.45	3.30	2.80
28.0		2.80	2.85	2.90	2.95	2.95	3.05	3.00	2.70
30.0		2.50	2.55	2.55	2.65	2.60	2.75	2.65	2.60
32.0		2.25	2.25	2.30	2.35	2.35	2.45	2.40	2.50
34.0		33.9m × 1.90t	1.95	2.05	2.10	2.10	2.20	2.15	2.25

- NOTE:**
1. Crane capacities shown above are determined according to JIS and do not exceed 78 % of tipping load with crane standing on a firm, level surface. Forward stability is 1.15 or more.
  2. To calculate the maximum load that can actually be lifted, deduct weight of all lifting accessories, such as main and aux. hooks, from figures shown above.

3. Working radius is the horizontal distance from the swing center to the center of gravity of a lifted load.
4. The offset angles shown are of jib boom offset angle against the main boom, under load.
5. The can-type counterweight weighs 16.9 t while the casting counterweight weighs 17.3 t.
6. Be sure to fully extend the side frames before operating the machine.

### Hook Weight

50 t Hook	0.61 t
30 t Hook	0.36 t
15 t Hook	0.32 t
6.5 t Hook	0.26 t



# SPECIFICATIONS

Unit : t

Main Boom Length (m)		34							
Jib Boom Length (m)		6.0		9.0		12.0		15.0	
Working Radius (m)	Offset Angle (°)	10	30	10	30	10	30	10	30
		10.6	6.50			11.7m×5.00t			
12.0	6.50	12.4m×6.50t		5.00		12.9m×4.10t			
14.0	6.50	6.50		5.00	14.4m×5.00t	4.10			3.30
16.0	6.45	6.50		5.00	5.00	4.10	16.4m×4.10t		3.30
18.0	5.45	5.60		5.00	5.00	4.10	4.10	3.30	18.4m×3.30t
20.0	4.65	4.80		4.75	4.95	4.10	4.10	3.30	3.30
22.0	4.05	4.15		4.10	4.30	4.10	4.10	3.30	3.20
24.0	3.50	3.60		3.60	3.75	3.65	3.80	3.30	3.05
26.0	3.10	3.15		3.15	3.25	3.20	3.40	3.25	2.90
28.0	2.70	2.80		2.80	2.90	2.85	3.00	2.90	2.75
30.0	2.40	2.45		2.45	2.55	2.50	2.65	2.55	2.65
32.0	2.10	2.15		2.15	2.25	2.25	2.35	2.30	2.45
34.0	1.85	1.85		1.90	2.00	1.95	2.10	2.00	2.15

Unit : t

Main Boom Length (m)		37							
Jib Boom Length (m)		6.0		9.0		12.0		15.0	
Working Radius (m)	Offset Angle (°)	10	30	10	30	10	30	10	30
		10.6		11.2m×6.50t					
12.0	6.50	13.0m×6.50t		12.4m×5.00t					
14.0	6.50	6.50		5.00	15.0m×5.00t	4.10			
16.0	6.35	6.50		5.00	5.00	4.10	17.0m×4.10t		14.6m×3.30t
18.0	5.35	5.50		5.00	5.00	4.10	4.10	3.30	19.0m×3.30t
20.0	4.55	4.70		4.65	4.85	4.10	4.10	3.30	3.30
22.0	3.95	4.05		4.00	4.20	4.10	4.10	3.30	3.30
24.0	3.40	3.50		3.50	3.65	3.55	4.05	3.30	3.25
26.0	3.00	3.05		3.05	3.20	3.10	3.80	3.30	3.10
28.0	2.60	2.70		2.70	2.80	2.75	3.30	3.15	2.95
30.0	2.25	2.35		2.35	2.45	2.40	2.90	2.80	2.85
32.0	1.95	2.05		2.05	2.15	2.10	2.55	2.45	2.65
34.0	1.70	1.75		1.80	1.90	1.85	2.25	2.15	2.35

Unit : t

Main Boom Length (m)		40							
Jib Boom Length (m)		6.0		9.0		12.0		15.0	
Working Radius (m)	Offset Angle (°)	10	30	10	30	10	30	10	30
		11.9	6.50						
12.0	6.50	13.6m×6.50t		13.0m×5.00t					
14.0	6.50	6.50		5.00	15.6m×5.00t	4.10			
16.0	6.30	6.50		5.00	5.00	4.10	17.7m×4.10t		15.2m×3.30t
18.0	5.30	5.50		5.00	5.00	4.10	4.10	3.30	19.7m×3.30t
20.0	4.50	4.65		4.60	4.85	4.10	4.10	3.30	3.30
22.0	3.90	4.00		3.95	4.15	4.05	4.10	3.30	3.30
24.0	3.35	3.45		3.45	3.60	3.50	3.75	3.30	3.15
26.0	2.90	3.00		3.00	3.15	3.05	3.25	3.10	3.00
28.0	2.55	2.65		2.60	2.75	2.70	2.85	2.75	2.90
30.0	2.20	2.30		2.25	2.40	2.35	2.50	2.40	2.60
32.0	1.90	1.95		1.95	2.10	2.00	2.20	2.10	2.30
34.0	1.60	1.70		1.70	1.80	1.75	1.90	1.80	2.00

# SPECIFICATIONS

Unit : t

Main Boom Length (m)		43							
Jib Boom Length (m)		6.0		9.0		12.0		15.0	
Working Radius (m)	Offset Angle (°)	10	30	10	30	10	30	10	30
	11.9								
12.0		12.5m × 6.50t		13.6m × 5.00t					
14.0		6.50	14.3m × 6.50t	5.00		14.7m × 4.10t		15.9m × 3.30t	
16.0		6.25	6.45	5.00	16.3m × 5.00t	4.10		3.30	
18.0		5.20	5.40	5.00	5.00	4.10	18.3m × 4.10t	3.30	
20.0		4.40	4.60	4.50	4.75	4.10	4.10	3.30	20.3m × 3.30t
22.0		3.80	3.90	3.85	4.10	3.95	4.10	3.30	3.30
24.0		3.25	3.40	3.35	3.50	3.40	3.65	3.30	3.20
26.0		2.80	2.95	2.90	3.05	2.95	3.20	3.00	3.05
28.0		2.40	2.55	2.50	2.65	2.60	2.80	2.65	2.90
30.0		2.05	2.15	2.15	2.30	2.20	2.45	2.30	2.55
32.0		1.75	1.85	1.85	2.00	1.90	2.10	1.95	2.25
34.0		1.50	1.55	1.55	1.70	1.65	1.80	1.70	1.95

- NOTE:**
1. Crane capacities shown above are determined according to JIS and do not exceed 78 % of tipping load with crane standing on a firm, level surface. Forward stability is 1.15 or more.
  2. To calculate the maximum load that can actually be lifted, deduct weight of all lifting accessories, such as main and aux. hooks, from figures shown above.

3. Working radius is the horizontal distance from the swing center to the center of gravity of a lifted load.
4. The offset angles shown are of jib boom offset angle against the main boom, under load.
5. The can-type counterweight weighs 16.9 t while the casting counterweight weighs 17.3 t.
5. Be sure to fully extend the side frames before operating the machine.

**Hook Weight**

50 t Hook	0.61 t
30 t Hook	0.36 t
15 t Hook	0.32 t
6.5 t Hook	0.26 t

# SPECIFICATIONS

## MAIN BOOM RATED LOAD WITH JIB BOOM ATTACHED (JIS Rating) (1)

Unit : t

Main Boom Length (m)		22							
Jib Boom Length (m)		6.0		9.0		12.0		15.0	
Working Radius (m)	Offset Angle (°)	10	30	10	30	10	30	10	30
	5.5		27.95	27.95	27.80	27.80	27.65	27.65	27.50
6.0		24.75	24.75	24.60	24.60	24.45	24.45	24.30	24.30
7.0		19.75	19.75	19.60	19.60	19.45	19.45	19.30	19.30
8.0		16.30	16.30	16.15	16.15	16.00	16.00	15.85	15.85
9.0		13.80	13.80	13.65	13.65	13.50	13.50	13.35	13.35
10.0		11.90	11.90	11.75	11.75	11.60	11.60	11.45	11.45
12.0		9.20	9.20	9.05	9.05	8.90	8.90	8.75	8.75
14.0		7.40	7.40	7.25	7.25	7.10	7.10	6.95	6.95
16.0		6.10	6.10	5.95	5.95	5.80	5.80	5.65	5.65
18.0		5.10	5.10	4.95	4.95	4.80	4.80	4.65	4.65
20.0		4.35	4.35	4.20	4.20	4.05	4.05	3.90	3.90
22.0		20.2m × 4.30t	20.2m × 4.30t	20.2m × 4.15t	20.2m × 4.15t	20.2m × 4.00t	20.2m × 4.00t	20.2m × 3.85t	20.2m × 3.85t
22.8									

Unit : t

Main Boom Length (m)		25							
Jib Boom Length (m)		6.0		9.0		12.0		15.0	
Working Radius (m)	Offset Angle (°)	10	30	10	30	10	30	10	30
	5.5								
6.0		6.1m × 24.05t	6.1m × 24.05t	6.1m × 23.90t	6.1m × 23.90t	6.1m × 23.75t	6.1m × 23.75t	6.1m × 23.60t	6.1m × 23.60t
7.0		19.70	19.70	19.55	19.55	19.40	19.40	19.25	19.25
8.0		16.25	16.25	16.10	16.10	15.95	15.95	15.80	15.80
9.0		13.75	13.75	13.60	13.60	13.45	13.45	13.30	13.30
10.0		11.85	11.85	11.70	11.70	11.55	11.55	11.40	11.40
12.0		9.15	9.15	9.00	9.00	8.85	8.85	8.70	8.70
14.0		7.35	7.35	7.20	7.20	7.05	7.05	6.90	6.90
16.0		6.05	6.05	5.90	5.90	5.75	5.75	5.60	5.60
18.0		5.05	5.05	4.90	4.90	4.75	4.75	4.60	4.60
20.0		4.30	4.30	4.15	4.15	4.00	4.00	3.85	3.85
22.0		3.65	3.65	3.50	3.50	3.35	3.35	3.20	3.20
22.8		3.45	3.45	3.30	3.30	3.15	3.15	3.00	3.00

- NOTE:**
1. Crane capacities shown above are determined according to JIS and do not exceed 78 % of tipping load with crane standing on a firm, level surface. Forward stability is 1.15 or more.
  2. To calculate the maximum load that can actually be lifted, deduct weight of all lifting accessories, such as main hook, from figures shown above.
  3. The can-type counterweight weighs 16.9 t while the casting counterweight weighs 17.3 t.
  4. Be sure to fully extend the side frames before operating the machine.

5. Correlations between the number of falls, maximum rated loads, hook weights are shown in the table below.

Hook Capacity (t)	Hook Weight (t)	Maximum Rated Load (t)				
		5 Falls	4 Falls	3 Falls	2 Falls	1 Falls
50.0	0.61	27.95	26.0	19.5	13.0	—
30.0	0.36	27.95	26.0	19.5	13.0	—
15.0	0.32			15.0	13.0	—
6.5	0.26					6.5

# SPECIFICATIONS

## MAIN BOOM RATED LOAD WITH JIB BOOM ATTACHED (JIS Rating) (2)

Unit : t

Main Boom Length (m)		28							
Jib Boom Length (m)		6.0		9.0		12.0		15.0	
Working Radius (m)	Offset Angle (°)	10	30	10	30	10	30	10	30
	6.7		21.00	21.00	20.85	20.85	20.70	20.70	20.55
7.0		19.60	19.60	19.45	19.45	19.30	19.30	19.15	19.15
8.0		16.20	16.20	16.05	16.05	15.90	15.90	15.75	15.75
9.0		13.70	13.70	13.55	13.55	13.40	13.40	13.25	13.25
10.0		11.75	11.75	11.60	11.60	11.45	11.45	11.30	11.30
12.0		9.05	9.05	8.90	8.90	8.75	8.75	8.60	8.60
14.0		7.25	7.25	7.10	7.10	6.95	6.95	6.80	6.80
16.0		5.95	5.95	5.80	5.80	5.65	5.65	5.50	5.50
18.0		4.95	4.95	4.80	4.80	4.65	4.65	4.50	4.50
20.0		4.20	4.20	4.05	4.05	3.90	3.90	3.75	3.75
22.0		3.60	3.60	3.45	3.45	3.30	3.30	3.15	3.15
24.0		3.05	3.05	2.90	2.90	2.75	2.75	2.60	2.60
26.0		25.4m × 2.75t	25.4m × 2.75t	25.4m × 2.60t	25.4m × 2.60t	25.4m × 2.45t	25.4m × 2.45t	25.4 × 2.30t	25.4m × 2.30t
28.0									

Unit : t

Main Boom Length (m)		31							
Jib Boom Length (m)		6.0		9.0		12.0		15.0	
Working Radius (m)	Offset Angle (°)	10	30	10	30	10	30	10	30
	6.7								
7.0		7.3m × 18.60t	7.3m × 18.60t	7.3m × 18.45t	7.3m × 18.45t	7.3m × 18.30t	7.3m × 18.30t	7.3m × 18.15t	7.3m × 18.15t
8.0		16.15	16.15	16.00	16.00	15.85	15.85	15.70	15.70
9.0		13.70	13.70	13.55	13.55	13.40	13.40	13.25	13.25
10.0		11.75	11.75	11.60	11.60	11.45	11.45	11.30	11.30
12.0		9.05	9.05	8.90	8.90	8.75	8.75	8.60	8.60
14.0		7.20	7.20	7.05	7.05	6.90	6.90	6.75	6.75
16.0		5.90	5.90	5.75	5.75	5.60	5.60	5.45	5.45
18.0		4.90	4.90	4.75	4.75	4.60	4.60	4.45	4.45
20.0		4.10	4.10	3.95	3.95	3.80	3.80	3.65	3.65
22.0		3.50	3.50	3.35	3.35	3.20	3.20	3.05	3.05
24.0		3.00	3.00	2.85	2.85	2.70	2.70	2.55	2.55
26.0		2.55	2.55	2.40	2.40	2.25	2.25	2.10	2.10
28.0		2.20	2.20	2.05	2.05	1.90	1.90	1.75	1.75

**NOTE:1.** Crane capacities shown above are determined according to JIS and do not exceed 78 % of tipping load with crane standing on a firm, level surface. Forward stability is 1.15 or more.

**2.** To calculate the maximum load that can actually be lifted, deduct weight of all lifting accessories, such as main hook, from figures shown above.

**3.** The can-type counterweight weighs 16.9 t while the casting counterweight weighs 17.3 t.

**4.** Be sure to fully extend the side frames before operating the machine.

**5.** Correlations between the number of falls, maximum rated loads, hook weights are shown in the table below.

Hook Capacity (t)	Hook Weight (t)	Maximum Rated Load (t)			
		4 Falls	3 Falls	2 Falls	1 Falls
50.0	0.61	21.0	19.5	13.0	—
30.0	0.36	21.0	19.5	13.0	—
15.0	0.32		15.0	13.0	—
6.5	0.26				6.5

# SPECIFICATIONS

## MAIN BOOM RATED LOAD WITH JIB BOOM ATTACHED (JIS Rating) (3)

Unit : t

Main Boom Length (m)		34							
Jib Boom Length (m)		6.0		9.0		12.0		15.0	
Working Radius (m)	Offset Angle (°)	10	30	10	30	10	30	10	30
	7.8		16.55	16.55	16.40	16.40	16.25	16.25	16.10
8.0		16.05	16.05	15.90	15.90	15.75	15.75	15.60	15.60
9.0		13.55	13.55	13.40	13.40	13.25	13.25	13.10	13.10
10.0		11.65	11.65	11.50	11.50	11.35	11.35	11.20	11.20
12.0		8.95	8.95	8.80	8.80	8.65	8.65	8.50	8.50
14.0		7.10	7.10	6.95	6.95	6.80	6.80	6.65	6.65
16.0		5.80	5.80	5.65	5.65	5.50	5.50	5.35	5.35
18.0		4.80	4.80	4.65	4.65	4.50	4.50	4.35	4.35
20.0		4.00	4.00	3.85	3.85	3.70	3.70	3.55	3.55
22.0		3.40	3.40	3.25	3.25	3.10	3.10	2.95	2.95
24.0		2.90	2.90	2.75	2.75	2.60	2.60	2.45	2.45
26.0		2.45	2.45	2.30	2.30	2.15	2.15	2.00	2.00
28.0		2.10	2.10	1.95	1.95	1.80	1.80	1.65	1.65
30.0		1.80	1.80	1.65	1.65	1.50	1.50	1.35	1.35
32.0		30.6m × 1.65t	30.6m × 1.65t	30.6m × 1.50t	30.6m × 1.50t	30.6m × 1.35t	30.6m × 1.35t	30.6m × 1.20t	30.6m × 1.20t

Unit : t

Main Boom Length (m)		37							
Jib Boom Length (m)		6.0		9.0		12.0		15.0	
Working Radius (m)	Offset Angle (°)	10	30	10	30	10	30	10	30
	7.8								
8.0		8.4m × 14.90t	8.4m × 14.90t	8.4m × 14.75t	8.4m × 14.75t	8.4m × 14.60t	8.4m × 14.60t	8.4m × 14.45t	8.4m × 14.45t
9.0		13.45	13.45	13.30	13.30	13.15	13.15	13.00	13.00
10.0		11.55	11.55	11.40	11.40	11.25	11.25	11.10	11.10
12.0		8.85	8.85	8.70	8.70	8.55	8.55	8.40	8.40
14.0		7.00	7.00	6.85	6.85	6.70	6.70	6.55	6.55
16.0		5.70	5.70	5.55	5.55	5.40	5.40	5.25	5.25
18.0		4.70	4.70	4.55	4.55	4.40	4.40	4.25	4.25
20.0		3.95	3.95	3.80	3.80	3.65	3.65	3.50	3.50
22.0		3.30	3.30	3.15	3.15	3.00	3.00	2.85	2.85
24.0		2.80	2.80	2.65	2.65	2.50	2.50	2.35	2.35
26.0		2.40	2.40	2.25	2.25	2.10	2.10	1.95	1.95
28.0		2.00	2.00	1.85	1.85	1.70	1.70	1.55	1.55
30.0		1.70	1.70	1.55	1.55	1.40	1.40	1.25	1.25
32.0		1.45	1.45	1.30	1.30				

- NOTE:**
1. Crane capacities shown above are determined according to JIS and do not exceed 78 % of tipping load with crane standing on a firm, level surface. Forward stability is 1.15 or more.
  2. To calculate the maximum load that can actually be lifted, deduct weight of all lifting accessories, such as main hook, from figures shown above.
  3. The can-type counterweight weighs 16.9 t while the casting counterweight weighs 17.3 t.
  4. Be sure to fully extend the side frames before operating the machine.

5. Correlations between the number of falls, maximum rated loads, hook weights are shown in the table below.

Hook Capacity (t)	Hook Weight (t)	Maximum Rated Load (t)		
		3 Falls	2 Falls	1 Falls
50.0	0.61	16.55	13.0	-
30.0	0.36	16.55	13.0	-
15.0	0.32	15.00	13.0	-
6.5	0.26			6.5

# SPECIFICATIONS

## N BOOM RATED LOAD WITH JIB BOOM ATTACHED (JIS Rating) (4)

Unit : t

Main Boom Length (m)	40							
	6.0		9.0		12.0		15.0	
Working Radius (m)	Offset Angle (°)		Offset Angle (°)		Offset Angle (°)		Offset Angle (°)	
	10	30	10	30	10	30	10	30
9.0	13.45	13.45	13.30	13.30	13.15	13.15	13.00	13.00
10.0	11.55	11.55	11.40	11.40	11.25	11.25	11.10	11.10
12.0	8.85	8.85	8.70	8.70	8.55	8.55	8.40	8.40
14.0	7.00	7.00	6.85	6.85	6.70	6.70	6.55	6.55
16.0	5.65	5.65	5.50	5.50	5.35	5.35	5.20	5.20
18.0	4.70	4.70	4.55	4.55	4.40	4.40	4.25	4.25
20.0	3.90	3.90	3.75	3.75	3.60	3.60	3.45	3.45
22.0	3.25	3.25	3.10	3.10	2.95	2.95	2.80	2.80
24.0	2.75	2.75	2.60	2.60	2.45	2.45	2.30	2.30
26.0	2.35	2.35	2.20	2.20	2.05	2.05	1.90	1.90
28.0	1.95	1.95	1.80	1.80	1.65	1.65	1.50	1.50
30.0	1.65	1.65	1.50	1.50	1.35	1.35	1.20	1.20
32.0	1.35	1.35	1.20	1.20				

Unit : t

Main Boom Length (m)	43							
	6.0		9.0		12.0		15.0	
Working Radius (m)	Offset Angle (°)		Offset Angle (°)		Offset Angle (°)		Offset Angle (°)	
	10	30	10	30	10	30	10	30
9.0	9.6m × 12.25t	9.6m × 12.25t	9.6m × 12.10t	9.6m × 12.10t	9.6m × 11.95t	9.6m × 11.95t	9.6m × 11.80t	9.6m × 11.80t
10.0	11.45	11.45	11.30	11.30	11.15	11.15	11.00	11.00
12.0	8.75	8.75	8.60	8.60	8.45	8.45	8.30	8.30
14.0	6.90	6.90	6.75	6.75	6.60	6.60	6.45	6.45
16.0	5.60	5.60	5.45	5.45	5.30	5.30	5.15	5.15
18.0	4.60	4.60	4.45	4.45	4.30	4.30	4.15	4.15
20.0	3.80	3.80	3.65	3.65	3.50	3.50	3.35	3.35
22.0	3.20	3.20	3.05	3.05	2.90	2.90	2.75	2.75
24.0	2.65	2.65	2.50	2.50	2.35	2.35	2.20	2.20
26.0	2.25	2.25	2.10	2.10	1.95	1.95	1.80	1.80
28.0	1.90	1.90	1.75	1.75	1.60	1.60	1.45	1.45
30.0	1.55	1.55	1.40	1.40	1.25	1.25		
32.0	1.25	1.25						

1. Crane capacities shown above are determined according to JIS and do not exceed 78 % of tipping load with crane standing on a firm, level surface. Forward stability is 1.15 or more.
2. To calculate the maximum load that can actually be lifted, deduct weight of all lifting accessories, such as main hook, from figures shown above.
3. The can-type counterweight weighs 16.9 t while the casting counterweight weighs 17.3 t.
4. Be sure to fully extend the side frames before operating the machine.

5. Correlations between the number of falls, maximum rated loads, hook weights are shown in the table below.

Hook Capacity (t)	Hook Weight (t)	Maximum Rated Load (t)		
		3 Falls	2 Falls	1 Falls
50.0	0.61	13.45	13.0	—
30.0	0.36	13.45	13.0	—
15.0	0.32	13.45	13.0	—
6.5	0.26			6.5

# TRANSPORTING

## TRANSPORTING ON PUBLIC ROADS

When transporting the machine on public roads, be sure to first understand and follow all local regulations.

1. For transporting using a trailer, check the width, height, length and weight of the trailer when the machine is loaded.
2. Investigate beforehand the conditions of the route to be traveled, such as dimensional limits, weight limits and traffic regulations.

In some cases, disassemble the machine to bring it within dimensional or weight limits as local regulations permit. Consult your authorized dealer for transporting on public roads.

The tables 1 and 2 show "COMPONENT WEIGHT AND DIMENSION" and "PARTIALLY DISASSEMBLED MACHINES AND THEIR RESTRICTIONS ON MOVEMENTS," respectively.

Table 1 COMPONENT WEIGHT AND DIMENSION

Component Names		Weight (kg)	L x W x H (m)	Remarks
Base Machine	Base Machine	28 800	6.63 x 3.30 x 3.20	The lower boom, wire ropes, and counterweights are excluded.
	Counterweight	7 250	3.24 x 0.47 x 1.50	Inner Counterweight
	Counterweight	9 650	3.24 x 0.59 x 1.52	Outer Counterweight
	Counterweight	6 600	2.31 x 0.63 x 1.37	Inner Casting Counterweight
	Counterweight	10 700	3.24 x 0.90 x 1.37	Outer Casting Counterweight
Crane Front Attachment	Lower Boom	770	5.15 x 1.55 x 1.54	
	Upper Boom	1 040	5.40 x 1.39 x 1.47	
	Boom Stop	120	4.00 x 0.13 x 0.13	
	Bridle	260	1.65 x 0.78 x 0.25	
	3 m Extension Boom	270	3.10 x 1.40 x 1.46	With Pendant Rope
	6 m Extension Boom	450	6.10 x 1.40 x 1.46	With Pendant Rope
	9 m Extension Boom	650	9.10 x 1.40 x 1.46	With Pendant Rope
	9 m B Extension Boom	680	9.10 x 1.40 x 1.49	With Pendant Rope
	Lower Jib Boom	150	3.20 x 0.72 x 0.63	Without Pendant Rope
	Upper Jib Boom	170	3.35 x 0.66 x 0.60	Without Pendant Rope
	3 m Extension Boom	80	3.06 x 0.72 x 0.60	Without Pendant Rope
	Jib Mast	180	3.20 x 0.72 x 0.64	Without Pendant Rope
	Aux. Jib	200	1.20 x 0.60 x 0.85	
	Boom Hoist Rope	150	Dia. 16 x 135	
	Boom Hoist Rope	165	Dia. 16 x 150	Tower
	Main Hoist Rope	395	Dia. 22 x 185	
	Aux. Hoist Rope	255	Dia. 22 x 120	
	50 t Hook	610	1.61 x 0.62 x 0.42	
	30 t Hook	360	1.51 x 0.62 x 0.30	
	15 t Hook	320	1.36 x 0.62 x 0.29	
6.5 t Hook	260	0.84 x 0.42 x 0.42		

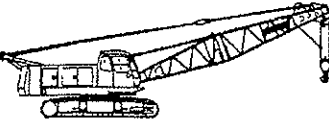
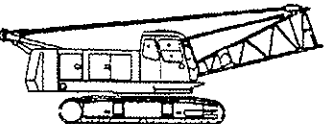
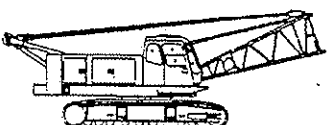
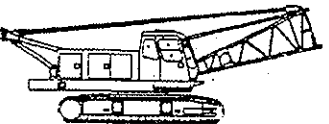
## TRANSPORTING



**CAUTION:** When "x" mark is shown, never perform the indicated machine movement.

○: Indicated movement is permitted.  
 △: Indicated movement is permitted with restrictions.  
 ×: Indicated movement is prohibited.

### Partially Disassembled Machines and Restrictions on Their Movements

Partially Disassembled Machines	Crane Movement	Level Surface Travel	Slope Travel		Swing		Side Frame Extension/Retraction
			Forward Travel	Reverse Travel	With Side Frame Extended	With Side Frame Retracted	
 [16 900 kg] M324-09-005 (49 000 kg)	With Basic Booms	○	△ Only on a grade of 10° or less	○	○	×	×
 [16 900 kg] M324-09-006 (47 400 kg)	With Lower Boom, Wire Ropes and Counterweight	△ Only at slow speed (forward or reverse)	×	○	△ Only at slow speed with the boom parallel to the ground	×	×
 [7 250 kg] M324-09-007 (37 750 kg)	With Lower Boom, Wire Ropes and Inner Counterweight	○	△ Only on a grade of 14° or less	○	○	○	○
 [No Counterweight] M324-09-008 (30 500 kg)	With Lower Boom and Wire Ropes	○	○	○	○	○	○

- NOTE:**
- Weights indicated in ( ) are of the counterweights and those in ( ) are of the whole machines.
  - The boom angle should be 30° except when △ marks are indicated. When a △ mark is indicated, the boom should be parallel to the ground. Swinging is allowed only on a firm, level surface.
  - Weight of each counterweight is as follows:  
 Std. type    Inner Counterweight: 7 250 kg  
                   Outer Counterweight: 9 650 kg  
 Casting type Inner Counterweight: 6 600 kg  
                   Outer Counterweight: 10 700 kg
  - One fourth of the fuel capacity (75 L, 65 kg) is included within the base machine weight. Also, the specified amount of hydraulic oil and gear oil are included.
  - When "With Wire Ropes" is indicated in the table, the indicated wire ropes are the main and aux. wire ropes.



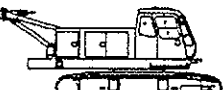


# TRANSPORTING

**⚠ CAUTION:** When "x" mark is shown, never perform the indicated machine movement.

○: Indicated movement is permitted.  
 △: Indicated movement is permitted with restrictions.  
 ×: Indicated movement is prohibited.

Partially Disassembled Machines and Restrictions on Their Movements

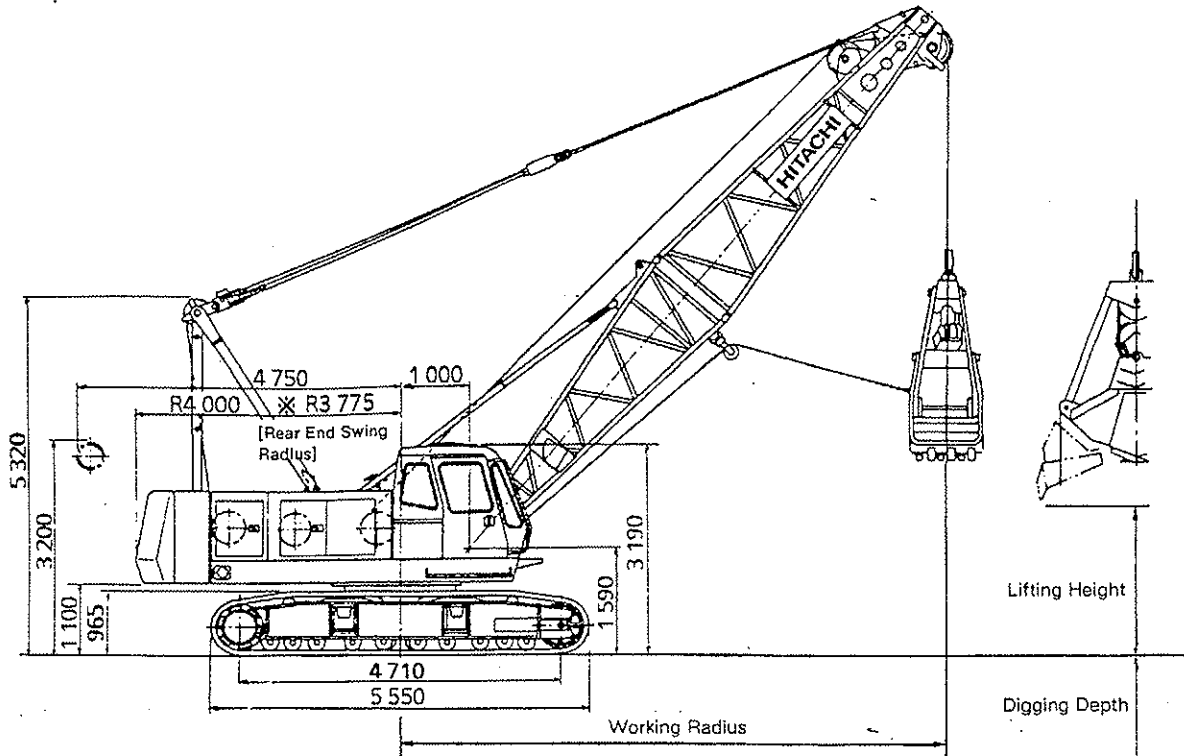
Partially Disassembled Machines	Crane Movement	Level Surface Travel	Slope Travel		Swing		Side Frame Extension/Retraction
			Forward Travel	Reverse Travel	With Side Frame Extended	With Side Frame Retracted	
 [16 900 kg] M324-09-009	Basic Machine with Counterweight (45 700 kg)	×	×	×	×	×	×
 [7 250 kg] M324-09-010	Basic Machine with Inner Counterweight (36 050 kg)	○	△ Only on a grade of 8° or less	○	○	×	×
 [No Counterweight] M324-09-011	Basic Machine without Counterweight (28 800 kg)	○	○	○	○	○	○

- NOTE:**
- Weights indicated in ( ) are of the counterweights and those in ( ) are of the whole machines.
  - The boom angle should be 30° except when △ marks are indicated. When a △ mark is indicated, the boom should be parallel to the ground. Swinging is allowed only on a firm, level surface.
  - Weight of each counterweight is as follows:  
 Std. type    Inner Counterweight: 7 250 kg  
                  Outer Counterweight: 9 650 kg  
 Casting type Inner Counterweight: 6 600 kg  
                  Outer Counterweight: 10 700 kg
  - One fourth of the fuel capacity (75 L, 65 kg) is included within the base machine weight. Also, the specified amount of hydraulic oil and gear oil are included.

# SPECIFICATIONS

## CLAMSHELL SPECIFICATIONS

Unit : mm



M324-12-003

### Specifications

Bucket Capacity	m <sup>3</sup>	0.8/1.0/1.2
Allowed Maximum Gross Weight for Clamshell Bucket and Captured Load Combined	1000kg	6.0
Boom Length	m	10 to 19
Maximum Digging Depth	m	36
Support Rope Speed	m/min	* 74/37
Opening/Closing Rope Speed	m/min	* 74/37
Boom Hoist Rope (Raise/Lower)	m/min	* 60
Travel Speed	km/h	* 2.0/1.6
Ground Pressure	kPa (kgf/cm <sup>2</sup> )	66.7 (0.68)
Operating Mass	t	51.4 (with 10 m boom + 1.2m <sup>3</sup> bucket)
		51.8 (with 10 m boom + 1.2m bucket + casting counterweight)

### Clamshell Bucket

Capacity(m <sup>3</sup> )	Weight (t)	Application
0.8	2.0	Excavation
1.0	2.45	Excavation
1.2	2.4	Light service Excavation

- Note: 1. SI units are used for specifications. In parenthesis, conventional units are also indicated.  
 2. Speeds marked with "\*" should be referred to only when the machine is used in clamshell operation. Also, note that "\*" marked values may vary depending on load applied.  
 3. Specifications other than those shown above are the same as those shown in the crawler crane specifications section.

# SPECIFICATIONS

## CLAMSHELL WORKING RANGE

Boom Length	m	10				13				16				19			
Boom Angle (Degree)		35	45	55	65	35	45	55	65	35	45	55	65	35	45	55	65
Working Radius	m	9.4	8.3	7.0	5.6	11.8	10.4	8.7	6.8	14.3	12.6	10.5	8.1	16.8	14.7	12.2	9.4
Rated Load of Bucket Weight and Captured Load Combined	(t)	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	5.80	6.00	6.00	6.00
Maximum Height of Opened Bucket (0.8 m <sup>3</sup> Bucket)	m	2.0	3.3	4.5	5.4	3.7	5.5	7.0	8.1	5.4	7.6	9.4	10.8	7.1	9.7	11.9	13.6
Maximum Height of Opened Bucket (1.0 m <sup>3</sup> Bucket)	m	1.8	3.1	4.3	5.2	3.5	5.3	6.8	7.9	5.2	7.4	9.2	10.6	6.6	9.5	11.7	13.4
Maximum Height of Opened Bucket (1.2 m <sup>3</sup> Bucket)	m	1.6	2.9	4.1	5.0	3.3	5.1	6.6	7.7	5.0	7.2	9.0	10.4	6.7	9.3	11.5	13.2

- NOTE:**
1. Rated load for clamshell work is 90% of Crane Rated Loads.
  2. Rated load of bucket weight and captured load combined is calculated as follows:  

$$\text{Rated Load} = \text{Bucket Capacity (m}^3) \times \text{Density of Captured Load (t/m}^3) + \text{Bucket Weight (t)}$$
 If a bucket heavier than specified (3.1 t Maximum) is used, the brake may "FADE," resulting from excessive heating of the brake even when the rated load is less than specified.
  3. Working radius is the horizontal distance from the swing center to the center of gravity of a lifted load.
  4. The maximum bucket weight allowed is 3.1 t.
  5. The can-type counterweight weighs 16.9 t while the casting counterweight weighs 17.3 t.
  6. Be sure to fully extend the side frames before operating the machine.
  7. The height of free fall operation which requires the braking operation should vary depending on working conditions, such as the bucket weight, operation cycle time, etc. However, limit the lifting height of free fall operation to within 10 m as a general rule.