



SC500-2

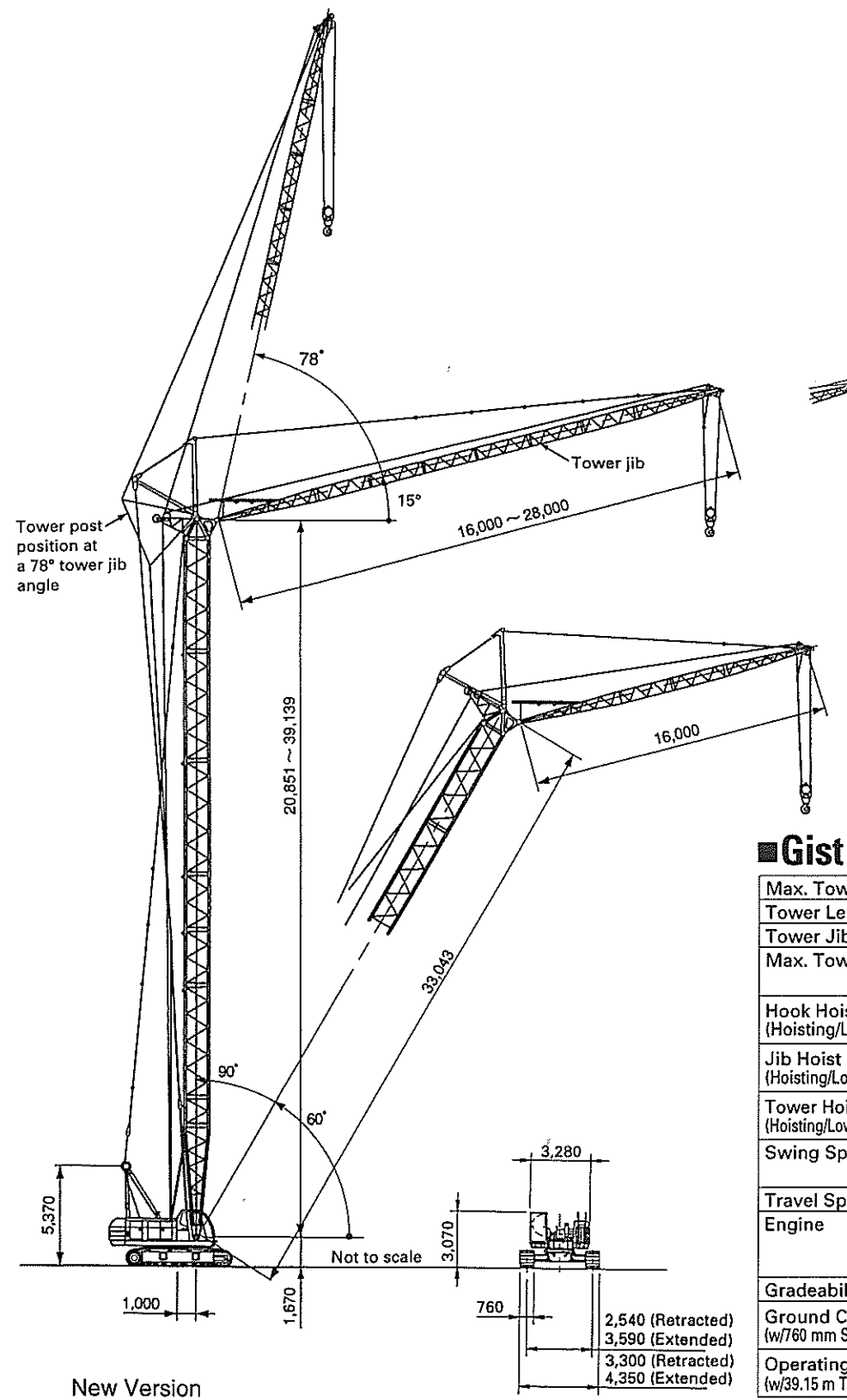
50-M ton Hyd. Crawler Crane Luffing Towercrane Att.

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- 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.

Address Inquires to:



■ Gist of Specification

Max. Towercrane Cap.	11.4 t × 10.0 m
Tower Length	20.85 m ~ 39.15 m
Tower Jib Length	16.00 m ~ 28.00 m
Max. Tower + Jib Length	39.15 m + 25.00 m 36.10 m + 28.00 m
Hook Hoist Rope Line Speed (Hoisting/Lowering-Front Drum)	110 ~ 2.0 m/min
Jib Hoist Rope Line Speed (Hoisting/Lowering-Aux. Rear Drum)	60 ~ 2.5 m/min
Tower Hoist Rope Line Speed (Hoisting/Lowering-Boom Hoist Drum)	62 ~ 3.0 m/min
Swing Speed	4.3 min. ~ (4.3 rpm) (Std.) 4.3/1.2 min. ~ (4.3/1.2 rpm) (Opt.)
Travel Speed	2.1/1.6 kph
Engine	Hino H07CT 132.4kW/2,100min. ⁻¹ < 180 ps/2,100 rpm >
Gradeability	22° (40%)
Ground Contact Pressure (w/760 mm Shoes)	75.6 kPa < 0.77 kgf/cm ² >
Operating Weight (w/39.15 m Tower + 25.00 m Jib)	Approx. 58.8 ton

Tower and Jib Combination Table

Jib length (m)	16.0				19.0				22.0				25.0				28.0			
Tower angle (°)	90	80	70	60	90	80	70	60	90	80	70	60	90	80	70	60	90	80	70	60
Tower length (m)																				
20.85	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
23.90	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
26.95	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
30.00	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
33.05	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
36.10	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
39.15	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

Notes:

- Tower and jib combination is available according to the above table; "○" mark means "Applicable", and "×" mark means "Not Applicable".
- In case that towercrane attachment is required in addition to liftcrane's one, following equipment is accordingly necessary as optional extras.
 - TOWER JIB FROM 16.0 M TO 28.0 M; its length depends on request.
 - TOWER HEAD SECTION WITH FAN-SHAPED POST;
 - TOWER EXTENSIONS; one set each of 6.10 m (w/metal lath on upper side), 6.10 m (w/out lugs), and 1.525 m boom extension is required at any rate; no. of q'ty required for other conventional type tower extensions of 3.05 m and 6.10 m long depend on request on tower length.
 - TOWER JIB HOIST PENDANT ROPE (S); this is additionally required according to kind of length and its no. of q'ty of boom extensions of liftcrane attachment.
 - AUXILIARY REAR DRUM WITH 580 MM DIA. PARALLEL GROOVED LAGGING; this is for tower jib hoist.
 - 16 MM DIA. 120 M LONG TOWER JIB HOIST CABLE;
 - TOWER JIB HOIST BAIL AND BRIDLE ASSEMBLIES;
 - 15 TON HOOK BLOCK.
- In the other case that towercrane attachment is only required, following equipment can be deducted from liftcrane specification on request.
 - 6.10 M CRANE TOP SECTION;
 - 50/35/5.8 TON HOOK BLOCKS;
 - FLY JIB FROM 6.10 M TO 15.25 M;
 - BOOM EXTENSIONS;
 - 20 MM DIA. BY 125 M LONG AUX. CRANE HOIST CABLE.
- Bottom section of 6.10m and extensions of 3.05m/6.10m for both liftcrane and towercrane attachments are common each other.

Towercrane Capacities

■ w/20.85 m tower

Jib length (m)	16.0				19.0			
Tower angle (°)	90	80	70	60	90	80	70	60
Working radius (m)								
6.0	11.4/6.5							
7.0	11.4				11.3/7.3			
8.0	11.4				11.3			
9.0	11.4				11.3			
10.0	11.4	10.1/11.9			10.9			
12.0	10.7	10.0			10.6	8.9/13.0		
14.0	8.8	8.2			8.8	8.1		
16.0	7.5	7.0	5.7/17.8		7.4	6.9		
18.0	6.0/17.4	6.0	5.6		6.4	6.0	5.0/19.4	
20.0		5.3	4.9		5.6	5.2	4.8	
22.0		5.0/21.0	4.4	3.8/23.1	4.9/20.3	4.6	4.3	
24.0			3.9	3.6		4.2/23.9	3.8	3.3/25.1
26.0			3.8/24.4	3.3			3.5	3.2
28.0				3.0/27.6			3.2/27.3	2.9
30.0								2.6
32.0								2.6/30.5

■ w/23.90 m tower

Jib length (m)	16.0				19.0				22.0			
Tower angle (°)	90	80	70	60	90	80	70	60	90	80	70	60
Working radius (m)												
6.0	11.4/6.5											
7.0	11.4				10.4/7.3							
8.0	11.4				10.4				9.4			
9.0	11.4				10.4				9.4			
10.0	11.4				10.4				9.4			
12.0	10.7	9.4/12.4			9.4	8.4/13.5			9.0			
14.0	8.8	8.1			8.8	8.0			7.7	7.5/14.7		
16.0	7.5	6.9			7.4	6.8			7.4	6.7		
18.0	6.0/17.4	6.0	5.1/18.8		6.4	5.9			6.4	5.8		
20.0		5.2	4.8		5.6	5.1	4.6/20.4		5.6	5.1		
22.0		4.8/21.5	4.2		4.9/20.3	4.6	4.1		4.9	4.5	4.0	
24.0			3.8	3.3/24.7		4.1	3.7		4.1/23.2	4.0	3.6	
26.0			3.5/25.5	3.1		4.0/24.4	3.3	2.9/26.7		3.6	3.2	
28.0				2.8			3.0	2.7		3.4/27.3	2.9	2.5/28.7
30.0				2.6/29.2			3.0/28.4	2.5			2.7	2.3
32.0								2.2			2.5/31.3	2.1
34.0												1.9
36.0												1.8/34.9

Working Ranges

■w/39.15m tower

Jib length (m)	16.0			19.0			22.0			25.0		
Tower angle (°)	90	80	70	90	80	70	90	80	70	90	80	70
Working radius (m)												
6.0	8.6/6.5											
7.0	8.6			8.0/7.3								
8.0	8.6			8.0			7.2			6.5/8.8		
9.0	8.6			8.0			7.2			6.5		
10.0	8.4			8.0			7.2			6.5/11.0		
12.0	8.0			8.0			6.8			6.3		
14.0	7.4	6.8/15.1		7.0			6.5			6.0		
16.0	6.6	6.3		6.6	6.1/16.2		6.2	5.5/17.3		5.7		
18.0	6.0/17.4	5.4		5.7	5.3		5.6	5.2		5.5	5.0/18.4	
20.0		4.8		5.0	4.7		5.0	4.6		4.9	4.5	
22.0		4.2		4.7/20.3	4.1		4.4	4.0		4.4	4.0	
24.0		3.8	3.0		3.7	2.6/25.6	4.1/23.2	3.6		4.0	3.5	
26.0		3.7/24.1	2.6		3.3	2.5		3.2	2.2/27.2	3.5	3.2	
28.0			2.4		3.2/27.0	2.3		2.9	2.1	3.4/26.1	2.8	1.9/28.8
30.0			2.1			2.0		2.7/29.9	1.9		2.6	1.8
32.0			2.1/30.7			1.8			1.7		2.3	1.6
34.0						1.7/33.6			1.5		2.3/32.8	1.4
36.0									1.4			1.3
38.0									1.3/36.5			1.1

Notes:

- Capacities included in these charts are the maximum allowable, and are based on machine standing level on firm supporting surface under ideal job conditions.
- Capacities are in metric tons, and are based on 78% of minimum tipping load, or based on the other factor of machine structural limitation.
- Capacities are under crawler extended condition with 3,590 mm gauge.
- Capacities are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stopping of loads, supporting surface conditions, and operating speeds. Operator must reduce load ratings to take such conditions into account. Deduction from rated capacities must be made for weight of hook block, weighted ball/hook, sling, spreader bar, or other suspended gear. SUMITOMO's hook block weight is as follows:
15 t.....0.35 t 5.8 t.....0.12 t
- A-frame gantry must be at "High" position.
- A 17.2 ton counterweight is required.
- Number of hook rope hoist reeving is determined at a condition that max. load of single part line of 20 mm dia. hoist rope is 5.8 ton.
- All capacities are rated for 360° swing.
- Least stable rated condition is over the side.
- Attachment must be erected and lowered over the front of the crawler mounting.
- Working radii shown above are at loading condition.
- The machine can be steplessly operated at tower angle between 60 and 90 degrees safely; towercrane capacities available under any tower angle are automatically set up by a computerized automatic over-load preventing system, SUMITOMO Model SML-06.
- Capacities apply only to the machine as originally manufactured and normally equipped by Sumitomo (S.H.I.) Construction Machinery Co., Ltd.

