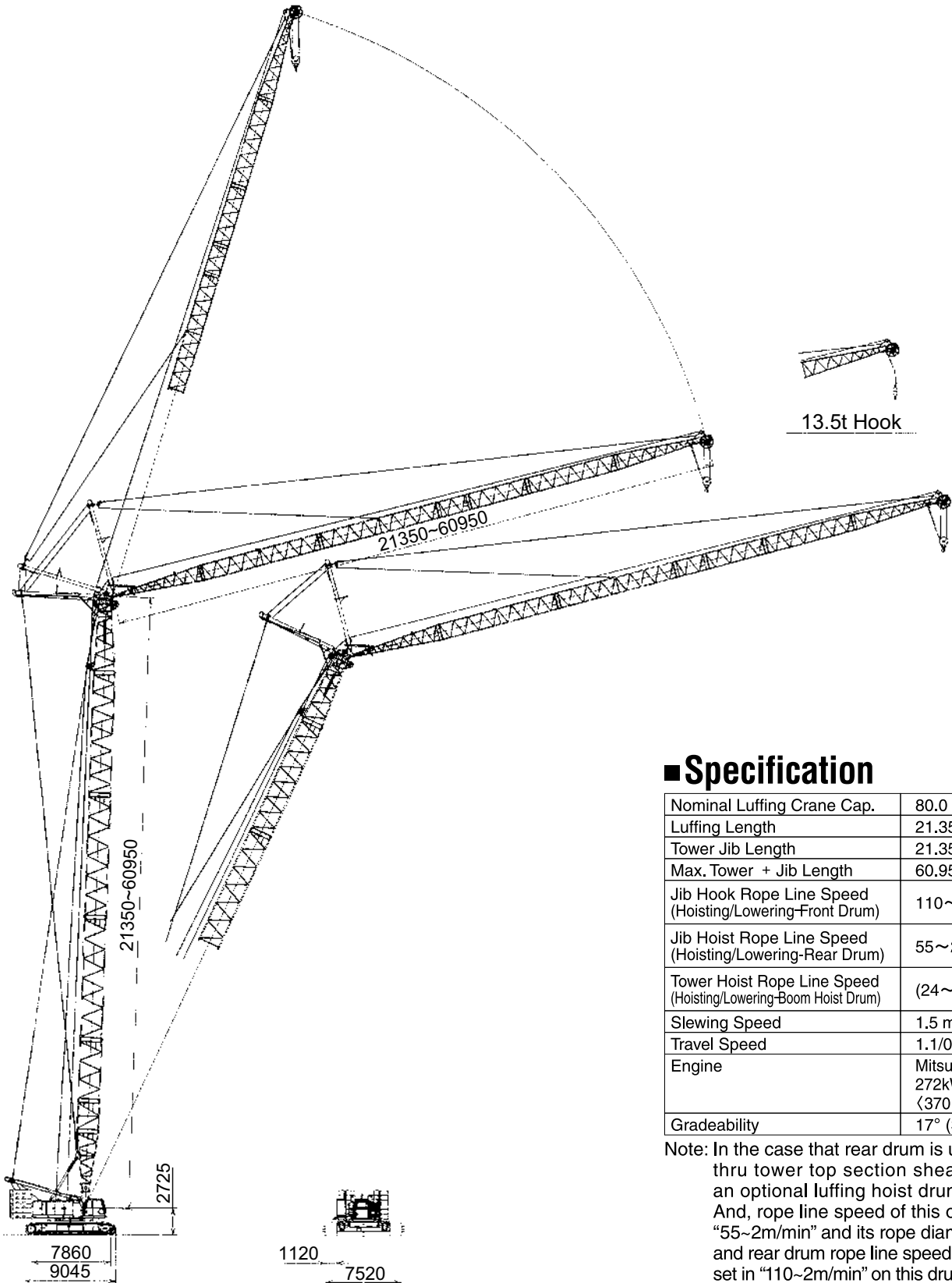




SCX2800-2

275-M ton Hydraulic Crawler Crane Luffing Jib Att.



■ Specification

Nominal Luffing Crane Cap.	80.0 t × 9.3 m
Luffing Length	21.35 m~60.95 m
Tower Jib Length	21.35 m~60.95 m
Max. Tower + Jib Length	60.95 m + 60.95 m
Jib Hook Rope Line Speed (Hoisting/Lowering-Front Drum)	110~2.0 m/min
Jib Hoist Rope Line Speed (Hoisting/Lowering-Rear Drum)	55~2.0 m/min
Tower Hoist Rope Line Speed (Hoisting/Lowering-Boom Hoist Drum)	(24~1.0 m/min) × 2
Slewing Speed	1.5 min ⁻¹ (1.5 rpm)
Travel Speed	1.1/0.5 km/hr
Engine	Mitsubishi 6M70-TL 272kW/2,000min ⁻¹ (370 ps/2,000rpm)
Gradeability	17° (30%)

Note: In the case that rear drum is used for liftwork thru tower top section sheave machinery, an optional luffing hoist drum is necessary. And, rope line speed of this optional drum is "55~2m/min" and its rope diameter is "28mm," and rear drum rope line speed is automatically set in "110~2m/min" on this drum arrangement.

Front-end Attachment

TOWER BOOM:

- Lattice construction, round tubular main chords, alloy, hi-ten steel, with bracing of round steel tubing.
- Tower boom connections In-line pin connections at 2.10m deep by 2.10m wide.
- Basic tower Four-piece, 21.35m basic length; 7.62m heavy-duty base section, one 6.10m ultra heavy-duty tower extension, 7.30m heavy-duty top section and 0.32m head section; provided with a 2-guide sheave for luffing jib crane hoist cable and the other cable for liftwork thru tower head top sheave machinery on an upper part of 7.30m tapered extension boom, and two plate links pinned to a part of 7.62m base section to adjust a little bit tower boom pendant rope length according to tower length. A 0.32m head section pins luffing jib base section, and rear post.
- Tower top sheave machinery Three head sheaves mounted on anti-friction bearings of conventional non-sealed grease type. An 80t lift is available as maximum.
- Ultra heavy-duty tower boom extension Available in 3.05m, 6.10m and 12.20m with tower boom/rear post pendants.
- Heavy-duty tower boom extension Available in 12.20m with tower boom/rear post pendants.
- Tower boom length 21.35m to 60.95m; the configuration of a 60.95m tower boom as maximum as recommended is as under: (1) 7.62m heavy-duty tower base section, (2) 3.05m ultra heavy-duty boom extension × 1 pc., (3) 6.10m ultra heavy-duty boom extension × 1 pc., (4) 12.20m ultra heavy-duty boom extension × 2 pcs., (5) 12.20m heavy-duty boom extension × 1 pc., (6) 7.30m tower top section, and (7) 0.32m tower head section.
- Tower boom luffing angle 88° thru 65° (according to tower boom/luffing jib combination).

Notes:

- All of tower booms except 0.32m tower head section and 7.30m tapered extension can be converted to the general liftcrane boom attachment.
- In converting tower boom attachment of 60.95m as shown above to the general liftcrane boom attachment of 91.45m as maximum, one set of 7.62m tapered crane top section, one set of 6.10m ultra heavy-duty boom extension and two sets of 12.20m heavy-duty boom extensions are additionally required.
- All of ultra heavy- and heavy-duty boom extensions are designed with no intermediate diagonal bracing(s); the diagonal bracing is only designed at one of two picture frames. Accordingly, it is able to nest luffing jib extension into appropriate boom extension in length.

LUFFING JIB:

- Lattice construction, round tubular main chords, alloy hi-ten steel, with bracing of round steel tubing.
- Luffing jib connections In-line pin connections at 1.55m deep by 1.55m wide.
- Basic luffing jib Three-pieces, 21.35m basic length; 9.15m bottom section, one 3.05m jib extension and 9.15m top section.
- Luffing jib top head machinery Three head and one guide sheaves mounted on anti-friction bearings of conventional non-sealed greas type.
- Luffing jib extensions Available in 3.05m, 6.10m and 9.15m lengths with pendants.
- Heavy-duty luffing jib extention Available in 12.20m with pendants.
- Mid-point suspension cable Required when luffing jib length exceeds 51.80m.
- Maximum luffing jib length 60.95m; a 60.95m tower jib configuration is as under: (1) 9.15m base section, (2) 12.20m heavy-duty jib extension × 2 pcs., (3) 3.05m jib extension × 1 pc., (4) 6.10m jib extension × 1 pc., (5) 9.15m jib extension × 1 pc., and (6) 9.15m jib top section.
- Luffing jib angle Available from 15° thru 73° to ground (according to tower boom/luffing jib combination possible).

FRONT AND REAR POSTS:

All-welded box construction; 8.9m long for front post pinned to 9.15m luffing jib bottom section, and 7.3m long for rear post pinned to 0.32m tower head section. Provided with a nylon sheave of three (3) for front post, and of four (4) for rear post for 7-part rope hoist reeving between posts. Rear post provides two backstops with power hydraulic cylinders to easily set rear post position, and front post equips a luffing jib crane hoist cable guide sheave.

HOOK BLOCKS:

To be selected from 80t, 35t and 13.5t hook blocks (as same as those of the HOOK BLOCKS mentioned in to “Front-end Attachment” of separate SCX2800-2 SPECIFICATIONS).

DRUM DATA:

See DRUM DATA mentioned into page 8 of separate SCX2800-2 SPECIFICATIONS.

HOIST REEVING:

No. of part line	Luffing jib & tower boom top crane hoists					
	6	5	4	3	2	1
Max. load (ton)	80.0	67.5	54.0	40.5	27.0	13.5

Note: The actual lifting capacity is, however, restricted by the luffing jib crane capacity and/or by the SWL of appropriate hook capacity.

CABLES:

See CABLES mentioned into page 8 of separate SCX2800-2 SPECIFICATIONS.

WORKING WEIGHT:

Approx. 252ton with 60.95m tower boom, 60.95m tower jib, 102.8ton counterweight, 18.0ton lower weight, 1,120mm wide track shoes and 80t hook block.

GROUND CONTACT PRESSURE:

140.3kPa <1.43kg/cm²> under a 252ton working weight mentioned above.

Luffing Jib Crane Capacities-80 metric tons

■ w/21.35m Tower

Jib Length (m)	21.35				24.40				27.45				30.50				33.50				
Tower Angle (°)	88	83	75	65	88	83	75	65	88	83	75	65	88	83	75	65	88	83	75	65	
Working radius(m)																					
9.0	80.0/9.4																				
10.0	79.8				72.3/10.3							63.0/11.2									
12.0	75.6	77.3/13.0			69.1							61.7				67.7/12.1			56.8/13.0		
14.0	71.3	75.2			66.4	67.7/14.2						59.3	59.1/15.3			65.2			55.8		
16.0	59.6	67.2			59.5	65.2						57.5	58.2			59.6	56.6/16.5		52.9	53.5/17.6	
18.0	51.1	58.9	57.5/18.6		51.0	58.8						50.8	56.3			51.0	54.2		50.1	53.5	
20.0	44.6	50.6	53.3		44.5	50.5	53.1/20.1					44.3	50.3	48.2/21.6		44.5	48.3		44.7	48.2	
22.0	39.5	44.2	47.4		39.4	44.1	47.2					39.2	43.9	47.1		39.3	42.7	43.9/23.2	39.5	42.7	
24.0	36.3/23.5	39.2	42.5	38.4/25.1	35.3	39.1	42.4					35.1	38.9	42.2		35.2	38.3	42.1	35.3	38.2	40.5/24.7
26.0		36.5/25.3	38.4	36.8	31.9	35.0	38.3	35.0/27.0				31.7	34.8	38.2		31.7	34.6	38.1	31.9	34.6	38.1
28.0			35.0	33.5	31.3/26.4	31.7	35.0	33.4	28.9	31.5	34.8	31.7/29.0			28.9	31.5	34.7		29.0	31.6	34.7
30.0			34.8/28.2	30.8		31.2/28.3	32.1	30.7	27.2/29.4	28.7	31.9	30.5			26.4	28.6	31.9	29.3/30.9	26.5	28.8	31.8
32.0				28.5/31.7			30.6/31.2	28.3			27.3/31.2	29.5	28.1	24.4	26.2	29.4	28.0	24.4	26.3	29.4	27.1/32.9
34.0								26.3			27.3	26.1	24.1/32.3	23.8	27.3	26.0	22.6	24.2	27.2	25.9	
36.0								25.7/34.6			27.2/34.1	24.3		23.6/34.2	25.1	24.2	21.4/35.3	21.8	25.1	24.1	
38.0												23.0/37.6			24.1/37.1	22.6		20.7/37.1	23.2	22.5	
40.0																21.2			21.5	21.1	
42.0																	20.8/40.5			19.8	
44.0																				19.0/43.5	
46.0																					

■ w/21.35m Tower

Jib Length (m)	36.55				39.60				42.65				45.70				48.75						
Tower Angle (°)	88	83	75	65	88	83	75	65	88	83	75	65	88	83	75	65	88	83	75	65			
Working radius(m)																							
12.0	48.8/13.9																						
14.0	48.7				41.1/14.8							36.5/15.7											
16.0	47.0				40.4							36.3				30.8/16.6			27.5/17.2				
18.0	45.7	46.3/18.7			39.4	39.0/19.9						35.1				30.1			27.2				
20.0	43.1	44.2			38.3	39.0						34.1	34.0/21.0			29.2			26.4				
22.0	39.4	41.6			37.5	37.9						33.3	33.7			28.5	28.5/22.2		25.7	25.4/23.0			
24.0	35.2	37.7			35.5	37.0						32.7	32.6			27.9	28.0		25.1	25.0			
26.0	31.7	34.5	37.7/26.2		32.0	34.4	35.1/27.7					31.7	31.8			27.4	27.5		24.6	24.4			
28.0	28.8	31.5	34.6		29.0	31.4	34.6					28.8	30.4	30.9/29.3		27.1	27.0		24.1	23.8			
30.0	26.4	28.6	31.7		26.5	28.8	31.7					26.3	27.6	30.7		26.6	26.4	26.0/30.8	23.5	23.4	22.7/31.9		
32.0	24.2	26.2	29.2		24.4	26.3	29.3					24.2	25.9	29.1		24.4	25.6	25.7	23.3	22.9	22.6		
34.0	22.4	24.1	27.1	24.9/34.9	22.5	24.2	27.1					22.3	24.0	26.9		22.5	23.9	25.2	22.4	22.7	22.4		
36.0	20.8	22.3	25.0	24.0	20.9	22.4	25.1	23.3/36.8				20.7	22.2	24.9		20.9	22.4	24.8	20.7	21.6	22.0		
38.0	19.4	20.6	23.1	22.4	19.4	20.8	23.2	22.3				19.2	20.5	23.0	21.5/38.8	19.4	20.7	23.2	19.3	20.1	21.6		
40.0	19.2/38.2	18.6	21.4	21.0	18.2	19.3	21.5	20.9	17.9	19.1	21.2	20.7			18.1	19.3	21.5	20.3/40.7	18.0	18.7	21.4		
42.0			19.9	19.7	17.5/41.1	17.6	20.0	19.6	16.8	17.8	19.7	19.4			16.9	18.0	19.9	19.4	16.8	17.4	20.5	18.9/42.2	
44.0			19.9/43.0	18.6		16.9/43.0	18.6	18.5	15.8	16.6	18.4	18.3			15.8	16.8	18.5	18.3	15.7	16.3	19.1	18.1	
46.0				17.5			17.5/45.9	17.5	15.7/44.1	15.1/45.9	17.2	17.2			14.9	15.8	17.3	17.2	14.8	15.3	17.8	17.1	
48.0				17.4/46.4				16.5				16.1	16.3	14.4/47.0	14.5	16.2	16.3		13.9	14.4	16.6	16.2	
50.0								15.9/49.4				15.8/48.8	15.4			13.6/48.9	15.2	15.4	13.3/49.3	13.5	15.6	15.3	
52.0													14.7					14.4/51.8	14.6		12.9/51.1	14.7	14.5
54.0													14.5/52.3						13.9		13.8	13.8	
56.0																		13.5/55.2				13.1	
58.0																						12.6/57.5	