# SCX2800-2

# **GENERAL DIMENSIONS**

### **SPECIFICATIONS**

			Liftcrane application	Luffing towercrane application
Max. lifting capacity $t \times m$		275 × 4.3	80 × 9.3	
Basic boom length m		15.25	_	
Max. boom length		m	91.45	_
Fly jib length		m	12.20 ~ 36.55	_
Boom + fly Jib length		m	70.10 + 36.55	_
Tower length		m	_	21.35 ~ 60.95
Tower jib length		m	_	21.35 ~ 60.95
Tower + jib length		m	_	60.95 + 60.95
Rope line speed(*1)	Front main drum	m / min	110 ~ 2	110 ~ 2
	Rear main drum	m / min	110 ~ 2	110 ~ 2
	Boom hoist drum	m / min	(24 ~ 1) × 2	(24 ~ 1) × 2
	Lifting jib hoist drum	m / min	_	50 ~ 2
Slewing speed		min <sup>-1</sup>	1.5	1.5
Travel speed high/low(*2)		km/h	1.1 / 0.5	1.1 / 0.5
Gradeability		%(°)	30 (17)	30 (17)
Engine	Make&model		Mitsubishi 6M70-TL	Mitsubishi 6M70-TL
	Rated output	kW / min <sup>-1</sup>	272 / 2000	272 / 2000
Ground contact pressure		kPa	124.0	140.3
Operating weight		†	223	252
		ι	(w/15.25basic boom and 275t hook block)	(w/60.95m tower, 60.95m luffing jib and 80t hook block)

- Notes:

  1. These figures are based on drum first layer and rated engine rpm with no load, and vary under load and operating conditions(\*1).

  2. Travel speed is based on flat, level and firm supporting surface, and under the conditions that no load must be applied and front-end attachment must be 15.25m basic boom(\*2)

  3. Unit in this specification is each shown under International System of Units.

  4. Liftcrane and luffing jib capacities of this SCX2800-2, are based on European EN13000 Standards.

- We are constantly improving our products and therefore reserve the right to change designs and specifications without notice.
- Illustrations may include optional equipment and accessories, and may not include all standard equipment.
   Painting color other than blue-and-white shown in this catalog shall be optionally available.

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> Printed in Japan 1403(T)05H EA188-2

# **HITACHI SUMITOMO**

# SCX2800-2

The New World Standard Crawler Crane

**ASIAN ISSUE** 



# The New World Standard SCX2800-2

# Take a closer look. The SCX2800-2. A new standard of 275ton class crawler crane throughout the world:

From now on, the SCX2800-2 will become a new world standard that matches and answers various demands and requirements from customer around the world. "Higher lifting performance", "job-proven controllability", "operator comfort", "superior safety", and "transport ease". The SCX2800-2 takes into its design these points under an advanced and accumulated technologies. Now, the SCX2800-2 just comes around you.

Max. line pull of 245<sub>kN(25t)</sub>

Rated line pull of 132<sub>kN(13.5t)</sub>

High line speed of 110m / min

Engine rated output 272kW(370PS)

# **Higher lifting performance**

The SCX2800-2. A new world standard crawler crane from Hitachi Sumitomo. No doubt at all. He surely provides superior lifting performance. Designed with two freefall-less main winch drums performing 110m / min rope line speed and 245kN(25t) line pull.

# **Faster assembling / disassembling design**

A self-assembling / disassembling device with a good design of "boom live mast with quick-draw cylinder" and "counterweight self-removal device" is standardized, and it results in saving not only time but also cost whenever such kind of job is done.

# **Excellent transportability**

Further, a transportation ease is available as a 3m overall width is designed even for basic main body when disassembling.

Max. lifting capacity:
Liftcrane
275t × 4.3m

Luffing jib 80t × 9.3m

# Reliable job performance with powerful winch drum

The SCX2800-2 certainly performs liftcrane/luffing towercrane works with bigger line pull of 245kN (25t) as maximum with cable of 28mm diameters.



# Bigger drum horse power at widely used rope line speed range

A bigger drum horse power (line pull by line speed) is realized under quite new winch drum design with a specially-tailored power increase control system that maximizes engine output under any load condition in whole range of engine rpm.

# Wider drum is designed

Front and rear main operating drums are able to wind up approx. 51m long cable at drum first layer with 26 windings; it accordingly results in longer cable life under a right cable winding into drum.

### An aluminum-make oil cooler

For not only corrosion-resistance but also high cooling efficiency, an aluminum-make oil cooler is provided in front of engine radiator.

# **Optional luffing jib hoist drum**

A luffing jib hoist drum is optionally available, and is required when rear main drum is used for liftwork with tower head top sheave machinery in the case of luffing jib application.





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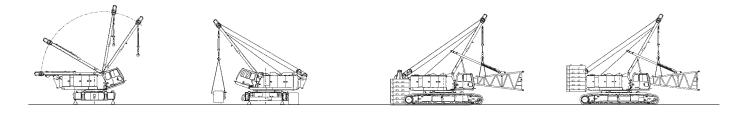


# The New World Standard SCX2800-2

# Faster assembling/disassembling of tread members and a good transportability

# Boom live mast with quick-draw cylinder and independent counterweight self-removal system

A self-assembling device is standardized with designs of "quick-draw system with boom live mast" and "a full counterweight self-removal device", for a good, high safety, accuracy assembling / disassembling work under lesser cost in cooperation with "hook-on design" with hydraulic removal joint pins for crawler side frames. Further, for the basic machine, it is able to transport under 45t weight / 3m width as an European road regulation.



# Side frame can be assembled easily under "hook-on design" with hyd. removal joint pins

Thanks to "hook-on design" with hydraulic removal joint pins, crawler side frames can be easily assembled and disassembled on and from lower frame, and it accordingly results in a time saving task.



**Compact base unit with a total width of** 

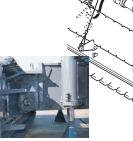
Compact base unit within 3.0 m width is available for

transport ease with a swing-away mechanism.

3.0m for transportation







# **Counterweight with horizontally-spit**

It is able to load boom extensions onto counterweight when transport. And, the reversible stack is possible to reduce the time for disassembling/assembling works.





# **Job-Proven Certain Controllability with** simplified & functional control station layout

# A high operation ease with speciallytailored EPC system.

Thanks to unique EPC system, an easy-precise-minute control of engine rpm and pump discharge from min. thru max. is really possible at the same time by simply twisting the grip fitted on slewing control lever.





# A power hydraulically tiltable cab

In consideration of operator comfort, a new operator's cab much improves the visibility thru front and both side windows of the cab under simplified layout of control station. In addition, a power hydraulically tiltable cab is designed for good upward visibility with 20 degree's tilting as max.





# Armchair control station with drum rotation sensors.

An armchair control station is provided for a good, easy and comfortable operation. In addition, armchair control levers of two main and boom hoist drums each fit the drum rotation sensor to let operator sense a drum rotation speed decrease/increase by a knob vibration per 11 mm cable winding/rewinding movement at 1st drum layer, and it results in performing more safety lifting work, especially in blind condition.

# A good slewing & boom hoisting/lowering speed control design

Boom hoist drum rotation speed can be freely controlled thru knob dialing independently for more precise combined operation of hook and boom motions. In addition, max. slewing speed can be freely controlled thru knob dialing too, and, as an example, it realizes a precise combined operation under higher hook hoisting and lower slewing speed in high lift work.





# The New World Standard SCX2800-2

# **Excellent reliability in every safety function**



# **Lifting height indication** function

For more safer lifting work especially in blind condition, it is available to indicate the lifting height above ground or depth below ground on display panel of LMI.





# **Boom speed slowdown** function

This function is available just before automatic stopping of boom motion at both upper and lower side limits of boom angle to prevent a shock even though control lever is still at hoisting/lowering position. This function is also available when overloading in the case that working radius exceeds the specified one.

# **Secondary boom** over-hoisting limiter

Further to boom over-hoist limiting function by the limit switch and LMI safety circuit, an additional limit switch is located on boom backstops for redundant boom protection.



# front-end att. erection mode with letter message

area, the LMI display panel automatically indicates "Now, out of crane working range" with a rigging instruction, and it is available to lift front-end att. off ground without the influence of LMI safety functions, and, after front-end att. is lifted over the range of crane working area, LMI safety function gets back automatically for safe erection work.



# **Lock lever** (Fool proof shut-off lever)

To insure safety when the operator leaves the cab, a main hydraulic shut-off switch is located in the cab exit to deactivate and lock the hydraulic system.

# **Automatic drum pawl** locking device

On boom hoist drum, it is designed to automatically lock and release drum pawl when control lever just returns to neutral position, and just actuates.

