

Hydraulic Crawler Crane

HITACHI SUMITOMO

# SCX2500

HITACHI SUMITOMO CRAWLER CRANE SCX2500



## Combination of Power and Speed makes every job possible!

Max.  
line pull of  
**245**  
kN

Rated  
line pull of  
**132**  
kN

High  
line speed of  
**120**  
m/min



### Winch system with fully independent hydraulic circuit and Powerful line pull fulfills a wide range of jobs

Adopted full independent winch system with one axle-one drum-one motor-one pump. This system responds widely to various jobs such as those requiring buckets, vibro-hammer and tower attachments without variation of motor speed by mutual interference. And unique power control system (EPPSA) enables drum horsepower to be as close to engine output as possible, which enables it to respond to heavy duty work with powerful line-pull. And furthermore engine stalls during low RPM operation or heavy load duty work are eliminated. This new system reduces horsepower loss at a minimum by utilizing the new hydraulic system.

※Free fall device is available as option.



### Reduced working hours with greatly improved line speed.

The greatly improved line speed of 120m/min. at the first drum layer is achieved by adopting a variable displacement motor at the center of the winch system. Increased power and lowering speed helps work time to be reduced, which is especially ideal for tower crane work or underground excavation work requiring by high lifting height.

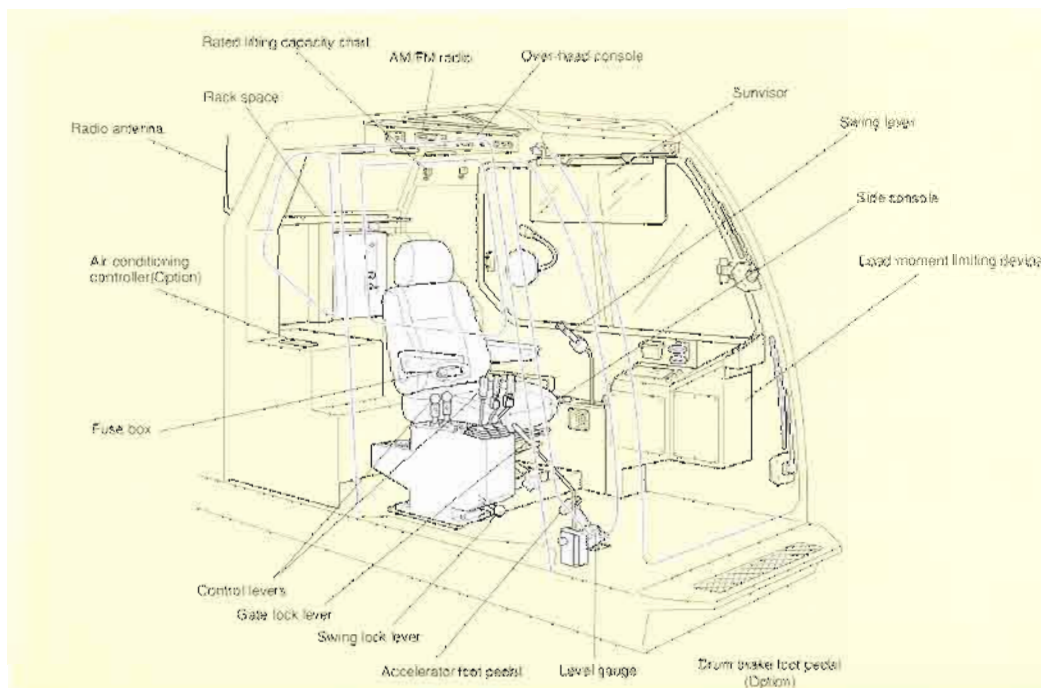
### Large wide drums extend life of wire rope.

Large wide drums (42m at the first layer) with built-in reduction gear can realize the extension of wire rope which prevents chafing of wire ropes due to small drum capacity in case of clamshell and dragline work.

Automatic cooling fan reduces power loss.

A 235kW turbo-charged diesel engine with high output and low fuel consumption.

Smooth swing with newly developed non-step speed control system.



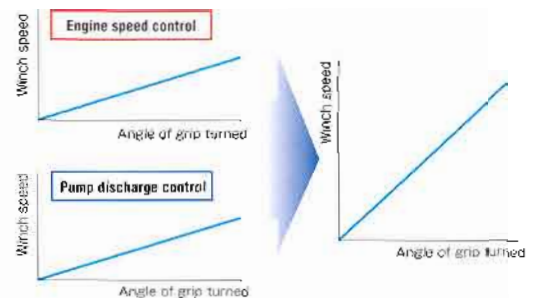
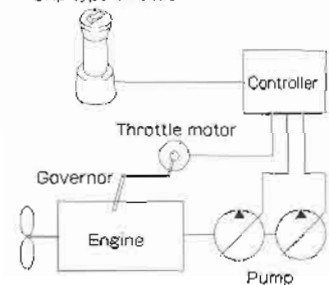
## SC controller makes highly-skilled operation easy

Thanks to unique SC controller, one-handed simultaneous control of engine and pump is possible.

Grip-type throttle control on the swing control lever enables continuous control of minimum to maximum speed by twisting the grip and also one-handed control of the engine and pump at the same time.



Grip-type throttle



### Hydraulically assisted drum brakes reduce operator fatigue (Option)

In the case that free-fall device is optionally designed on both front and rear drums, a newly developed hydraulically assisted brake system has been adopted on its external contracting band brake to increase braking effects with less foot power. It results in significantly less operator fatigue during the operations which often require free fall of the winch. An automatic brake mode can be selected for safety during conventional liftcrane operation.

## Safety system provides people on the job site with high security.

### Newly developed SML-10 Safe Load Indicator (with message display)

Indicator of warning, emergency stop, load due to overloading together with newly adopted message display system reduces setting work of moment limiter. And lifting height meter can be equipped as an option for working in "blind" conditions.



### Speed slowdown device (incorporated with SML-10 Safe Load Indicator)

The new overload limit system automatically slows down the drum speed to one third of normal speed as the lifting capacity approaches the limit. It safely prevents load swing due to sudden shock.

### Dual hook over-hoist limiting device

Hook over-hoist limiting device and speed slowdown device installed with lifting height meter (Option) in load moment limiter safely prevents hook over-hoisting.

### Travel control lever

Travel control levers are a short-lever type, and located at right-hand near armchair control station. And, it results in operator's rear view ease.



### Dual warning for swing alarm, with audible and visual signal

Flasher synchronizes alarm in swing motion. Buzzer of swing alarm can be set up individually. Buzzer of swing alarm can be deactivated for operation at night.



### Gate lock lever for fool proof shut-off system

### Stop release key switch

### Annunciator-type overload warning system (incorporated with SML-10 Safe Load Indicator)

This system for 16 different alarms including overloading, and excessive boom lowering etc. helps operators to react quickly in latent danger. And as it is impossible to release both stop motion and alarm systems, it prevents accidents caused by preset release.

#### Warning messages:

- ① Overload limit
- ② Auto stop
- ③ Boom hoist limit
- ④ Jib hoist limit
- ⑤ Boom lower limit
- ⑥ Jib lower limit
- ⑦ Two-block limit
- ⑧ Free mode activated
- ⑨ Free-fall
- ⑩ Height limit set
- ⑪ Radius limit set
- ⑫ Luffing attachment protection activated
- ⑬ Boom protection activated
- ⑭ Hydraulic control pressure reduced
- ⑮ Stop release
- ⑯ Rigging mode

### Three color percentage indicator (Option)

Three color percentage indicator can be equipped as option, which is similar to traffic light and enables people to be aware of.



### Dual boom over-hoist limiting device

Two kind of limit switches are located in boom foot and boom backstops respectively, so that it prevents any damage caused from boom over-hoisting twice.



**Comfortable operation**

# Large windshield with wide visibility can realize comfortable operation

Improved front visibility



Arm chair control lever can provide easy operation



Improvement of space under foot



## Better mobility enables transportation speed to be much higher

### Counterweight with 9-horizontally-split units

It is able to minimize no. of vehicle as boom extension(s) can be loaded on counterweights after counterweights were onto trailer. Also, it enables to reduce the time for assembling and disassembling work of counterweight as their reversible stack is possible when their stack on ground is temporarily required.



### Folding mast

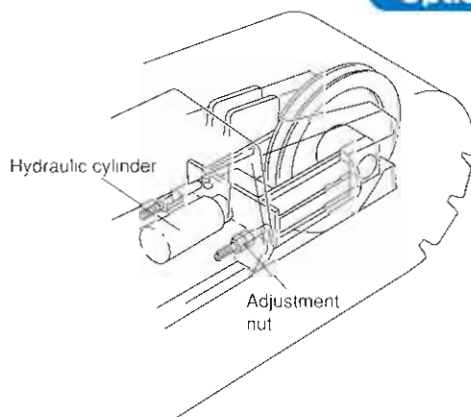
Folding mast makes assembly and disassembly easier and faster.



### Automatic track tension system

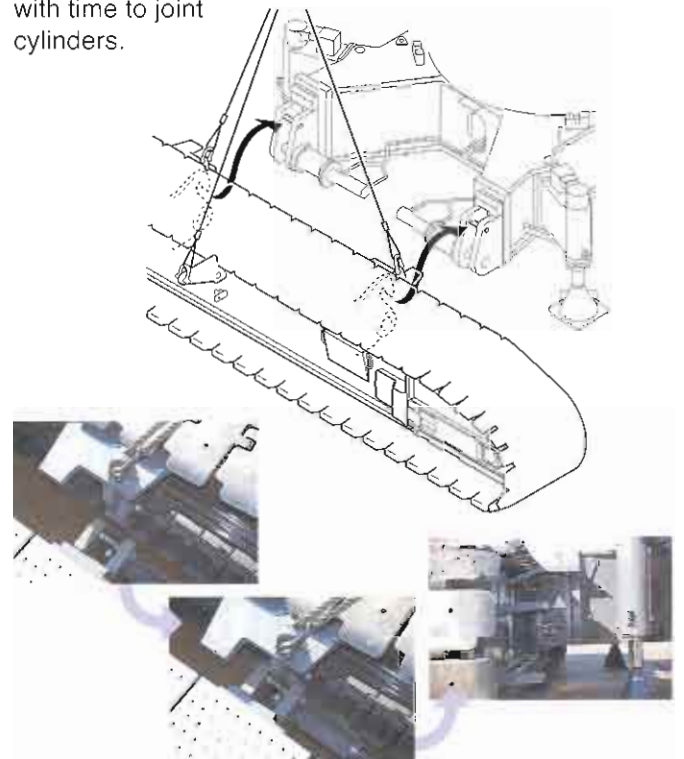
Our reliable automatic track adjustment system uses hydraulics to keep track tension at an optimum level. Should foreign matter lodge between track and idler, hydraulic pressure works as a cushion to prevent damage.

**Option**



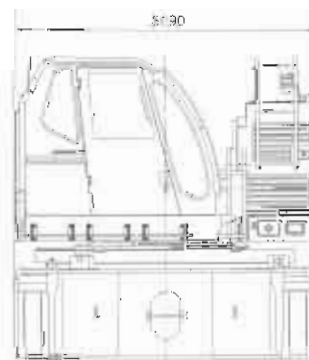
### Side frame can be assembled easily only by hydraulic cylinders

Newly-developed cylinder-joint system is designed to assemble the side frames on carbody frame by operation of cylinder. Assembly work can be finished with time to joint cylinders.



### Compact base unit with a total width of 3200mm for transportation

Compact base unit within 3.19 m width is available for transport ease.



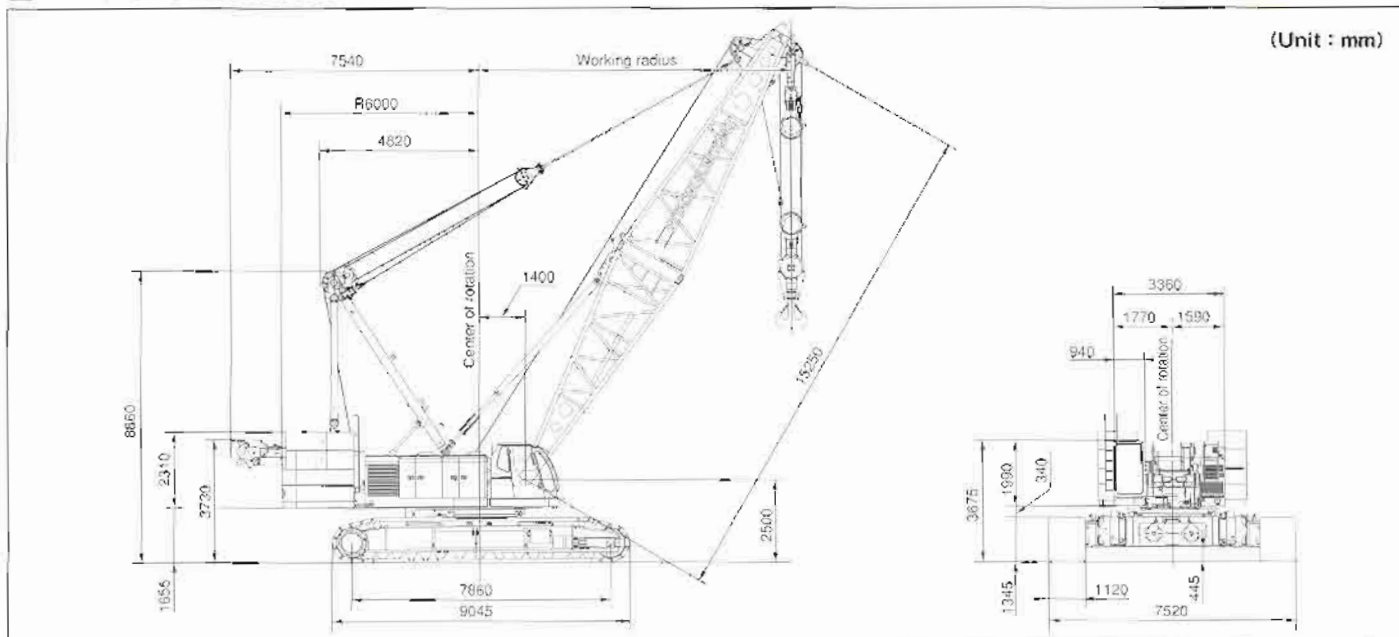
# A good consideration for human being and environment is done too

## Clean and low noise engine

Engine meets current EU Emission Regulations for Off-Road Diesel Engine – Stage 2, and Japanese Emission Standard for Diesel Construction Equipment – Stage 2, and clears low noise level as defined by Ministry of Land, Infrastructure and Transport of Japan under the new noise measuring methods regulated by ISO.



## General dimensions



(Unit : mm)

## Specifications

Description		Liftrane application	Luffing towercrane application (Version A)
Max. lifting capacity	t×m	250×4.6	25×18
Basic boom length	m	15.25	—
Max. boom length	m	88.40	—
Fly jib length	m	12.20~36.55	—
Boom + fly Jib length	m	73.15+36.55	—
Tower length	m	—	36.55~60.95
Tower jib length	m	—	27.45~51.80
Tower + jib length	m	—	60.95+51.80
Rope line speed(*1)	Front main drum	m/min	120~2
	Rear main drum	m/min	120~2
	Boom hoist drum	m/min	(24~1)×2
Swing speed	min <sup>-1</sup>	1.7	1.7
Travel speed high/low(*3)	km/h	1.2/0.8	1.2/0.8
Gradeability	% (°)	30 (17)	30 (17)
Engine	Make & model	Mitsubishi 6D24-TL	Mitsubishi 6D24-TL
	Rated output	kW/min <sup>-1</sup>	235/2000
Ground contact pressure	kPa	109	121
Operating weight		203	225
		(w/basic boom and 250t hook block)	(w/60.95m tower, 51.80m jib and 25t 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 This figure is applicable to tower jib hoisting(\*2)

3 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(\*3)

## Standard equipment

### Superstructure

Standard tools and tool box  
Head lights  
Rear view mirrors  
Foot step at side frame  
Slings for assembly and disassembly  
Gantry lifting cylinders  
Joint cylinders  
Foot throttle  
SC controller  
Lower jack-up device  
Swing speed control mechanism  
Side step at operator cab  
Windshield wipers w/washers

### Operator cab

Radio with AM/FM and clock  
Sunshade  
Sunvisor  
Cup holder  
Floor mat  
Ashtray and lighter  
Rack  
Book holder

### Safety device

Level gauge (in operator cab and lower frame)  
Swing and travelling alarms  
Annunciator-type overload warning device  
Gate lock lever for foot pedal shut-off system  
Dual boom over-hoist limiting device  
Individual control lever lock  
Engine service monitor  
Emergency machine stop buttons  
Speed slowdown device  
Drum locks

•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.

Specifications subject to change without notice

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