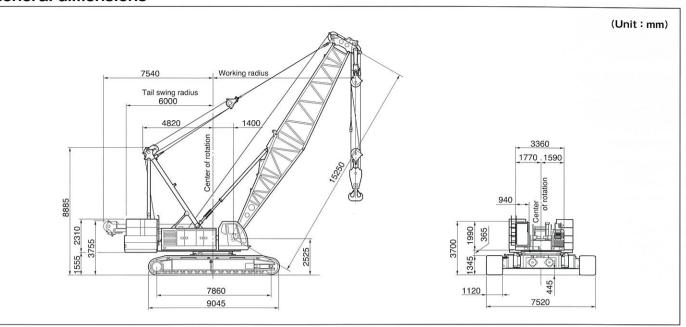
#### **■**General dimensions



#### **■**Specifications

	Description		Liftcrane application	Luffing towercrane application
Max. lifting capacity t×n		t×m	250×4.5	70×11
Basic boom length m		m	15.25	
Max. boom length		m	88.40	_
Fly jib length		m	12.20~36.55	— — — — — — — — — — — — — — — — — — —
Boom + fly Jib length		m	70.10+36.55	_
Tower length		m		21.35~60.95
Luffing jib length		m	_	21.35~60.95
Tower + luffing jib length m			60.95+60.95	
Rope line speed(*1)	Front main drum	m/min	120~2	120~2
	Rear main drum	m/min	120~2	120~2
	Boom hoist drum	m/min	(24~1)×2	(24~1)×2
	Luffing jib hoist drur	m m/min		50~2
Swing speed		min <sup>-1</sup>	1.7	1.7
Travel speed high/low(*2)		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	235/2000
Ground contact pressure kPa		117.2	133.4	
Operating weight t			210 (w/15.25 basic boom and 250t hook block)	239 (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.For liftcrane and luffing towercrane capacities of this SCX2500LF, it is available in two kinds of ratings; one is based on European EN13000 & DIN15018/3 Standards, and the other is based on American SAE 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.

#### Address inquires to:

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http://www.hands-crane.com

#### ■Standard equipment

# Superstructure Standard tools and tool box; Head lights; Rear view mirrors; Foot step at side frame; Crawler side frame sling ropes w/shackles; A-frame gantry cylinders; Hyd. removal Joint pins; Foot throttle; SC controller; Carbody 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;

Ashtray and lighter; Rack; Book holder;

#### Safety device

SML-10 Load Moment Limiter;
Hook over-hoist limiting device;
Boom over-hoist and -lowering limiting device;
Level gauge (in operator cab and carbody frame);
Swing and traveling alarms;
Audible warning device;
Fool proof shut-off system;
Dual boom over-hoist limiting device;
Individual control lever lock;
Engine monitoring lamps;
Emergency machine stop buttons;
Speed slowdown device;
Drum locks;
Swing lock;

**HITACHI SUMITOMO** Hydraulic Crawler Crane SCX2500LF

## **Combination of power and speed makes every job possible!**









#### Winch system with fully independent hydraulic circuit and powerful line pull fulfills a wide range of jobs. Adopted full independent winch system with one drum-one motor-one pump.

This system certainly performs various jobs under any applications such as liftcrane, luffing towercrane, vibro-hammer and clamshell bucket without drum rotation speed change by mutual interference of hydraulic circuit oil flow. And, by employing an unique power control system (EEPSA), the engine always maximizes its output under any load condition, and accordingly engine stall can be eliminated. And, an increase of output can be realized in whole range of engine rpm. In addition, a new hydraulic system and automatic cooling fan minimize engine power loss as much as possible.

XA multiple wet-disc type automatic brake is standardized on two main operating drums; a true gravity free-fall and automatic brake modes are available on these drums as an optional extra with a conventional brake/clutch drum design instead, if required,



#### 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 on two main operating drums. Increased power load lowering speed helps reduce the time in every works especially for luffing towercrane work requiring high lifting height.



Wide drum which is available to wind up 42m long of cable at the first layer is designed under installation of reduction gear unit within drum inside, and can realize to prolong the life of cable under a right cable winding into the drum.

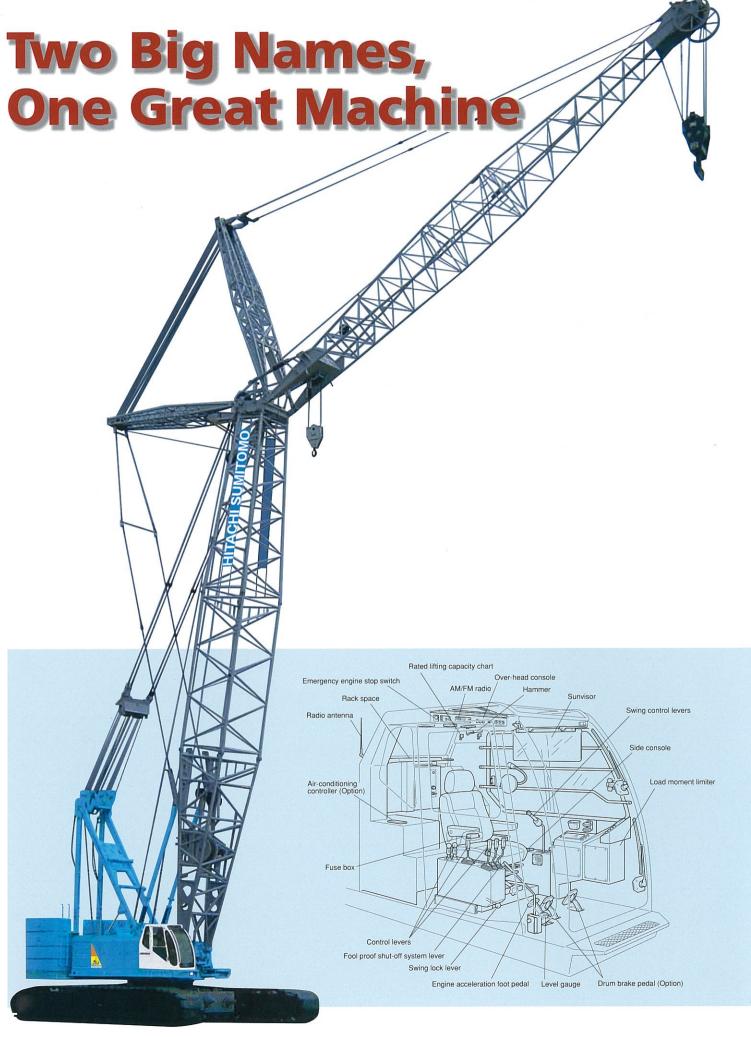
A 70t×11m nominal luffing towercrane capacity with combo type front/rear posts and an independent luffing jib hoist winch drum design.

Approx. 122m maximum tip height under luffing towercrane att. of 60.95m tower + 60.95m luffing jib.

**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.

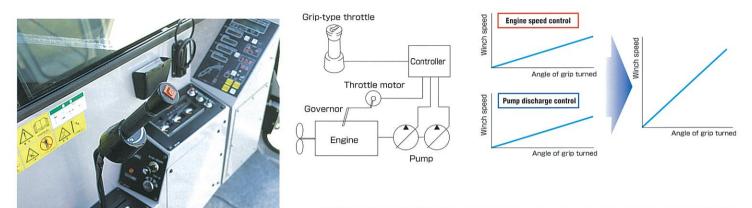


#### Safety

### **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 realizes a continuous and easy-precise-minute control of the engine rpm and pump discharge from minimum to maximum at the same time by simply twisting the grip.





# Optional hydraulically assisted drum brakes reduce operator fatigue.

In the case that free-fall function is optionally required on both front and rear drums, a newly developed hydraulically assisted brake system is 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.

## Newly developed SML-10 Load Moment Limiter with message display.

A fully computerized automatic over-load preventing system of model SML-10 Load Moment Limiter functions alarming, automatic machine stop and emergency stop whenever over-loading, and its display panel indicates several kinds of present working and lifting conditions like

actual lifting load for high level of safety operation. Also, newly designed display system greatly reduces setting and adjusting times for this kind of safety device. In addition, lifting height meter can be equipped as an option, effectively available for working in "blind" condition.



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

Flasher synchronizes alarm in swing motion. In night operation, buzzer of swing alarm can be deactivated for a

calm operation. In addition, travel warning buzzer is available to alert work crew around the machine to keep clear too.

Safety device provides an excellent reliability and safety operation.



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

#### Stop release key switch.

#### Speed slowdown device.

This function is one of safety functions of the SML-10, and 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 over-loading in the case that working radius exceeds the specified one.

#### Hook hoisting speed slowdown device.

This device is installed in an optional lifting height meter, and is available to perform hook over-hoist limiting motion safely furthermore in functionally combination with standardized hook over-hoist limiting device.

#### 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.

#### Audible warning alarm.

This is one of functions of SML-10 Load Moment Limiter, and available to let operator know pre-warning before all of operation limits like "over-loading", "boom over-hoisting and - lowering" and so on by ten and some kinds of different audible buzzer.

#### Optional three color percentage indicator.

Three color percentage indicator can be equipped as option which is similar to traffic light and to available to let work crew around the machine know machine working status-quo.



#### **Dual boom over-hoist limiting device.**

Further to boom over-hoist limiting function by the limit switch and Load Moment Limiter safety circuit, an additional limit switch is located on boom backstops for redundant boom protection. This kind of device is also available on towercrane luffing jib backstops.



#### **Comfortable operation**

## Large windshield with wide visibility realizes an operator comfort.

#### Improved front visibility.



## Arm chair control lever can provide easy operation.



Improvement of space under foot.



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

#### Clean and Low Noise Engine.

Engines meet 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.

#### **Transportation**

## Transportation and assembling ease results in a time saving task.

## 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.



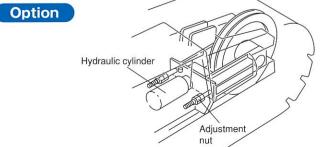
#### A-frame gantry with folding design.

Folding design helps make an easier and faster assembling and disassembling of the A-frame gantry.



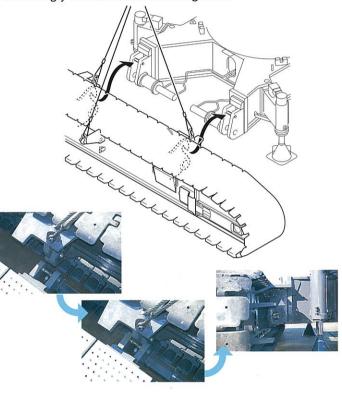
#### Optional automatic track tension system.

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



# 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 car-body frame, and it accordingly result in a time saving task.



## Compact base unit with a total width of 3200mm.

Compact base unit is available to set a 3.19m overall width under swing-away design of operator cab for transport ease.

