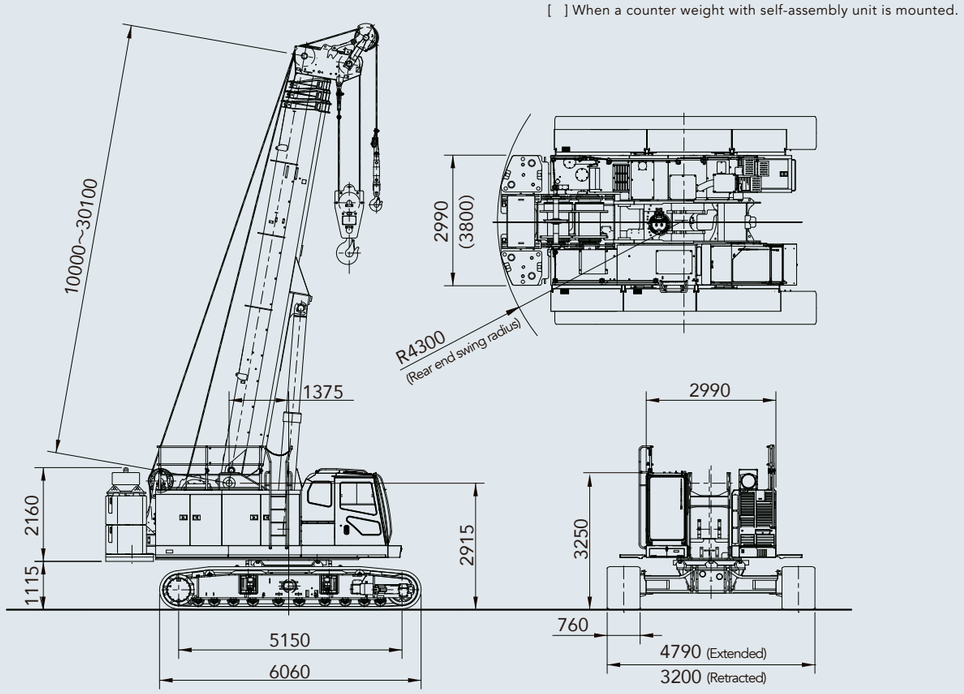
General dimensions

Units: mm

[ ] When a counter weight with self-assembly unit is mounted.



Specifications

			Lift crane
Max. lifting capacity x work radius		t × m	65 x 3.0
Boom length		m	10～30.1
Boom type			4-section telescopic boom
Rope line speeds (*1)	Front/rear	m / min	105
	3rd winch (option)	m / min	105
Boom hoist speed (*2)		sec/angle	52/0～78.0
Swing speed		min^{-1}(rpm)	4.5 (4.5)
Travel speed	High/low (*3)	km/h	1.7 / 1.2
Gradeability		% (°)	30 (17)
Engine	Make & model		Isuzu 6HK1 (Stage III B / Tier 4 i)
	Rated output	kW/min^{-1} (PS/rpm)	210/1900 (285/1900)
Ground contact pressure		kPa	92.4 (with 65 t hook)
Operating weight		t	70.9 (with 65 t hook)

Notes: 1. Rope line speeds vary under load and operating conditions (*1).
2. Boom hoist speeds vary under load and operating conditions (*2).
3. Travel speed is based on flat, level and firm supporting surface with no load (*3).

- We are constantly improving our products and therefore reserve the right to change designs and specifications without notice.
- Units in this catalog are shown under International System of Units (SI). The figures in parenthesis are under the older British Gravitational System of Units.
- Illustrations may include optional equipment and accessories, and may not include all standard equipment.
- Standard equipment and accessories may vary by country and region.

Sumitomo Heavy Industries Construction Cranes Co., Ltd. has been abbreviated as "HSC" throughout this catalog. "HSC CRANES" is a brand of Sumitomo Heavy Industries Construction Cranes Co., Ltd.

Address inquiries to :

Sumitomo Heavy Industries Construction Cranes Co., Ltd.

9-3, Higashi-Ueno 6-chome, Taito-ku, Tokyo 110-0015, Japan
Phone: 81-3-3845-1387 Facsimile: 81-3-3845-1394
http://www.hsc-cranes.com

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650 TLX

TELESCOPIC CRAWLER CRANE

650TLX-Inspired by Innovation

The “650TLX” represents the optimum telescopic crawler crane that comes from extensive experience with cranes, down to every little aspect and detail.
The “650TLX” is equipped with a lightweight, rigid 4-section telescopic boom mounted on a proven crawler crane body. The result is unsurpassed operating ease and control suited to a broad range of worksites, while delivering the level of eco-friendly performance, transportability and safety that is essential for today. The enhanced telescopic crawler crane “650TLX” is designed with sophisticated styling and unrivaled job flexibility. Unprecedented handling and performance are here to inject innovation into your business.

＊Photos may differ to the specifications of available products.

Telescopic boom for better work efficiency with so many jobs

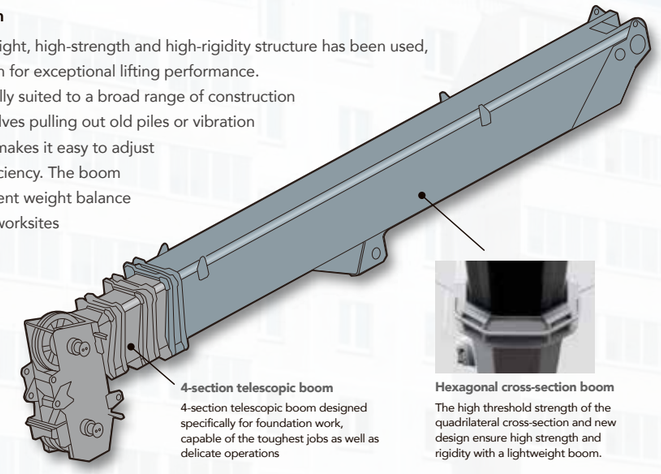
A high level of performance is essential on construction sites with tough, diverse working conditions. The 650TLX features a lightweight, high-rigidity 4-section telescopic boom for unprecedented operating ease and control. Flexibility for any work site and superb mobility brings even better work efficiency.

High-rigidity 4-section telescopic boom

A 4-section telescopic boom with a lightweight, high-strength and high-rigidity structure has been used, and coupled with a high-performance winch for exceptional lifting performance. The high rigidity of the boom makes it ideally suited to a broad range of construction methods such as foundation work that involves pulling out old piles or vibration hammer operations. The telescopic boom makes it easy to adjust the length of the boom for better work efficiency. The boom foot is also positioned at the rear for excellent weight balance and practical lifting performance, even on worksites with limited height (or low headroom).

■ **Crane specifications**

Max. lifting capacity x work radius	**65 t x 3.0 m**
Boom length	**10 m~30.1 m**



4-section telescopic boom
4-section telescopic boom designed specifically for foundation work, capable of the toughest jobs as well as delicate operations

Hexagonal cross-section boom
The high threshold strength of the quadrilateral cross-section and new design ensure high strength and rigidity with a lightweight boom.

Powerful winch and crawler mean peace of mind

Powerful 7 t rated line pull winches (22.4 mm diameter rope) have been used at the front and rear. Outriggers are not needed, which means excellent mobility on sites with soft ground, while excellent stability in all directions and superb lifting capacity means work with peace of mind.

Excavation mode

"Excavation mode" is available to suit foundation construction work such as drill augers and drilling pylon holes.

Powerful hydraulic system OPTION

The crane includes a powerful hydraulic system to cater to varying types of foundation work and construction requirements, and is compatible with high-load attachments such as augers and vibro-equipment. A 3rd winch is also available as an option for work requiring entire casing drivers to be lifted.

■ **Auger hydraulic system**
Max. pressure **31.4 MPa** Max. flow rate **520 L/min**

■ **Hydraulic output system**
A Max. pressure **13.7 MPa** Max. flow rate **38 L/min**
B Max. pressure **27.4 MPa** Max. flow rate **150 L/min**

Note: The maximum flow rate varies with load.

＊Photos may differ to the specifications of available products.

Note: Ensure compliance with road rules and regulations during transportation and driving.

650TLX TRANSPORTABILITY

Innovative transportation and assembly system to suit even more worksites

The 650TLX has been designed with an exceptional transportation and assembly system to meet a diverse range of transportation requirements. The quick assembly system for the boom and other core component makes assembly possible even on the tightest job sites. Efficient transportation means lower costs, and streamlined assembly boosts the types of job sites the crane can work on comfortably.

Crawler with self-assembly unit (with crane inspection system) OPTION

Counter weight with self-assembly unit OPTION

Foldable jack allows work and crawler retraction while mounted OPTION

Superb breakdown and assembly for quick and diverse preparation

A crawler with self-assembly unit (with crane inspection system) that uses a telescope boom, and counter weight with self-assembly unit are available as optional extras, allowing cranes to be assembled quickly in tight spaces. A newly developed foldable jack (optional) can remain mounted to the crane for even smoother assembly and operation after transportation to the site. Such diverse configuration options mean work is possible on a greater range of work sites.

Note: The counter weight width is 3.8 m with the counter weight with self-assembly unit installed.

2.99 m transportation width

To comply with change in transportation requirements and more stringent regulations, the crane can be loaded on trailers less than 3 m-wide. The transportation width is within 3 m even with the folding type jack beam installed, and transportation weight is 30.7 t with jack installed.

Note: The catwalk must be removed when transporting with the 2.99 m transportation width.

The efficiency of telescopic boom cranes

Compared to lattice booms, telescopic booms help to reduce the number of components during transportation, which helps to cut back transportation costs. They also take less assembly space and make assembly/disassembly time quicker, all of which translate to better construction efficiency. A boom assembly/disassembly system is also available as an option. Truly innovative assembly and transportation capability, and the potential for using smaller helper cranes and meeting more transportation regulations.

Designs for ease of transportation and assembly

[Transportation]
- Crawler extension/retraction system
- Boom transportation mount OPTION
- Boom foot pin assembly/disassembly jig and tool OPTION

[Assembly]
- Multi-assembly stage monitoring system
- Cat-walk (folding type) OPTION
- No-counter weight specification
- Handrails (folding type) OPTION
- Boom stanchion OPTION

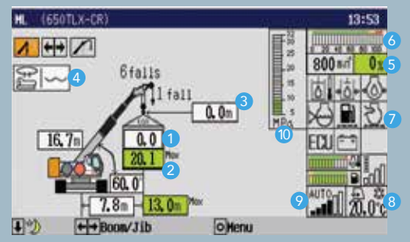
＊Photos may differ to the specifications of available products.

650TLX SAFETY

Reliable and precise. Safety to protect against the unexpected.

Safety should be utmost on any worksite, and the 650TLX raises the bar even further with the latest in safety technology developed with lattice boom cranes. A large, user-friendly display monitor system, warning alarm and other features to prevent accidents from happening are installed to fully assist operators during operations. Handrails (folding type) and a catwalk are also installed as standard to ensure safety during maintenance.

Moment limiter display

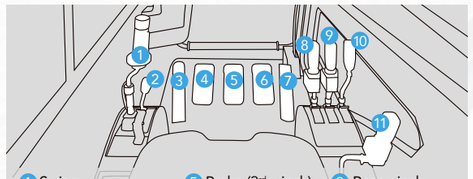


1. Actual load ratio
2. Rated load
3. Hook position
4. Swing neutral mode
5. Load ratio indicatore
6. Load ratio meter
7. Warning icons
8. Air-conditioner icon
9. Muffler filter regeneration icon
10. Auger hydraulic pressure gauge

Moment limiter with large screen display

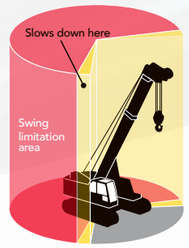
A large screen display has been used offering excellent visibility and field of view of any job. A host of items can be shown, while a simple display layout ensures that information is provided to the operator properly. The display has also been designed with an interactive interface to follow any movement of the crane from a safety perspective, which helps to limit unintended operations and maintain utmost safety.

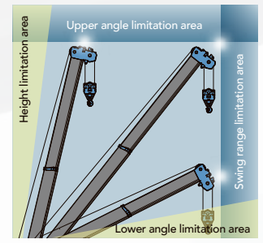
Telescopic crane pedal and lever layout



1. Swing
2. Boom extend/retract
3. Boom hoist
4. Brake (F)
5. Brake (3rd winch)
6. Brake (R)
7. Accelerator pedal
8. Front winch
9. Rear winch
10. 3rd winch
11. Auger hydraulic system

Note: Image includes optional features.





Swing restriction unit OPTION

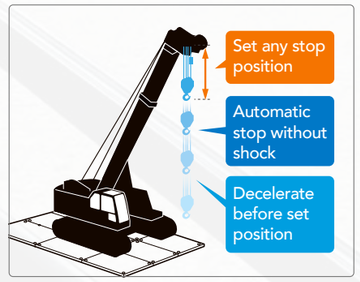
The swing restriction unit prevents the crane from swinging into objects by allowing the swing range to be preset with the M/L, and notifying the operator of the swing range and automatically stopping the crane when required. The work area can be configured through a combination of the M/L boom height limitation and boom angle limitation (upper/lower). This helps prevent accidents result as well as boost efficiency with repetitive work.

Designed for safe work

Functions such as a boom auto slowdown device and swing neutral free/brake mode selector switch help to boost safety.

ML Anti-two block

A new anti-two block using a lifting height indication device is included as standard. When a height restriction is set in advance in the lifting height meter, the slowdown function will kick in as the restricted height is approached to prevent hook overhoist.



Note: This function plays a supplementary role to the existing moment limiter and use of this equipment alone is prohibited by laws and regulations.

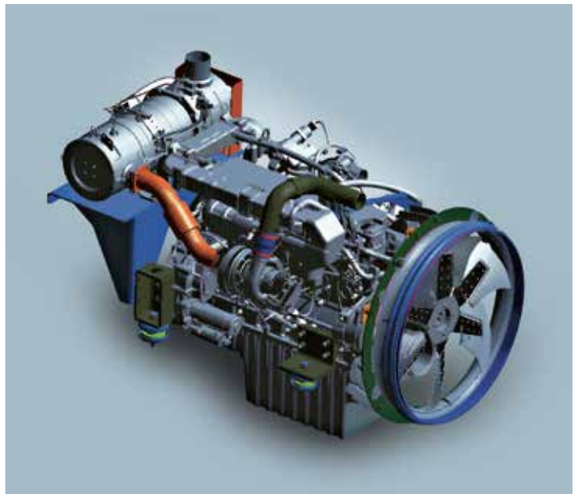
Other safety functions and devices

- Gate lock lever
- Anti-two block
- Three color percentage indicator
- Individual winch operation lever locks
- Emergency engine stop switch
- Winch drum lock (front, rear)
- Drum and rear view monitor system OPTION

＊Photos may differ to the specifications of available products.

Clean and economical. Environmentally-friendly for mankind and society

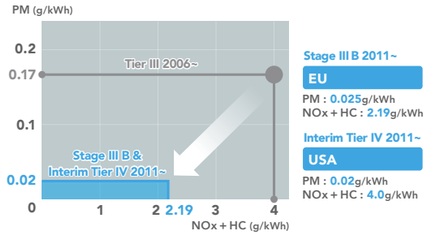
A new greener engine delivers clean power required for Hitachi Sumitomo new generation of cranes. This advanced, environmentally-friendly technology ensures a more pleasant experience for everyone, surrounding towns, well into the future. Fuel consumption has been fine-tuned for more economic operation, which also presents major benefits from a management perspective.



Powered with a new-generation of clean engine

The crane is powered with a new-generation of clean engine that complies with tougher new emissions regulations enforced in Japan, North America and Europe. A major reduction in exhaust gas emissions and a reduction in fuel consumption help to decrease CO_2 emissions. The new engine and power train have been engineered to be even more environmentally-friendly.

■ Clean performance (JPN)



Muffler filter to reduce PM emissions

A muffler filter for removing PM has been used as a new exhaust gas post-treatment device. The filter offers great practicality with automatic regeneration control every 8 to 10 hours.

Display of muffler filter conditions (moment limiter display)

Precautions when using the muffler filter

- Always use diesel as fuel. Ensure that the designated low ash oil (JASO DH-2, and ACEA E6. E9) is used for engine oil.
- The muffler filter will become hot when it is being regenerated. Check for safety by ensuring that there are no flammable objects nearby.
- The exhaust gas temperature will rise during regeneration. This may have a slight impact on operating performance.

Improved cooling

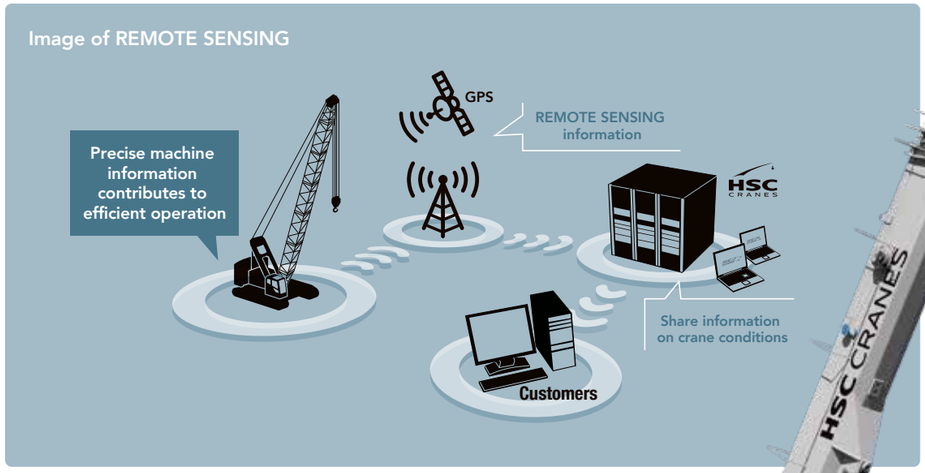
The radiator, oil cooler, and air-conditioner heat exchanger have been combined into a single panel. This increases the cooling efficiency of the heat exchangers and improves maintenance accessibility and reliability.

"REMOTE SENSING" system installed as standard

Precise monitoring of the crane's operating condition to minimize downtime and ensure accurate maintenance. Keeping machines in the best possible operating condition helps to improve operating efficiency, while also reducing the time and cost required for maintenance.

Store data on machine conditions and operations, remote management
(total operating time management, position information with GPS, operating condition management such as work conditions)

- Minimize downtime
- Accurate maintenance
- Better safety



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