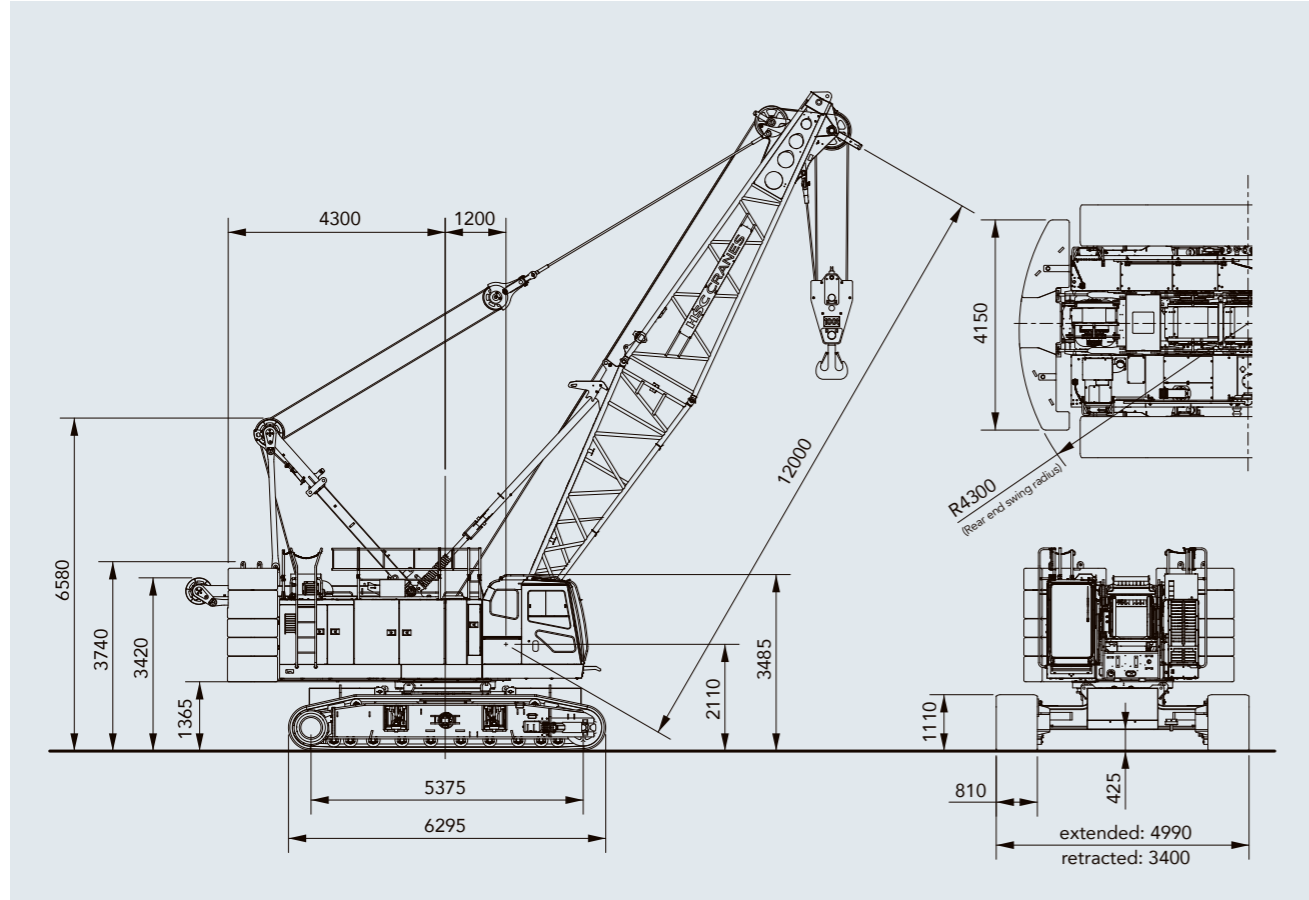


General dimensions

Units: mm



Specifications

Model		SCX1000HD-3	
Application		Liftcrane	Clamshell
Max. lifting capacity	t × m	100 × 3.8	—
Basic boom length	m	12	12
Max. boom length	m	60	24
Rope line speeds (*1)	Front/rear main drum	m/min	110
	3rd winch drum	m/min	95
	Boom hoist drum	m/min	44
Swing speed	min ⁻¹ (rpm)	2.4 (2.4)	
Travel speed high/low(*2)	km/h	2.0 / 1.1	
Gradeability	% (°)	30 (17)	
Bucket capacity	m ³	—	3.0
Allowable gross weight	t	—	12.5
Max. digging depth	m	—	36
Engine	Make & model	Cummins QSL9 (Stage III A / Tier 3)	
	Rated output	kW/min ⁻¹ (PS/rpm)	280/2,000 (380/2,000)
Ground contact pressure	kPa (kgf/cm ²)	118 (1.21) (w / basic boom and 100 t hook block)	118 (1.20) (w / basic boom and 3.0 m ³ clamshell bucket)
Operating weight	t	105 (w / basic boom and 100 t hook block)	105 (w / basic boom and 3.0 m ³ clamshell bucket)

Notes: 1. Rope line speeds vary under load and operating conditions (*1). 2. Travel speed is based on flat, level and firm supporting surface with no load and 12 m basic boom (*2).

- 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.

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SCX
1000HD-3



New 100t

Heavy Duty Model to Transform Foundation Work!

Elevating worksites with movement like no other.

With the immensely capable performance of the HD series, the SCX900HD-2 was always at the top of the foundation construction sites. As its genuine successor model, the SCX1000HD-3 has been further fine-tuned for a high level of performance suited to a new age. Lifting capacity has been increased to 100 t to make easy work of trenching for continuous diaphragm walls, and with high-precision operations designed for foundation work, performance is outstanding in every regard. Unrivaled work efficiency and ease-of-use engineered to meet the most demanding needs to elevate any worksite.

SCX 1000HD-3



The Good Design Award has been granted to the "SCX-3 Series" for its superb operability, ease of transportation and assembly, safety, and eco-friendly performance as a new generation of crane.

*Photos may differ to the specifications of available products. Attachments and hose reels are not HSC products, and are not included in sales specifications.



SCX1000HD-3 PERFORMANCE

Unsurpassed capabilities truly shine on tough worksites.

The superior capabilities of the HD series have been honed even further to meet the needs of high-load, repetitive jobs. Power has been boosted to achieve a 100 t lifting capacity, coupled with outstanding synchronized operation required for foundation work. The true value of the SCX1000HD-3's exceptional performance shines on challenging worksites like diaphragm wall trenching or foundation work.



<p>■ Lifting performance (maximum load x work radius) 100 t x 3.8 m <small>(crane specifications)</small></p>	<p>SCX900HD-2 was 90 t x 4.0 m</p>
<p>■ Maximum work radius 1.7 t x 49.2 m <small>(crane specifications)</small></p>	<p>SCX900HD-2 was 1.5 t x 44.4 m</p>

Up to 100 t lifting capacity

The SCX1000HD-3 excels with an extra 10 t lifting performance over the previous SCX900HD-2. Now with an ample 100 t lifting capacity, it delivers smooth and accurate operations over a broad range of work types, from trenching for diaphragm walls through to constructing foundations.

3rd winch OPTION

A 3rd winch with newly designed brake is available, with a 12 t rated line pull and high-capacity rope length of 205 m (rope diameter 26 mm). This option is ideal when hoisting drivers for pile casings as part of foundation work.



Performance suited to trenching for continuous diaphragm walls

A powerful 13.5 t rated line pull winch (with free-fall function) is included as standard to meet the need for high-load and repetitive work like diaphragm wall trenching, and is designed for operations deep below ground or over large areas. A new hydraulic system ideal for synchronized operation ensures that high-precision excavation work is safe and seamless.

An optional 15.5 t rated line pull winch (with free-fall function) is also available to further enhance operating capabilities.



Additional hydraulic oil cooler OPTION

In addition to the standard hydraulic oil cooler, an optional additional hydraulic oil cooler is also available. This improves the heat balance for greater reliability during high-load trenching for continuous diaphragm walls. The oil cooler has a compact design that fits within the transportation height, and does not need to be folded down during transportation.



Photos may differ to the specifications of available products.

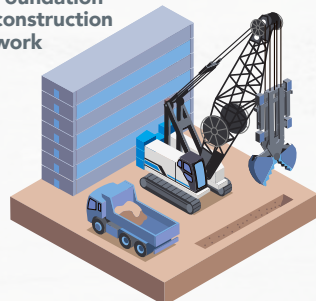
SCX1000HD-3 UTILITY & CONTROL

Superior power with high-precision control for any type of work.

Having full command of the crane is what sets the SCX1000HD-3 apart from others under high-load work or precision operations. Designed to respond exactly as intended by the operator regardless of their experience or skill level, the superior usability of the SCX1000HD-3 is not only ideally suited to foundation construction work but also as well as a broad range of job types like foundation support operations and port cargo handling.

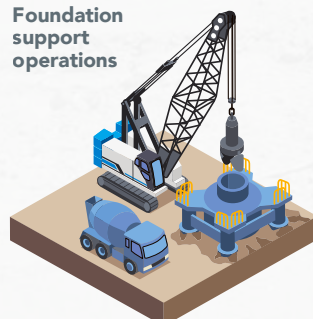
CONFIGURABLE TO SUIT JOB SITES OR WORK TYPES

Foundation construction work



Superior control of the winch brake means that high-load foundation construction work (excavation) can also be completed with ease. The wide drum ensures reliable operations.

Foundation support operations

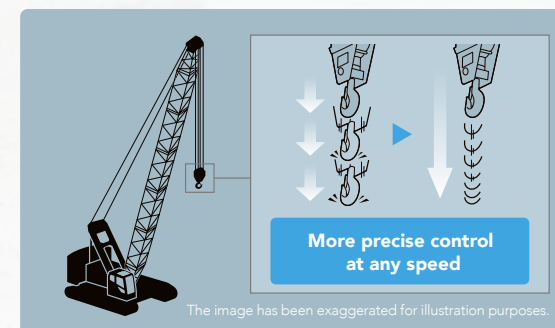


The lifting capacity of the power winch is ample for work involving hoisting drivers for pile casings or steel-reinforced frames.

Port cargo handling



The HD series is designed for tough, repetitive operations that make it ideal for handling a wide range of port cargo with accessories like grab buckets and lifting magnets.



The image has been exaggerated for illustration purposes.

Newly designed brake for superb operating feel

The SCX1000HD-3 features a newly designed multiple wet-disc type winch brake, and the use of a control section, reviewed disc quantity and lowering pedal provides enhanced control with smooth, high-precision response. The system ensures reliable braking even during repetitive high-load work by limiting increases in temperature, and also provides peace of mind during excavation work that utilizes free-fall operation.

Swing brake operation pedal **OPTION**

A swing brake operation pedal has been employed to ensure precise swing control under strong-wind situations. This maintains a high level of control when swinging the cab around, even on the harshest of work sites.



Swing neutral brake

Switches for swing free/swing brake when the control lever is in the neutral position have been installed. When the swing lever is in the neutral position, the operator may choose between free or brake depending on the work and personal preferences.



Swing mode selector switch

Reduction counter weight specification **OPTION**

Reduction counter weight specification are available as an optional extra to provide added flexibility for a diverse range of worksites, including high locations and within tight internal areas where operating weight is limited or restricted (with counter weight detector).

Counter weight	Std	-1 layer	-2 layers	-3 layers
Lower weight	Yes	Yes	No	No
Total operating weight	105 t	100 t	77.5 t	70.8 t
Ground contact pressure	119 kPa	112 kPa	82 kPa	80 kPa

Note: Reduction counter weight specifications are only configured to suit crane specifications.

Designed for ease of transportation and assembly

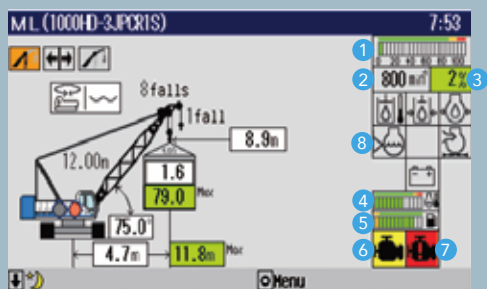
- Lugs for boom lifting
- Retract device
- Non-folding additional hydraulic oil cooler **OPTION**
- Multi-assembly stage monitoring system
- Boom connection pin holding device

SCX1000HD-3 SAFETY

Reliable and precise. Advanced safety features for the unexpected.

Improving safety should come first and foremost. A simple, easy-to-view interface has been designed to ensure that information is provided to the operator in the most reliable way possible. Various accident prevention functions and multiple redundant safety devices have also been installed for protection against the unexpected. Work is covered by the utmost safety and reliability with a full complement of advanced safety equipment.

Moment limiter display



- 1 Load ratio indicator (%)
- 2 Engine speed
- 3 Load ratio (%)
- 4 Water temperature (engine coolant)
- 5 Fuel gauge
- 6 Engine trouble alarm (yellow)
- 7 Engine trouble alarm (red)
- 8 Warning icons

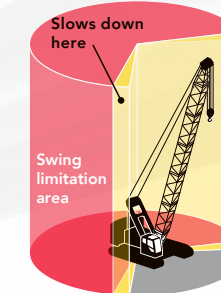
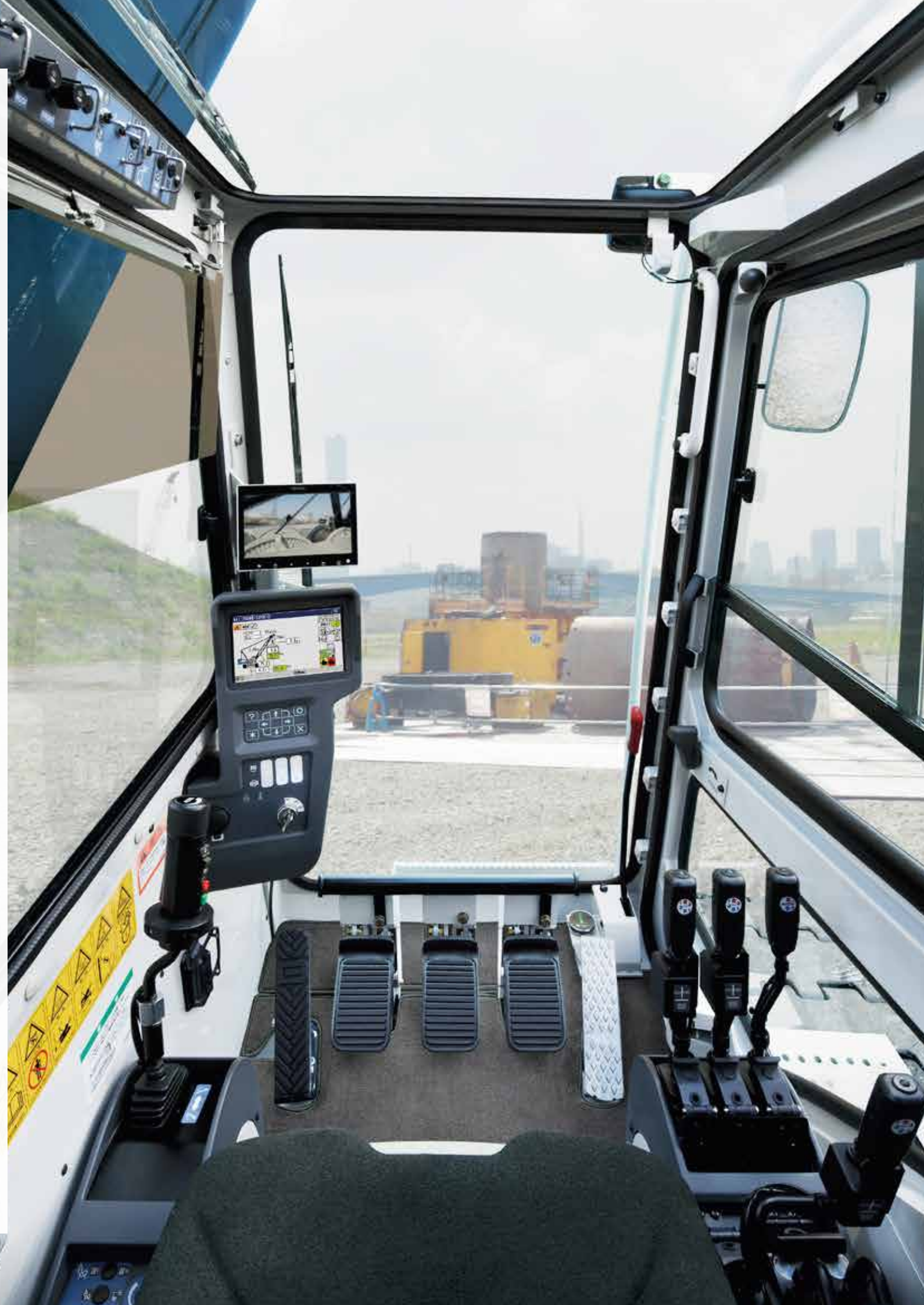
Moment limiter with large screen display

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.

ML Anti-two block

A new anti-two block using a lifting height indication device is offered as a standard equipment. 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. Together with the anti-two block switch, the lifting height moment limiter provides a redundant level of safety against hook overhoist, leading to improved safety.

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



Swing restriction unit OPTION

The swing restriction unit prevents the crane from swinging into objects by allowing the swing range to be preset, and notifying the operator of the swing range and automatically stopping the crane when required. Together with the restricted swing range function, the result is an added level of safety when working in tight areas.



Drum and rear view monitor system OPTION

A drum and rear view monitor system is available to help check winching and conditions behind the crane. The wide screen has been designed for ease of viewing, and can switch between cameras to make checking the operation of each section easier.

Designed for safe work

An auto drum lock is installed as standard, which detects boom hoisting operations and automatically applies the lock when the lever is in the neutral position. Various warning alarms and information are conveyed to the operator to help reduce the number of careless accidents. The width of the skywalk (optional extra) has been increased to make assembly easier, and a catwalk and handrails (folding type) are also installed as standard. All these combine to ensure work is conducted as safely as possible.

Auto slowdown (Slow stop)

An auto slowdown (slow stop) function is included to prevent shocks caused by stopping suddenly when an automatic stop is triggered due to boom over-hoisting or over-loading.



Wider skywalk (made by FRP) OPTION



Folding type upper house handrails

Other safety functions and devices

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

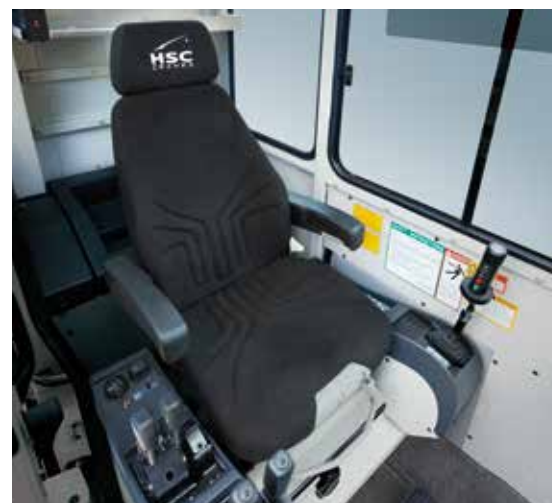
Enhanced visibility and functionality with greater comfort.

To provide operators with greater comfort over a longer work span, HSC has designed the crane to be easy to use from the ground up. Design elements such as excellent visibility and an optimum working position help to reduce operator fatigue, while at the same time increasing comfort and functionality to ensure maximum performance, day-in, day-out.



Major improvements to operating field of view

The cab has extra-wide windows to improve visibility in all directions. Green tinted safety glass has been used all round to protect the operator from UV rays and objects that may have come free during operation. A new wiper provides a greater area of visibility when working in rain.



Highly-functional seat for optimum work position

The new seats are designed with the ideal shape for a more comfortable seating position. The wide range of seat adjustments means it suits any body shape, for the best work and a relaxing posture. A seat with suspension is available as an optional extra.



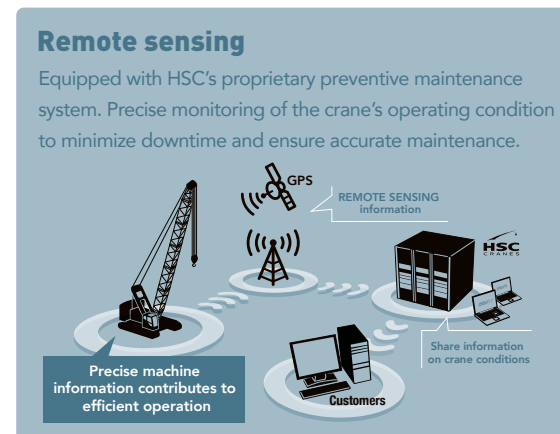
Large sliding door

A sliding door and wide platform have been implemented to reduce the amount of space required when opening and closing the door, which makes getting in and out of the cab a breeze. Four steps on the side of the crawler side frame have been used for even better access.



Control levers with winch rotation sensor

Control levers with optimized pitch for better operation and winch drum rotation sensors (front/rear) are also included. Any rotation can be felt in the levers for smoother operations where precision is required.



*Photos may differ to the specifications of available products.

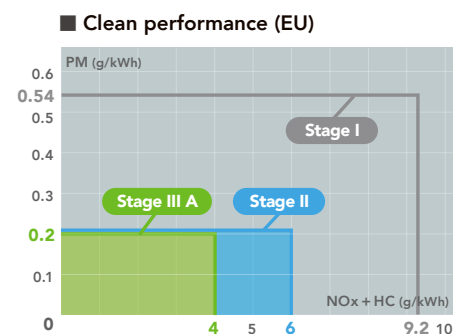
Clean and economical. Environmentally friendly for mankind and society.

A new greener engine delivers clean power required for our 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.

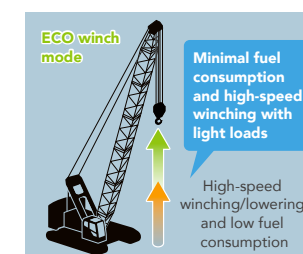


Powered with a clean engine

Powered with an environmentally-friendly engine that is equivalent to EU stage III A and US Tier 3 emissions regulations. A major reduction in exhaust gas emissions and a reduction in fuel consumption help to decrease CO2 emissions. The new engine and power train have been engineered to be even more environmentally friendly.



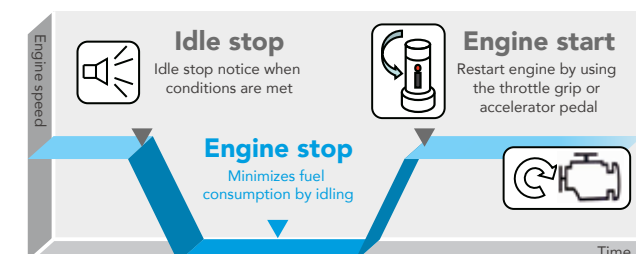
ECO winch mode
Reducing wastage during light load work, increasing productivity



ECO winch mode has been newly installed, offering high-speed lifting and lowering of light loads without having to increase the engine speed. This delivers excellent efficiency on high-elevation construction sites or multiple rope hanging operations, as well as limiting fuel consumption and noise as engine speed can be kept at a minimum.



Auto idle stop function
Minimizes excess fuel consumption during work



A new auto idle stop function is available for energy-efficient operation and minimal exhaust gas emissions. This prevents unnecessary idling during work to help reduce fuel consumption and limit the level of wear throughout various components. There is no impact on work, as the function stops the engine if the switch is ON and the required conditions are met, and restarts the engine when the accelerator is used.