### General Dimensions

**Units:** mm

- Overall height: 84,300
- Jib length: 1,200
- Boom length: 5,375
- Main boom length: 2,713
- Minimum main boom length: 3,209
- Minimum base boom length: 3,026
- Maximum base boom length: 3,400

### Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>SCX1000A-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. lifting capacity</td>
<td>t</td>
</tr>
<tr>
<td>Basic boom length</td>
<td>m</td>
</tr>
<tr>
<td>Max. boom length</td>
<td>m</td>
</tr>
<tr>
<td>Crane jib length</td>
<td>m</td>
</tr>
<tr>
<td>Boom - crane jib length</td>
<td>m</td>
</tr>
<tr>
<td>Rope line speeds (*1)</td>
<td>m / min</td>
</tr>
<tr>
<td>Swing speed</td>
<td>m / min</td>
</tr>
<tr>
<td>Travel speed high/low (*2)</td>
<td>m / min</td>
</tr>
<tr>
<td>Gradeability</td>
<td>% (≥)</td>
</tr>
<tr>
<td>Bucket capacity</td>
<td>m³</td>
</tr>
<tr>
<td>Allowable gross weight</td>
<td>t</td>
</tr>
<tr>
<td>Max. digging depth</td>
<td>m</td>
</tr>
<tr>
<td>Engine</td>
<td></td>
</tr>
<tr>
<td>Make &amp; model</td>
<td>Isuzu 6HK1 (Stage III A / Tier 3)</td>
</tr>
<tr>
<td>Rated output</td>
<td>kW / rpm</td>
</tr>
</tbody>
</table>

### 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)

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**Additional Information**

- We are constantly improving our products and therefore reserve the right to change designs and specifications without notice.
- Values in the 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 documentation may vary by country and region.

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**Address inquiries to:**

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Phone: 81-3-3845-1387 Facsimile: 81-3-3845-1394
http://www.hsc-cranes.com
The goal was to make valuable contributions in various fields around the world. To achieve this, HSC created a whole new benchmark for crawler cranes. The result is powerful and smooth work capabilities, backed with advanced operations; highly-efficient transportation and assembly; eco-friendly with great fuel economy. And of course safety and reliability are paramount. Designed with peace of mind to boost confidence, the ideal crawler crane is now available. Behold the “SCX1000A-3” making its global mark for a new generation. This new benchmark is set to take the world, business, and even the future, to all new highs.
SCX1000A-3 PERFORMANCE

Smooth and powerful. Advanced work capabilities are set to revolutionize your work site.

HSC cranes are at the forefront of their field, and are designed to create ideal working conditions to suit any work site or requirements. The SCX1000A-3 has been added to the lineup with a 10 t greater lifting capacity over the SCX900-2, as well as a host of powerful work capabilities. This drastically improves the base performance of the crane to provide true peace of mind for any type of work. There is now no reason to compromise when it comes to workability.

- All-new powerful winch
The all-new 12 t-rated line pull winch (rope φ26 mm) has been increased by 8% to increase scope for lifting heavy loads with line-speed 45m/min, and provide better capability for simultaneous movements. Combined with a new brake* that offers better operating feel, the crane delivers simply outstanding workability.

- Better lifting performance for excellent workability
The SCX1000A-3 features outstanding design characteristics, and is now more powerful and refined. Ample performance helps to increase the crane’s work radius to bring unprecedented efficiency to your work site. The powerful winch not only makes lifting easier, but also provides superior strength when lowering loads, where precise control is essential. Smooth and accurate work gives rise to safety and peace of mind.

- Eco winch mode with high-speed winching and low-fuel consumption
Also included is a new Eco mode, which allows high line speeds under light loads without having to increase the engine speed (low rpm). This mode delivers outstanding workability in situations such as high-elevation construction sites and work requiring many wire replacements, and also limits fuel consumption and noise at engine speed can be kept at a minimum.

- Simple operation
ECC eco winch mode is activated automatically using the minimum control inputs of the engine and control levers. Lower initial and working speeds are realizable only. 1150 rpm or lower engine speed.

<table>
<thead>
<tr>
<th>Lifting performance</th>
<th>Ordinary operation (maximizes lifting capacity)</th>
<th>110 t x 3.5m (crane specifications)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum work radius</td>
<td>11.7 x 47.2m (max. work radius)</td>
<td>220 m long rope</td>
</tr>
</tbody>
</table>

*Optional extra

A 13.5 t-rated line pull winch (rope φ28 mm) is optionally available.

1 IPUPTNBZEJ⒎FSUPUIFTQFDJpDBUJPOTPGBWBJMBCMFQSPEVDUT

HSC cranes are at the forefront of their field, and are designed to create ideal working conditions to suit any work site or requirements. The SCX1000A-3 has been added to the lineup with a 10 t greater lifting capacity over the SCX900-2, as well as a host of powerful work capabilities. This drastically improves the base performance of the crane to provide true peace of mind for any type of work. There is now no reason to compromise when it comes to workability.
The hydraulic system uses HSC's own unique combined hydraulic circuit. By increasing and optimizing the pump pressure through the use of a mixed circuit to control the hydraulic oil from two hydraulic pumps, the sense of operability in travelling, hoisting/lowering, swing and boom hoisting can be enhanced. Even for multiplex operations, the latest hydraulic control system is able to support all tasks efficiently through priority control matching the needs. This helps to achieve a sense of operability that matches the intent of the operator.

**Combined hydraulic circuits**

The hydraulic system uses HSC's own unique combined hydraulic circuit. By increasing and optimizing the pump pressure through the use of a mixed circuit to control the hydraulic oil from two hydraulic pumps, the sense of operability in travelling, hoisting/lowering, swing and boom hoisting can be enhanced. Even for multiplex operations, the latest hydraulic control system is able to support all tasks efficiently through priority control matching the needs. This helps to achieve a sense of operability that matches the intent of the operator.

**Control dials**

Fine speed control dials for operations such as hoisting, lowering, swinging and boom hoisting are positioned in a central location on the left side console. Operations can be adjusted at will to suit the particular job.

**New multiple wet-disc type brake with improved control feel**

The optional brake uses a new multiple wet-disc type that offers better control. A hanging brake pedal gives the operator smooth and precise responses. Reliable braking performance is now a reality even under high loads, all while minimizing disc temperature. The system can even be used for heavy digging and foundation work that allows free-fall operation*.

**Swing brake operation pedal**

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.

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*Free-fall function is an optional extra for models equipped with the 12 t rated line pull winch. See the Spec. catalog for more details.
The crane represents exceptional value when transporting it between sites. Performance has been retained while offering a design that allows efficient transportation, assembly and disassembly. This level of transportation and assembly combine to drastically improve efficiency on any work site.

**SCX1000A-3 TRANSPORTABILITY**

Speedy and smart. Exceptional transportability and assembly guarantees better results.

The crane represents exceptional value when transporting it between sites. Performance has been retained while offering a design that allows efficient transportation, assembly and disassembly. This level of transportation and assembly combine to drastically improve efficiency on any work site.

**2.99m transportation width, body weight with lower boom approximately 30 t**

To comply with changes in transportation requirements and more stringent regulations, the crane can be loaded on less than 3 m-wide trailers. And in addition to a crane body width that is 2.99 m, the weight of the body with lower boom has been kept approximately 30 t, which drastically improves ease of assembly after the crane has been transported to a site. This also leads to a reduction in transportation costs.

**Folding gantry with hoisting cylinder**

The folded gantry and main frame can be connected together, allowing the crane to be raised with the gantry in its lowest state. A hoisting cylinder has been installed as standard on the gantry itself, for quicker disassembly and assembly work.

**New counter weight**

A lower weight and new counter weight split into six separate pieces has been used to help reduce body weight but improve lifting performance. The lighter weight of each counter weight makes assembly easier.

**Retract device**

A retract device has been included as standard to change the width of the crawlers, making transportation of the crawler tracks easier. The retract pin can be pulled out from the outer side of the crane, which helps to improve safety during work.

**Simple assembly crawler side frame**

Comes with a folding extension beam and special link for lifting. These make the crawler side frame easier to assemble and disassemble, and improve safety.

**Reduction counter weight specification**

<table>
<thead>
<tr>
<th>Counter weight (piece)</th>
<th>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).</th>
</tr>
</thead>
<tbody>
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**Designed for ease of transportation and assembly**

- Long fork beam lifting
- Simple assembly crawler side frame
- Folding gantry with hoisting cylinder
- Hydraulic shoe tension unit

**Reduction counter weight specification**

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</table>
Reliable and precise lifting with advanced safety features

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 measures and multiple redundant safety devices have also been included to provide comfort for the operator. Rest assured that your work is safe, backed with a full complement of advanced safety equipment.

### 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

This device prevents the crane from swinging into objects and causing damage, by notifying the operator of the swinging range and automatically stopping the crane when required. The result is an added level of safety when working in tight areas.

### Drum and Rear View Monitor System

Four monitoring cameras have been installed to make it easier to oversee the condition of the front/rear drum, boom hoist drum, back and left-rear. For added safety, checks of each stage of operation are also easier as the wide screen is connected to switchable cameras.

### 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. All these combine to ensure work is conducted as safely as possible.

### Other Safety Functions and Devices

- Windchime drum lock (front, rear)
- Winch drum lock (front, rear)
- Auto drum lock (boom hoist)
- Auto drum lock (front, rear)
- Auto drum lock (boom hoist)
- Anti-two block
- Anti-two block
- Gate lock lever
- Gate lock lever
- Emergency engine stop switch
- Emergency engine stop switch
SCX1000A-3 COMFORT

**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.

**New 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. Three steps on the side of the crawler side frame have been used for even better access.

**Optimized lever and switch layout**

The pitch of the armchair levers can be optimized to improve operation with an intelligent and ergonomic switch layout.

**Cross operation lever**

Cross operation lever is provided for a good, easy and comfortable operation for two main operating drums, boom hoist drums and swinging. For travel motion, two armchair levers are provided behind right-hand cross operation lever for operator comfort.

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**SCX1000A-3 ECOLOGY**

**Clean and economical. Environmentally-friendly for mankind and society**

A new greener engine delivers clean power required for HSC’s new generation of cranes. This advanced, environment-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.

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**Technologies to improve fuel efficiency**

In addition to improvements to the engine combustion efficiency, paired with enhanced hydraulic controls, idle stop functions and Eco-winch mode have also been used to comply with more stringent exhaust gas regulations as well as improve fuel economy.

**Counter weights with outstanding recyclability**

Environmentally-friendly design with counter weights made from cast weights that can easily be recycled.

---

**For SCX-3 model, Stage III A (Tier 3) engine machine is also available in less regulated area.**

New engine emission gas (Stage III B, Tier 4 i) is regulated in Japan, USA and Europe and Stage III B (Tier 4 i) Engine requires high grade fuel, engine oil and without aftertreatment module.

---

**#1 Idle stop main switch ON**

**#2 Engine warmed up**

**#3 All levers are neutral**

**#4 Idle engine speed**

**#5 Not over load**

**#6 Not free fall mode**

**#7 Swing brake ON**

**#8 Working mode**

**#9 Keep #1 to #8 more than 7 seconds**

9 conditions to get Idle stop

**Clean performance (EU)**

For SCX-3 model, Stage III A (Tier 3) engine machine is also available in less regulated area. New engine emission gas (Stage III B, Tier 4 i) is regulated in Japan, USA and Europe and Stage III B (Tier 4 i) Engine requires high grade fuel, engine oil and without aftertreatment module.
Utmost reliability on work sites. Today, and decades into the future.

There are numerous ways to measure quality. Reliability that ensures peace of mind during daily operations is just one. HSC has designed the SCX1000A-3 from early on in the development stage to deliver enhanced durability and ease of maintenance. Engineered with a safe design for improving operating capabilities and reducing running costs, HSC cranes have evolved to deliver more benefits than ever before.

Measures for improving durability
Increasing the strength of each part essential for operations is the first step. Reliability has also been fine-tuned to maximize work capabilities. Only the most stringent quality standards have been employed by HSC, from the start of development to production, all the way through to durability testing. Every aspect has been honed to ensure reliability, including a stronger lower frame, and greater precision load cells and boom angle sensor. HSC has developed a truly environmentally-friendly crane for all, built on strict eco-management standards.

Even easier maintenance
A central layout has been used for inspection equipment, combined with more gauge ports and a host of other useful functions. Maintenance has been made so much easier with improvements to engine servicing, and a layout that makes each filter and fan belt a breeze to replace.

“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
- Minimize downtime
- Accurate maintenance
- Better safety

Image of REMOTE SENSING
Precise machine information contributes to efficient operation

High-durability box type truck shoes
New boom angle sensor
Shoe automatic tension unit
New load cell

Even easier maintenance
A central layout has been used for inspection equipment, combined with more gauge ports and a host of other useful functions. Maintenance has been made so much easier with improvements to engine servicing, and a layout that makes each filter and fan belt a breeze to replace.