### General dimensions

<table>
<thead>
<tr>
<th>SCX1200-3</th>
<th>Unit: mm</th>
</tr>
</thead>
</table>

### Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>SCX1200-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application</td>
<td>Liftcrane</td>
</tr>
<tr>
<td>Max. lifting capacity</td>
<td>120 × 5.0</td>
</tr>
<tr>
<td>Lifting capacities</td>
<td>25 × 9.0</td>
</tr>
<tr>
<td>Stage III A / Tier 3</td>
<td></td>
</tr>
</tbody>
</table>

- **Framed main drum**:
  - Max. boom length: 10 × 12
  - Boom in crane length: 20 × 28
  - Tower length: 16.5 × 11
  - Tower + jib length: 18 × 14
  - Rope line speeds (*1):
    - Swing speed: 110 (35)
    - Tower jib hoist drum: 95 (35)
    - Tower hoist drum: 65
- **Luffing towercrane**:
  - Max. tower + tower jib length: 110 (45)
  - Max. tower + tower jib length: 110 (45)

- **Engine**:
  - Make & model: Isuzu 6HK1 (Stage III A / Tier 3)
  - Rated output: 200.6/1,850 (272/1,850)

- **Support and opening/closing wire rope speed**:
  - 1.7 (1.7)

- **Ground contact pressure**:
  - 2.5

- **Operating weight**:
  - Approx. 35

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 15 m basic boom (*2).

### Notes
- 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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LIFT THE WORLD.

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.

With outstanding workability and high-precision operation, these cranes have the potential to increase efficiency of transportation and assembly. The new benchmark has been widely improved – from an environmentally-friendly design and great fuel economy, through to the latest in safety and reliability. Performance that provides comfortable operation to generate value in the lifting world.

Behold the “SCX1200-3” 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.

SCX 1200-3
Introducing a new generation of crane that for ideal workability and performance to suit any work site. The SCX1200-3 offers users unprecedented work precision and efficiency, and more than ample power for any job. Be in control of a crane that takes performance to new levels, with an uncompromised approach to work.

**SCX1200-3 PERFORMANCE**

**Precision and workability to transform any work site.**

Introducing a new generation of crane that for ideal workability and performance to suit any work site. The SCX1200-3 offers users unprecedented work precision and efficiency, and more than ample power for any job. Be in control of a crane that takes performance to new levels, with an uncompromised approach to work.

**A high-rigidity boom for the toughest jobs**

Both the boom foot width and boom width, as well as the bracing strength, have been increased to improve the strength of the boom itself. This helps to deliver advanced stability during work, to reduce side deflection and twisting throughout the front of the crane, and to make positioning loads quicker. A mast system has been employed to improve operating response.

**All-new powerful winch**

The power of the 12 t-rated line pull winch (rope ø26 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.

**3rd winch**

The 3rd winch has a new multiple wet-disc type brake with a 12 t-rated line pull winch and large winding capacity 220 m long rope. A φ2500-3000 class casing driver can also be handled.

**Eco winch mode with high-speed winching and low-fuel consumption**

Also included is a new Eco winch 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 multiple rope-hanging operations and also limits fuel consumption and noise as engine speed can be kept at a minimum.

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* Test values obtained with in-house assessments

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**SCX1200-3 Current model**

<table>
<thead>
<tr>
<th></th>
<th>SCX1200-3</th>
<th>Current model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boom foot</td>
<td>1350 mm</td>
<td>+250 mm</td>
</tr>
<tr>
<td>width (max)</td>
<td>1100</td>
<td></td>
</tr>
<tr>
<td>Boom width</td>
<td>2000 mm</td>
<td>+150 mm</td>
</tr>
<tr>
<td>(max)</td>
<td>1850</td>
<td></td>
</tr>
<tr>
<td>Bracing section area (mm²)</td>
<td>+9%</td>
<td>Base</td>
</tr>
<tr>
<td>Boom tip deflection*</td>
<td>+17%</td>
<td>Base</td>
</tr>
</tbody>
</table>

* Test values obtained with in-house assessments

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**Ordinary operation**

- Minimal fuel consumption and high-speed winching with light loads

**Eco winch mode**

- Eco winch mode is activated automatically using the ordinary control levers if the ECO winch switch is ON and certain operating conditions are met (hook only, 1150 rpm or lower engine speed).

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**3rd winch**

The 3rd winch has a new multiple wet-disc type brake with a 12 t-rated line pull winch and large winding capacity 220 m long rope. A φ2500-3000 class casing driver can also be handled.
High-precision, exactly as intended. A level of control available to all.

Flexible operation and performance makes the crane truly shine during heavy lifting or precision jobs. The crane has been designed so that it can be operated by anyone, exactly as they intend to, instead of relying on the operator’s level of experience or skill. Outstanding usability has been the key behind development, and can be experienced at your work site, wherever in the world that may be.

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 traveling, hoisting/lowering, swing and boom hoisting can be enhanced. Even for multiple 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.

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.

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 response. 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 utilizes free-fall operation.*

*Optional extra.

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.

Rear winch

Front winch

Motor (aux.)

Pump

Pump

Engine

Hydraulic oil tank

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.

Flexible operation and performance makes the crane truly shine during heavy lifting or precision jobs. The crane has been designed so that it can be operated by anyone, exactly as they intend to, instead of relying on the operator’s level of experience or skill. Outstanding usability has been the key behind development, and can be experienced at your work site, wherever in the world that may be.
SCX1200-3 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.

Redefining the assembly and disassembly process with the mast system.

The use of a mast system that allows the entire mast to be lowered with the upper spreader structure drastically improves pendant joint work and the boom assembly process. Other features such as similarly shaped counter weight make assembly and disassembly processes easier, while labor-saving hydraulic hose connections and safe operation mean the crane is an all-round winner when it comes to assembly.

Hook-on and joint pin design for the crawler side frame assembling.

The crawler side frame can be mounted with a side frame joint pin removal cylinder that improve assembly and disassembly immensely. The design also ensures safer work.

A width suited to trailers results in transportation cost savings

The crane is less than 3 m wide and weighs less than 30 t, which makes it easier to load on to trailers. This in turn helps to reduce costs related to transportation. A swing cab mechanism has also been employed to increase the boom foot width further, for more reliable crane operation and exceptional ease of transportation.

Reduction counter weight specification

A reduction counter weight specification is 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).

<table>
<thead>
<tr>
<th>Option</th>
<th>Counter weight self-assembly unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPTION</td>
<td>Removable stage monitoring system</td>
</tr>
<tr>
<td>OPTION</td>
<td>Remote control box for jack with car body</td>
</tr>
</tbody>
</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 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.

Mt. 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 an supplementary role to the existing moment limiter and use of this equipment alone is prohibited by law and regulations.

Improved safety for safe work

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

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.
SCX1200-3 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.

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

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. Four steps on the side of the crawler side frame have been used for even better access.

SCX1200-3 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, 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.

Technologies to improve fuel efficiency
In addition to improvements to the engine combustion efficiency, paired with enhanced hydraulic controls, auto 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.

Clean performance (EU)
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.

For SCX-3 model, Stage II (Tier 2) 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 B (Tier 4 i) Engine requires high grade fuel, engine oil and without aftertreatment it makes.

For SCX-3 model engine machine with low exhaust gas emission in Japan, USA and Europe.

Engine RPM
Time
Engine parts consumption
Reduce exhaust gas and environmental loading
Reduce fuel consumption and running cost
Reduce engine parts consumption
9 conditions to get idle stop
#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

Auto idle stop
Function
Engine RPM
Time
Engine parts consumption
Reduce exhaust gas and environmental loading
Reduce fuel consumption and running cost
Reduce engine parts consumption
9 conditions to get idle stop
#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
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 SCX1200-3 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.

**REMOTE SENSING**

"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

Precise machine information contributes to efficient operation

Image of REMOTE SENSING

- Precise machine information
- Share information on crane conditions
- Store data on machine conditions and operations
- GPS

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 engineering, and a layout that makes each filter and fan belt a breeze to replace.