SCX900HD-2

GENERAL DIMENSIONS

UNIT: m

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Lift crane application</th>
<th>Crane/أ Application</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Max. lifting capacity (Rated)</strong></td>
<td><strong>Rated</strong></td>
</tr>
<tr>
<td>Lifting capacity (Rated)</td>
<td>1,100 + 800</td>
</tr>
<tr>
<td>Basic boom length</td>
<td>12</td>
</tr>
<tr>
<td>Main boom length</td>
<td>60</td>
</tr>
<tr>
<td>Max. boom length</td>
<td>24</td>
</tr>
<tr>
<td>Duration main drum (Rated)</td>
<td>110</td>
</tr>
<tr>
<td>Rear main drum (Rated)</td>
<td>75 (bucket holding)</td>
</tr>
<tr>
<td>Boom hold drum (Rated)</td>
<td>40</td>
</tr>
<tr>
<td>Boom hold drum (Rated)</td>
<td>40</td>
</tr>
<tr>
<td>Travel speed</td>
<td>2.5</td>
</tr>
<tr>
<td>Trolley travel speed (Rated)</td>
<td>2.1/1.2</td>
</tr>
<tr>
<td>Gradeability</td>
<td>39 (17)</td>
</tr>
<tr>
<td>Engine</td>
<td>Mitsubishi 8M70-EL</td>
</tr>
<tr>
<td>Rated output</td>
<td>272/2,000</td>
</tr>
<tr>
<td>Ground contact pressure</td>
<td>96</td>
</tr>
<tr>
<td>Operating weight</td>
<td>89 (Rated)</td>
</tr>
</tbody>
</table>

Notes: 1. These figures are based on drum, boom and main engine setup with no load, and vary under certain operating conditions. 2. Rated speed is based on N1, low and firm supporting surface, and under the conditions that no load must be applied and no end attachment must be 12 m (basic boom) and 3.5 m (bucked).
A powerful newly developed winch drums; they are certainly able to respond to any hard works under foundation jobs like hammer grabbing.

Previously, HSC was a standard bearer of heavy duty foundation base machine, and since then HSC has been having a hard time trying energetically to develop a true foundation base machine for next generation, and it now results in seeing an epoch-making machine, SCX900HD-2 under an accumulated design technologies and field experiences of Sumitomo and Hitachi so far with design concept of “simple, refined and reliable”. Thanks to customer’s good and long patience, the SCX900HD-2 now unveils.

An ideal answer over a true hydraulic heavy duty crawler crane —

**SCX900HD-2**

just unveils.

A high excavating performance under excellent controllability at operator’s will with newly developed powerful drum winches performing bigger line pull and sure break capability

- **Advanced clutchless multiple wet-disc brake**
- **Rated line pull:** 132 kN (13.5 ton)
- **Bigger width drum:** 632 mm
- **High line speed:** 110 m/min⁻¹
- **High power engine:** 272 kW (370 PS)
**Most advanced clutchless multiple wet-disk brake**

At operator’s will, two main winch drum brakes well perform a constant brake pedal feeling regardless of what is load, light or heavy, and what brake pedal stroke is done from initial thru full. And, no over-heating is of course seen even under heavy duty works as a forced-oil cooling system is designed, and it results in stress-free operation.

**Free-fall mechanism**

Of course, two main winch drums’ free-fall function is standardized, and their rated line pull is 132 kN (13.5 ton) with 28 mm dia. cable as enough for bucket off-ground and casing tube drawing.

**An optional 3rd winch drum**

An 108 kN (11.0 ton) line pull is performed, and a 50 ft lift can be done. And, a 2 m dia. casing driver lift and other auxiliary lift can also be done.

**High power engine**

A 272 kW (370 PS) engine from Mitsubishi is provided, and accordingly a bigger drum horse power (line pull by line speed) is realized under a new winch drum design with a specialty-tailored power increase control system that maximizes engine output under any load condition in whole range of engine rpm.

---

**A long-awaited machine performance from foundation job customer is ——**

**A Clear Brake Response & Sure Brake Capability.**
One-hand acceleration grip
Thanks to a unique grip design, an easy-precise-minute control of engine rpm and pump discharge from min. thru max. is really possible at the same time by simply twisting the grip fitted on slewing control lever.

Drum rotation sensors
Control levers of two main and boom hoist drums each fit the drum rotation sensor to let operator sense a drum rotation speed decrease/increase by a knob vibration during inching lever operation, and it results in realizing a good work performance on specific foundation jobs like “bucket offground”, “pile initial drawing” and so on, and in performing more safety lifting works, especially in blind condition.

Brake mode change switches
On top of winch drum control levers, the said switches are fitted too for easy-and-sure change of brake mode from “automatic” to “free-fall” and vice versa.

Brake mode select key switches
On instrument panel, these are provided, and in the case that “automatic” brake mode is once set, winch drum always keeps this mode even if “free-fall” brake mode is get by the other brake mode change switch fitted on reum: control levers.

To free from work stress of operator —
Strict Design Concentration toward
Universal Operation Controllability & Operator Comfort.

Slidable control station and operator seat
To set most of suitable operator position, both right-and left-hand control stations are designed to simultaneously slide 60 mm back and forth together with operator seat, and operator seat is able to slide 80 mm independently too. Further, a well-proportional seat design is taken to reduce operator fatigue during continuous duty cycle works.
New load moment indicator

An easy-to-read LCD graphic display panel is well designed and a reflection-less display panel is provided on a new LMI with setting ease of viewing angle. In addition, no zero-point adjustment, and data input thru interface counter-indication/message on display panel are available for easier and certain setting of operating conditions and LMI function. Of course, “present lifting load”, “rated load”, “load ratio”, “working radius”, “boom angle”, “engine rpm” and so on are indicated on the LMI display panel. Further, the LMI functions that if lifting condition reaches peril zone, an intermittent warning buzzer is given operator together with a warning letter message on display panel of LMI.

Boom speed slowdown function

This function 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.

Front-end attachment erection mode

In the range out of crane working area, the LMI display panel automatically indicates “Now, out of crane working range” with a rigging instruction, and it is available to lift front-end at all off ground without the influence of LMI safety functions and, after front-end is lifted over the range of crane working area, LMI safety function gets back automatically for safe erection work.

For gentle and lovely machine to human being and nature ——

Severe Consideration over Safety First and Environmental Management.

Function check over safety devices

The LMI is able to check whether or not safety devices like “main hook over-hoisting limiter”, “boom over hoisting and lowering limiter”, and “secondary boom over-hoisting limiter” is correct before operation.

Standardized safety devices other than the above

- Emergency engine stop switch (in cab)
- Lifting height indication device
- Lock lever (Foot proof shut-off lever)
- Automatic drum lock, boom hoist drum
- Control lever locks
- Slewing & travel alarm

Low emission engine

The prime mover, Mitsubishi 6M70-TL, meets Stage/Tier 3 of current emission regulation for off-road diesel engine in Europe, USA, and Japan.

Environmental management

Under our own strict idea, it is being done and is taken in any way, any time and anywhere on manufacture of products.
**Folding type axle beam ends**

Larger lower frame axle beams with folding type ends are designed, and these four (4) ends reach up to axle box end of crawler side frames for better fitting between axle beams and crawler side frames. And, it is able to eliminate their assembling/disassembling, and axle beam-end pins can easily be pulled up and down from outside.

**Counterweights**

"Hook-on" design is taken for their mounting on upper revolving frame, and "horizontally-split" design is also taken to load boom extension(s) onto counterweights when transport.

**Optional rigid guard**

A detachable-ease rigid guard is optionally available i/o standard, and it is possible to eliminate to take cable out of drum when machine disassembling for transport in the case of a special cable-end with lug.

**Gantry**

A-frame type; raised and lowered by power hydraulic cylinders for assembling/disassembling ease.

---

**To get fast assembling/disassembling and transport—**

**Sincere Attention to High Cost Efficiency.**