Power to spare for foundation and civil engineering operations

Tough

The all new SCX1200HD-2 is ready to meet the needs of the heavy-duty market. The reinforced body and powerful winch provide the extra operability, durability and safety that will take the lead in this market. The SCX1200HD-2 can easily handle Ø3,000 mm class hammer grab bucket or the main unit of a casing driver and answer almost any need for foundation and civil engineering work.

- Advanced clutchless multiple wet-disc brake
- Rated line pull: 132 kN (13.5 ton)
- Bigger root dia. drum: 624 mm
- High line speed: 110 m/min²
- High power engine: 272 kW (370 PS)

Notes: Illustrations and photos may include optional equipment and accessories, and may not include all standard equipment. All of photos are taken in this catalogue and for the sake of catalog making. If this operation is away from cab during machine operation, it is certainly required to set appropriate safety device(s) without fail.
Flexibility
Power and Response to Spare

Most advanced clutchless multiple wet-disc 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 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.

Ample specifications, wide drum and high-speed line speed
The wide drum enables a single layer of cable to be 41 m (21 rows). This prevents the wear that occurs when multiple layer winding is used. And the maximum line speed of 110 meters per minute dramatically reduces operating time.

An optional 3rd winch drum
The rated line pull of 3rd winch drum is 108 kN (11.0 ton) and has a maximum lifting capacity of 60 ton.

Easy operation
Total Control in Total Comfort

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 ready possible at the same time by simply twisting the grip fitted on steering control lever.

Negative brake system
With a new negative brake of spring-applied/power hydraulically-released design applying dynamic hydraulic pressure for its release control, an effective braking can be done under an extreme light foot pedaling, and it accordingly results in greatly reducing operator fatigue especially during winch free-fall operations under duty cycle applications. Further, the use of negative brake system maintains a high level of brake safety even if a hydraulic pressure drop in the circuit happens.

Separated oil cooler from engine radiator

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 specially-basked power increase control system that maximizes engine output under any load condition in whole range of engine rpm.

Sildable control station and operator seat
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, 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 pelll zone, an intermittent warning buzzer is given operator together with a warning letter message on display panel of LMI.

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 off-ground”, “pile initial drawing” and so on, and in performing more safety lifting works, especially in blind condition.

- Automatic drum lock: boom hoist drum
- Emergency engine stop switch (in cab)
- Slowing & 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.

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

Folding A-frame with lifting/lowering cylinder enables high-speed disassembly and assembly
The cylinder for lifting/lowering the A-frame is standard equipment. This enables quick assembly and disassembly for enhanced efficiency.

Optional rigid guard
A detachable-assembly rigid guard is optionally available to 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 big.

Easy to load onto trailer
Since the jack cylinder can be stored in the lower frame, the main body can be loaded directly on the trailer without using any wooden beams.

* Note that this may not be possible on some trailers.

Only cylinder operation is needed for side frame assembly
The old-type insert-type method meant it took a lot of time to assemble the main body and side frame. The new-type cylinder joint method enables the main body and side frame to be fixed in place by only operating the cylinder. Assembly only takes as long as the time needed to extend and retract the cylinder.