



Hydraulic Crawler Crane 7055/7070

5 Major Features

- 1. Global Design
Super-Structure**

- 2. High-Performance Winch
Accommodates a Wide
Range of Jobs**

- 3. Smooth Operation and
Control**

- 4. Reliable Safety Features**

- 5. Multi-Function LMI Display**

Complies with Worldwide Exhaust Gas Regulations

With its low pollution engine, the 7055/7070 meets NRMM (Europe) Stage IIIA and US EPA Tier III exhaust emissions regulations.

Complies with Japanese Noise Regulations

The 7055/7070 is designed with advanced KOBELCO low-noise construction technologies, as specified by the Japanese Ministry of Land, Infrastructure and Transport.



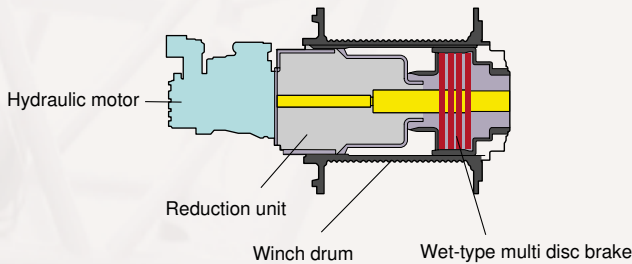
Durable operation for the toughest jobs

High-Performance Winch Accommodates a Wide Range of Jobs

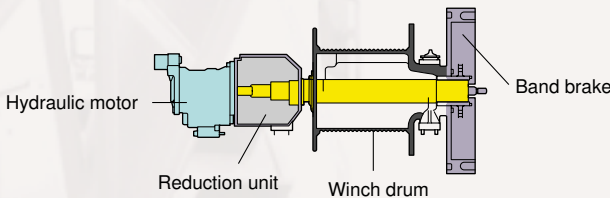
Winches with Built-In Wet-Type Disc Brakes

KOBELCO's proprietary winch mechanism features a built-in wet-type multi disc brake and reduction unit. This innovative design delivers greater braking power, more drum capacity and easier maintenance than ever before.

Wet-Type Multi Disc Brake system



Conventional Brake System



Wet-Type Disc Brake System

KOBELCO's new oil cooled wet-type multi disc brake system provides quiet, dependable braking power. The multiple discs are self-adjusting and self-equalizing. Forced-oil circulation keeps brake temperatures cooler during long, continuous operations and ensures smooth braking. The completely enclosed system eliminates the possibility of outside contamination, providing years of problem-free service life. In free-fall mode, the brake pedal is easily depressed to reduce operator fatigue.



Built-in brake disc

Maintenance-Free Winch

Winches are maintenance-free. The built-in wet-type disc brake has a forced-oil cooling system to prevent overheating, and requires no band adjustment or lining replacement.

Environmentally-Friendly Design

Because there's no brake band, the brake operates quietly and doesn't generate lining dust.

Wide, Large-Capacity Winches for Smooth High-Rise Work



The wide hoist winches provide an impressive spooling capacity of 40 m on the first layer with a 22 mm hoist rope. Their large capacity and large diameter help to prevent uneven spooling and wear while ensuring smooth operation for high-rise work.

Spooling capacity (First-layer):

40m

Large Third Winch (Optional)

Because of KOBELCO's innovative internal disc brake system and side engine layout, the optional third winch is the same size as the main and auxiliary winches, allowing for more attachment options and better operation coordination.





Clear, Panoramic View

The 7055/7070 has a new cabin design with sash-less front and top glass that provides a panoramic frontward and skylight view. The glass also has less curvature to minimize distortion. The front upper window has been broadened on both sides for a view that is 31% wider than a conventional cab, while the top-window view is widened toward the rear.

Comfortable 940mm-Wide Cab

High-Speed Lifting Increases Work Efficiency

The main, auxiliary and optional third winches deliver a fast maximum hoisting and lowering speed of 120 m/min that improves operational efficiency on high-rise jobs.

New Hydraulic System

A choice of two hydraulic modes optimizes hydraulic performance in all working configurations by preventing interference during simultaneous operations. In Mode 1, designed for crane operations, one pump drives the main hoist and auxiliary hoist winches and the other pump hoists the boom winch. In Mode 2, designed for tower specifications, one pump drives the main hoist winch and the second pump drives the auxiliary hoist winch (for hoisting the tower jib) and hoists the boom.

Winch Speed Controller

The speeds of the main winch, auxiliary winch and boom hoist can be set independently with trimmer controls.



No compromise in KOBELCO's safety policy

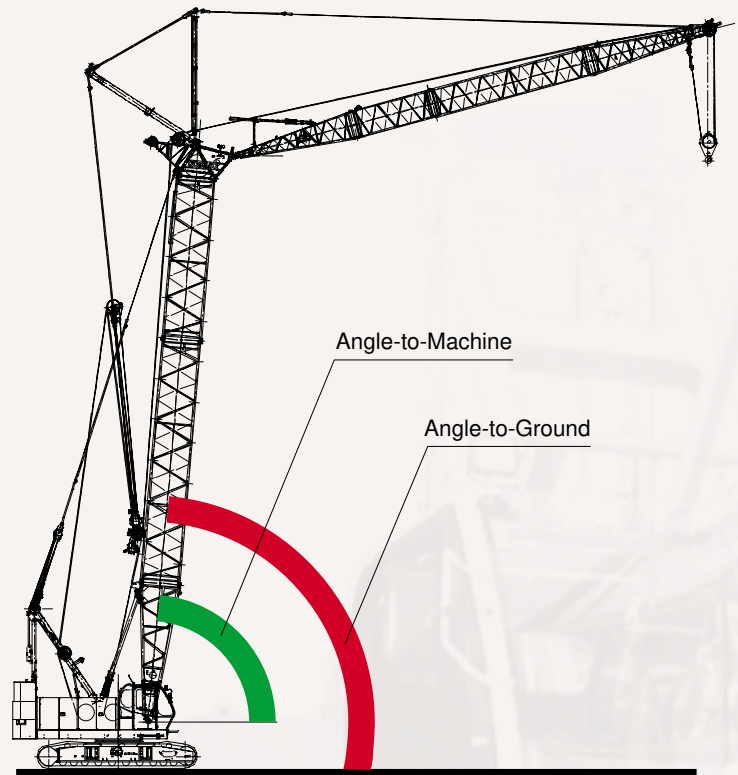
Reliable Safety Features

Two-Stage System to Prevent Boom and Jib Over-Hoists

With primary and secondary over-hoist prevention devices, this new safety system can prevent boom over-hoist at two stages. The primary stop function is activated when the boom or tower approaches the critical angle-to-ground during hoisting. This new system monitors the angle-to-ground of the boom, tower or jib with a sensor, and swiftly alerts the operator of danger. For the tower, the angle-to-machine is also monitored at this stage. The secondary stop function uses a device that monitors the angle-to-machine of the boom, tower or jib through a limit switch fitted to the boom and jib backstops. It stops the machine automatically to prevent it from working outside of the safety range, and once activated it cannot be cancelled.

Automatic Soft-Stop Function Reduces Shocks

This function is activated automatically when boom or tower jib lowering, or boom hoisting is stopped by the over-load prevention system and the over-hoist prevention system. It makes for a smooth stop and reduces dangerous swinging of the load.



Automatic Stop Release Switch with Safety Function

The automatic stop system prevents over-load, hook over-hoist and boom over-hoist. To deactivate the system, a two-stage release procedure is employed that uses a master key and separate switches. This makes it easy to supervise the use of the single key and prevent unauthorized release of the automatic stop system.

Free-fall with Monitoring and Lock Functions

Free-fall operations can only be initiated by releasing the lock using a key switch. Unless the lock is released, free-fall cannot occur even if the switch is put in the "neutral-free" position. Also, to prevent the free-fall mode from being activated accidentally because of system malfunction, a monitoring function monitors the free-fall clutch cylinder pressure in the winch.

Free-fall Switch with Interlock



The free-fall switches are strategically located on the hoist levers, allowing the operator to engage free-fall without removing his hands from the control levers. To prevent the load from accidentally dropping, the interlock function makes it impossible to initiate free-fall unless the foot brake is fully depressed.



To prevent the load from accidentally dropping because of operator error, do not use free-fall during lifting work.

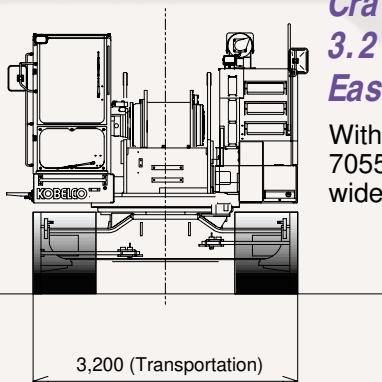


Efficient Transportability and Assembly



Crawler Retraction to 3.2 m Designed for Easier Transport

With its crawlers retracted, the 7055/7070 measures just 3.2m wide for easy transport.



Boom Assembly/Disassembly Mode



The boom assembly/disassembly mode, which is used to release the over-hoist prevention function to facilitate boom assembly and disassembly, is activated with a switch located under the multi-function LCD display of the load moment indicator (LMI). (This switch is different from the switch that releases the auto-stop functions for over-load and hook over-hoist.) When the boom is lifted to a certain angle, it is automatically deactivated and the LMI function is automatically re-engaged to ensure that the boom assembly/disassembly function is used only when needed.

For better man-machine communication

Multi-Function LMI Display

Multi-Function LMI Display

The newly designed load moment indicator (LMI) system features a large, easy-to-read LCD display. The rated load, actual load, load ratio, and other information are displayed in large characters. Warnings and other items are displayed in color, and text messages and alarms alert the operator to prevent dangerous conditions from developing. Other information can also be displayed, including a rated load chart and rated load curve, in addition to a function that regulates the working range.

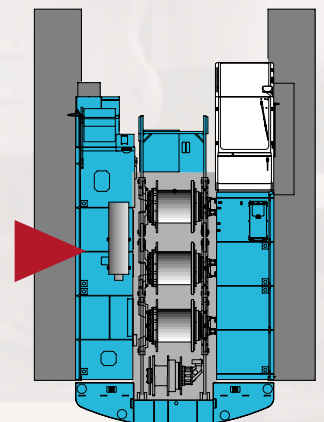


Multi display

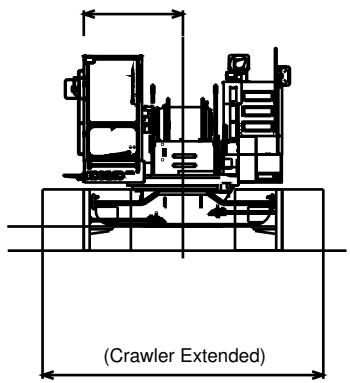
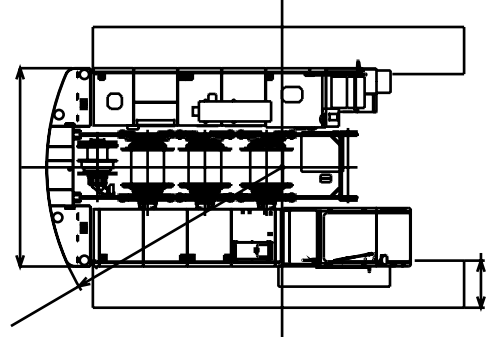
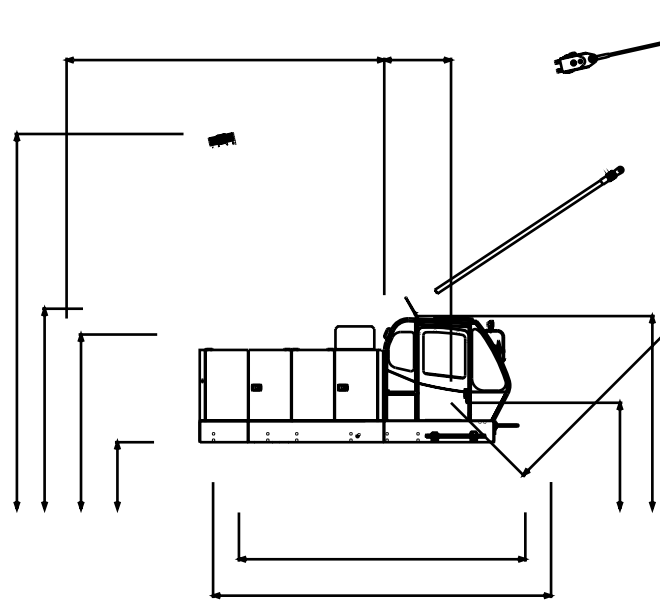
The easy-to-read LCD multi display provides information on the current status of such functions as engine rpm, maintenance, and on-board trouble-shooting, so that the operator has an ongoing, real-time assessment of the machine's conditions at a glance.

Side-Engine Layout for Easy Maintenance

A new engine layout on the side of the machine provides easy access for routine inspections and servicing. Maintenance crews can access the entire power plant just by opening the side door.



7055



7070

