

Hydraulic Crawler Crane 7035/7045



KOBELCO
◆ KOBELCO, LTD.

YOU CAN FEEL THE DIFFERENCE!

The KOBELCO 7035/45 crawler crane from Kobe Steel redefines the meaning of versatility and precision. Equipped with SensaTouch Control, you can feel the position and movement of the load directly through the control lever. Machine response is so smooth and natural that the hook feels like an extension of your own hand. And this sensitivity is backed by a power-packed engine and highly sophisticated hydraulic system that ensure tough, reliable performance.

One look at the upper carriage

will tell you the 7035/45 is something out of the ordinary. The sleek, rounded design combines the versatile capabilities of a top-of-the-line crane with the comfort and responsiveness of the KOBELCO MARK II hydraulic excavators. Here at last is a machine that can do it all—lifting, clamshell, and vibro-hammer—with an easy operability unrivaled in the industry. It's a new concept in construction machinery design: ultra-efficient performance with a human touch.

CRANES WILL NEVER BE THE SAME!

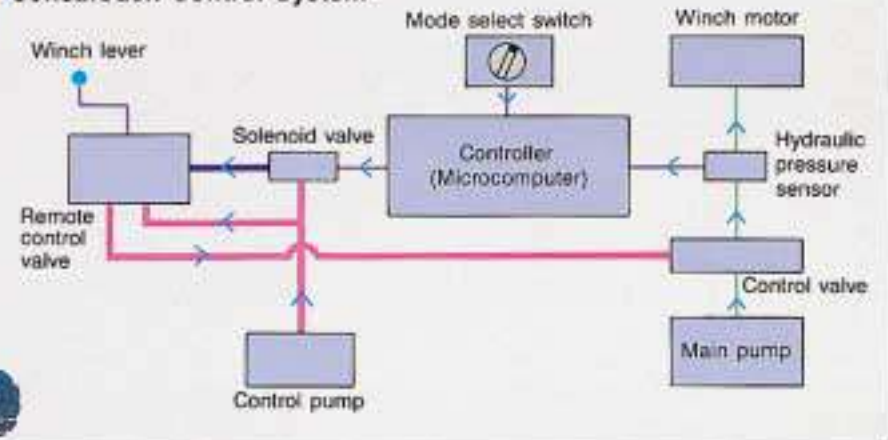
The 7035/7045 is more than just a crane. It's an all-purpose base machine that can handle a wide range of civil engineering and construction jobs. Regardless of how it's used, though, the 7035/7045 provides that sure, sensitive operation that only KOBELCO SensaTouch Control can give.



CRANE



SensaTouch Control System



SensaTouch Control Lets You Know

SensaTouch Control provides sensitive lever response to the load so that you can tell exactly when the hook begins to move. Bolt matching, girder placement, and other inching operations can be carried out with excellent precision and safety.



Faster, More Versatile Boom Hoisting and Lowering

Boom hoisting and lowering speeds rival those of a rough terrain crane when operated within the 40° to 70° range. And for the first time on any crane of this class, the boom can be hoisted and lowered by pedal, permitting simultaneous inching of the swing, winch, and boom.

Power Performance at the Top of Its Class

When it comes to pure power the 7035/45 stands at the head of its class with a 16-ton lifting capacity. There's more than enough power to tackle such jobs as H-beam extraction and heavy load lifting.

BASE MACHINE



Get In, Around, and Out with Ease

The 7035/45 makes the most of limited space. With a rear swing radius of just 3.57m for the 7035 and 3.83m for the 7045, you can get into and out of tight corners with ease.

Ready to Go When You Are

The fully equipped 7035 weighs in at an easily transportable 38 tons. When it's time to move on, adjust

the track width with the help of heavy-duty hydraulic cylinders, activate the straight propel system, and guide the machine easily onto a trailer. Total loaded height is 3.8m or less. The boom loads snugly in four sections onto an 11-ton truck.

Stable and Exact Speed Control with Engine Speed Sensing (ESS)

Engine Speed Sensing (ESS) provides the most efficient use of engine power for heavy-duty operation and jobs that require simultaneous attachment and swing operation. With ESS, lifting and lowering can be done while swinging without significant loss of speed, making full use of the 7035/45's powerful 155 PS direct-injected turbocharged engine.

Optional Third Drum and Additional Hydraulic Power Source

An optional third drum with inching capability can be fitted for leader work and other operations that require independent free-fall control. This drum's versatility can be further enhanced by an optional hydraulic power source for work with earth augers, drills, and vibrohammers.



VIBROHAMMER

Fast, Sure Sheet Pile Loading

The 7035/45 features synchronized main and auxiliary winch operation and highly sensitive inching capability, making it easy to grab sheet piles with the vibrohammer attachment. And because there's no time lag at the control lever, operation is faster and more precise than ever before.



Simple Insertion and Removal with SensaTouch Control

Computerized SensaTouch Control allows the operator to feel the movement of the vibrohammer's spring directly through the control lever. Insertion and removal of piles can be carried out safely and accurately even when the operator cannot actually see the attachment.

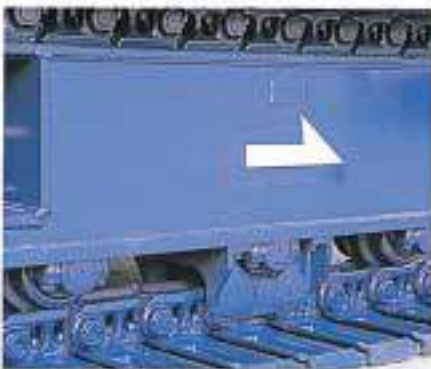
Handles Large Vibrohammer Attachments with Ease

Total rated lifting capacity was determined in the design stage with vibrohammer operation in mind. When fitted with a 24.38m boom, the 7035 has an impressive lifting capacity of 6.40 ton, and the 7045 a lifting capacity of 8.45 ton (assuming a 12m operating radius). The result is a versatile capability that can easily accommodate large vibrohammer attachments.



Heavy-Duty Over-the-Side Performance

With large, heavy-duty track link crawlers, the 7035/45 features steady, sure-footed traction and a low center of gravity for outstanding over-the-side lifting capacity. Stable, powerful performance is assured regardless of swing position.



Feel the Load, Not the Machine

Vibration and noise are minimized by sturdy, durable machine construction and a special backstop panel that separates the operator from the engine compartment. The cab is mounted on a highly rigid floor plate with rubber mounts that further ensure a quiet, comfortable working environment.



CLAMSHELL AND LIFTING MAGNET



Continuous Operation Without Seizure

The 7035/45 comes equipped with a newly designed large-finned brake drum that effectively dissipates heat to prevent cable seizure. This advanced feature is combined with a high-capacity brake clutch to ensure long hours of trouble-free, continuous operation.

Reach Four Floors Down on the First Cable Layer

Large-capacity, extra-wide winch drums permit clamshell work as deep as four floors down while remaining on the first cable layer. The result is faster, more efficient cycle times.

Fast, Powerful Swing with High-Torque Speed Reducer

The 7035/45 features a high-torque speed reducer with the same capacity as those found in cranes in the 55-ton class. This high-performance feature ensures fast swing response with plenty of power.

Independent Swing Pump—Another KOBELCO First

The use of an independent pump for the swing is unprecedented in a crane of this class, marking yet another KOBELCO first. Power loss is minimized during simultaneous operations for improved handling and positioning.

Optional Boom Inserts Are Built to Take It

Continuous clamshell operations require boom components with exceptional tensile strength to withstand constant stress and vibration. The tough boom inserts offered as an option on the 7035/45 fully meet this requirement, and are backed by the metallurgical expertise of Kobe Steel, one of the world's largest iron and steel producers.

Precise Control of Engine Revolutions

The 7035/45 features the same patent-pending electric throttle system that has been so highly evaluated on our large crawler cranes. Engine rpm is precisely controlled with the lightest of touches. And since the grip only rotates 120 degrees, wrist fatigue is eliminated even after long hours of operation.



A FULL RANGE OF ADVANCED SAFETY FEATURES



See How It Runs

Whether you're digging with the clamshell, driving piles, or lifting a load, you can see what you're doing with a clear view. The front window opens fully, and the rear guard is kept low for good visibility behind.



A Soft Touch Is All You Need

You have to operate the 7035/45 to know just how sensitive and comfortable crane control can be. SensaTouch Control provides immediate, intuitive response for both the attachment and swing. Time lag has been eliminated, and convenient mode switches are provided

so that inching is absolutely precise for all machine functions, including travel. Just settle into the fully adjustable, cloth-covered seat and take control—it's a whole new experience.



If It Isn't Safe, It Isn't KOBELCO

Swing flashers, high-intensity working lights, and a warning buzzer are just a few of the standard features that contribute to safe, trouble-free operation. A special lever lock system (patent

pending) prevents accidental operation when you enter or leave the cab. A computerized overload prevention system keeps the load within safe limits at all times, while a host of other safety devices and monitor gauges keep all machine functions running smoothly. Care has been taken down to the last detail, including direction indicators on the crawler tracks to distinguish front and rear.



A Quiet Sense of Power

Urban noise regulations pose no problems for the 7035/45. You can lift a load with a whisper of just 61 dB(A)/30m to keep surrounding residents undisturbed, even at night.



KEEP ON WORKING SHIFT AFTER SHIFT, JOB AFTER JOB!

Maintenance Has Never Been So Easy!

Every effort has been made to design a machine that stays on the job, not in the shop. Boom point sheave and lower rollers are permanently lubricated. Hydraulic pressure for each line can be easily checked with the help of individual line plugs. A heavy-duty 120 Ah battery is provided as standard, and a 150 Ah battery is optionally available for operation in cold climates. Six doors provide full access to the engine and hydraulic components for routine inspection and maintenance. The grease gun fits snugly into a holder fitted inside the rear guard.

Tough Durability Minimizes Downtime

Backed by Kobe Steel's extensive technical expertise and production experience, the 7035/45 features tough, durable construction and advanced design that minimizes downtime. Vibration is controlled by special damping steel material, and noise is reduced with the help of sophisticated acoustical analysis programs. The boom, frame, and crawler rollers incorporate high tensile strength steel, and the toughness of the steel used in the deck and floor plates has been increased 50% over that of previous KOBELCO cranes to accommodate vibrohammer operation. It all adds up to a durable machine that keeps on working under the hardest of conditions.



Features

Every Job Has Its Own Special Requirements. You Need a Machine That Can Do It All.

- Power and stability to accommodate large vibrohammer attachments.
- Line pull of 16 tons makes sheet pile removal easy and quick.
- Large-capacity drum permits clamshell work as deep as four floors down on the first cable layer.
- Heavy-duty hoisting capacity provided by high-output engine and 60-ton class winch.
- Fast lifting and boom hoisting speeds ensure reduced cycle times on construction projects.
- Compact rear swing radius provides efficient operation in limited spaces.
- Mechatronic ESS makes full use of engine power and prevents stalls.
- Large-capacity brake drum with heat-radiating fins ensures safe, seizure-free performance during continuous operation.
- Low center of gravity keeps the machine stable when lifting over the side.
- Heavy-duty track links assure stable, sure-footed travel.
- Independent swing pump provides powerful and fast swing during simultaneous attachment operation.
- Optional heavy-duty boom inserts designed for high-stress, continuous operation.

Operators Have Different Skills and Work Experience. You Need a Machine That Can Be Operated by Anyone.

- SensaTouch Control with hydraulic pilot system permits the operator to feel the movement of the load through the control lever.
- Larger hydraulic piping eliminates time lag at the controls when lifting and lowering loads.
- Easy, precise inching control for lifting, hoisting, and travel.
- SensaTouch Control provides direct, sensitive control of the swing for exact positioning.
- Independent inching control for the swing facilitates inching during simultaneous attachment operation.
- Optional swing brake provides choice of negative and positive modes.
- Straight-propel travel system keeps the machine on track during simultaneous boom operation.
- Electric throttle provides light, accurate engine control.
- Pedaled boom hoist control permits simple simultaneous operation of three machine functions.
- Excellent upward visibility provided by a pop-up skylight and a sliding upper front window that can be stored on the cab ceiling.

- Downward field of vision kept clear by a removable lower front window.
- Cloth-covered, tilt-adjustable seat helps the operator to maintain a comfortable and relaxed posture.
- Window washer and intermittent wiper provided as standard equipment.

Urban Environments Place New Conditions on Operation. You Need a Machine That Works Quietly, Safely, and Unobtrusively.

- Newly designed backstop greatly reduces vibration and noise during vibrohammer operation.
- Various anti-noise measures for the power plant and attachment keep onsite noise to a mere 60 dB(A)/30m.
- Swing flashers and rear light alert onsite workers of the machine's next move for improved safety.
- Lever lock system prevents accidental operation when the operator enters or leaves the cab.
- Free-fall interlock eliminates accidental activation of free-fall.
- Individual lever locks allow unused levers to be conveniently secured.
- Hoist overload device features an easy-to-read liquid crystal display and incorporates diagnostic and individual cancellation functions.
- Optional external hoist load indicator lamp helps to keep operation within safe limits at all times.
- Compact overall machine dimensions facilitate operation in cramped urban settings.

Indirect Costs Add Up. You Need a Machine That is Durable and Easily Transported.

- The 7035's boom can be disassembled and loaded onto an 11-ton truck.
- Newly developed self-removable counterweight facilitates disassembly. (Standard on the 7035, optional on the 7045)
- Spreader features automatic storage and allows boom and guy cables to be connected easily.
- Optional auxiliary jib simplifies cable reeving.
- Highly tapered guy cable pin and lightweight connectors facilitate assembly.
- Convenient side step simplifies boom assembly.
- Check & Safety Monitor continuously checks 16 machine functions and alerts the operator of potential problems. (Tachometer is optional)
- Tough frame construction has proven durable enough to withstand one million road tests.

Address inquiries to:

NOTE: Due to our policy of continual product improvement, all designs and specifications are subject to change without advance notice.



KOBE STEEL, LTD.

ENGINEERING & MACHINERY DIVISION
Construction Machinery Division

KOBELCO Bldg., 3-2, Toyo 2-chome, Koto-ku, TOKYO, 135-8381 JAPAN
Tel:03/6634-5311 / Fax:03/6634-5538

Bulletin No. 7035/7045-102