

KOBELCO

SK400D_{LC}

SK550D_{LC}

Demolition Machine



We Save You Fuel
Achieving a Low-Carbon Society

Designed and built to save time and get you up and working!!

The KOBELCO demolition machine utilizes a common use type base boom and exclusive NEXT attachment joint for the Ultra long front, boom insert and the Separate boom.

KOBELCO's demolition machines with the exclusive NEXT joint systems are made so you can set up or change work fronts quick and easy to get the job done. With the ability to change tools on site and work at multiple heights with a single machine, the productivity is maximized with the needs of the job.

The machine can be quickly set up and adapted to meet the job requirement and be use for the full duration of the job instead of swapping out machines.

Due to the unique structure of this attachment, transport can be completed safely and with just a few steps. Add that to the excellent fuel savings and machine durability, KOBELCO helps provide the owner reduced operational costs, less downtime and greater return on investment.

KOBELCO's SK400DLC, SK550DLC demolition machine is the next generation of high performance and cutting edge technology. It's ready to go to work for you.

Focus on operation rate resulting in a machine with common use type base boom

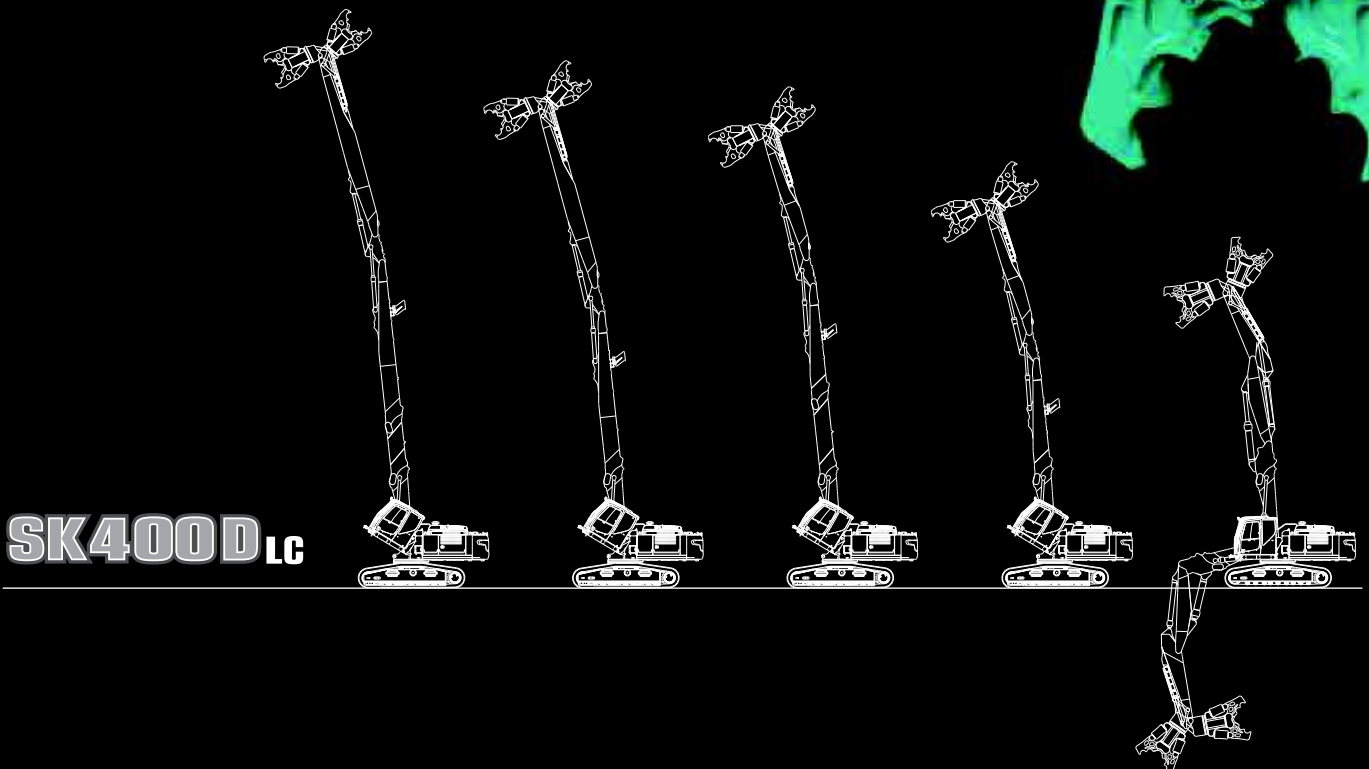
Previous demolition machines had a structure that basically did not allow attachments to be exchanged, meaning one complete machine was required for each specification. Having machines each dedicated to its specialty was useful onsite, but this meant that the operation rate was low and users were required to own multiple machines. KOBELCO's solution was to develop a machine structure that enabled one machine to be adapted to multiple specifications. Our solution took form in the shape of the machine with common use type base boom.

The NEXT system, created with focus on the site



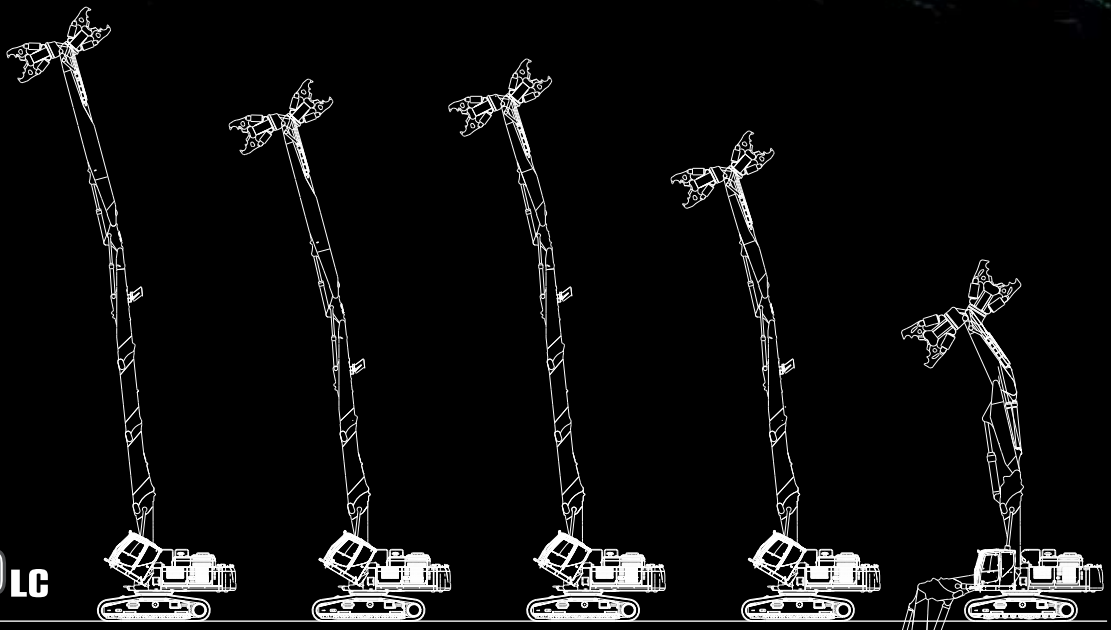
A machine with common use type base boom is transported by separating the main body and its attachments, requiring less time for set-up after arriving onsite. KOBELCO studied in detail how the assembly work could be completed safely in a short time. We threw out the previous fixed concepts about attachments and developed an innovative attachment that incorporated our various ideas, resulting in the NEXT system.

Four types of ultra long attachment specification for high elevation demolition, with 'separate boom' specification designed for breaking up foundations.





SK550D_{LC}



Work setups done quickly and safely! The new-generation NEXT demolition attachment

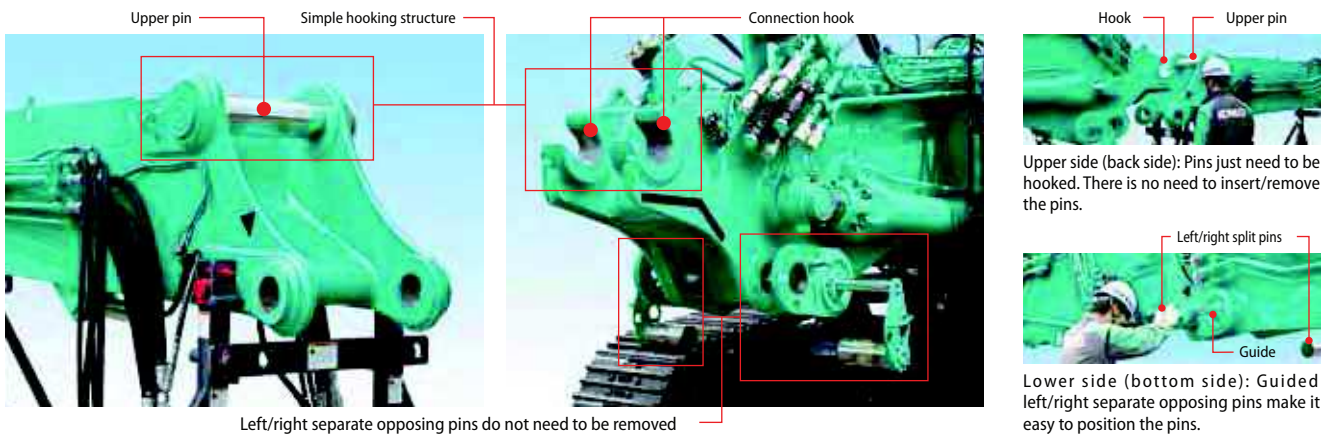


NEXT attachment

The new-generation NEXT demolition attachment for the demolition machine with common use type base boom was designed by KOBELCO without being limited by existing concepts. Each boom attachment has a block structure that simplifies assembly/disassembly and transport, and the attachments employ our original NEXT joint system. The piping can be connected at ground level, and the steps for attachment assembly/disassembly from pressure release to pin fixing can be completed safely in a short time.

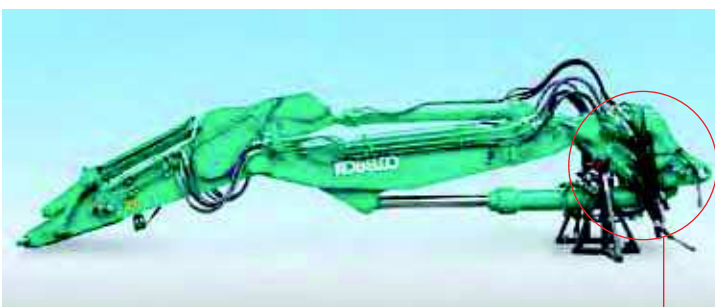
■ NEXT joint system

KOBELCO's original joint system was developed by testing the assembly/disassembly process extensively. The boom attachment can be connected just by hooking the upper (backside) pin and fixing with the separate opposing pins on the lower side (bottom side).



■ Main front boom [NEXT separate boom specification]

Assembly of the separate boom simply means connecting the main front boom with which the jib cylinder foot section is integrated, to the all-purpose base boom using the NEXT joint system. This saves on the work otherwise required to connect the jib cylinder.



Main front boom

■ Side-mounted hydraulic piping

All attachment joints have the hydraulic piping mounted on the side, adopting hydraulic multi-coupler system for connecting sections.



Piping connection: Hydraulic multi-coupler system on the side of the boom.



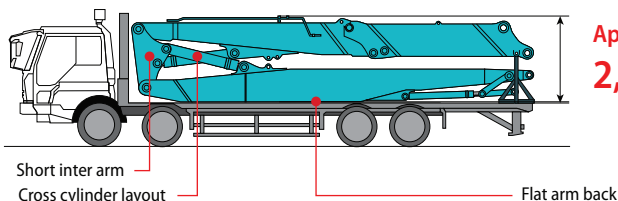
SK400D LC
Separate boom specification

Attachments and base machine designed for easy truck transport

Attachment height during transport

[NEXT ultra long attachment specification]

The 3-piece NEXT ultra long attachment is designed with the jib cylinder and arm cylinder crossed over the short inter arm, and the back of the arm is flat. The height while in the stored state has been lessened to approx. 2m to lower the entire height during transport.



Approx.
2,030mm

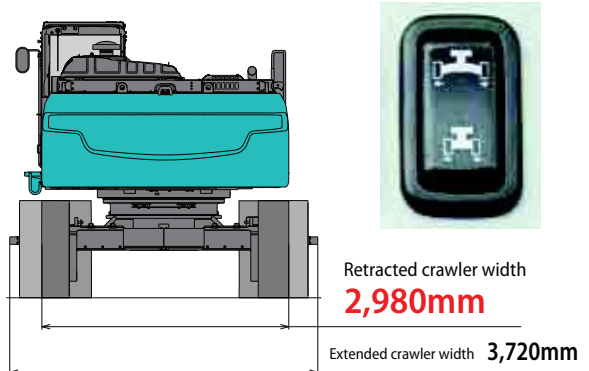
Quick hitch piping

A hydraulic circuit for the quick-hitch arm that allows quick and easy fitting of the front attachment is supplied as standard.



Hydraulic crawler extension/retraction mechanism

Crawlers can be retracted to reduce crawler width to below 3m for ease of transport. The hydraulic system makes light work of extending or retracting with crawler shoes remaining on ground.



Two-part counterweight

The counterweight can be separated into two for transport. One part forms a case into which the other part is housed. It looks neat and uncluttered, and assembly/disassembly is faster than with an integrated counterweight.

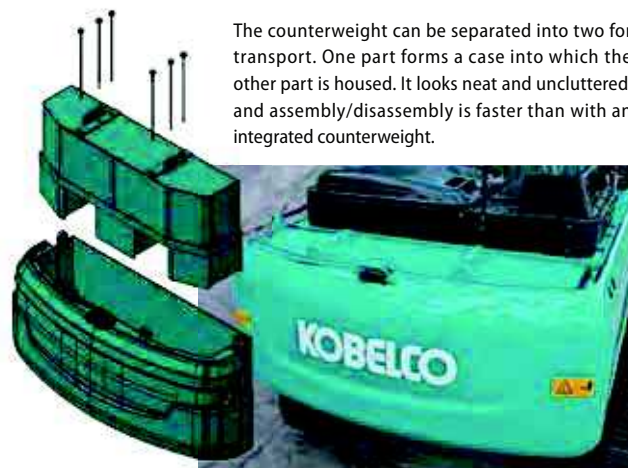


Photo shows earlier model

Boom attachments can be changed easily, enabling a high machine operation rate



Separate boom specification

KOBELCO has pioneered the development of the separate boom in Japan, and the NEXT separate boom is the product of a wealth of technologies built up through long experience in this field. By attaching a large nibbler, demolition is completed swiftly and efficiently, whether it's the lower floors of tall buildings where the concrete is thickest, or basement floors and foundations. Working ranges at machine foot are extensive, and the maximum working depth is top level in all classes.



Maximum work depth

SK550D_{LC} 6,260mm

SK400D_{LC} 6,210mm

Note: The measurement is for the arm bucket pin position.

NEXT ultra long attachment specification

Long reach attachment specifications are for high elevation demolition carried out from ground level. Maximum working height for both SK400DLC and SK550DLC is top level in their class. Can handle general demolition of 8~9 story buildings, and height can be reduced by removing the insert boom.

Maximum work height

SK550D_{LC}
6.1m arm **Approx. 25.0m** 8.7m arm **Approx. 27.5m**

SK400D_{LC}
6.1m arm **Approx. 21.1m** 8.7m arm **Approx. 24.7m**

Note: The measurement is for the arm bucket pin position.

Large nibbler

With ultra long attachment specification, large crusher with mouth width exceeding 1m can be accommodated. Separate boom specification have a large nibbler already installed, for powerful crushing and efficient performance.

KR1100TPR-2

Mouth width **1,100mm**

Weight **2,580kg** Crushing force (center) **1,520kN**

KR1350TPR-40

Mouth width **1,350mm**

Weight **3,750kg** Crushing force (center) **1,770kN**

KR1500TPR-50

Mouth width **1,530mm**

Weight **5,200kg** Crushing force (center) **2,080kN**



KR1100TPR-2



KR1350TPR-40

SK400D_{LC}
Ultra long attachment specification
6.1m arm + 3.5m boom insert



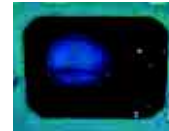
Fuel costs can be reduced with outstanding low fuel consumption and mode selection



New environmental engine

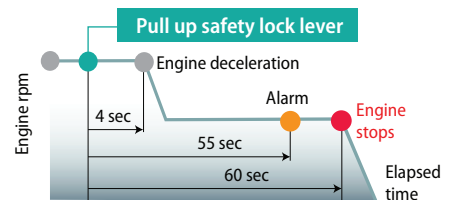


A new electronically controlled engine with high power and low fuel consumption is installed. Particulate matter and NOx emissions are suppressed through the engine's high combustion efficiency, exhaust gas after-treatment equipment, and urea SCR system. The engine also conforms to EPA Tier IV Final regulations.



AIS (Auto Idle Stop)

This idling stop function eliminates wasteful fuel consumption while waiting between operations. The engine stops automatically when the operation lever continues to remain in the locked state.



Fuel consumption mode

A function is provided for switching modes to prioritize fuel consumption depending on the work content. Modes can be switched while using any front attachment including the nibbler, breaker, or bucket.



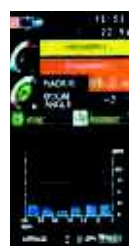
- H mode**
When prioritizing work volume
- S mode**
When prioritizing the balance between work volume and fuel consumption
- E mode**
When extensively prioritizing fuel consumption



Bucket / nibbler / breaker mode switch

New cluster gauge

A new color multi-display with multi-function indicators is installed. In addition to gauges and information such as fuel consumption, maintenance, working radius/boom angle, and rear view camera images, the selected attachment mode and mounted front attachment are also displayed.



Fuel consumption



Attachment mode selection screen



Front attachment selection screen



Enhanced safety functions to assist the operator in production and performance

New cab interference prevention system

The cab interference prevention system is standard on the SK400DLC, SK550DLC. This feature sounds an alarm and prevents the machine from allowing the working tool to come into contact with the cab during operation. Current tool position can be detected with high accuracy so the tool can be moved at close range near the cab, resulting in increased safe working range.

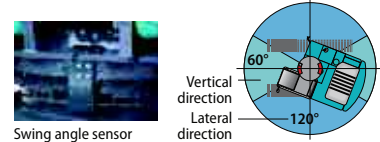
■ System operation

As the working tool approaches the cab, alarm is sounded before any contact can occur, and the machine automatically prevents tool from making contact with the cab.



Stability warning system

The working radius and stability are calculated from the position of the attachment, and the operator is warned with a alarm (continuous sound) where the machine's stability could be compromised.



The tip over risk area will vary according to the upper orientation since the safety allowance will vary depending on the swing angle. The maximum working radius is larger when facing the vertical direction.

Tilt cab

Cab support to allow tilting up to 30° is supplied as standard. The operator can maintain a comfortable posture during high elevation demolition work, suffering less fatigue over long working periods.



- Crosspiece on right side cab window for operator safety should the glass be broken.
- Cab foot mirror and cab foot light to ensure full visibility for work at machine foot.
- Maintenance stopper for greater safety during tilt mechanism maintenance.
- Alarm to prevent accidents when cab tilting is operated.
- Cab lowering device for emergencies.

Demolition special cab

The adjoining edge of the top and front windows are free of view-obstructing pillars, and radial type grid guards are installed on front and upper sides. This gives the operator an unobstructed and continuous view from ground level to the maximum working height.



- ISO 10262 level II FOPS front and top guards.
- The cab guards can be opened and closed without tools, and the glass can be cleaned easily.
- Vertical open/close roller shades that can be stopped at any position.
- Laminated front window.
- High strength security glass that complies with European P5A anti-crime standard.

Multiple standard features and accessories for ensuring safety

Tilting cab
Tilting cab is standard.

Rear view camera
The rear view camera is displayed on the multi-display.

Right side camera + monitor
Rear and side camera views can be displayed on the separate monitor.

Boom, arm and jib holding valves
Standard - to prevent boom or arm from falling if hose is damaged.

Cab with two lights
Cab mounted lights are standard.

One way call (loudspeaker system)
High sensitivity microphone used for clearer voice quality.

Specialized attachment stands Option
For greater safety and efficiency during assembly, disassembly and transport.

Falling object deflector
The guard deflects falling debris away from the machine. This is standard for the ultra long attachment.

*The accessory settings may differ according to the class or specification. Refer to the list of key accessories on the back page for details.

Highly durable structure to show enduring excellent performance in hard operations

Factory engineered Heavy Duty boom and arm [Ultra long attachment]



Lifting eyes are provided.
Hoses are routed for easy maintenance.

Dedicated arm for the ultra long attachment

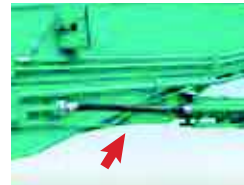
Various reinforcements and protective structures are incorporated in the arm section to prevent damage from contact or flying debris.



Guided reinforced bucket cylinder guard with box-type structure



Electric wiring with optimized routing and full cover for preventing damage



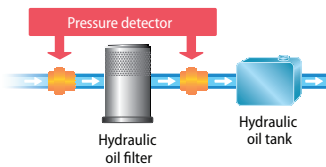
Hoses routed to protect from damages



Guarded work LED lights

Hydraulic oil filter restriction indicator

Clogging is detected by the pressure difference at the filter entrance and exit, and warnings are displayed on the color multi-display. Hydraulic equipment trouble can be prevented by taking action before contaminants enter the hydraulic oil tank.



LED lights

Bright, long-life LED lights fitted to left and right of arm for ultra long attachment specification, and to left and right of boom for separate boom specification.



Various functions and accessories for the longevity of the machine



Upper frame under cover guards
The 6mm thick reinforced cover protects the inner devices & engine unit.



Swivel guard
The lower car body structure is fitted underneath with a 9mm thick reinforced cover.



Water spray (with drainage circuit) Option
A drainage circuit is newly installed to prevent rusting valves. The pipe can be drained after sprinkle water.



New hydraulic oil filter
Glass filtration material with outstanding cleaning ability and durability is used.



Air cleaner (double element)
The double filter structure and large capacity prevent dust from being sucked in.



Auto lubrication system
The attachment is automatically oiled at specified times. Eliminates the trouble of oiling before starting work.



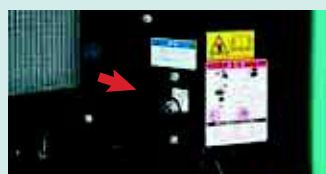
Additional tool box
A large storage box for storing tools is provided.



Reinforced guard for travel motor
Thick steel plate used to ensure strength and minimize gap with frame.



Fuel fill-up pump
Quick, safe fuel fill-ups possible from a standing position without the need to mount upper carriage.



Battery shut-off device
Single switch to prevent battery discharge over long inactive periods.



Full track guides Option
Crawler de-tracking prevented even on roughest ground littered with demolition rubble.



Crawler extension/retraction mechanism guard
Hydraulic cylinders protected from flying demolition rubble.

*The accessory settings may differ according to the class or specification. Refer to the list of key accessories on the back page for details.