

**KOBELCO**

**SK1300 D<sub>LC</sub>**

Ultra High Reach Demolition Excavator



*We Save You Fuel*  
Achieving a Low-Carbon Society

# The New Standard in Ultra High Reach Excavators

Reach new heights in demolition.  
Introducing the SK1300DLC: Where power meets versatility.

KOBELCO has worked closely with building demolition contractors to identify challenges and to find solutions to take the industry to the next level, while continuing to push the boundaries of what is possible with demolition excavators. Customers have asked for machines that provide superior productivity, with improved stability and greater tool carrying capacity, and the ability to use more powerful crushers at new heights. KOBELCO has once again responded to these challenges—introducing the next generation of ultra-high reach demolition excavators, the all-new SK1300DLC. Featuring the newly developed NEXT ADVANCE 4-piece high reach demolition attachment, the SK1300DLC provides a wide variety of boom and arm combination options, for whatever the job requires. The SK1300DLC is also designed for ease of transportability, featuring increased safety and minimised work preparation time.

Ultra-high reach, with multiple boom and arm configurations providing flexibility.



- 4-piece ultra long attachment specification [40m type / 35m type]
- 3-piece ultra long attachment specification [35m type / 31m type]
- Separate boom specification with insert
- Separate boom specification [for maximum tool weight and ground level processing]

# Achieve a higher level of productivity. Reach new heights, with greater tool capacity.

## 4-piece ultra long attachment specification



**Equipped with NEXT ADVANCE, a flexible configuration ultra-high reach demolition attachment solution.**

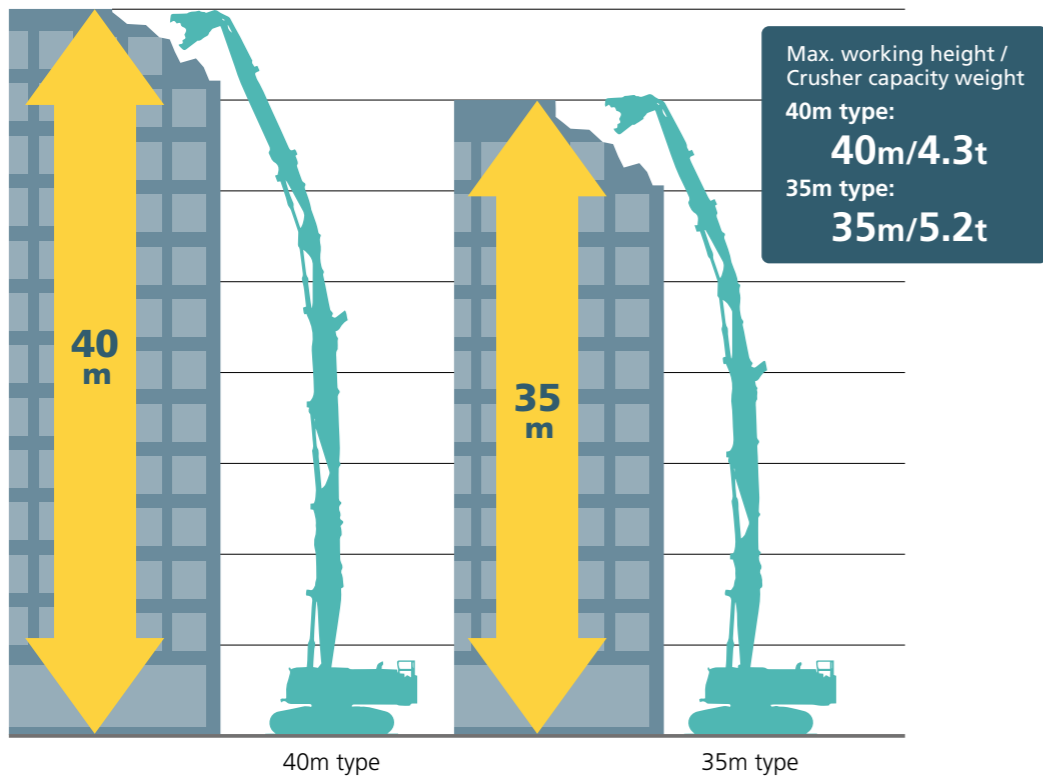
The new NEXT ADVANCE high reach demolition attachment was developed to achieve greater working heights, with improved tool capacities. The unique new articulated structure of the 4-piece high reach demolition attachments make it possible to greatly overcome current operational limits of other 100 ton-class machines.

### Exclusive articulated insert boom

One example of the new NEXT ADVANCE technology is the introduction of articulation joints to the insert boom. By keeping the centre of gravity of the overall machine lower, even larger crushers can be used without the need to increase overall base machine weight.

### Choose from 40m and 35m reach configurations

Adding a 4-piece boom configuration to the 100t class has allowed a max reach of 40m—previously limited only to larger machines. Choose the 35m boom configuration to support even larger crushers.



Quick hitch piping equipped as standard

## 3-piece ultra long attachment specification

### Two arm lengths for job site flexibility

The 3-piece high reach attachment is available with a 35m and 31m configuration. Front arms of differing lengths are available, with a common attachment design allowing interchangeability. Working height and the maximum attachment mass can be adjusted to suit the application by simply changing the front arm.

### Large working radius utilises machine's full reach capability

The 3-piece attachment configuration provides a wide working radius, with a large margin of stability in the longitudinal direction, allowing the operator to take full advantage of the longer reach. At the same time, the maximum allowable attachment weight has been increased. Quick hitch piping is equipped as standard.

35m type : 8.9m front arm

31m type : 6.8m front arm

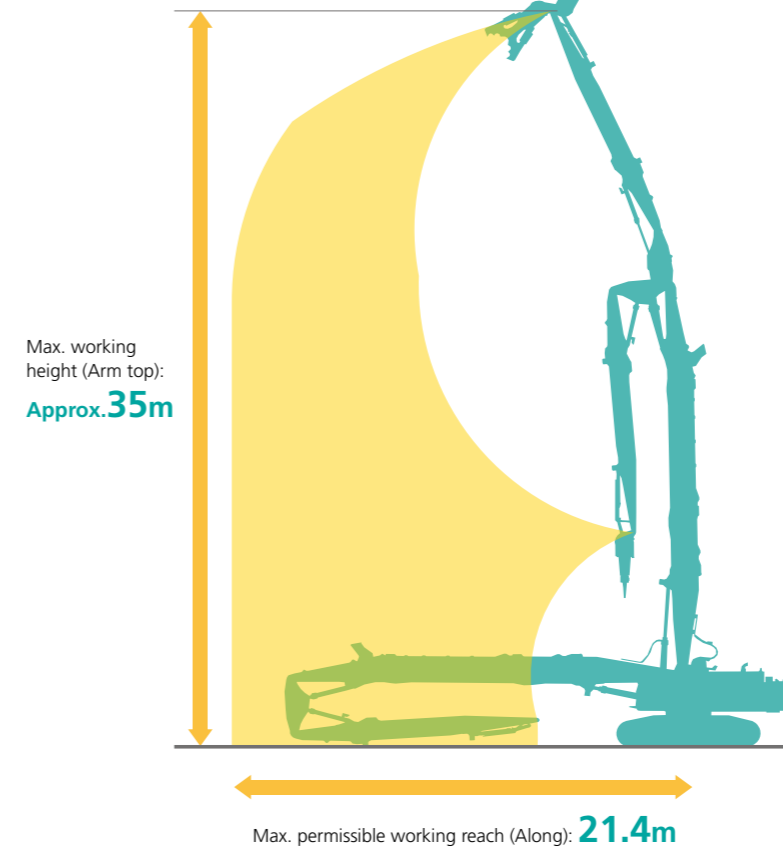
### Crusher capacity weight

35m type : **5.0t** (4.4t) 31m type : **6.1t** (5.3t)

\* ( ) indicates crusher weight capacity with quick hitch installed

### Working range

(For 35m type)



Powerful large diameter cylinders

**Powerful large diameter cylinders**

The boom cylinders now use a large diameter cylinder, and the cylinder mount position has been optimised — improving lifting power and allowing heavier attachments.

**Quick hitch piping equipped as standard**

Dedicated quick hitch piping is equipped as standard, allowing the installation of a quick hitch, for easy attachment changes.

# Attachment configuration to maximise cost reduction.

## Separate boom specification with insert

### Wide working range from high reach to ground level

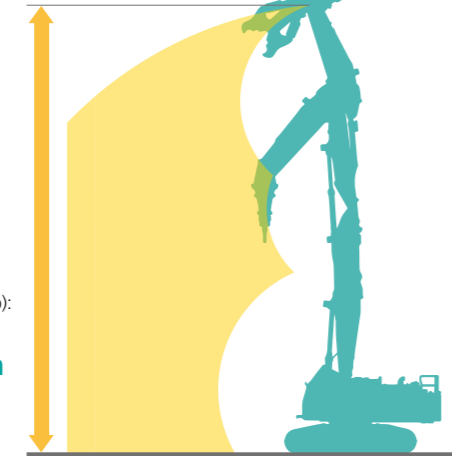
A wide working range envelope is achieved, with no limits on the angle of the main boom during demolition operations. The boom and arm sections can be completely lowered, allowing secondary demolition and heavy dismantling operations at ground level.

Crusher capacity weight  
**9.6t (8.0t)**

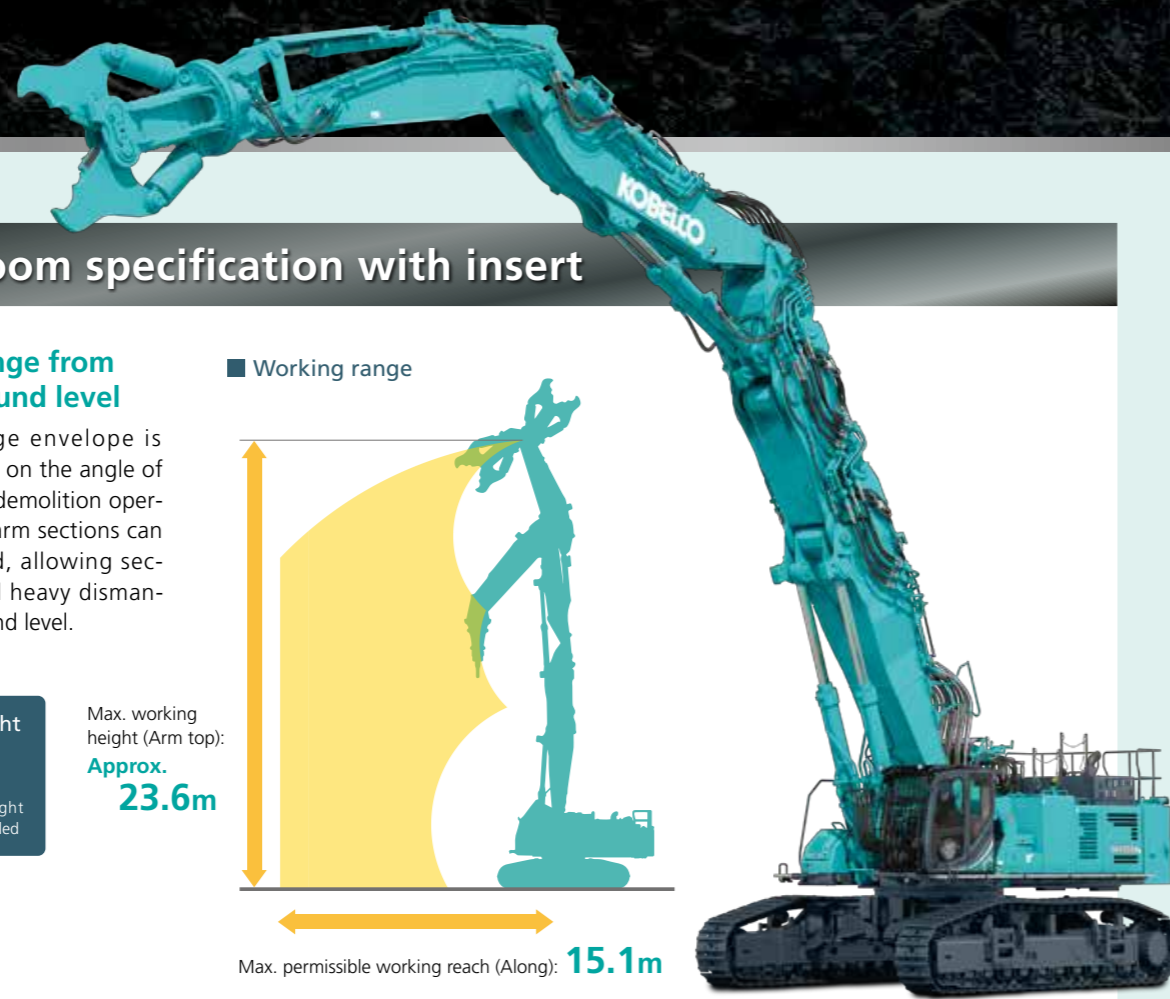
\* ( ) indicates crusher weight capacity with quick hitch installed

Max. working height (Arm top):  
**Approx. 23.6m**

Working range



Max. permissible working reach (Along): **15.1m**



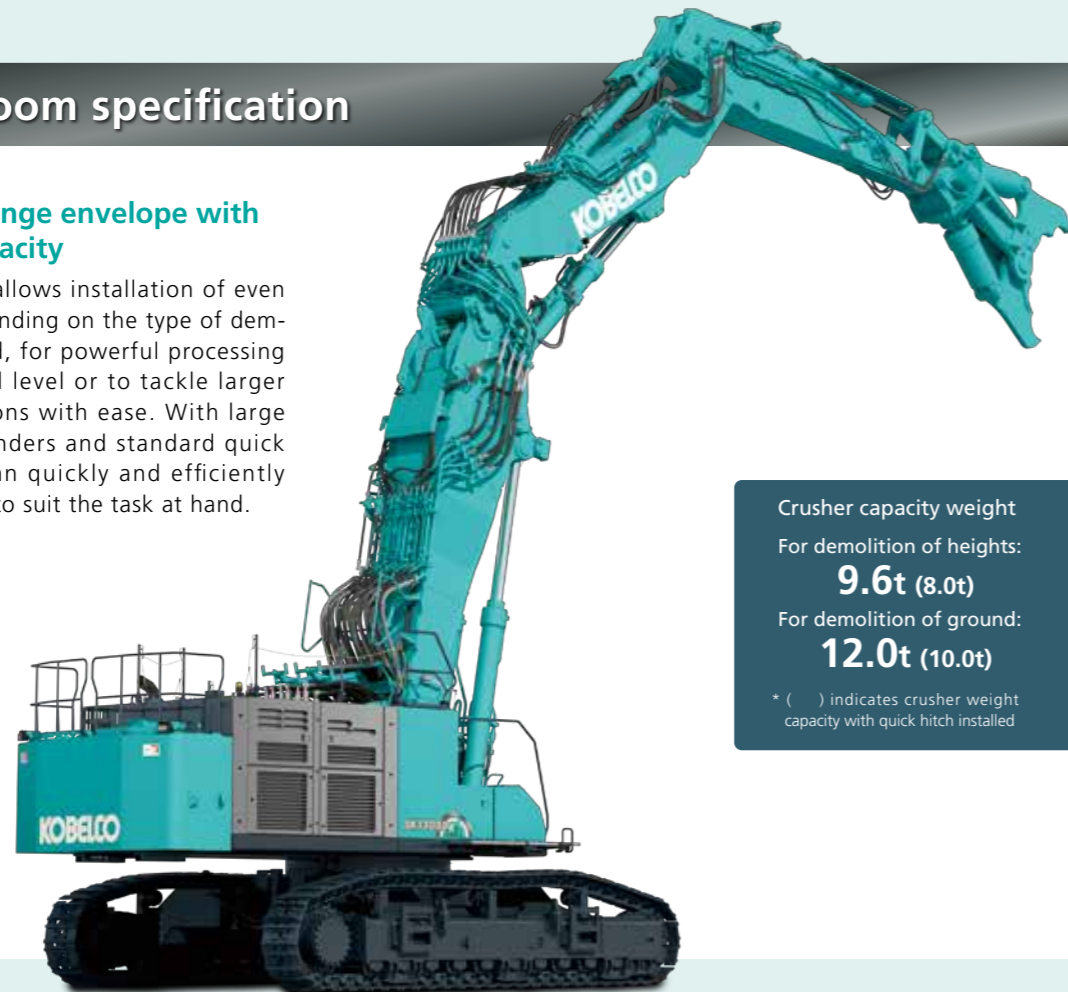
## Separate boom specification

### Wide working range envelope with powerful lift capacity

The separate boom allows installation of even larger crushers, depending on the type of demolition work required, for powerful processing capability at ground level or to tackle larger sub-grade foundations with ease. With large diameter lifting cylinders and standard quick hitch piping, you can quickly and efficiently change attachments to suit the task at hand.

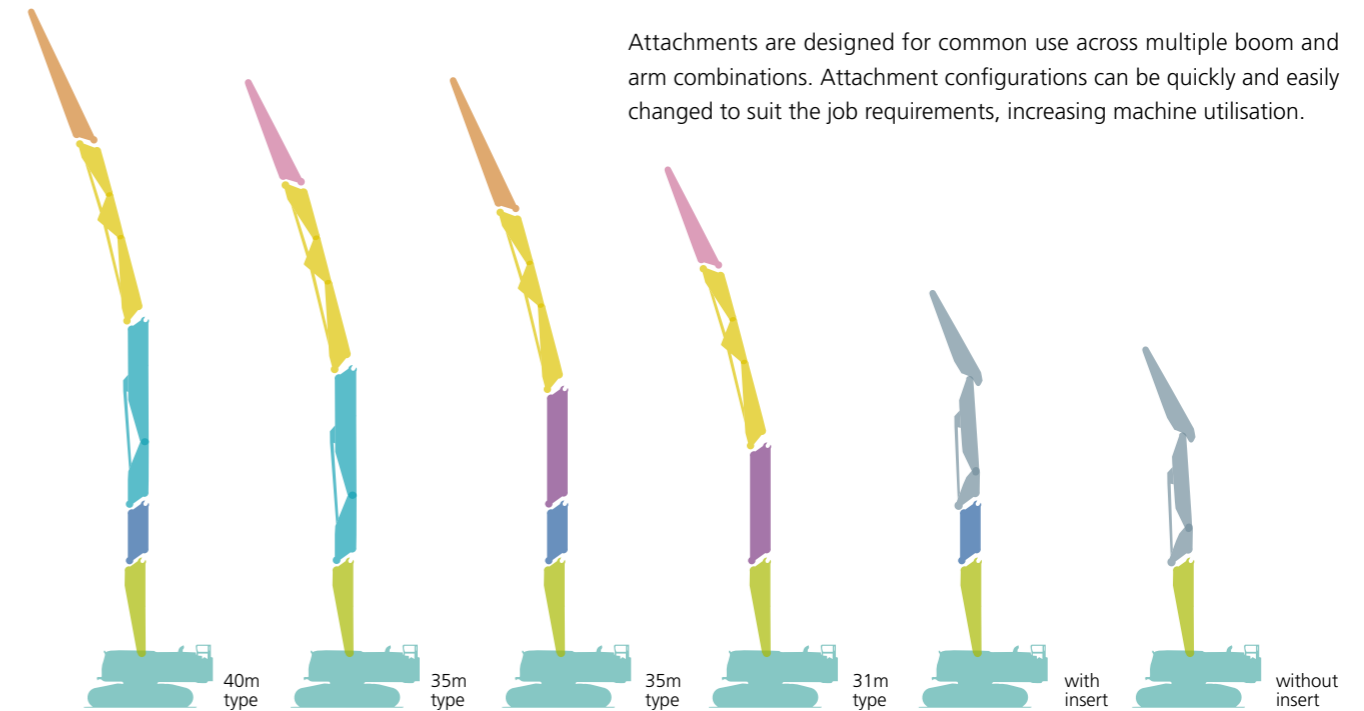
Crusher capacity weight  
For demolition of heights:  
**9.6t (8.0t)**  
For demolition of ground:  
**12.0t (10.0t)**

\* ( ) indicates crusher weight capacity with quick hitch installed



## New attachments designed for standardisation across multiple configurations

Attachments are designed for common use across multiple boom and arm combinations. Attachment configurations can be quickly and easily changed to suit the job requirements, increasing machine utilisation.



4-piece ultra long attachment specification

3-piece ultra long attachment specification

Separate boom specification

### Attachment lineup and compatibility

\* Same colored attachments can be commonly used.

	4-piece ultra long attachment specification		3-piece ultra long attachment specification		Separate boom specification	
	40m type	35m type	35m type	31m type	with insert	for demolition of heights / for demolition of ground
Front arm (semi long)	●		●			
Front arm (STD)		●		●		
Inter boom section	●	●	●	●		
Insert boom with joint	●	●				
Insert boom (long)			●	●		
Insert boom (short)	●		●		●	
Separate boom (unified arm)					●	●
Main boom (with sub-frame)	●	●	●	●	●	●

# Modular design allows easy transport, with fast setup and disassembly.

## Subframe structure enables 32-ton transportation

The main boom attachment point uses a unique modular subframe structure with a simple alignment mechanism that allows easy removal and installation of the main boom structure when required. The guide structure and the hydraulic pin make it easy to remove and install the main boom, achieving a base machine transportation mass of 32 tonnes or less, simplifying transport in urban environments.

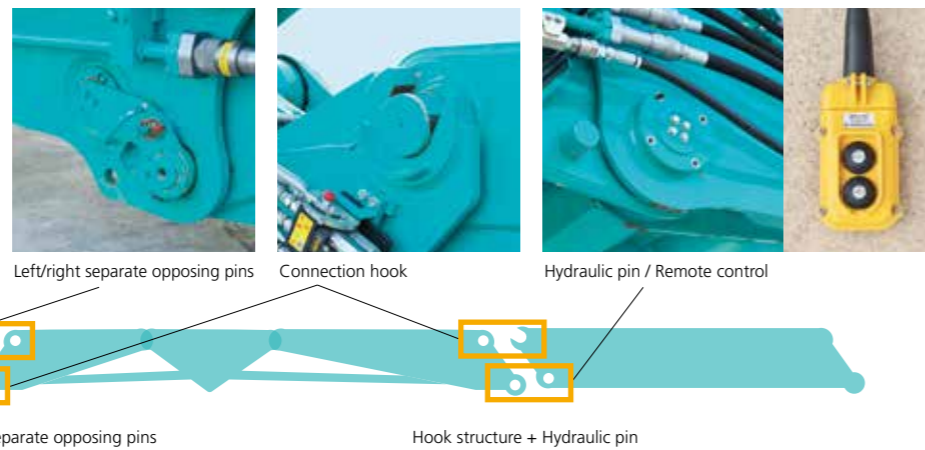
Main boom disassembly time: **Approx. 2 hours**

Transportation mass of base machine: **Approx. 32t**  
(Height: Approx. 4.1m <including trailer bed>, Width: Approx. 3.2m)



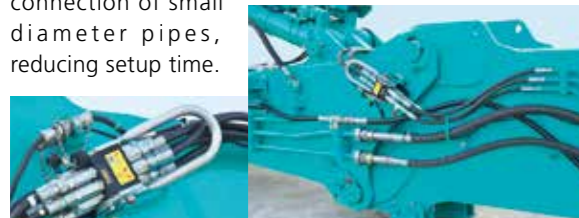
## New arm connection design reduces assembly time

A newly developed split arm design simplifies installation of arm segments. A hook structure with separate opposing pins and a guide are used in conjunction with a hydraulic pin connection to reduce the time required for assembly and disassembly.



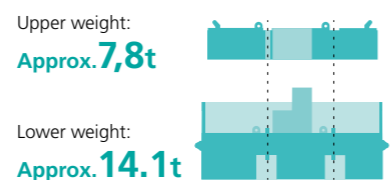
## Safe and quick hydraulic connection

Hydraulic pipes are installed on the left and right sides of the attachment for improved reliability and ease of assembly. During assembly and disassembly, hydraulic connectors can be safely coupled without the need to climb on top of the attachment. A single action multi-line coupler system has been implemented for the connection of small diameter pipes, reducing setup time.



## Two piece counterweight with steps

A two-piece counterweight design improves ease of transport. Both counterweights are encased in a single frame; the lower counterweight incorporates a stepped design to improve accessibility for assembly and disassembly.



## Translifter with synchronised four-leg control

A translifter for quickly and safely assembling/disassembling the lower car body of the base machine and the crawler frame is equipped as standard. The translifter includes synchronised four-leg control, making individual leg operation unnecessary.



4-piece ultra long attachment specification

# Unbeatable performance, functionality and versatility take demolition to the next level.

## Operator station designed for all-day comfort and reduced fatigue

The standard tilting demolition spec cabin includes front and top guards, for excellent visibility and safety. The spacious operator station minimises operator fatigue with its modern design and comfort inclusions.



Air-suspension seat with supportive back and neck rest reduces fatigue.



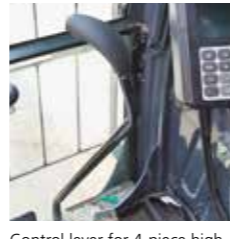
A 30-degree cab tilt angle provides the optimum viewing position when the application requires long periods of working at heights.



Operator station with a wide field of vision, for improved safety



Skylight with wide opening roller shade



Control lever for 4-piece high reach demolition spec machine placed in the foot area

## 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.

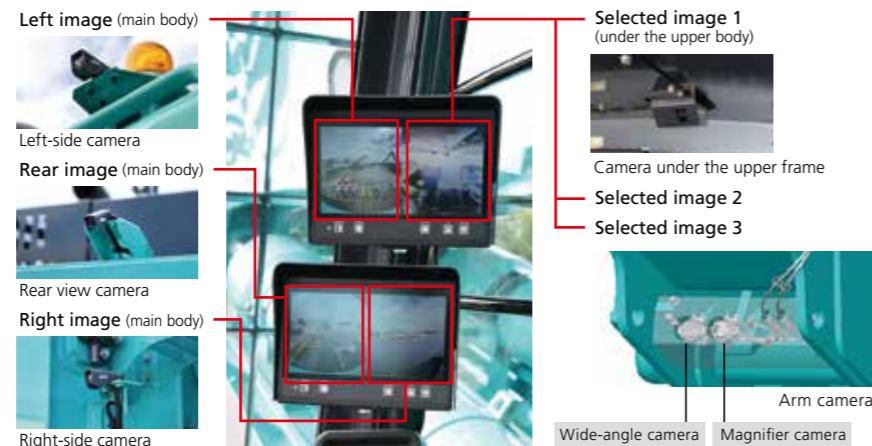


AdBlue® tank



## Multiple cameras standard, for increased operator awareness

In addition to being able to see areas around the machine not visible to the naked eye, the operator can also quickly check demolition objects located near the crusher blade from the operator's seat. Cameras are equipped in four spots on the base machine (rear, right, and left sides, and under the upper machine body) and a camera is also equipped at the tip of the arm. Two dual-display monitors are provided, showing the feeds from four cameras simultaneously. The operator can easily switch the video feeds with the rotary switch.



\*The front attachment camera is only installed on the high reach demolition attachment/equipment machine.  
\*Only the picture from the front attachment camera can be switched.

## Cab interference prevention system improves operator efficiency

Because there is no danger of the crusher contacting with the cab, the operator can confidently perform lever control even around the base of the machine. With highly accurate interference position detection, a wide working area is obtained during arm-retracted operation. Work can proceed smoothly.

### System movement

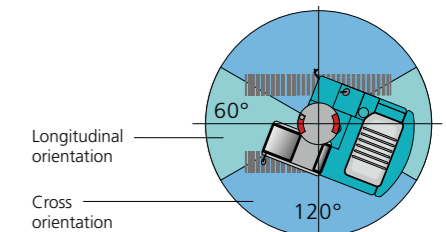
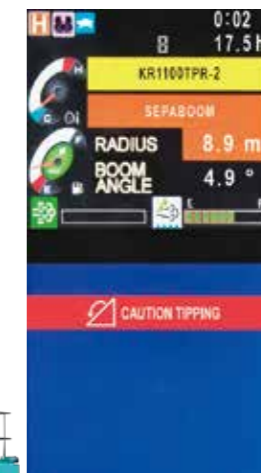
If the top of the arm or other part of the front attachment comes within a certain distance of the cab, the interference alarm sounds just before contact and operation gently stops automatically.



\* The photo is of the SK400DLC.

## Tip-over warning device with longitudinal/horizontal orientation detection

The device determines the danger of tipping from the posture and swing angle of the attachment, and it informs the operator with an audible alarm and a warning on the screen if the machine is in a dangerous position. The danger range for tipping differs depending on the upper orientation, due to changes in the level of safety clearance from the swing angle. In longitudinal orientation, a larger maximum working radius can be obtained.



4-piece ultra long attachment specification

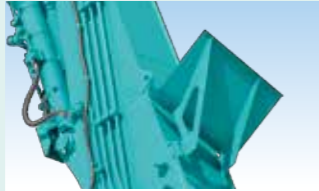


# Demolition ready. Standard factory options, built ready to work.

## Safety improvements



**LED lights**  
High intensity LED working lights are provided on the front, as well as two cab lights and a boom light.



**Debris deflector**  
(high reach demolition specification)  
Increases operator safety by preventing falling demolition debris from colliding with the cab.



**Handrail (+ stanchion)**  
Maintains safety for work on the counterweights via a stanchion and wire rope.



**Public address system**  
(PA system)  
Maintains safety by alerting workers in the area with clear audio quality.



**Lower entry/exit step**  
Ladder-type steps equipped in the front and back of both left and right crawlers.



**Swing flasher**  
The swing warning lamp helps prevent collisions and accidents while the upper body is turning.



**Cab emergency lowering device**  
Even in an emergency, the cab can be lowered by operating the dedicated lever.



**Boom emergency lowering device**  
Controls to automatically lower the attachment when the engine fails.



**Tie down points**  
Equipped with brackets for lashing during transportation on the lower car body.



## Improved maintainability



**Reversible cooling fan**  
Reliability is improved with the automatic reversing fan, which reduces build-up of debris on the cooling package.



**Maintenance walkway**  
A wide walkway is provided, allowing easy access to inspection and maintenance points.



**Removable catwalk**  
Catwalks are provided on both the left and right sides of the base of the machine, allowing easier access for maintenance.



**Case drain filter**  
A first for the class, a hydraulic case drain filter is equipped for improved filtration and reliability.



**Electric lubrication system**  
The factory installed auto-greaser provides automatic lubrication of machine and attachment pins.



**Fuel supply pump**  
Quickly and easily fuel the machine from ground level using the onboard automatic fuel pump.



**Cab tilt maintenance stopper**  
Cab tilt lock for greater safety during tilt mechanism maintenance.

## Improved reliability and durability



**Hydraulic lock valves**  
Boom and arm cylinders are equipped with hydraulic holding valves, for increased safety.



**Water sprinkler with two nozzles**  
A two-nozzle water sprinkler is provided on the upper right section of the arm.



**Battery shut-off device**  
Battery cut-off switch prevents battery discharge over long periods.



**Bucket cylinder guard**  
Bucket cylinder guarding is installed to prevent damage during demolition operations.



**Jib cylinder guard\***  
Jib cylinder guarding is installed to prevent damage during demolition operations.



**Boom cylinder guard\***  
Boom cylinder guarding is installed to prevent damage during demolition operations.



**Upper frame under cover guards**  
The 6mm thick reinforced cover protects the engine and components.



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

\* Option for separate boom specification machines.

Separate boom specification

**Engine**

<b>Model</b>	HINO E13CYM-KSDB
<b>Type</b>	Four-stroke liquid-cooled direct injection diesel turbo charged with intercooler.
<b>No. of cylinders</b>	6
<b>Bore and stroke</b>	137 mm x 146 mm
<b>Displacement</b>	12.913 L
<b>Rated power output</b>	380 kW / 1,800 min <sup>-1</sup> (ISO 14396)
<b>Max. torque</b>	2,120 N·m / 1,300 min <sup>-1</sup> (ISO 14396)

**Hydraulic system**

<b>Pump</b>	
<b>Type</b>	Variable displacement piston pumps + gear pump
<b>Max. discharge flow</b>	2 x 504 L/min 1 x 49.3, 1 x 30.1 L/min
<b>Relief valve setting</b>	
<b>Excavating circuit</b>	33.0 MPa
<b>Power Boost</b>	34.0 MPa
<b>Travel circuit</b>	33.0 MPa
<b>Swing circuit</b>	25.9 MPa
<b>Control circuit</b>	5.0 MPa
<b>Pilot control pump</b>	Gear type
<b>Main control valves</b>	11-spool
<b>Oil cooler</b>	Air cooled type

**Swing system**

<b>Swing motor</b>	Two fixed capacity axial piston pump
<b>Swing brake</b>	Hydraulic
<b>Parking brake</b>	Wet multiple plate
<b>Swing speed</b>	3.6 min <sup>-1</sup> (Ultra long attachment) 6.0 min <sup>-1</sup> (Separate boom)
<b>Tail swing radius</b>	4,820 mm

**Travel system**

<b>Travel motors</b>	Two variable capacity type axial piston pump With counter balance valve
<b>Travel brakes</b>	Hydraulic brake
<b>Parking brakes</b>	Wet multiple plate
<b>Travel shoes</b>	55 each side
<b>Travel speed (high / low)</b>	4.2 / 2.7 km/h
<b>Gradeability</b>	18% {10 deg}

**Cab & control**

<b>Cab</b>	Sealed steel type with 3-sided guard (DS cab)
<b>Control</b>	Engine: Rotation speed control by turning the accelerator dial. Travel : Move each track back and forth independently by moving the two levers back and forth. Operation : Two left and right levers control four movements, two pedals on the left and right control two movements

**Refilling capacities & lubrications**

<b>Fuel tank</b>	960 L
<b>Cooling system</b>	62 L
<b>Engine lubricant</b>	54 L
<b>Hydraulic oil tank</b>	599 L tank oil level 1,070 L hydraulic system
<b>DEF/Urea tank</b>	83 L

**Operating Weight & Ground Pressure**

<b>Attachment Type</b>	NEXT ADVANCE 4-piece Ultra long attachment		
	40m type	35m type	
<b>Operating Weight</b>	136,900 kg	132,900 kg	
<b>Ground Pressure</b>	170 kPa	165 kPa	
<b>Attachment Type</b>	3-piece Ultra long attachment		
	35m type	31m type	
<b>Operating Weight</b>	130,500 kg	126,600 kg	
<b>Ground Pressure</b>	162 kPa	157 kPa	
<b>Attachment Type</b>	Separate attachment		
	with insert boom	for demolition of heights	for demolition of ground
	<b>Operating Weight</b>	131,400 kg	126,600 kg
<b>Ground Pressure</b>	163 kPa	157 kPa	160 kPa

\*Counter weight & max. front attachment mass including.

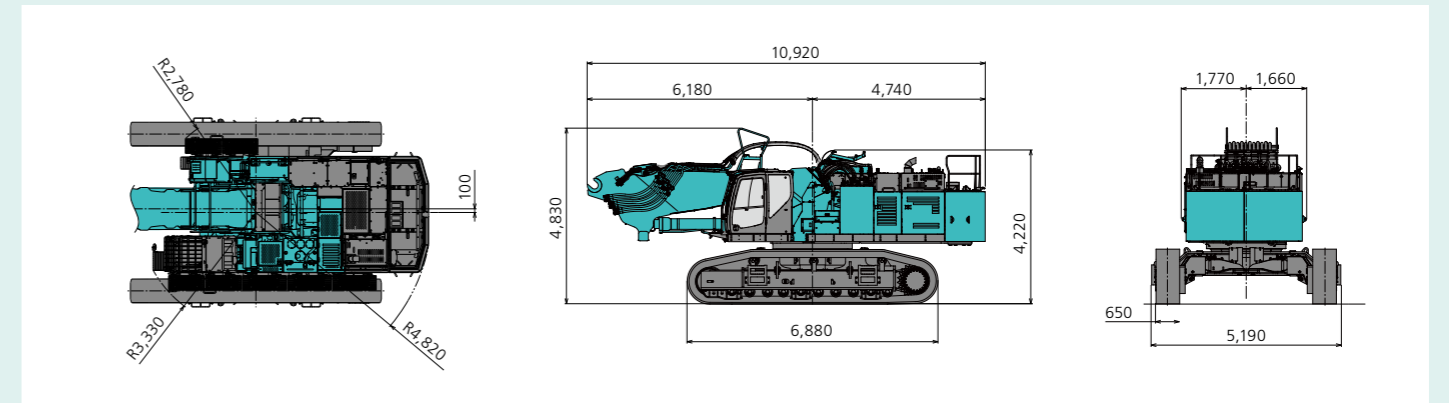
**Max. tool weight**

<b>NEXT ADVANCE 4-piece Ultra long attachment</b>	
40m type	4,300 kg
35m type	5,200 kg
<b>3-piece Ultra long attachment</b>	
35m type	5,050 kg
31m type	6,100 kg
<b>Separate attachment</b>	
with insert boom	9,600 kg
for demolition of heights	9,600 kg
for demolition of ground	12,000 kg

**Dimensions**

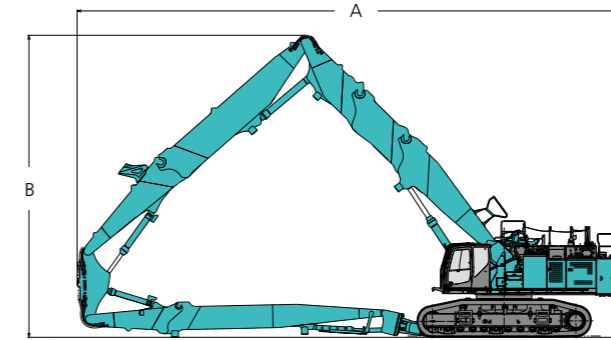
**Dimensions (base machine + base boom)**

Unit: mm



**Assembled machine dimensions**

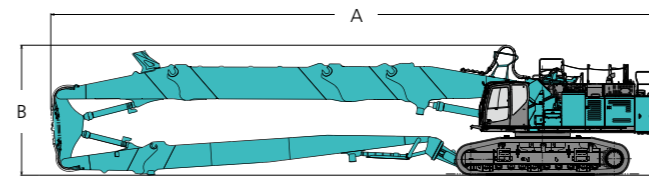
● NEXT ADVANCE 4-piece ultra long attachment specification



\*The posted figure is 40m type Unit: mm

	40m type	35m type
A: Overall length	21,540	19,790
B: Overall height of ATT	11,890	10,720

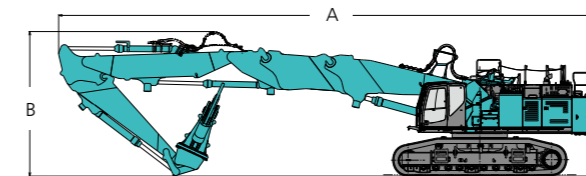
● 3-piece ultra long attachment specification



\*The posted figure is 35m type Unit: mm

	35m type	31m type
A: Overall length	24,090	21,550
B: Overall height of ATT	5,120	5,120

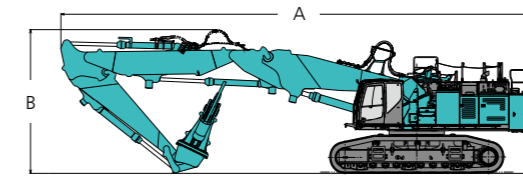
● Separate boom specification with insert



Unit: mm

	Separate boom + Insert
A: Overall length	21,300
B: Overall height of ATT	5,730

● Separate boom specification



Unit: mm

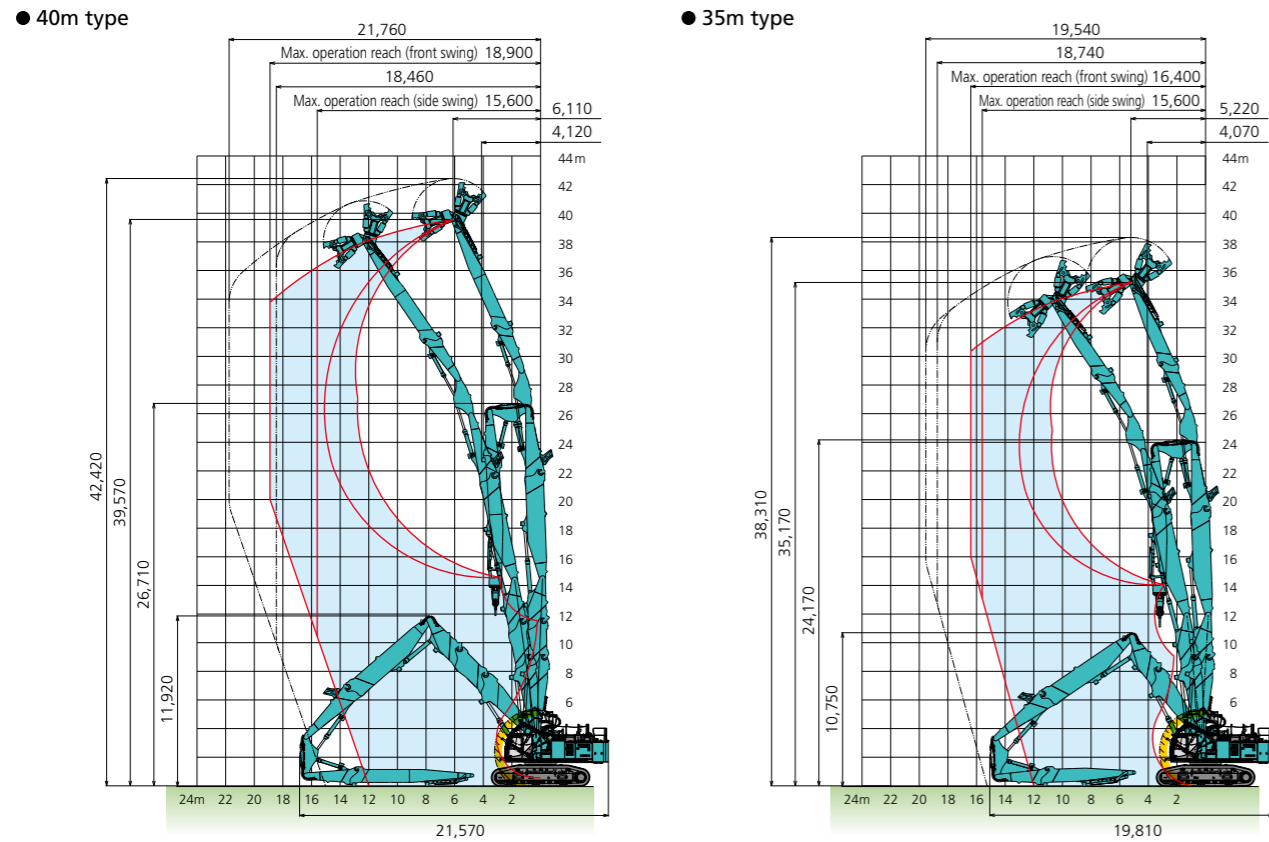
	For demolition of heights	For demolition of ground
A: Overall length	18,730	
B: Overall height of ATT	5,700	



**Working Ranges**

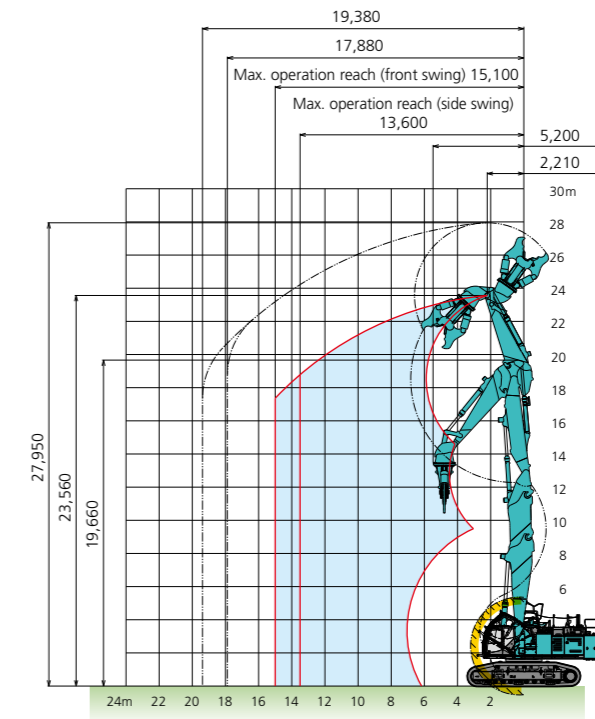
**NEXT ADVANCE 4-piece ultra long attachment specification**

Unit: mm



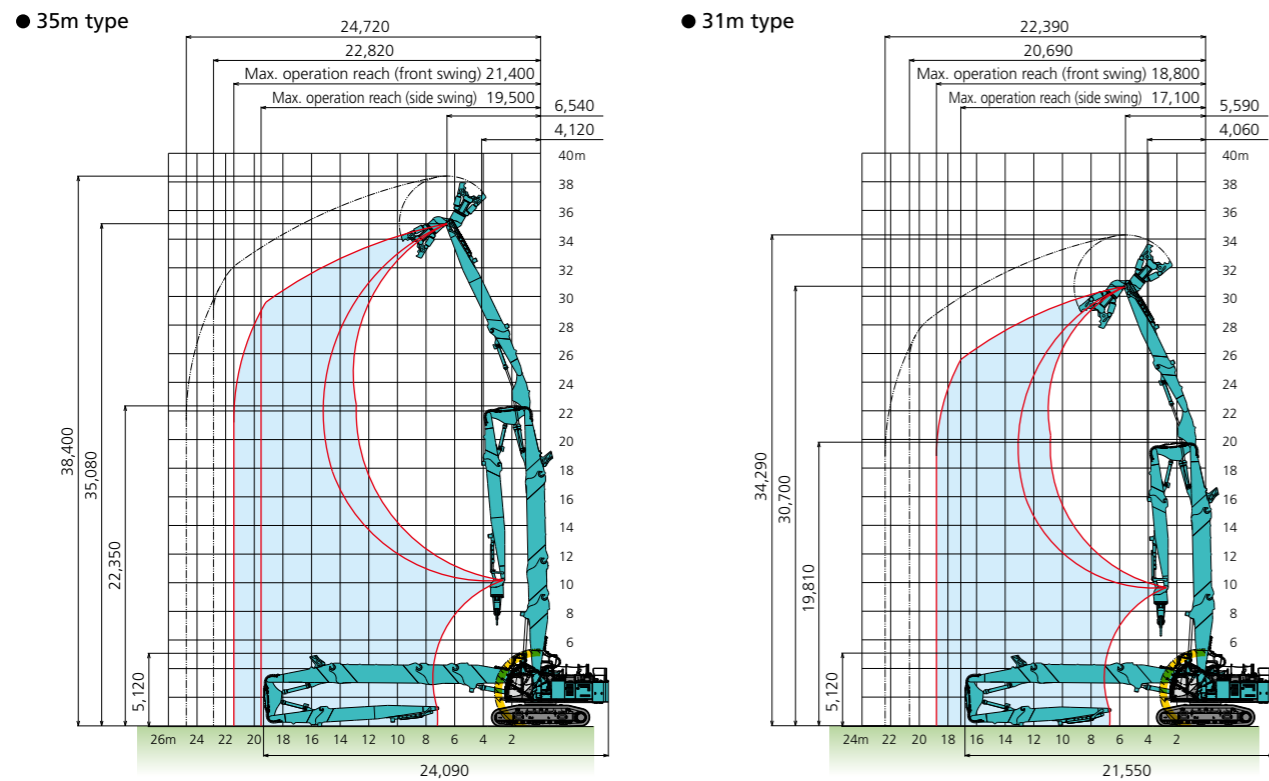
**Separate boom specification with insert**

Unit: mm



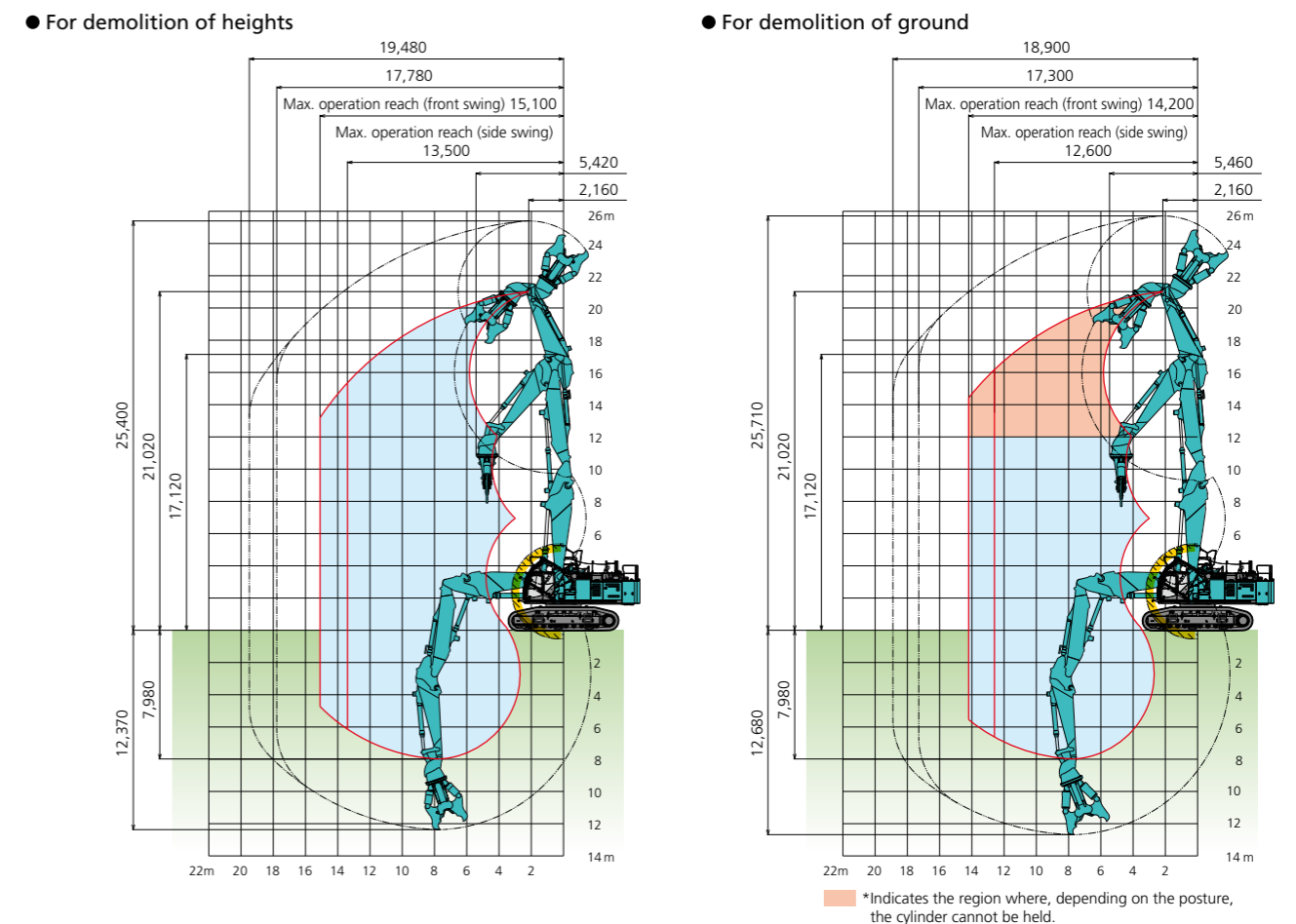
**3-piece ultra long attachment specification**

Unit: mm



**Separate boom specification**

Unit: mm



\*Without including height of shoe lug. \*Cab interference prevention system operating area. \*The numeric values for the blade are the values for when a Kobelco end attachment is mounted.

\*Without including height of shoe lug. \*Cab interference prevention system operating area. \*The numeric values for the blade are the values for when a Kobelco end attachment is mounted.

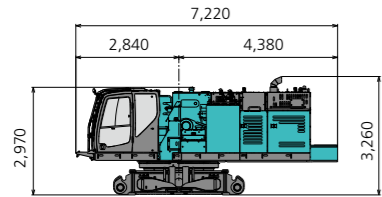
**Dimensions**

**Dimensions and mass when disassembled**

● **Base machine**

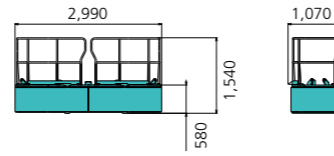
Unit: mm

Base machine (without counterweight, without crawler)



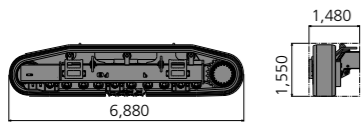
Weight: 31,900kg

Counterweight (Internal weight+ Handrail)



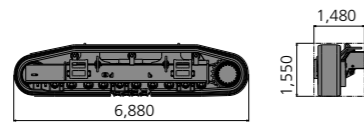
Weight: 7,800kg

Crawler (750mm shoe / one side)



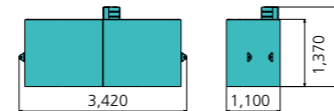
Weight: 29,600kg (14,800kgx2)

Crawler (650mm shoe / one side)



Weight: 28,800kg (14,400kgx2)

Counterweight case

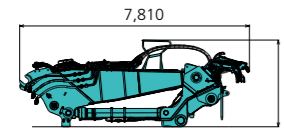


Weight: 14,100kg

● **Ultra long attachment**

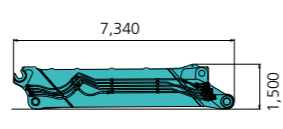
Unit: mm

Subframe+base boom [N1]



Width: 1,830mm Weight: 15,800kg

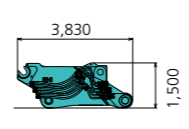
Insert boom (long type) [N2-A]



3-piece / 35m 3-piece / 31m

Width: 1,620mm Weight: 6,400kg

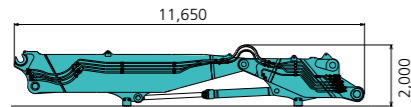
Insert boom (short type) [N2-B]



4-piece / 40m 3-piece / 35m separate with insert

Width: 1,630mm Weight: 4,800kg

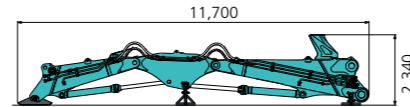
Base front boom [N3]+rear boom [N4]



4-piece / 40m 4-piece / 35m

Width: 1,630mm Weight: 13,700kg

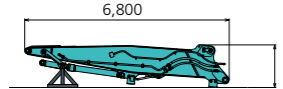
Front boom [N5]+inter boom [N6]+rear arm [N7]



4-piece / 40m 4-piece / 35m 3-piece / 35m 3-piece / 31m

Width: 1,400mm Weight: 11,400kg

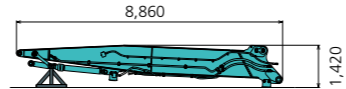
Front arm (standard type) [N8-A]



4-piece / 35m 3-piece / 31m

Width: 1,050mm Weight: 4,000kg

Front arm (semi long type) [N8-B]



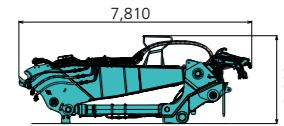
4-piece / 40m 3-piece / 35m

Width: 1,010mm Weight: 4,200kg

● **Separate attachment**

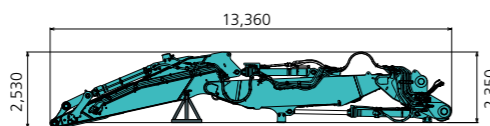
Unit: mm

Subframe+base boom [N1]



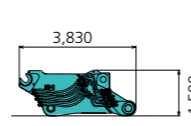
Width: 1,830mm Weight: 15,800kg

Base front boom+front boom+mono arm



Width: 1,630mm Weight: 18,000kg

Insert boom (short type) [N2-B]



Width: 1,630mm Weight: 4,800kg

**STANDARD EQUIPMENT**

Note: Standard and optional equipment may vary. Consult your KOBELCO dealer for specifics

**ENGINE**

- Turbocharged and inter-cooled HINO E13CYM-KSDB Diesel engine
- Automatic engine deceleration
- Reversible cooling fan
- Auto Idle Stop (AIS)
- Batteries (2 x 12V - 176Ah)
- Starting motor (24V - 7kW), 90amp alternator
- Removable radiator clean-out screen
- Automatic engine shut-down if low engine oil pressure
- Side by side oil, hydraulic and engine radiators
- Double-element air cleaner

**CONTROL**

- Working mode selector (H-mode, S-mode and ECO-mode)
- Extra piping (proportional hand controlled)
- Power Boost (34.0MPa)
- Refueling pump

**HYDRAULIC**

- Auto warm-up system
- Hydraulic oil cooler
- Hydraulic oil filter condition indicator
- Hydraulic oil for cold climates
- Quick hitch piping
- Multi controller
- Multi-coupler (QH line x 2, rotation line x 2, jib & arm pilot line x 2, drain x 1)

**SWING SYSTEM & TRAVEL SYSTEM**

- Swing rebound prevention system
- Automatic swing brake
- Two-speed travel with automatic down shift
- Sealed & lubricated track links
- 650mm track shoes
- Grease-type track adjusters
- Hydraulic retractable crawler
- Track guides
- Translifter

**MIRRORS, LIGHTS & CAMERAS**

- Rear-view camera, left and right side camera, rear-under-view camera
- Attachment camera (ultra long attachment: 2)
- Additional two monitors
- Working lights (LED: 2 on the upper body, 2 on the cab)
- Attachment front work light (LED: separate boom: 2, ultra long attachment: 2)
- Cab foot light
- Cab foot mirror
- Swing flashers
- Yellow flasher lights (2 on upper frame)

**CAB & CONTROL**

- Tilt cab
- Demolition special cab
- Air suspension seat with heater & armrests
- Headrest
- Retractable 3-inch seatbelt
- Electric horn
- All-weather, sound-insulated cab
- P5A glass
- Easy to read multi-display monitor
- Automatic climate control
- Defroster
- Bluetooth® installed radio (AM/FM Stereo with speakers)
- Luggage tray
- Large cup holder
- Detachable two-piece floor mat
- Handrails
- Wiper (top and front window)
- Top window washer
- Emergency escape hammer
- Attachment pressure release system
- 12V power source

**GUARDING & SAFETY**

- Tip-over warning device
- Cab interference prevention system
- Boom, arm, jib holding valves
- Second boom cylinder holding valves (4-piece ultra long attachment)
- Boom emergency lowering device
- Slow return check valves
- 6mm thick upper frame under cover guards
- Electric lubrication pump system
- Rotation and N&B auxiliary circuits and piping
- Falling object deflector (separate boom)
- One way call
- Remote machine monitoring system "GEOSCAN"
- Cab tilt operation alarm
- Cab emergency lowering device
- Crosspiece for operator safety in cab
- Console tilt
- Cab tilt maintenance stopper
- Battery shut-off function
- Travel alarm
- Catwalk (left, right front)
- Tool box
- Dual system water spray
- Emergency accel dial
- Emergency manual valve for lowering attachment
- Emergency manual valve for lowering cab
- Over load alarm (separate boom)

**OPTIONAL EQUIPMENT**

- Boom cylinder cover (separate boom)
- Jib cylinder cover (separate boom)
- NEXT Removal/inst. jib
- 750mm track shoes
- Custom paint colours



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Specialist equipment is needed to use this machine in demolition work. Before using it please contact your KOBELCO dealer.  
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