

HIGH REACH DEMOLITION

ZAXIS 250LC 350LC 350LCN 470LCH 870LCH

A P P L I C A T I O N & A T T A C H M E N T



Model Code : ZX250LC-3
Engine Rated Power : 132 kW (177 HP)
Operating Weight : 26 700 - 31 000 kg
Attachment Tool Weight : 2 400 / 2 600 kg
(High Reach Demolition / Mono Boom)

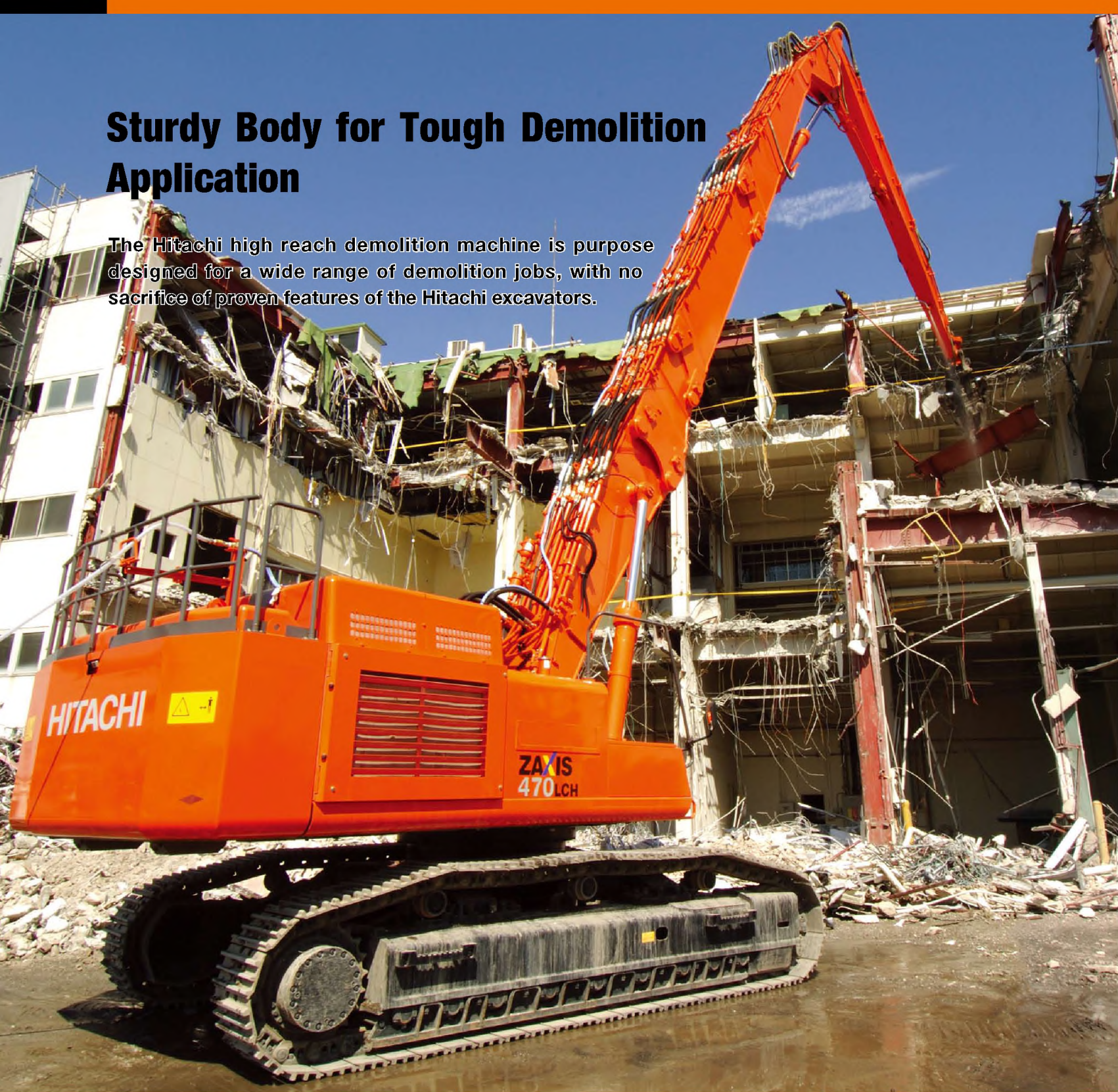
Model Code : ZX350LC-3 / ZX350LCN-3
Engine Rated Power : 202 kW (271 HP)
Operating Weight : 38 000 - 45 200 kg
Attachment Tool Weight : 2 400 / 3 500 kg
(High Reach Demolition / 2-Piece Boom)

Model Code : ZX470LCH-3
Engine Rated Power : 260 kW (349 HP)
Operating Weight : 56 800 - 63 500 kg
Attachment Tool Weight : 2 400 / 4 500 kg
(High Reach Demolition / 2-Piece Boom)

Model Code : ZX870LCH-3
Engine Rated Power : 397 kW (532 HP)
Operating Weight : 94 900 - 109 000 kg
Attachment Tool Weight : 2 400 / 6 600 kg
(High Reach Demolition / 2-Piece Boom)

Sturdy Body for Tough Demolition Application

The Hitachi high reach demolition machine is purpose designed for a wide range of demolition jobs, with no sacrifice of proven features of the Hitachi excavators.



Operator Comfort

The ZAXIS-3 series cab has been redesigned to meet demands of customers. From the operator's seat the operator has an excellent view of the jobsite. On the widescreen color LCD monitor the operator can see machine conditions and with the rear view camera, what is behind the machine. Ample legroom, short stroke levers and a comfortable seat ensure optimum working conditions. The seat features horizontal, vertical adjustments and has a backrest contoured for comfort, with a HITACHI logo. Wide adjustable armrests and a retractable seat belt are included. Short stroke levers allow for continuous operation with less fatigue. Three switches on the lever (optional) can be set to operate attachments other than buckets. The cab is pressurized to keep out dust. Noise and vibrations are kept to a minimum due to the elastic mounts, filled with silicone oil, the cab rests on.



Tilting Cab

The tilting cab can be tilted back up to 30 degrees for increased upward visibility, while keeping the operator in comfortable position. The cab is integrated into the upper frame, without increase in machine height. This design eliminates the projection of any part. The cab is sound-and vibration-insulated with viscous mounts. (Except ZX250LC-3)



Highly Visible Cab

The one-piece thick front window, made of laminated safety glass, is integrated with a twin wiper for better visibility. The impact-resistant roof window, integrated with a wiper and washer, extends fully to the rear for good upward visibility.



Twin wipers



Roof window with wiper and washer

Safety

Sturdy FOPS Cab with OPG Top and Front Guard

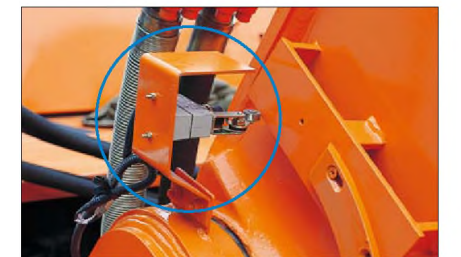
The FOPS* cab is provided standard with the OPG top guard and OPG front guard (per ISO 10262-1998) for operator protection. Crossbars at the top guard are aligned with viewing direction of the operator to increase visibility.

*Falling Object Protective Structure



Boom Angle Alarm

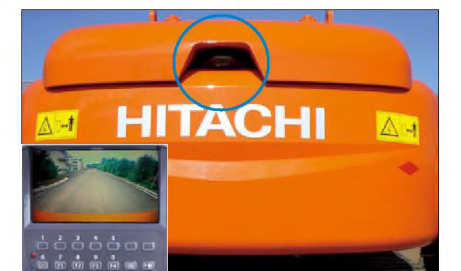
When the machine inclines close to its limit, the boom angle alarm buzzes for alerting. With the boom angle alarm on the boom, the operator can directly read the boom inclination angle through cab side window.



Boom angle alarm

Rear View Camera

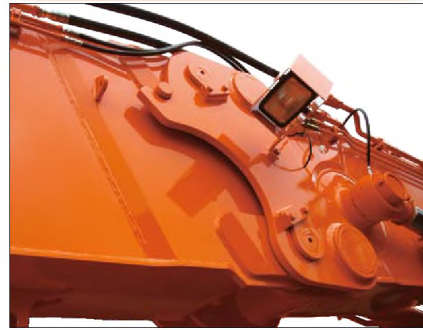
The widescreen color LCD, teamed up with the rear view camera on the counterweight, gives the operator unobstructed rearward viewing. The rear view camera automatically works when traveling, and can also be manually turned on with a select switch on the monitor.



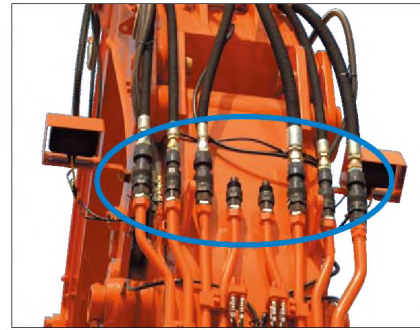
Assortment of Devices and Meters

Boom Guide System

The boom guide and high-pressure couplers facilitate the exchange and storage of the front attachment, remarkably reducing its exchanging time. The boom guide system includes a hook and an expander pin for easy connection of the front to the lower boom. The front is always in operator's sight for easy operation.

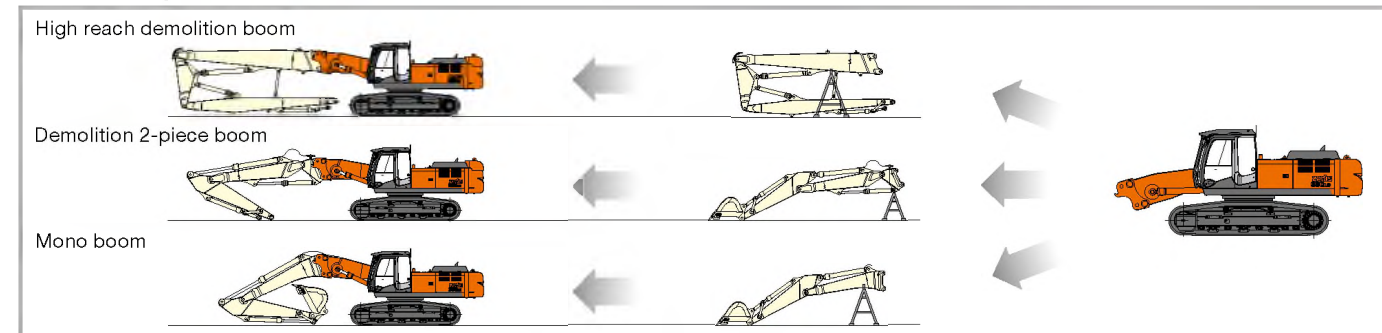


Boom guide



High-pressure couplers

Multi-Boom System



The multi-boom system falls into the high reach demolition boom, demolition 2-piece boom, and mono boom, which are selectable depending on demolition height. The multi-boom system is tailored for efficient building demolishing and foundation breaking, using a crusher. Also, they are applicable for efficient excavation, using a backhoe bucket.

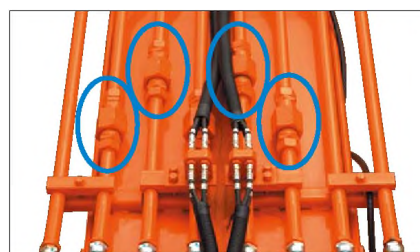
Front Attachment Mode Selector Switch

The front mode selector switch shifts the hydraulic circuit of machine according to the front attachment to be installed.

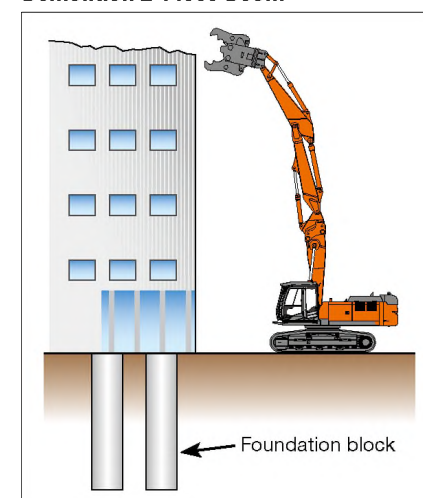


Slow Return Valves

Keep adequate lowering speed of the high lift front: Avoid rapid lowering due to weights of the high lift front and crusher.



Demolition 2-Piece Boom



The demolition 2-piece boom, featuring ample working reach, can be fitted with the front attachment in large class for efficient demolition of the foundation and mid-rise building.

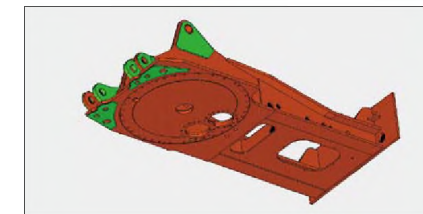
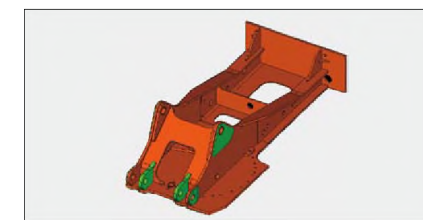
Track Under Cover and Reinforced Full Upperstructure Undercover

Protect the covered hoses, piping and valves by collision obstacles (reinforcements, etc.) during operation.



Strengthened Frame for Demolition

The main frame is further strengthened for high reach demolition at the boom foot and boom cylinder bottom bracket. (Strengthening points and ways vary depending on models.)



ZX470LCH-3

Tilt Cylinder Guard



The tilt cylinder is protected with a rugged metal cover from falling objects, such as concrete blocks and debris.

Strengthened Boom Cylinders

The boom cylinders are strengthened to sustain high-power operation.

High-Performance (mesh) Full-Flow Filters

Maintain hydraulic oil clean in the hydraulic circuit by eliminating impurities.

Front Attachment Stand

The front attachment stand is provided to support the front. The stand is lightweight for easy transport and set-up.



High reach demolition stand



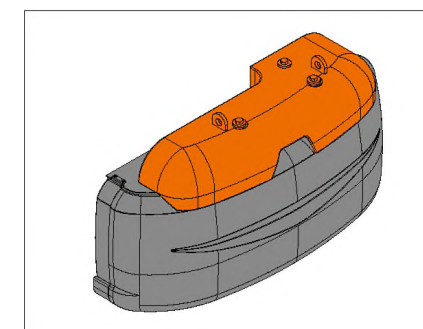
Demolition 2-piece boom stand



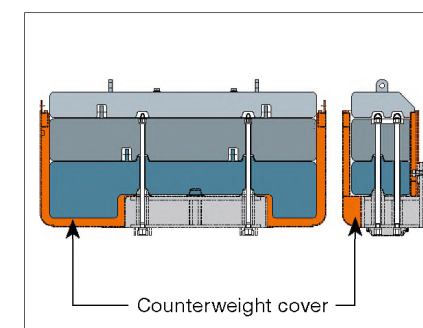
Mono boom stand

Counterweight Specifications

Two types of counterweights, put-on and segmentation types. The segmentation type can be mounted by using a small crane. To use the backhoe front, remove a conventional counterweight by consulting the manual.



Put-on type : ZX250LC-3 / ZX350LC-3 / ZX350LCN-3



Segmentation type : ZX470LCH-3 / ZX870LCH-3



SPECIFICATIONS

ZX250LC-3

ENGINE

Model.....	Isuzu AH-4HK1X
Type.....	4-cycle water-cooled, direct injection
Aspiration.....	Turbocharged, intercooled
No. of cylinders	4
Rated power	
ISO 9249, net.....	132 kW (177 HP) at 2 000 min ⁻¹ (rpm)
ECC 80/1269, net ...	132 kW (177 HP) at 2 000 min ⁻¹ (rpm)
SAE J1349, net	132 kW (177 HP) at 2 000 min ⁻¹ (rpm)
Maximum torque	673 N·m (69 kgf·m) at 1 500 min ⁻¹ (rpm)
Piston displacement....	5.193 L
Bore and stroke	115 mm x 125 mm
Batteries.....	2 x 12 V / 88 Ah

HYDRAULIC SYSTEM

- Work mode selector
 - Digging mode / Attachment mode
 - Engine speed sensing system
- | | |
|---------------------|--|
| Main pumps | 2 variable displacement axial piston pumps |
| Maximum oil flow... | 2 x 224 L/min |
| Pilot pump..... | 1 gear pump |
| Maximum oil flow... | 34 L/min |

Hydraulic Motors

Travel	2 variable displacement axial piston motors
Swing.....	1 axial piston motor

Relief Valve Settings

Implement circuit	34.3 MPa (350 kgf/cm ²)
Swing circuit.....	32.4 MPa (300 kgf/cm ²)
Travel circuit.....	34.3 MPa (350 kgf/cm ²)
Pilot circuit	3.9 MPa (40 kgf/cm ²)
Power boost	36.3 MPa (370 kgf/cm ²)

Hydraulic Cylinders

High-strength piston rods and tubes. Cylinder cushion mechanisms provided in boom and arm cylinders to absorb shock at stroke ends.

Hydraulic Filters

Hydraulic circuits use high-quality hydraulic filters. A suction filter is incorporated in the suction line, and full-flow filters in the return line and swing/travel motor drain lines.

CONTROLS

Pilot controls. Hitachi's original shockless valve.

Implement levers	2
Travel levers with pedals	2

UPPERSTRUCTURE

Revolving Frame

Welded sturdy box construction, using heavy-gauge steel plates for ruggedness. D-section frame for resistance to deformation.

Swing Device

Axial piston motor with planetary reduction gear is bathed in oil. Swing circle is single-row, shear-type ball bearing with induction-hardened internal gear. Internal gear and pinion gear are immersed in lubricant. Swing parking brake is spring-set/hydraulic-released disc type.

Swing speed	13.5 min ⁻¹ (rpm)
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Operator's Cab

Independent spacious cab, 1 005 mm wide by 1 675 mm high, conforming to ISO* Standards. Reinforced glass windows on 4 sides for visibility. Front windows (upper and lower) can be opened. Reclining seat with armrests; adjustable with or without control levers.

* International Standardization Organization

UNDERCARRIAGE

Tracks

Tractor-type undercarriage. Welded track frame using selected materials. Side frame welded to track frame. Lubricated track rollers, idlers, and sprockets with floating seals. Track shoes with triple grousers made of induction-hardened rolled alloy. Heat-treated connecting pins with dirt seals. Hydraulic (grease) track adjusters with shock-absorbing recoil springs.

Numbers of Rollers and Shoes on Each Side

Upper rollers	2
Lower rollers	9
Track shoes	51
Track guards.....	2

Travel Device

Each track driven by 2-speed axial piston motor through planetary reduction gear for counterrotation of the tracks. Sprockets are replaceable.

Parking brake is spring-set/hydraulic-released disc type. Travel shockless relief valve built in travel motor absorbs shocks when stopping travel. Automatic transmission system: High-Low.

Travel speeds	High : 0 to 5.5 km/h
	Low : 0 to 3.4 km/h

Maximum traction force....	222 kN (22 650 kgf)
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Gradeability	70% (35 degrees) continuous
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WEIGHTS AND GROUND PRESSURE

ZX250LC-3 High Reach Demolition 16 m:

Equipped with attachment (attachment tool weight: 2 500 kg).

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	31 100 kg	62 kPa (0.63 kgf/cm ²)

ZX250LC-3: Mono Boom :

Equipped with attachment (attachment tool weight: 2 600 kg).

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	28 400 kg	56 kPa (0.57 kgf/cm ²)

ZX250LC-3: Mono Boom :

Equipped with 1.0 m³ bucket: 970 kg (SAE, PCSA heaped).

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	26 700 kg	53 kPa (0.54 kgf/cm ²)

SERVICE REFILL CAPACITIES

Fuel tank	500.0 L
Engine coolant	26.0 L
Engine oil	23.0 L
Swing device.....	9.1 L
Travel device (each side)	7.8 L
Hydraulic system.....	280.0 L
Hydraulic oil tank.....	243.0 L

BACKHOE ATTACHMENTS

Boom and arms are of welded, box-section design.

Buckets

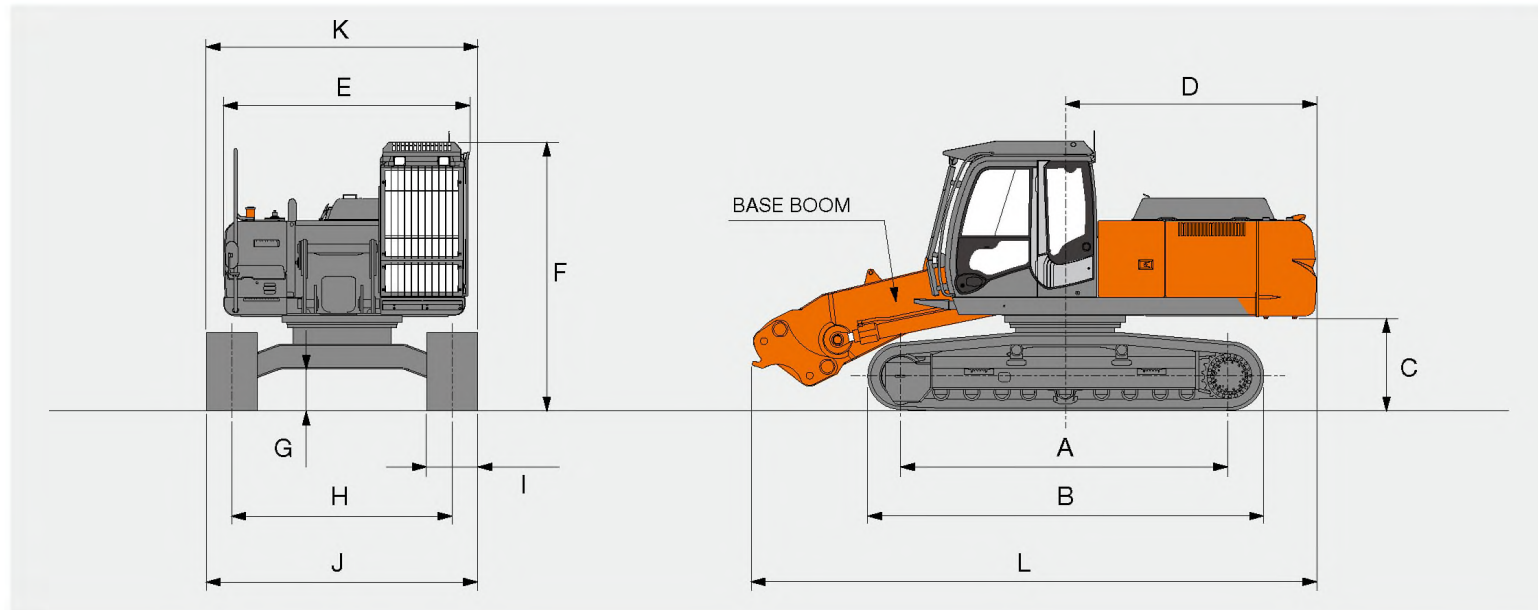
Bucket types: mono boom

Capacity SAE, PCSA heaped	With side cutters	Without side cutters	Weight
1.0 m ³	1 260 mm	1 130 mm	970 kg

DIMENSIONS

ZX250LC-3

DIMENSIONS (BASE MACHINE)



Unit: mm

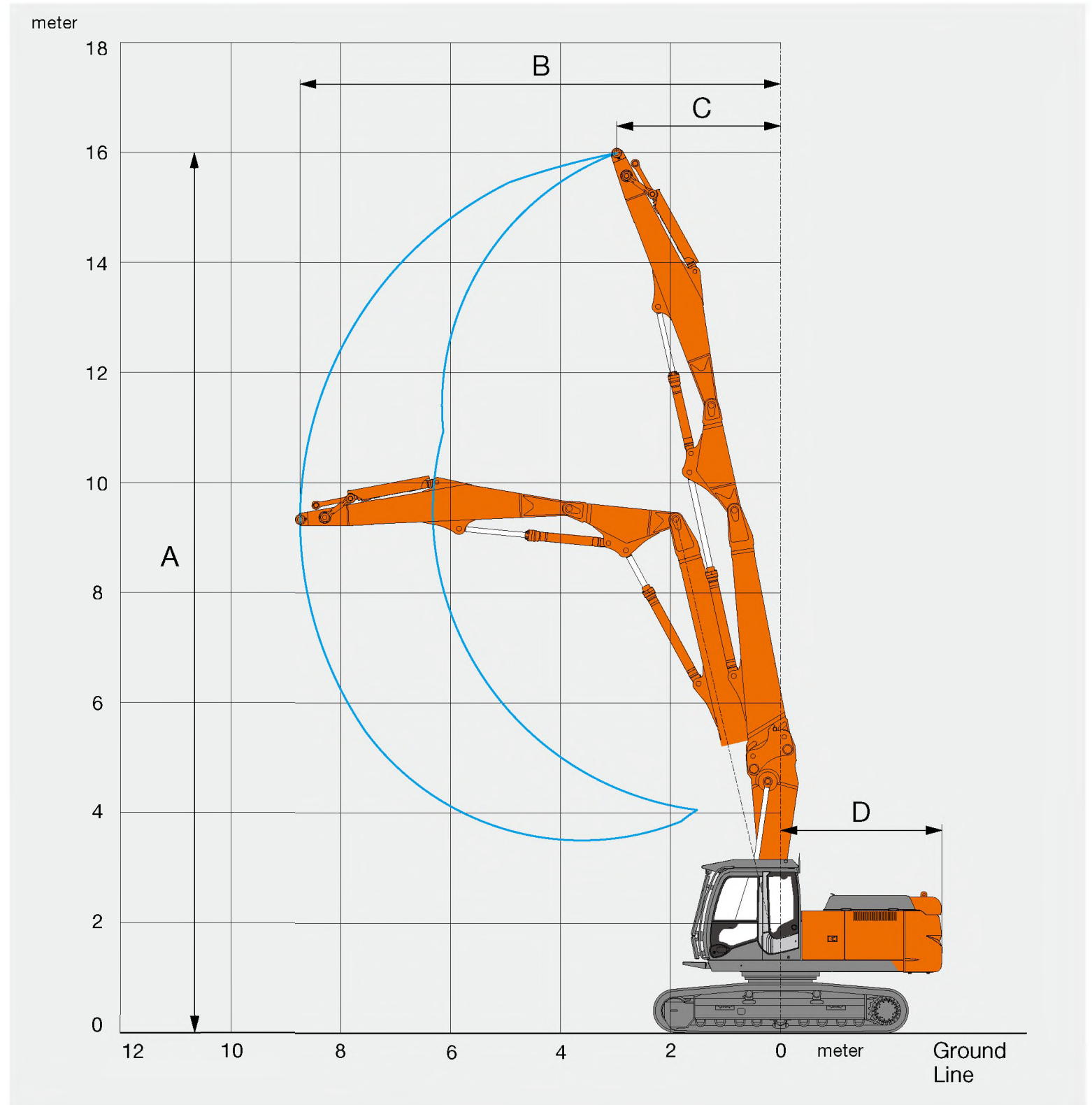
	ZX250LC-3
A Distance between tumbler	3 845
B Undercarriage length	4 640
*1C Counterweight clearance	1 090
D Rear-end swing radius	2 940
E Overall width of upperstructure	2 890
F Overall height of cab	3 150
*1G Min. ground clearance	460
H Track gauge	2 590
I Track shoe width	600
J Undercarriage width	3 190
K Overall width	3 190
L Overall length	6 610
*2 Transportation weight	22 900 kg

*1 Excluding track shoe lug *2 Excluding additional weight G: Triple grouser shoe

WORKING RANGES

ZX250LC-3 High Reach Demolition 16 m

WORKING RANGES



Unit: mm

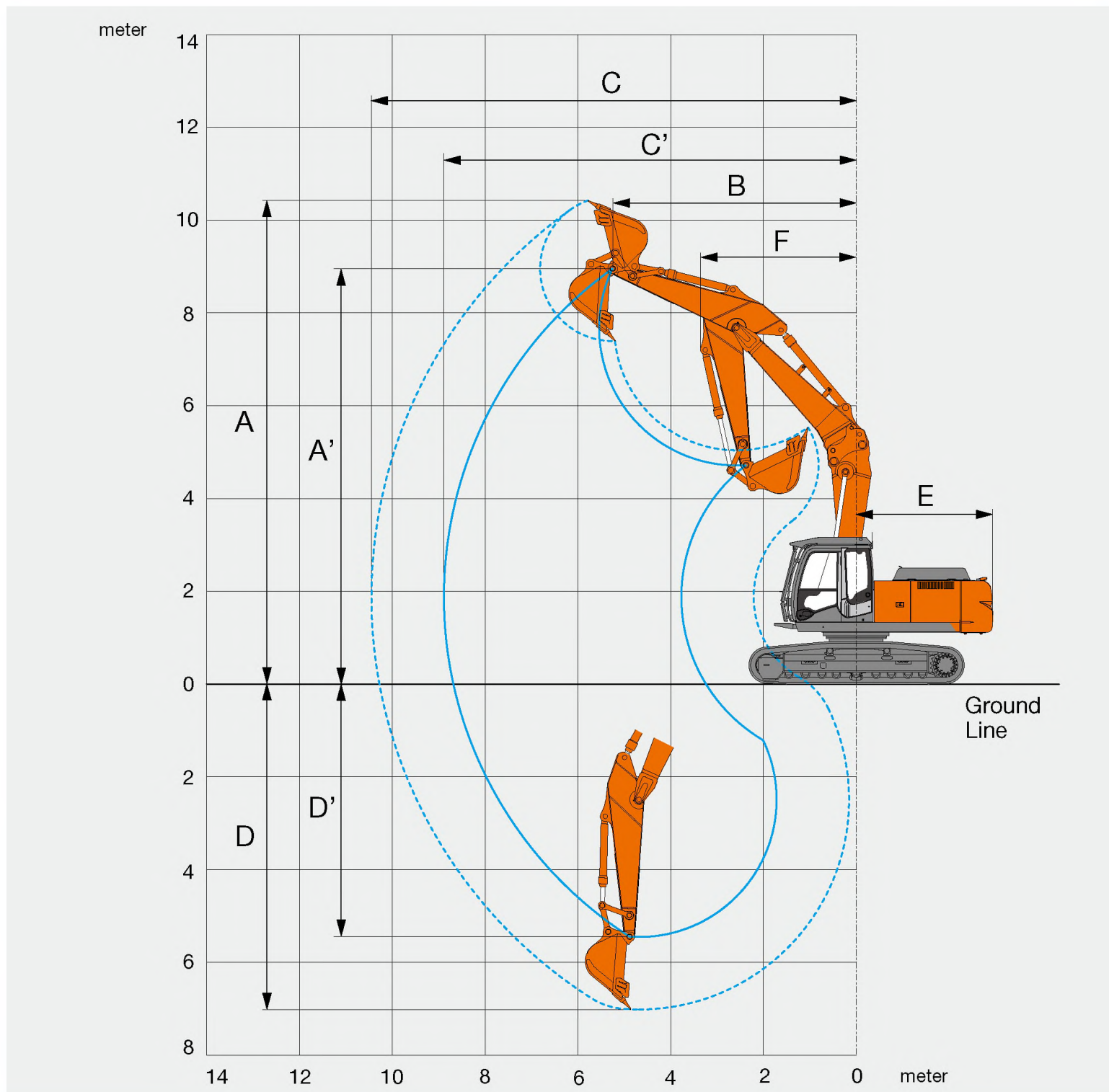
	High Reach Demolition 16 m
A Max. working height (arm top point)	16 000
B Forward limited working reach (arm top point)	8 730
C Reach at max. height (arm top point)	2 980
D Rear end swing radius	2 940
*Max. tool weight	2 500 kg

*Including quick hitch

WORKING RANGES

ZX250LC-3 Mono Boom

WORKING RANGES



Unit: mm

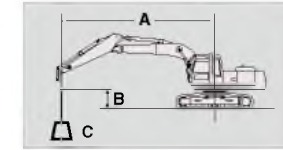
	Mono Boom
A Max. digging height (bucket)	10 430
A' Max. working height (arm top point)	8 950
B Reach at max. height (arm top point)	5 250
C Max. digging reach (bucket)	10 450
C' Max. working reach (arm top point)	8 880
D Max. digging depth (bucket)	7 020
D' Max. working depth (arm top point)	5 450
E Rear end swing radius	2 940
F Min. swing radius (bucket)	3 380
Bucket digging force* ISO	180 kN (18 400 kgf)
Arm crowd force* ISO	126 kN (12 800 kgf)
**Max. tool weight	2 600 kg

*At power boost
**Including quick hitch

LIFTING CAPACITIES

Metric measure

1. Ratings are based on ISO 10567.
2. Lifting capacity of the ZAXIS Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
3. The load point is the center line of the bucket pivot mounting pin on the arm.
4. *Indicates load limited by hydraulic capacity.
5. 0 m = Ground.



- A: Load radius
- B: Load point height
- C: Lifting capacity

ZX250LC-3 Mono Boom

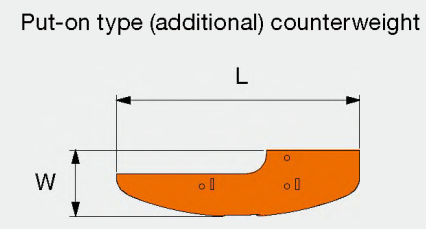
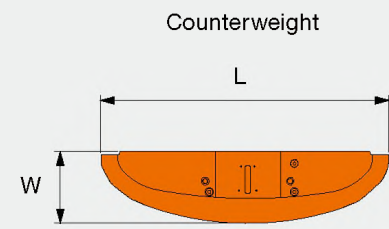
Rating over-front Rating over-side or 360 degrees Unit: 1 000 kg

Conditions	Load point height	Load radius																At max. reach				
		1 m		2 m		3 m		4 m		5 m		6 m		7 m		8 m		meter				
Boom: 6.28 m	7 m											*4.98	*4.98	*4.91	*4.91			*4.35	*4.35	7.22		
Arm: 2.96 m	6 m											*5.20	*5.20	*4.97	*4.97			*4.30	*4.30	7.84		
Shoe: 600 mm	5 m							*7.24	*7.24	*6.23	*6.23	*5.60	*5.60	*5.19	*5.19			*4.33	*4.20	8.30		
Counterweight: 6 500 kg	4 m							*8.83	*8.83	*7.11	*7.11	*6.13	*6.13	*5.50	5.45	*5.10	4.40	*4.44	*3.87	8.62		
Without bucket	3 m							*10.5	*10.5	*8.06	*8.06	*6.71	6.61	*5.87	5.26	*5.31	4.28	*4.62	*3.65	8.81		
	2 m							*10.0	*10.0	*8.90	6.47	*7.26	6.31	*6.22	5.06	*5.53	4.15	*4.89	*3.53	8.88		
	1 m							*4.61	*4.61	*9.79	*9.79	*9.48	7.81	*7.68	6.07	*6.52	4.90	*5.72	4.04	*5.21	3.48	8.84
	0 (Ground)							*6.14	*6.14	*10.9	10.5	*9.75	7.60	*7.94	5.90	*6.71	4.77	*5.82	3.96	*5.33	3.52	8.68
	-1 m	*3.57	*3.57	*5.40	*5.40	*8.15	*8.15	*12.2	10.4	*9.73	7.49	*8.00	5.79	*6.75	4.69	*5.80	3.90	*5.47	*3.66		8.39	
	-2 m	*5.98	*5.98	*7.73	*7.73	*10.7	*10.7	*11.7	10.5	*9.47	7.47	*7.84	5.76	*6.61	4.66			*5.60	*3.92		7.97	
	-3 m	*8.47	*8.48	*10.5	*10.5	*13.9	*13.9	*10.8	10.6	*8.92	7.52	*7.42	5.78	*6.19	4.69			*5.73	*4.37		7.39	
	-4 m			*14.0	*14.0	*12.0	*12.0	*9.65	*9.65	*8.00	7.65	*6.61	5.89					*5.81	*5.18		6.60	
	-5 m							*7.87	*7.87	*6.47	*6.47							*5.73	*5.73		5.51	

TRANSPORTATION

ZX250LC-3

COUNTERWEIGHT



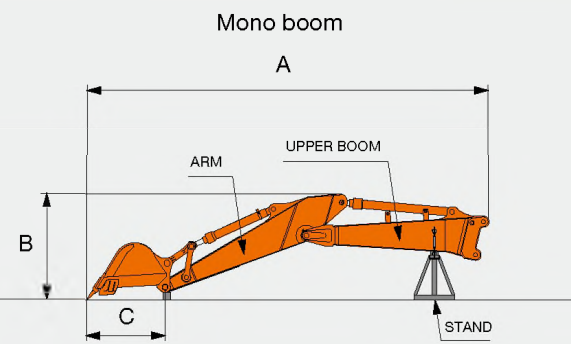
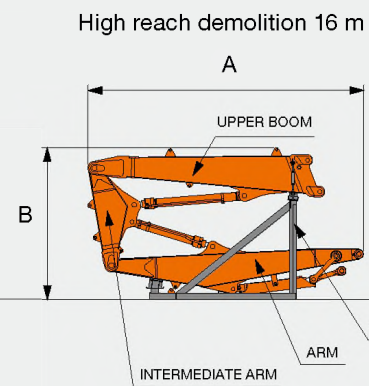
Counterweight		
L: Length	mm	2 840
W: Width	mm	715
Height	mm	1 170
*Weight	kg	6 500

*Excluding bolts weight

Additional counterweight		
L: Length	mm	2 400
W: Width	mm	655
Height	mm	425
*Weight	kg	1 520

*Excluding bolts weight

FRONT ATTACHMENT



High reach demolition 16 m		
A: Length	mm	5 600
B: Height	mm	3 000
*Total weight	kg	4 150

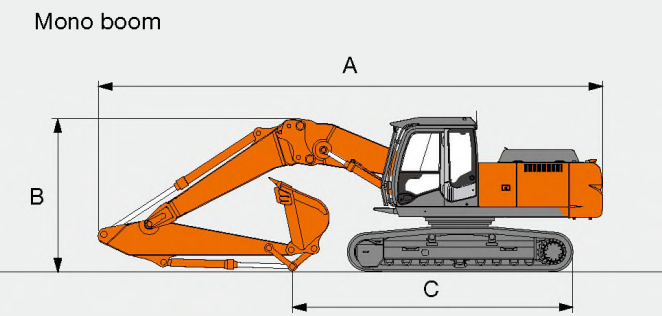
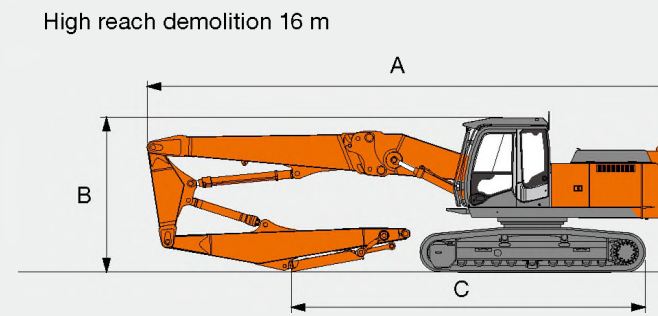
*Excluding stand weight

Mono boom		
A: Length	mm	7 930
B: Height	mm	2 090
C: Tip radius	mm	1 500
*Total weight (Incl. Bucket)	kg	3 730
*Total weight (Not Incl. Bucket)	kg	2 760

*Excluding stand weight

	High reach demolition	Mono boom
Overall rest width	mm	2 300
Stand weight	kg	500
		145

OVERALL



Unit: mm

High reach demolition 16 m	
A Transport Length	11 100
B Overall height	3 000
C Length on ground	7 430

Unit: mm

Mono boom	
A Transport Length	10 400
B Overall height	3 250
C Length on ground	5 780

EQUIPMENT

ZX250LC-3

STANDARD EQUIPMENT

Standard equipment may vary by country, so please consult your Hitachi dealer for details.

ENGINE

- H/P mode control
- E mode control
- 50 A alternator
- Dry-type air filter with evacuator valve (with air filter restriction indicator)
- Cartridge-type engine oil filter
- Cartridge-type fuel double filters
- Air cleaner double filters
- Radiator, oil cooler and intercooler with dust protective net
- Radiator reserve tank
- Fan guard
- Isolation-mounted engine
- Auto-idle system
- Fuel cooler
- Electrical fuel feed pump
- Engine oil drain coupler

HYDRAULIC SYSTEM

- Work mode selector
- Power boost
- Auto power lift
- Control valve with main relief valve
- Extra port for control valve
- Suction filter
- Full-flow filter
- Pilot filter
- Swing dampener valve
- Additional pump (30 L/min)
- High mesh full flow filter with restriction indicator

CAB

- CRES II (Center pillar reinforced structure) cab
- OPG top guard Level II (ISO 10262)
- OPG front guard Level II (ISO 10262)
- FOPS guard
- All-weather sound suppressed steel cab
- Laminated round glass (green color) front window
- 4 fluid-filled elastic mountings
- Front windows on upper, lower and left side can be opened
- Intermittent windshield twin wipers
- Front window, upper window washer
- Adjustable reclining suspension seat with adjustable armrests
- Footrest
- Electric double horn
- AM-FM radio with digital clock
- Seat belt
- Drink holder
- Cigarette lighter
- Ashtray
- Storage box
- Glove compartment
- Fire extinguisher bracket
- Floor mat
- Short wrist control levers
- Pilot control shut-off lever
- Engine shut-off switch
- Auto control air conditioner
- Transparent roof with roller curtain
- Mechanical suspension seat with heater
- Roof window with wiper and washer

MONITORING SYSTEM

- Display of meters: water temperature, hour, fuel rate, clock
- Other displays: work mode, auto-idle, glow, rearview monitor, operating conditions, etc
- Alarms: overheat, engine warning, engine oil pressure, alternator, minimum fuel level, hydraulic filter restriction, air filter restriction, work mode, overload, etc
- Alarm buzzers: overheating, engine oil pressure, overload, boom angle, tilting cab

LIGHTS

- 2 working lights

UPPERSTRUCTURE

- 6.0 mm thickness undercover
- Fuel level float
- Electric fuel refilling pump with auto stop
- Rear-view camera
- 150 Ah batteries
- Hydraulic oil level gauge
- Tool box
- Rear-view mirror (right & left side)
- Swing parking brake

UNDERCARRIAGE

- Travel parking brake
- Travel motor covers
- 2 track guards (each side) and hydraulic track adjuster
- Bolt-on sprocket
- Upper and lower rollers
- Reinforced track links with pin seals
- 4 tie-down hooks
- Track undercover

FRONT ATTACHMENTS

- HN bushing
- Reinforced resin thrust plate
- Casted bucket link A (mono boom)
- Welded bucket link A (high reach demolition)
- Centralized lubrication system
- Dirt seal on all bucket pins

MISCELLANEOUS

- Standard tool kit
- Lockable machine covers
- Lockable fuel refilling cap
- Skid-resistant tapes, plates and handrails
- Travel direction mark on track frame
- Onboard information controller

OPTIONAL EQUIPMENT

Optional equipment may vary by country, so please consult your Hitachi dealer for details.

CAB

- Air suspension seat with heater
- Sun visor
- 12 V power source

LIGHTS

- Additional cab roof front lights
- Additional cab roof rear lights
- Rotating lamp
- Additional boom light with cover

OTHERS

- Hose rupture valves
- Overload warning device
- Pre-cleaner
- Biodegradable oil
- Pilot accumulator

SPECIFICATIONS

ZX350LC-3 / ZX350LCN-3

ENGINE

Model.....	Isuzu AH-6HK1X
Type.....	4-cycle water-cooled, direct injection
Aspiration.....	Turbocharged, intercooled
No. of cylinders.....	6
Rated power	
ISO 9249, net.....	202 kW (271 HP) at 1 900 min ⁻¹ (rpm)
ECC 80/1269, net.....	202 kW (271 HP) at 1 900 min ⁻¹ (rpm)
SAE J1349, net.....	202 kW (271 HP) at 1 900 min ⁻¹ (rpm)
Maximum torque.....	1 080 N·m (110 kgf·m) at 1 500 min (rpm)
Piston displacement.....	7.790 L
Bore and stroke.....	115 mm x 125 mm
Batteries.....	2 x 12 V / 128 Ah

HYDRAULIC SYSTEM

- Work mode selector
 - Digging mode / Attachment mode
- Engine speed sensing system

Main pumps.....	2 variable displacement axial piston pumps
Maximum oil flow.....	2 x 288 L/min
Pilot pump.....	1 gear pump
Maximum oil flow.....	34 L/min

Hydraulic Motors

Travel.....	2 variable displacement axial piston motors
Swing.....	1 axial piston motor

Relief Valve Settings

Implement circuit.....	34.3 MPa (350 kgf/cm ²)
Swing circuit.....	32.4 MPa (330 kgf/cm ²)
Travel circuit.....	34.3 MPa (350 kgf/cm ²)
Pilot circuit.....	3.9 MPa (40 kgf/cm ²)
Power boost.....	36.3 MPa (370 kgf/cm ²)

Hydraulic Cylinders

High-strength piston rods and tubes. Cylinder cushion mechanisms provided in boom and arm cylinders to absorb shock at stroke ends.

Hydraulic Filters

Hydraulic circuits use high-quality hydraulic filters. A suction filter is incorporated in the suction line, and full-flow filters in the return line and swing/travel motor drain lines.

CONTROLS

Pilot controls. Hitachi's original shockless valve.

Implement levers.....	2
Travel levers with pedals.....	2

UPPERSTRUCTURE

Revolving Frame

Welded sturdy box construction, using heavy-gauge steel plates for ruggedness. D-section frame for resistance to deformation.

Swing Device

Axial piston motor with planetary reduction gear is bathed in oil. Swing circle is single-row, shear-type ball bearing with induction-hardened internal gear. Internal gear and pinion gear are immersed in lubricant. Swing parking brake is spring-set/hydraulic-released disc type.

Swing speed..... 10.7 min⁻¹ (rpm)

Operator's Cab

Independent spacious cab, 1 005 mm wide by 1 675 mm high, conforming to ISO* Standards. Reinforced glass windows on 4 sides for good visibility. Openable front windows (upper and lower). Reclining seat with armrests; adjustable with or without control levers.

* International Standardization Organization

UNDERCARRIAGE

Tracks

Tractor-type undercarriage. Welded track frame using selected materials. Side frame welded to track frame. Lubricated track rollers, idlers, and sprockets with floating seals.

Track shoes with triple grousers made of induction-hardened rolled alloy. Heat-treated connecting pins with dirt seals. Hydraulic (grease) track adjusters with shock-absorbing recoil springs.

Numbers of Rollers and Shoes on Each Side

Upper rollers.....	2
Lower rollers.....	8
Track shoes.....	48
Track guards.....	3

Travel Device

Each track driven by 2-speed axial piston motor through planetary reduction gear for counterrotation of the tracks. Sprockets are replaceable.

Parking brake is spring-set/hydraulic-released disc type. Travel shockless relief valve built in travel motor absorbs shocks when stopping travel. Automatic transmission system: High-Low.

Travel speeds.....	High : 0 to 5.5 km/h
	Low : 0 to 3.2 km/h

Maximum traction force..... 298 kN (29 200 kgf)

Gradeability..... 70% (35 degrees) continuous

WEIGHTS AND GROUND PRESSURE

ZX350LC-3 High Reach Demolition 21 m:

Equipped with attachment (attachment tool weight: 3 000 kg).

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	44 300 kg	83 kPa (0.84 kgf/cm ²)

ZX350LC-3 High Reach Demolition 23 m:

Equipped with attachment (attachment tool weight: 2 400 kg).

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	45 200 kg	84 kPa (0.86 kgf/cm ²)

ZX350LC-3 Demolition 2-Piece Boom :

Equipped with attachment (attachment tool weight: 3 500 kg).

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	44 700 kg	83 kPa (0.85 kgf/cm ²)

ZX350LC-3 Demolition 2-Piece Boom :

Equipped with 1.4 m³ bucket: 1 380 kg (SAE, PCSA heaped).

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	42 600 kg	79 kPa (0.81 kgf/cm ²)

ZX350LC-3 Mono Boom :

Equipped with attachment (attachment tool weight: 3 500 kg).

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	40 200 kg	75 kPa (0.77 kgf/cm ²)

ZX350LC-3 Mono Boom :

Equipped with 1.4 m³ bucket: 1 380 kg (SAE, PCSA heaped).

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	38 100 kg	71 kPa (0.73 kgf/cm ²)

SERVICE REFILL CAPACITIES

Fuel tank.....	630.0 L
Engine coolant.....	32.0 L
Engine oil.....	41.0 L
Swing device.....	17.0 L
Travel device.....	9.2 L
(each side)	
Hydraulic system.....	374.0 L
Hydraulic oil tank.....	298.0 L

BACKHOE ATTACHMENTS

Boom and arms are of welded, box-section design.

Buckets

Bucket types: 2-piece boom and mono boom

Capacity SAE, PCSA heaped	With side cutters	Without side cutters	Weight
1.4 m ³	1 410 mm	1 280 mm	1 380 kg

ZX350LCN-3 High Reach Demolition 21 m:

Equipped with attachment (attachment tool weight: 3 000 kg).

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	44 200 kg	83 kPa (0.84 kgf/cm ²)

ZX350LCN-3 Demolition 2-Piece Boom :

Equipped with attachment (attachment tool weight: 3 500 kg).

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	44 600 kg	83 kPa (0.85 kgf/cm ²)

ZX350LCN-3 Demolition 2-Piece Boom :

Equipped with 1.4 m³ bucket: 1 380 kg (SAE, PCSA heaped).

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	42 500 kg	79 kPa (0.81 kgf/cm ²)

ZX350LCN-3 Mono Boom :

Equipped with attachment (attachment tool weight: 3 500 kg).

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	40 100 kg	75 kPa (0.77 kgf/cm ²)

ZX350LCN-3 Mono Boom :

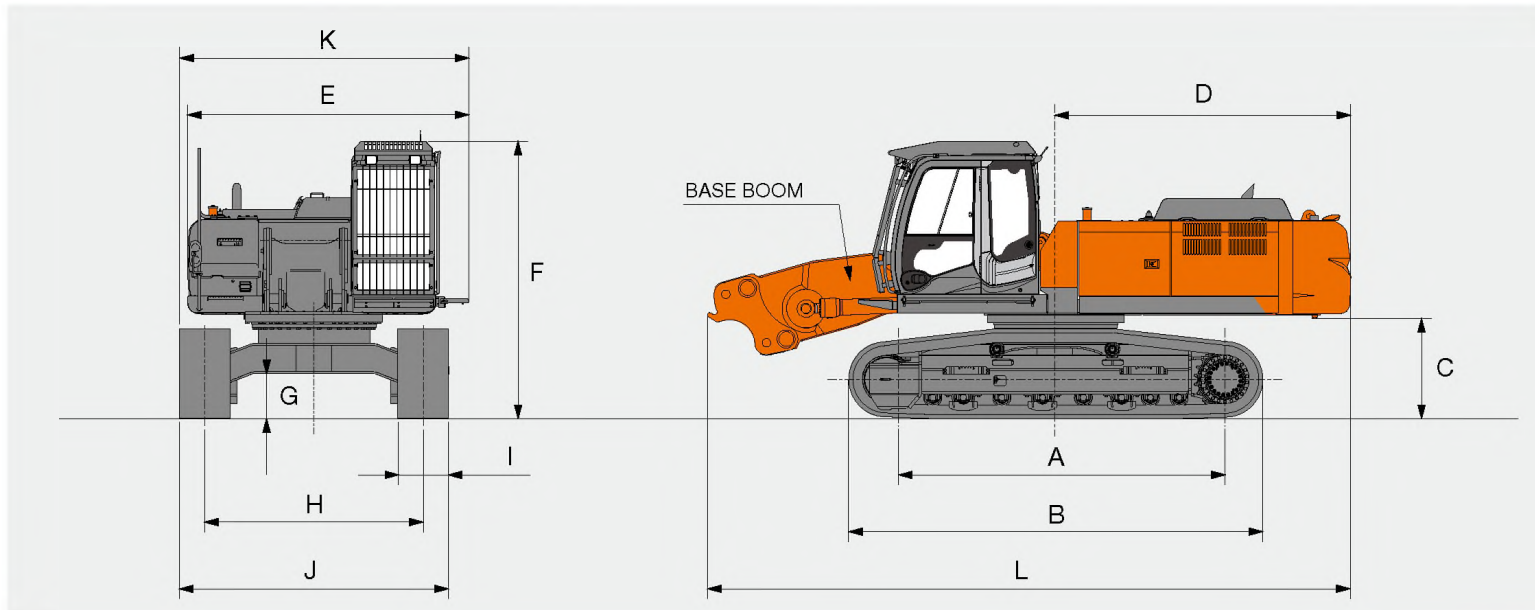
Equipped with 1.4 m³ bucket: 1 380 kg (SAE, PCSA heaped).

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	38 000 kg	71 kPa (0.73 kgf/cm ²)

DIMENSIONS

ZX350LC-3 / ZX350LCN-3

DIMENSIONS (BASE MACHINE)



Unit: mm

	ZX350LC-3	ZX350LCN-3
A Distance between tumbler		4 050
B Undercarriage length		4 950
*1C Counterweight clearance		1 160
D Rear-end swing radius		3 550
E Overall width of upperstructure		3 420
F Overall height of cab		3 290
*1G Min. ground clearance		500
H Track gauge	2 590	2 400
I Track shoe width		G 600
J Undercarriage width	3 190	3 000
K Overall width	3 520	3 420
L Overall length		7 710
*2 Transportation weight	32 400 kg	32 300 kg

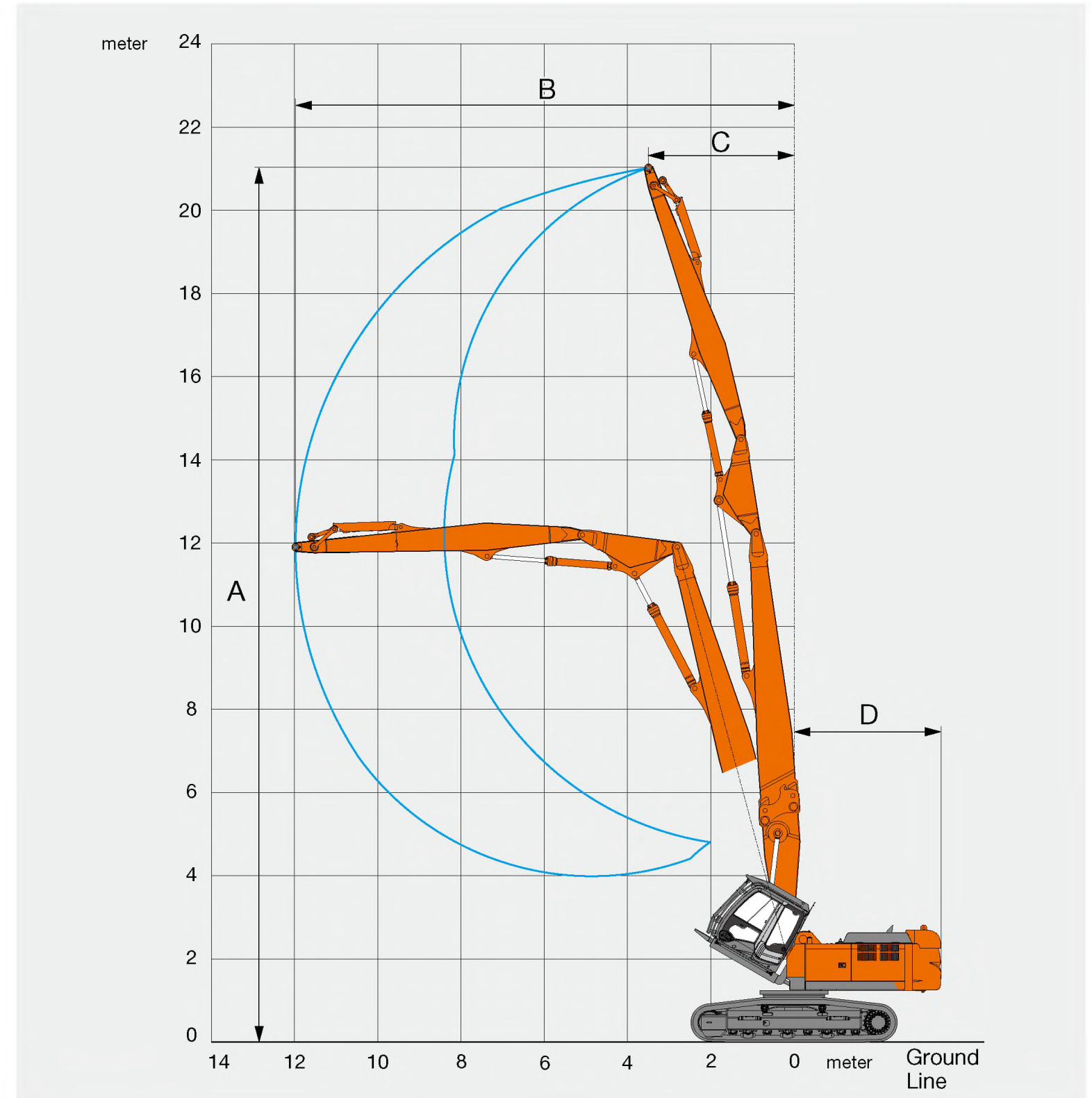
*1 Excluding track shoe lug G: Triple grouser shoe

*2 Excluding additional weight

WORKING RANGES

ZX350LC-3 / ZX350LCN-3 High Reach Demolition 21 m

WORKING RANGES



Unit: mm

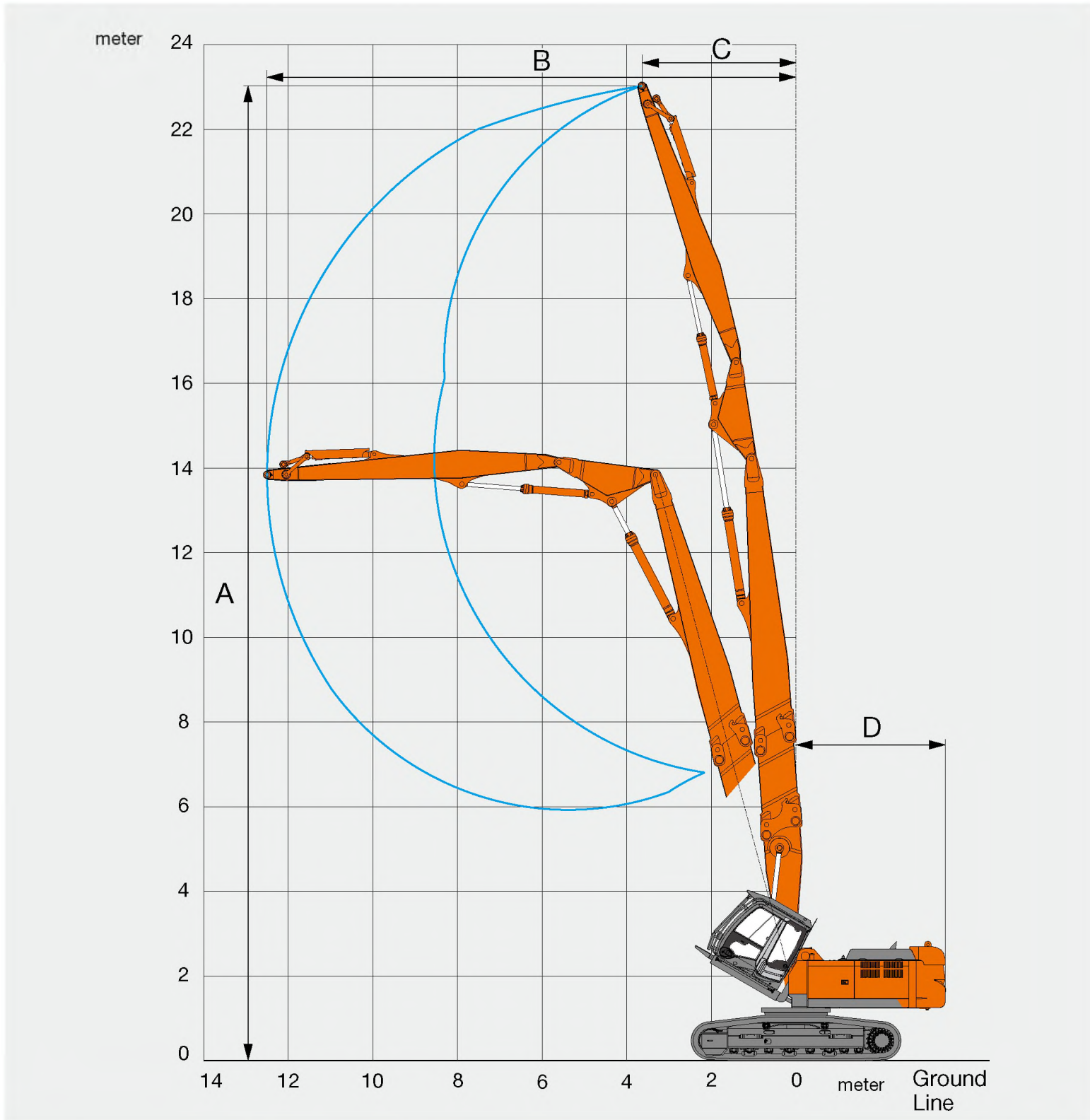
	High Reach Demolition 21 m
A Max. working height (arm top point)	21 000
B Forward limited working reach (arm top point)	12 000
C Reach at max. height (arm top point)	3 490
D Rear end swing radius	3 550
*Max. tool weight	3 000 kg

*Including quick hitch

WORKING RANGES

ZX350LC-3 High Reach Demolition 23 m

WORKING RANGES



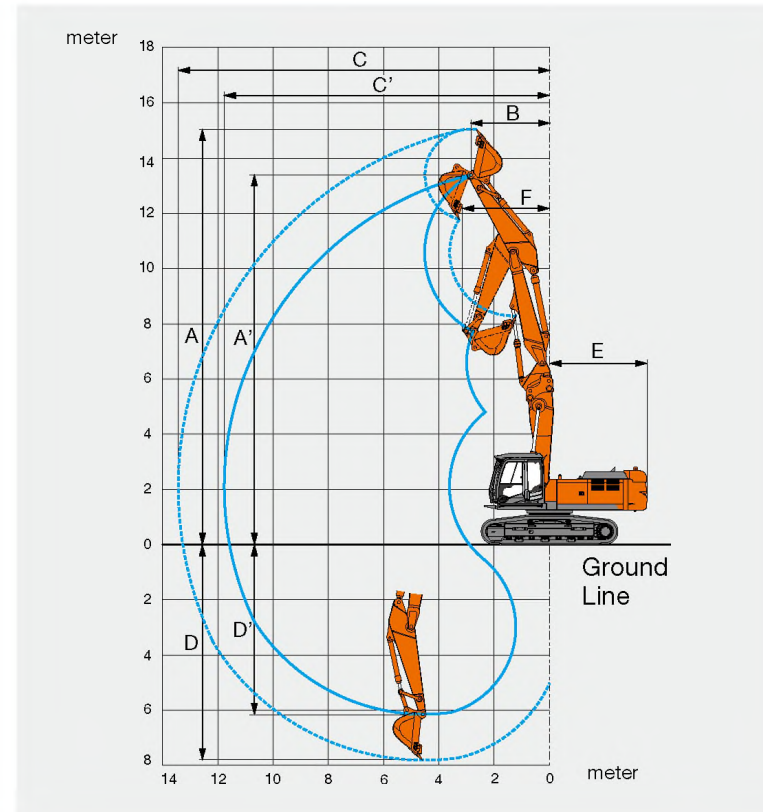
Unit: mm

High reach demolition 23 m	
A Max. working height (arm top point)	23 000
B Forward limited working reach (arm top point)	12 500
C Reach at max. height (arm top point)	3 640
D Rear end swing radius	3 550
*Max. tool weight	2 400 kg

*Including quick hitch

ZX350LC-3 / ZX350LCN-3 Demolition 2-Piece Boom

WORKING RANGES



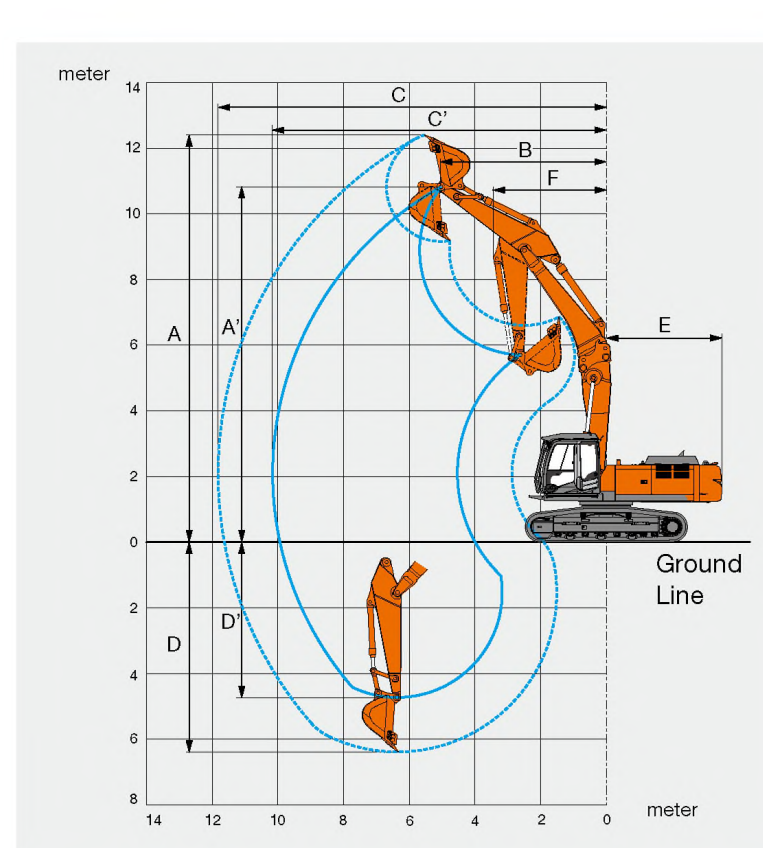
Unit: mm

Demolition 2-piece boom	
A Max. digging height (bucket)	15 050
A' Max. working height (arm top point)	13 390
B Reach at max. height (arm top point)	2 840
C Max. digging reach (bucket)	13 440
C' Max. working reach (arm top point)	11 770
D Max. digging depth (bucket)	7 820
D' Max. working depth (arm top point)	6 150
E Rear end swing radius	3 550
F Min. swing radius (bucket)	3 140
Bucket digging force ISO	202 kN (20 600 kgf)
Arm crowd force ISO	152 kN (15 600 kgf)
*Max. tool weight	3 500 kg

*Including quick hitch

ZX350LC-3 / ZX350LCN-3 Mono Boom

WORKING RANGES



Unit: mm

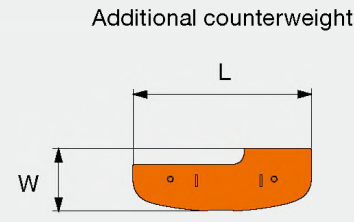
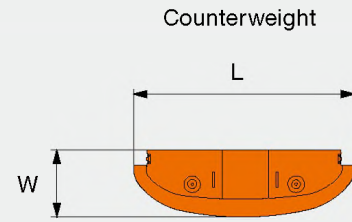
Mono boom	
A Max. digging height (bucket)	12 450
A' Max. working height (arm top point)	10 860
B Reach at max. height (arm top point)	5 050
C Max. digging reach (bucket)	11 850
C' Max. working reach (arm top point)	10 190
D Max. digging depth (bucket)	6 410
D' Max. working depth (arm top point)	4 740
E Rear end swing radius	3 550
F Min. swing radius (bucket)	3 450
Bucket digging force ISO	202 kN (20 600 kgf)
Arm crowd force ISO	152 kN (15 600 kgf)
*Max. tool weight	3 500 kg

*Including quick hitch

TRANSPORTATION

ZX350LC-3

COUNTERWEIGHT



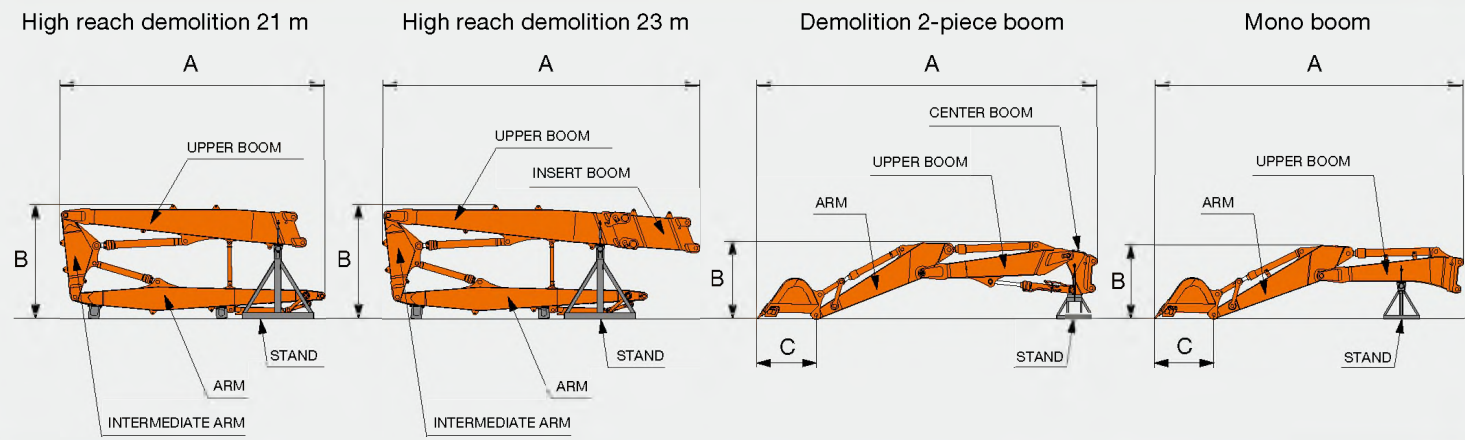
Counterweight		
L: Length	mm	2 950
W: Width	mm	900
Height	mm	1 260
*Weight	kg	8 200

*Excluding bolts weight

Additional counterweight		
L: Length	mm	2 390
W: Width	mm	840
Height	mm	650
*Weight	kg	2 800

*Excluding bolts weight

FRONT ATTACHMENT



High reach demolition 21 m		
A: Length	mm	7 510
B: Height	mm	3 250
*Total weight	kg	6 010

*Excluding stand weight

High reach demolition 23 m		
A: Length	mm	8 980
B: Height	mm	3 250
*Total weight	kg	7 500

*Excluding stand weight

Demolition 2-piece boom		
A: Length	mm	7 980
B: Height	mm	2 170
C: Tip radius	mm	1 660
*Total weight (Incl. Bucket)	kg	7 280
*Total weight (Not Incl. Bucket)	kg	5 900

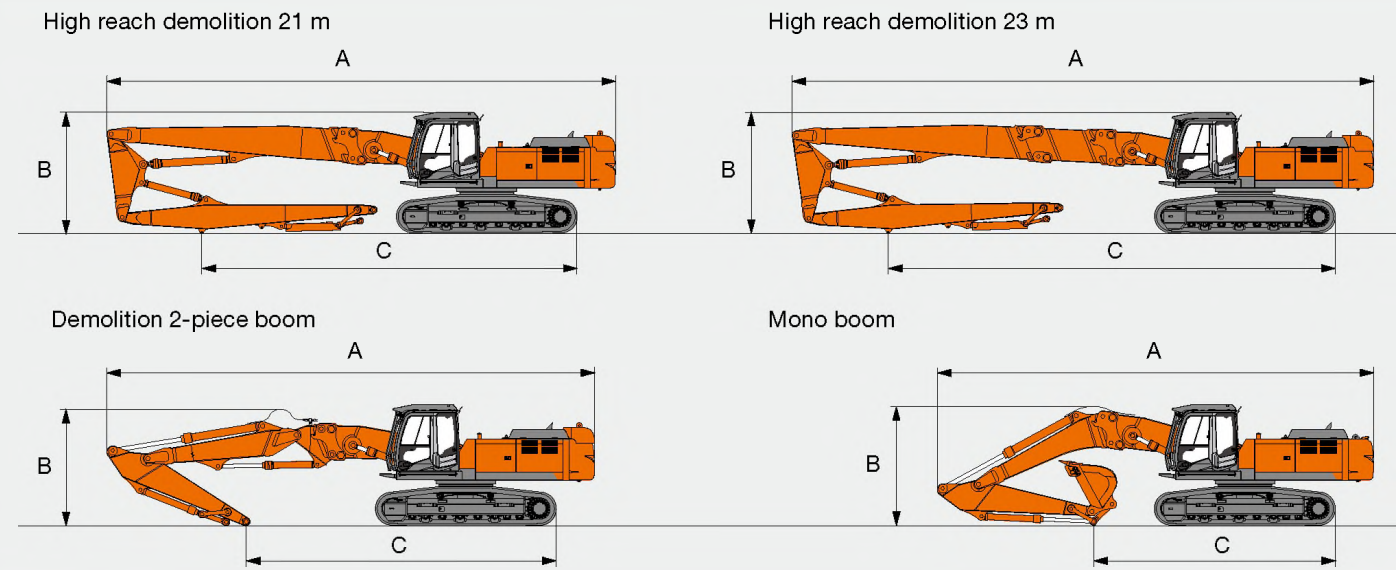
*Excluding stand weight

Mono boom		
A: Length	mm	8 650
B: Height	mm	2 060
C: Tip radius	mm	1 660
*Total weight (Incl. Bucket)	kg	5 560
*Total weight (Not Incl. Bucket)	kg	4 180

*Excluding stand weight

	High reach demolition	Demolition 2-piece boom	Mono boom	
Overall stand width	mm	2 300	1 600	1 700
Stand weight	kg	735	175	275

OVERALL



Unit: mm

High reach demolition 21 m	
A Transport Length	14 200
B Overall height	3 100
C Length on ground	10 300

High reach demolition 23 m	
A Transport Length	16 200
B Overall height	3 100
C Length on ground	12 300

Unit: mm

Demolition 2-piece boom	
A Transport Length	13 400
B Overall height	3 180
C Length on ground	8 550

Mono boom	
A Transport Length	12 000
B Overall height	3 250
C Length on ground	6 630

EQUIPMENT

ZX350LC-3 / ZX350LCN-3

STANDARD EQUIPMENT

Standard equipment may vary by country, so please consult your Hitachi dealer for details.

ENGINE

- H/P mode control
- E mode control
- 50 A alternator
- Dry-type air filter with evacuator valve (with air filter restriction indicator)
- Cartridge-type engine oil filter
- Cartridge-type fuel double filters
- Air cleaner double filters
- Radiator, oil cooler and intercooler with dust protective net
- Radiator reserve tank
- Fan guard
- Isolation-mounted engine
- Auto-idle system
- Fuel cooler
- Electrical fuel feed pump
- Engine oil drain coupler

HYDRAULIC SYSTEM

- Work mode selector
- Power boost
- Auto power lift
- Control valve with main relief valve
- Extra port for control valve
- Suction filter
- Full-flow filter
- Pilot filter
- Swing dampener valve
- Additional pump (30 L/min)
- High mesh full flow filter with restriction indicator

CAB

- CRES II (Center pillar reinforced structure) cab
- OPG top guard Level II (ISO 10262)
- OPG front guard Level II (ISO 10262)
- FOPS guard
- All-weather sound suppressed steel cab
- Laminated round glass (green color) front window
- 4 fluid-filled elastic mountings
- Front windows on upper, lower and left side can be opened
- Intermittent windshield twin wipers
- Front window, upper window washer
- Adjustable reclining suspension seat with adjustable armrests
- Footrest
- Electric double horn
- AM-FM radio with digital clock
- Seat belt
- Drink holder
- Cigarette lighter
- Ashtray
- Storage box
- Glove compartment
- Fire extinguisher bracket
- Floor mat
- Short wrist control levers
- Pilot control shut-off lever
- Engine shut-off switch
- Auto control air conditioner
- Transparent roof with roller curtain
- Mechanical suspension seat with heater
- Tilting cab
- Roof window with wiper and washer

MONITORING SYSTEM

- Display of meters: water temperature, hour, fuel rate, clock
- Other displays: work mode, auto-idle, glow, rearview monitor, operating conditions, etc
- Alarms: overheat, engine warning, engine oil pressure, alternator, minimum fuel level, hydraulic filter restriction, air filter restriction, work mode, overload, etc
- Alarm buzzers: overheating, engine oil pressure, overload, boom angle, tilting cab

LIGHTS

- 2 working lights

UPPERSTRUCTURE

- 6.0 mm thickness Undercover
- Fuel level float
- Electric fuel refilling pump with auto stop
- Rear-view camera
- 160 Ah batteries
- Hydraulic oil level gauge
- Tool box
- Rear-view mirror (right & left side)
- Swing parking brake

UNDERCARRIAGE

- Travel parking brake
- Travel motor covers
- 3 track guards (each side) and hydraulic track adjuster
- Bolt-on sprocket
- Upper and lower rollers
- Reinforced track links with pin seals
- 4 tie-down hooks
- Track undercover

FRONT ATTACHMENTS

- HN bushing
- Reinforced resin thrust plate
- Casted bucket link A (mono boom / 2-piece boom)
- Welded bucket link A (high reach demolition)
- Centralized lubrication system
- Dirt seal on all bucket pins

MISCELLANEOUS

- Standard tool kit
- Lockable machine covers
- Lockable fuel refilling cap
- Skid-resistant tapes, plates and handrails
- Travel direction mark on track frame
- Onboard information controller

OPTIONAL EQUIPMENT

Optional equipment may vary by country, so please consult your Hitachi dealer for details.

CAB

- Air suspension seat with heater
- Sun visor
- 12 V power source

OTHERS

- Hose rupture valves
- Overload warning device
- Pre-cleaner
- Biodegradable oil
- Pilot accumulator

LIGHTS

- Additional cab roof front lights
- Additional cab roof rear lights
- Rotating lamp
- Additional boom light with cover

SPECIFICATIONS

ZX470LCH-3

ENGINE

Model.....	Isuzu AH-6WG1X
Type.....	4-cycle water-cooled, direct injection
Aspiration.....	Turbocharged, intercooled
No. of cylinders.....	6
Rated power	
ISO 9249,	
Without Fan net.....	260 kW (349 HP) at 1 800 min ⁻¹ (rpm)
ECC 80/1269,	
Without Fan net.....	260 kW (349 HP) at 1 800 min ⁻¹ (rpm)
SAE J1349,	
Without Fan net.....	260 kW (349 HP) at 1 800 min ⁻¹ (rpm)
Maximum torque.....	1 580 N·m (161 kgf·m) at 1 500 min ⁻¹ (rpm)
Piston displacement.....	15.681 L
Bore and stroke.....	147 mm x 154 mm
Batteries.....	2 x 12 V / 170 Ah

HYDRAULIC SYSTEM

- Work mode selector
 - General purpose mode / Attachment mode
 - Engine speed sensing system
- | | |
|-----------------------|--|
| Main pumps..... | 2 variable displacement axial piston pumps |
| Maximum oil flow..... | 2 x 360 L/min |
| Pilot pump..... | 1 gear pump |
| Maximum oil flow..... | 30 L/min |

Hydraulic Motors

Travel.....	2 axial piston motors with parking brake
Swing.....	2 axial piston motor

Relief Valve Settings

Implement circuit.....	31.9 MPa (325 kgf/cm ²)
Swing circuit.....	27.9 MPa (285 kgf/cm ²)
Travel circuit.....	34.3 MPa (350 kgf/cm ²)
Pilot circuit.....	3.9 MPa (40 kgf/cm ²)
Power boost.....	34.3 MPa (350 kgf/cm ²)

Hydraulic Cylinders

High-strength piston rods and tubes. Cylinder cushion mechanisms provided in boom and arm cylinders to absorb shock at stroke ends.

Hydraulic Filters

Hydraulic circuits use high-quality hydraulic filters. A suction filter is incorporated in the suction line, and full-flow filters in the return line and swing/travel motor drain lines.

CONTROLS

Pilot controls. HITACHI's original shockless valve.

Implement levers.....	2
Travel levers with pedals.....	2

UPPERSTRUCTURE

Revolving Frame

Welded sturdy box construction, using heavy-gauge steel plates for ruggedness. D-section frame for resistance to deformation.

Swing Device

Axial piston motor with planetary reduction gear is bathed in oil. Swing circle is single-row, shear-type ball bearing with induction-hardened internal gear. Internal gear and pinion gear are immersed in lubricant. Swing parking brake is spring-set/hydraulic-released disc type.

Swing speed.....	9.0 min ⁻¹ (rpm)
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Operator's Cab

Independent spacious cab, 1 005 mm wide by 1 675 mm high, conforming to ISO* Level I Standards (OPG top guard fitted Level I). Reinforced glass windows on 4 sides for good visibility. Openable front windows (upper and lower). Reclining seat with armrests; adjustable with or without control levers.

* International Standardization Organization

UNDERCARRIAGE

Tracks

Tractor-type undercarriage. Welded track frame using selected materials. Side frame bolted to track frame. Lubricated track rollers, idlers, and sprockets with floating seals. Track shoes with triple grousers made of induction-hardened rolled alloy. Heat-treated connecting pins with dirt seals. Hydraulic (grease) track adjusters with shock-absorbing recoil springs.

Numbers of Rollers and Shoes on Each Side

Upper rollers.....	3
Lower rollers.....	9
Track shoes.....	53
Track guards.....	3

Travel Device

Each track driven by axial piston motor through planetary reduction gear for counterrotation of the tracks. Sprockets are replaceable.

Parking brake is spring-set/hydraulic-released disc type. Automatic transmission system: High-Low.

Travel speeds.....	High : 0 to 5.5 km/h
	Low : 0 to 3.4 km/h

Maximum traction force.....	322 kN (32 800 kgf)
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Gradeability.....	70% (35 degrees) continuous
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WEIGHTS AND GROUND PRESSURE

ZX470LCH-3 High Reach Demolition 25 m:

Equipped with attachment (attachment tool weight: 3 000 kg)

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	62 700 kg	111 kPa (1.13 kgf/cm ²)

ZX470LCH-3 High Reach Demolition 27 m:

Equipped with attachment (attachment tool weight: 2 400 kg)

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	63 500 kg	112 kPa (1.14 kgf/cm ²)

ZX470LCH-3 Demolition 2-Piece Boom :

Equipped with attachment (attachment tool weight: 4 500 kg)

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	62 500 kg	110 kPa (1.12 kgf/cm ²)

ZX470LCH-3 Demolition 2-Piece Boom :

Equipped with 1.9 m³ bucket: 1 590 kg (SAE, PCSA heaped)

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	59 600 kg	105 kPa (1.08 kgf/cm ²)

ZX470LCH-3 Mono Boom :

Equipped with attachment (attachment tool weight: 4 500 kg)

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	59 700 kg	105 kPa (1.08 kgf/cm ²)

ZX470LCH-3 Mono Boom :

Equipped with 1.9 m³ bucket: 1 590 kg (SAE, PCSA heaped)

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	56 800 kg	100 kPa (1.02 kgf/cm ²)

SERVICE REFILL CAPACITIES

Fuel tank.....	725.0 L
Engine coolant.....	55.0 L
Engine oil.....	57.0 L
Swing device.....	6.5 L
Travel device (each side).....	11.0 L
Hydraulic system.....	560.0 L
Hydraulic oil tank.....	330.0 L

BACKHOE ATTACHMENTS

Boom and arms are of all-welded, box-section design.

Buckets

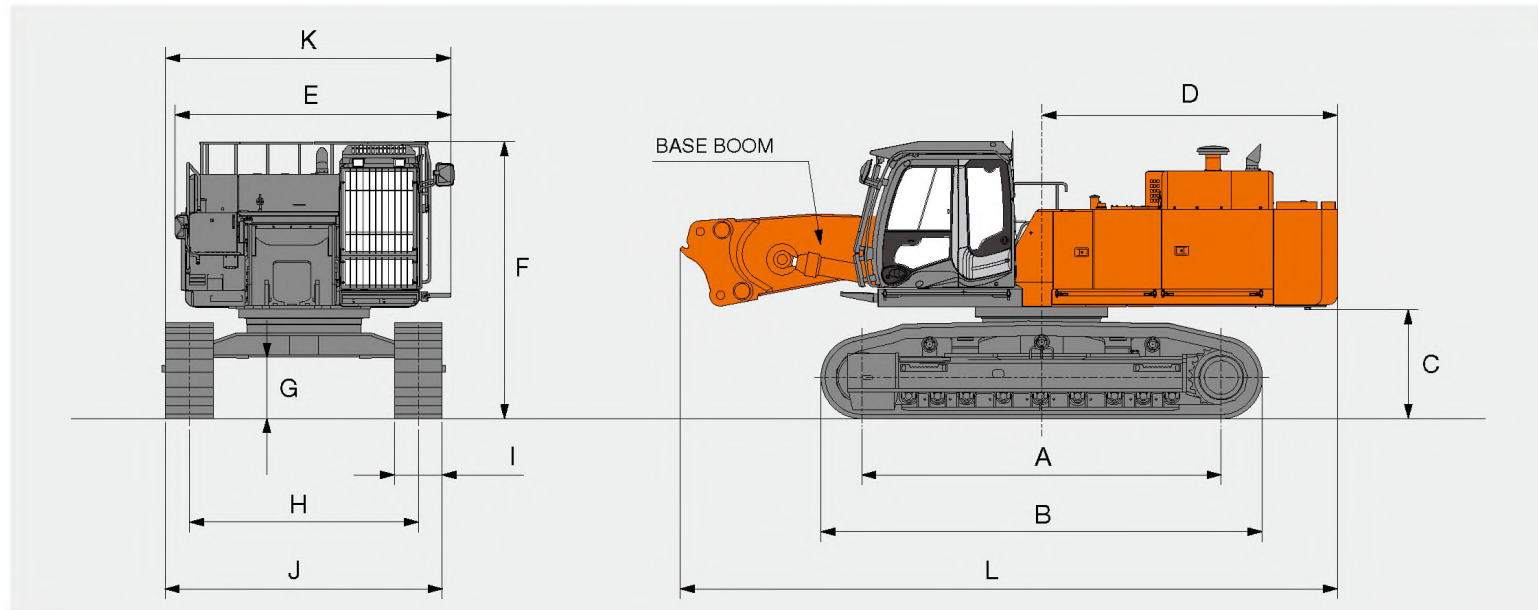
Bucket types: 2-piece boom and mono boom

Capacity SAE, PCSA heaped	With side cutters	Without side cutters	Weight
1.9 m ³	1 540 mm	1 400 mm	1 590 kg

DIMENSIONS

ZX470LCH-3

DIMENSIONS (BASE MACHINE)



Unit: mm

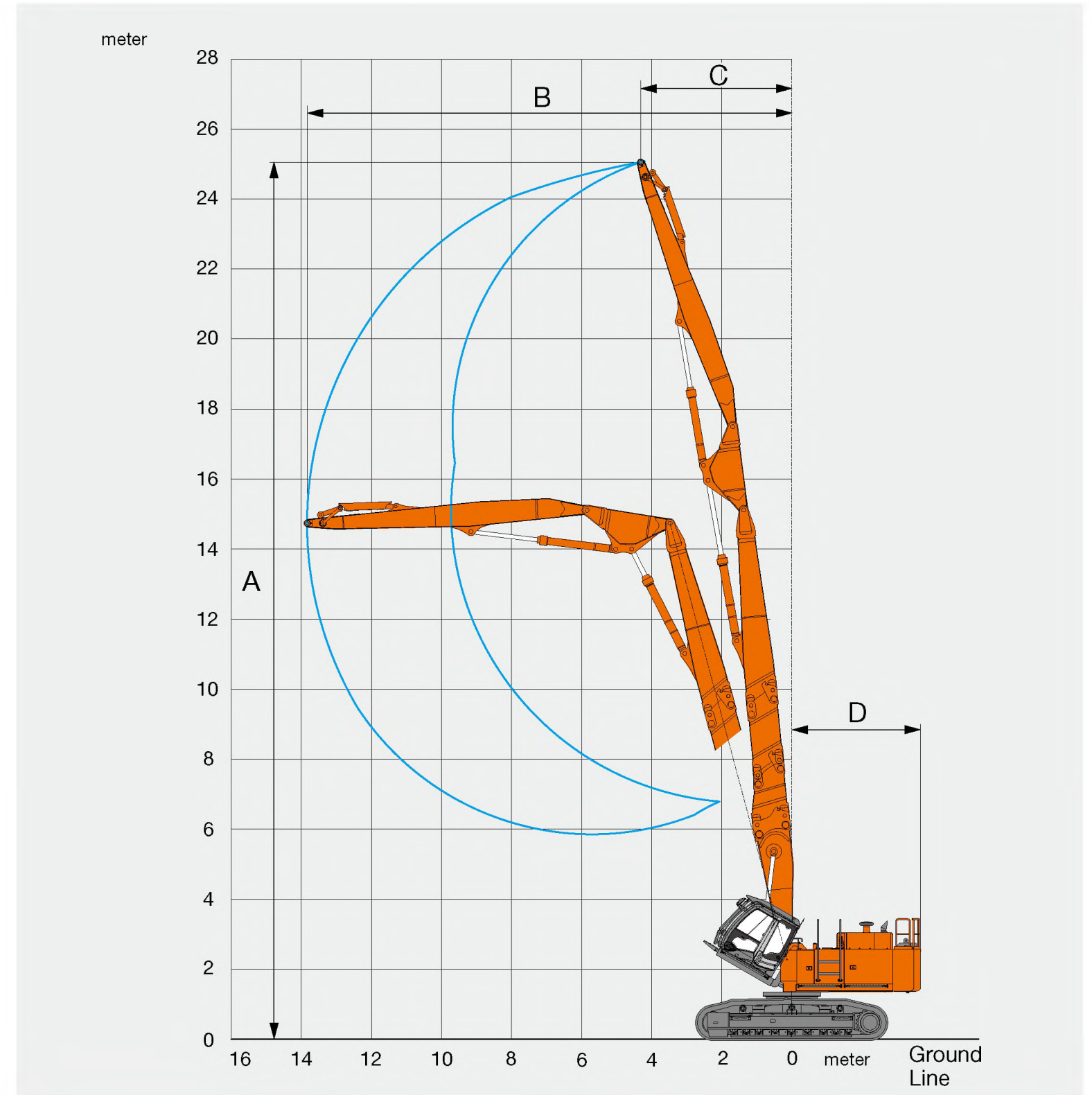
	ZX470LCH-3
A Distance between tumbler	4 470
B Undercarriage length	5 470
*1C Counterweight clearance	1 320
D Rear-end swing radius	3 810
E Overall width of upperstructure	3 560
F Overall height of cab	3 450
*1G Min. ground clearance	720
H Track gauge : Extended / Retracted	2 890 / 2 390
I Track shoe width	G 600
J Undercarriage width	3 490 / 2 990
K Overall width	3 720
L Overall length	8 180
*2 Transportation weight	36 300 kg

*1 Excluding track shoe lug *2 Excluding counterweight G: Triple grouser shoe

WORKING RANGES

ZX470LCH-3 High Reach Demolition 25 m

WORKING RANGES



Unit: mm

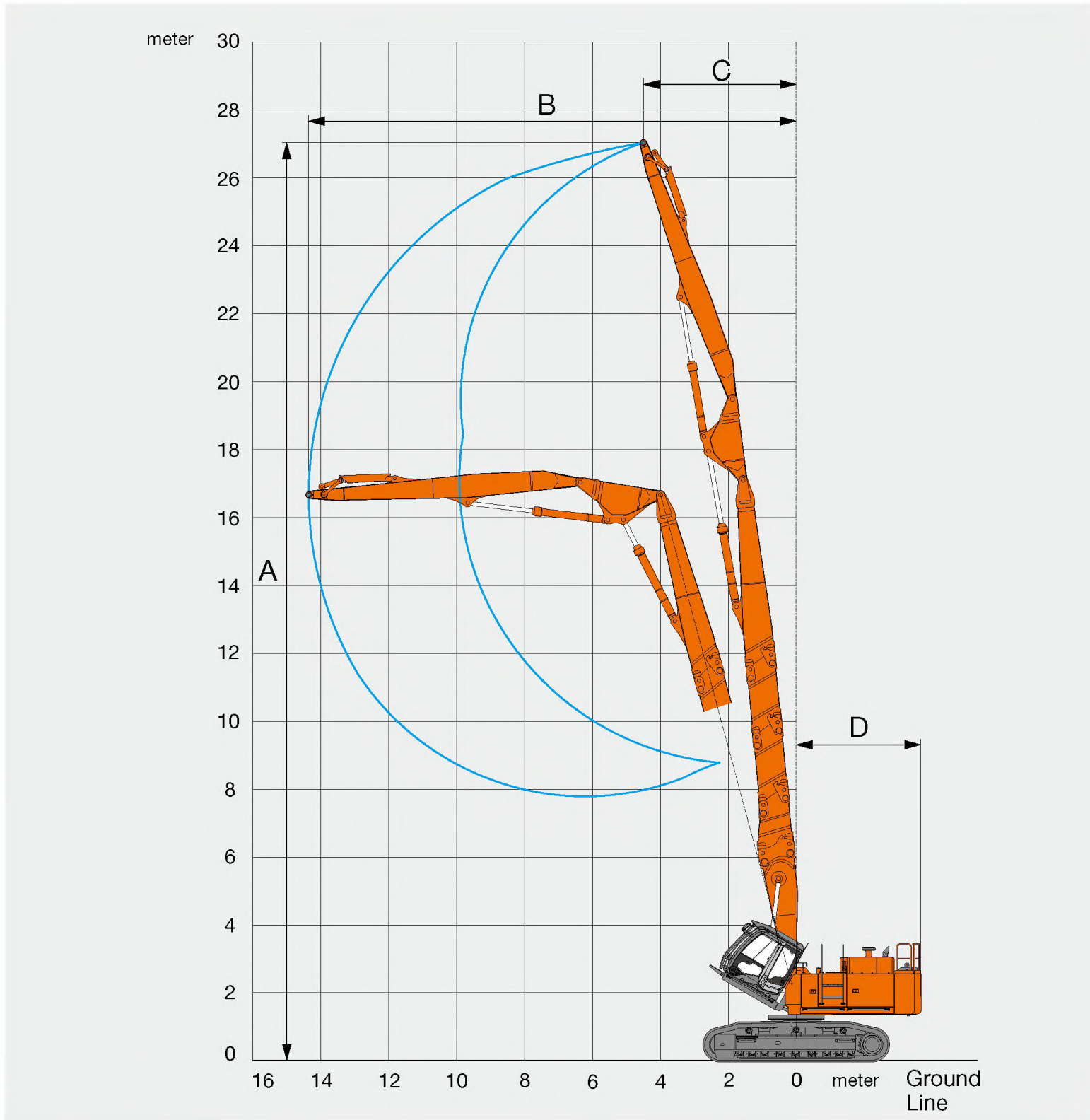
	High Reach Demolition 25 m
A Max. working height (arm top point)	25 000
B Forward limited working reach (arm top point)	13 800
C Reach at max. height (arm top point)	4 310
D Rear end swing radius	3 810
*Max. tool weight	3 000 kg

*Including quick hitch

WORKING RANGES

ZX470LCH-3 High Reach Demolition 27 m

WORKING RANGES



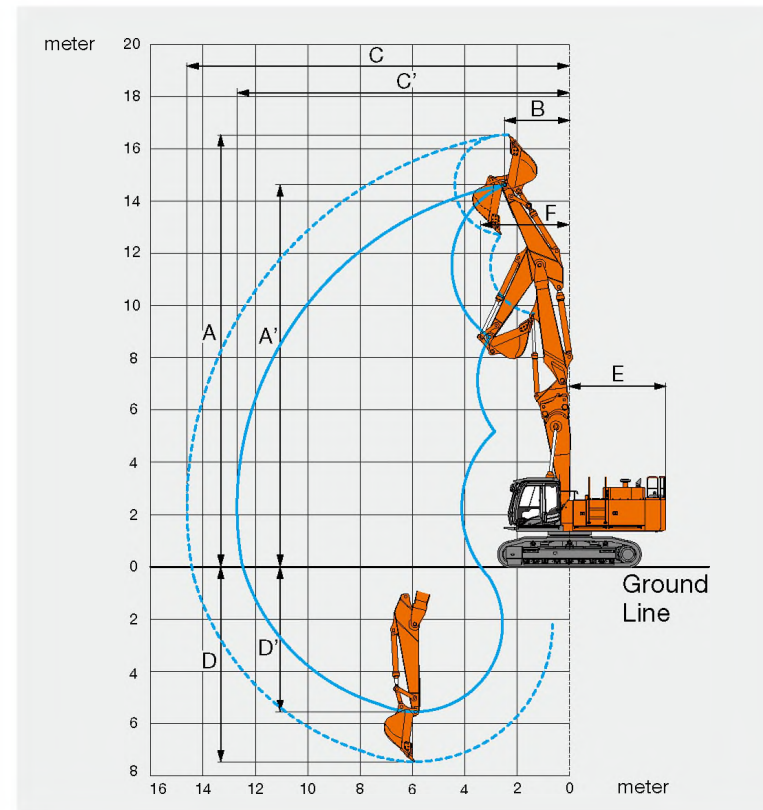
Unit: mm

	High Reach Demolition 27 m
A Max. working height (arm top point)	27 000
B Forward limited working reach (arm top point)	14 400
C Reach at max. height (arm top point)	4 500
D Rear end swing radius	3 810
*Max. tool weight	2 400 kg

*Including quick hitch

ZX470LCH-3 Demolition 2-Piece Boom

WORKING RANGES



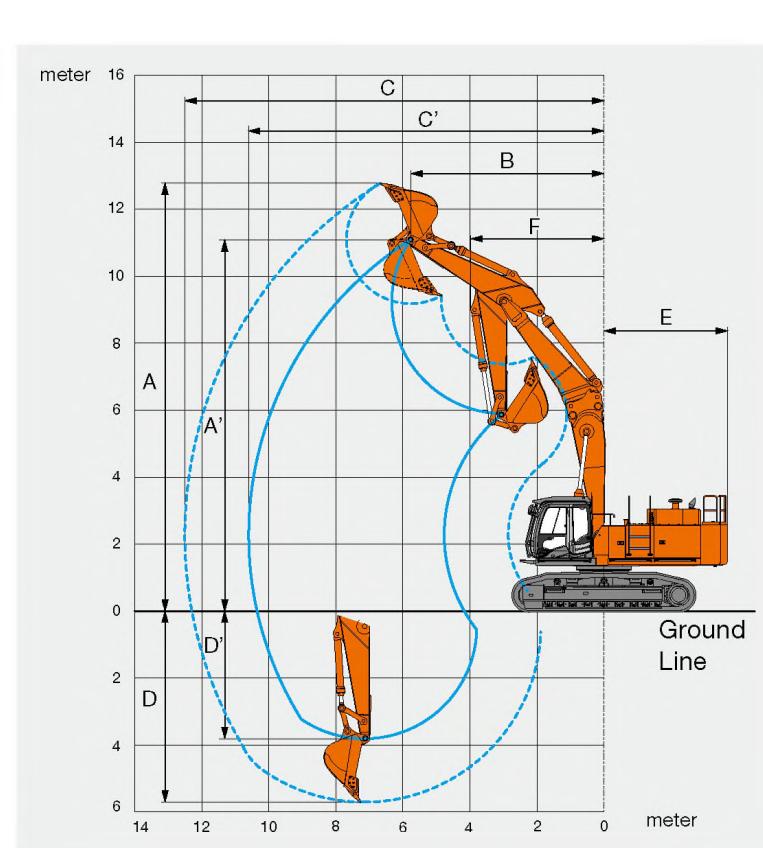
Unit: mm

	Demolition 2-Piece Boom
A Max. digging height (bucket)	16 500
A' Max. working height (arm top point)	14 600
B Reach at max. height (arm top point)	2 510
C Max. digging reach (bucket)	14 600
C' Max. working reach (arm top point)	12 700
D Max. digging depth (bucket)	7 460
D' Max. working depth (arm top point)	5 550
E Rear end swing radius	3 810
F Min. swing radius (bucket)	3 500
Bucket digging force ISO	278 kN (28 300 kgf)
Arm crowd force ISO	216 kN (22 000 kgf)
*Max. tool weight	4 500 kg

*Including quick hitch

ZX470LCH-3 Mono Boom

WORKING RANGES



Unit: mm

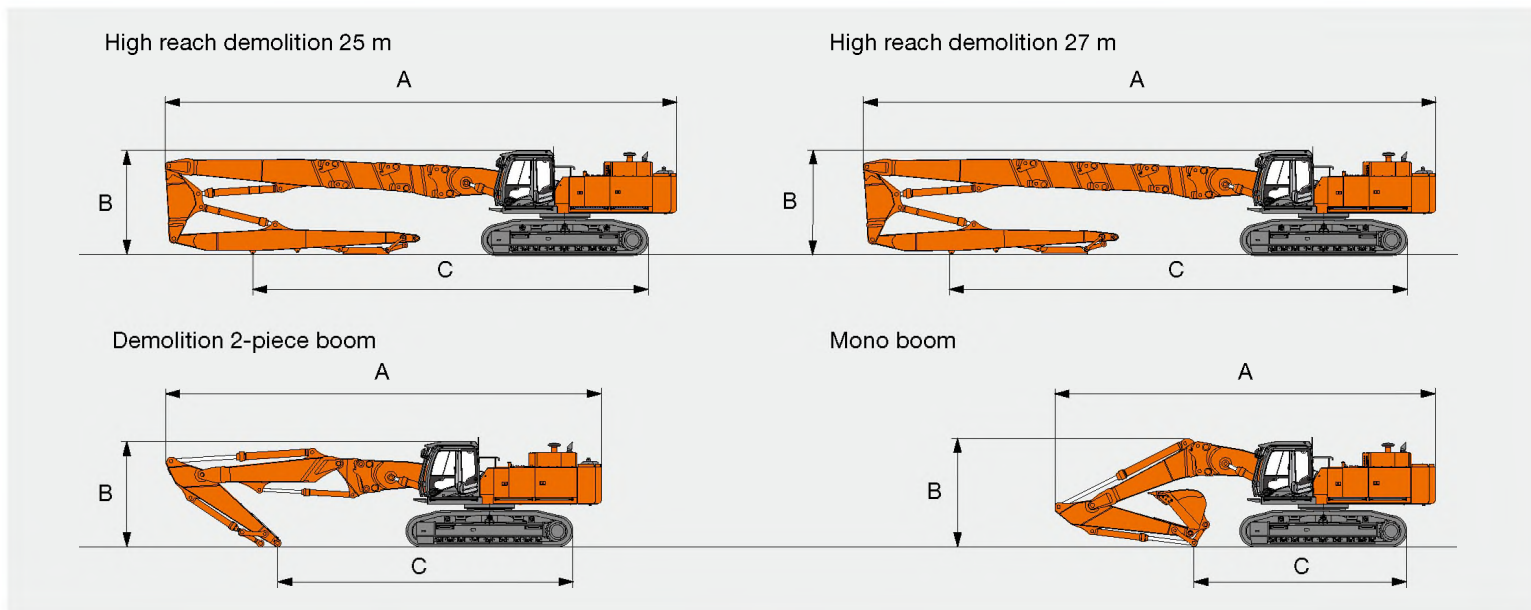
	Mono Boom
A Max. digging height (bucket)	12 800
A' Max. working height (arm top point)	11 100
B Reach at max. height (arm top point)	5 770
C Max. digging reach (bucket)	12 500
C' Max. working reach (arm top point)	10 600
D Max. digging depth (bucket)	5 580
D' Max. working depth (arm top point)	3 810
E Rear end swing radius	3 810
F Min. swing radius (bucket)	3 980
Bucket digging force ISO	278 kN (28 300 kgf)
Arm crowd force ISO	216 kN (22 000 kgf)
*Max. tool weight	4 500 kg

*Including quick hitch

TRANSPORTATION

ZX470LCH-3

OVERALL



Unit: mm

High reach demolition 25 m	
A Transport Length	17 000
B Overall height	3 200
C Length on ground	13 000

High reach demolition 27 m	
A Transport Length	19 000
B Overall height	3 200
C Length on ground	15 000

Unit: mm

Demolition 2-piece boom	
A Transport Length	14 500
B Overall height	3 300
C Length on ground	9 790

Mono boom	
A Transport Length	12 500
B Overall height	3 590
C Length on ground	7 010

EQUIPMENT

ZX470LCH-3

STANDARD EQUIPMENT

Standard equipment may vary by country, so please consult your Hitachi dealer for details.

ENGINE

- H/P mode control
- P mode control
- E mode control
- 50 A alternator
- Dry-type air double filter with evacuator valve (with air filter restriction switch for monitor)
- Cartridge-type engine oil filter
- Cartridge-type fuel filter
- Fuel pre-filter
- Radiator, oil cooler and intercooler with dust protective net
- Radiator reserve tank
- Fan guard
- Isolation-mounted engine
- Auto-idle system

HYDRAULIC SYSTEM

- Work mode selector
- Engine speed sensing system
- E-P control system
- Power boost
- Auto power lift
- Boom mode selector system
- Shockless valve in pilot circuit
- Control valve with main relief valve
- Extra port for control valve
- Suction filter
- Full-flow filter
- Pilot filter
- Drain filter
- Quick warm-up system for pilot circuit
- Additional pump (30L/min)

CAB

- CRES II cab
- OPG top guard Level II (ISO 10262)
- OPG front guard Level II (ISO 10262)
- FOPS guard
- All-weather sound suppressed steel cab
- Laminated round glass (green color) front window
- Front windows on upper, lower and left side can be opened
- 6 fluid-filled elastic mounts
- Intermittent windshield twin wipers
- Front window, upper window washer
- Adjustable reclining suspension seat with adjustable armrests
- Footrest
- Electric double horn
- AM-FM radio with digital clock
- Auto-idle selector
- Retractable seat belt
- Drink holder
- Cigarette lighter
- Ashtray
- Storage box
- Glove compartment
- Floor mat
- Short wrist control levers
- Auto control air conditioner
- Engine shut-off switch
- Transparent roof with sliding curtain
- Tilting cab
- Roof window with wiper and washer

MONITORING SYSTEM

- Display of meters: water temperature, hour, fuel rate, clock
- Other displays: work mode, auto-idle, glow, rearview monitor, operating conditions, etc
- Alarms: overheat, engine warning, engine oil pressure, alternator, minimum fuel level, hydraulic filter restriction, air filter restriction, work mode, overload, etc
- Alarm buzzers: overheating, engine oil pressure, overload, boom angle, tilting cab

LIGHTS

- 2 working lights

UPPERSTRUCTURE

- 6.0 mm thickness Undercover
- Fuel level float
- Rear view camera
- 170 Ah batteries
- Hydraulic oil level gauge
- Tool box
- Rear view mirror (right & left side)
- Swing parking brake
- Ladder
- Electric grease gun with hose-reel

UNDERCARRIAGE

- Travel parking brake
- Travel motor covers
- Hydraulic track adjuster
- Idler track guard
- Bolt-on sprocket
- Upper and lower rollers
- Reinforced track links with pin seals
- 3 track guards (each side)
- 600 mm triple grouser shoes
- Track undercover

FRONT ATTACHMENTS

- Flanged pin
- Monolithically cast bucket link A (monoboam / 2-Piece boom)
- Welded bucket link A (high reach demolition)
- Centralized lubrication system
- Dirt seal on all bucket pins

MISCELLANEOUS

- Standard tool kit
- Lockable machine covers
- Lockable fuel refilling cap
- Skid-resistant tapes, plates and handrails
- Travel direction mark on track frame
- Onboard information controller

OPTIONAL EQUIPMENT

Optional equipment may vary by country, so please consult your Hitachi dealer for details.

- Hose rupture valves
- Electrical fuel refilling pump with auto-stop
- Swing motion alarm device with lamps
- Travel motion alarm device
- Biodegradable oil
- Extinguisher

- Pre cleaner
- 2 cab lights
- Sun visor
- 12 V power source
- Additional fuse box
- Overload alarm
- Air suspension seat with heater

- Mechanical suspension seat with heater
- Additional working light with cover

SPECIFICATIONS

ZX870LCH-3

ENGINE

Model.....	Isuzu AH-6WG1X
Type.....	4-cycle water-cooled, direct injection
Aspiration.....	Turbocharged
No. of cylinders.....	6
Rated power	
ISO 9249,	
Without Fan net	397 kW (532 HP) at 1 800 min ⁻¹ (rpm)
ECC 80/1269,	
Without Fan net	397 kW (532 HP) at 1 800 min ⁻¹ (rpm)
SAE J1349,	
Without Fan net	397 kW (532 HP) at 1 800 min ⁻¹ (rpm)
Maximum torque.....	2 250 Nm (230 kgf·m) at 1 500 min ⁻¹ (rpm)
Piston displacement....	15.681 L
Bore and stroke	147 mm x 154 mm
Batteries.....	2 x 12 V / 170 Ah

HYDRAULIC SYSTEM

- Work mode selector
General purpose mode / Attachment mode
- Engine speed sensing system
Main pumps..... 2 variable displacement axial piston pumps
Maximum oil flow... 2 x 528 L/min
Pilot pump..... 1 gear pump
Maximum oil flow... 30 L/min

Hydraulic Motors

Travel	2 axial piston motors with parking brake
Swing.....	2 axial piston motor

Relief Valve Settings

Implement circuit.....	31.9 MPa (325 kgf/cm ²)
Swing circuit.....	29.4 MPa (300 kgf/cm ²)
Travel circuit.....	34.3 MPa (350 kgf/cm ²)
Pilot circuit	3.9 MPa (40 kgf/cm ²)
Power boost	34.3 MPa (350 kgf/cm ²)

Hydraulic Cylinders

High-strength piston rods and tubes. Cylinder cushion mechanisms provided in boom and arm cylinders to absorb shock at stroke ends.

Hydraulic Filters

Hydraulic circuits use high-quality hydraulic filters. A suction filter is incorporated in the suction line, and full-flow filters in the return line and swing/travel motor drain lines.

CONTROLS

Pilot controls. Hitachi's original shock less valve and quick warm-up system built in the pilot circuit.

Implement levers	2
Travel levers with pedals.....	2

UPPER STRUCTURE

Revolving Frame

Welded sturdy box construction, using heavy-gauge steel plates for ruggedness. D-section frame for resistance to deformation.

Swing Device

Axial piston motor with planetary reduction gear is bathed in oil. Swing circle is single-row, shear-type ball bearing with induction-hardened internal gear. Internal gear and pinion gear are immersed in lubricant. Swing parking brake is spring-set/hydraulic-released disc type.
Swing speed..... 7.3 min⁻¹ (rpm)

Operator's Cab

Independent spacious cab, 1 005 mm wide by 1 795 mm high, conforming to ISO* Standards. (OPG top guard fitted Level II (ISO 10262) compliant cab) Reinforced glass windows on 4 sides for visibility. Reclining seat with armrests; adjustable with or without control levers.
* International Standardization Organization

UNDERCARRIAGE

Tracks

Tractor-type undercarriage. Welded track frame using selected materials. Side frame bolted to track frame. Lubricated track rollers, idlers, and sprockets with floating seals.
Track shoes with triple grousers made of induction-hardened rolled alloy. Heat-treated connecting pins with dirt seals. Hydraulic (grease) track adjusters with shock-absorbing recoil springs.

Numbers of Rollers and Shoes on Each Side

Upper rollers	3
Lower rollers	9
Track shoes	51
Track guards.....	3

Travel Device

Each track driven by axial piston motor through reduction gears for counterrotation of the tracks. Sprockets are replaceable. Parking brake is spring-set/hydraulic-released disc type. Automatic transmission system: High-Low.

Travel speeds.....	High : 0 to 4.1 km/h Low : 0 to 3.1 km/h
--------------------	---

Maximum traction force.... 560 kN (57 100 kgf)

Gradeability..... 70% (35 degrees) continuous

WEIGHTS AND GROUND PRESSURE

ZX870LCH-3 High Reach Demolition 40 m:

Equipped with attachment (attachment tool weight: 2 400 kg)

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	650 mm	108 300 kg	147 kPa (1.50 kgf/cm ²)

ZX870LCH-3 Demolition 2-Piece Boom :

Equipped with attachment (attachment tool weight: 6 600 kg)

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	650 mm	109 000 kg	148 kPa (1.51 kgf/cm ²)

ZX870LCH-3 Demolition 2-Piece Boom :

Equipped with 3.4 m³ bucket: 2 680 kg (SAE, PCSA heaped)

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	650 mm	105 100 kg	142 kPa (1.46 kgf/cm ²)

* Excluding bucket weight

ZX870LCH-3 Mono Boom :

Equipped with attachment (attachment tool weight: 6 600 kg)

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	650 mm	103 800 kg	140 kPa (1.43 kgf/cm ²)

ZX870LCH-3 Mono Boom :

Equipped with 3.4 m³ bucket: 2 680 kg (SAE, PCSA heaped)

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	650 mm	99 900 kg	136 kPa (1.38 kgf/cm ²)

* Excluding bucket weight

SERVICE REFILL CAPACITIES

Fuel tank	1 120.0 L
Engine coolant	116.0 L
Engine oil	57.0 L
Swing device (each side)	15.0 L
Travel device (each side).....	11.0 L
Hydraulic system	790.0 L
Hydraulic oil tank	500.0 L

BACKHOE ATTACHMENTS

Boom and arms are of welded, box-section design.

Buckets

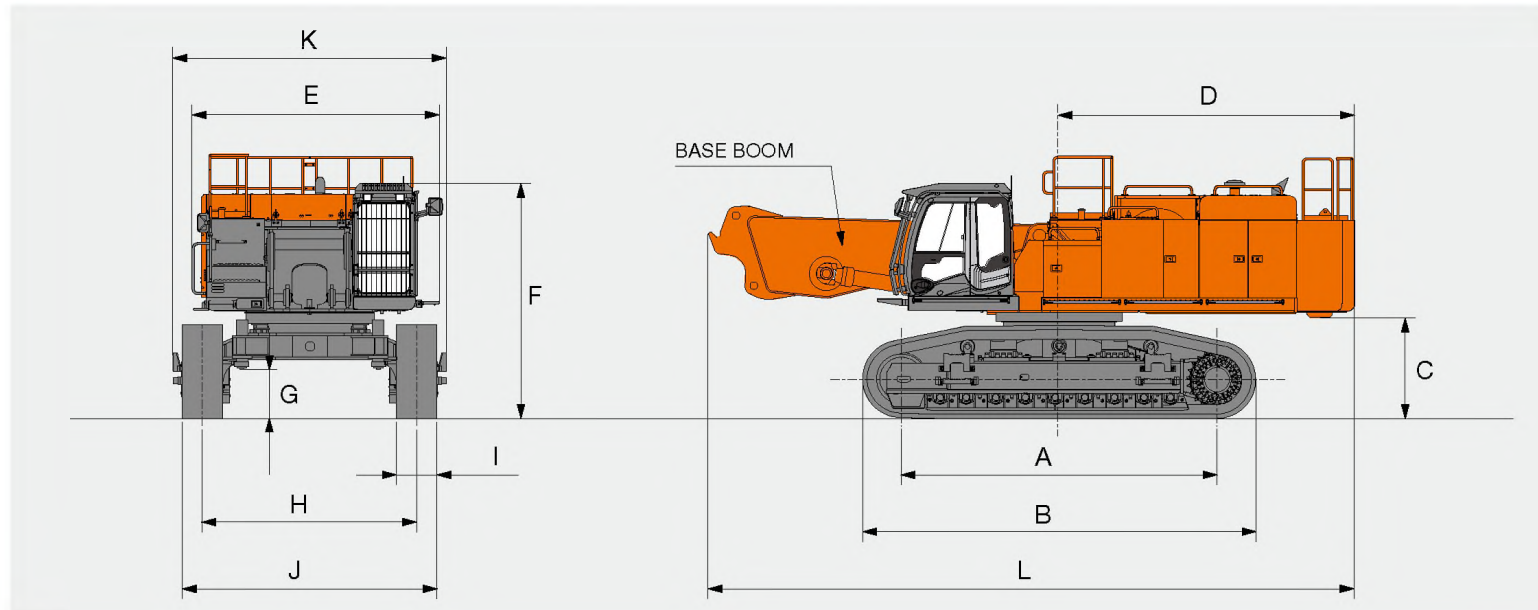
Bucket types: 2-piece boom and mono boom

Capacity SAE, PCSA heaped	With side cutters	Without side cutters	Weight
3.4 m ³	2 030 mm	1 860 mm	2 680 kg

DIMENSIONS

ZX870LCH-3

DIMENSIONS (BASE MACHINE)



Unit: mm

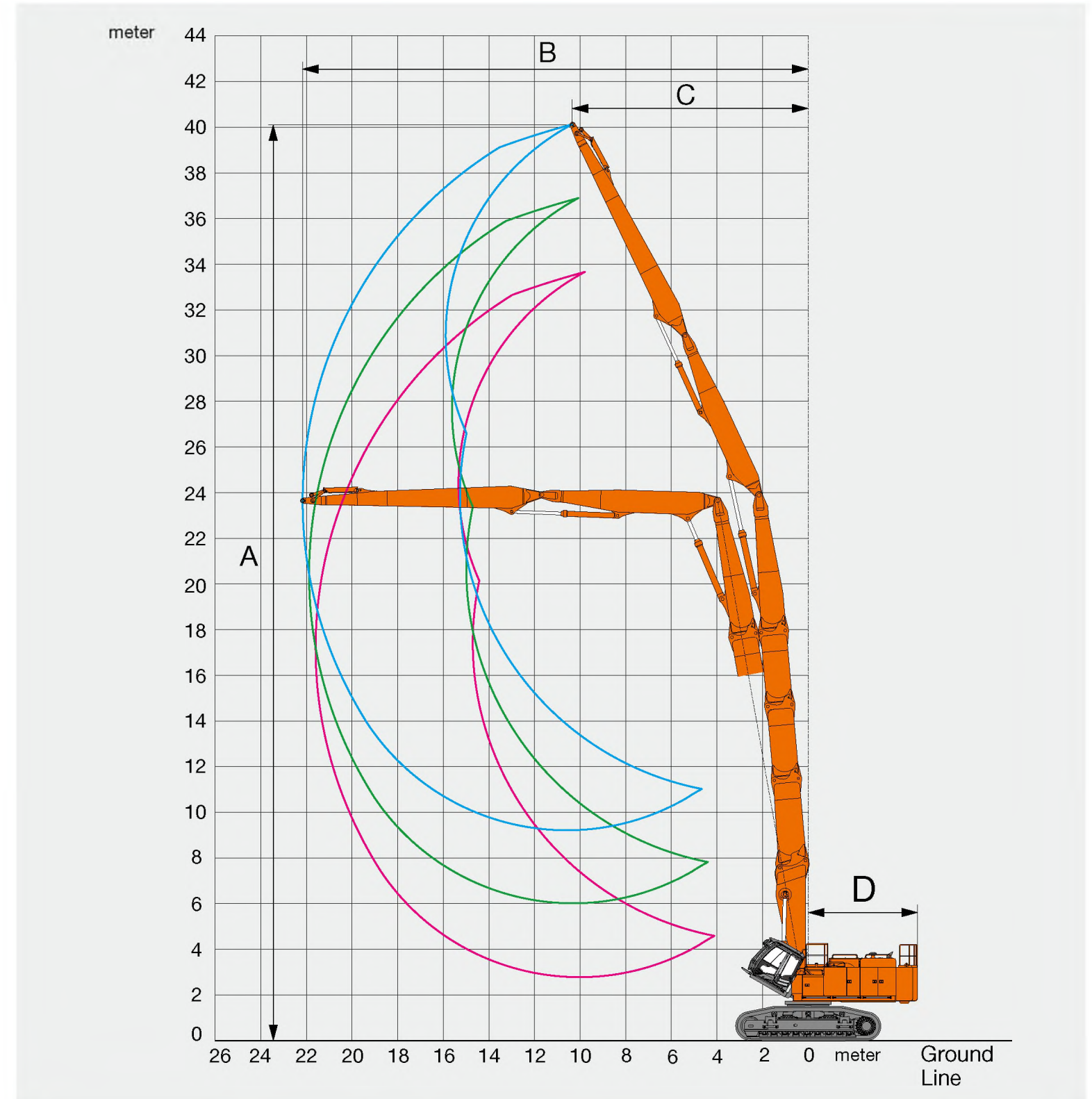
	ZX870LCH-3
A Distance between tumblers	5 110
B Undercarriage length	6 360
*1C Counterweight clearance	1 580
D Rear-end swing radius	4 820
E Overall width of upperstructure	4 070
F Overall height of cab	3 780
*1G Min. ground clearance	730
H Track gauge (Extended / Retracted)	3 450 / 2 830
I Track shoe width	G 650
J Undercarriage width (Extended / Retracted)	4 100 / 3 480
K Overall width	4 400
L Overall length	10 500
*2 Transportation weight	66 700 kg

*1 Excluding track shoe lug *2 Excluding counterweight G: Triple grouser shoe

WORKING RANGES

ZX870LCH-3 High Reach Demolition 33 m / 36 m / 40 m

WORKING RANGES



Unit: mm

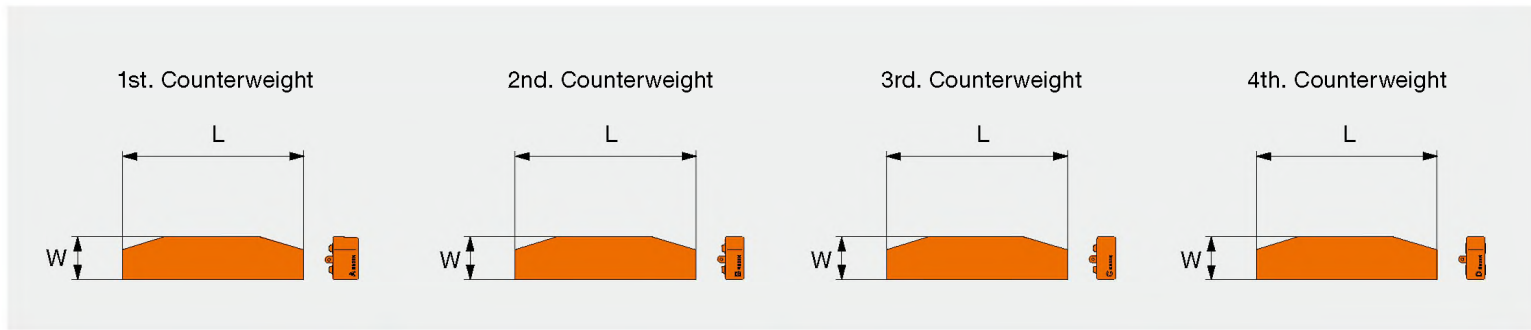
	High Reach Demolition		
	33 m	36 m	40 m
A Max. working height (arm top point)	33 600	36 800	40 000
B Forward limited working reach (arm top point)	21 100	21 600	22 100
C Reach at max. height (arm top point)	9 700	10 000	10 300
D Rear end swing radius	4 820	4 820	4 820
*Max. tool weight	3 000 kg	3 000 kg	2 400 kg

*Including quick hitch

TRANSPORTATION

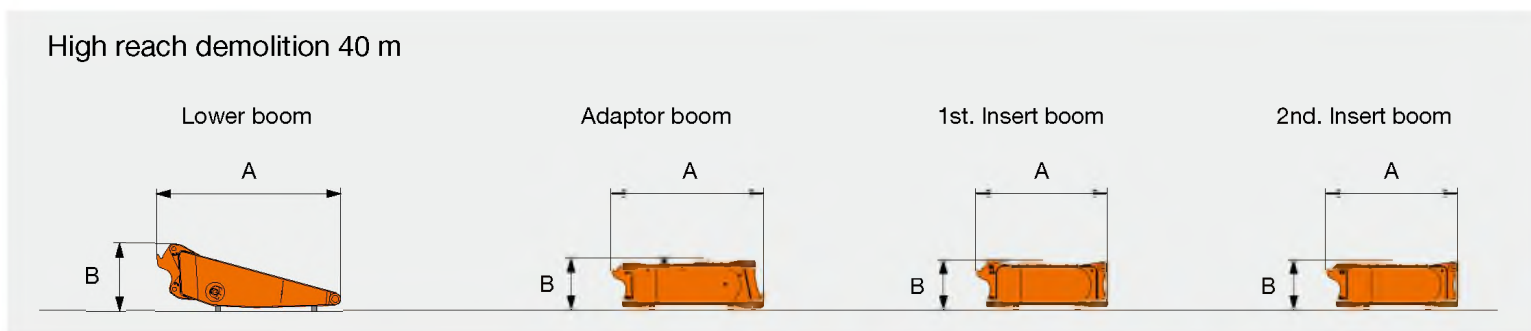
ZX870LCH-3

COUNTERWEIGHT



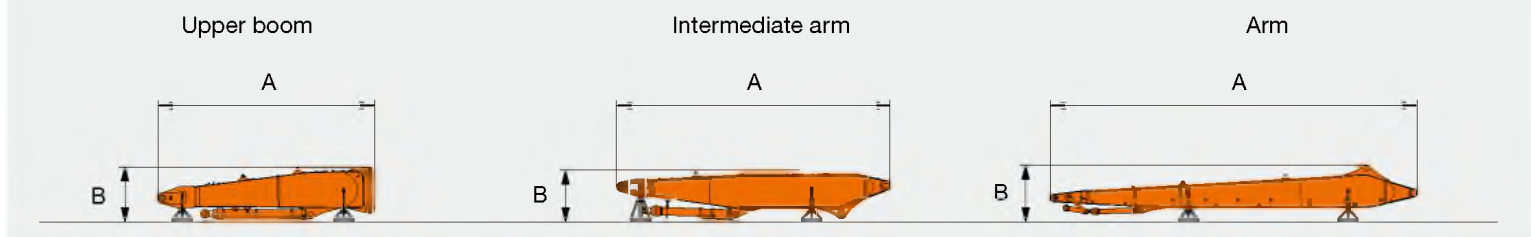
1st. Counterweight			2nd. Counterweight			3rd. Counterweight			4th. Counterweight		
L: Length	mm	3 165	L: Length	mm	3 165	L: Length	mm	3 165	L: Length	mm	3 165
W: Width	mm	745	W: Width	mm	745	W: Width	mm	745	W: Width	mm	745
Height	mm	585	Height	mm	465	Height	mm	465	Height	mm	465
Weight	kg	5 000	Weight	kg	5 000	Weight	kg	5 000	Weight	kg	5 000

FRONT ATTACHMENT



Lower boom			Adaptor boom			1st. Insert boom			2nd. Insert boom		
A: Length	mm	5 370	A: Length	mm	4 470	A: Length	mm	3 860	A: Length	mm	3 860
B: Height	mm	1 950	B: Height	mm	1 700	B: Height	mm	1 600	B: Height	mm	1 600
Width / Incl.support	mm	1 430 / 1 430	Width / Incl.support	mm	880 / 1 000	Width / Incl.support	mm	810 / 1 000	Width / Incl.support	mm	810 / 1 000
Weight / Incl.support	kg	5 640 / 5 680	Weight / Incl.support	kg	2 900 / 2 970	Weight / Incl.support	kg	2 490 / 2 530	Weight / Incl.support	kg	2 490 / 2 530

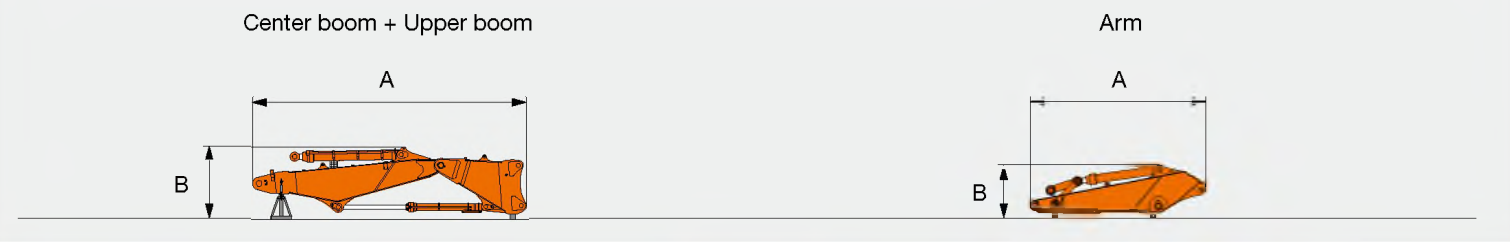
High reach demolition 40 m



Upper boom			Middle arm			Arm		
A: Length	mm	6 310	A: Length	mm	7 980	A: Length	mm	10 700
B: Height	mm	1 650	B: Height	mm	1 550	B: Height	mm	1 650
Width / Incl.stand	mm	850 / 1 360	Width / Incl.stand	mm	740 / 1 360	Width / Incl.stand	mm	580 / 1 360
Weight / Incl.stand	kg	4 080 / 4 250	Weight / Incl.stand	kg	3 730 / 3 940	Weight / Incl.stand	kg	3 260 / 3 430

FRONT ATTACHMENT

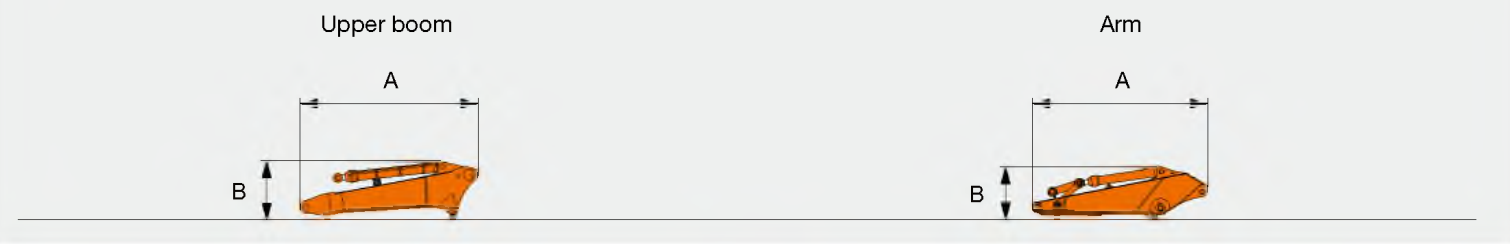
Demolition 2-piece boom



Center boom + Upper boom		
A: Length	mm	7 940
B: Height	mm	2 500
Width / Incl.stand and support	mm	1 040 / 1 360
Weight / Incl.stand and support	kg	10 200 / 10 400

Arm		
A: Length	mm	5 130
B: Height	mm	1 550
Width / Incl.support	mm	1 080 / 1 080
Weight / Incl.support	kg	5 010 / 5 050

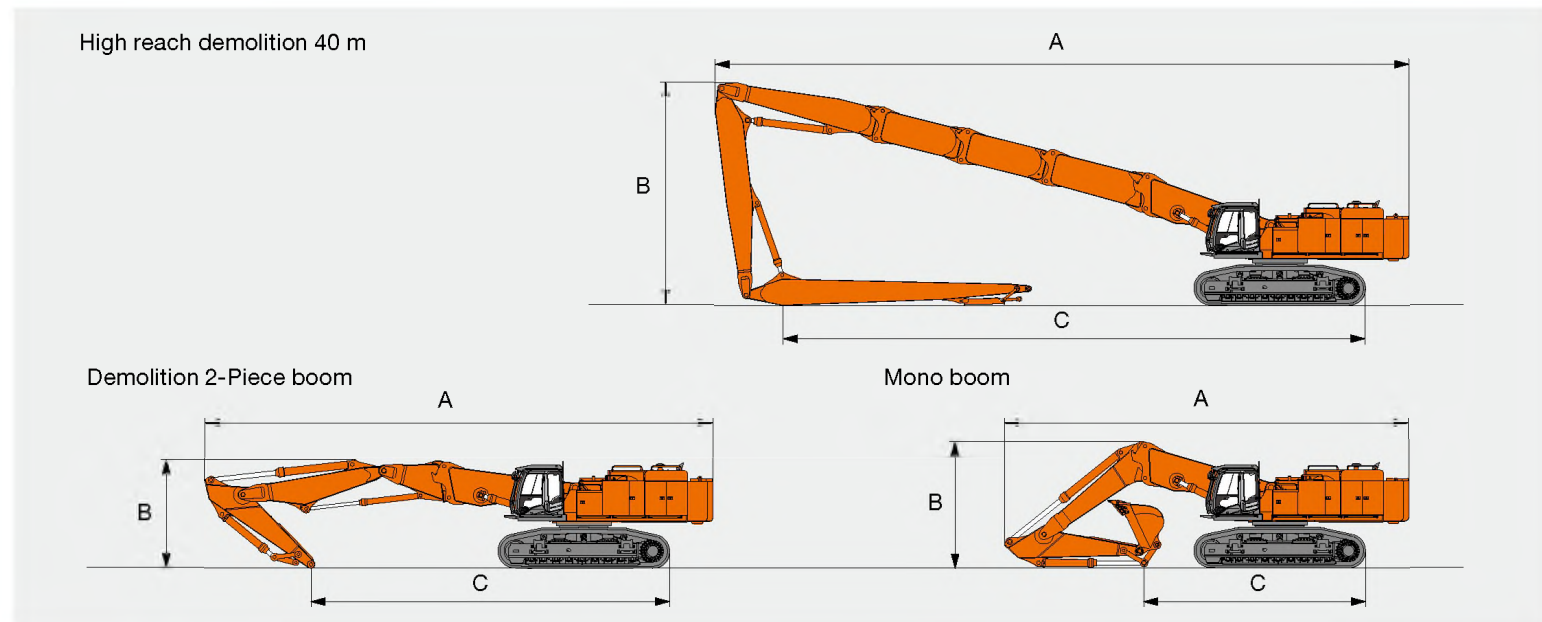
Mono boom



Upper boom		
A: Length	mm	5 200
B: Height	mm	1 750
Width / Incl.rest	mm	910 / 1 100
Weight / Incl.rest	kg	5 280 / 5 320

Arm		
A: Length	mm	5 130
B: Height	mm	1 550
Width / Incl.support	mm	1 080 / 1 080
Weight / Incl.support	kg	5 010 / 5 050

OVERALL



Unit: mm

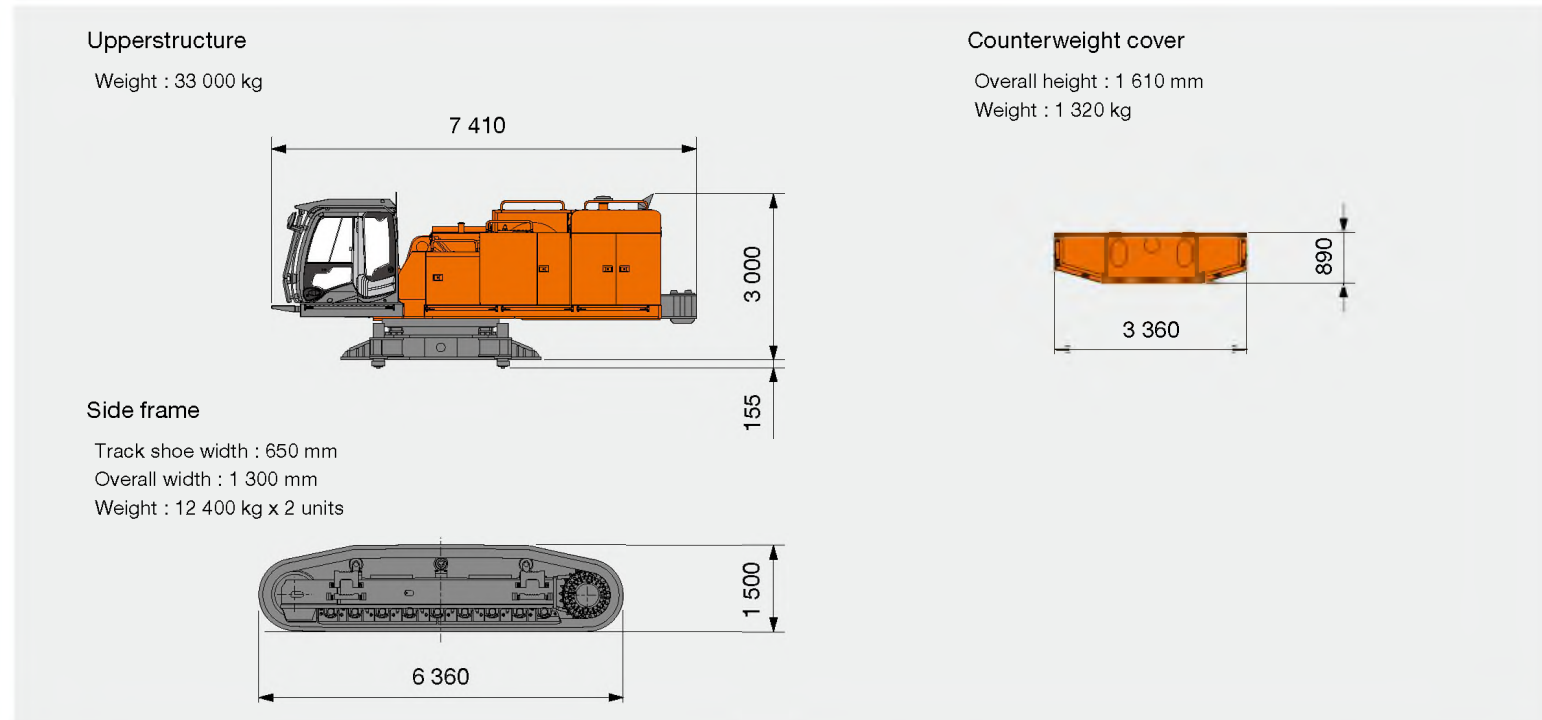
High reach demolition 40 m	
A Transport Length	25 900
B Overall height	8 440
C Length on ground	21 600

Unit: mm

Demolition 2-piece boom	
A Transport Length	19 000
B Overall height	4 580
C Length on ground	13 400

Mono boom	
A Transport Length	15 000
B Overall height	4 700
C Length on ground	9 870

Unit: mm



Upperstructure

Weight : 33 000 kg

Counterweight cover

Overall height : 1 610 mm
Weight : 1 320 kg

Side frame

Track shoe width : 650 mm
Overall width : 1 300 mm
Weight : 12 400 kg x 2 units

ZX870LCH-3

STANDARD EQUIPMENT

Standard equipment may vary by country, so please consult your Hitachi dealer for details.

ENGINE

- H/P mode control
- P mode control
- E mode control
- 50 A alternator
- Dry-type air double filter with evacuator valve (with air filter restriction switch for monitor)
- Cartridge-type engine oil filter
- Cartridge-type fuel filter
- Fuel pre-filter
- Radiator, oil cooler and intercooler with dust protective net
- Radiator reserve tank
- Fan guard
- Isolation-mounted engine
- Auto-idle system

HYDRAULIC SYSTEM

- Work mode selector
- Engine speed sensing system
- E-P control system
- Power boost
- Auto power lift
- Boom mode selector system
- Shockless valve in pilot circuit
- Control valve with main relief valve
- Extra port for control valve
- Suction filter
- Full-flow filter
- Pilot filter
- Drain filter
- Quick warm-up system for pilot circuit

CAB

- CRES II cab
- OPG top guard Level II (ISO10262)
- OPG front guard Level II (ISO 10262)
- FOPS guard
- All-weather sound suppressed steel cab
- Laminated round glass (green color) front window
- Left side window can be opened
- 6 fluid-filled elastic mounts
- Intermittent windshield twin wipers
- Front window, upper window washer
- Adjustable reclining suspension seat with adjustable armrests
- Footrest
- Electric double horn
- AM-FM radio with digital clock
- Auto-idle selector
- Retractable Seat belt
- Drink holder
- Cigarette lighter
- Ashtray
- Storage box
- Glove compartment
- Floor mat
- Short wrist control levers
- Auto control air conditioner
- Pilot control shut-off lever
- Engine shut-off switch
- Transparent roof with slide curtain
- Tilting cab
- Roof window with wiper and washer

MONITORING SYSTEM

- Display of meters: water temperature, hour, fuel rate, clock
- Other displays: work mode, auto-idle, glow, rearview monitor, operating conditions, etc
- Alarms: overheat, engine warning, engine oil pressure, alternator, minimum fuel level, hydraulic filter restriction, air filter restriction, work mode, overload, etc
- Alarm buzzers: overheat, engine oil pressure, overload, boom angle, tilting cab

LIGHTS

- 3 working lights
- 2 cab lights

UPPERSTRUCTURE

- 6.0 mm thickness Undercover
- Fuel level float
- Rear view camera
- 170 Ah batteries
- Electrical fuel refilling pump with auto-stop
- Electrical grease gun with hose-reel
- Hydraulic oil level gauge
- Tool box
- Utility space
- Rearview mirror (right & left side)
- Swing parking brake

UNDERCARRIAGE

- Travel parking brake
- Travel motor covers
- Hydraulic track adjuster
- Idler track guard
- Bolt-on sprocket
- Upper and lower rollers
- Reinforced track links with pin seals
- Full track guard
- 650 mm double grouser shoes
- Track undercover

FRONT ATTACHMENTS

- Flanged pin
- Centralized lubrication system
- Dirt seal on all bucket pins

MISCELLANEOUS

- Standard tool kit
- Lockable machine covers
- Lockable fuel filling cap
- Skid-resistant tapes, plates, handrails and sidewalk
- Travel direction mark on track frame
- Onboard information controller

OPTIONAL EQUIPMENT

Optional equipment may vary by country, so please consult your Hitachi dealer for details.

- Hose rupture valves
- Swing motion alarm device with lamps
- Travel motion alarm device
- Biodegradable oil
- Pre cleaner
- Auto-grease lubricator
- Sun visor
- 12 V power source
- Additional fuse box
- Overload alarm

These specifications are subject to change without notice.
Illustrations and photos show the standard models, and may or may not include optional equipment, accessories, and all standard equipment with some differences in color and features.
Before use, read and understand the Operator's Manual for proper operation.

