HITACHI

Reliable solutions

MATERIAL HANDLING MACHINE

ZAXIS 250LC / 350LC / 470LCH



Model Code	ZX250LC-5B	
Engine Rated Power	132 kW (177 HP)	
Operating Weight	27 900 - 29 000 kg	

Model Code	ZX350LC-5B	
Engine Rated Power	202 kW (271 HP)	
Operating Weight	38 400 - 39 600 kg	

Model Code	ZX470LCH-5B	
Engine Rated Power	270 kW (362 HP)	
Operating Weight	52 700 - 54 400 kg	

SPECIFICATIONS ZAXIS 250LC MATERIAL HANDLING

ENGINE

HYDRAULIC SYSTEM

Hydraulic Pumps

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	29.6 MPa (300 kgf/cm²)
Travel circuit	34.3 MPa (350 kgf/cm²)
Pilot circuit	3.9 MPa (40 kgf/cm²)
Power boost	36.3 MPa (370 kgf/cm ²)

Hydraulic Cylinders

	Quantity	Bore	Rod diameter
Boom	2	125 mm	90 mm
Arm	2	120 mm	90 mm

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 11.0 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 Organization for Standardization

UNDERCARRIAGE

Tracks

Tractor-type undercarriage. Welded track frame using selected materials. Side frame welded to track frame. Lubricated track rolles, 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 guard	1

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 disk 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	222 kN (22 600 kgf)

SERVICE REFILL CAPACITIES

Fuel tank	510.0 L
Engine coolant	26.0 L
Engine oil	
Swing device (each side)	
Travel device (each side)	7.8 L
Hydraulic system	
Hydraulic oil tank	156.0 L

WEIGHTS AND GROUND PRESSURE

Equipped with 7.00 m boom, 6.00 m gooseneck type arm, 7 300 kg counterweight.

	Triple grouser shoe	Operating weight	Ground pressure
	600 mm	27 900 kg	56 kPa (0.57 kg/cm²)
	700 mm	28 200 kg	48 kPa (0.49 kg/cm²)
	800 mm	28 500 kg	42 kPa (0.43 kg/cm²)
	900 mm	29 000 kg	38 kPa (0.38 kg/cm²)

Basic Machine Weight and Overall width



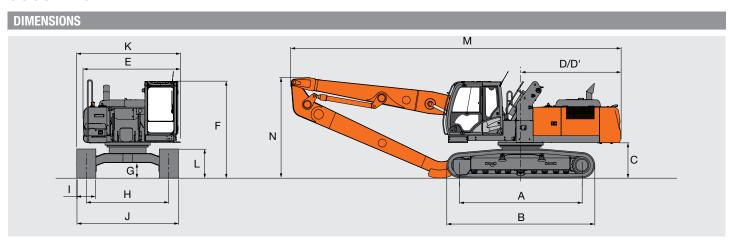
Excluding front end attachment, fuel, hydraulic oil and coolant etc. Including counterweight.

Triple grouser shoe	Weight	Overall width
600 mm	22 800 kg	3 390 mm
700 mm	23 100 kg	3 390 mm
800 mm	23 400 kg	3 390 mm
900 mm	23 900 kg	3 490 mm

Components weight

	Weight
Counter weight	7 300 kg
7.00 m straight boom (with arm cylinder)	2 470 kg
6.00 m gooseneck type arm	1 310 kg

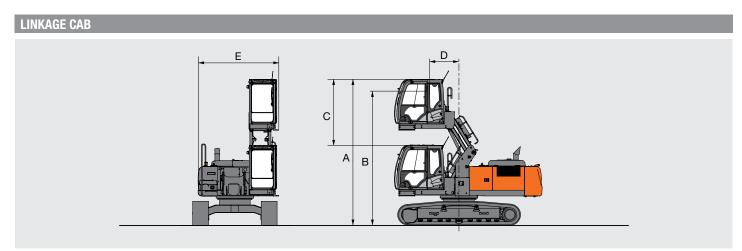
GOOSENECK TYPE ARM



Unit: mm

				OHIL HIH	
		ZAXIS	250LC		
A Distance between tumblers		3 8	350		
B Undercarriage length		4 6	640		
*C Counterweight clearance		1 (060		
D Rear-end swing radius		3 -	140		
D' Rear-end length		3 -	140		
E Overall width of upperstructure		3 040			
F Overall height of cab		3 (040		
*G Min. ground clearance		460			
H Track gauge		2.5	590		
I Track shoe width	G 600	G 600 G 700 G 800 G 900			
J Undercarriage width	3 190	3 290	3 390	3 490	
K Overall width	3 390	3 390	3 390	3 490	
*L Track height	920				
M Overall length		10 500			
N Overall height of boom		3 340			

^{*}Excluding track shoe lug G: Triple grouser shoe



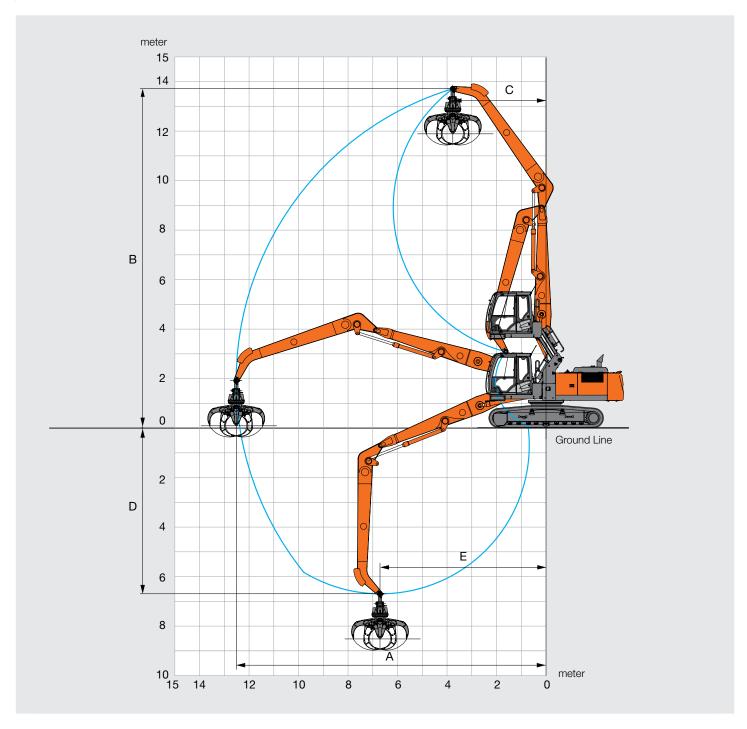
Unit: mm

	ZAXIS 250LC
A Overall height of cab	3 040 to 5 520
B Operator's view point	2 580 to 5 060
C Cab Lifting Length	2 480
D Operator's view between swing center	1 480
E Overall width upperstructure (including cab sidewalk)	3 040

SPECIFICATIONS ZAXIS 250LC MATERIAL HANDLING

GOOSENECK TYPE ARM

WORKING RANGES



Unit: mm

	O'III. 11III
Model	ZAXIS 250LC
Boom length	7.00 m
Arm length	6.00 m
A Max. Arm Point Reach	12 500
B Max. Arm Point Height	13 700
C Min. Swing Radius	3 740
D Max. Arm Point Depth	6 700
E Max. Arm Point Depth Reach	6 680

Excluding track shoe lug

LIFTING CAPACITIES ZAXIS 250LC MATERIAL HANDLING

Notes: 1. Lifting capacity of the ZX series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity. (ISO 10567)

4.5 m

*6 990

*8 590

*10 100

*9 550

*6 260

*5 780

*5 980

*6 450

ů

*6 990

*8 590

*10 100

*9 550

*6 260

*5 780

*5 980

*6 450

6.0 m

*4 120

*4 930

*5 320

*5 950

*6 750

*7 520

7 660

7 340

7 180

*6 680

*5 180

ů

*4 120

*4 930

*5 320

*5 950

*6 750

*7 520

*8 000

*8 050

*7 620

*6 680

*5 180

2. *Indicates load limited by hydraulic capacity.

3.0 m

*12 300

*5 970

*2 950

*2 970

*3 350

*3 800

ů

*12 300

*5 970

*2 950

*2 970

*3 350

*3 800



Load radius

7.5 m

*4 090

*4 590

*4 630

*4 850

*5 200

*5 630

5 930

5 650

5 440

5 330

*5 290

*4 060

*5 180

*5 120

*4 810

*4 160

*2 950

4 400

4 270

4 200

*4 160

*2 950

*4 360

*4 210

*3 830

*3 040

3 550

3 470

3 440

*3 040

ů

*4 090

*4 590

*4 630

*4 850

*5 200

*5 630

*6 040

*6 290

*6 300

*5 990

*5 290

*4 060

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

ZAXIS 250LC Material Handling Machine Load

height

m 12.0

10.5

9.0

7.5

6.0

4.5

3.0

1.5

0 (Ground)

-1.5

-3.0

-4.5

-6.0

Conditions

Boom 7.00 m

(Linkage type)

Counterweight 7 300 kg

Shoe 600 mm

Arm 6.00 m with High lift cab

Rating over-front Rating over-side or 360 degrees Unit :						Unit : kg		
						At max, reach		
9.0) m	10.	10.5 m		12.0 m		max. rea	CIT
ů		ů		ů		ů		meter
						*2 920	*2 920	7.24
*2 570	*2 570					*2 560	*2 560	9.01
*3 870	*3 870					*2 380	*2 380	10.3
*4 340	*4 340	*3 280	*3 280			*2 290	*2 290	11.2
*4 440	*4 440	*4 100	3 960			*2 250	*2 250	11.8
*4 640	*4 640	*4 180	3 880	*2 740	*2 740	*2 260	*2 260	12.2
*4 870	4 770	*4 290	3 770	*3 310	3 050	*2 320	*2 320	12.5
*5 070	4 570	*4 360	3 650	*3 610	2 990	*2 420	*2 420	12.5

*3 580

*2 950

2 940

2 910

*2 570

*2 810

*3 100

*2 820

*2 950

*2 570

*2 810

3 070

*2 820

*2 950

12.4

12.1

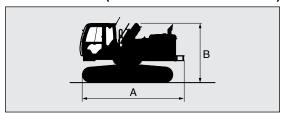
11.5

10.7

9.00

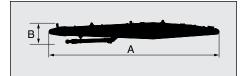
TRANSPORTATION ZAXIS 250LC MATERIAL HANDLING

BASIC MACHINE (WITHOUT COUNTERWEIGHT)

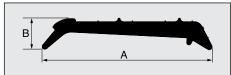


	Shoe width	А	В	Width	Weight	
	600 mm	- 5 340 mm		3 390 mm	16 700 kg	
Basic machine (with boom cylinder, without counterweight)	700 mm		5 340 mm	3 040 mm	3 390 mm	17 000 kg
	800 mm			3 340 11111	3 040 11111	3 390 mm
	900 mm			3 490 mm	17 800 kg	
7.00 m straight boom (with arm cylinder)		7 220 mm	980 mm	1 020 mm	2 470 kg	
6.00 m gooseneck type arm		6 200 mm	1 160 mm	930 mm	1 310 kg	
Counterweight		710 mm	1 200 mm	2 840 mm	7 300 kg	

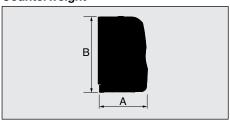
Boom



Arm (Gooseneck type)



Counterweight



EQUIPMENTZAXIS 250LC MATERIAL HANDLING

ENGINE Air cleaner double filters Auto idle system Auto shut-down control Cartridge-type engine oil filter Fuel pre-filter Fuel main filter Dust-proof indoor net Dry-type air filter with evacuator valve (with air filter restriction indicator) Electrical fuel feed pump ECO/PWR mode control Engine oil drain coupler Engine warm-up device Fan guard Fuel cooler Fuel recirculation filter 0 High performance water separator • Isolation-mounted engine Muffler filter Pre-cleaner 0 Radiator, oil cooler and intercooler • Radiator reserve tank 50 A alternator

Auto power lift Control valve with main relief valve Full-flow filter High mesh full flow filter with restriction indicator Hose rupture valve Pilot filter Power boost Suction filter Swing dampener valve Two extra port for control valve Variable reliefvalve for attachment (open-close) Work mode selector	HYDRAULIC SYSTEM	
Full-flow filter High mesh full flow filter with restriction indicator Hose rupture valve Pilot filter Power boost Suction filter Swing dampener valve Two extra port for control valve Variable reliefvalve for attachment (open-close)	Auto power lift	•
High mesh full flow filter with restriction indicator Hose rupture valve Pilot filter Power boost Suction filter Swing dampener valve Two extra port for control valve Variable reliefvalve for attachment (open-close)	Control valve with main relief valve	•
with restriction indicator Hose rupture valve Pilot filter Power boost Suction filter Swing dampener valve Two extra port for control valve Variable reliefvalve for attachment (open-close)	Full-flow filter	•
Pilot filter Power boost Suction filter Swing dampener valve Two extra port for control valve Variable reliefvalve for attachment (open-close)	8	0
Power boost Suction filter Swing dampener valve Two extra port for control valve Variable reliefvalve for attachment (open-close)	Hose rupture valve	•
Suction filter Swing dampener valve Two extra port for control valve Variable reliefvalve for attachment (open-close)	Pilot filter	•
Swing dampener valve Two extra port for control valve Variable reliefvalve for attachment (open-close)	Power boost	•
Two extra port for control valve Variable reliefvalve for attachment (open-close)	Suction filter	•
Variable reliefvalve for attachment (open-close)	Swing dampener valve	•
(open-close)	Two extra port for control valve	•
Work mode selector		•
	Work mode selector	•

CAB	
Aux. function lever (assist)	
Aux. function lever (cab)	_
All-weather sound suppressed steel	_
cab	•
AM-FM radio	•
Ashtray	•
Auto control air conditioner	•
AUX. terminal and storage	•
CRES V (Center pillar reinforced structure) cab	•
Drink holder with hot & cool function	•
Electric double horn	•
Engine shut-off switch	•
Equipped with reinforced, tinted	_
(green color) glass windows	•
Evacuation hammer	•
Fire extinguisher bracket	0
Floor mat	•
Footrest	•
Front lower guard (ISO Level 1)	•
Front upper guard (ISO Level 1)	•
Front window washer	•
Windows on front, upper, lower and left side can be opened	•
Glove compartment	•
Hot & cool box	•
Intermittent windshield wipers	•
Key cylinder light	•
Laminated round glass window	0
LED room light with door courtesy	•
Pilot control shut-off lever	•
Rear tray	-
Retractable seat belt	-
Rubber radio antenna	_
Seat : air suspension seat with heater	_
Seat adjustment part : backrest,	_
armrest, height and angle, slide forward / back	•
Short wrist control levers	•
Sun visor (front)	•
Sun visor (side)	0
Transparent roof with slide curtain	•
2 speakers	•
4 fluid-filled elastic mounts	•
12 V power outlet	0
	_

Standard equipment O ------ Optional equipment

UNDERCARRIAGE

MONITOR SYSTEM

Alarm buzzers:
overheat, engine oil pressure,
overload

Alarms:

overheat, engine warning, engine oil pressure, alternator, minimum fuel level, hydraulic filter restriction, air filter restriction, work mode, overload, etc

Display of meters:

water temperature, hour, fuel rate, clock

Other displays:

work mode, auto-idle, glow, rearview
monitor, operating conditions, etc

32 languages selection

LIGHTS

LIGITIS	
Additional cab roof front lights	0
Additional cab roof rear lights	0
Additional boom light with cover	•
Rotating lamp	0
2 working lights	•
2 working arm lights with cover	•

UPPER STRUCTURE

Electric fuel refilling pump with auto stop and filter	•
Fuel level float	•
Hydraulic oil level gauge	•
Rear view camera	•
Rear view mirror (right & left side)	•
Swing parking brake	•
Tool box	•
Undercover	•
Utility space	•
7 300 kg counterweight	•
2 x 126 Ah batteries	•

Doit-oil sprocker	•
Reinforced track links with pin seals	•
Travel motor covers	•
Travel parking brake	•
Track undercover	0

Upper and lower rollers

1 track guard (each side) and hydraulic track adjuster

2 track guards O
4 tie down hooks

600 mm triple grouser shoes

700 / 800 / 900 mm triple grouser shoes

FRONT ATTACHMENTS

Centralized lubrication system	•
Dirt seal on all bucket pins	•
Flanged pin	•
HN bushing	•
Reinforced resin thrust plate	•
WC (tungsten-carbide) thermal spraying	•

ATTACHMENTS

Additional pump (30 L/min)	•
Attachment piping (open-close)	•
Attachment rotating piping	•
Pilot accumulator	0

MISCELLANEOUS

MISOLLLANLOGG	
Global e-Service	•
Lockable fuel refilling cap	•
Lockable machine covers	•
Onboard information controller	•
Skid-resistant tapes, plates and handrails	•
Standard tool kit	•
Theft deterrent system*	0
Travel direction mark on track frame	•

SPECIFICATIONS ZAXIS 350LC MATERIAL HANDLING

ENGINE

Model Isuzu AL-6HK1X

Type 4-cycle water-cooled, common rail direct

injection

cooled EGR

Aftertreatment Muffler filter

No. of cylinders 6

Rated power

Piston displacement 7.790 L

HYDRAULIC SYSTEM

Hydraulic pumps

Main pumps 3 variable displacement axial piston pumps

Maximum oil flow ... 2 x 288 L/min

1 x 260 L/min

Pilot pump 1 gear pump

Maximum oil flow ... 36.4 L/min

Hydraulic Motors

Travel	2 variable displacement axial piston motors

Swing 1 swash plate 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/cm²)
Pilot circuit	3.9 MPa (40 kgf/cm²)
Power boost	36.3 MPa (370 kgf/cm ²)

Hydraulic Cylinders

	Quantity	Bore	Rod diameter
Boom	2	145 mm	100 mm
Arm	2	140 mm	100 mm

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 9.7 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 Organization for Standardization

UNDERCARRIAGE

Tracks

Tractor-type undercarriage. Welded track frame using selected materials. Side frame welded to track frame. Lubricated track rolles, 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 disk type.

Automatic transmission system; High-Low.

Travel speeds High: 0 to 5.0 km/h

Low: 0 to 3.2 km/h

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

SERVICE REFILL CAPACITIES

	uel tank	
E	Engine coolant	40.0 L
E	Engine oil	48.0 L
9	Swing device	15.7 L
٦	ravel device (each side)	9.2 L
H	Hydraulic system	340.0 L
H	Hydraulic oil tank	180.0 L

WEIGHTS AND GROUND PRESSURE

Equipped with 8.50 m boom, 6.20 m gooseneck type arm, 10 000 kg counterweight.

	, 0 ,1	, 0
Triple grouser shoe	Operating weight	Ground pressure
600 mm	38 400 kg	72 kPa (0.73 kg/cm²)
700 mm	38 800 kg	62 kPa (0.63 kg/cm²)
800 mm	39 200 kg	54 kPa (0.55 kg/cm²)
900 mm	39 600 kg	48 kPa (0.49 kg/cm²)

Basic Machine Weight and Overall width



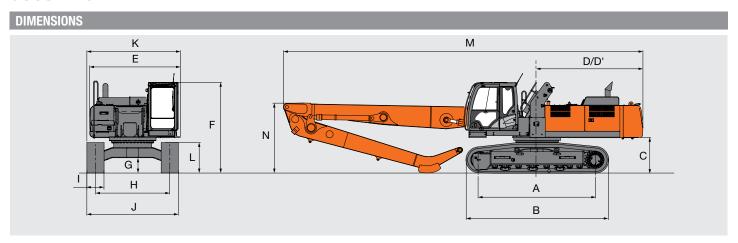
Excluding front end attachment, fuel, hydraulic oil and coolant etc. Including counterweight.

Triple grouser shoe	Weight	Overall width
600 mm	32 300 kg	3 390 mm
700 mm	32 700 kg	3 390 mm
800 mm	33 100 kg	3 390 mm
900 mm	33 500 kg	3 490 mm

Components weight

	Weight
Counter weight	10 000 kg
8.50 m straight boom (with arm cylinder)	3 520 kg
6.20 m gooseneck type arm	1 560 kg

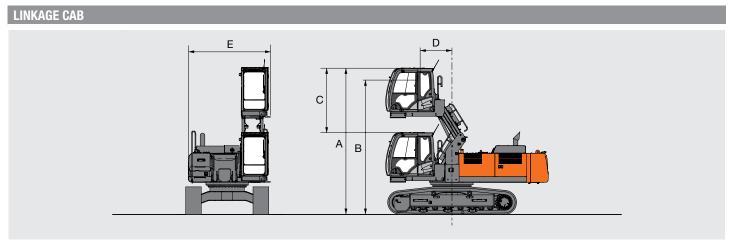
GOOSENECK TYPE ARM



Unit: mm

	ZAXIS 350LC			
A Distance between tumblers		4 050		
B Undercarriage length		4 9	940	
*C Counterweight clearance		1 -	160	
D Rear-end swing radius		3.7	700	
D' Rear-end length		3 7	700	
E Overall width of upperstructure	3 160			
F Overall height of cab		3 160		
*G Min. ground clearance	500			
H Track gauge		2 590		
I Track shoe width	G 600	G 700	G 800	G 900
J Undercarriage width	3 190	3 290	3 390	3 490
K Overall width	3 390	3 390	3 390	3 490
*L Track height	1 070			
M Overall length	12 610			
N Overall height of boom	2 680			

^{*}Excluding track shoe lug G: Triple grouser shoe



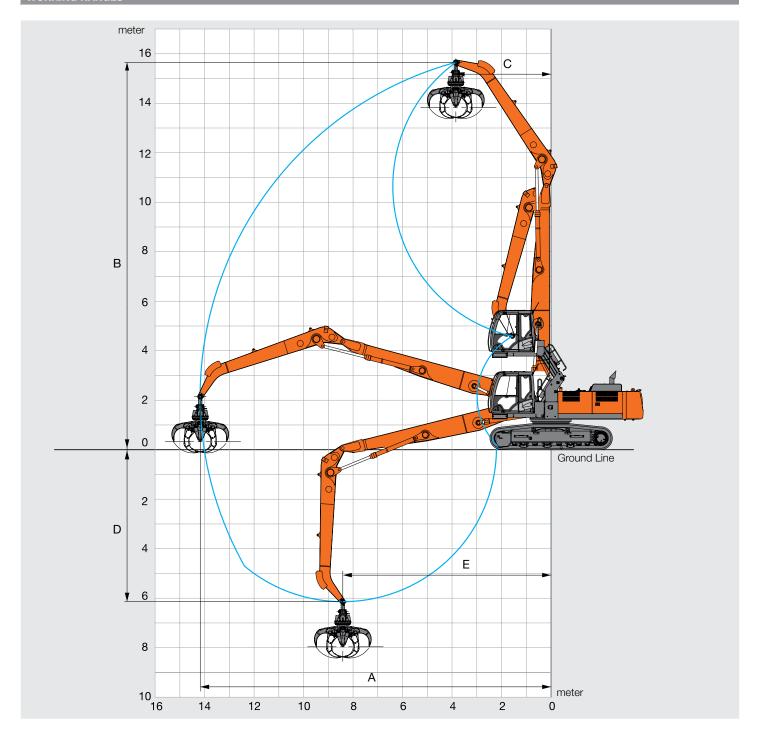
Unit: mm

	ZAXIS 350LC
A Overall height of cab	3 160 to 5 640
B Operator's view point	2 720 to 5 200
C Cab Lifting Length	2 480
D Operator's view between swing center	1 440
E Overall width upperstructure (including cab sidewalk)	3 160

SPECIFICATIONS ZAXIS 350LC MATERIAL HANDLING

GOOSENECK TYPE ARM

WORKING RANGES



Unit: mm

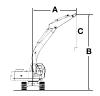
	Gill. Hill
Model	ZAXIS 350LC
Boom length	8.50 m
Arm length	6.20 m
A Max. Arm Point Reach	14 200
B Max. Arm Point Height	15 700
C Min. Swing Radius	3 850
D Max. Arm Point Depth	6 140
E Max. Arm Point Depth Reach	8 420

Excluding track shoe lug

LIFTING CAPACITIES

Notes: 1. Lifting capacity of the ZX series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity. (ISO 10567)

2. *Indicates load limited by hydraulic capacity.



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

ZAXIS 350LC Material Handling Machine

Rating over-front Atlant Rating over-side or 360 degrees Unit : kg

	Load point height m	Load radius														
Conditions			3.0) m	4.5	5 m	6.0) m	7.5	m	9.0) m	10.	5 m	12.0	O m
		ď	@	ď		ů	@	ů		ů		ů		ů		
Boom 8.50 m	13.5					*7 140	*7 140	*5 700	*5 700							
Arm 6.20 m with	12.0							*7 140	*7 140	*5 740	*5 740					
High lift cab	10.5							*8 010	*8 010	*7 070	*7 070	*5 400	*5 400			
(Linkage type) Counterweight	9.0							*8 090	*8 090	*7 230	*7 230	*6 550	6 010	*4 500	*4 500	
10 000 kg	7.5					*9 660	*9 660	*8 360	*8 360	*7 380	*7 380	*6 600	5 930	*5 930	4 760	
Shoe 600 mm	6.0			*11 800	*11 800	*10 400	*10 400	*8 780	*8 780	*7 610	7 340	*6 720	5 790	*5 970	4 680	
	4.5	*21 600	*21 600	*14 800	*14 800	*11 400	*11 400	*9 290	9 220	*7 880	7 060	*6 840	5 610	*6 000	4 570	
	3.0	*4 010	*4 010	*16 600	*16 600	*12 200	11 900	*9 740	8 720	*8 110	6 750	*6 930	5 410	*5 990	4 450	
	1.5	*1 620	*1 620	*7 250	*7 250	*12 700	11 100	*9 990	8 250	*8 210	6 450	*6 920	5 220	*5 890	4 330	
	0(Ground)	*2 150	*2 150	*5 200	*5 200	*12 500	10 500	*9 880	7 880	*8 080	6 210	*6 750	5 060	*5 660	4 230	
	-1.5	*3 020	*3 020	*5 180	*5 180	*10 300	10 200	*9 350	7 640	*7 670	6 040	*6 350	4 950	*5 230	4 160	
	-3.0			*5 640	*5 640	*9 610	*9 610	*8 370	7 540	*6 910	5 960	*5 670	4 890	*4 510	4 140	
	-4.5			*6 260	*6 260	*8 150	*8 150	*6 920	*6 920	*5 740	*5 740	*4 610	*4 610	*3 350	*3 350	
	-6.0							*4 970	*4 970	*4 090	*4 090					

Load	Load	radius	At max. reach			
point	13.8	5 m				
height m	ů		Ů		meter	
13.5			*4 480	*4 480	8.33	
12.0			*4 030	*4 030	10.1	
10.5			*3 790	*3 790	11.4	
9.0			*3 660	*3 660	12.4	
7.5			*3 600	*3 600	13.1	
6.0	*3 990	3 830	*3 600	*3 600	13.6	
4.5	*5 040	3 780	*3 650	3 570	14.0	
3.0	*5 130	3 720	*3 760	3 450	14.2	
1.5	*4 950	3 650	*3 920	3 400	14.2	
0(Ground)	*4 610	3 600	*4 150	3 420	14.0	
-1.5	*4 030	3 570	*3 820	3 510	13.7	
-3.0			*3 380	*3 380	13.2	
-4.5			*2 780	*2 780	12.5	
-6.0						

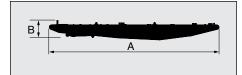
TRANSPORTATION ZAXIS 350LC MATERIAL HANDLING

BASIC MACHINE (WITHOUT COUNTERWEIGHT)

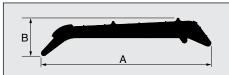


	Shoe width	А	В	Width	Weight
	600 mm			3 390 mm	23 300 kg
Basic machine (with boom cylinder, without	700 mm	5 940 mm	3 160 mm	3 390 mm	23 700 kg
counterweight)	800 mm	3 940 11111	3 100 11111	3 390 mm	24 100 kg
3 ,	900 mm			3 490 mm	24 500 kg
8.50 m straight boom (with arm cylinder)		8 740 mm	1 040 mm	1 160 mm	3 520 kg
6.20 m gooseneck type arm		6 410 mm	1 420 mm	1 070 mm	1 560 kg
Counterweight		830 mm	1 250 mm	2 950 mm	10 000 kg

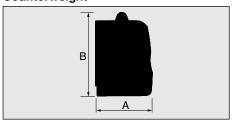
Boom



Arm (Gooseneck type)



Counterweight



EQUIPMENT ZAXIS 350LC MATERIAL HANDLING

ENGINE	
Air cleaner double filters	•
Auto idle system	•
Auto shut-down control	•
Cartridge-type engine oil filter	•
Cartridge-type fuel pre-filter	•
Cartridge-type fuel main filter	•
Dust-proof indoor net	•
Dry-type air filter with evacuator valve (with air filter restriction indicator)	•
Electrical fuel feed pump	•
ECO/PWR mode control	•
Engine oil drain coupler	•
Engine warm-up device	•
Fan guard	•
Fuel cooler	•
Fuel recirculation filter	0
High performance water separator	•
Isolation-mounted engine	•
Muffler filter	•
Pre-cleaner	0
Radiator, oil cooler and intercooler	•
Radiator reserve tank	•
50 A alternator	•

HYDRAULIC SYSTEM	
Auto power lift	•
Control valve with main relief valve	•
Full-flow filter	•
High mesh full flow filter with restriction indicator	0
Hose rupture valve	•
Pilot filter	•
Power boost	•
Suction filter	•
Swing dampener valve	•
Two extra port for control valve	•
Variable reliefvalve for attachment (open-close)	•
Work mode selector	•

CAR	
CAB	
Aux. function lever (assist)	•
Aux. function lever (cab)	•
All-weather sound suppressed steel cab	•
AM-FM radio	•
Ashtray	•
Auto control air conditioner	•
AUX. terminal and storage	•
CRES V (Center pillar reinforced structure) cab	•
Drink holder with hot & cool function	•
Electric double horn	•
Engine shut-off switch	_
Equipped with reinforced, tinted	•
(green color) glass windows Evacuation hammer	_
	_
Fire extinguisher bracket	0
Floor mat	•
Footrest	•
Front lower guard (ISO Level 1)	•
Front upper guard (ISO Level 1)	•
Front window washer	•
Windows on front, upper, lower and left side can be openend	•
Glove compartment	•
Hot & cool box	•
Intermittent windshield wipers	•
Key cylinder light	•
Laminated round glass window	0
LED room light with door courtesy	•
Pilot control shut-off lever	_
Rear tray	_
	_
Retractable seat belt	_
Rubber radio antenna	_
Seat : air suspension seat with heater	•
Seat adjustment part : backrest, armrest, height and angle, slide forward / back	•
Short wrist control levers	•
Sun visor (front)	•
Sun visor (side)	0
Transparent roof with slide curtain	•
2 speakers	_
4 fluid-filled elastic mounts	•
	0
12 V power outlet	_
24 V cigarette lighter	•

CAB
Aux. function lever (assist)
Aux. function lever (cab)
All-weather sound suppressed steel cab
AM-FM radio
Ashtray •
Auto control air conditioner
AUX. terminal and storage
CRES V (Center pillar reinforced structure) cab
Orink holder with hot & cool function
Electric double horn
Engine shut-off switch
Equipped with reinforced, tinted (green color) glass windows
Evacuation hammer •
Fire extinguisher bracket O
Floor mat •
Footrest
Front lower guard (ISO Level 1)
Front upper guard (ISO Level 1)
Front window washer
Windows on front, upper, lower and eft side can be openend
Glove compartment •
Hot & cool box
ntermittent windshield wipers
Key cylinder light
_aminated round glass window O
_ED room light with door courtesy •
Pilot control shut-off lever
Rear tray •
Retractable seat belt •
Rubber radio antenna •
Seat : air suspension seat with neater
Seat adjustment part : backrest,

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

LIGHTS	
Additional cab roof front lights	0
Additional cab roof rear lights	0
Additional boom light with cover	•
Rotating lamp	0
2 working lights	•
2 working arm lights with cover	•

32 languages selection

UPPER STRUCTURE	
Electric fuel refilling pump with auto stop and filter	•
Fuel level float	•
Hydraulic oil level gauge	•
Rear view camera	•
Rear view mirror (right & left side)	•
Swing parking brake	•
Tool box	•
Undercover	•
Utility space	•
10 000 kg counterweight	•
2 x 135 Ah batteries	•

UNDERCARRIAGE	
Bolt-on sprocket	•
Reinforced track links with pin seals	•
Travel motor covers	•
Travel parking brake	•
Track undercover	0
Upper and lower rollers	•
3 track guards (each side) and hydraulic track adjuster	•
4 tie down hooks	•
600 mm triple grouser shoes	•
700, 800, 900 mm triple grouser	0

...... Standard equipment O Optional equipment

FRONT ATTACHMENTS	
Centralized lubrication system	•
Dirt seal on all bucket pins	•
Flanged pin	•
HN bushing	•
Reinforced resin thrust plate	•

ATTACHMENTS	
Additional pump (30 L/min)	•
Attachment piping (open-close)	•
Attachment rotating piping	•
Pilot accumulator	0

MISCELLANEOUS	
Global e-Service	•
Lockable fuel refilling cap	•
Lockable machine covers	•
Onboard information controller	•
Skid-resistant, plates and handrails	•
Standard tool kit	•
Theft deterrent system*	0
Travel direction mark on track frame	•

SPECIFICATIONS ZAXIS 470LCH MATERIAL HANDLING

ENGINE

Model Isuzu AL-6UZ1XSA-01

cooled EGR

Aftertreatment Muffler filter

No. of cylinders 6

Rated power

ISO 9249, net H/P mode:

(Without Fan) 270 kW (362 HP) at 2 000 min⁻¹ (rpm)

EEC 80/1269, net ... H/P mode:

(Without Fan) 270 kW (362 HP) at 2 000 min⁻¹ (rpm)

SAE J1349, net H/P mode:

(Without Fan) 270 kW (362 HP) at 2 000 min⁻¹ (rpm) Maximum torque 1 435 Nm (146 kgf m) at 1 500 min⁻¹ (rpm)

Piston displacement ... 9.839 L

HYDRAULIC SYSTEM

Hydraulic Pumps

Main pumps 2 variable displacement axial piston pumps

Hydraulic Motors

Travel	2 axial piston motors	with parking brake
--------	-----------------------	--------------------

Swing 2 axial piston motors

Relief Valve Settings

Implement circuit	31.9 MPa (325 kgf/cm ²)
Swing circuit	26.0 MPa (265 kgf/cm ²)
Travel circuit	35.3 MPa (360 kgf/cm ²)
Pilot circuit	3.9 MPa (40 kgf/cm ²)
Power boost	35.3 MPa (360 kgf/cm ²)

Hydraulic Cylinders

	Quantity	Bore	Rod diameter
Boom	2	170 mm	115 mm
Arm	2	140 mm	100 mm

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)

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 Organization for Standardization

UNDERCARRIAGE

Tracks

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 quards	2

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.

Low: 0 to 3.9 km/h

Maximum traction force ... 329 kN (33 600 kgf)

WEIGHTS AND GROUND PRESSURE

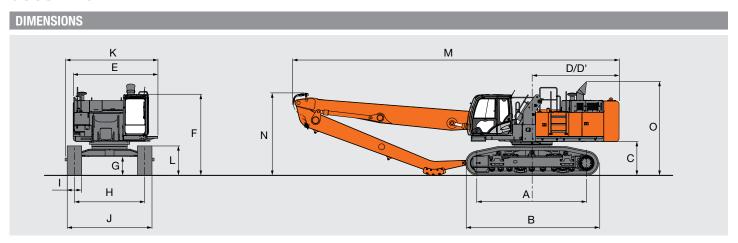
Equipped with 9.50 m boom, 7.30 m gooseneck type arm.

Triple grouser shoe		Operating weight	Ground pressure
	600 mm	52 700 kg	89 kPa (0.90 kgf/cm²)
	750 mm	53 500 kg	73 kPa (0.74 kgf/cm²)
	900 mm	54 200 kg	61 kPa (0.62 kgf/cm²)

SERVICE REFILL CAPACITIES

Fuel tank	725.0 L
Engine coolant	52.0 L
Engine oil	41.0 L
Swing device (each side)	
Travel device (each side)	11.0 L
Hydraulic system	510.0 L
Hydraulic oil tank	330.0 L

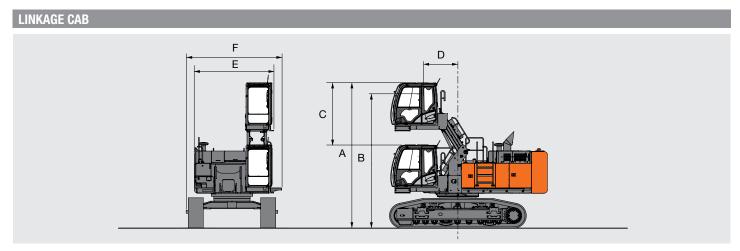
GOOSENECK TYPE ARM



Unit: mm

		ZAXIS 470LCH							
A Distance between tumblers		4 470							
B Undercarriage length		5 470							
*C Counterweight clearance		1 360							
D Rear-end swing radius		3 700							
D' Rear-end length		3 580							
E Overall width of upperstructure		3 480							
F Overall height of cab		3 320							
*G Min. ground clearance		737							
H Track gauge: Extended / Retracted		2 890 / 2 390							
I Track shoe width	G 600	G 750	G 900						
J Undercarriage width: Extended / Retracted	3 490 / 2 990	3 640 / 3 140	3 790 / 3 290						
K Overall width: Extended	3 820	3 820	3 820						
L Track height		1 220							
M Overall length	13 530								
N Overall height of boom		3 400							
O Overall height of exhaust funnel		3 870							

^{*}Excluding track shoe lug G: Triple grouser shoe



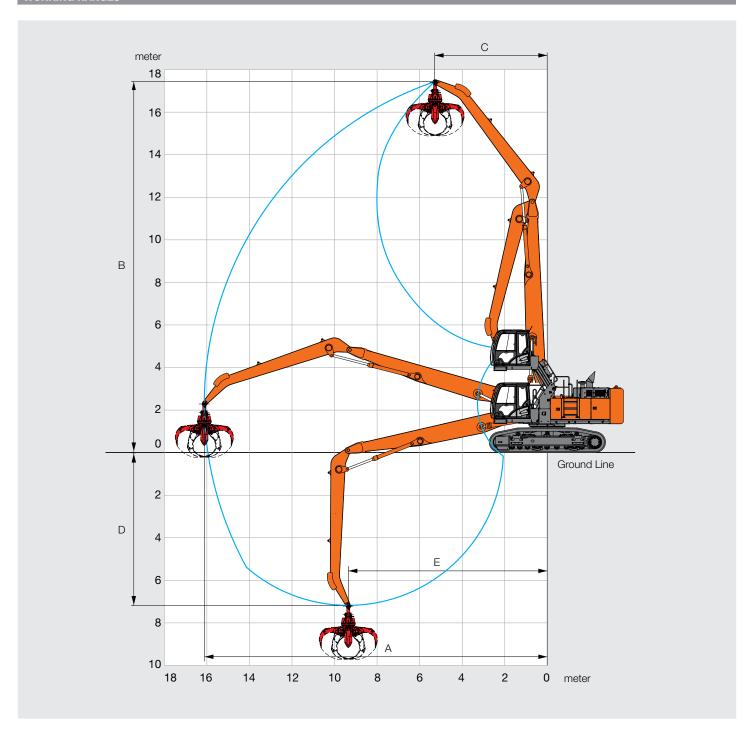
Unit: mm

	ZAXIS 470LCH
A Overall height of cab	3 320 to 5 800
B Operator's view point	2 860 to 5 340
C Cab Lifting Length	2 480
D Operator's view between swing center	1 610 to 1 600
E Overall width upperstructure (Including cab sidewalk)	3 170
F Overall width (Including base machine sidewalk)	3 820

SPECIFICATIONS ZAXIS 470LCH MATERIAL HANDLING

GOOSENECK TYPE ARM

WORKING RANGES



Unit: mm

	Gilla IIIII
Model	ZX470LCH
Boom length	9.50 m
Arm length	7.30 m
A Max. arm point reach	16 200
B Max. arm point height	17 500
C Min. swing radius	5 300
D Max. arm point depth	7 210
E Max. arm point depth reach	9 370

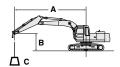
Excluding track shoe lug

LIFTING CAPACITIES ZAXIS 470LCH MATERIAL HANDLING

Notes: 1. Ratings are based on ISO 10567.

- Lifting capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% 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.

For lifting capacities, subtract bucket and quick hitch weight from lifting capacities.



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

ZX470LCH GOOSENECK TYPE ARM

-6.0

ZX470LCH GOOSENECK TYPE ARM Bating over-front Rating over-side or 360 degrees Unit:										es Unit: kg			
	Load Load radius												
Conditions	point	3.0) m	4.5	5 m	6.0) m	7.5	5 m	9.0) m	10.	5 m
	height m	ů	•	ů	•	ů	®	ů	•	Ů	©	Ů	©
Boom 9.50 m	16.5							*5 770	*5 770				
Gooseneck type	15.0							*7 180	*7 180	*5 990	*5 990		
arm 7.30 m with	13.5									*7 060	*7 060	*5 880	*5 880
High lift cab (Linkage type) Counterweight	12.0									*7 760	*7 760	*6 920	*6 920
	10.5									*8 370	*8 370	*7 730	*7 730
	9.0							*9 220	*9 220	*9 100	*9 100	*8 550	*8 550
13 700 kg	7.5							*10 200	*10 200	*10 050	*10 050	*8 930	*8 930
Shoe 600 mm	6.0					*11 620	*11 620	*12 110	*12 110	*10 420	*10 420	*9 130	9 040
	4.5	*17 360	*17 360	*18 490	*18 490	*15 750	*15 750	*12 800	*12 800	*10 800	*10 800	*9 330	8 740
	3.0			*20 810	*20 810	*16 830	*16 830	*13 360	*13 360	*11 090	10 450	*9 460	8 430
	1.5			*4 600	*4 600	*17 270	17 190	*13 610	12 750	*11 190	10 000	*9 460	8 120
	0(Ground)	*1 190	*1 190	*3 520	*3 520	*9 070	*9 070	*13 380	12 190	*11 000	9 620	*9 250	7 870
	-1.5	*2 000	*2 000	*3 710	*3 710	*7 310	*7 310	*12 620	11 820	*10 450	9 350	*8 770	7 670
	-3.0	*2 820	*2 820	*4 250	*4 250	*7 090	*7 090	*11 340	*11 340	*9 510	9 180	*7 990	7 540
	-4.5			*4 890	*4 890	*7 420	*7 420	*9 560	*9 560	*8 140	*8 140	*6 840	*6 840

*8 000

*8 000

*7 280

*7 280

*6 310

*6 310

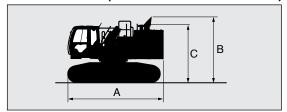
*5 260

*5 260

Load	Load radius						At may reach		h
point	12.0) m	13.	5 m	15.	0 m	At max. read		41
height m	ů	©	Ů	©	Ů	©	ů	©	meter
16.5							*5 760	*5 760	7.50
15.0							*4 940	*4 940	9.90
13.5							*4 510	*4 510	11.6
12.0	*5 540	*5 540					*4 270	*4 270	12.9
10.5	*6 630	*6 630	*4 810	*4 810			*4 120	*4 120	13.9
9.0	*7 550	*7 550	*5 980	*5 980			*4 040	*4 040	14.7
7.5	*8 010	7 550	*6 950	6 250	*4 620	*4 620	*4 010	*4 010	15.3
6.0	*8 100	7 380	*7 220	6 140	*5 570	5 170	*4 040	*4 040	15.7
4.5	*8 180	7 180	*7 210	6 010	*6 310	5 100	*4 100	*4 100	16.0
3.0	*8 200	6 970	*7 150	5 870	*6 180	5 010	*4 210	*4 210	16.1
1.5	*8 110	6 760	*6 990	5 730	*5 940	4 930	*4 370	*4 370	16.1
0(Ground)	*7 870	6 590	*6 690	5 620	*5 550	4 860	*4 600	4 460	16.0
-1.5	*7 410	6 450	*6 200	5 530	*4 960	4 820	*4 230	*4 230	15.7
-3.0	*6 680	6 360	*5 440	*5 440	*4 030	*4 030	*3 720	*3 720	15.3
-4.5	*5 610	*5 610	*4 330	*4 330			*3 070	*3 070	14.7
-6.0	*4 110	*4 110							

TRANSPORTATION ZAXIS 470LCH MATERIAL HANDLING

BASIC MACHINE (WITHOUT COUNTERWEIGHT)

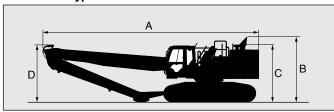


Shoe width	А	В	C*1	Overall width*2	Weight
600 mm				2 990 mm	32 000 kg
750 mm	5 690 mm	3 870 mm	3 400 mm	3 140 mm	32 800 kg
900 mm				3 290 mm	33 500 kg

^{*1} Without exhaust funnel

BASIC MACHINE FITTED WITH FRONT AND SIDEWALK

Gooseneck type arm

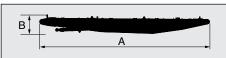


	А	В	C*1	D
Gooseneck type	12 890 mm	3 870 mm	3 400 mm	3 400 mm

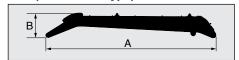
^{*1} Without exhaust funnel

Disassembly Conditions	A mm	B mm	Width mm	Weight kg
9.50 m straight boom (with arm cylinders)	9 780	1 070	1 270	4 540
7.30 m gooseneck type arm	7 520	1 090	1 230	1 960
Counterweight	670	1 800	2 960	13 700
Side Step (Front)	1 000	515	150	21
Side Step (Rear)	1 700	515	150	34
Ladder	1 770	750	430	23
Boom Cylinder x2	2 470	490	330	440
Boom Hose x4	1 100	100	100	9

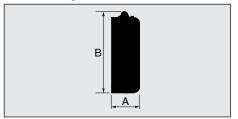
Boom



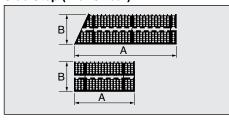
Arm (Gooseneck type)



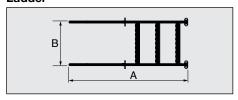
Counterweight



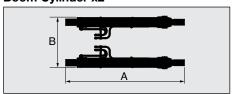
Side Step (Front/Rear)



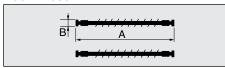
Ladder



Boom Cylinder x2



Boom Hose x4



^{*2} Undercarriage retracted

EQUIPMENTZAXIS 470LCH MATERIAL HANDLING

ENGINE	
Auto idle system	•
Cartridge-type engine oil filter	•
Cartridge-type fuel filter	•
Dry-type air double filter with evacuator valve (with air filter restriction switch for monitor)	•
Fan guard	•
Fuel main filter	•
Fuel pre-filter	•
Isolation-mounted engine	•
Power mode control [H/P (High Power) PWR (Power) ECO (Economy)]	•
Pre-cleaner	0
Radiator, oil cooler and intercooler with dust protective net	•
Radiator reserve tank	•
50 A alternator	•

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

CAB	
Additional fuse box	•
Adjustable armrests	•
All-weather sound suppressed steel cab	•
AM-FM radio	•
Ashtray	•
Auto control air conditioner	•
Auto-idle selector	•
AUX. function lever (assist)	•
AUX. function lever (cab)	•
AUX. terminal and storage	•
Cab: Laminated round glass (green color) front window	0
Front window on upper, lower and left side can be opened	•
Front lower guard (ISO Level 1)	•
Front upper guard (ISO Level 1)	•
Drink holder	•
Engine shut-off switch	•
Electric double horn	•
Evacuation hammer	•
Floor mat	•
Footrest	•
Front window washer	•
Glove compartment	•
Hot & cool box	•
Intermittent windshield wiper	•
LED room light with door courtesy	•
Pilot control shut-off lever	•
Retractable seat belt	•
Rubber radio antenna	•
Seat: Adjustable reclining air suspension with heater	•
Short wrist control levers	•
Storage box	•
Sun visor (front)	•
Sun visor (side)	0
Transparent roof with slide curtain	•
2 speakers	•
4 fluid-filled elastic mounts	•
12 V power outlet	0
24 V cigarette lighter	•

Standard equipment O ------ Optional equipment

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

LIGHTS	
Additional working lights (boom right side, arm both side)	•
2 cab lights	0
2 working lights	•

UPPER STRUCTURE
Electric fuel refilling pump with auto stop
Electrical grease pump with hose-reel
Fuel level float
Hydraulic oil level gauge
Ladder
Rear view camera
Rear view mirror (right & left side)
Sidewalk (cab side)
Swing parking brake
Tool box
Utility space •
170 Ah batteries
4.5 mm thickness undercover
13 700 kg counterweight

UNDERCARRIAGE	
Bolt-on sprocket	•
Full track guard	0
Hydraulic track adjuster	•
Idler track guard	•
Reinforced track links with pin seals	•
Travel motor covers	•
Travel parking brake	•
Track undercover	0
Upper and lower rollers	•
2 track guards (each side)	•
600 mm triple grouser shoes	•
750 mm shoe with standard track	<u> </u>
guard	
900 mm shoe with standard track guard	0

FRONT ATTACHMENTS
Additional pump (30 L/min)
Attachment rotating piping
Attachment piping (open-close)
Centralized lubrication system
Damage prevention plate and square bars
Dirt seal on all bucket pins
Flanged pin •
7.30 m gooseneck type arm
9.50 m boom •

MISCELLANEOUS	
Anti-slip steps and handrails	•
Global e-Service	•
Lockable fuel refilling cap	•
Lockable machine covers	•
Onboard information controller	•
Standard tool kit	•
Theft deterrent system*	0
Travel direction mark on track frame	•



- Hitachi Environmental Vision 2025 -

The Hitachi Group released the Environmental Vision 2025 to curb annual carbon dioxide emissions. The Group is committed to global production while reducing environmental impact in life cycles of all products, and realizing a sustainable society by tackling three goals - prevention of global warming, recycling of resources, and enhancement of ecosystem.

Reducing Environmental Impact by New ZAXIS

Hitachi makes a green way to cut carbon emissions for global warming prevention according to LCA*. New ZAXIS utilizes lots of technological advances, including the new ECO mode, and Isochronous Control. Hitachi has long been committed to recycling of components, such as aluminum parts in radiators and oil cooler. Resin parts are marked for recycling.

*Life Cycle Assessment - ISO 14040



Prior to operating this machine, including satellite communication system, in a country other than a country of its intended use, it may be necessary to make modifications to it so that it complies with the local regulatory standards (including safety standards) and legal requirements of that particular country. Please do not export or operate this machine outside the country of its intended use until such compliance has been confirmed. Please contact your Hitachi dealer in case of questions about compliance.

These specifications are subject to change without notice.

Illustrations and photos show the standard models, and may or may not include optional equipment, accessories, customer installed and modified parts, optional parts and all standard equipment with some differences in color and features. Before use, read and understand the Operator's Manual for proper operation.

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KA-EN184EU