**ZAXIS-5G series** Forestry Machines



**Reliable solutions** 

# FORESTRY MACHINES

APPLICATION & ATTACHMENT



 Model Code
 ZX250L-5G
 ZX290L-5G
 ZX400L-5G

 Engine Rated Power
 132 kW (177 HP)
 132 kW (177 HP)
 184 kW (246 HP)

 Operating Weight
 26 900 - 27 400 kg
 29 900 - 30 600 kg
 36 700 kg

# HITACHI FOREST MACHINES ZAXIS Empower your Vision.

The ZAXIS-5G L series is purpose built on our rich experience for diverse harsh forestry applications. Hitachi knows what users want most in tough forestry environment: Robust front, big traction force and high swing torque. The strengthened forestry front is capable of using a harvester grapple. The oversized forestry undercarriage offers high maneuverability. The ZAXIS-5G L series is originally designed as a versatile forestry machine with a standard cab and upperstructure. It can easily be tweaked and revamped to suit a variety of forestry applications, including logging, felling, loading and road building.



Pursuits of Durability and Reliability

1

Durable, reliable engine
 Forestry front

HITACHI

Forestry undercarriage (reinforced high track frame) Reinforced travel motor covers and reinforced block bars Reinforced idler parts of side frame Strengthened upper rollers and bracket Reinforced side step (bolt mounted) Reinforced track undercover (optional)



Enhanced Perfomance Page 6

- · Increased traction force
- · Increased ground clearance
- Increased swing torque
- High rise bracket



Simplified Maintenance

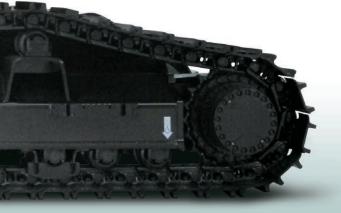
- · Dust-proof indoor net
- · One-touch openable cover
- Utility space



Specifications Page 8-19

- · ZX250L-5G : Page 8-10
- · ZX290L-5G : Page 11-13
- · ZX400L-5G : Page 14-16
- · Lifting capacities (without bucket) : Page 17
- · Equipment : Page 18-19





# Pursuits of Durability and Reliability



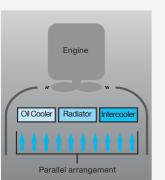
#### Durable, Reliable Engine

This engine has a track record showing impressive durability at countless tough job sites around the world.

The engine — associated with a rugged design, a direct fuel injection system and an elaborate governor — goes green, and complies with EU Stage II and US EPA Tier 2 emissions regulations.

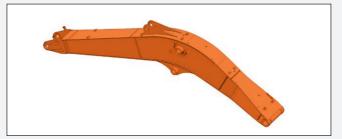
The cooling system well keeps the engine cool. The engine cover has a wider air suction area, and radiators are arranged in parallel for efficient cooling. This parallel arrangement also facilitates their cleaning.





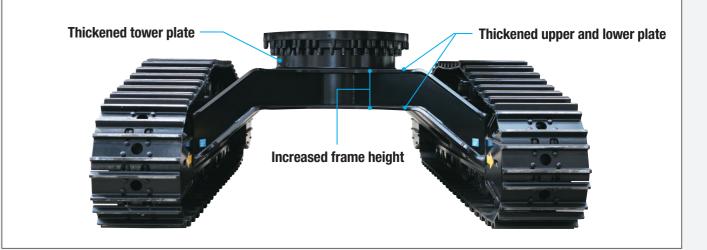
#### Forestry Front

The forestry front is a reinforced-type H-boom, using thickened plates and restructured high rise bracket for tough forestry works.



#### Forestry Undercarriage (Reinforced High Track Frame)

Hitachi ZX-L series forest machine is reinforced exclusively for harsh forestry applications. Its oversized undercarriage uses thickened plates, and next-larger-class components, including upper and lower rollers, track links, side track frames and travel motors. Track frame height increases for larger cross section with higher rigidity. Travel devices



Rainforced Travel Motor Covers and Reinforced Block Bars



Thickened motor covers: ZX250L-5G/290L-5G: 9 mm ZX400L-5G: 12 mm

Rainforced Idler Part of Side Frame



#### Reinforced Track Undercover (Optional)

Optional reinforced-type 9 mm thick track undercover is available to protect the center joint and piping from tree branches and stumps. What's more, 20 mm bolt holes are newly provided at the track frame for the mounting of an over-9 mm thick undercover whenever the customer wants.

are redesigned, using thickened motor covers (mounted securely by a new method), and reinforcing block bars for protection against damage. Idler brackets, shoe guides, and upper and lower roller brackets (both-end supported) are employed to strengthen the undercarriage.

Strengthened Upper Rollers and Bracket



**Rainforced Side Step (Bolt Mounted)** 



## Performance

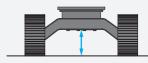
#### Increased Traction Forces

The undercarriage uses size up components provide increased traction force for better climbing and undercarriage life.

Traction forces	
<b>ZX250L-5G</b> ······246 kN (25 100 kgf)	11% UP
ZX290L-5G ······298 kN (30 400 kgf)	21% UP
<b>ZX400L-5G</b>	8 % UP
Compared	to previous model

#### **Increased Ground Clearances**

Ample min. ground clearance allows the undercarriage to move around with less worrying about stamps. It gives the undercarriage high stability and maneuverability in woods.



Min.	ground	clearance
------	--------	-----------

<b>ZX250L-5G</b>	6 % UP
<b>ZX290L-5g</b> 770 mm	3 % UP
<b>ZX400L-5g</b>	7 % UP
Compared	to previous model

#### Increased Swing Torque

Swing torque is the most-demanded feature in forestry applications. Higher swing torque is achieved than ever before, allowing for efficient delimbing with a harvester and powerful log- handling.

Increased swing torque	
<b>ZX250L-5g</b> 77.5 kNm (7 900 kgf m)	9 % UP
<b>ZX290L-5g</b> 90.5 kNm (9 200 kgf m)	9 % UP
<b>ZX400L-5G</b> ·······120.0 kNm (12 200 kgf m)	
Compared to previous model	



#### Increased Work Height

Log-loading capability is enhanced. A high-lift bracket is redesigned for higher strength and productivity. Log-loading height is increased, and minimum swing radius is shortened. High and wide track frames provide high-lifting capability.



# Simplified Maintenance

#### Dust-Proof Indoor Net

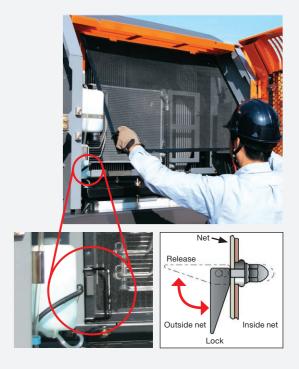
A dust-proof indoor net, provided at the front of air con condenser, can be easily removed and cleaned with compressed air. At the rear of the radiator, air blowing can be done through a one-touch open cover. The air condenser is openable for easy cleaning at its rear.



Utility space

**One-touch Openable Upper Cover** 

ZAXIS Empower your Vision.



## **SPECIFICATIONS ZX250L**-5G

#### ENGINE Isuzu CC-6BG1T Model ..... ...... 4-cycle water-cooled, direct injection Туре ..... Aspiration ..... Turbocharged, intercooled No. of cylinders ...... 6 Rated power ISO 9249, net ...... 132 kW (177 HP) at 2 150 min<sup>-1</sup> (rpm) SAE J1349, net ..... 132 kW (177 HP) at 2 150 min<sup>-1</sup> (rpm) Maximum torque ...... 637 Nm (65 kgfm) at 1 800 min<sup>-1</sup> (rpm) Piston displacement .. 6.494 L Bore and stroke ...... 105 mm x 125 mm Batteries ..... 2 x 12 V / 88 Ah

#### HYDRAULIC SYSTEM

#### Hydraulic Pumps

2 variable displacement axial piston pumps
2 x 223 L/min
1 gear pump
32.0 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 <sup>2</sup> )
Swing circuit	32.4 MPa (330 kgf/cm <sup>2</sup> )
Travel circuit	34.8 MPa (355 kgf/cm <sup>2</sup> )
Pilot circuit	3.9 MPa (40 kgf/cm <sup>2</sup> )
Power boost	38.0 MPa (388 kgf/cm <sup>2</sup> )

#### **Hydraulic Cylinders**

	Quantity	Bore	Rod diameter
Boom	2	125 mm	90 mm
Arm	1	140 mm	100 mm
Bucket	1	130 mm	90 mm

#### UPPERSTRUCTURE

#### **Revolving Frame**

D-section frame skirt for resistance to deformation.

#### Swing Device

Axial piston motor with planetary reduction gear is bathed in oil. Swing circle is single-row. Swing parking brake is spring-set/hydraulic-released disc type. Swing speed 11.0 min<sup>-1</sup> (rpm)

owing opeod	riterini (pin)
Swing torque	77.5 kNm (7 900 kgfm)

#### **Operator's Cab**

Independent spacious cab, 1 005 mm wide by 1 675 mm high, conforming to ISO\* Standards. \* International Organization for Standardization

#### UNDERCARRIAGE

#### Tracks

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	7
Track shoes	45
Track guards	3

#### **Travel Device**

Each track driven by 2-speed axial piston motor. Parking brake is spring-set/hydraulic-released disc type. Automatic transmission system: High-Low. Travel speeds ..... High : 0 to 4.9 km/h Low : 0 to 2.9 km/h

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

#### SERVICE REFILL CAPACITIES

Fuel tank	510.0 L
Engine coolant	26.0 L
Engine oil	
Swing device	9.1 L
Travel device (each side)	9.2 L
Hydraulic system	280.0 L
Hydraulic oil tank	156.0 L

#### WEIGHTS AND GROUND PRESSURE

#### Operating weight and Ground pressure (without bucket)

Shoe type	Shoe width mm	Arm length m	Operating weight kg	Ground pressure kPa(kgf/cm <sup>2</sup> )
Double grouser shoe	600	2.96	27 400	55 (0.56)
Single grouser shoe	600	2.96	26 900	54 (0.55)

#### WEIGHT: BASIC MACHINE and COMPONENTS

#### **Basic Machine Weight and Overall width**



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

#### ZX250L-5G

Double grouser shoe Single grouser shoe Component weights	600 mm 600 mm	23 000 kg 22 400 kg	3 390 mm 3 390 mm
	600 mm	22 400 kg	3 390 mm
Component weights			
	ZX250L-5G		
Counterweight	5 250 kg		
Arm (with link and bucket cylinder)	1 270 kg		
BUCKET AND ARM DIGGING FORCES			
Arm length	2.96 m		
Arm length Bucket digging force* ISO	2.96 m 188 kN (19 200 kgf)		
°			
Bucket digging force* ISO	188 kN (19 200 kgf)		

Shoe type	Shoe width	Weight	Overall width
Double grouser shoe	600 mm	23 000 kg	3 390 mm
Single grouser shoe	600 mm	22 400 kg	3 390 mm
Component weights			
	ZX250L-50	3	
Counterweight	5 250 kg		
Arm (with link and bucket cylinder)	1 270 kg		
Arm (with link and bucket cylinder) BUCKET AND ARM DIGGING FOR(			
BUCKET AND ARM DIGGING FOR	CES	) kgfj	
BUCKET AND ARM DIGGING FOR Arm length Bucket digging force* ISO	2.96 m		
BUCKET AND ARM DIGGING FOR	2.96 m 188 kN (19 20)	) kgf)	

Shoe type	Shoe width	Weight	Overall width
Double grouser shoe	600 mm	23 000 kg	3 390 mm
Single grouser shoe	600 mm	22 400 kg	3 390 mm
Component weights			
	ZX250L-5G		
Counterweight	5 250 kg		
Arm (with link and bucket cylinder)	1 270 kg		
Arm (with link and bucket cylinder) BUCKET AND ARM DIGGING FORC			
BUCKET AND ARM DIGGING FORC	ES	kgf)	
BUCKET AND ARM DIGGING FORC	<b>ES</b> 2.96 m		
BUCKET AND ARM DIGGING FORC Arm length Bucket digging force* ISO	ES 2.96 m 188 kN (19 200	kgf)	

At power boos

#### **BACKHOE ATTACHMENTS**

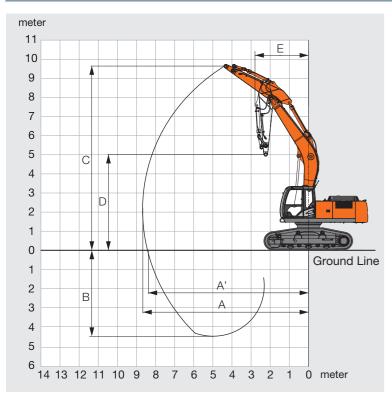
Boom and arms are of welded, box-section design. 6.00 m boom and 2.96 m arm is available. Bucket is of welded steel structure. Side clearance adjust mechanism provided on the bucket joint bracket.

#### Bucket (option)

Capacity	Wi	dth	No. of teeth	Weight
ISO heaped	Without side cutters	With side cutters	No. of teeth	weight
1.00 m <sup>3</sup>	1 130 mm	1 260 mm	5	850 kg

## SPECIFICATIONS ZX250L-5G

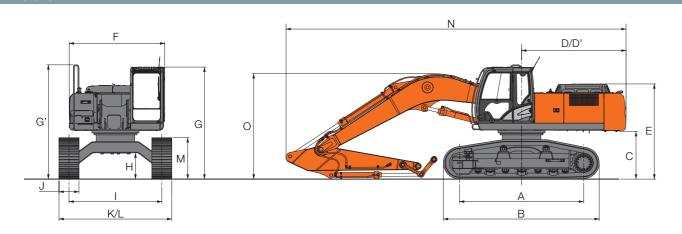
#### **WORKING RANGES**



	Unit: mm	
ZX250L-5G		
Arm length	2.96 m	
A Max. working reach	8 730	
A' Max. working reach (on ground)	8 440	
B Max. working depth	4 350	
C Max. working height	9 660	
D Min. dumping height	5 000	
E Min. swing radius	2 800	
Excluding track shoe lug	·	

Excluding track shoe lug

#### DIMENSIONS



	ZX250L-5G
A Distance between tumblers	3 730
B Undercarriage length	4 690
* C Counterweight clearance	1 380
D Rear-end swing radius	3 140
D' Rear-end length	3 140
E Engine cover height	2 860
F Overall width of upperstructure	2 870
G Cab height	3 370
G' Overall height of upperstructure	3 440

\* The dimension do not include the height of the shoe lug

# ENGINE

**SPECIFICATIONS** 

LINGINE	
Model	Isuzu CC-6BG1T
Туре	4-cycle water-cooled, direct injection
Aspiration	Turbocharged, intercooled
No. of cylinders	6
Rated power	
ISO 9249, net	132 kW (177 HP) at 2 150 min-1 (rpm)
SAE J1349, net	132 kW (177 HP) at 2 150 min-1 (rpm)
Maximum torque	637 Nm (65 kgfm) at 1 800 min-1 (rpm)
Piston displacement	6.494 L
Bore and stroke	105 mm x 125 mm
Batteries	2 x 12 V / 88 Ah

#### HYDRAULIC SYSTEM

**ZX290L**-5G

### Hydraulic Pumps

Main pumps	2 variable displacement axial piston pumps
Maximum oil flow	2 x 236 L/min
Pilot pump	1 gear pump
Maximum oil flow	34.0 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 <sup>2</sup> )
Swing circuit	32.4 MPa (330 kgf/cm <sup>2</sup> )
Travel circuit	34.8 MPa (355 kgf/cm <sup>2</sup> )
Pilot circuit	3.9 MPa (40 kgf/cm <sup>2</sup> )
Power boost	38.0 MPa (388 kgf/cm <sup>2</sup> )

#### Hydraulic Cylinders

	Quantity	Bore	Rod diameter
Boom	2	135 mm	95 mm
Arm	1	150 mm	105 mm
Bucket	1	135 mm	90 mm

#### UPPERSTRUCTURE

#### **Revolving Frame**

D-section frame skirt for resistance to deformation.

#### Swing Device

Unit: mm

Axial piston motor with planetary reduction gear is bathed in oil. Swing circle is single-row. Swing parking brake is spring-set/hydraulic-released disc type.

Swing speed	10.3 min <sup>-1</sup> (rpm)
Swing torque	90.5 kNm (9 200 kgfm)

#### **Operator's Cab**

Independent spacious cab, 1 005 mm wide by 1 675 mm high, conforming to ISO\* Standards. \* International Organization for Standardization

ZX250L-5G \* H Min. ground clearance 740 I Track gauges 2 790 J Track shoe width 600 K Undercarriage width 3 390 L Overall width 3 390 M Track height with double grouser shoe 1 190 N Overall length 10 220 O Overall height of boom 3 170

#### UNDERCARRIAGE

#### Tracks

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. 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 2.6 km/h

Maximum traction force .. 298 kN (30 400 kgf)

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

#### SERVICE REFILL CAPACITIES

Fuel tank	510.0 L
Engine coolant	26.0 L
Engine oil	
Swing device	11.7 L
Travel device (each side)	
Hydraulic system	290.0 L
Hydraulic oil tank	156.0 L

#### WEIGHTS AND GROUND PRESSURE

#### Operating weight and Ground pressure (without bucket)

ZX290L-5G				
Shoe type	Shoe width mm	Arm length m	Operating weight kg	Ground pressure kPa(kgf/cm <sup>2</sup> )
Double grouser shoe	600	3.11	30 600	57 (0.58)
Single grouser shoe	600	3.11	29 900	56 (0.57)

## SPECIFICATIONS ZX290L-5G

#### WEIGHT: BASIC MACHINE and COMPONENTS

#### **Basic Machine Weight and Overall width**



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

#### ZX290L-5G

Shoe type	Shoe width	Weight	Overall width
Double grouser shoe	600 mm	25 600 kg	3 390 mm
Single grouser shoe	600 mm	25 000 kg	3 390 mm

#### **Component weights**

	ZX290L-5G
Counterweight	6 300 kg
Arm (with link and bucket cylinder)	1 500 kg

#### **BUCKET AND ARM DIGGING FORCES**

Arm length	3.11 m
Bucket digging force* ISO	202 kN (20 600 kgf)
Bucket digging force* SAE : PCSA	175 kN (17 900 kgf)
Arm crowd force* ISO	144 kN (14 700 kgf)
Arm crowd force* SAE : PCSA	138 kN (14 100 kgf)

\* At power boost

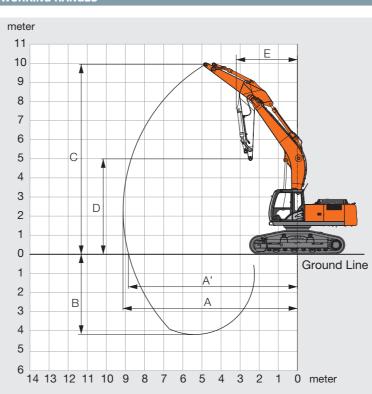
#### **BACKHOE ATTACHMENTS**

Boom and arms are of welded, box-section design. 6.20 m boom and 3.11 m arm is available. Bucket is of welded steel structure. Side clearance adjust mechanism provided on the bucket joint bracket.

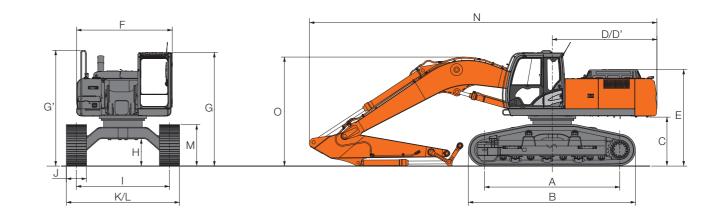
#### **Buckets (option)**

Capacity	Width		No. of teeth	Weight
ISO heaped	Without side cutters	With side cutters	NO. OF leeth	Weight
1.10 m <sup>3</sup>	1 220 mm	1 350 mm	5	900 kg

WORKING RANGES



#### DIMENSIONS



	ZX290L-5G
A Distance between tumblers	4 050
B Undercarriage length	5 010
* C Counterweight clearance	1 420
D Rear-end swing radius	3 140
D' Rear-end length	3 140
E Engine cover height	2 900
F Overall width of upperstructure	2 870
G Cab height	3 410
G' Overall height of upperstructure	3 470

\* The dimension do not include the height of the shoe lug

Unit: mm				
ZX290L-5G				
3.11 m				
9 150				
8 860				
4 140				
9 910				
4 950				
3 170				

Excluding track shoe lug

Unit: mm

	ZX290L-5G
* H Min. ground clearance	770
I Track gauges	2 790
J Track shoe width	600
K Undercarriage width	3 390
L Overall width	3 390
M Track height with double grouser shoe	1 250
N Overall length	10 420
O Overall height of boom	3 270

## **SPECIFICATIONS ZX400L**-5G

#### ENGINE Isuzu AA-6HK1X Model ..... ...... 4-cycle water-cooled, direct injection Туре ..... Aspiration ..... Turbocharged, intercooled No. of cylinders ...... 6 Rated power ISO 9249, net ...... 184 kW (246 HP) at 2 000 min<sup>-1</sup> (rpm) SAE J1349, net ..... 184 kW (246 HP) at 2 000 min<sup>-1</sup> (rpm) Maximum torque ...... 873 Nm (89.0 kgfm) at 1 700 min<sup>-1</sup> (rpm) Piston displacement .. 7.790 L Bore and stroke ...... 115 mm x 125 mm Batteries ..... 2 x 12 V / 128 Ah

#### HYDRAULIC SYSTEM

#### Hydraulic Pumps

Main pumps	2 variable displacement axial piston pumps
Maximum oil flow	2 x 279 L/min
Pilot pump	1 gear pump
Maximum oil flow	32.8 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 <sup>2</sup> )
Swing circuit	32.4 MPa (330 kgf/cm <sup>2</sup> )
Travel circuit	34.8 MPa (355 kgf/cm <sup>2</sup> )
Pilot circuit	3.9 MPa (40 kgf/cm <sup>2</sup> )
Power boost	38.0 MPa (388 kgf/cm <sup>2</sup> )

#### **Hydraulic Cylinders**

	Quantity	Bore	Rod diameter
Boom	2	145 mm	100 mm
Arm	1	170 mm	115 mm
Bucket	1	140 mm	95 mm

#### UPPERSTRUCTURE

#### **Revolving Frame**

D-section frame skirt for resistance to deformation.

#### Swing Device

Axial piston motor with planetary reduction gear is bathed in oil. Swing circle is single-row. Swing parking brake is spring-set/hydraulic-released disc type. Swing speed 10.7 min<sup>-1</sup> (rpm)

oming opeoal	rom min (ipin)
Swing torque	120 kNm (12 200 kgfm)

#### **Operator's Cab**

Independent spacious cab, 1 005 mm wide by 1 675 mm high, conforming to ISO\* Standards. \* International Organization for Standardization

#### UNDERCARRIAGE

#### Tracks

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	49	
Track guards	3	

#### **Travel Device**

Each track driven by 2-speed axial piston motor. Parking brake is spring-set/hydraulic-released disc type. Automatic transmission system: High-Low. Travel speeds ..... High : 0 to 4.7 km/h Low : 0 to 2.6 km/h

Maximum traction force	322 kN (32 800 kgf)

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

#### SERVICE REFILL CAPACITIES

Fuel tank	630.01
Engine coolant	
Engine oil	
Swing device	
Travel device (each side)	11.0 L
Hydraulic system	340.0 L
Hydraulic oil tank	180.0 L

#### WEIGHTS AND GROUND PRESSURE

#### Operating weight and Ground pressure (without bucket)

Shoe type	Shoe width mm	Arm length m	Operating weight kg	Ground pressure kPa(kgf/cm <sup>2</sup> )
Double grouser shoe	600	3.20	36 700	68 (0.69)
Single grouser shoe	600	3.20	36 700	68 (0.69)

#### WEIGHT: BASIC MACHINE and COMPONENTS

#### **Basic Machine Weight and Overall width**



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

#### ZX400L-5G

Shoe type	Shoe width	Weight	Overall width
Double grouser shoe	600 mm	30 800 kg	3 480
Single grouser shoe	600 mm	30 700 kg	3 480
Component weights			
	ZX400L-5G		
Counterweight	7 600 kg		
Arm (with link and bucket cylinder)	1 820 kg		
BUCKET AND ARM DIGGING FORCE			
BUCKET AND ARM DIGGING FORCE			
BUCKET AND ARM DIGGING FORCE	<b>S</b> 3.20 m		
BUCKET AND ARM DIGGING FORCE Arm length Bucket digging force* ISO	<b>S</b> 3.20 m 246 kN (25 100 kgf)		

Shoe type	Shoe width	Weight	Overall width
Double grouser shoe	600 mm	30 800 kg	3 480
Single grouser shoe	600 mm	30 700 kg	3 480
Component weights			
	ZX400L-:	5G	
Counterweight	7 600 kç	]	
Arm (with link and bucket cylinder)	1 820 kg		
Arm (with link and bucket cylinder) BUCKET AND ARM DIGGING FOR		3	
BUCKET AND ARM DIGGING FOR	CES		
BUCKET AND ARM DIGGING FOR Arm length Bucket digging force* ISO	CES 3.20 m	 )0 kgf)	
BUCKET AND ARM DIGGING FOR	CES 3.20 m 246 kN (25 10	)0 kgf)	

Shoe type	Shoe width	Weight	Overall width
Double grouser shoe	600 mm	30 800 kg	3 480
Single grouser shoe	600 mm	30 700 kg	3 480
Component weights			
	ZX400L-5	G	
Counterweight	7 600 kg		
Arm (with link and bucket cylinder)	1 820 kg		
Arm (with link and bucket cylinder) BUCKET AND ARM DIGGING FORC			
BUCKET AND ARM DIGGING FORC	ES		
BUCKET AND ARM DIGGING FORC	ES 3.20 m	0 kgf)	
BUCKET AND ARM DIGGING FORC Arm length Bucket digging force* ISO	ES 3.20 m 246 kN (25 10	0 kgf) 0 kgf)	

#### **BACKHOE ATTACHMENTS**

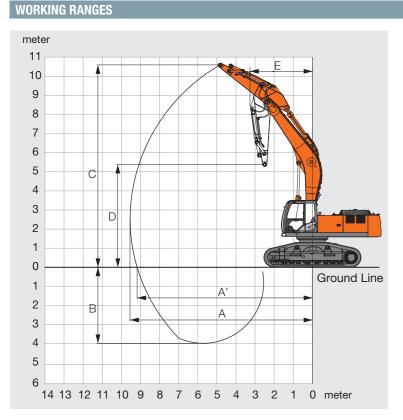
Boom and arms are of welded, box-section design. 6.40 m boom and 3.20 m arm is available. Bucket is of welded steel structure. Side clearance adjust mechanism provided on the bucket joint bracket.

#### **Buckets (option)**

Capacity	Wi	dth	No. of teeth	Woight
ISO heaped	Without side cutters With side cutters		NO. OF LEELT	Weight
1.40 m <sup>3</sup>	1 280 mm	1 410 mm	5	1 160 kg

## **SPECIFICATIONS ZX400L**-5G

#### **ZX400L**-5G



	Unit: mm
ZX400L	-5G
Arm length	3.20 m
A Max. working reach	9 440
A' Max. working reach (on ground)	9 110
B Max. working depth	3 990
C Max. working height	10 470
D Min. dumping height	5 300
E Min. swing radius	3 230
Excluding track shoe lug	

# **LIFTING CAPACITIES (Without Bucket)**

#### Notes: 1. Ratings are based on ISO 10567.

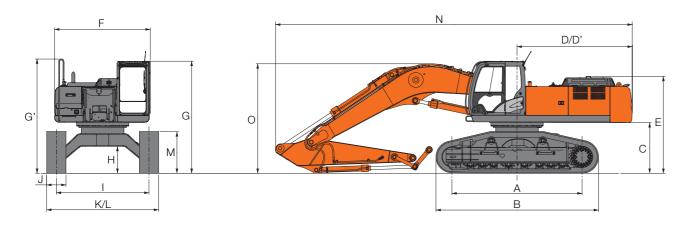
- 2. Lifting capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
- 3. The load point is the center-line of the bucket pivot mounting pin on the arm.
- 4. \*Indicates load limited by hydraulic capacity.
- 5. 0 m = Ground.
- For lifting capacities, subtract bucket and quick hitch weight from lifting capacities without bucket.

#### ZX250L-5G Load rad Load 3.0 m 4.5 m 6.0 m Conditions point height ٩ Ð Ů Ů Ů H-boom 6.00 m 7.5 m \*5 890 Arm 2.96 m 6.0 m \*6 630 \*6 630 \*6 640 Without Bucket 4.5 m \*13 710 \*13 710 \*9 170 \*9 170 \*7 250 Shoe 600 mm 3.0 m \*10 760 \*10 760 \*7 950 1.5 m \*11 590 10 950 \*8 430 \*5 450 \*11 350 \*8 430 0 m (Ground) \*5 450 10 680 \*10 590 \*7 810 -1.5 m \*10 590 \*10 260 \*10 260 -3.0 m \*10 290 \*10 290 \*8 320 \*6 350 \*8 320

ZX290L-5G									Rating	over-front	🕒 Rating	over-side or	360 degrees	s Unit : kg
	Load					Load	radius					/	At max. reach	
Conditions	point	3.0	) m	4.5	ōm	6.0	) m	7.5	ōm	9.0	) m		tillan. Teau	
height		ů	<b>O</b>	Ů	<b>O</b>	Ů	<b>O</b>	ů	<b>O</b>	Ů	<b>O</b>	Ů	œ	meter
H-boom 6.20 m	7.5 m					*7 780	*7 780					*4 970	*4 970	7.48
Arm 3.11 m	6.0 m					*8 230	*8 230	*7 350	6 530			*4 730	*4 730	8.36
Without Bucket Shoe 600 mm	4.5 m			*11 430	*11 430	*9 000	8 980	*7 640	6 370			*4 680	*4 680	8.89
0100 000 1111	3.0 m			*13 360	13 060	*9 870	8 530	*8 020	6 150	*6 010	4 660	*4 800	4 540	9.15
	1.5 m			*14 340	12 310	*10 450	8 140	*8 260	5 940	*6 490	4 570	*5 090	4 470	9.15
	0 m (Ground)			*14 030	11 980	*10 450	7 890	*8 150	5 800			*5 600	4 600	8.89
	-1.5 m	*10 570	*10 570	*12 690	11 920	*9 710	7 800	*7 450	5 750			*6 060	5 000	8.36
	-3.0 m			*10 330	*10 330	*8 000	7 870					*5 420	*5 420	7.49

ZX400L-5G									🖁 Rating	over-front	🗭 Rating	over-side or	360 degrees	s Unit : kg
	Land					Load	radius						t mov rood	h
Conditions	Load point	3.0	) m	4.5	ōm	6.0	) m	7.5	ōm	9.0	) m	At max. reach		
Conditions point height		ů	<b>O</b>	ů	<b>O</b>	Ů	<b>O</b>	Ů	<b>O</b>	Ů	<b>O</b>	Ů	Ð	meter
H-boom 6.40 m	7.5 m					*11 220	*11 220	*8 860	8 820			*6 440	*6 440	7.94
Arm 3.20 m	6.0 m			*13 530	*13 530	*12 130	*12 130	*10 630	8 710			*6 290	*6 290	8.73
Without Bucket Shoe 600 mm	4.5 m			*17 320	*17 320	*13 330	11 830	*11 140	8 450	*8 200	6 370	*6 360	6 130	9.21
onoc ocomm	3.0 m			*19 840	17 120	*14 510	11 230	11 570	8 150	8 780	6 230	*6 630	5 810	9.42
	1.5 m			*20 630	16 260	*15 140	10 750	11 270	7 880	8 640	6 100	*7 140	5 750	9.39
	0 m (Ground)	*8 060	*8 060	*19 640	15 950	*14 880	10 470	11 080	7 700	8 560	6 020	*7 990	5 930	9.11
	-1.5 m	*14 920	*14 920	*17 400	15 940	*13 610	10 380	*10 590	7 640			*8 460	6 450	8.55
	-3.0 m	*16 080	*16 080	*13 900	*13 900	*11 080	10 470	*8 000	7 760			*7 560	7 560	7.66

	I College	r • 1 '	1.1	
DIM	 C 0 1	1971		



\* H Min. ground clearance

I Track gauges

N Overall length

J Track shoe width

K Undercarriage width L Overall width

O Overall height of boom

M Track height with double grouser shoe

L I	lnit.	mm
U	/I III.	111111

ZX400L-5G

800

2 880

600 3 480

3 480

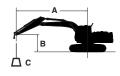
1 300

11 110

3 410

	ZX400L-5G
A Distance between tumblers	4 050
B Undercarriage length	5 060
* C Counterweight clearance	1 540
D Rear-end swing radius	3 590
D' Rear-end length	3 590
E Engine cover height	3 020
F Overall width of upperstructure	2 990
G Cab height	3 490
G' Overall height of upperstructure	3 560

\* The dimension do not include the height of the shoe lug



A: Load radius

B: Load point height C: Lifting capacity

		💾 Rating o	over-front	🕞 Rating	over-side or	360 degrees	s Unit : kg
lius						t max. reac	h
1	7.5	m	9.0	) m	F	at max. reac	
	Ů	œ	Ů	œ	ů		meter
*5 890					*4 500	*4 500	6.90
*6 640	*5 360	*5 360			*4 350	*4 350	7.84
*7 250	*6 180	5 620			*4 410	*4 410	8.42
7 560	*6 470	5 440			*4 630	4 350	8.69
7 230	*6 660	5 270			*5 060	4 260	8.70
7 020	*6 550	5 150			*5 560	4 390	8.43
6 960	*5 910	5 130			*5 420	4 810	7.88
*6 350					*5 020	*5 020	6.95

## **EQUIPMENT**

50 A alternator

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

	ZX250L-5G	ZX290L-5G	ZX400L-5G
ENGINE			
Air cleaner double filters	•	•	•
Auto idle system	•	•	•
Cartridge-type engine oil filter	•	•	•
Cartridge-type fuel main filter	•	•	•
Dry-type air filter with evacuator valve (with air filter restriction indicator)	•	•	•
Dust-Proof indoor net	•	•	•
ECO/PWR mode control	•	•	•
Engine warm-up device	•	•	•
Fan guard	•	•	•
Pre-cleaner	•	•	•
Radiator reserve tank	•	•	•
Water separator	•	•	•

HYDRAULIC SYSTEM			
Auto power lift	٠	•	•
Control valve with main relief valve	•	•	•
Full-flow filter	•	•	•
High mesh full flow filter with restriction indicator	0	0	0
One extra port for control valve	٠	•	•
Pilot filter	٠	•	•
Power boost	٠	•	•
Suction filter	٠	•	•
Work mode selector	•	•	•

•

٠

•

CAB			
All-weather sound suppressed steel cab	•	•	•
AM-FM radio with 2 speakers	•	•	•
Ashtray	•	•	•
Auto control air conditioner	•	•	•
AUX. terminal and storage	0	0	0
Cab (Center pillar reinforced structure)	•	•	•
Drink holder	•	•	•
Drink holder with hot & cool	•	•	•
Electric double horn	•	•	•
Engine shut-off lever	•	•	•
Evacuation hammer	•	•	•
Floor mat	•	•	•
Footrest	•	•	•
Front window washer	•	•	•
Front window on upper,lower and left side can be opened	•	•	•
Glove compartment	•	•	•
Hot & cool box	•	•	•
Intermittent windshield wipers	•	•	•
Key cylinder light	•	•	•
LED room light with door courtesy	•	•	•

ZX250L-5G •	ZX290L-5G	ZX400L-5G
•	•	•
•		
	•	•
•	٠	•
٠	٠	•
٠	٠	•
0	0	0
0	0	0
•	•	•
•	•	•
٠	•	•
•	•	•

MONITOR SYSTEM			
Alarm buzzers:overheat,engine oil pressure,overload	•	•	•
Alarm:overheat,engine warning engine oil pressure,alternator,m inimum fuel level,hydraulic filter restriction,air filter restriction,work mode,overload,etc	•	•	•
Display of meters:work mode. auto-idle,glow,operating conditions.etc	•	•	•
Other displays: work mode,auto-idle,grow, rearview monitor,operating conditions, etc	•	•	•
32 languages selection	•	•	•

UPPER STRUCTURE			
Electric fuel refilling pump	0	0	0
Fuel level float	•	٠	•
Hydraulic oil level gauge	•	•	•
Rear view camera	0	0	0
Rear view mirror (right &left side)	•	•	•
Swing parking brake	•	•	•
Tool box	•	•	•
Undrercover less	•	•	•
Utility space	•	٠	•
6 mm reinforced undercover	0	0	0
5 250 kg heavier counterweight	•	-	-
6 300 kg heavier counterweight	-	•	-
7 600 kg heavier counterweight	-	_	•
2x88 Ah batteries	•	•	_
2x128 Ah batteries	-	_	•

	ZX250L-5G	ZX290L-5G	ZX400L-5G
UNDERCARRIAGE			
Bolt-on sprocket	٠	•	•
High track	•	•	•
Hydraulic track adjuster	٠	•	•
Lower rollers	•	•	•
Reinforced track links with pin seals	٠	•	•
Reinforced idler bracket	٠	•	•
Reinforced side step (Bolt on type)	•	•	•
Reinforced track spring	٠	•	•
Reinforced upper rollers	٠	•	•
Shoe guide (idler bracket side)	٠	•	•
Travel parking brake	٠	•	•
3 track guards	•	•	•
4 tie down hooks	٠	•	_
600 mm double grouser shoes	٠	•	•
600 mm single grouser shoes	0	0	0
Reinforced travel motor cover	(9 mm)	(9 mm)	(12 mm)
9 mm reinforced track under cover	0	0	0

FRONT ATTACHNENTS			
Arm	• 2.96 m	● 3.11 m	• 3.20 m
Arm with damage prevention plate	0	0	0
Boom with high rise bracket	e.0 m H-boom	● 6.2 m H-boom	● 6.4 m H-boom
Bucket	O 1.00 m <sup>3</sup>	0 1.10 m <sup>3</sup>	O 1.40 m <sup>3</sup>
Centralized lubrication system	•	•	•
Dirt seal on all bucket pins	•	•	•
Flanged pin	•	•	•
HN bushing	•	•	•
Reinforced resin thrust plate	•	•	•
Reinforced link B	•	•	•
WC (tungsten-carbide) thermal spraying	•	•	•
Without bucket	•	•	•

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

<ul> <li>Standard equipment</li> </ul>		O : Optional equipment	
	ZX250L-5G	ZX290L-5G	ZX400L-5G
ATTACHMENTS			
Attachment basic piping	•	•	•
Electric controlled operation for attachment	0	0	0
Hydraullic right pedal for attachment	•	•	•
2 pump combined flow for attachment basic piping	0	0	0
MISCELLANEOUS			
Global e-Service	•	•	•
Lockable fuel refilling cap	•	•	•
Lockable machine covers	•	•	•
Onboard information controller	•	•	•
Skid-resistant tapes,plates and handrails	•	•	•
Standard tool kit	•	•	•
Travel direction mark on track frame	•	•	•

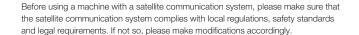


#### **Hitachi Environmental Vision 2025**

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, conservation of resources, and preservation 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



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.

#### Hitachi Construction Machinery Co., Ltd. www.hitachi-c-m.com

KA-EN161