

**DOOSAN**

Construction Equipment

# DX530LC-5B

Rated power	257 kW (345 HP) @ 1,800 rpm
Operational weight	51,800 kg
Bucket capacity (SAE)	2.14 - 3.28 m <sup>3</sup>



# DX530LC-5B

The superior operational speed, control performance and innate convenience of the DX series effectively ensures high efficiency and alleviates the operator's fatigue, while the innovative centralized layout enhances user convenience.

## The best model for mining industry, highly reliable and durable, boasting the best fuel efficiency in its class

With its stylish and classy appearance, the DX530LC-5B equipped with a reliable, low-emission and efficient engine, fuel economy and operational performance have been greatly improved.

### Engine

- Characterized by high fuel efficiency, superior durability, high versatility and easy to repair
- Energy-saving and environmentally-friendly
- Meets Tier 3 emission standard

### Hydraulic System

More reliable hydraulic parts and higher system pressure and flow rate ensure strong performance.

### Adaptable to Poor-Quality Fuel

The improved filtering efficiency of the fuel filtering system, and the addition of abrasion-proof, corrosion-resistant material to key components makes the product fully compatible with poor-quality fuel.

### Track Width Adjustment

Track width can be adjusted according to the environment in order to ensure operational stability and facilitate equipment transportation.

### New Cab

The newly-designed cab offers better visibility and comfort and lower noise.

### User-Friendly Lighting Settings

User-friendly lighting settings ensure security and convenience during nighttime operations.

### Fuel Consumption

Designed for low fuel consumption and equipped with an SPC (Smart Power Control) and other fuel-saving units, the DX530LC-5B consumes 10% less fuel than previous models.

### Largely Enhanced Undercarriage Reliability

The strengthened undercarriage structure offers reliable quality during long operating periods.

### Rigid Front Operation Unit

The thickness of key components has been increased and advanced manufacturing technology has been adopted for improved durability.

### Fully Automatic Climate Control System

Ergonomic heating/cooling air recirculation system ensures easy operation; optimally located air vents prevent frosting



### Centralized Layout

Centralized maintenance items and human-oriented design further facilitates maintenance.

### Independent Radiator and Oil cooler

Significantly improve cooling performance, and facilitate cleaning and maintenance.

### Boom

Integral structure and reinforced boom enhance strength and durability.

### Arm

Reinforced arm plate thickness coupled with the reinforcing rib and wear-resistant plate extends durability of the arm.

### Bucket

Enhanced design of new bucket offers excellent durability in heavy duty operation, effectively enabling long operational periods.

Featuring a design focused on low fuel consumption, the DX530LC-5B is equipped with a high-performance engine and hydraulic components, combined with advanced the SPC (Smart Power Control) mode. Effectively compensates rising fuel costs, and benefits customers!

Up to 6 modes including (P. Mode/S. Mode/E. Mode) + SPC are available working mode can be freely selected based on actual operational conditions in order to maximize fuel efficiency and effectively reduce fuel costs.



### Engine

The Scania engine, monolithic structure of the pump nozzle, and unique centrifugal filter deliver numerous benefits including high reliability, enhanced fuel efficiency and ease of maintenance, low failure rates, and reduced maintenance costs.

Manufacturer	Scania
Power	257 kW (345 HP) / 1,800 rpm
Emission certification	to meet Tier 3 emission standards
Number of cylinders	6
Displacement	12.7 l



### EPOS System

Power mode (P), Standard mode (S) and Economy mode (E) can be selected according to the actual working conditions. Meanwhile, by means of auto idle and intelligent control of main pump flow and hydraulic system pressure, low fuel consumption is realized.

### SPC Mode

Smart sensing of actual work loads and automatically adjustable engine speed and main pump torque deliver greater operational efficiency and lower fuel consumption.

The DX530LC-5B features the largest bucket in its series to increase operational efficiency

The DX530LC-5B is equipped with a standard 2.72 m<sup>3</sup> bucket. (A 3.2 m<sup>3</sup> bucket is available as an option.)

### Superior combined operating capacity



### Accurate and Efficient Combined Operations

Best-in-the-class digging force, travel traction force and lifting force can effectively improve operational efficiency, while rational fuel distribution ensures smoother combined operations.



### Power Boost Button

The power boost button can be used to instantly increase the boom lifting speed or travel traction force, thus ensuring a swift and efficient response to complex conditions.



### Swing Speed and Control

Best-in-the-class swing torque ensures more powerful swing and effective combined operations.



### Compact Swing Motor

The compact swing motor significantly reduces swing vibrations and provides greater swing torque, thereby enabling efficient work performance.



### New Hydraulic Pump

Equipped with a new high-capacity, high-efficiency hydraulic pump to dramatically increase operational efficiency, and a large-capacity gear pump for efficient pilot control.

The newly-designed cab offers better visibility and quieter, more comfortable working conditions.

**1 The new seat adjustment mode enhances operational efficiency.**

Shock-resistant suspension seat can be adjusted frontward and backward, or automatically adjusted based on the weight of the operator.

**2 Full Automatic Climate control system**

Automatic temperature control provides the operator with a comfortable driving environment and reduces driver fatigue.

**3 Joystick lever**

Joystick levers are ergonomically designed for easy, comfortable handling.



**Engine Emergency Stop**

When the engine fails and cannot be shut down, you can use the Emergency Stop control button positioned under the seat (as shown in the illustration) to stop the engine and avoid potential hazards.

**New dashboard** The newly designed dashboard displays more information, making it easier to understand the equipment status.



**The hi-tech color LCD monitor system displays all types of operational information, improving the operator's convenience.**

a. Trip monitor : displays readings for fuel consumption, operational time, average fuel consumption, daily fuel consumption.

b. Warning information confirmation : To check the warning information, select it on the dashboard and confirm the details.

c. Filter information : main consumables of the equipment, replacement cycle and remaining time can be confirmed on the dashboard; and remaining time can be reset and replacement cycle can be changed here.

**Comfortable and luxurious space, centralized switch design**

A metallic trim panel of the type used in advanced cars has been incorporated into the design, and various switches have been centralized, greatly increasing operational convenience and productivity.



**SPC (Smart Power Control) mode selection switch**

Application of the SPC mode significantly reduces fuel consumption and further benefits customers.

**Audio button**

Centralization of the control buttons has greatly improved operational convenience.



**Convenient storage space and power supply unit**

The adoption of a convenient storage box for small items, a 12V power supply unit for the safe storage and recharging of mobile phones and other small electrical appliances, and the Quick start switch of the air conditioner further enhance convenience.



**Low-noise cooling system design**

Noise inside and outside the cab is significantly reduced, thereby enhancing the operator's comfort and convenience.



**USB interface**

The USB interface adjacent to the radio can be connected to MP3s, etc. for practical and entertainment purposes.

## Significant increase of quality and durability!



### Optimized and reinforced bucket

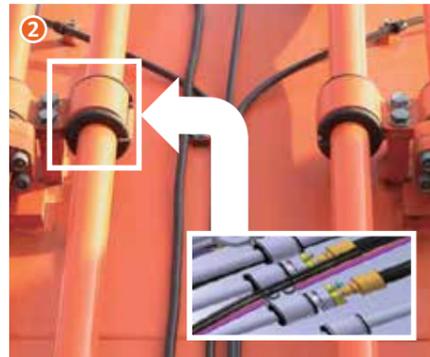
- The bucket has been optimized and reinforced to deliver excellent durability in heavy duty operation, effectively ensuring long operational periods.
- Its overall design enables close contact with digging tracks, facilitating excavation works.
  - Lip plates and side plate are made with more wear-resistant materials.
  - The bottom of the bucket is also fitted with wear-resistant reinforcing plates.

### Strengthened boom and arm

The plate thickness of the boom and arm has been increased by more than 16% compared to the previous-generation products.



The improved filtering efficiency of the fuel filter system has made the engine more adaptable to low-quality fuels.



### Boom - pipeline

Piping vibration has been greatly reduced by shortening the fixed tube clamp spacing, thereby improving durability and reducing oil leakage.



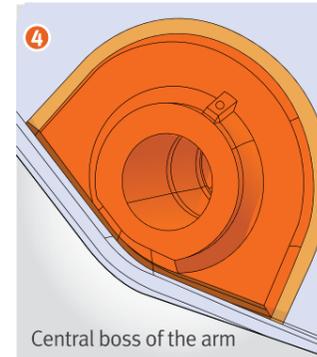
### Wear resistant bushing

The surface of bushing is coated with a self-lubricating substance to realize optimum lubrication and debris cleaning, thereby improving anti-seizure capacity and extending life expectancy.

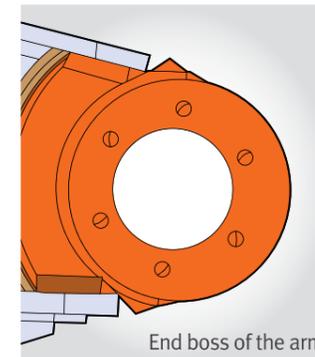


### Cooling capacity significantly increased

The separate radiator and oil cooler structure, and enlarged size of the ventilation hole deliver substantially improved cooling capacity.



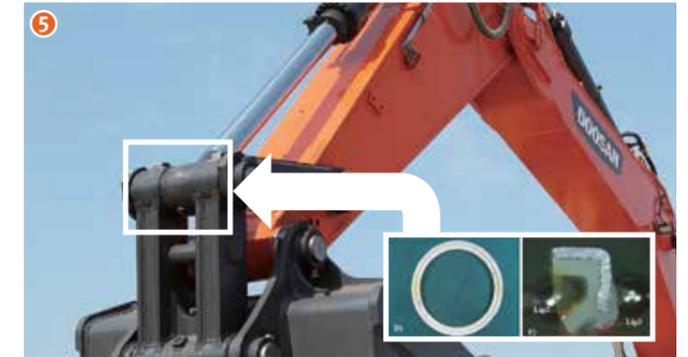
Central boss of the arm



End boss of the arm

### New structural design improves durability

Integral structures have been adopted to eliminate welding points and increase the contact areas of sheet metals, thereby improving durability. The new designed bosses and cylinder head reduces stress per unit area, greatly improving durability.



### Enhanced cylinder

- The durability of front operating unit's cylinder has been enhanced to reduce maintenance costs and deliver long-term operational sustainability.
- The seal ring on the cylinder bottom features a dual-lip sealing structure for better sealing performance.



### More reliable counterweight bracket and robust baseboard

- The more reliable counterweight bracket and robust baseboard can easily cope with poor working conditions to ensure reliability and long-term operational efficiency.
- 6 fixed bolts with enlarged horizontal bolt spacing make the counterweight more stable, and prevent falling off due to long-term vibration.
  - The more secure and robust base plate design can permanently protect core components from damage, while the reinforced cover plate, high-strength and durable mounting bolts ensure security and stability.



## Convenient, fast, economic layout

Novel and convenient layout settings enhance customer convenience.



### Extended consumable replacement cycle

Hydraulic oil: 4,000 hours  
 Engine oil filtering element: 500 hours  
 Engine oil: 500 hours

### User-friendly engine hood design

The integral structure of the previous generation has been replaced with 3 separate sub-structures, making the equipment more durable and easier to handle. The maintenance parts have been centralized in the main pump room for easy removal and maintenance; the fuel filter has been reconfigured for greater convenience, and can be easily accessed by maintenance staff standing on the ground.



### Additional Hand rails and non-skid panel

The addition of a boarding hand rails and a new, black, large-area non-skid panel has improved service convenience.



The engine hood features a detachable design and a newly-added foot pedal for easy daily inspection, facilitating field maintenance. Furthermore, all components are highly universal, dramatically reducing replacement fitting costs.



### Fuel tank cap

The double-locking design effectively prevents fuel theft incidents.



### Increased capacity of the windshield washer fluid reservoir

The capacity of the windshield washer fluid reservoir has been doubled, allowing easy filling of washer fluid.

## Main Specifications

Engine		Drive and Brakes	
Mode	DC13	Steering control	Foot pedal and lever all-in-one control
Type	n-line	Driving method	Hydraulic drive
Intake	Turbocharged	Travel motor	Axial plunger hydraulic motor
Number of cylinders	6	Travel speed (High/Low)	5.3/3.1 km/h
Cylinder diameter	130 mm	Travel Section	
Piston stroke	160 mm	Center frame	X - Frame
Rated power	257 kW ( 345 HP ) @ 1,800 rpm	Track frame	Cabinet type cross-sectional structure
		Track seal	Self-lubricating track
Swing System		Track adjustment (High/Low)	Grease filling
Driving method	Hydraulic drive	Track shoes	53 blocks each side
Deceleration mechanism	Planetary gear reduction	Riding wheel	3 each side
Rotation speed	8.3 rpm	Supporting wheel	9 each side

## Operational Weight

Working weight (approximate) includes 7,100 mm boom, 3,350 mm arm, SAE 3.28 m<sup>3</sup> bucket, a operator, lubricant, cooling fluid, filled fuel tank and standard settings.

Track link	Operational weight	Ground pressure
600 mm	51.8 ton	90 kPa

## Hydraulic System

Hydraulic Motor		Maximum Digging Force (ISO)	
Travel motor	Axial plunger type X 2	Bucket	27.2 / 28.8 ton
Swing motor	Axial plunger type X 2	Bucket arm	23.8 / 25.2 ton
Main Pump		Fuel Tank Capacity	
Type	Variable axial plunger pump	Fuel tank	Hydraulic oil tank
Maximum flow	2*355l/min @ 1,800 rpm	685l	390l
Relief Valve Setting Value		Fuel Tank Capacity	
Hydraulic circuit of the working unit	330 kgf/cm <sup>2</sup>	Radiator	Engine
Hydraulic travel circuit	330 kgf/cm <sup>2</sup>	51l	45l
Hydraulic rotary circuit	300 kgf/cm <sup>2</sup>	Travel deceleration gear oil	Swing reducer
Boost hydraulic circuit	350 kgf/cm <sup>2</sup>	2 X 10l	2 X 5l

Cylinder	
Boom	2-170 mm X 115 mm X 1,650 mm
Bucket arm	1-190 mm X 130 mm X 1,980 mm
Bucket	1-170 mm X 115 mm X 1,341 mm

## OPTIONAL COMPONENTS



### Track

Deeper gripping depth of track shoes for mines produces greater travel traction force, and ensures easy operations on hard/rocky ground.



### Fuel Filler Pump

Fueling can be conducted more quickly and easily, and operational continuity effectively ensured.



### Rear View Camera

Optional rear cameras can be fitted to view the conditions behind the equipment, thereby enhancing safety.



### Rotating Beacon and Rear Lamp

Rotating Beacon and rear lamp ensures greater security during operation.



### Oil Bath Air Filter

Foreign particles in the air can be filtered more effectively in harsh conditions, thus improving the engine's durability.



### Large Capacity Bucket (3.2 m<sup>3</sup>)

The digging force of the arms and bucket, as well as the lifting force of the boom, has been maximized in order to provide the highest possible operational efficiency with the most appropriate configuration as and when required for mining and excavation works.

Model	DX530LC-5B
Track Type	Wide Variable
Track Gauge (mm)	3,300 (Extended)
Counterweight (kg)	11,100
Shoe (mm)	600

## BUCKET

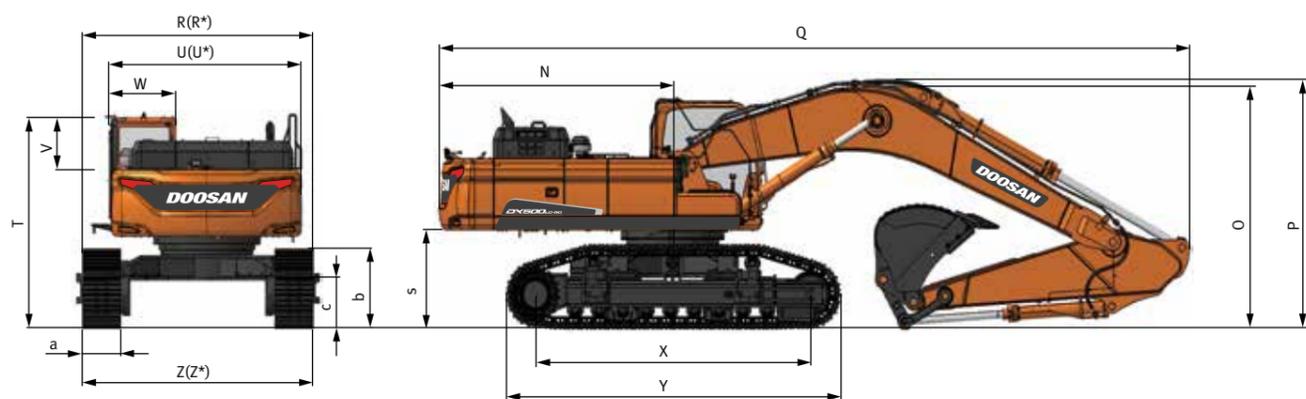
Bucket Type	Capacity		7.1m Boom	6.3m Boom
	SAE/PCSA	CECE	3.35m Arm	2.9m Arm
H Class	2.07 m <sup>3</sup>	1.86 m <sup>3</sup>	A	A
H Class	2.35 m <sup>3</sup>	2.10 m <sup>3</sup>	A	A
H Class	2.72 m <sup>3</sup>	2.42 m <sup>3</sup>	A	A
H Class	2.91 m <sup>3</sup>	2.58 m <sup>3</sup>	A	A
H Class	3.28 m <sup>3</sup>	2.89 m <sup>3</sup>	B	A
S Class	2.78 m <sup>3</sup>	2.47 m <sup>3</sup>	A	A
S Class	3.15 m <sup>3</sup>	2.78 m <sup>3</sup>	B	A

Based on ISO 10567 and SAE J296, arm length without quick change clamp

A : Suitable for materials with density of 2100kg/m<sup>3</sup> (3500lb/yd<sup>3</sup>)

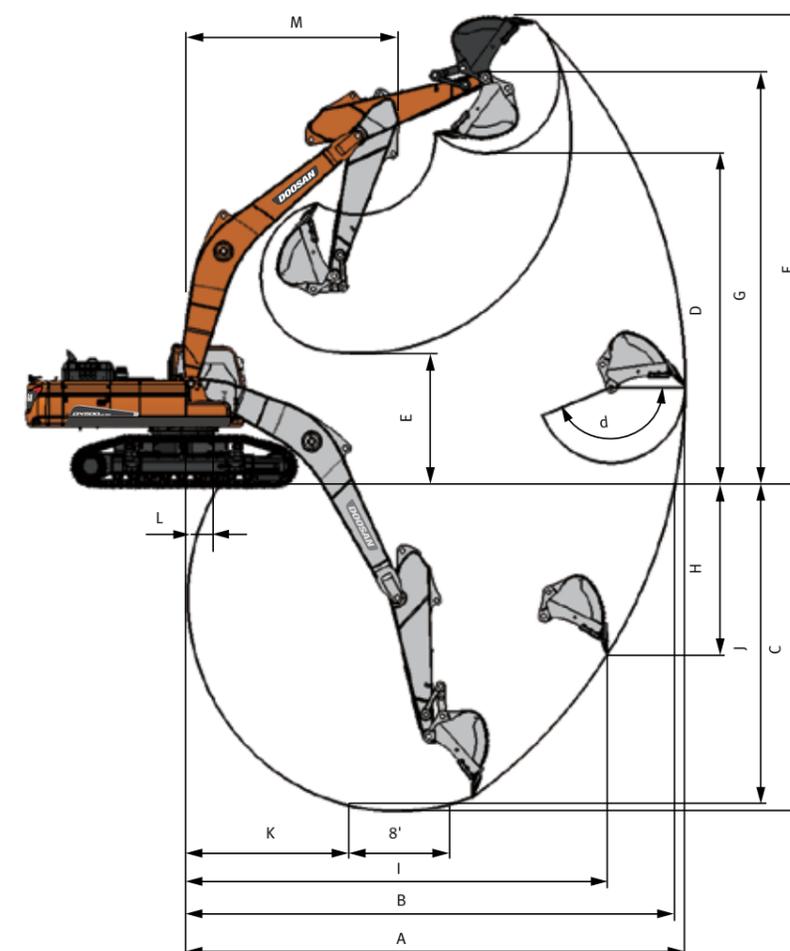
B : Suitable for materials with density of 1800kg/m<sup>3</sup> (3000lb/yd<sup>3</sup>)

### Technical Specifications



					DX530LC-5B	
Boom type	(mm)		7,100		6,300	
Arm type	(mm)		3,350		2,900	
Bucket type	(m <sup>3</sup> )		2.35		3.28	
Variable track						
Tail swing radius	(mm)	N	3,800		3,800	
Shipping height (to boom top)	(mm)	O	3,580		4,125	
Shipping height (to hose top)	(mm)	P	3,705		4,165	
Shipping length	(mm)	Q	12,230		11,530	
Shipping width	(mm)	R	3,340		3,340	
Ground clearance of the counterweight***	(mm)	S	1,430		1,430	
Total height	(mm)	T	3,350		3,350	
House width	(mm)	U	2,990		2,990	
House width (CAT walk)	(mm)	U	3,296		3,296	
Cab height	(mm)	V	845		845	
Overall cab width	(mm)	W	1,010		1,010	
Central distance between the idler and the sprocket	(mm)	X	4,475		4,475	
Track length	(mm)	Y	5,455		5,455	
Total width (Undercarriage width)	(mm)	Z	3,340 / 3,900**		3,340 / 3,900**	
Shoe width	(mm)	a	600		600	
Track height***	(mm)	b	1,180		1,180	
Min. ground clearance***	(mm)	c	730		730	

Note: \*Not including boss of the track shoes \*\*undercarriage contraction/expansion \*\*\* Without Grouser



					DX530LC-5B	
Boom type	(mm)		7,100		6,300	
Arm type	(mm)		3,350		2,900	
Bucket type1	(m <sup>3</sup> )		2.35		3.28	
Variable track						
Max. digging reach	(mm)	A	12,135		10,765	
Max. digging reach at ground level	(mm)	B	11,880		10,475	
Max. digging depth	(mm)	C	7,805		6,785	
Max. loading height	(mm)	D	7,850		6,670	
Min. loading height	(mm)	E	3,115		2,920	
Max. digging height	(mm)	F	10,940		9,580	
Max. bucket pin height	(mm)	G	9,690		8,510	
Max. vertical wall depth	(mm)	H	4,045		2,595	
Max. vertical radius	(mm)	I	10,210		9,480	
Max. depth to 2,500 mm line	(mm)	J	7,655		6,575	
Min. radius 2,500 mm line	(mm)	K	3,895		3,195	
Min. digging reach	(mm)	L	810		1,060	
Min. swing radius	(mm)	M	5,215		4,755	
Bucket reach angle	(deg)	d	179		179	

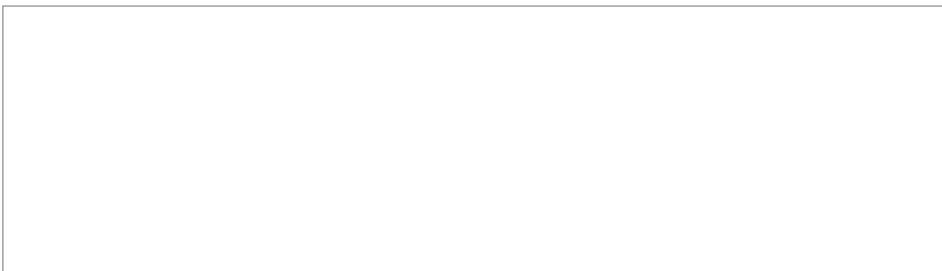
# Doosan is

Since 1896, Doosan, the oldest company in Korea, has evolved with its people. The company grew up rapidly for last 10 years with reputation. For human-oriented vision, Doosan has been building constructions, energy, machines, infra structures globally. As a global leader of infra structure, Doosan continues its vision to make human-oriented future.

First in Korea, Doosan self-developed excavators in 1985 and continued building versatile construction machines including excavators, wheel loaders, articulated dump trucks to execute its human-oriented philosophy. Doosan became a global leader of heavy construction machine industry by achieving global sales line, producing line, and distribution line. Along with large production bases in Korea, China, USA, Belgium, Czech, Norway Doosan has 1400 dealer networks and Doosan is providing reliable products and trusted solutions for your stable business at no risk.



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