

# DEVELON

Excavator

## DX300LC-7B





# The Return of the Pioneer in Mining Excavation

DEVELON's 30-ton class product is the company's classic model in its product line up. It could be described as the original model in the crusher market.

As the latest model in DEVELON's 30-ton category, the DX300LC-7B boasts a powerful engine and high fuel efficiency. It is widely used for small scale mining operations and large government construction projects.

### SIGNIFICANTLY IMPROVED ENGINE PERFORMANCE

The output power was enhanced 20% by upgrading the engine, ensuring superior operation performance.

### COMPLETELY UPGRADED HYDRAULIC SYSTEM

The ACE hydraulic system in the DX300LC-7B was upgraded by increasing the discharge rate of the main pump in order to improve the amount of oil flow. This results in faster operation and greater load carrying capacity.

### FUEL EFFICIENCY THAT HAS BECOME EVEN BETTER

The hydraulic system was designed with low fuel consumption in mind through the adoption of the latest SPC (Smart Power Control) 3 system, resulting in a machine with an ideal fuel efficiency. The fuel saving effect is clearly apparent.

### ROBUST AND DURABLE COMPONENTS

The real operating conditions at work sites were taken into consideration when developing the components. In order to increase the durability of key connecting components, single body casts were used. The machine promises excellent operational stability and durability with optimized chassis.

### EASY MAINTENANCE

Due to organized and logical positioning of components, the operator can perform daily inspections while standing on the ground.

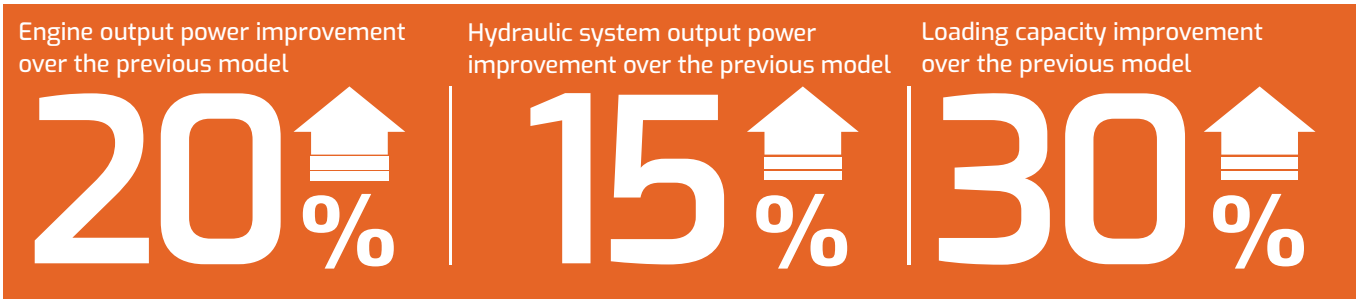


### SPC3 - SMART POWER CONTROL SYSTEM

The recently upgraded SPC3 Smart Power Control System detects the power required in real working conditions and then automatically adjusts the engine rpm / main pump torque and controls the rotational operation. In this way the system enhances operational efficiency while reducing fuel consumption.

### EPOS SYSTEM

Depending on the actual working conditions, the operator could choose from Power Mode(P), Standard Mode(S), and Economic Mode(E). Through the simultaneous smart control of automatic idling, flow rate of the main pump, and hydraulic system pressure, power loss and fuel consumption levels were both reduced.



The above data was obtained in an ideal working environment. The test data obtained from a real working environment may show significant deviations. Therefore, please use the above data only as a reference.



# RELIABILITY

Through upgraded design programming and repetitive simulations, improved reliability is achieved.

The lifespan of the machine was extended through advanced 3D design and many iterations of reliable testing, creating even more values for our customers.



## 1 HIGH-QUALITY REAR-VIEW CAMERA

Taking into consideration conditions of a government construction site, DEVELON equipped the DX300LC-7B with a high-resolution rear-view camera which guarantees all-weather safety of equipment throughout the year.



## 2 REINFORCED BUCKET

By incorporating optimized structural design in certain harsh areas, the durability of the bucket was enhanced, and its lifespan extended.



## 3 ADDITION OF A FUEL COOLER

The performance of the engine was improved by enhancing the fuel cooling capability to meet the temperature requirements of the engine.



## 4 MULTI-STAGE OIL FILTER SYSTEM

Reliability was also improved with a 3-stage oil filter system that strengthens the performance of the oil filter. The machine ability to run on low-quality oil was improved, lowering the malfunctioning rate and significantly reducing the maintenance costs.



## 5 REINFORCED ARM & BOOM DESIGN

Through improved structure and welding techniques, stress concentration is reduced. By improving the structural stability and durability of the arm and boom with thicker plates in critical areas, the machine's adaptability to harsh working environments was enhanced.



## 6 IMPROVED CYLINDER

The durability of the cylinder in the front of the machine was increased, resulting in lower maintenance and repair costs. This improvement allows owners to operate the machine for longer periods for jobs that require continuous digging.





### 360-DEGREE ALL-AROUND DRIVING VISIBILITY

The size of the cab's glass windows has been enlarged, providing operators with a 360-degree view while performing their tasks.

# COMFORT

The implementation of an "operator-centered" design concept has effectively reduced noise and vibrations within the cab, resulting in significantly lower levels of both. The cab is equipped with a multi-function LCD panel and an air-conditioning system that enables all-season operation of the machine. This ensures convenience and comfort for the operator.



**1** With the installation of a color panel, operators can now easily view equipment operating information ; thus greatly enhancing controllability of the machine.

- a** Short-distance driving data panel: Through the short-distance driving data panel, operators can check the fuel consumption, driving time, average fuel consumption, and daily average fuel consumption.
- b** Warning information: Operators can check the state of the equipment through warnings displayed on the instrument panel.
- c** Oil filter system information: Through the instrument panel, operators can check the total usage time of key components, their replacement periods, the time remaining in their lifespans, and other details. They can also reset the total usage time and modify the replacement periods of the components.



### 2 CENTRALIZED POWER SWITCH DESIGN

The design that places the power switch in a central position greatly enhances the convenience of handling the machine as well as the operator's efficiency in performing a job.



### ENGINE EMERGENCY STOP SWITCH

The addition of an engine emergency stop switch increases the safety of controlling the machine.



### A CAB THAT PROVIDES LOW NOISE ENVIRONMENT

The effective reduction of noise through implementation of the latest sound-proof material improves the cabin comfort level.



# MAINTENANCE

## Convenient, quick, and cost-effective maintenance

The customer's operating environment is made simpler with the latest and convenient maintainability.



### 1 ENGINE COVER WITH USER-CENTERED DESIGN

The design of the engine cover was changed to multiple segments, which greatly improved the convenience of opening and closing the cover for performing maintenance.



### 2 A MACHINE DESIGN THAT IMPROVES THE CONVENIENCE OF MAINTENANCE

By installing components like the fuel main filter and filter elements on both sides of the machine, performing maintenance has become so much more convenient.





### 3 ADJUSTABLE OPERATOR SEAT

The operator's seat can be adjusted upward / downward and forward / backward, permitting the operator to work comfortably in the cab.



### 6 BLUETOOTH PLAYER

The radio now comes with the Bluetooth function so that the operator can enjoy music while operating the machine. The safety and convenience of operating the machine was further enhanced with the capability to call and receive mobile calls via Bluetooth while operating the machine.



### 4 360 DEGREE SURROUNDING VENT DESIGN OF AIR CONDITIONER

The air blowing from the front, bottom and rear air conditioner vents provides a working environment that feels comfortably cool.



### 5 CONVENIENTLY PLACED GLOVE COMPARTMENT AND POWER SUPPLY

The cab is equipped with a small but convenient glove compartment and also a 12V USB charging station where the operator can store personal items and charge his or her mobile phones. There is a quick start button on the air conditioner that could be used to quickly activate the air conditioning unit.





# DEVELON FLEET MANAGEMENT

## Telematics Service (OPTIONAL)

**TELECOMMUNICATIONS** Data flow from machine to web



**TELEMATICS TERMINAL**

Terminal device is installed and connected to a machine to get machine data.

**TELECOMMUNICATION**

DEVELON provides Dual mode (Cellular, Satellite) communication to maximize communication coverage

**DEVELON FM WEB**

User can monitor machine status from DEVELON FM Web

**TELEMATICS SERVICE BENEFITS** DEVELON and dealer support customers to improve work efficiency with timely and responsive services

**CUSTOMER**

Improve work efficiency

- Timely and preventive service
- Improve operator's skills by comparing work pattern
- Manage fleet more effectively

**DEALER**

Better service for customers

- Provide better quality of service
- Maintain machine value
- Better understanding of market needs

**DEVELON**

Responsive to customer's voice

- Utilize quality-related field data
- Apply customer's usage profile to develop new machine

**FUNCTIONS(WEB/APP)** DEVELON Telematics Service provides various functions to support your great performance



FUNCTION		EXCAVATOR	WHEEL LOADER	ADT
GPS	Location Geo-fence	All models	All models	All models
Operation hours	Daily, Weekly, Monthly report	All models	All models	All models
Operation hours	Total operation hours Operation hours by mode	All models	All models	All models
Maintenance parts	Preventive maintenance by item replacement cycle	All models	All models	All models
Fault code/ Warning	Fault code Machine Warnings on Gauge Panel	All models	All models	All models
Fuel information	Fuel level Fuel consumption	All models	All models	All models
Dump capacity	Dump tonnage Count of Work Cycle	N/A	N/A	All models

# GLOBAL PARTS NETWORK

## QUALITY-PROVEN MAIN COMPONENTS

DEVELON provides fast and precise worldwide delivery of genuine DEVELON parts through its global PDC (parts distribution center) network.

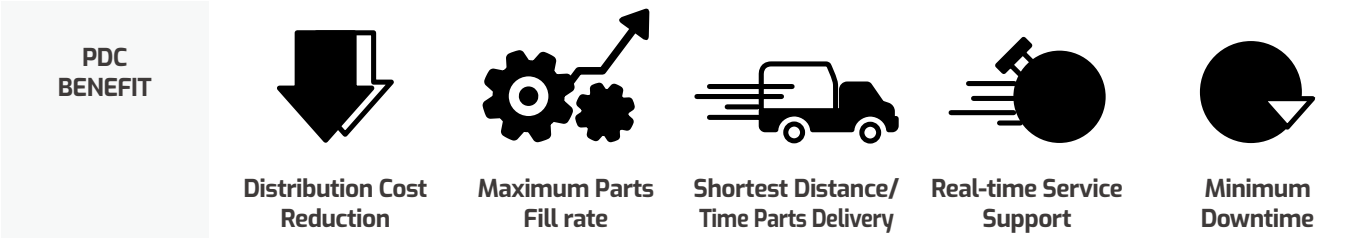


**GLOBAL NETWORK**

The global network of the GPDC (Global Parts Distribution Center) maximizes its fill rate by making sure that each center is stockpiled with all the critical parts required for businesses in its area. The network also minimizes the time and costs required for parts delivery by positioning PDCs close to major markets around the world. DEVELON PDCs communicate with customers in their time zone, informing them that they are open for operation, and deliver parts to them as early as possible.

## THE GLOBAL PARTS DISTRIBUTION CENTER NETWORK

PDCs had been set up as shown below, including Mother PDC in Ansan, Korea. The ten other PDCs include one in China (Yantai), three in USA (Atlanta, Seattle and Miami), two in Europe (Germany and the UK), one in the Middle East (Dubai) and two in Asia (Singapore and Indonesia) and one in Brazil (São Paulo).





# TECHNICAL SPECIFICATIONS

## ENGINE

Model	DL08
Type	Direct fuel injection and electronic control
Intake	Turbocharged
Number of cylinders	6
Bore	108 mm
Stroke	139 mm
Rated Power	191 kW(260 HP) / 1800 rpm

## SWING SYSTEM

Driving system	Hydraulic
Deceleration unit	Planetary gear reducing
Swing brake	Wet multi-disc brake
Swing speed	9.4 rpm

## DRIVING AND BRAKING DEVICE

Steering control	Pedal plate and joystick integrated control
Driving method	Hydraulic
Travel motor	Axial piston hydraulic motor
Travel speed (high / low)	5.7 / 3.2 km/h
Operation brake	Hydraulic brake
Parking brake	Wet multi-disc brake

## UNDERCARRIAGE

Center frame	X-frame
Track frame	box-type
Track seal	self-lubricating track
Track adjustment(High / Low)	buffer tensioning
Track shoes	48 each side
Roller	2 each side
Track roller	9 each side

## OPERATING WEIGHT

(Operator, lubricant, coolant, full fuel tank and standard configuration)

Boom	6,245 mm
Arm	3,100 mm
Bucket	1.65 m <sup>3</sup>
Shoe	600 mm
Operating weight	30,800 kg
Ground pressure	0.59 kg/cm <sup>2</sup>

## CYLINDER

Cylinders	Quantity	Bore x Rod diameter x stroke
Boom	2	140 mm X 95 mm X 1,450 mm
Arm	1	150 mm X 105 mm X 1,670 mm
Bucket	1	135 mm X 90 mm X 1,150 mm

## MAXIMUM DIGGING FORCE (ISO)

Bucket	16.9 ton (165.6 kN)
Bucket(with power)	17.9 ton (175.4 kN)
Arm	12.8 ton (125.4 kN)

## HYDRAULIC SYSTEM

### HYDRAULIC MOTOR

Travel motor	Axial plunger typeX2
Swing brake	Wet multi-disc brake

### MAIN PUMP

Type	Axial plunger pump
Maximum flow	2 X 272 ℓ/min

### SAFETY VALVE SETTING

Work device hydraulic circuit	350 kgf/cm <sup>2</sup> (34.3 Mpa)
Travel hydraulic circuit	350 kgf/cm <sup>2</sup> (34.3 Mpa)
Swing hydraulic circuit	295 kgf/cm <sup>2</sup> (28.9 Mpa)
Booster hydraulic circuit	370 kgf/cm <sup>2</sup> (36.3 Mpa)

### OIL TANK CAPACITY

Oil tank	500 ℓ
Hydraulic oil tank(FULL)	170 ℓ

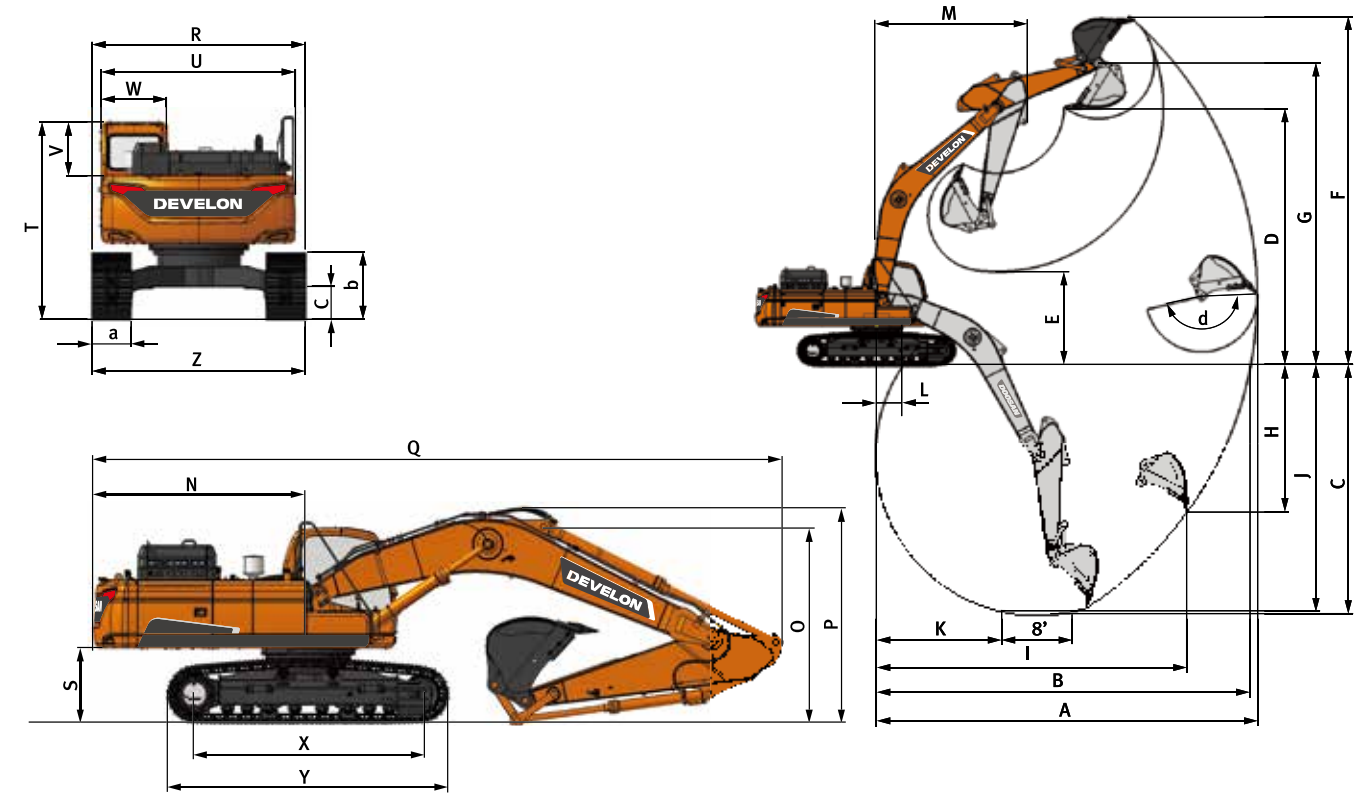
### COOLANT / LUBRICANT TANK CAPACITY (REFILLABLE)

Cooler	40 ℓ
Engine	42 ℓ
Driving Brake Gear Oil	2X7 ℓ
Swing brake	6 ℓ

## OPTION



# WORKING RANGE & DIMENSION



Boom	(mm)	6,245
Arm	(mm)	3,100
Bucket	(m <sup>3</sup> )	1.47
Rear swing radius	(mm) N	3,188
Overall height (Boom)	(mm) O	3,515
Overall height (Hose)	(mm) P	3,697
Overall length	(mm) Q	10,615
Overall width	(mm) R(R*)	3,200
Counterweight clearance	(mm) S	1,150
Overall height (Cabin)	(mm) T	3,031
Turntable width	(mm) U	2,960
Cabin height (Above turntable)	(mm) V	818
Cabin width	(mm) W	1,007
Distance between the center of the guide wheel and the center of the driving wheel	(mm) X	4,039
Crawler length	(mm) Y	4,940
Total width	(mm) Z(Z*)	3,199
Crawler width	(mm) a	600
Crawler height	(mm) b	1,033
Ground clearance	(mm) c	506

Boom	(mm)	6,245
Arm	(mm)	3,100
Bucket	(m <sup>3</sup> )	1.47
Maximum digging reach	(mm) A	10,671
Maximum digging reach (ground)	(mm) B	10,475
Maximum digging depth	(mm) C	7,244
Maximum dumping height	(mm) D	7,334
Minimum dumping height	(mm) E	2,808
Maximum digging height	(mm) F	10,255
Maximum bucket pin height	(mm) G	8,885
Maximum vertical wall digging depth	(mm) H	5,195
Maximum vertical wall radius	(mm) I	7,767
Maximum digging depth on flat ground with an 8 inch flat bucket	(mm) J	7,025
Maximum digging radius on flat ground with an 8 inch flat bucket	(mm) K	3,110
Minimum digging reach	(mm) L	668
Minimum swing radius	(mm) M	4,019
Bucket angle	(mm) d	175

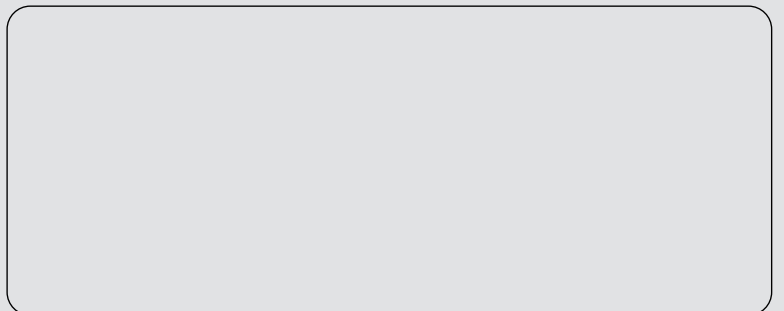


# We are DEVELON

We trace our roots to 1937 as one of Korea's first large scale machine plant. Throughout time we have consistently delivered exceptional products and solutions.

DEVELON is a bold name that reflects our core ambition to continue developing onwards and leaving behind a positive footprint in our world. Moving forward, we seek to be part of our customers and partners' endeavor to build a better world.

## Powered by Innovation



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Certain specification(s) are based on engineering calculations and are not actual measurements. Specification(s) are provided for comparison purposes only and are subject to change without notice. Specification(s) for your individual Develon equipment will vary based on normal variations in design, manufacturing, operating conditions, and other factors. Pictures of Develon units may show other than standard equipment.

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