

# DOOSAN

Crawler Excavators |  
DX300LC-7



Maximum power: 271 hp  
Operating weight: 30.3 t  
Bucket capacity: 1.75 m<sup>3</sup>



# Doosan Group – Building your tomorrow today

## Be part of the great Doosan family

The Doosan Group - founded in 1896 and headquartered in Seoul, South Korea - is one of the fastest-growing companies in the world:

- With more than 37,500 employees in 38 countries, we are a major player in a variety of industries worldwide.
- A global leader in the Infrastructure Support Business (ISB), with 56 subsidiaries and 3,700 distributors worldwide.
- Dramatic growth over the past two decades, with an annual Doosan Group revenue rising from €2.4 billion in 1998 to €12.8 billion in 2016.

## Doosan Group – a top player worldwide



### Doosan Infracore

- Among the world's Top 5 manufacturers of construction equipment



### Doosan Bobcat

- A leading company in the design, manufacture, marketing, distribution and service of small equipment and attachments for construction, agriculture, and landscaping
- Leading position in the global compact equipment market
- N° 1 in North America for SSL, CTL and MEX



### Doosan Heavy Industries & Construction

- World N° 1 in desalination plant construction
- World N° 1 in heat recovery steam generator market
- World N° 1 in mould & tool steel
- World N° 3 in crankshafts



### Doosan Engineering & Construction

- A pioneering leader in construction of residential and public buildings, civil works and industrial facilities.
- World N° 1 chemical process equipment products



## Doosan Infracore Construction Equipment

### Creating construction equipment for over 40 years

For over 40 years, we've been building a global production and business network to become one of the world's foremost construction equipment manufacturers.

### A solid partner, close to you

A truly global player in every respect, we have large-scale factories, sales subsidiaries and dealers all over the world.



Doosan facilities in Europe

▣ **From machine manufacturer... to full solution provider**

To ensure the highest trade-in and residual values, our parts and service support professionals maintain the performance, productivity and reliability that you expect of our products throughout their lifetime.

▣ **Ask your dealer for a full range of services designed especially for you!**

As your local specialist, your dealer ensures that you receive the maximum benefit from our integrated package. Plan ahead to ensure the success of your equipment!



Doosan approved attachments



Genuine parts



Extension of warranty



Financial solutions



Maintenance contract



Telematics



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Advanced Services

- Articulated Dump Trucks
- Mini excavator
- Crawler Excavator
- Wheeled Excavator
- Wheel Loaders



▣ **Experience the Doosan product range!**



Articulated Dump Trucks



Wheel Loaders



Wheeled Excavators



Mini Excavators



Crawler Excavators

# Raise profits, productivity & fuel efficiency

## ▶ High productivity and low cost of ownership

Delivers higher productivity and reduced fuel consumption in an efficient and comfortable work environment.

Ⓞ **Reliability:** Reinforced castings and forged steel pivot points and reinforced heavy-duty arm and boom to withstand high-impact materials. Monoboam or articulated boom for added versatility. Improved hydraulic line routing to protect your investment.

Ⓞ **Safety:** 360° camera system, large side mirrors, powerful halogen or LED worklights, anti-slip steps and platforms. Guard rails on upper structure, ultrasonic obstruction indicator (option), travel alarm: your safety is our priority.

Ⓞ **Productivity:** State-of-the-art bucket and arm digging forces.

Ⓞ **Plug & play:** Machine Guidance options available with major brands' ready kits (Trimble, Leica, Xsite, etc.) and can differ by model and region.



Ⓞ **Undercarriage durability:** Forged steel and deep-hardened top rollers – oil-lubricated rollers – heat-treated sprocket – deep-hardened, heat-treated, grease lubricated & longer life track chains.

☉ **Comfort:** One of the most spacious cabs in the market, with low noise & vibration levels and excellent all-round visibility. Fully adjustable heated air suspension seat, air conditioning with climate control as standard.

☉ **Operate at ease:** All important information is at your fingertips with the new easy-to-use 8" touch screen.

☉ **Engine:** Exceptionally powerful – with high torque at low revs – the new Doosan engine combines reliability and low environmental impact. This Stage V compliant 6 cylinder engine delivers 202 kW at 1800 rpm.

☉ **Excellent fuel efficiency:** To save fuel, the Smart Power Control (SPC) system optimizes the balance between the pump output and the diesel engine.

☉ **Easy maintenance:** Easy access to all compartments. Radiator and oil cooler separated for better cooling and easier access. Maintenance data directly available from control panel.

☉ **Advanced filtration:** Highest efficiency filters & cleaners remove water, dust & particles to protect your investment optimally.



**Super-long reach and two-piece boom:** one long-reach machine – with a reach of 17.5 m – is ideally suited for special applications. A two-piece boom machine configuration is also available for more versatility.

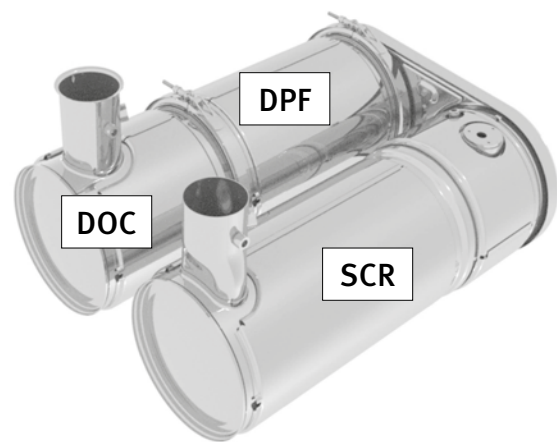
# Top performance and fuel efficiency



## ▣ The power to raise productivity

Since 1958, Doosan has been developing and producing diesel engines for buses, trucks, ships and construction equipment. Thanks to constant innovation for over 60 years, Doosan engines have earned a worldwide reputation for reliability and ease of maintenance.

- The DX300LC-7 is equipped with the latest generation Doosan engine. To work in perfect harmony, the excavator and the engine have been developed together from the start
- Stage V compliant, this engine boasts extremely low emissions because reducing our environmental impact is paramount to us
- Exhaust gases are purified by Selective Catalytic Reduction (SCR) technology, a Diesel Oxidation Catalyst (DOC) and a Diesel Particulate Filter (DPF)

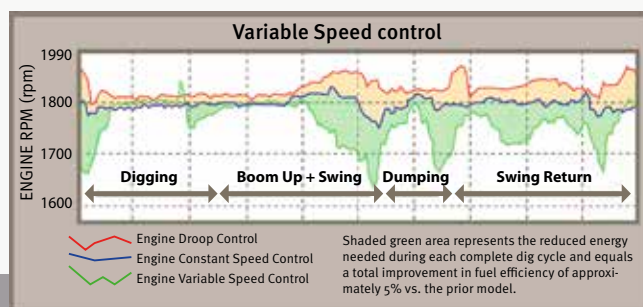


## Efficient fuel management

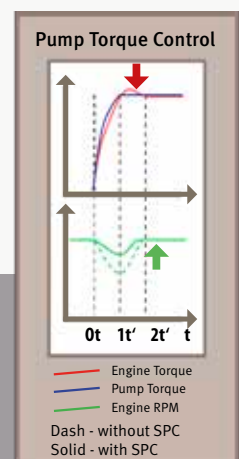
- Choice of 4 power modes (Eco - Standard - Power - Power Plus) and automatic Smart Power Control system for optimal power and reduced fuel consumption in all conditions
- Smart Power Control (SPC) system: reduces engine speed and adjusts pump torque according to work conditions. The system automatically adjusts engine power and hydraulic output to improve fuel efficiency and reduce emissions
- Engine auto-shut-off: shuts down the engine after the machine has been idling for a specified time. The operator can set the delay before shut-off via the touchscreen



**Variable Geometry turbocharger:** provides optimal air flow to the engine combustion chamber under all speed and load conditions, so that exhaust gas is cleaner and fuel economy is improved.



**SPC (Smart Power Control):** 2 systems (Variable Speed Control and Pump Torque Control) work together to improve efficiency while maintaining productivity.





# Operating in high comfort

## ▣ The ideal workspace – designed around you

An operator who works in an excavator 8 hours a day highly values the comfort of his working environment. That's why Doosan's new generation cabs are designed with the operator in mind.



### Best-in-class operator environment

The DX300LC-7 is designed to provide you with the best possible working conditions. The sophisticated state-of-the-art ROPS cab is pressurized and ISO-certified for your safety. A high-quality heated seat with air suspension provides maximum operator comfort.

### First class comfort

Comfortably seated, you benefit from a clear all-round view of the worksite and have easy access to several storage compartments. Noise and vibration levels are remarkably low, while air conditioning and automatic climate control allow you to keep working for hours on end without feeling tired.

Pedals, joysticks and armrests have all been designed for operator comfort and efficiency.

### Cab suspension

The cab's suspension system (CabSus mount) dampens vibrations and provides outstanding protection against impact. This system absorbs shocks and vibrations much more effectively than a conventional silentblock suspension system.

### King size touchscreen

The wide 8" touchscreen provides easy scrolling through the different menus, including power settings and auxiliary hydraulics settings. It also allows you to connect a Bluetooth device or listen to your favorite radio station.

### 360° Camera system

The 360° camera system gives you full view of the machine's surroundings.





1. Large sun roof
2. Sun visor
3. Storage compartment for sunglasses
4. Window grip
5. Improved visibility on the bottom right

6. Joysticks and switches are integrated in adjustable control consoles
7. Separate seat height adjustment lever and cushion tilting function
8. Straight ergonomic pedals
9. Flat, spacious, easy-to-clean floor

# Total control in all simplicity

## Expert fingertip control

The ergonomic controls and the easy-to-view colour monitor place the machine firmly in your hands.

- The new multi-function 8" touchscreen displays all useful information in a visual and intuitive format.
- At a glance, you can check the machine's status and settings to achieve optimal efficiency.
- Doosan's unique jog shuttle switch gives you easy and precise control over all machine functions.
- Highly sensitive and low-effort joysticks enable you to work safely, smoothly and confidently.
- The proportional thumb switches on the joysticks can be mounted horizontally or vertically, as the operator prefers, for optimal control of hydraulic attachments.



### Dynamic power management

- Automatic travel speed range selection (slow/fast)
- Activating the power boost control system increases digging force by 10%
- A one-touch deceleration button immediately reduces engine speed to low idle
- Auto-idling starts 4 seconds (adjustable) after all controls are returned to neutral – reducing fuel consumption and noise levels in the cab

### Intelligent floating boom mode (optional)

The “intelligent floating boom” function allows the boom to move up and down freely according to the application:

- Hydraulic breaker setting: during boom down operation, the boom moves down freely under its own weight. The result is reduced shock and vibration and longer breaker service life
- Full float setting: during boom down selection, the boom is allowed to rise and fall as required while the bucket is drawn across the ground

### 4 Work modes and 4 Power modes

Delivers the needed power according to your specific application while minimizing fuel consumption:

- 1-way mode, 2-way mode, Digging mode and Lifting mode
- Power Plus mode, Power mode, Standard mode, Economy mode



1. Sheer switch
2. Display monitor
3. Breaker/Booster button
4. Joystick 1-touch function button
5. Starter switch (Start/Stop button)
6. Engine speed control dial
7. Travel speed selector switch

8. Light switch
9. Cab work light switch
10. After-treatment system switch
11. Bluetooth control panel
12. Air conditioning and heating control panel
13. Wiper control panel
14. Quick coupler switch

# Reliability - the habit of a lifetime

## ▣ Designed for long term, all-round, heavy-duty performance

In your profession, you need equipment you can depend on. At Doosan, we put durability and reliability at the core of our machines' development. Our materials and structures undergo stringent testing for strength and resilience under the most extreme conditions.

And we continually manufacture the most durable machines to ensure lower cost of ownership. The customer's satisfaction is our main driving force. We know your jobs and your needs, and we build the machines that help you meet your daily challenges.



### Extra-strong X chassis

Designed using finite element analysis and 3D computer simulation, the X shaped undercarriage ensures optimum structural integrity and durability.

### Undercarriage durability

- The chain is composed of sealed, self-lubricating links for long-term dependability. For improved protection, alignment and performance, there are 3 types of guard available: normal, double, and full-length, according to the application
- The track spring and idler are joined for long-lasting performance and easy maintenance
- Cast steel heavy-duty sprockets guarantee the highest resistance
- The track rollers are lubricated for life

### Strengthened boom and arm

During the development of our machines, we use intensive testing to calculate the best load distribution throughout the boom structure. Combined with thicker material, this means that element fatigue is limited and both reliability and component life are increased. To better protect the base of the arm, reinforced bars have been added and the arm center and end boss have been strengthened.

### Advanced filtration

- Fuel filters and water separator: a filter-type high-performance water separator effectively captures moisture in the fuel, reducing impurities and helping minimize any fuel-related issues. Pre-filters and dual main filters as standard achieve a high degree of purity that minimises fuel system failures.
- Cyclonic air pre-cleaner: air filter life and engine efficiency are directly related to the amount of debris ingested through the engine's air intake. Therefore, a cyclonic air pre-cleaner (as standard) is the first stage of an air intake system that prevents the majority of heavier-than-air particles from entering. Self-cleaning and maintenance-free, the system is able to expel all types of mixed debris, including mud, snow, rain, leaves, sawdust, chaff, etc.

### Pin and bushing advanced technology

Highly lubricated metal is used for the boom pivot to increase the component's lifetime and lengthen greasing intervals. The bucket pivot features EM (Enhanced Macrosurface) bushings. These have a tailored surface pattern and self-lubricating coating for optimised greasing and more efficient debris removal. Ultra-hard wear-resistant discs and bucket pivot polymer shims increase durability even more.



DOOSAN

**Track guards:** to provide better protection, track alignment, and machine performance while travelling. 2 guards per track as standard (double and full-length track guards available as options). These track guard options provide you with optimal solutions for your extreme applications.

# Simple maintenance with maximum uptime

## ▣ Excellent service accessibility

Short maintenance operations at long intervals mean you can depend on your equipment being available on-site when it's needed. Our machines are designed for simple routine maintenance. Meanwhile, skilled Doosan-trained technicians are available to provide extra support when needed. To get the most out of your machine, you can choose the package you need from a broad range of service agreements. Uptime, productivity and residual value are all maximized, making our excavators an economical and rewarding choice.

The new DOOSAN DL08 Stage V engine has been developed with optimized maintenance in mind, to provide high and durable performance.



### Maintenance access made simple

- Large guard rails are installed along with anti-slip steps and plates, for safer, easier access to the whole upper structure.
- The air conditioning filter is placed on the side of the cab for easy access. The filter's cover can be locked and opened with the starter key.
- A battery cut-off switch makes it easy to disconnect the battery for long-term storage.
- The hour meter display can be easily checked from ground level.
- Shut-off valves have been fitted on the pre-filter piping line and fuel tank drain piping to make servicing easier and prevent pollution from leakage.
- Engine parts can be easily reached via the top and side panels.
- The radiator and oil cooler have been separated, making access for cleaning easier.
- For extra accessibility and servicing convenience, all filters (engine oil filter, fuel pre-filters, fuel filters and pilot filter) are located in the pump compartment.
- An electric transfer pump for initial priming of fuel filters is featured as standard.

### Longer service intervals

More than 99,5% of foreign particles are filtered out in oil return filters and engine oil filters – so the oil and filter change interval is longer.

### Global Doosan network

With a worldwide network of Doosan dealers and Parts Distribution Centers, your Doosan excavator can be serviced and maintained wherever you are.

### Full solution provider

- The Doosan Telematic system (Doosan Connect) is included in the standard equipment of our excavators. It offers all the features for reading out vehicle operation and production parameters remotely, and providing you with complete peace of mind.
- Protection+: an extended warranty covering parts, travel and service (check with your local dealer).
- Maintenance contract: your dealer will support you with routine service at regular intervals.
- Genuine parts: manufactured and tested to ensure they always meet the same high quality standards as the original components.

### AdBlue® tank

Connected to the ECU, sensors in the tank detect low levels of AdBlue® or any other system malfunction.

### Centralised greasing points

To make maintenance easier, the greasing points have been centralised. An automatic lubrication system is available as an option.



# Technical specifications

## Engine

Designed to deliver superior performance and fuel efficiency, the Doosan DLo8V diesel engine fully meets latest stage V emission regulations. To optimise machine performance, the engine uses high-pressure fuel injectors, air-to-air inter-cooler and electronic engine controls. 4-Cycle Water-Cooled, Variable Geometry Turbocharged, Diesel Oxidation Catalyst (DOC) & Selective Catalytic Reduction (SCR) and Diesel Particulate Filter (DPF).

DX300LC-7	
Model	Doosan DLo8V
No. of cylinders	6
Rated power at 1800 rpm (SAE J1995)	202 kW (271 hp)
(SAE J1349)	199 kW (267 hp)
Max. torque at 1300 rpm	1275 Nm
Idle (low - high)	800 [±10] - 1900 [±25] rpm
Piston displacement	7640 cm <sup>3</sup>
Bore × stroke	108 mm × 139 mm
Starter	24 V × 6 kW
Batteries - Alternator	2 × 12 V, 150 Ah - 24 V, 80 A
Air filter	Double element air cleaner and pre-filtered Cyclone Turbo dust separator

## Undercarriage

Extremely robust construction throughout - made of high-quality, durable materials, with all welded structures designed to limit stresses.

- Track rollers lubricated for life
- Idlers and sprockets fitted with floating seals
- Track shoes made of induction-hardened alloy with triple grouser
- Heat-treated connecting pins
- Hydraulic track adjuster with shock-absorbing tension mechanism

### Number of rollers and track shoes per side

DX300LC-7	
Upper rollers (standard shoe)	2
Lower rollers	9
Number of links & shoes per side	48
Link pitch	216 mm

## Weight

	Shoe width (mm)	Machine weight (t)	Ground pressure (kgf/cm <sup>2</sup> )
Triple grouser	600 (Std)	30.3	0.58
	700	31.0	0.51
	800	31.4	0.45
	850	31.5	0.43
Double grouser	600	31.0	0.59

## Component weights

Item	Unit	Weight	Remarks
Upper structure without front	kg	12130	With counterweight
Lower structure assembly	kg	10927	
Front assembly	kg	6157	Based on standard *
Boom	mm	6245 / 6260 two-piece	Including bushing
	kg	2229 / 2496	
Arm	mm	2500 / 2850 / 3100 / 3750	
	kg	967 / 1085 / 1038 / 1178	

(\*) Standard front – 6245 mm boom, 3100 mm arm, 1.27 m<sup>3</sup> GP bucket.

## Hydraulic system

The e-EPOS (Electronic Power Optimising System) is the brain of the excavator - minimising fuel consumption and optimizing the efficiency of the hydraulic system for all working conditions.

To harmonise the operation of the engine and the hydraulics, the e-EPOS is connected to the engine's electronic control unit (ECU) via a data transfer link.

- The hydraulic system enables independent or combined operations
- 2 travel speeds offer either increased torque or high speed
- Cross-sensing pump system for fuel savings
- Auto-deceleration system
- 4 operating modes, 4 power modes
- Flow and pressure control of auxiliary hydraulic circuits from control panel
- Computer-aided pump flow control

### Pumps & system pressure

DX300LC-7	
Main pumps, type:	2 × variable displacement tandem axial piston pumps
Maximum flow at 1800 rpm	2 × 248 l/min
Pilot pump, type:	Gear pump
Maximum flow at 1800 rpm	27 l/min
Relief valve settings:	
Implement	350 (370) kgf/cm <sup>2</sup>
Travel	350 kgf/cm <sup>2</sup>
Swing	295 kgf/cm <sup>2</sup>
Pilot	40 kgf/cm <sup>2</sup>

## Hydraulic cylinders

High-strength steel piston rods and cylinder bodies. Shock-absorbing mechanism fitted in all cylinders for shock-free operation and extended piston life.

Cylinders	Quantity	Bore × rod diameter × stroke (mm)
Boom	2	140 × 95 × 1450
Arm	1	150 × 105 × 1670
Bucket	1	135 × 90 × 1150
SLR Bucket	1	95 × 65 × 900
Two-piece boom	1	170 × 115 × 1341



## ➤ Swing mechanism

The swing mechanism uses an axial piston motor, driving a 2-stage planetary reduction gear bathed in oil for maximum torque.

- Swing bearing: single-row, shear type ball bearing with induction hardened internal gear
- Internal gear and pinion immersed in lubricant

### ► Swing speed & torque

	DX300LC-7
Maximum swing speed	9.88 rpm
Maximum swing torque	12137 kgf-m

## ➤ Drive

Each track is driven by an independent, high-torque axial piston motor through a planetary reduction gearbox. Two levers / foot pedals guarantee smooth travel with counter-rotation on demand.

The track frame protects the travel motor, brake and planetary gears. The multi-disc track brakes are spring-applied and hydraulic released.

### ► Speed & traction

	DX300LC-7
Travel speed (low - high)	3.0 - 5.5 km/h
Maximum traction	35 t
Maximum gradeability	35° / 70%

## ➤ Buckets

Bucket Type	Capacity (m³) SAE	Width (mm)		Weight (kg)	Standard track / narrow track						
		With side cutters	W/O side cutters		One-piece boom				Two-piece boom		
					Arm 2.50 m	Arm 2.85 m	Arm 3.10 m	Arm 3.75 m	Arm 2.50 m	Arm 3.10 m	Arm 3.75 m
GP	0.80	1037	962	860	A / A	A / A	A / A	A / A	A / A	A / A	A / A
	1.03	1247	1172	990	A / A	A / A	A / A	A / B	A / A	A / A	A / B
	1.27	1445	1376	1104	A / A	A / A	A / B	A / C	A / B	A / C	A / D
	1.50	1657	1582	1220	A / B	A / B	B / C	C / D	A / C	A / D	B / -
	1.75	1867	1792	1310	B / C	C / C	C / D	D / -	A / D	C / -	C / -
HD	1.04	1108	1070	1024	A / A	A / A	A / A	A / B	A / A	A / B	A / B
	1.23	1258	1220	1104	A / A	A / A	A / B	B / C	A / A	A / C	A / C
	1.47	1458	1420	1211	A / B	A / B	A / C	B / D	A / C	A / D	B / D
	1.60	1558	1520	1264	A / C	B / C	B / D	C / D	A / D	A / D	B / -
	1.72	1658	1620	1338	B / C	C / C	C / D	D / -	A / D	C / -	C / -
Rock	1.16	-	1432	1200	A / A	A / A	A / B	A / C	A / A	A / B	A / C

A: Suitable for materials with a density less than or equal to 2100 kg/m³

B: Suitable for materials with a density less than or equal to 1800 kg/m³

## ➤ Fluid capacities

	DX300LC-7
Fuel tank	500 l
Cooling system (radiator)	50 l
Urea (def) tank	63 l
Hydraulic oil tank	280 l
Engine oil	42 l
Swing drive	7 l
Travel device	2 × 7 l

## ➤ Cab

The air-conditioning and heating systems are integrated for optimal climate control. An automatically-controlled fan supplies the pressurised and filtered cab air, which is distributed throughout the cab from multiple vents.

The heated air suspension, adjustable operator's seat includes a seat belt. The operator can adjust the ergonomic seat and joystick console separately according to his preferences.

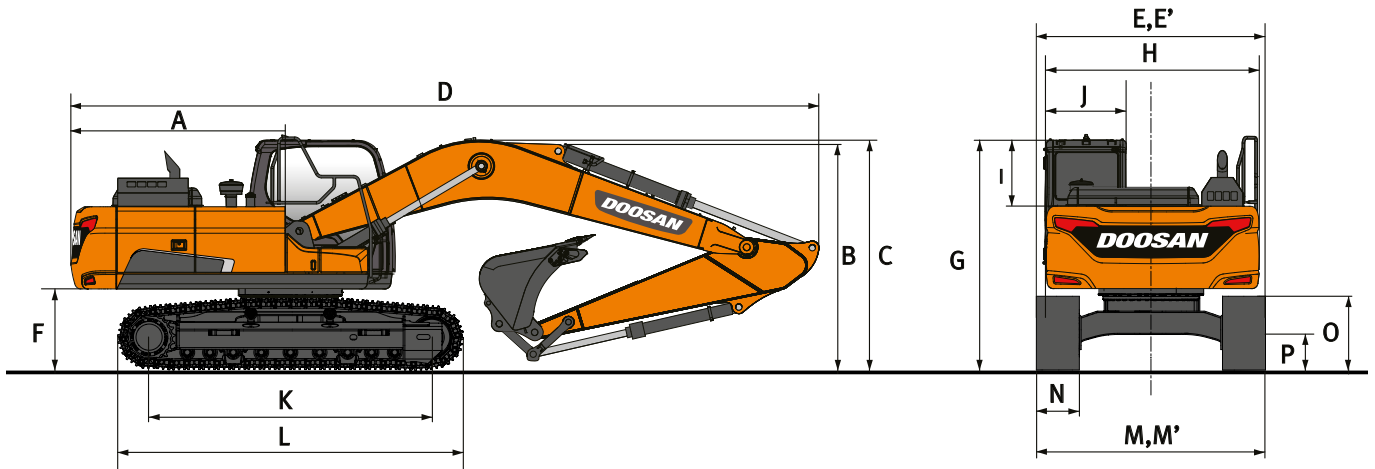
### ► Noise emission

	DX300LC-7
A-weighted emission sound pressure level at the operator's position, LpAd (ISO 6396:2008)	72 dB(A)
A-weighted sound power level, LwAd (2000/14/EC)	Declared : 104 dB(A) Measured : 103 dB(A)

Note – Declared single-number noise emission values are the sum of measured values and the associated uncertainty, and they represent upper boundaries of the range of values which is likely to occur in measurements.



# Dimensions



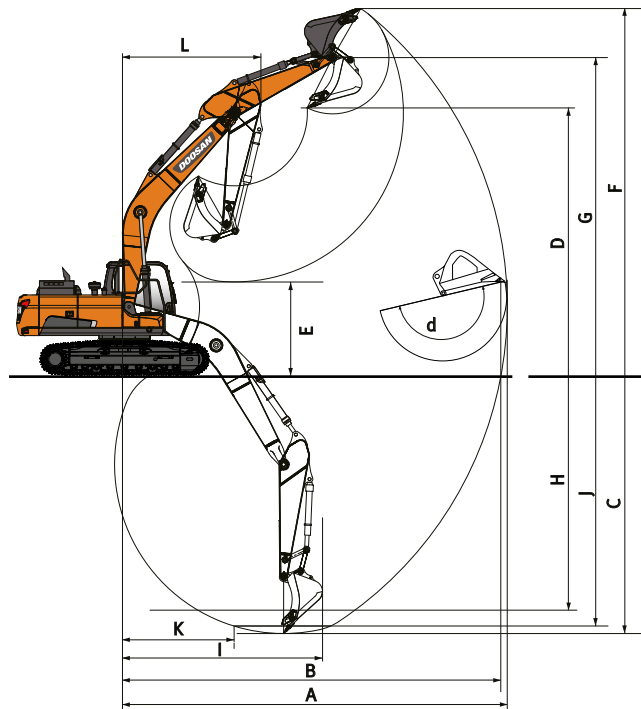
## Dimensions

	One-piece boom				Two-piece boom		
	6245				3250 LB + 3050 UB		
	2500	2850	3100	3750	2500	3100	3750
Boom length - mm							
Arm length - mm	2500	2850	3100	3750	2500	3100	3750
Bucket capacity - m <sup>3</sup>	1.51	1.27	1.27	1.03	1.51	1.27	1.03
A Tail swing radius - mm	3230	3230	3230	3230	3230	3230	3230
B Shipping height (boom) - mm	3385	3495	3265	3455	3455	3465	3700
C Shipping height (hose) - mm	3495	3615	3370	3575	3455	3465	3700
D Shipping length - mm	10765	10705	10605	10705	10790	10660	10660
E Shipping width std. - mm	3200	3200	3200	3200	3200	3200	3200
E' Shipping width narrow - mm	3000	3000	3000	3000	3000	3000	3000
F Counterweight clearance - mm	1120	1120	1120	1120	1120	1120	1120
G Height over cab - mm	3050	3050	3050	3050	3050	3050	3050
H House width - mm	2960	2960	2960	2960	2960	2960	2960
I Cab height above house - mm	853	853	853	853	853	853	853
J Cab width - mm	1010	1010	1010	1010	1010	1010	1010
K Tumbler distance - mm	4040	4040	4040	4040	4040	4040	4040
L Track length - mm	4940	4940	4940	4940	4940	4940	4940
M Undercarriage width std. - mm	3200	3200	3200	3200	3200	3200	3200
M' Undercarriage width narrow - mm	3000	3000	3000	3000	3000	3000	3000
N Shoe width std. - mm	600	600	600	600	600	600	600
O Track height - mm	970	970	970	970	970	970	970
P Ground clearance - mm	470	470	470	470	470	470	470

## Digging forces (ISO)

	One-piece boom				Two-piece boom		
	6245				3250 LB + 3050 UB		
	2500	2850	3100	3750	2500	3100	3750
Boom length - mm							
Arm length - mm	2500	2850	3100	3750	2500	3100	3750
Bucket capacity - m <sup>3</sup>	1.51	1.27	1.27	1.03	1.51	1.27	1.03
BUCKET (Normal/Press. Up) - ton	18.9 / 20.0	18.9 / 20.0	18.9 / 20.0	18.9 / 20.0	18.9 / 20.0	18.9 / 20.0	18.9 / 20.0
ARM (Normal/Press. Up) - ton	16.0 / 17.0	N/A	13.2 / 13.9	11.7 / 12.4	16.0 / 17.0	13.2 / 13.9	11.7 / 12.4

# Working range



## Working range

Boom length - mm	One-piece boom				Two-piece boom		
	6245				3250 LB + 3050 UB		
Arm length - mm	2500	2850	3100	3750	2500	3100	3750
Bucket capacity - m <sup>3</sup>	1.51	1.27	1.27	1.03	1.51	1.27	1.03
A Max. digging reach - mm	10155	10415	10725	11240	11280	10860	11415
B Max. digging reach (ground) - mm	9950	10215	10530	11065	10075	10670	11235
C Max. digging depth - mm	6700	7055	7305	7950	6410	7010	7605
D Max. loading height - mm	6990	6995	7280	7395	8415	8895	9255
E Min. loading height - mm	3370	3010	2750	2110	4290	3565	2950
F Max. digging height - mm	10010	9980	10325	10405	11615	12085	12450
G Max. bucket pin height - mm	8585	8600	8880	8990	10015	10495	10855
H Max. vertical wall depth - mm	5395	5450	6125	6600	5185	5840	6415
I Max. radius vertical - mm	6840	7175	6840	7070	6820	6855	7035
J Max. digging depth (8° level) - mm	6465	6815	7110	7755	6295	6905	7515
K Min. radius 8° level - mm	2970	2905	3000	2920	1825	1820	1820
L Min. swing radius - mm	4045	4070	4040	4050	3065	2900	3105
d Bucket angle - °	176	176	175	174	176	175	174

## Doosan Buckets

4 More. More choice - More durable - More strength - More performance!

### General Construction Bucket



The General purpose bucket is designed for digging and re-handling soft to medium materials (e.g. materials with low wear characteristics such as top-soil, loam, coal).

### Heavy Construction Bucket



The Heavy duty bucket is designed for mass excavations in dense materials such as hard packed clay, shot limestone, limited rock content and gravel.

### Severe Mining Bucket



The Severe duty bucket is designed for durability in digging compact materials like loose or blasted rock, hard packed clay and stone.

### X-treme Mining Bucket



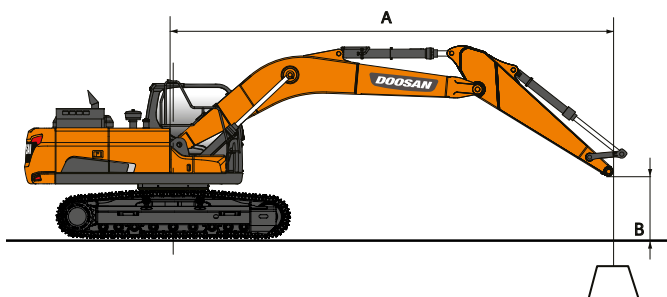
The X-treme duty bucket is designed as a long-life version of the Severe duty bucket for digging in the most abrasive materials.

# Lifting capacities

## DX300LC-7

Standard track width: 3200 mm • W/O Bucket

Unit: 1000 kg	A		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		Max. reach				
	B		☺	☹	☺	☹	☺	☹	☺	☹	☺	☹	☺	☹	☺	☹	A		
One-piece boom 6.25 m Arm 3.1 m Shoe 600 mm Counterweight 5.1 t	7.5 m																5.42 *	5.42 *	7.27
	6.0 m								6.87 *	6.87 *	6.78 *	5.99					5.21 *	5.13	8.19
	4.5 m							9.55 *	9.55 *	8.00 *	8.00 *	7.27 *	5.83				5.22 *	4.49	8.77
	3.0 m							12.64 *	11.89	9.47 *	7.79	8.02 *	5.60	5.96 *	4.22		5.41 *	4.17	9.07
	1.5 m							15.20 *	11.09	10.88 *	7.38	8.58	5.38	6.52	4.12		5.80 *	4.05	9.10
	0.0 m							16.45 *	10.71	11.79	7.11	8.40	5.22				6.46 *	4.12	8.89
	-1.5 m	8.59 *	8.59 *	12.25 *	12.25 *	16.60 *	10.62	11.65	6.99	8.32	5.15						7.09	4.43	8.40
	-3.0 m	13.97 *	13.97 *	18.94 *	18.94 *	15.84 *	10.72	11.69	7.02	8.39	5.21						8.26	5.14	7.59
	-4.5 m			19.23 *	19.23 *	13.86 *	11.00	10.21 *	7.25								9.44 *	6.77	6.32
One-piece boom 6.25 m Arm 3.75 m Shoe 600 mm Counterweight 5.1 t	7.5 m										5.63 *	5.63 *				4.48 *	4.48 *	7.91	
	6.0 m										6.00 *	6.00 *				4.36 *	4.36 *	8.78	
	4.5 m								7.09 *	7.09 *	6.58 *	5.90	5.68 *	4.35		4.39 *	4.09	9.32	
	3.0 m							11.15 *	11.15 *	8.62 *	7.91	7.41 *	5.64	6.65	4.23		4.56 *	3.80	9.59
	1.5 m							14.04 *	11.26	10.17 *	7.44	8.30 *	5.39	6.50	4.10		4.89 *	3.68	9.63
	0.0 m				8.55 *	8.55 *	15.83 *	10.71	11.37 *	7.09	8.37	5.18	6.39	3.99			5.44 *	3.73	9.43
	-1.5 m	8.52 *	8.52 *	12.24 *	12.24 *	16.48 *	10.49	11.57	6.91	8.24	5.06						6.34 *	3.96	8.97
	-3.0 m	12.58 *	12.58 *	17.17 *	17.17 *	16.18 *	10.51	11.53	6.87	8.23	5.05						7.25	4.49	8.21
	-4.5 m	17.53 *	17.53 *	21.18 *	21.18 *	14.82 *	10.71	11.06 *	7.00								8.96 *	5.63	7.06
-6.0 m			16.32 *	16.32 *	11.55 *	11.17										9.60 *	8.89	5.26	
Two-piece boom Arm 2.5 m Shoe 600 mm Counterweight 5.9 t	9.0 m					11.28 *	11.28 *									9.42 *	9.42 *	5.07	
	7.5 m					11.01 *	11.01 *	9.81 *	9.58							8.14 *	7.93	6.70	
	6.0 m			11.15 *	11.15 *	12.00 *	12.00 *	10.06 *	9.43	8.74 *	6.58					7.68 *	6.28	7.70	
	4.5 m					13.95 *	13.95 *	10.85 *	9.05	8.96 *	6.46					7.59 *	5.47	8.31	
	3.0 m							11.74 *	8.6	9.49 *	6.25					7.78 *	5.08	8.62	
	1.5 m							12.25 *	8.23	9.48	6.06					7.68	4.96	8.66	
	0.0 m					15.80 *	12.08	12.07 *	8.03	9.35	5.94					7.92	5.1	8.43	
	-1.5 m					14.00 *	12.12	11.02 *	7.99	8.39 *	5.94					7.50 *	5.56	7.92	
	-3.0 m					11.13 *	11.13 *	8.81 *	8.12							6.61 *	6.61	7.05	
Two-piece boom Arm 3.1 m Shoe 600 mm Counterweight 5.9 t	9.0 m							6.10 *	6.10 *							6.01 *	6.01 *	6.02	
	7.5 m							8.34 *	8.34 *							5.32 *	5.32 *	7.43	
	6.0 m					8.71 *	8.71 *	9.12 *	9.12 *	8.16 *	6.7					5.04 *	5.04 *	8.35	
	4.5 m					12.92 *	12.92 *	10.27 *	9.2	8.49 *	6.53					4.97 *	4.93	8.92	
	3.0 m					15.19 *	13.26	11.29 *	8.72	9.05 *	6.3	6.79 *	4.77			5.08 *	4.6	9.20	
	1.5 m					16.50 *	12.43	12.04 *	8.29	9.5	6.07	7.24	4.68			5.35 *	4.5	9.24	
	0.0 m					16.31 *	12.07	12.16 *	8.02	9.32	5.91	6.24 *	4.62			5.84 *	4.6	9.03	
	-1.5 m			11.06 *	11.06 *	14.97 *	12.01	11.48 *	7.92	8.90 *	5.85					6.68 *	4.95	8.55	
	-3.0 m			15.35 *	15.35 *	12.56 *	12.14	9.80 *	7.98	7.11 *	5.94					6.48 *	5.72	7.75	
Two-piece boom Arm 3.75 m Shoe 600 mm Counterweight 5.9 t	10.5 m					6.72 *	6.72 *									5.95 *	5.95 *	4.82	
	9.0 m							6.56 *	6.56 *							4.83 *	4.83 *	6.85	
	7.5 m							6.89 *	6.89 *	6.09 *	6.09 *					4.39 *	4.39 *	8.12	
	6.0 m							7.32 *	7.32 *	7.11 *	6.81					4.21 *	4.21 *	8.96	
	4.5 m			9.81 *	9.81 *	9.44 *	9.44 *	9.03 *	7.99 *	6.61	6.18 *	4.91				4.19 *	4.19 *	9.49	
	3.0 m					14.11 *	13.62	10.69 *	8.85	8.56 *	6.34	6.87 *	4.79			4.29 *	4.19	9.76	
	1.5 m					15.94 *	12.61	11.64 *	8.35	9.26 *	6.08	7.14 *	4.65			4.53 *	4.09	9.80	
	0.0 m					16.42 *	12.05	12.06 *	8	9.29	5.87	7.11	4.55			4.94 *	4.16	9.60	
	-1.5 m			11.18 *	11.18 *	15.63 *	11.86	11.75 *	7.83	9.16	5.76	7.04 *	4.52			5.63 *	4.43	9.15	
-3.0 m			16.22 *	16.22 *	13.75 *	11.91	10.55 *	7.82	8.05 *	5.77					6.42 *	5	8.41		
-4.5 m					10.53 *	10.53 *	8.06 *	7.98							5.59 *	5.59 *	7.28		



☺ : Rating over front.  
☹ : Rating over side or 360°.

- Lifting capacities are in compliance with ISO 10567:2007(E).
- The load point is at the end of the arm.
- \* = The nominal loads are based on hydraulic capacity.
- The nominal loads shown do not exceed 75% of tipping loads or 87% of hydraulic lifting capacity.
- For lifting capacity with bucket, simply subtract the actual weight of the bucket from the values.
- The configurations indicated do not necessarily reflect the standard equipment of the machine.

## DX300LC-7

Narrow track width: 3000 mm • W/O Bucket

Unit: 1000 kg	A	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		Max. reach		
		B	Ⓜ	Ⓒ	Ⓜ	Ⓒ	Ⓜ	Ⓒ	Ⓜ	Ⓒ	Ⓜ	Ⓒ	Ⓜ	Ⓒ	Ⓜ	Ⓒ
One-piece boom 6.25 m Arm 2.5 m Shoe 600 mm Counterweight 5.1 t	7.5 m							7.37 *	7.37 *					7.56 *	6.85	6.54
	6.0 m							7.70 *	7.70 *	7.57 *	5.41			7.59 *	5.33	7.56
	4.5 m					10.87 *	10.87 *	8.77 *	7.45	7.87 *	5.3			7.75 *	4.59	8.19
	3.0 m					13.95 *	10.49	10.17 *	7.03	8.53 *	5.1			7.2	4.21	8.50
	1.5 m					16.08 *	9.86	11.42 *	6.68	8.54	4.92			7.04	4.08	8.54
	0.0 m					16.73 *	9.66	11.74	6.47	8.4	4.79			7.25	4.18	8.31
	-1.5 m			12.50 *	12.50 *	16.43 *	9.67	11.68	6.41	8.38	4.77			7.95	4.55	7.79
	-3.0 m			20.76 *	19.38	15.24 *	9.83	11.51 *	6.51					9.59	5.44	6.90
	-4.5 m			16.89 *	16.89 *	12.51 *	10.19							10.00 *	7.74	5.47
One-piece boom 6.25 m Arm 3.1 m Shoe 600 mm Counterweight 5.1 t	7.5 m													5.42 *	5.42 *	7.27
	6.0 m							6.87 *	6.87 *	6.78 *	5.52			5.21 *	4.72	8.19
	4.5 m					9.55 *	9.55 *	8.00 *	7.58	7.27 *	5.36			5.22 *	4.13	8.77
	3.0 m					12.64 *	10.8	9.47 *	7.14	8.02 *	5.14	5.96 *	3.86	5.41 *	3.82	9.07
	1.5 m					15.20 *	10.02	10.88 *	6.74	8.56	4.93	6.5	3.77	5.80 *	3.7	9.10
	0.0 m					16.45 *	9.66	11.75	6.47	8.38	4.77			6.46 *	3.77	8.89
	-1.5 m	8.59 *	8.59 *	12.25 *	12.25 *	16.60 *	9.57	11.62	6.35	8.3	4.7			7.07	4.05	8.40
	-3.0 m	13.97 *	13.97 *	18.94 *	18.94 *	15.84 *	9.66	11.65	6.38	8.37	4.75			8.24	4.69	7.59
	-4.5 m			19.23 *	19.23 *	13.86 *	9.94	10.21 *	6.6					9.44 *	6.17	6.32
One-piece boom 6.25 m Arm 3.75 m Shoe 600 mm Counterweight 5.1 t	7.5 m									5.63 *	5.63 *			4.48 *	4.48 *	7.91
	6.0 m									6.00 *	5.62			4.36 *	4.24	8.78
	4.5 m							7.09 *	7.09 *	6.58 *	5.43	5.68 *	3.99	4.39 *	3.75	9.32
	3.0 m					11.15 *	11.12	8.62 *	7.25	7.41 *	5.18	6.63	3.88	4.56 *	3.47	9.59
	1.5 m					14.04 *	10.19	10.17 *	6.79	8.30 *	4.93	6.49	3.74	4.89 *	3.36	9.63
	0.0 m			8.55 *	8.55 *	15.83 *	9.65	11.37 *	6.45	8.35	4.73	6.37	3.64	5.44 *	3.4	9.43
	-1.5 m	8.52 *	8.52 *	12.24 *	12.24 *	16.48 *	9.44	11.54	6.27	8.21	4.61			6.34 *	3.61	8.97
	-3.0 m	12.58 *	12.58 *	17.17 *	17.17 *	16.18 *	9.46	11.5	6.24	8.2	4.6			7.23	4.09	8.21
	-4.5 m	17.53 *	17.53 *	21.18 *	18.99	14.82 *	9.65	11.06 *	6.36					8.96 *	5.13	7.06
-6.0 m			16.32 *	16.32 *	11.55 *	10.1							9.60 *	8.08	5.26	
Two-piece boom Arm 2.5 m Shoe 600 mm Counterweight 5.9 t	9.0 m					11.28 *	11.28 *							9.42 *	9.42 *	5.07
	7.5 m					11.01 *	11.01 *	9.81 *	8.48					8.14 *	7	6.70
	6.0 m			11.15 *	11.15 *	12.00 *	12.00 *	10.06 *	8.33	8.74 *	5.79			7.68 *	5.52	7.70
	4.5 m					13.95 *	12.22	10.85 *	7.96	8.96 *	5.67			7.59 *	4.79	8.31
	3.0 m							11.74 *	7.52	9.33	5.47			7.53	4.43	8.62
	1.5 m							12.25 *	7.15	9.12	5.28			7.38	4.32	8.66
	0.0 m					15.80 *	10.38	12.07 *	6.96	8.99	5.17			7.62	4.43	8.43
	-1.5 m					14.00 *	10.42	11.02 *	6.92	8.39 *	5.16			7.50 *	4.84	7.92
	-3.0 m					11.13 *	10.63	8.81 *	7.05					6.61 *	5.75	7.05
Two-piece boom Arm 3.1 m Shoe 600 mm Counterweight 5.9 t	9.0 m							6.10 *	6.10 *					6.01 *	6.01 *	6.02
	7.5 m							8.34 *	8.34 *					5.32 *	5.32 *	7.43
	6.0 m					8.71 *	8.71 *	9.12 *	8.48	8.16 *	5.91			5.04 *	4.89	8.35
	4.5 m					12.92 *	12.58	10.27 *	8.1	8.49 *	5.74			4.97 *	4.31	8.92
	3.0 m					15.19 *	11.52	11.29 *	7.63	9.05 *	5.51	6.79 *	4.16	5.08 *	4.01	9.20
	1.5 m					16.50 *	10.72	12.04 *	7.21	9.14	5.29	6.96	4.07	5.35 *	3.91	9.24
	0.0 m					16.31 *	10.37	12.16 *	6.95	8.96	5.13	6.24 *	4.01	5.84 *	3.99	9.03
	-1.5 m			11.06 *	11.06 *	14.97 *	10.31	11.48 *	6.85	8.9	5.08			6.68 *	4.3	8.55
	-3.0 m			15.35 *	15.35 *	12.56 *	10.44	9.80 *	6.91	7.11 *	5.16			6.48 *	4.97	7.75
Two-piece boom Arm 3.75 m Shoe 600 mm Counterweight 5.9 t	10.5 m					6.72 *	6.72 *							5.95 *	5.95 *	4.82
	9.0 m							6.56 *	6.56 *					4.83 *	4.83 *	6.85
	7.5 m							6.89 *	6.89 *	6.09 *	6.08			4.39 *	4.39 *	8.12
	6.0 m							7.32 *	7.32 *	7.11 *	6.01			4.21 *	4.21 *	8.96
	4.5 m			9.81 *	9.81 *	9.44 *	9.44 *	9.03 *	8.26	7.99 *	5.82	6.18 *	4.3	4.19 *	3.9	9.49
	3.0 m					14.11 *	11.86	10.69 *	7.76	8.56 *	5.56	6.87 *	4.17	4.29 *	3.64	9.76
	1.5 m					15.94 *	10.89	11.64 *	7.27	9.16	5.29	6.95	4.04	4.53 *	3.54	9.80
	0.0 m					16.42 *	10.35	12.06 *	6.93	8.93	5.09	6.83	3.94	4.94 *	3.6	9.60
	-1.5 m			11.18 *	11.18 *	15.63 *	10.16	11.75 *	6.75	8.81	4.98	6.8	3.9	5.63 *	3.83	9.15
	-3.0 m			16.22 *	16.22 *	13.75 *	10.21	10.55 *	6.75	8.05 *	4.99			6.42 *	4.33	8.41
	-4.5 m					10.53 *	10.45	8.06 *	6.91					5.59 *	5.39	7.28

# Standard and optional equipment

## Engine

Doosan, Stage V compliant, SCR, DOC and DPF post treatment	●
Variable Turbo Charger and air-to-air intercooler	●
Auto-idle function	●
Auto shut-off	●

## Hydraulic system

Boom and arm flow regeneration	●
Swing anti-rebound valves	●
Spare ports (valve)	●
Flow and pressure adjustment of hydraulics lines controlled from the cab	●
One-touch power boost function	●
Smart Power Control (SPC)	●
Breaker piping	●
Cylinder cushioning & contamination seals	●
Setting of auxiliary hydraulic flow and pressure from the display panel	●

## Cab & Interior

Pressurised, sound-insulated and CabSus mounted cab	●
Heated, adjustable air suspension seat with adjustable headrest and armrests	●
Air conditioning with climate control	●
Pull-up type front window with sun roller blind and removable lower front window	●
Sliding left window	●
Upper and lower windshield wipers	●
Rain visor	●
Rear window defroster switch	●
Adjustable PPC wrist control levers for arm, boom, bucket and swing	●
Joysticks and pedals provide proportional control of auxiliary lines for attachments	●
Travel pedals with hand levers	●
Jog shuttle switch	●
8" color LCD touch-enabled gauge panel	●
Attachment management system	●
Engine speed (RPM) control dial	●
Automatic travel speed	●
4 operating modes & 4 working modes	●
Electric horn	●
Ceiling light	●
Cup holders	●
Multiple storage compartments (e.g. document holder under seat)	●
Storage area (tools, etc.)	●
Hot and cool box	●
Flat, spacious, easy-to-clean floor	●
Master key	●
Anti-theft protection	●
12 V power socket and USB ports	●
Serial communication port for laptop PC interface	●
Integrated RADIO+MP3 (STEREO) with Bluetooth Streaming	●

## Safety

Roll Over Protective Structure (ROPS)	●
Boom and arm cylinder safety valves	●
Overload warning device	●
Large guard rails on upper structure and steps	●
Rotating beacon	●
Around View Camera 360°	●
Punched metal anti-slip plates	●
Hydraulic safety lock lever	●
Safety glass	●
Hammer for emergency escape	●
Right and left rear-view mirrors	●
Lockable fuel cap and covers	●
Battery cut-off switch	●
Engine restart prevention system	●
Parking brake	●
Light Pack (4 front & 2 rear work lights on the cab)	●
Emergency engine stop switch and hydraulic pump control switch	●
FOGS cab - top and front cab guards (ISO 10262)	○
Front window upper and lower guards	○
Smart key	○
Ultrasonic detection	○
LED lights	○

## Other

Boom: 6245 mm – arm: 3100 mm – counterweight: 5100 kg	●
"Doosan Connect" Telematic system	●
Auto shut-off fuel filler pump	●
Double element air cleaner and pre-filtered Cyclone Turbo dust separator	●
Fuel pre-filter with water separator sensor	●
Dust screen for radiator/oil cooler	●
Hydraulically-driven oil cooler fan	●
Self-diagnostic function	●
Alternator (24 V, 80 A) - Battery (2 × 12 V, 150 Ah)	●
Hydrostatic 2-speed travel system with automatic shift	●
Remote greasing for swing circle and work group pivot points	●
Electric transfer pump for initial priming of fuel filters	●
Arms: 2500 mm, 2850 mm heavy duty, 3100 mm heavy duty or 3750 mm	○
Air compressor	○
Side protector*	○

Booms: one piece boom 6245 mm heavy duty with 5100 kg counterweight or two-piece boom (3245 mm LB + 3050 mm UB) with 5900 kg counterweight	○
Heavy-duty bottom cover	○
Doosan buckets: full range of GP, HD & Rock buckets	○
Doosan quick-couplers	○
Hydraulic piping for crusher, quick-coupler, clamshell, tilting and rotating buckets	○
Additional filter for breaker piping	○
Floating boom	○
Double pump flow	○
Engine coolant heater	○
Oil-washed air cleaner	○
Straight travel pedal (not to be combined with two-piece boom)	○
Automatic lubrication system	○
Alarm for travel & swing	○

## Undercarriage

Narrow undercarriage	○
X-frame with hydraulic track adjuster	●
Normal track guards	●
Double track guards	○
Full-length track guards	○
Greased and sealed track links	●
600 mm triple grouser shoe	●
600 mm double grouser shoe	○
700, 800, 850 mm triple grouser shoe	○

Standard: ●  
Optional: ○



Around View Camera 360°



LED lights



Side protector\*



Air compressor



Smart key



Ultrasonic sensors

Some of these options may be standard in some markets. Some of these options may not be available for certain markets. Please check with your local DOOSAN dealer for more information about availability or to adapt your machine to your application needs.

\*For NLC version, the side protector will increase the transportation width by 12 cm, but is easily removable.

**WORK EFFICIENCY  
MANAGEMENT**

**JOB SITE  
MANAGEMENT**

**PROACTIVE  
SERVICE**

**PREVENTIVE  
MAINTENANCE**

**OPERATION TREND**

Total operation hours and operation hours by mode

**FUEL EFFICIENCY\***

Fuel level and fuel consumption

**LOCATION**

GPS and geo-fence

**REPORTS**

Operation report & utilization

**WARNING & ALERT**

Detect machine warnings, antenna disconnection, and geo/time fence

**FILTER & OIL MANAGEMENT**

Preventive maintenance by item replacement cycle

**TELEMATICS TERMINAL**

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

**TELECOMMUNICATION**

Doosan provides Dual mode (Mobile, Satellite) communication to maximize communication coverage.

**DOOSANCONNECT WEB**

Users can monitor machine status from DoosanCONNECT Web.

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