

**DOOSAN**

Construction Equipment

# DX300LCA

Engine Power	SAE J1349, net 146 kW(193 HP) @ 1,900 rpm
Operational Weight	29,600 kg (65,257 lb)
Bucket Capacity (SAE/PCSA)	0.64 ~ 1.75 m <sup>3</sup> (0.84 ~ 2.29 yd <sup>3</sup> )



DOOSAN DX300LCA HYDRAULIC EXCAVATOR :  
**PROVIDING OPTIMUM VALUE  
TO THE END USER**

**DX300LCA**

**A NEW MODEL DOOSAN DX300LCA HYDRAULIC EXCAVATOR :**

- Improved ergonomics, increases comfort and excellent all round visibility ensuring a safe and pleasant working environment.
- Improved reliability is achieved through the use of high performance materials combined with new methods of structural stress analysis, and leads to increased component life





### 7 INCH MONITOR

- New, user-friendly LCD color monitor with full access to machine settings and maintenance data.
- Operator can see rear view through new monitor (If customer selects rear view camera option)



### TROPICAL HYDRAULIC OIL (ISO VG 68)

- Maintain best performance of your machine by keeping optimum viscosity in tropical area.



### HEAVY-DUTY FRONT

- Overall reinforcement of steel plate by increasing thickness. (Side plate 20%, Bottom 15%)
- Reinforced boom-end bracket and enlarged arm-center boss
- Enlarged arm-end boss and reinforcement plate with abrasion-resistant beams.



### ADVANCED HD CABIN (OPTIONAL)

- ROPS, FOPS optional
- The latest interior (MP3, Joystick, Air suspension seat, etc.)



### ADVANCED FRONT BUSH

- EM bushing (Enhanced Macro-surface)
- Pocket & Dimple surface pattern : Optimized greasing & Trap foreign object
- Wear resistant solid lubricant coating : Noise free & enhanced anti-seizure property
- 30% longer life time than competitors



### PRE CLEANER

- Install rotor type pre-cleaner (Donaldson Top Spin 5"). So filtering efficiency 20% increased



### WATER SEPARATOR

- Fuel water separator filters water in fuel and enhance engine's durability and reduce quality problem caused by water in fuel (Extra Filter + Pre Filter + Main Filter)



### ADVANCED H-CLASS BUCKET

- Doosan new H-class bucket has the best strength of steel & the optimized design
- Add side cutter / add chamfer and inner plate at member part
- Increase bucket solidity and change casting type



### ADVANCED UNDERCARRIAGE

- Strengthen Sprocket structure and tooth
- Structure to prevent debris



# PERFORMANCE & PRODUCTIVITY

## DX300LCA

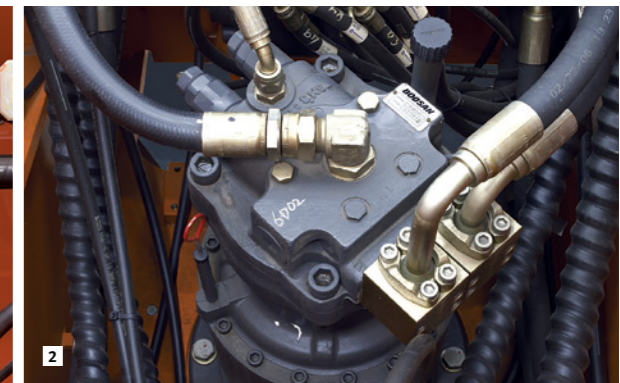
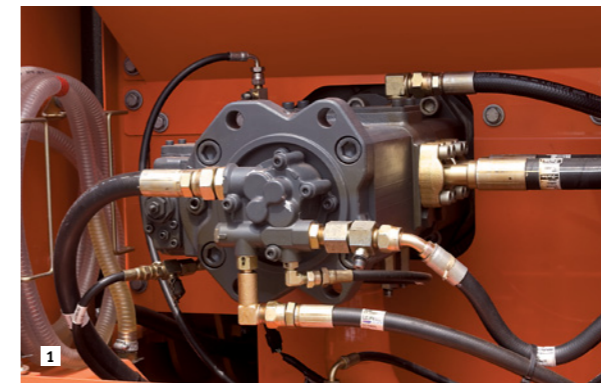
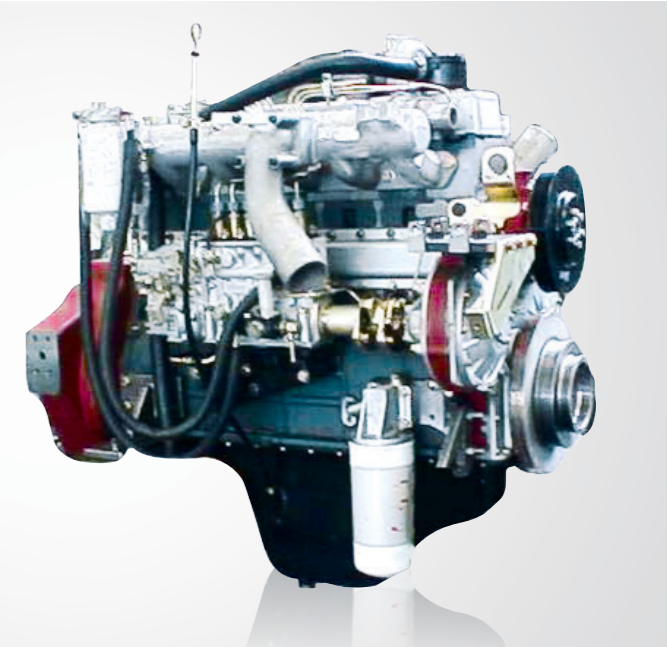
The performance of the DX300LCA has a direct effect on its productivity. Its new improved engine and new EPOS™ controlled hydraulic system have combined to create an unbeatable hydraulic excavator, with a cost/performance ratio that makes the DX300LCA even more appealing.



### DOOSAN ENGINE(DE08TIS)

Doosan product gives high performance through in-house engine

Doosan engine(In-house) perfectly harmonized with the hydraulic system and provides strong power. Mechanical engine provides high resistance to moisture, dust, and bad fuel quality. The best engine power in the industry(193HP) provides stable working speed even in the heavy workload situation.



#### 1 HYDRAULIC PUMP

The Main pump has a capacity of 2 x 247 l/min reducing cycle time while a high capacity gear pump improves pilot line efficiency.

#### 2 SWING DRIVE

Shocks during rotation are minimized, while increased torque is available to ensure rapid cycles.

#### EXCAVATOR CONTROL

Improved Excavator control by New EPOS™ system  
The brains of the hydraulic excavator, the EPOS™ (Electronic Power Optimizing system), have been improved, through a CAN (Controller Area Network) communication link, these units are now perfectly synchronised.



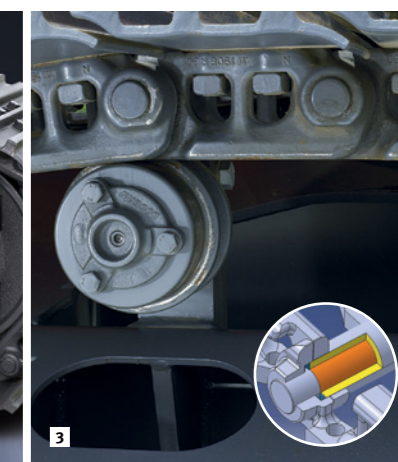
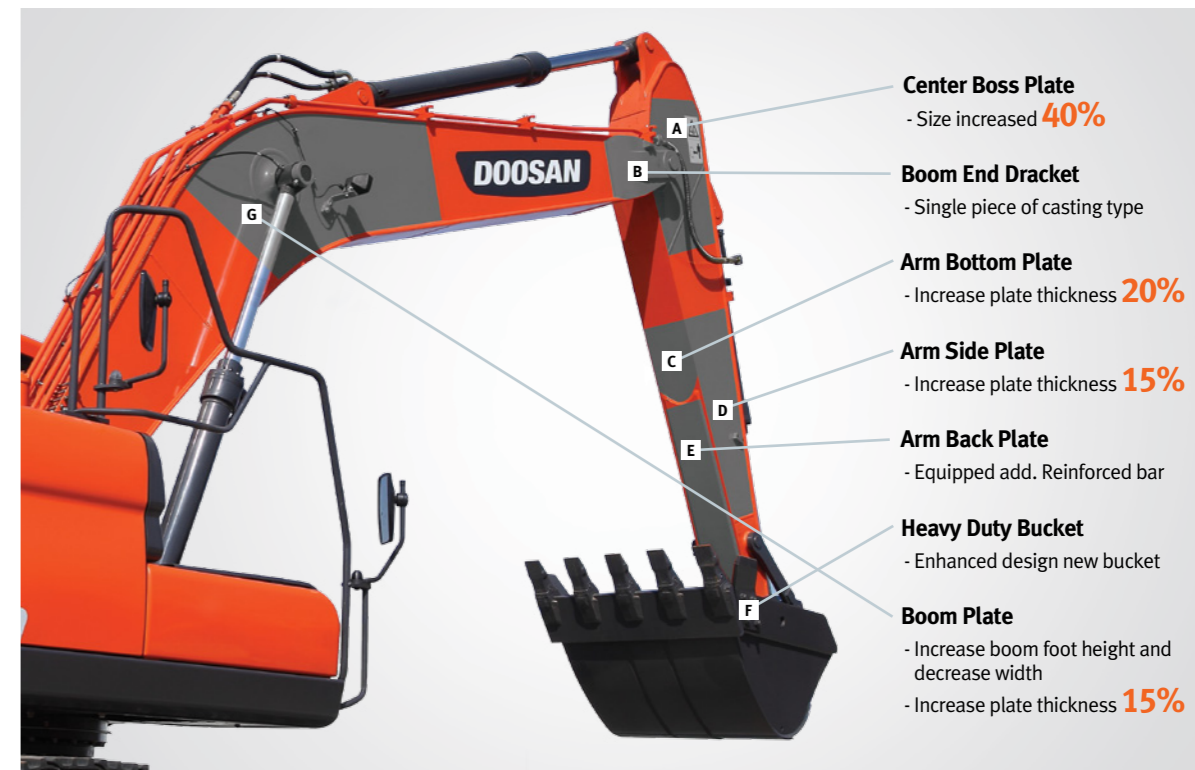
# DURABILITY & RELIABILITY

## DX300LCA

The reliability of an item of plant contributes to its overall lifetime operating costs. DOOSAN uses computer-assisted design techniques, highly durable materials and structures then test these under extreme conditions.



### HEAVY DUTY BOOM & ARM BOOM (STANDARD)



### 1 ADVANCED PIN-BUSH AND DISK / SHIM TECHNOLOGY

Pocket & Dimple surface pattern : Optimized greasing & Trap foreign object  
 - Wear resistant solid lubricant coating :  
 Noise free & enhanced anti-seizureproperty.  
 - Ultra-hard wear-resistant disc :  
 Increase the wear resistance and the service intervals.

### 2 TRACKS

The chain is composed of self-lubricating sealed links isolated from all external contamination. The tracks are locked by mechanically bolted pins.

### 3 IMPROVED TRACK SPRING AND IDLER

The track spring and the idler have been joined directly to achieve high durability and improved maintenance convenience.



**RELIEF CUTOFF**

The pump continues to supply flow even when the maximum pressure on the system is reached due to severe working environments and large workloads. Relief cutoff technology of DX300LCA prevents transfer of unnecessary flow to maintain powerful working level at the maximum value while reducing consumption of fuel.



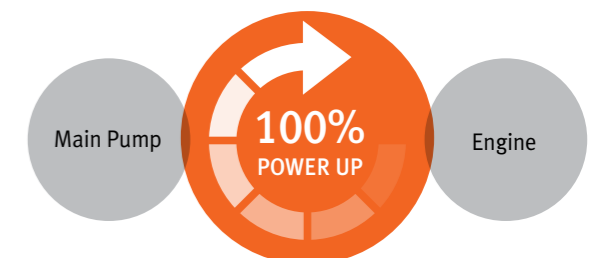
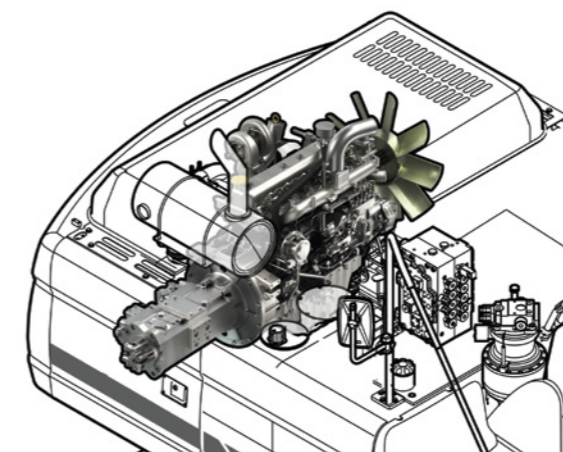
**OPTIMIZED LEVER CONTROL & AUTO IDLE**

When operator takes a break and leaves the control joystick fixed, both of the engine and the pump are kept in standby mode and prevents unnecessary fuel consumption.



**PUMP MATCHING TECHNOLOGY**

Engine & pump matching, the new technology of Doosan, fully resolves problems; low responses time of the system, unnecessary fuel consumption. Matching response time between pump and engine efficiently reduces unnecessary fuel consumption as well as exhaust fumes.





# OPERATOR COMFORT

# DX300LCA

The work rate of the hydraulic excavator is directly linked to the performance of its operator. DOOSAN Designed the DX300LCA by putting the operator at the center of the development goals. The result is significant ergonomic value that improves the efficiency and safety of the operator.



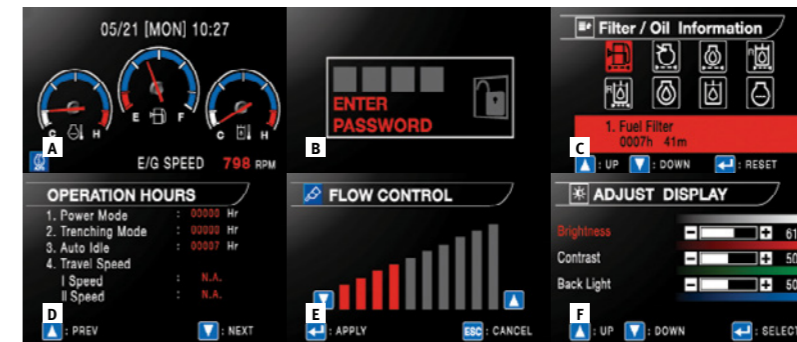
## MONITOR



- 3 power modes for maximum efficiency
  - Power mode
  - Standand mode
  - Economy mode

- 1 Control panel
- 2 Navigation modes
  - Rearview camera, Display selector
- 3 Working modes
  - Auto-idle & Flow rate control

- 3 work modes to suit your application
  - 1-way mode
  - 2-way mode
  - Digging mode



## CONTROL PANEL

- A Standard screen
- B Anti-theft protection
- C Filter/oil information
- D Operation history
- E Flow rate control
- F Contrast control



## 1 CONTROL LEVER

Very precise control of the equipment increases versatility, safety and facilitates tricky operations requiring great precision. Levelling operations and the movement of lifted loads in particular are made easier and safer. DOOSAN designed the DX300LCA by putting the operator at the center of the development goals. The result is significant ergonomic value that improves the efficiency and safety of the operator. More space, better visibility, air conditioning, a very comfortable seat... These are all elements that ensure that the operator can work for hours and hours in excellent conditions.

## 2 AIR SUSPENSION SEAT (OPTIONAL)

Equipped with various functions of adjustment forth and back and, and lumbar support, it reduces the vibration of equipment transmitted during work in an effective way. Also for considering winter working environment, Seat warmer functions equipped.



# EASY MAINTENANCE

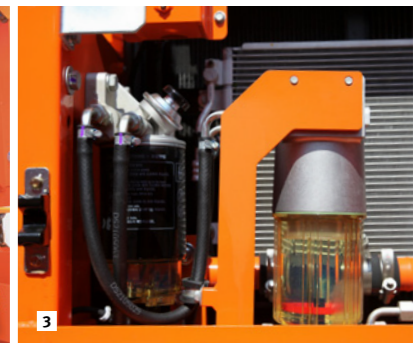
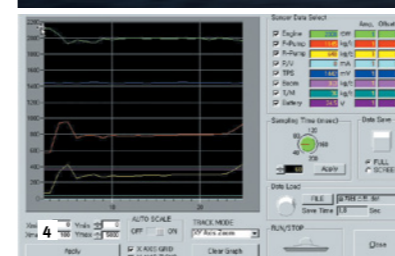
# DX300LCA

Short maintenance operations at long intervals increase the availability of the equipment on site. DOOSAN has developed the DX300LCA with a view to high profitability for the user.



## EASY MAINTENANCE

Access to the various radiators is very easy, making cleaning easier. Access to the various parts of the engine is from the top and via side panels.



### 1 HYDRAULIC OIL RETURN FILTER

The protection of the hydraulic system is made more effective by the use of glass fiber filter technology in the main oil return filter. This means that with more than 99.5% of foreign particles filtered out, the oil change interval is increased.

### 2 AIR CLEANER

The large capacity forced air cleaner removes over 99% of airborne particles, reducing the risk of engine contamination and making the cleaning and cartridge change intervals greater.

### 3 WATER SEPARATOR

High efficiency fuel filtration is attained by the use of multiple filters, including a fuel pre-filter fitted with a water separator that removes most moisture from the fuel.

### 4 PC MONITORING (DMS)

A PC monitoring function enables connection to the EPOS™ system, allowing various parameters to be checked during maintenance, such as pump pressures, engine rotation speed, etc. and these can be stored and printed for subsequent analysis.

### 5 PRE CLEANER

Install rotor type pre-cleaner (Donaldson Top Spin 5"). So filtering efficiency 20% increased

### 6 CENTRALIZED GREASE INLETS FOR EASY MAINTENANCE

The boom & arm grease inlets are grouped for easy access.

\* Option spec info is included to the images contained in this material and may not be the same with the actual specs.



# TELEMATICS SERVICE (OPTIONAL)

# GLOBAL PARTS NETWORK

## TELECOMMUNICATIONS

Data flow from machine to web



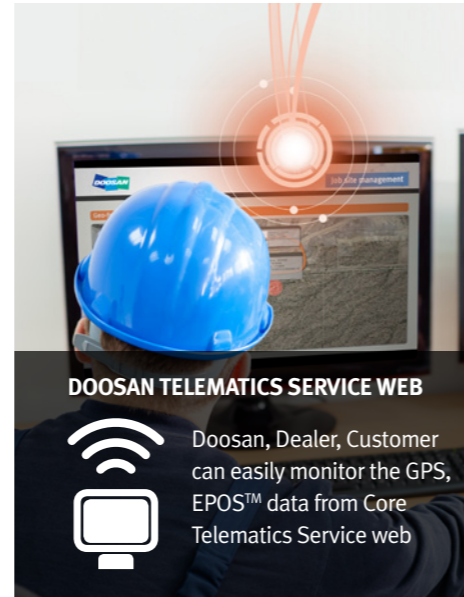
TELEMATICS SERVICE TERMINAL

Telematics Service terminal is installed to machine / connected to EPOS™



TELECOMMUNICATION

GPS, EPOS™ data is sent to designated server by GSM, Satellite telecommunication

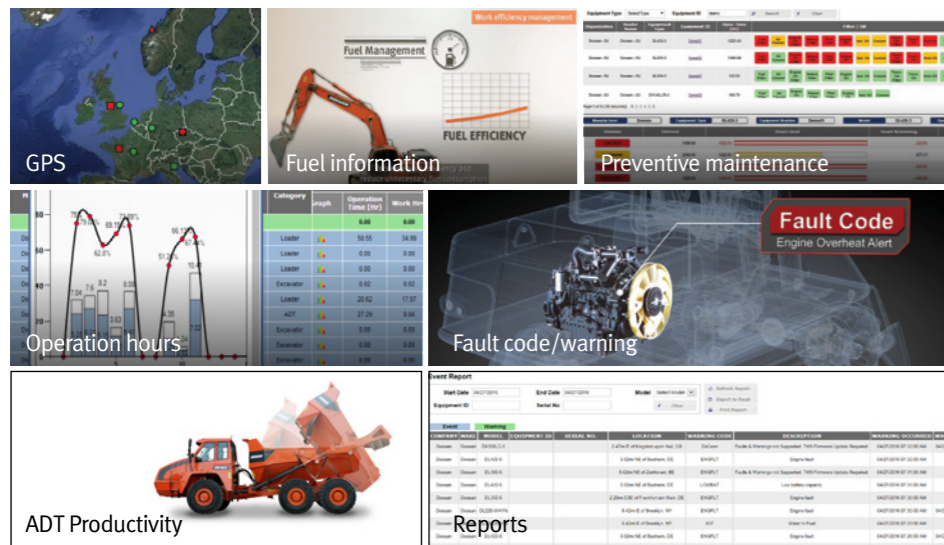


DOOSAN TELEMATICS SERVICE WEB

Doosan, Dealer, Customer can easily monitor the GPS, EPOS™ data from Core Telematics Service web

## FUNCTIONS

Doosan Telematics Service provides various functions to support your great performance



## TELEMATICS SERVICE BENEFITS

Doosan 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

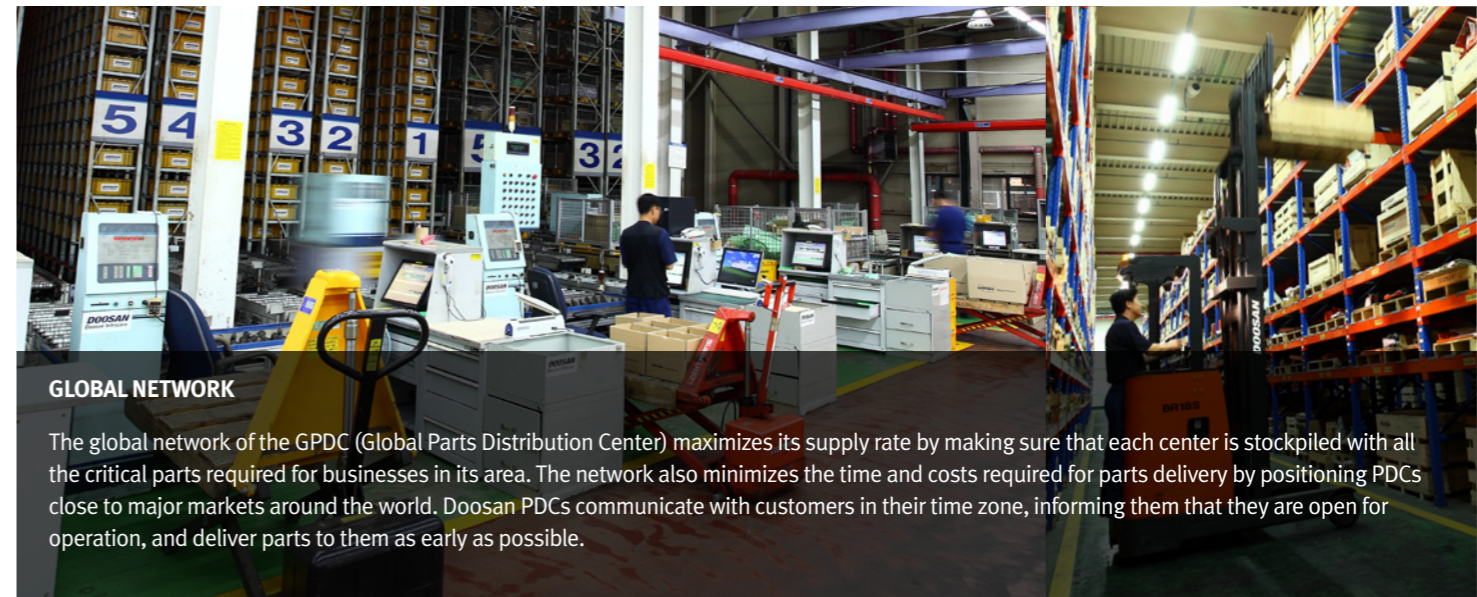
- Better service for customers
- Provide better quality of service
- Maintain machine value
- Better understanding of market needs

### Doosan

- Responsive to customer's voice
- Utilize quality-related field data
- Apply customer's usage profile to developing new machine

## GLOBAL PDC (PARTS DISTRIBUTION CENTER) NETWORK

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



GLOBAL NETWORK

The global network of the GPDC (Global Parts Distribution Center) maximizes its supply rate by making sure that each center is stocked 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. Doosan 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 seven other PDCs include one in China (Yantai), one in the USA (Chicago), one in Brazil (Campinas), two in Europe (Germany and the UK), one in the Middle East (Dubai), and one in Asia (Singapore).



MPDC : Mother Parts Distribution Center PDC : Parts Distribution Center

FUNCTION	EXCAVATOR	WHEEL LOADER	ADT
GPS	All models	All models	All models
E-mail reports	All models	All models	All models
Operation hours	All models	All models	All models
Maintenance parts	All models	Tier 4 only	All models
Fault code/ Warning	All models	Tier 4 only	All models
Fuel information	All models	Tier 4 only	All models
Dump capacity	N/A	N/A	All models

PDC BENEFIT

**Distribution Cost Reduction**

**Maximum Parts supply rate**

**Shortest distance/time parts delivery**

**Real-time service support**

**Minimum downtime**

Heavy Construction Bucket, which is also called Heavy Duty bucket, is the most commonly used bucket in the construction equipment market and is designed mainly for use in heavy construction but also used in low density mining and quarry application.

**Hinge**  
Optimized reinforced construction for high strength and performance matched to the machine's power.

**Adapter**  
Corner adapter Positioned under Side cutter to increase strength.

**Wrapper (Shell)**  
Shape increases heel clearance and decreases wear rate.

**Horizontal Bottom Wear Plates**  
Protects bottom section and reinforces bucket for greater strength and rigidity. Designed for easily replacement during maintenance repair.

**Lip Plate (Cutting Edge)**  
Beveled edge for better penetration and 500BHN material for high abrasion resistance.

**Tooth (Tip)**  
Designed with mechanical properties that maintain hardness for long wear life in tough digging applications.

**Side cutter**  
Designed for better penetration and used high wear resistant material.

**Side Wear Plates**  
Side plates meet up with bottom wear plates for seamless corner protection.



### General Purpose bucket

which is also called 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 Duty bucket

which is also called Heavy Duty bucket, is the most commonly used bucket in the construction equipment market and is designed mainly for use in heavy construction but also used in low density mining and quarry application.



### Severe Duty bucket

which is also called Severe Duty bucket. The bucket is designed for use in high density mining and quarry application using high strength and high abrasion resistance materials. It can be used in the toughest of applications.



### Extra Severe Duty Bucket

which is also called X class bucket. The bucket is designed for use in high density mining and quarry application using high strength and high abrasion resistance materials. It can be used in the toughest of applications.

**TOOTH**

**GD (General Duty) Tooth**  
Optimized design for Doosan's GP and the new General Construction bucket. Suitable for machines ranging from 14 to 70 tons. Recommended for general construction and utility loading applications.

**HD (Heavy Duty) Tooth**  
Optimized design for the Heavy Construction bucket. Suitable for machines ranging from 14 to 70 tons. Recommended for most applications including excavating, trenching, loading and medium density quarries and mining.

**SD (Severe Duty) Tooth**  
Optimized design for the Severe Mining bucket and the Xtreme Mining bucket. Suitable for machines ranging 22 to 70 tons. Recommended for extremely tough quarries and mining application.

## BUCKET



	Capacity (SAE/PCSA)	Capacity (SAE/PCSA)
<b>GENERAL PURPOSE BUCKET</b>	0.64 / 0.80 / 1.03 / 1.27 / 1.51 / 1.75 m <sup>3</sup>	<b>SEVERE DUTY BUCKET</b> 1.20 / 1.45 / 1.57 m <sup>3</sup>
<b>HEAVY DUTY BUCKET</b>	1.04 / 1.23 / 1.47 / 1.60 / 1.72 m <sup>3</sup>	<b>ROCK BUCKET</b> 1.16 m <sup>3</sup>

## DEMOLITION



	Model	Weight	Tool diameter	Frequency
<b>HYDRAULIC BREAKER</b>	DXB230H	2,465 kg	150 mm	310~680 BPM
<b>FIXED PULVERIZER</b>	FP34	2,745 kg	1,061 mm	78 t
<b>ROTATING CRUSHER</b>	RC34	2,950 kg	1,056 mm	78 t
<b>MULTI-PROCESSOR</b>	C / D / P / S MP34	3,030 / 3,000 / 3,130 / 2,990 kg	1,119 / 983 / 1,008 / 573 mm	95 / 101 / 103 / 104 t

C : Crushing jaw  
D : Demolition jaw  
P : Pulverizing jaw  
S : Shearing jaw



## MATERIAL HANDLING

	Model	Weight	Max Jaw opening	Max. Closing Force	Capacity
<b>MULTI-GRAPPLE</b>	MG34	2,275 kg	2,350 mm	9.2 t	1.10 m <sup>3</sup>
<b>STONE GRAPPLE</b>	SG30	1,685 kg	2,200 mm	-	0.59 m <sup>2</sup>
<b>WOOD GRAPPLE</b>	L / P WG30	1,585 / 1,445 kg	2,200 mm	-	0.75 m <sup>2</sup>
<b>LOG GRAPPLE</b>	L / P LG30	1,715 / 1,680 kg	2,200 mm	-	0.81 m <sup>2</sup>
<b>ORANGE GRAPPLE</b>	OG30	1,700 kg	2,290 mm	-	0.60 m <sup>2</sup>

L : Link type  
P : Pendulum type



## EARTH MOVING

	Model	Weight	Max. Jaw opening	Capacity
<b>CLAMSHELL BUCKET</b>	CB30	1,920 kg	1,985 mm	1.40 m <sup>3</sup>
<b>PLATE COMPACTOR</b>	Model	Weight	Base plate (WxL)	Impulse force
	PC34	1,807 kg	1,000 x 1,300 mm	17.3 t
<b>RIPPER</b>	Model	Weight	Length	
	RP30	587 kg	1,298 mm	

## CONNECTING



	Model	Weight	Bucket Pin dia.	Working rage (Pin to Pin)
<b>Quick Coupler</b>	QC30	584 kg	90 mm	488 ~ 603 mm

# TECHNICAL SPECIFICATIONS

## ENGINE

<b>Model</b>
Doosan DE08TIS

<b>Type</b>
Water-Cooled, Direct Injection

<b>Rated horse power</b>
151kW (202HP) @ 1,900 rpm (SAE J 1995,Gross) 146 kW (193 HP) @ 1,900 rpm (SAE J1349,net)

<b>Max torque</b>
90 kgf.m @ 1,300 rpm

<b>Piston displacemntt</b>
8,071cc

<b>Bore &amp; stroke</b>
Ø111mm x 139 mm

<b>Starting motor</b>
24 V x 6.0 kW

<b>Batteries</b>
12 V x 2/150 AH

<b>Air cleaner</b>
Double element and pre-filtered Turbo with auto dust evacuation.

## HYDRAULIC SYSTEM

The heart of the system is the EPOS™ (Electronic Power Optimizing System). It allows the efficiency of the system to be optimized for all working conditions and minimizes fuel consumption. The new EPOS™ is connected to the engine electronic control via a data transfer link to harmonize the operation of the engine and hydraulics.

- The hydraulic system enables independent or combined operations.
- Two travel speeds offer either increased torque or high speed tracking.
- Cross-sensing pump system for fuel savings.
- Auto deceleration system.
- Two operating modes, two power modes.
- Button control of flow in auxiliary equipment circuits.
- Computer-aided pump power control.

<b>Main pumps</b>
Tandem, Axial Piston max flow : 2-247l/min Displacement : 131 cc/rev weight : 130kg

<b>Pilot pump</b>
Gear pump - max flow : 28.5l/min Pilot pump : 15 cc/rev Relief valve pressure : 40 kgf/cm <sup>2</sup>

<b>Maximum system pressure</b>
Boom/Arm/Bucket Working, Travel - 330 kg/cm <sup>2</sup> Pressure up - 350 kg/cm <sup>2</sup>

## WEIGHT

Shoe width	Operating weight	Ground pressure (kgf/cm <sup>2</sup> )
(STD)600G mm	0.56 kgf/cm <sup>2</sup>	29.3 ton
(OPT)700G mm	0.49 kgf/cm <sup>2</sup>	29.9 ton
(OPT)800G mm	0.43 kgf/cm <sup>2</sup>	30.2 ton
(OPT)850G mm	0.41 kgf/cm <sup>2</sup>	30.4 ton
(OPT)600DG mm	0.57 kgf/cm <sup>2</sup>	29.9 ton

## HYDRAULIC CYLINDERS

The piston rods and cylinder bodies are made of high-strength steel. A shock absorbing mechanism is fitted in all cylinders to ensure shock-free operation and extend piston life.

Cylinders	Quantity	Bore x Rod diameter x stroke
Boom	2	140 X 95 X 1,440mm
Arm	1	150 X 105 X 1,755mm
Bucket	1	140 X 90 X 1,150mm
SLR	1	95 X 65 X 885mm

## UNDERCARRIAGE

Chassis are of very robust construction, all welded structures are designed to limit stresses. High-quality material used for durability. Lateral chassis welded and rigidly attached to the undercarriage. Track rollers lubricated for life, idlers and sprockets fitted with floating seals. Tracks shoes made of induction-hardened alloy with triple grousers. Heat-treated connecting pins. Hydraulic track adjuster with shock-absorbing tension mechanism

**Upper rollers(Standard shoe)** - 2

**Lower rollers** - 9

**Track shoes** - 48

**Overall track length** - 4,940 mm

## SWING MECHANISM

High-torque, axial piston motor with planetary reduction gear bathed in oil. Swing circle is singlerow, shear type ball bearing with induction-hardened internal gear. Internal gear and pinion gear immersed in lubricant.

**Swing speed** - 0 to 9.9 rpm

**MAX. SWING TORQUE** - 10363 kgf.m

**MAX. SWING TORQUE** - 10070 kgf.m

## DRIVE

Each track is driven by an independent, high-torque, axial piston motor through planetary reduction gear. Two levers or foot pedal control provide smooth travel or counter-rotation upon demand.

**Travel speed (HIGH/low)** - 3.0/5.1km/h

**Maximum traction force** - 25.2 / 13.7 ton

**Gradeability** - 70%

## REFILL CAPACITIES

**Fuel tank** - 500l

**Cooling system (Radiator capacity)** - 35l

**Engine oil** - 31.5l

**Swing drive(each)** - 6l

**Final drive(each)** - 2x7l

**Hydraulic tank** - 280l

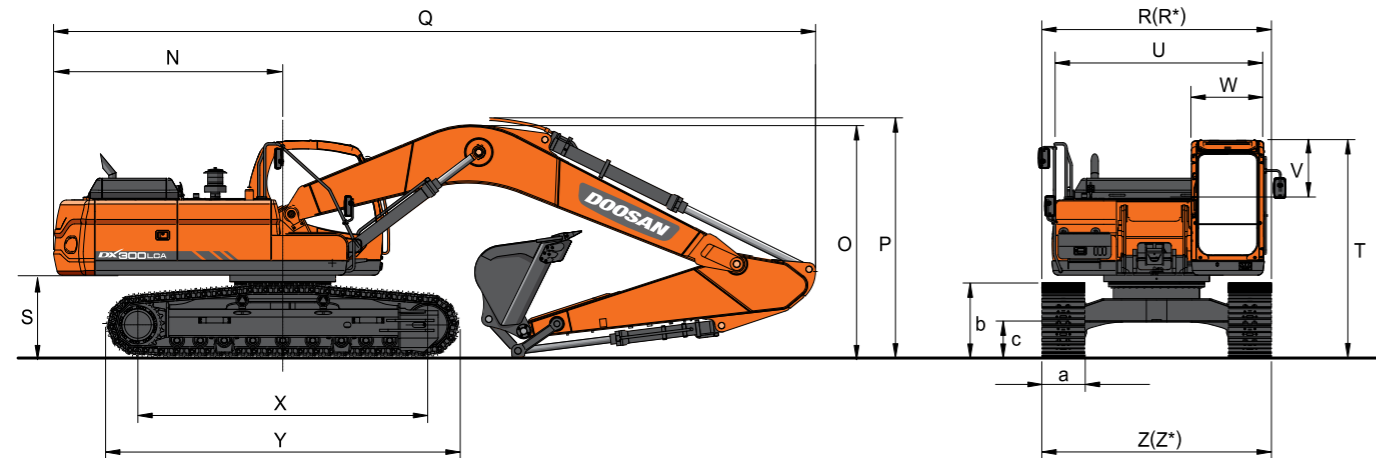
## BUCKET

						C/W (ton)	5.3					5.9
						SHOE (mm)	600					800
Bucket Type	Capacity (m <sup>3</sup> )		Width (mm)		Radius (mm)	Width (kg)	6.245m Boom			6.245m HD Boom		SLR (10m)
	SAE/PCSA	CECE	W/O Cutter	With Cutter			2.5m Arm	3.1m Arm	3.75m Arm	2.85m	3.1m HD	SLR (7m)
General Purpose Bucket	0.64	0.55	1,083	1,167	1,220	423	X	X	X	X	X	C
	0.80	0.70	962	1,037	1,602	847	A	A	A	A	A	X
	1.05	0.90	1,172	1,247	1,602	971	A	A	A	A	A	X
	1.27	1.10	1,376	1,445	1,602	1,090	A	A	A	A	A	X
	1.50	1.30	1,582	1,657	1,602	1,199	A	B	C	A	B	X
Rock Bucket	1.75	1.50	1,792	1,867	1,602	1,301	B	C	D	C	C	X
	1.16	0.99	1,432	N/A	1,634	1,180	A	A	A	A	A	X
Heavy Duty Bucket	1.04	0.94	1,050	N/A	1,553	940	A	A	A	A	A	X
	1.23	1.10	1,200	N/A	1,553	1,016	A	A	A	A	A	X
	1.47	1.31	1,400	N/A	1,553	1,117	A	B	B	A	B	X
	1.60	1.41	1,500	N/A	1,553	1,168	A	B	C	B	B	X
	1.72	1.52	1,600	N/A	1,553	1,239	B	C	C	B	C	X
Ditching Bucket	1.20	1.08	1200	N/A	1,593	1,287	A	A	A	A	A	X
	1.45	1.29	1400	N/A	1,593	1,401	A	B	C	B	B	X
	1.57	1.39	1500	N/A	1,593	1,457	B	C	C	B	C	X
Maximum load pinXon(payload+bucket)							4622	4150	3828	4437	4099	1541

Based on ISO 10567 and SAE J296, arm length without quick change clamp  
A : Suitable for materials with density of 2,100 kg/m<sup>3</sup> (3,500 lb/yd<sup>3</sup>) or less  
B : Suitable for materials with density of 1,800 kg/m<sup>3</sup> (3,000 lb/yd<sup>3</sup>) or less  
C : Suitable for materials with density of 1,500 kg/m<sup>3</sup> (2,500 lb/yd<sup>3</sup>) or less  
D : Suitable for materials with density of 1,200 kg/m<sup>3</sup> (2,000 lb/yd<sup>3</sup>) or less  
X : Not recommended

This bucket recommendation is based on machine stability considering the tipping load with certain density of handling material, and should be strictly followed.  
It's more recommendable to use a smaller size of bucket than recommendation under the severe working condition and application to avoid the durability risks.

# DIMENSIONS

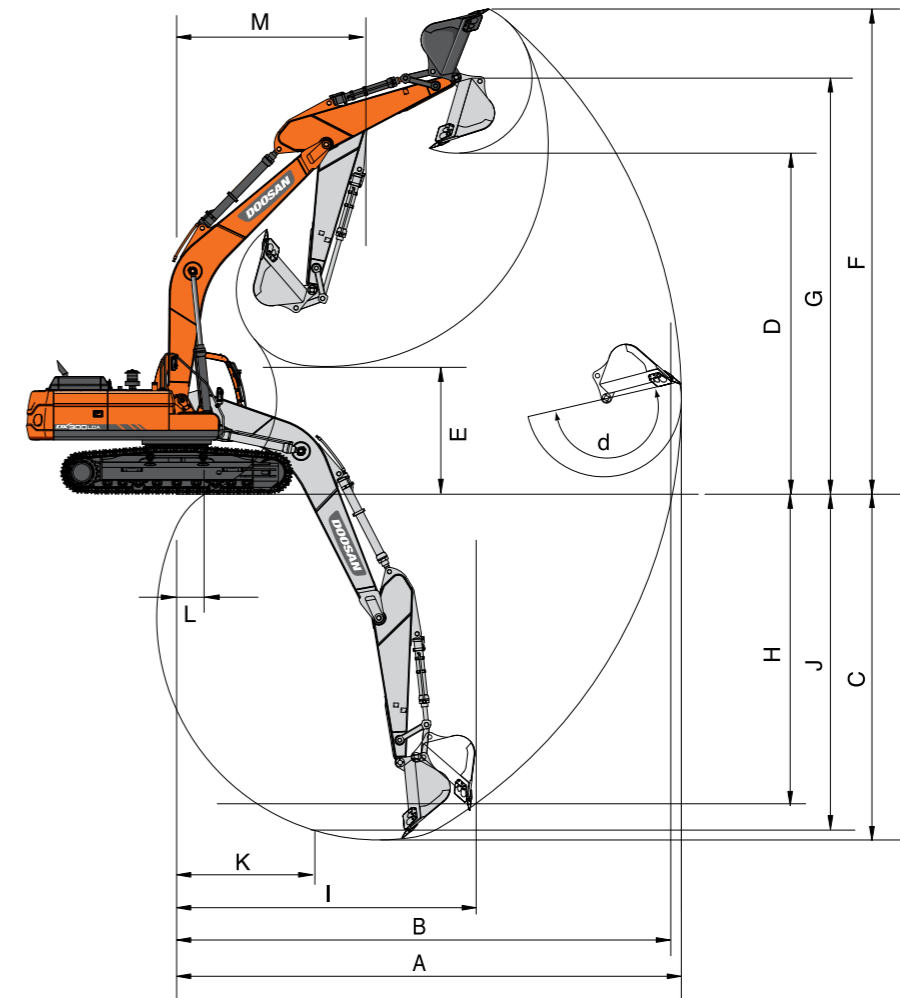


## STANDARD

Dimensions (6,245mm(20'6")Boom, 3,100mm(10'2")Arm, 600mm(24")shoe)

Boom Type (One Piece)	(mm)		6,245		10,000	
Arm Type	(mm)		3,100	2,500	3,750	7,000
Bucket Type (pcsa)	(m <sup>3</sup> )		1.27	1.51	1.03	0.64
Tail Swing Radius	(mm)	N	3,200	←	←	←
Shipping Height (Boom)	(mm)	O	3,250	3,369	3,366	3,427
Shipping Height (Hose)	(mm)	P	3,345	3,475	3,475	3,455
Shipping Length	(mm)	Q	10,620	10,740	10,660	14,370
Shipping Width (Std.)	(mm)	R	3,200	←	←	←
C/Weight Clearance	(mm)	S	1,150	←	←	←
Height Over Cab.	(mm)	T	3,065	←	←	←
House Width	(mm)	U	2,960	←	←	←
Cab. Height Above House	(mm)	V	845	←	←	←
Cab. Width	(mm)	W	1,010	←	←	←
Tumbler Distance	(mm)	X	4,040	←	←	←
Track Length	(mm)	Y	4,940	←	←	←
Undercarriage Width (Std.)	(mm)	Z	3,200	←	←	3,400
Shoe Width	(mm)	a	600	←	←	800
Track Height	(mm)	b	1,048	←	←	←
Car Body Clearance	(mm)	c	500	←	←	←

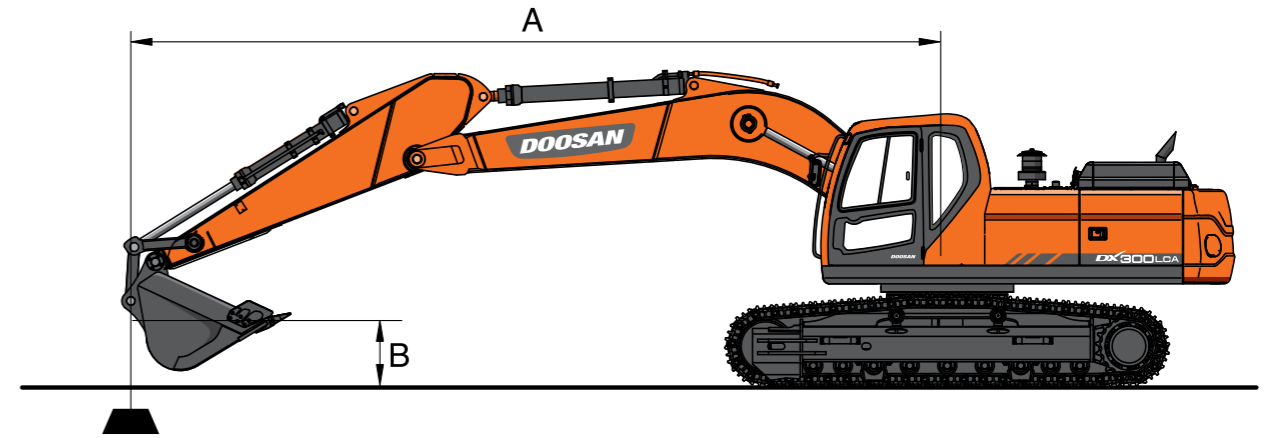
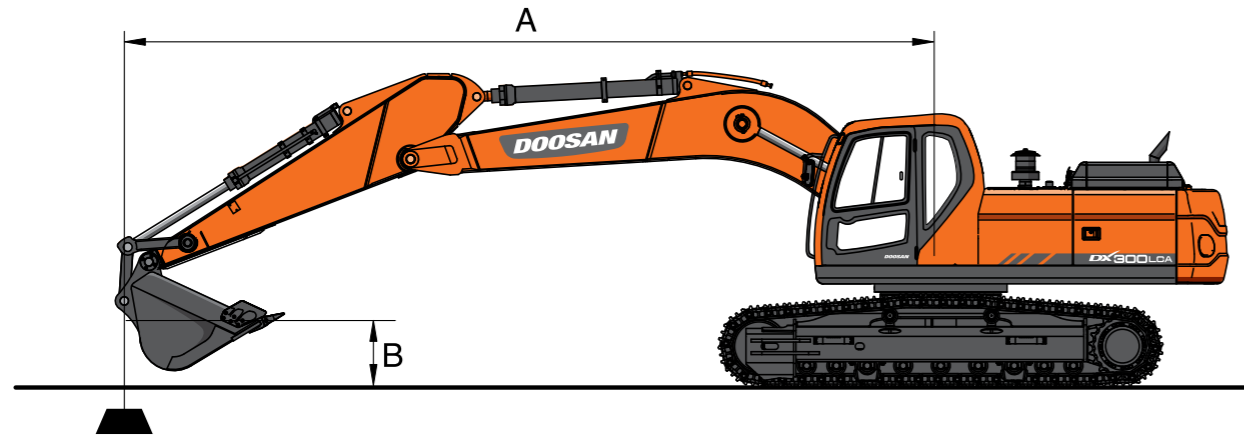
# WORKING RANGES



## WORKING RANGES

Boom Type (One Piece)	(mm)		6,245		10,000	
Arm Type	(mm)		3,100	2,500	3,750	7,000
Bucket Type (pcsa)	(m <sup>3</sup> )		1.27	1.51	1.03	0.64
MAX. digging reach	(mm)	A	10,745	10,170	11,270	17,520
Max. digging reach (ground)	(mm)	B	10,550	9,965	11,085	17,405
MAX. digging depth	(mm)	C	7,360	6,760	8,010	13,855
Max. loading height	(mm)	D	7,260	6,930	7,365	11,930
Min. loading height	(mm)	E	2,720	3,325	2,070	2,310
Max. digging height	(mm)	F	10,330	9,970	10,410	14,175
Max. bucket pin height	(mm)	G	8,845	8,545	8,980	13,185
Max. vertical wall depth	(mm)	H	6,190	5,405	6,670	11,610
Max. radius vertical	(mm)	I	6,810	6,870	7,045	10,905
Max. digging depth 8' line	(mm)	J	7,165	6,525	7,830	13,720
Min. radius 8' line	(mm)	K	2,990	2,965	2,925	5,090
Min. digging reach	(mm)	L	595	1,975	-350	1,055
Min. swing radius	(mm)	M	4,054	4,060	4,060	6,125
Bucket angle	(deg)	d	175	175	174	169

# LIFTING CAPACITY



## STANDARD

### Metric

Boom : 6,245mm(20'6") Arm : 3,100mm(10'2") Bucket : SAE 1.27m<sup>3</sup> HEAPED(CECE 1.1m<sup>3</sup>) Shoe : 600mm(24")

Unit : 1,000kg

A(m)	2		3		4		5		6		7		8		9		Max. Reach		A(m)	
B(m)	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	
8																		* 3.77	* 3.77	7.09
7																		* 3.65	* 3.65	7.83
6																		* 3.62	* 3.62	8.3
5																		* 3.66	* 3.66	8.81
4																		* 3.77	* 3.77	9.09
3																		* 3.96	* 3.96	9.25
2																		* 4.22	* 4.22	9.31
1																		* 4.58	* 4.58	9.25
0																		* 5.09	* 5.09	9.09
-1																		* 5.6	* 5.6	8.8
-2																		* 6.03	* 6.03	8.39
-3																		* 6.75	* 6.75	7.83
-4																		* 7.58	* 7.58	7.08
-5																		* 8.02	* 8.02	6.07
-6																		* 8.45	* 8.45	4.64

### Feet

Unit : 1,000ld

A(ft)	10		15		20		25		30		Max. Reach		A(ft)		
B(ft)	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧		
25													* 8.19	* 8.19	24.25
20													* 7.98	* 7.98	27.38
15													* 7.16	* 7.16	29.33
10													* 8.69	* 8.69	30.34
5													* 9.65	* 9.65	30.5
0													* 11.23	* 11.23	29.81
-5													* 12.78	* 12.78	28.23
-10													* 14.97	* 14.97	25.58
-15													* 17.26	* 17.26	21.44
-20													* 18.69	* 18.69	14.65

- RATINGS ARE BASED ON SAE J1097
- THE LOAD POINT IS A HOOK LOCATED ON THE BACK OF THE BUCKET.
- \* RATED LOADS ARE BASED ON HYDRAULIC CAPACITY.
- RATED LOADS DO NOT EXCEED 87% OF HYD. CAPACITY OR 75% OF TIPPING CAPACITY.

🔧 : Rating Over Front  
 🔄 : Rating Over Side or 360 degree

## OPTION 1

### Metric

Boom : 6,245mm(20'6") Arm : 2,500mm(8'2") Bucket : SAE 1.51m<sup>3</sup> HEAPED(CECE 1.3m<sup>3</sup>) Shoe : 600mm(24")

Unit : 1,000kg

A(m)	2		3		4		5		6		7		8		Max. Reach		A(m)			
B(m)	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧			
8																		* 5.64	* 5.64	6.22
7																		* 5.65	* 5.65	7.07
6																		* 5.73	* 5.73	7.69
5																		* 5.84	* 5.84	8.13
4																		* 6.00	* 6.00	8.44
3																		* 6.45	* 6.45	8.62
2																		* 7.63	* 7.63	8.68
1																		* 8.11	* 8.11	8.62
0																		* 8.23	* 8.23	8.44
-1																		* 8.14	* 8.14	8.13
-2																		* 7.04	* 7.04	7.68
-3																		* 8.04	* 8.04	7.06
-4																		* 8.49	* 8.49	6.22
-5																		* 8.94	* 8.94	5.04
-6																				

### Feet

Unit : 1,000ld

A(ft)	10		15		20		25		Max. Reach		A(ft)			
B(ft)	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧			
25												* 12.42	* 12.42	21.51
20												* 12.60	* 12.60	25.04
15												* 13.32	* 13.32	27.17
10												* 14.3	* 14.3	28.26
5												* 16.01	* 16.01	28.42
0												* 18.86	* 18.86	27.69
-5												* 15.7	* 15.7	25.98
-10												* 17.76	* 17.76	23.06
-15												* 19.30	* 19.30	18.37

- RATINGS ARE BASED ON SAE J1097
- THE LOAD POINT IS A HOOK LOCATED ON THE BACK OF THE BUCKET.
- \* RATED LOADS ARE BASED ON HYDRAULIC CAPACITY.
- RATED LOADS DO NOT EXCEED 87% OF HYD. CAPACITY OR 75% OF TIPPING CAPACITY.

🔧 : Rating Over Front  
 🔄 : Rating Over Side or 360 degree



# STANDARD & OPTION

## STANDARD EQUIPMENT

### Boom & Arm

---

- 6.245m Boom (Heavy duty)
- 3.1 Arm (Heavy duty)

### Hydraulic system

---

- Boom and arm flow regeneration
- Boom and arm holding valves
- Swing anti-rebound valves
- Spare ports (Control valve)
- One-touch power boost

### Cabin & Interior

---

- Viscous cab mounts
- All weather sound suppressed type cab
- Air conditioner & Heater
- Adjustable suspension seat with head rest and adjustable arm rest
- Pull-up type front window and removable lower front window
- Room light
- Intermittent windshield wiper
- Cigarette lighter and ashtray
- Cup holder
- Hot & Cool box
- LCD color monitor panel
- E/G RPM control dial
- AM/FM radio + MP3 (USB)
- Remote radio ON/OFF switch
- 12V spare powers socket
- Serial communication port for laptop PC interface
- Joystick lever with 3 switches
- Sun visor
- Sun roof

### Safety

---

- Large handrails and step
- Convex metal anti-slip plates
- Seat belt
- Hydraulic safety lock lever
- Safety glass
- Hammer for emergency escape
- Right and left rearview mirrors
- Travel alarm
- Battery protector cover

### Others

---

- Double element air cleaner
- Additional Water separator
- Dry Type Pre Cleaner
- Fuel filter
- Dust screen for radiator/oil cooler
- Engine overheat prevention system
- Engine restart prevention system
- Self-diagnostic system
- Alternator (24V, 50 amps)
- Electric horn
- Halogen working lights (frame mounted 1, boom mounted 2)
- Hydraulic track adjuster
- Track guards
- Greased and sealed track link
- Hydraulic oil tank air breather filter
- Long & Fixed track

## OPTIONAL EQUIPMENT

Some of optional equipments may be standard in some markets. Some of this optional equipment is not available in some markets. You must check with the local DOOSAN dealer to know about the availability or to release the adaptation following the needs of the applications

### Boom & Arm

---

- 6.245m Boom
- 10.0m Boom
- 2.5m Arm (Heavy duty)
- 2.85m Arm (Heavy duty)
- 3.1m Arm (Heavy duty)
- 3.1m Arm
- 3.75m Arm
- 7.0m Arm

### Safety

---

- Boom and arm hose rupture protection valve
- Overload warning device
- Cabin Top/Front guard (ISO 10262, FOGS standard)
- Travel & swing alarm
- Rotating / Telescopic beacon
- Lock valve
- Rear lamp for number plate

### Cabin & Interior

---

- Air suspension seat
- Rain shield
- High seat Mount
- Breaker pedal
- ROPS/FOGS Cabin
- Cabin front guard (Upper and lower guard)
- Steel roof cover
- Side mirror

### Others

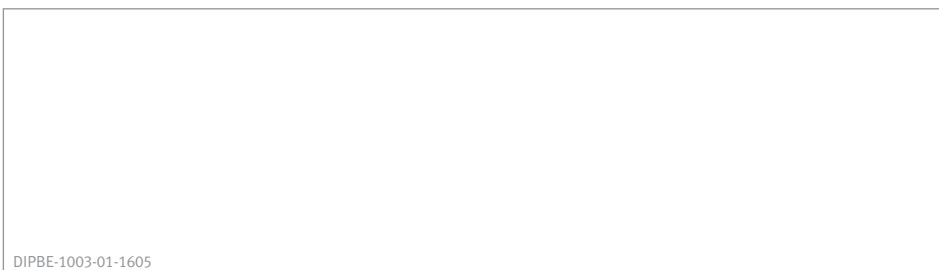
---

- Piping for crusher
- Piping for quick clamp
- Piping option
  - Breaker with flow control valve - Crusher
  - Crusher with tilting - Rotating
  - Clamshell - Quick Clamp
- 700mm/800mm/850mm shoe
- Lower wiper
- 80A alternator
- Fuel filler pump
- Working lights
  - 4-front/2-rear on cabin
  - 2-front on cabin
  - 1 on counterweight
- Counterweight (5.0 Ton / 5.9 Ton)
- Noise Kit
- Hydraulic Oil
  - Cold weather (VG32)
  - Normal (VG46)
  - Tropical weather (VG68)
- Full length track guard
- Breaker filter
- Water Separator with heater
- Oil Washed pre cleaner
- Heavy duty main frame
- Heavy duty track frame

# 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, Brazil, Doosan has 1400 dealer networks and Doosan is providing reliable products and trusted solutions for your stable business at no risk.



**Doosan Infracore Korea Office (HQ)**  
27F, Doosan Tower, 275, Jangchungdan-ro,  
Jung-gu, Seoul, Korea(04563)  
Tel : 82 2 3398 8114

[www.doosaninfracore.com/ce/](http://www.doosaninfracore.com/ce/)

DIPBE-1003-01-1605

Materials and Specifications in the catalogue are subject to change without notice.