

DX225LCA-2



SIMPLE AND POWERFUL JUST RIGHT FOR THE TOUGH ENVIRONMENT

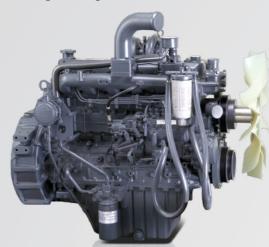




NEWLY DEVELOPED AND IMPROVED, YET STEADY AS ALWAYS, NEW AND QUALITY-PROVEN MACHINE FOR THE TOUGH ENVIRONMENT

KEY COMPONENTS NEWLY DEVELOPED/ENHANCED WITH DOOSAN'S TECHNOLOGIES

Doosan offers you excellent performance and durability with its own design and manufacturing technologies.



1 DB58TIS DOOSAN ENGINE

- DX225LCA-2 runs on Doosan DB58TIS engine, one of the most widely-used engines in Doosan.
- Doosan DB58TIS engine has already gained recognition in the market for reliability, low fuel consumption and easy maintenance with quality that has been validated.



NEW DOOSAN MCV

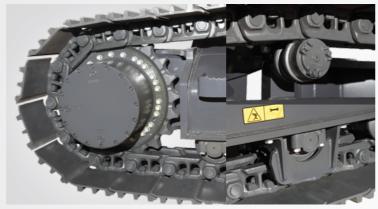
Manufactured with Doosan's technologies, this new version of MCV is more fuel-efficient than its previous model.



3 ENHANCEMENTS TO MAIN PUMP

This new main pump developed for DX225LCA-2 helps improve fuel economy with optimized cylinders and higher system pressures.







O STRENGTHENED IDLER BRACKET

The idler bracket has been fitted with a reinforced bar to further protect the main components from external impacts.



ADVANCED FRONT BUSH

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

PRIDE OF DX225LCA-2, EXCELLENT WORK EFFICIENCY







FUEL EFFICIENCY UP UP UP!!

The enhancements to the hydraulic systems of DX225LCA-2 enable you to use engine power in a more effective manner. DX225LCA-2 is capable of performing the same intensity of operations at much lower fuel consumption than others of the same class, significantly increasing your work efficiency.

max.

* Above result is based on internal test, against DX225LCB.

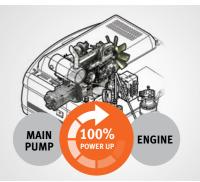
OPTIMIZED LEVER CONTROL & AUTO IDLE

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 response time of the system, unnecessary fuel consumption. Matching response time between pump and engine efficiently reduces unnecessary fuel consumption as well as exhaust fumes.



A SPACIOUS CABIN WITH ENHANCED COMFORT





* Above image may differ from actual product.

PRIDE OF DOOSAN, DOOSAN MAINTENANCE

ARE YOU WORRIED ABOUT YOUR MACHINE MAINTENANCE? DON'T BE. DOOSAN'S MAINTENANCE SERVICE PROGRAM IS AT YOUR SERVICE AND THIS WHOLE NEW DX225LCA-2 IS ALSO PART OF IT. TRUST DOOSAN.





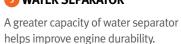
We redoubled our efforts for easier maintenance.





A rotor type of pre-cleaner in DX225LCA-2 filters out particles larger than 20 microns with over 99% accuracy.

O PRE-CLEANER





6 ENHANCED RESERVE TANK

This new reserve tank, that is bigger A larger cooling module and a longer in size and more effective in UV protection, has reduced failure risks.



GREATER COOLING CAPACITY

life for your machine.





2 NEW VERTICAL FUEL LEVEL **SENSOR**

You can get more accurate information about the remaining fuel level regardless of the product positions.





Separate design of injection and discharge of grease reduced a failure risk in valves.

TELEMATICS SERVICE (OPTIONAL)

GLOBAL PARTS NETWORK

TELECOMMUNICATIONS

Data flow from machine to web







BENEFITS

Location

FUNCTIONS

Geo-fence



Reports Periodic operation report

Utilization



Operation Trend

- · Total operation hour
- · Operation hour by mode



Fuel Efficiency*

- · Fuel level · Fuel consumption

Preventive maintenance by item replacement cycle

Filter & Oil Management





Warning & Alert

- · Detect machine warnings
- Antenna disconnection
- Geo/Time fence



^{*} Functions may not be applied to all models. Please contact your sales representative to get more information of the service.

TELEMATICS SERVICE BENEFITS

Improve work efficiency

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

Better service for customers

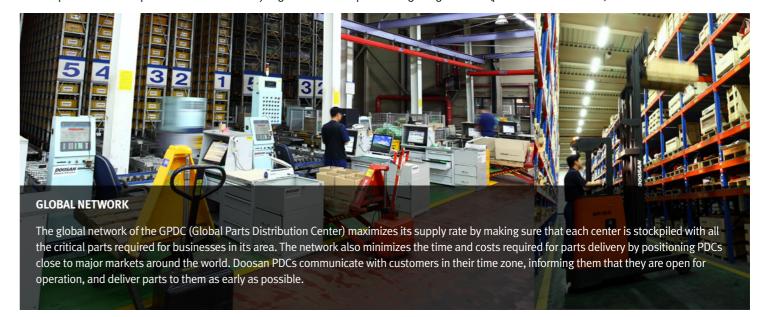
- · Provide better quality of service
- · Maintain machine value
- · Better understanding of market needs

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.



The Global Parts **Distribution Center Network** PDCs had been set up as shown below, including Mother PDC in Ansan, Korea. The eight other PDCs include one in China (Yantai), two in the USA (Chicago and Miami), one in Brazil (Campinas), two in Europe (Germany and the UK), one in the Middle East (Dubai), and one in Asia (Singapore).







Reduction

Distribution Cost Maximum Parts supply rate









distance/time parts delivery

downtime support

TECHNICAL SPECIFICATIONS

ENGINE

Model

DOOSAN DB58TIS

Type

2 valves per cylinder, vertical injectors, water cooled, turbo charged with air to air intercooler. The emission levels are well below the values required for TIER II

Number of cylinders

6

RATED HORSE POWER

113 kW (154 PS) @ 1,800 rpm (SAE J1995, Gross) 109 kW (148 PS) @ 1,800 rpm (SAE J1349, net)

Max torque

66 kgf.m @ 1,400 rpm

Piston displacement

5,785 cc

Bore & stroke

Ø 102 mm x 118 mm

STARTING MOTOR

24 V x 4.5 kW

Batteries

24 V (12 V x 2 / 100 AH)

Air cleaner

Double element

HYDRAULIC SYSTEM

Main pumps

Swash Plate, Axial Piston Max. Flow: 2 x 207 l/min Displacement: 115 X 2 cc/rev

Pilot pump

Gear pump - max flow : 27 l/min Pilot pump : 15 cc/rev

Main relief Pressure

Maximum system pressure: 320 kgf/cm²
Main system pressure: 320 kgf/cm²
Travel system pressure: 320 kgf/cm²
Swing system pressure: 270 kgf/cm²

WEIGHT

5.7 m Heavy Duty Boom, 2.9 m Heavy Duty Arm, 0.92 m³ Bucket, 3.8 Ton Counterweight

Shoe width (mm)	Ground p	ressure	Machine Weight			
Silve width (illill)	LC Track (kgf/cm²)	STD Track (kgf/cm²)	LC Track (Ton)	STD Track (Ton)		
600	0.46	0.49	21.4	20.8		
800	0.36	0.38	22.1	21.5		

BUCKET LC Track, 3.8 Ton Counterweight, 600 mm Shoe

Bucket	Capacity (m³)	Widtl	n (mm)	Wainsht (km)	5.7 MONO Boom (HD)				
Type	SAE/PCSA	W/O Cutter With Cutter		Weight (kg)	2.4m Arm	2.9m Arm (HD)			
CD	0.92	1,316	1,367	871	Α	A			
GP	1.05	1,458	1,509	930	Α	В			
	0.92	1,050	1,096	867	Α	В			
H-CLASS	1.08	1,200	1,246	939	В	С			
	1.40	1,500	1,546	1,101	D	-			
Maximum load pin-on (payload + bucket) 3 017 2 755									

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

A: Suitable for materials with density of 2,100 kg/m³ (3,500 lb/yd³) or less

B: Suitable for materials with density of 1,800 kg/m 3 (3,000 lb/yd 3) or less C: Suitable for materials with density of 1,500 kg/m 3 (2,500 lb/yd 3) or less

D : Suitable for materials with density of 1,200 kg/m 3 (2,000 lb/yd 3) or less



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	120 X 85 X 1,263 mm	
Arm	1	135 X 95 X 1,443 mm	
Bucket	1	115 X 80 X 1,060 mm	

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 shockabsorbing tension mechanism.

Upper rollers - 2

Lower rollers - 8 for LC track, 7 for STD track **Track shoes** - 49 for LC track, 45 for STD track

Overall track length - 4,445 mm for LC track, 4,065 mm for STD track

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 - 10.9 rpm **Swing Torque** - 6.46 ton.m

DRIVI

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) - 3.1 / 5.5 km/h Maximum traction force - 20.57 / 9.4 ton

Gradeability - 70 %

REFILL CAPACITIES

Fuel tank - 392 l Cooling system - 25.6 l Engine oil - 28 l Swing drive - 5 l Final drive - 2 x 3.3 l Hydraulic tank - 141 l

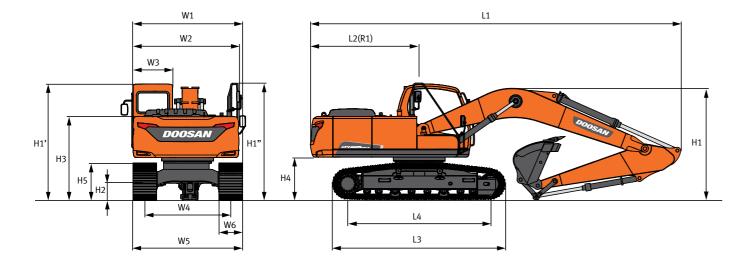
BUCKET DIGGING FORCES

December 7 cm a	Capacity (m³)	Width	n (mm)	Dii (T)		
Bucket Type	SAE/PCSA	W/O Cutter	With Cutter	Digging force (Ton)		
GP	0.92	1,316	1,367	[[A[]]] [[[[O]]]		
GP	1.05	1,458	1,509	[SAE] 11.5, [ISO] 12.8		
	0.92	1,050	1,096			
H-Class	1.08	1,200	1,246	[SAE] 11.5, [ISO] 12.8		
	1.40	1,500	1,546			

ARM DIGGING FORCES

Arm	Length (mm)	Weight (kg)	Digging force (Ton)
HD Arm	2,900	759	[SAE] 8.7, [ISO] 9.1
SHORT Arm	2,400	677	[SAE] 10.1, [ISO] 10.5

DIMENSIONS

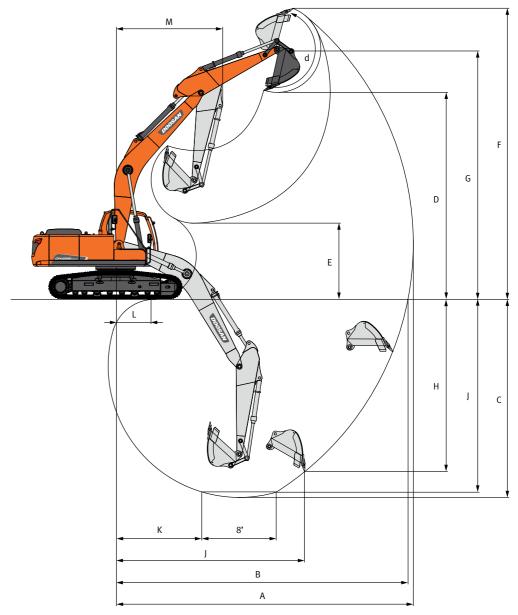


STANDARD

Boom Type	,	(mm)		5,	700
Arm Type		(mm)		2,900	2,400
Bucket Type (SAE/P	CSA)	(m³)		0.92	1.05
Overall Length		(mm)	L1	9,505	9,545
	Boom	(mm)		2,860	2,960
Overell Height	Hose	(mm)	H1	3,005	3,125
Overall Height	Cabin	(mm)] HI	2,955	←
	Hand/Guard Rail	(mm)		2,990	←
Overall Width	Overall Width			2,990	←
Rear Swing Radius	(mm)	R1	2,840	←	
Ground Clearance *	(mm)	H2	* 450.5	←	
Rear End Distance	Rear End Distance			2,792	←
House Width		(mm)	W2	2,710	←
Cabin Width		(mm)	W3	1,010	←
Height Over Cover		(mm)	Н3	2,113	←
Counterweight Clear	rance *	(mm)	H4	* 1,066	←
Track Height *		(mm)	H5	* 883	←
Track Length (LC Tra	ck)	(mm)	L3	4,445	←
Tumbler Distance (L	C Track)	(mm)	L4	3,650	←
Track Gauge	Frack Gauge			2,390	←
Undercarriage Width	ndercarriage Width		W5	2,990	←
Shoe Width	<u>~</u>		W6	600	←
Grouser Height		(mm)		26	←

WORKING RANGES



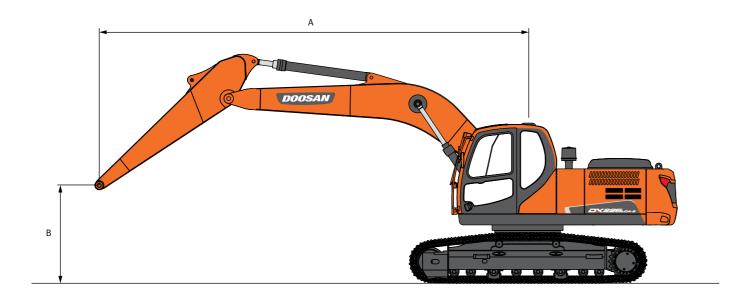


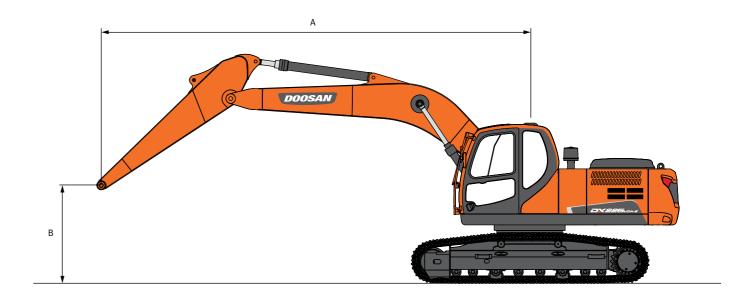
WORKING RANGES

Boom Type (One Piece)	(mm)		5,7	700
Arm Type	(mm)		2,900	2,400
Bucket Type (SAE/PCSA)	(m³)		0.92	1.05
Max. Digging Reach	(mm)	Α	9,875	9,390
Max. Digging Reach (Ground)	(mm)	В	9,700	9,210
Max. Digging Depth	(mm)	С	6,595	6,095
Max. Loading Height	(mm)	D	6,840	6,690
Min. Loading Height	(mm)	E	2,500	2,995
Max. Digging Height	(mm)	F	9,625	9,495
Max. Bucket Pin Height	(mm)	G	8,280	8,130
Max. Vertical Wall Depth	(mm)	Н	5,735	5,410
Max. Radius Vertical	(mm)	I	6,180	5,910
Max. Depth To 2,500mm Line	(mm)	J	6,410	5,860
Min. Radius 2,500mm Line	(mm)	К	2,860	2,790
Min. Digging Reach	(mm)	L	117	975
Min. Swing Radius	(mm)	М	3,555	3,575
Bucket Angle	(deg)	d	177	177

LIFTING CAPACITY







STANDARD

Metric

Boom: 5,700 mm (18' 7") Arm: 2,900 mm (9' 5") Shoe: 800 mm (2' 6") Counter Weight: 3,840 kg (8,466 lb) STD track

Unit: 1,000 kg

: Rating Over Front

😝 : Rating Over Side or 360 Degree

A(m)	1	.5	:	3	4	.5	(6	7	.5		Max. Reach	
B(m)	-	G	4	(-	<u>u</u>	(c	-	Œ	4	Œ	-	(-	A(m)
7.5							4.66 *	4.61			4.05 *	4.05 *	6.20
6							4.81 *	4.61			3.76 *	3.25	7.31
4.5							5.27 *	4.43	4.53	3.06	3.70 *	2.73	7.99
3					7.72 *	6.38	5.99 *	4.17	4.41	2.95	3.71	2.46	8.35
1.5					9.15 *	5.85	5.97	3.91	4.28	2.83	3.59	2.36	8.42
0			5.70 *	5.70 *	8.95	5.56	5.78	3.73	4.18	2.73	3.67	2.4	8.23
-1.5	6.22 *	6.22 *	9.82 *	9.82 *	8.86	5.49	5.7	3.66	4.16	2.71	3.99	2.61	7.74
-3	10.59 *	10.59 *	12.38 *	10.69	8.88 *	5.56	5.75	3.71			4.76	3.11	6.88
-4.5			9.38 *	9.38 *	6.84 *	5.81					5.20 *	4.4	5.51

Feet												U	Init : 1,000 lb
A(ft)	5		10		1	15		20		25	Max. Reach		
B(ft)		G	4	i	4	(4	(H	4	(Ha	- A	H	A(m)

A(II))		10		1	15		20		.5	Max. Reacii		
B(ft)	4	(c	4	(=	5	(5		-	(c	•	(A(m)
25							10.26 *	10.16			8.92 *	8.92 *	20.33
20							10.61 *	10.16			8.29 *	7.16	23.97
15							11.61 *	9.77	10	6.75	8.16 *	6.01	26.21
10					17.02 *	14.07	13.20 *	9.19	9.73	6.51	8.18	5.43	27.39
5					20.17 *	12.89	13.17	8.62	9.44	6.23	7.92	5.21	27.64
0			12.56 *	12.56 *	19.73	12.26	12.73	8.23	9.22	6.03	8.09	5.3	26.99
-5	13.71 *	13.71 *	21.66 *	21.66 *	19.54	12.1	12.56	8.07	9.17	5.98	8.8	5.75	25.38
-10	23.34 *	23.34 *	27.29 *	23.57	19.58 *	12.26	12.67	8.17			10.49	6.86	22.59
-15			20.68 *	20.68 *	15.09 *	12.81					11.46 *	9.71	18.07

- 1. Load point is the end of the arm.
- 2. Capacities marked with an asterisk (*) are limited by hydraulic capacities.
- 3. Lift capacities shown do not exceed 75 % of minimum tipping loads or 87 % of hydraulic capacities.
- 4. The least stable position is over the side.
- 5. Lift capacities apply only to the machine as originally manufactured and normally equipped by the manufacturer.

 6. Lift capacities are in compliance with iso 10567.

OPTION

Metric

Boom: 5,700 mm (18' 7") Arm: 2,900 mm (9' 5") Shoe: 600 mm (2' 0") Counter Weight: 3,840 kg (8,466 lb) LC track

Unit: 1,000 kg

A(m)	1	.5		3	4.	4.5 6		6	7	.5	Max. Reach			
B(m)	<u> </u>	Œ	6	G	5	(<u> </u>	(C	4	G	<u> </u>	(=	A(m)	
7.5							4.66 *	4.66 *			4.05 *	4.05 *	6.20	
6							4.81 *	4.81 *			3.76 *	3.53	7.31	
4.5							5.27 *	4.81	4.85 *	3.33	3.70 *	2.97	7.99	
3					7.72 *	7	5.99 *	4.54	4.98	3.22	3.80 *	2.69	8.35	
1.5					9.15 *	6.45	6.71 *	4.28	4.85	3.09	4.05 *	2.59	8.42	
0			5.70 *	5.70 *	9.83 *	6.15	6.61	4.1	4.74	3	4.15	2.63	8.23	
-1.5	6.22 *	6.22 *	9.82 *	9.82 *	9.74*	6.08	6.53	4.03	4.72	2.98	4.52	2.86	7.74	
-3	10.59 *	10.59 *	12.38 *	12.09	8.88 *	6.16	6.58 *	4.07			5.38 *	3.41	6.88	
-4.5			9.38 *	9.38 *	6.84 *	6.41					5.20 *	4.83	5.51	

Feet Unit: 1,000 lb

	A(ft)	!	5	1	.0	1	.5	2	0	2	5	Max. Reach		
B(ft)		4	(=	-	G	-	(C		(=	-	(-	<u> </u>	(A(m)
	25							10.26 *	10.26 *			8.92 *	8.92 *	20.33
	20							10.61 *	10.61 *			8.29 *	7.78	23.97
1	15							11.61 *	10.61	10.70 *	7.34	8.16 *	6.55	26.21
1	10					17.02 *	15.43	13.20 *	10.02	10.99	7.09	8.37 *	5.94	27.39
	5					20.17 *	14.22	14.79 *	9.44	10.68	6.82	8.92 *	5.71	27.64
	0			12.56 *	12.56 *	21.68 *	13.57	14.57	9.04	10.46	6.61	9.15	5.81	26.99
	-5	13.71 *	13.71 *	21.66 *	21.66 *	21.47 *	13.4	14.39	8.88	10.4	6.56	9.97	6.31	25.38
	10	23.34 *	23.34 *	27.29 *	26.64	19.58 *	13.57	14.51 *	8.98			11.85 *	7.52	22.59
-	15			20.68 *	20.68 *	15.09 *	14.13					11.46 *	10.64	18.07

- 1. Load point is the end of the arm.
- 2. Capacities marked with an asterisk (*) are limited by hydraulic capacities.
- 3. Lift capacities shown do not exceed 75 % of minimum tipping loads or 87 % of hydraulic capacities.
- 4. The least stable position is over the side.
- 6. Lift capacities apply only to the machine as originally manufactured and normally equipped by the manufacturer.

 6. Lift capacities are in compliance with iso 10567.

: Rating Over Front

🚰 : Rating Over Side or 360 Degree

STANDARD & OPTION

STANDARD EQUIPMENT

Fronts

- 5.7 m Heavy Duty Boom
- 2.4 m Heavy Duty Arm

Hydraulic system

- Boom and Arm flow regeneration
- Boom and Arm holding valves
- Swing anti-rebound valves

Cabin & Interior

- Viscous cab mounts
- E/G RPM control dial
- Serial communication port for laptop PC interface
- Cup holder
- Seat belt
- 12 V spare power socket
- Room light
- All weather sound suppressed type CAB.
- Viscous cab mounts

Safety

- Handrail and step
- Safety glass
- Hammer for emergency escape
- Battery protector cover

Others

- Double element air cleaner with two stage filtration
- Dry type Pre Air Cleaner
- Two stage water separator
- Fuel filter
- Engine overheat prevention system
- Engine restart prevention system
- Self-diagnostic system
- Alternator (24 V, 60 A)
- Electric horn
- Working lights (1 boom mounted, 1 storage box mounted)
- Hydraulic track adjuster
- Track guards
- Greased and sealed track link
- Hydraulic oil tank air breather filter



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

Arm

• 2.9 m Heavy duty Arm

Bucket

- 0.92 m³ H Class Bucket
- 1.08 m³ H Class Bucket
- 1.4 m³ H Class Bucket

Auxiliary Hydraulic

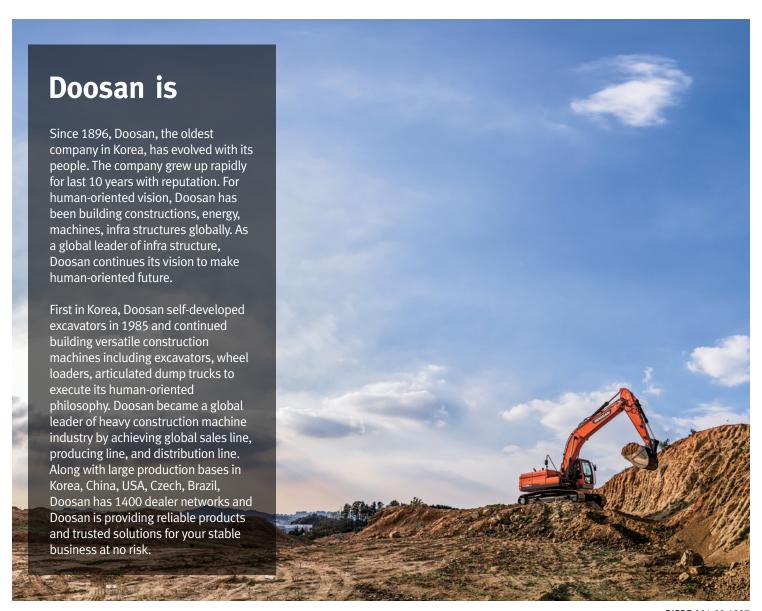
- One-way for Hammer
- Hydraulic Filter for One-way return line

Undercarriage

- Long & Fixed Track
- Standard & Fixed Track
- Undercover for Track Frame
- 600 mm / 700 mm / 800 mm Triple Grouser Shoe

Cabin Sub Group

- Mechanical type Suspension Seat
- Upper and Lower Guard
- Side Mirror
- 2 Working lamp
- Wiper
- MP3 Radio
- Air Conditioner and Heater
- TMS (Doosan Telematics System)



DIPBE-001-00-1907



Doosan Infracore Co., Ltd. 489 (Hwasu-dong), Injung-ro, Dong-Gu, Incheon, Korea(22502) www.doosaninfracore.com/ce/en