

Construction Equipment



1 44ET	Engine Power Operational Weight Bucket / SAE	SAE J1349, 110 kW (148 HP) @ 1,900 rpm 20,600 kg (45,415 lb) 0.81 ~ 1.05 m ³ (1.06 ~ 1.37 cu.yd)
		5
DODSAN		

: DX200A Efficient Performance





When cost-effectiveness is critical on your jobsite, **DX200A** is the right answer.

DX200A guarantees you unrivalled fuel efficiency. See how much you can save with reduced fuel T. Ex. consumption and minimized cycle time.

The new DX200A hydraulic excavator has all the advantages of the previous model and now offers additional added value to the operator.

PERFORMANCE & PRODUCTIVITY

Doosan's DB58TIS mechanical engine, -EPOS equipped with the new e-EPOS[™] (Electronic e-EPOS™ Power Optimizing System) technology, delivers excellent work capabilities.

STRUCTURES



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Doosan's DX200A structures feature Doosan's proprietary technologies that deliver excellent durability and guarantee continuous reliable performance comparable with that of a brand new product, thereby reducing maintenances and service costs.



Handling & Comfort

Key points

Undercarriage: The rollers, sprockets and track links are newly designed to minimize damage to the product.

DOOSAN

HANDLING & COMFORT

Doosan products are designed for convenience and safety. Doosan's machine is designed for comfortable, long-term operation in tough areas. Doosan's goal of ensuring user convenience can be seen even in the simplest service work.

A driver should keep the peak condition to produce a maximum workload. In particular, if a driver has to work more than 10 hours a day, the driver's condition can affect a workload significantly. Doosan equipment is designed to be operated conveniently at driver's wills, so that the driver can keep the best condition.



ECONOMICS

The Doosan excavator, a combination of four advanced technologies, guarantees a significant reduction of maintenance costs thanks to its exceptionally low rate of fuel consumption.







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COMPACT & FAST

Doosan's DX200A is 380 mm shorter than the DX225LCA in track length, which makes the DX200A suitable for the small space Compact & Fast where LC equipment is too wide to enter.

Undercarriage width : DX225LCA 2,990mm DX200A 2,800mm 190^{shorter} (1)Track length : DX225LCA 4,445mm



DX200A 4,065mm

Performance

DOOSAN DB58TIS ENGINE.

Doosan DX200A engine

Make and Model

Torque

Alternator

Rated Horse Power

At the heart of the hydraulic excavator is the improved DOOSAN DB58TIS engine. It is combined with the new e-EPOS[™] electronic control system, for optimum power and fuel saving.

DOOSAN DB58TIS - 6 cylinders

61.5 kgf.m (603 Nm) @ 1,400 rpm

24 V / 4.5 kW

• Better performance by improved engine

• Energy efficiency reduces fuel consumption







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



HYDRAULIC PUMP. The Main pump has a capacity of 2x222.3 ℓ/\min reducing cycle time while a high capacity gear pump improves pilot line efficiency.



TRAVEL DEVICE. New design travel device gets more performance by improving efficiency and simplication of the internal structure.

New e-EPOS[™] system (Electronic Power Optimizing System). The brains of the hydraulic excavator, the e-EPOS[™], have been improved, through a CAN (Controller Area Network) communication link, enabling a continuous exchange of information between the engine and the hydraulic system. These units are now perfectly synchronised.

> INCOMENT CONTRACTOR

// DX 200A

The advantages of the new e-EPOS[™] impacts at several levels, Ease of operation and user-friendliness:

- The availability of a power mode and standard mode guarantee maximum efficiency under all conditions.
- The automatic deceleration mode enables fuel saving.
- Regulation and precise control of the flow rate required by the equipment are available as standard.
- A self-diagnosis function enables technical problems to be resolved quickly and efficiently.
- An operational memory provides a graphic display of the status of the machine.
- Maintenance and oil change intervals can be displayed.



NEW OPTION BUCKET FOR MASS PRODUCTION. Newly provide short boom & 0.92m³ bucket.

Economics



Market No.1 Fuel Efficiency in Middle Excavator.

"NEW CONTROL LOGIC" for Better Fuel Efficiency









Reliability

DOOSAN uses computer-assisted design techniques, highly durable materials and structures then test these under extreme conditions. Durability of materials and longevity of structures are our first priorities.

D-TYPE FRAME. The D-type frame and chassis frame add strength and minimize distortion due to shocks.

X-CHASSIS. The X-chassis frame section has been designed using finite element and 3-dimensional computer simulation, to ensure greater durability and optimum structural integrity. The swing gear is solid and stable.

SINTERED BUSHING. A highly lubricated metal sintered bushing is used for all front pivot points in order to increase the lifetime and durability. Extend the greasing intervals to 250 hours. (except bucket parts)

SPROCKET. Doosan equipment is designed with optimal sprocket to move from one jobsite to another. Teeth are thick to prevent breaking and designed in low profile to minimize wear caused by body pitching during traveling.

DX200A Previous mode



ROLLER. The rollers used in the undercarriage of Doosan equipments feature unparalleled durability. The gaps between the rollers are minimized to prevent foreign materials from entering, and the impact dispersion design further improves the durability.

DOOSAN'S EQUIPMENT IS COATED WITH SUPER DOOSAN ORANGE PAINT

A specially developed paint for enhanced visibility at long distances, the paint provides excellent physical coating properties providing protection in extreme environments. It does not fade in sunlight or UV either. The paint is non-toxic, eco-friendly, and does not have a high metal content. Doosan's management philosophy is committed to environmental protection.

Maintenance





PC MONITORING (DMS). A PC monitoring function enables connection to the e-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.

grouped for easy access.



a high level of filtration allowing the oil change interval to be increased to 500 hours. It is easy removing most moisture from the fuel to access and is positioned to avoid contaminating the surrounding environment.

ENGINE OIL FILTER. The engine oil filter offers **WATER SEPARATOR.** High efficiency and large capacity water separator protect the engine by (additional water separator as strandard)





Short maintenance operations at long intervals increase the availability of the equipment on site. DOOSAN has developed the DX200A with a view to high profitability for the user.



CENTRALIZED GREASE INLETS FOR EASY MAINTENANCE. The arm grease inlets are



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.





CONVENIENT FUSE BOX. The fuse box is conveniently located in a section of the storage compartment behind the operator's seat providing a clean environment and easy access.

Handling & Comfort

More space, better visibility, air conditioning with climate control, very comfortable seat. These are the elements that ensure the operator can work in the beest possible conditions.

Furthermore, a new, user-friendly colour 7" TFT LCD monitor panel gives full access to machine settings and maintenance data allowing you to work safely and confidently with an accurate overview of all conditions.





CONTROL PANEL. Correct positioning with clear controls makes the operator's task easier.



CONTROL LEVER. Levelling operations and the movement of lifted loads in particular are made easier and safer. The control levers have additional electrical buttons for controlling other additional equipment (for example, grabs, crushers, breakers, etc.)



AIR CONDITIONING. The high performance air conditioning provides an air flow which is adjusted and electronically controlled for the conditions. Five operating modes enable even the most demanding operator to be satisfied.

Technical Specification

Engine

MODEL

DOOSAN DB58TIS 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.

TYPE

WATER-COOLED, 4-CYCLE DIRECT

NUMBER OF CYLINDERS

6

NOMINAL FLYWHEEL POWER

GROSS POWER : 115 kW(157 PS, 154 HP) @ 1,900 rpm (SAE J1995) NET POWER : 110 kW(150 PS,148 HP) @ 1,900 rpm (SAE J1349)

MAX TORQUE

61.5 kgf.m (603 Nm) @ 1,400 rpm

PISTON DISPLACEMENT

5,785 cc (353 cu.in)

BORE & STROKE

102 mm x 118 mm

STARTER 24 V / 4.5 kW

BATTERIES

2 x 12 V / 100 Ah

AIR CLEANER

Double element with auto dust evacuation.

Hydrauric System

The heart of the system is the e-EPOS[™] (Electronic Power Optimizing System). It allows the efficiency of the system to be optimized for all working conditions and minimizes fuel consumption.

- 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.

MAIN PUMPS

2 variable displacement axial piston pumps Max flow : 2 x 222.3 Liter/min Displacement : 2 x 117.0 cc/rev Weight : 117 kg

PILOT PUMP

Gear Pump - Max Flow Rate : 28.5 Liter/min Displacement : 15 cc/rev Relief valve Pressure : 40 kgf/cm²

MAXIMUM SYSTEM PRESSURE

Boom/arm/Bucket: 350 kgf/cm²(343 bar) Travel: 350 kg/cm² Swing: $270 \text{ kgf/cm}^2(264 \text{ bar})$

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 1,260
Arm	1	135 x 95 x 1,450
Bucket	1	120 x 80 x 1,060

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 double grouser. Heat-treated connecting pins. Hydraulic track adjuster with shock-absorbing tension mechanism.

NUMBER OF ROLLERS AND TRACK SHOES PER SIDE							
2 ea							
7 ea							
45 ea							
4,065 mm							

Environment

Noise levels comply with environmental regulations (dynamic values).

SOUND LEVEL GUARANTEE

103 dB(A) (2000/14/EC)

CAB SOUND LEVEL

73 dB(A) (ISO 6396)

Weight

SHOE WIDTH (mm)	GROUND PRESSURE (kgf/cm ²)	MACHINE WEIGHT (ton)	
STD. 600G	0.48	20,600 kg (45,415 lb)	
OPT. 800G	0.37	21,120 kg (46,561 lb)	

Digging force (ISO)

		Boom : 5,700 mm Arm : 2,900 mm Bucket : 0.92 m³ - CW : 3.8 t	Boom : 5,700 mm Arm : 2,400 mm Bucket : 0.92 m³ - CW : 3.8 t	Boom : 5,700 mm Arm : 2,900 mm Bucket : 0.81 m³ - CW : 3.8 t	Boom : 5,700 mm Arm : 2,400 mm Bucket : 0.81 m³ - CW : 3.8 t
Bucket	t	15.2	15.2	15.2	15.2
Bucket	kN	151	151	151	151
A rm	t	10.8	12.6	10.8	12.6
Arm	kN	108	125	108	125

Bucket		C/W (ton)	3.	8				
		SHOE (mm) 600						
Ruckot Tupo	Capacity	(m³)	Width	(mm)	Woight (kg)	5.7 m Boom		
bucket type	SAE/PCSA	CECE	W/O Cutter	With Cutter	weight (kg)	2.4 m Arm	2.9 m Arm	
	0.81	0.72	1,064	1,126	654	A	A	
GP	0.92	0.81	1,172	1,236	707	А	В	
	1.05	0.92	1,308	1,370	751	В	С	

Based on ISO 10567 and SAE J296, arm length without quick change clamp A : Suitable for materials with density of 2,100kg/m³ (3500lb/yd³) or less B : Suitable for materials with density of 1,800kg/m³ (3000lb/yd³) or less C : Suitable for materials with density of 1,500kg/m³ (2500lb/yd³) or less D : Suitable for materials with density of 1,200kg/m³ (2000lb/yd³) or less : Not recommended

Swing Mechanism

- An axial piston motor with two-stage planetary reduction gear is used for the swing.
- Increased swing torque reduces swing time.
- Internal induction-hardened gear.
- Internal gear and pinion immersed in lubricant bath.
- The swing brake for parking is activated by spring and released hydraulically.

ТҮРЕ	AXIAL PISTON
SWING SPEED	11.3 rpm
MAX SWING TORQUE	6,460 kgf.m

Drive

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

TRAVEL SPEED (FAST/SLOW)	3.2 / 5.8 km/hr
MAXIMUM TRACTION FORCE	23.1 / 12.2 ton
MAXIMUM GRADE	70 %

Refill Capacities

FUEL TANK

400 ℓ (105.7 US gal, 88 lmp gal)

COOLING SYSTEM (RADIATOR CAPACITY)

24 ℓ (6.3 US gal, 5.3 lmp gal)

ENGINE OIL

28 ℓ (7.1 US GAL, 5.9 LMP GAL)

SWING DEVICE 5 ℓ (1.32 US gal, 1.1 lmp gal)

TRAVEL DEVICE

3.3 ℓ (0.87 US gal, 0.73 lmp gal)

OIL TANK

195 ℓ (63.4 US GAL, 52.8 LMP GAL)

Dimensions

Working Ranges



Dimensions

BOOM TYPE (ONE PIECE)	(mm)		5,70	00
ARM TYPE	(mm)		2,900	2,400
BUCKET TYPE (PCSA)	(m³)		0.92	1.05
TAIL SWING RADIUS	(mm)	А	2,750	\leftarrow
SHIPPING HEIGHT (BOOM)	(mm)	В	2,940	3,045
SHIPPING HEIGHT (HOSE)	(mm)	С	3,005	3,110
SHIPPING LENGTH	(mm)	D	9,485	9,500
SHIPPING WIDTH	(mm)	E	2,800	\leftarrow
C/WEIGHT CLEARANCE	(mm)	F	1,055	\leftarrow
HEIGHT OVER CAB.	(mm)	G	2,975	\leftarrow
HOUSE WIDTH	(mm)	Н	2,710	\leftarrow
CAB. HEIGHT ABOVE HOUSE	(mm)	Ι	845	\leftarrow
CAB. WIDTH	(mm)	J	960	\leftarrow
TUMBLER DISTANCE	(mm)	К	3,270	\leftarrow
TRACK LENGTH	(mm)	L	4,065	\leftarrow
UNDERCARRIAGE WIDTH	(mm)	Μ	2,800	\leftarrow
SHOE WIDTH	(mm)	Ν	600	\leftarrow
TRACK HEIGHT	(mm)	0	947	\leftarrow
GROUND CLEARANCE	(mm)	Р	480	\leftarrow

Working Ranges

BOOM TYPE (ONE PIECE)	(mm)		
ARM TYPE	(mm)		
BUCKET TYPE (PCSA)	(m ³)		
MAX. DIGGING REACH	(mm)	А	
MAX. DIGGING REACH (GROUND)	(mm)	В	
MAX. DIGGING DEPTH	(mm)	С	
MAX. LOADING HEIGHT	(mm)	D	
MIN. LOADING HEIGHT	(mm)	E	
MAX. DIGGING HEIGHT	(mm)	F	
MAX. BUCKET PIN HEIGHT	(mm)	G	
MAX. VERTICAL WALL DEPTH	(mm)	Н	
MAX. RADIUS VERTICAL	(mm)	Ι	
MAX. DEPTH TO 8' LINE	(mm)	J	
MIN. RADIUS 8' LINE	(mm)	К	
MIN. DIGGING REACH	(mm)	L	
MIN. SWING RADIUS	(mm)	Μ	
BUCKET ANGLE	(deg)	d	



	5,700	
2,900		2,400
0.92		1.05
9,900		9,480
9,730		9,300
6,620		6,110
6,990		6,830
2,555		3,070
9,750		9,630
8,450		8,299
5,640		5,390
6,410		6,050
6,430		5,910
2,865		2,880
519		1,698
3,410		3,410
166		166

Lifting Capacity





Option 1

Boom: 5.7 m Arm: 2.9 m SHOE: 600 mm STD TRACK

																		Un	it : 1,000k
A(m)	1	1		2		3		4		5		6		7		8		Max. Read	:h
B(m)	ŀ	(4	(b	÷	ľ	(]	ŀ	(-	(]	1	(4	(Ľ	(A(m)
8																	3	3	@5.95
7																	2.82	2.82	@6.86
6											4.02	4.02	3.86	3.18			2.75	2.75	@7.51
5											4.3	4.15	4.11	3.12			2.75	2.39	@7.99
4									5.27	5.27	4.72	3.98	4.35	3.03	3.58	2.34	2.8	2.15	@8.32
3					*10.65	*10.65	*7.60	7.3	6.1	5.11	5.23	3.79	4.43	2.91	3.51	2.27	2.92	2	@8.52
2					*8.55	*8.55	*8.98	6.75	6.93	4.8	5.54	3.6	4.3	2.79	3.43	2.2	3.02	1.91	@8.60
1					*7.27	*7.27	*9.97	6.34	7.18	4.54	5.35	3.43	4.18	2.68	3.36	2.13	3	1.88	@8.56
O(GROUND)			*4.93	*4.93	*8.28	*8.28	10.16	6.12	6.97	4.36	5.21	3.3	4.09	2.59	3.3	2.08	3.05	1.91	@8.40
-1			*7.18	*7.18	*10.09	9.77	10.04	6.02	6.86	4.26	5.13	3.22	4.03	2.54	3.27	2.05	3.2	2.01	@8.11
-2	*8.27	*8.27	*9.39	*9.39	*12.45	9.83	10.03	6.01	6.82	4.23	5.09	3.19	4.01	2.52			3.49	2.19	@7.68
-3	*10.29	*10.29	*11.87	*11.87	*12.31	9.97	*9.56	6.07	6.86	4.26	5.12	3.22	4.05	2.56			3.98	2.51	@7.09
-4			*14.26	*14.26	*10.72	10.19	*8.45	6.21	6.78	4.35	5.22	3.31					4.88	3.1	@6.27
-5					*8.37	*8.37	*6.67	6.43	5.19	4.54							4.96	4.36	@5.14

Ratings are based on SAE J1097
Load point is the end of arm.
* Rated loads are based on hydraulic capacity.
Rated loads do not exceed 87% of hydraulic capacity or 75% of tipping capacity.

Option 2

Boom: 5.7 m Arm: 2.4 m SHOE: 600 mm STD TRACK

A(m)	A(m) 2		3		4		5		6		7		8		Max. Reach		
B(m)	ľ	(]	ľ	(]	ŀ	(]	Ъ	(]	Ъ	(]	F	(F a	Ъ	(F	ľ	(‡	A(m)
8															*4.18	*4.18	@5.33
7									*4.48	4.23					*3.91	3.84	@6.31
6									*4.50	4.2	*3.89	3.14			*3.80	3.11	@7.03
5							*5.15	*5.15	*4.75	4.1	*4.51	3.1			*3.79	2.68	@7.54
4			*9.25	*9.25	*7.00	*7.00	*5.84	5.34	*5.15	3.94	4.54	3.02			3.67	2.4	@7.89
3					*8.43	7.1	*6.64	5.03	*5.63	3.77	4.43	2.91	3.52	2.29	3.44	2.23	@8.10
2					*9.68	6.61	*7.40	4.75	5.52	3.59	4.31	2.8	3.46	2.23	3.33	2.14	@8.18
1					10.35	6.29	7.15	4.53	5.36	3.45	4.21	2.71	3.4	2.17	3.31	2.11	@8.14
O(GROUND)			*7.25	*7.25	10.18	6.15	7	4.39	5.25	3.35	4.13	2.64			3.38	2.15	@7.97
-1	*7.02	*7.02	*10.03	9.96	10.13	6.11	6.93	4.33	5.19	3.29	4.1	2.61			3.58	2.27	@7.67
-2	*10.04	*10.04	*12.71	10.06	*9.98	6.14	6.93	4.33	5.19	3.29	4.11	2.62			3.94	2.51	@7.21
-3	*13.33	*13.33	*11.43	10.23	*9.12	6.24	7	4.39	5.24	3.34					4.59	2.94	@6.57
-4	*12.02	*12.02	*9.57	*9.57	*7.74	6.41	*6.21	4.52							*5.20	3.76	@5.68
-5					*5.42	*5.42									*4.84	*4.84	@4.39

Rating Over Front 🕞 : Rating Over Side or 360 degree

Ratings are based on SAE J1097
Load point is the end of arm.
* Rated loads are based on hydraulic capacity.
Rated loads do not exceed 87% of hydraulic capacity or 75% of tipping capacity.



: Rating Over Front

🚰 : Rating Over Side or 360 degree

A Solid Promise





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

DOOSAN

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