

# DX75-7B







# WIDELY RECOGNIZED BY THE MARKET FOR ITS HIGHEST PERFORMANCE, FLEXIBLE AND STABLE OPERATION, AND LONGER SERVICE LIFE OF PARTS.



**RIGID FRONT**One-piece-type casting and increased thickness for greater durability.



**NEWLY DESIGNED WORK LIGHT** 

Higher brightness and wider lighting area improve support for night-time work.



LARGER CABIN

Larger cabin, same size as middle-large excavator models. Sufficient operating space, low noise level, and wider field of view.



ELECTRIC FUEL FILLER PUMP (OPTIONAL)

Easily refuel anywhere and anytime.



HIGH-EFFICIENCY
HYDRAULIC SYSTEM

Engine energy efficiency maximized with the enhanced hydraulic system.



#### **ENGINE**

Electric controller mechanical engine produces outstanding power and is highly durable, which results in excellent operation in high-load operations. In addition, it features low noise and low emissions, making it suitable for operation in noise sensitive areas and at night.



#### **EASY MAINTENANCE**

Modular design for convenient and easy onsite maintenance work.



#### REINFORCED TRACK FRAME

Improved design has enhanced the durability and stability of the mechanism.



DOOSAN



# PERFORMANCE & PRODUCTIVITY



#### **ENHANCED FRONT AND SIDE LIFTING CAPACITY**











#### 1 DOZER BLADE (OPTIONAL)

The dozer shovel is useful for leveling and clean-up work and for stabilizing the machine during digging applications.

Shocks during rotation are minimized, while the increased torque option ensures rapid cycles.

#### **3 HIGHER GRADEABILITY AND WORK CAPABILITY**

Thanks to the strong traction force combined with the highest swing torque in its class, the DX75-7B delievers superior capability when working on a slope.

#### 4 POWERFUL TRAVEL TRACTION

Powerful travel traction for undisturbed operation on slopes and wet ground.

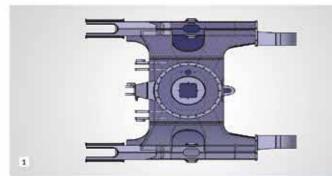




#### **REINFORCED BOOM AND ARM**

The boom lower plate is designed as an integral type to reduce weld joints and stress concentration. The thicknesses of the side and upper plates of the arm have been increased for further reinforcement.









#### 1 OPTIMI ZED TRACK FRAME STRUCTURE

The new track frame structure distributes stress concentration to improve parts durability and work stability.

#### 2 IMPROVED SWING DEVICE

The performance of the swivel motor has been further improved, including stable rotation, precise braking, and excellent shock absorption.

#### 3 LOWER STRUCTURE

The newly designed, one-piece type cast idler strengthens joints by reducing assembly steps. The low roller has been changed to the center-fixed type to enhance the stability of the lower structure and the strength of the track frame.

## DX75-78

# **\$ FUEL EFFICIENCY**



#### **ENGINE SPECIFICATIONS**

Power 39 kW (52.3 HP) 2,200 rpm

No. of Cylinders 4
Displacement 3,319 cc









#### 1 FUEL PRE FILTER

Removes over 99 % of harmful foreign substances, extends the service life of engine parts with improved lubrication performance.

#### 2 AIR PRE FILTER

Reducing the risk of engine contamination and filtering efficiency increased

# **OPERATOR COMFORT**



#### **ANALO G DASHBOARD**



The intuitively designed dashboard clearly displays information on the status of the equipment.

#### AIR CONDITIONING



The high performance air conditioning provides an air flow which is adjusted and electronically controlled for the prevailing conditions. Five operating modes ensure even the most demanding operator will be satisfied.



### 1 UPGRADED CONTROL PANEL WITH CENTRALI ZED SWITCHES

The metallic interior panels are similar to those of luxury cars. The switches are clustered for more convenient and efficient operation.

#### **1** EMERGENCY ENGINE STOP BUTTON

The emergency stop button can cut off fuel feed to stop the engine in the event of an emergency without having to use the start key.





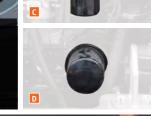






#### **EASY FILTER REPLACEMENT**

The filters are clustered for convenient maintenance. The dual fuel filtering and water separation function protects the engine from poor quality fuels.

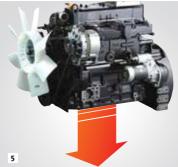














#### 1 DETACHABLE TRACK GUARD

The track guards are bolted to the frame for easier maintenance of the track.

#### **2 BATTERY COVER**

The reinforced battery cover is resistant to fracture and can store a grease gun and a tool box.

#### **3 GAS SPRING CYLINDER**

The new gas spring enables easier opening and closing of the engine cover, including full opening for engine maintenance.

#### 4 FUEL COOLER AND RADIATOR

The independent type fuel chiller and radiator facilitates installation and replacement, reducing maintenance time.

#### 5 FAST ENGINE OIL DRAIN

Engine oil can be drained quickly without spillage to prevent environmental pollution.

#### 6 LOW NOISE / VIBRATION TECHNOLOGY

Reduces vibration and noise, extending the lifespan of hydraulic units and parts.

## TELEMATICS SERVICE (OPTIONAL)

# **GLOBAL PARTS NETWORK**

#### **TELECOMMUNICATIONS**

Data flow from machine to web







#### **BENEFITS**

#### Location



**FUNCTIONS** 











- · Total operation hour
- · Operation hour by mode

Filter & Oil Management

replacement cycle

· Preventive maintenance by item



#### Fuel Efficiency\*

- · Fuel level · Fuel consumption





#### 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

#### Customer

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 nine other PDCs include one in China (Yantai), three in the USA (Chicago, Atlanta, Miami), one in Brazil (Americana), two in Europe (U.K. and Germany), one in the middle East (Dubai) and one in Asia (Singapore)

(As of April, 2019)



PDC BENEFIT



**Distribution Cost** Reduction



**Maximum Parts** supply rate



Shortest distance/time parts delivery



Real-time service support

downtime

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## **TECHNICAL SPECIFICATIONS**

**ENGINE** 

Model

YANMAR \ 4TNV98-EXS

**Number of cylinders** 

4

Nominal flywheel power

Gross 39 KW (53 PS) @ 2,200 rpm Net 36.5 KW (49.6 PS) @ 2,200 rpm

Max. torque

19.1~20.8 kgf.m / 1,650 rpm

Piston displacement

3,319 cc

Bore & stroke 98 x 110 mm

Starter

12 V x 3.5 kW

Batteries 2 x 12 V / 100 Ah

**HYDRAULIC SYSTEM** 

Main pumps

1 variable displacement axial piston pumps 158.4 liter/min at 2,200 rpm

Pilot pump

Gear pump 11.0 liter/min at 2,200 rpm

Maximum system pressure

Boom / Arm / Bucket : 250 kg/cm2 (245 bar)

Travel: 250 kg/cm2 (245 bar) Swing: 220 kg/cm2 (216 bar)

**HYDRAULIC CYLINDERS** 

Cylinders	Quantity	Bore x Rod diameter x stroke
Boom	1	110 x 65 x 865 mm
Arm	1	100 x 65 x 813 mm
Bucket	1	85 x 55 x 680 mm

SWING MECHANISM

Swing speed: 0 to 10.4 rpm

WEIGHT

Boom: 3,620 mm Arm: 1,670 mm Bucket: SAE 0.3 m3

	Shoe width	Operating weight	Ground pressure (kgf/cm²)
Triple Grouser	450 mm	7,500 kg (with dozer)	0.36 kgf/cm <sup>2</sup>

**UNDERCARRIAGE** 

Number of rollers and track shoes per side

Upper rollers : 1 EA Lower rollers : 5 EA Shoes : 38 EA

Tumbler Distance: 2,110 mm

**DRIVE** 

Travel speed (fast/slow)

4.6 / 2.9 km/h

Maximum traction force

3,500 / 5,800 Kgf

Maximum grade

30° / 58 %

**ENVIRONMENT** 

Sound level guarantee

Cab sound level

74 dB

99 dB

**REFILL CAPACITIES** 

**Fuel tank** 

130

Cooling system (Radiator capacity)

10l

Engine oil

11.6l

Swing drive

1.5l

Final drive (each)

1.3l

Hydraulic tank

90l

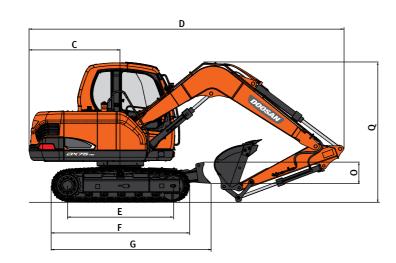
**WEIGHT** 

	Capacity (m3)	BUCKET WIDTH (mm)				
	SAE	W/CUTTER	W/O CUTTER			
STD. BUCKET	0.3	859.5	787			

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# **DIMENSIONS**

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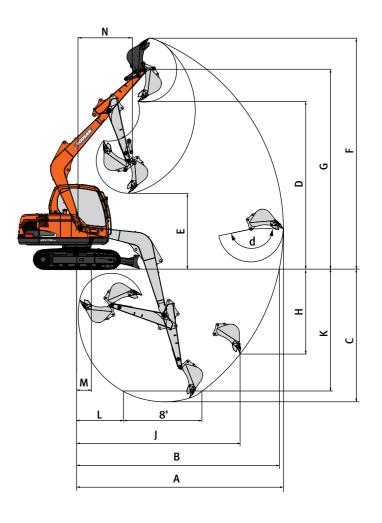
#### **WEIGHT**

BOOM TYPE (ONE PIECE)	(mm)	3,620
ARM TYPE	(mm)	1,670
BUCKET TYPE (SAE)	(m³)	0.3
C TAIL SWING RADIUS	(mm)	1,750
D SHIPPING LENGTH	(mm)	6,030
E TUMBLER DISTANCE	(mm)	2,110
F TRACK LENGTH	(mm)	2,750
G TRACK LENGTH(DOZER)	(mm)	3,210
H TRACK HEIGHT	(mm)	695
I TRACK GAUGE	(mm)	1,650
J TRACK WIDTH	(mm)	2,100
K CAR BODY CLEARANCE	(mm)	370
L BODY WIDTH	(mm)	2,130
M SHIPPING WIDTH	(mm)	2,180
N DOZER WIDTH	(mm)	2,100
O DOZER HEIGHT	(mm)	418
P SHIPPING HEIGTH	(mm)	2,680
Q SHIPPING HEIGTH(BOOM)	(mm)	2,610

#### **DIGGING FORCE (ISO)**

Bucket (SAE)	0.3 m <sup>3</sup>	Arm	1,670 mm
Digging force	5,340 kgf		3,690 kgf
	52.36 kN	Digging force	36.19 kN
	11,772.7 lbf		8,135 lbf

# **WORKING RANGES**

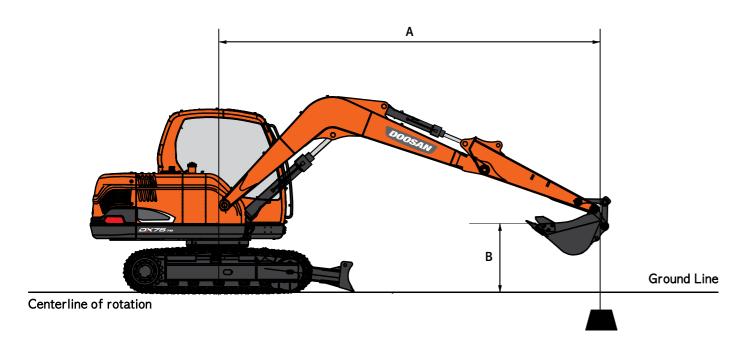


#### **WORKING RANGE**

BOOM	M TYPE (ONE PIECE)	(mm)	3,620
ARM	TYPE	(mm)	1,670
BUCK	ET TYPE (SAE)	(m³)	0.3
Α	MAX. DIGGING REACH	(mm)	6,270
В	MAX.DIGGING REACH (Gradeability)	(mm)	6,115
С	MAX. DIGGING DEPTH	(mm)	4,080
D	MAX. LOADING HEIGHT	(mm)	5,170
E	MIN. LOADING HEIGHT	(mm)	2,345
F	MAX. DIGGING HEIGHT	(mm)	7,100
G	MAX. BUCKET PIN HEIGHT	(mm)	6,150
Н	MAX. VERTICAL WALL DEPTH	(mm)	2,670
J	MAX. RADIUS VERTICAL	(mm)	4,750
K	MAX. DEPTH TO 8' LINE	(mm)	3,725
L	MIN. RADIUS 8' LINE	(mm)	1,120
M	MIN. DIGGING REACH	(mm)	560
N	MIN. SWING RADIUS	(mm)	1,745
d	BUCKET ANGLE	(mm)	165

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## LIFTING CAPACITY



#### **WEIGHT**

TRACK WIDTH: 2.1 m (7'2") STD TRACK BOOM: 3.620 m (11'9") ARM: 1.670 m (5'6") BUCKET: SAE 0.3 m3 HEAPED SHOE: 450 mm (17.7")

A(m)	2	3	4	5	2	3	4	5	Max. Reach		h
B(m)	<u>#</u>	<del>(</del>	<u></u>	<del>(</del>	₫.	( <del> </del>	-	<del>(</del>	-	( <del> </del>	A(m)
5			1.26 *	1.26 *					1.20 *	1.20 *	3.78
4			1.36 *	1.36 *	1.30 *	1.30 *			1.09 *	1.09 *	4.56
3	2.44 *	2.44 *	1.73 *	1.73 *	1.44 *	1.44 *			1.08 *	0.97	5.02
2			2.24 *	2.24 *	1.66	1.43			1.01	0.87	5.25
1			2.55	2.14	1.59	1.36	1.13	0.97	0.99	0.84	5.28
0			2.47	2.06	1.55	1.32	1.12	0.96	1.03	0.88	5.11
-1	3.95 *	3.95 *	2.45	2.05	1.53	1.30	1.09	0.93	1.17	1.00	4.72
-2	3.37 *	3.37 *	2.35 *	2.07	1.55	1.32	1.07	0.91	1.52	1.30	4.04
-3									1.44 *	1.44 *	2.89

- 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 MINIMUN TIPPING LOADS OR 87 % OF HYDRAULIC CAPACITIES.
- 4. THE LEAST STABLE POSITION IS OVER THE SIDE.
- 5. THE TOTAL MASS OF MACHINE IS 7200 kg INCLUDED IN THIS MASS BOOM 3.62 m, ARM 1.67 m, 632 kg COUTNERWEIGHT, BUCKET WEIGHT O kg, ALL OPERATING FLUIDS AND A 75 kg OPERATOR.

  6. LIFT CAPACITIES ARE IN COMPLIANCE WIHT ISO 10567.



: RATING OVER FRONT

: RATING OVER FRONT

: RATING OVER SIDE OR 360 degree

☐ : RATING OVER SIDE OR 360 degree

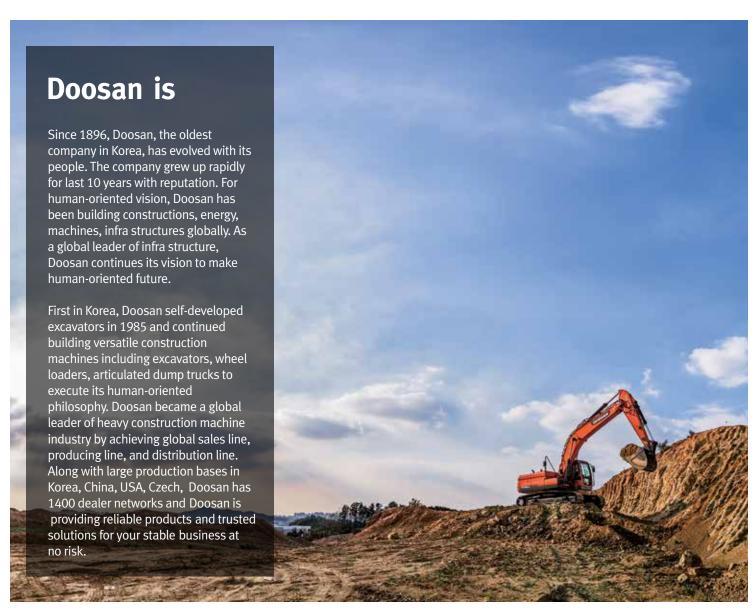
#### **WITHOUT DOZER**

TRACK WIDTH: 2.1 m (7'2") STD TRACK BOOM: 3.620 m (11'9") ARM: 1.670 m (5'6") BUCKET: SAE 0.3 m3 HEAPED SHOE: 450 mm (17.7")

A(m)	:	1		1		2	:	3		4		5	٨	Лах. Reac	h
B(m)	-	<del>[</del>	-	( <del> </del>	<u>t</u>	( <del> </del>	-	( <del>L</del> i	-	<del>[</del>	-	( <del> </del>	A(m)		
5					1.26 *	1.26 *					1.20 *	1.20 *	3.78		
4					1.36 *	1.36 *	1.30 *	1.30 *			1.09 *	1.09 *	4.56		
3			2.44 *	2.44 *	11.73 *	1.73 *	1.44 *	1.44 *	1.13	0.97	1.08 *	0.97	5.02		
2					2.24 *	2.24 *	1.66	1.43	1.12	0.96	1.01	0.87	5.25		
1					2.55	2.14	1.59	1.36	1.09	0.93	0.99	0.84	5.28		
0					2.47	2.06	1.55	1.32	1.07	0.91	1.03	0.88	5.11		
-1	3.10 *	3.10 *	3.95 *	3.95 *	2.45	2.05	1.53	1.30			1.17	1.00	4.72		
-2	5.03 *	5.03 *	3.37 *	3.37 *	2.35 *	2.07	1.55	1.32			1.52	1.3	4.04		
-3											1.44 *	1.44 *	2.89		

- 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 MINIMUN TIPPING LOADS OR 87 % OF HYDRAULIC CAPACITIES.
- 5. THE TOTAL MASS OF MACHINE IS 7200 kg INCLUDED IN THIS MASS BOOM 3.62 m, ARM 1.67 m, 631.2 kg COUTNERWEIGHT,
- BUCKET WEIGHT 273 kg, ALL OPERATING FLUIDS AND A 75 kg OPERATOR.
- 6. LIFT CAPACITIES ARE IN COMPLIANCE WIHT ISO 10567.





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