DOOSAN

Construction Equipment

DX75-7B

Engine Power	53HP @ 2,200 rpm
Operational Weight	7,420 kg
Bucket Capacity (SAE)	0.3 m^3

DOOSAN DX75-7B HYDRAULIC EXCAVATOR :

A NEW MODEL WITH ADVANCED FEATURES

DX75-7B

The key phrase during the development of the DX75-7B was “giving optimum value to the end users.” This translates, in concrete terms, into : Increased production and improved fuel economy thanks to electronic optimization of the hydraulic system and the improved Yanmar Engine(Yanmar 4TNV98-EXS). Improved ergonomics, increased comfort and excellent all around visibility ensure a safe and pleasant working environment.

Improved reliability through the use of high performance materials combined with new methods of structural stress analysis have led to increased component life expectancy, thus reducing running costs. Reduced maintenance increases the availability of the excavator and reduces running costs.

"VERSATILE MINI" DX75-7B !!

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.

* it may contain photographs of machines with specifications that differ from those of machines sold in your area.

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.

2 SWING DEVICE

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

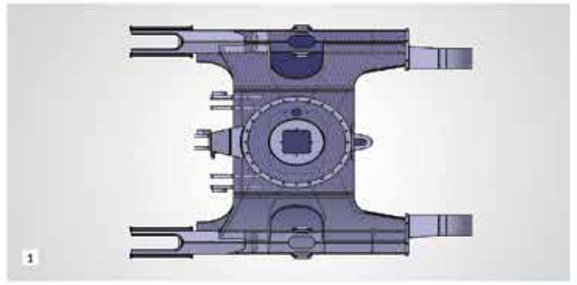
Powerful travel traction for undisturbed operation on slopes and wet ground.

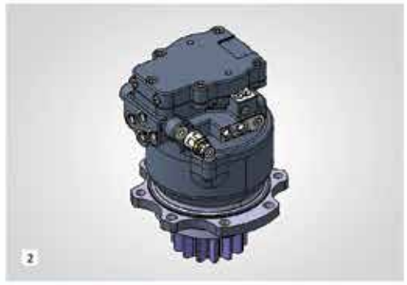
STABLE DURABILITY PROVED IN DIVERSE WORK ENVIRONMENTS

User demand for smaller-capacity equipment has been satisfied with enhanced front attachments, further reinforced upper structure, and high-durability frame and parts that have been proven at many worksites over a long period of time.

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.

FITTED WITH THE INDUSTRY-PROVEN YANMAR ELECTRONIC PUMP ENGINE

Oil separator and filer to improve the fuel discharge and durability of the engine. The compatibility of the hydraulic and drive systems has increased the oil discharge rate with reduced flow loss.

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

Larger cabin, same size as middle-large excavator models. Sufficient operating space, low noise level, and wider field of view. Noise and vibration in the cabin have been minimized, while the air conditioning system ensures an optimized work environment. A safe and pleasant environment is a precondition for enhanced work efficiency.

WIDER FIELD OF VIEW

The wide cabin window provides a wider field of view for greater work efficiency and safety.

ADJUSTABLE SEAT

The driver's seat can be adjusted by height and tilted to fit for the operator's position, thereby reducing fatigue and improving work efficiency.

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.

NEW WORK LIGHT

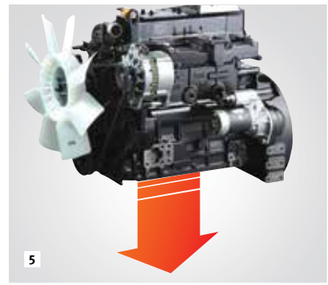
Upgraded brightness provides more lighting for nighttime works.

CONVENIENT, FAST , ECONOMICAL MAINTENANCE

Upgraded maintanence features provide customers with even greater convenience.

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)

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

BENEFITS

FUNCTIONS

Location
- GPS
- Geo-fence

Reports
- Periodic operation report
- Utilization

Operation Trend
- Total operation hour
- Operation hour by mode

Fuel Efficiency*
- Fuel level
- Fuel consumption

Filter & Oil Management
- Preventive maintenance by item replacement cycle

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 work pattern
- Manage fleet more effectively

Dealer

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

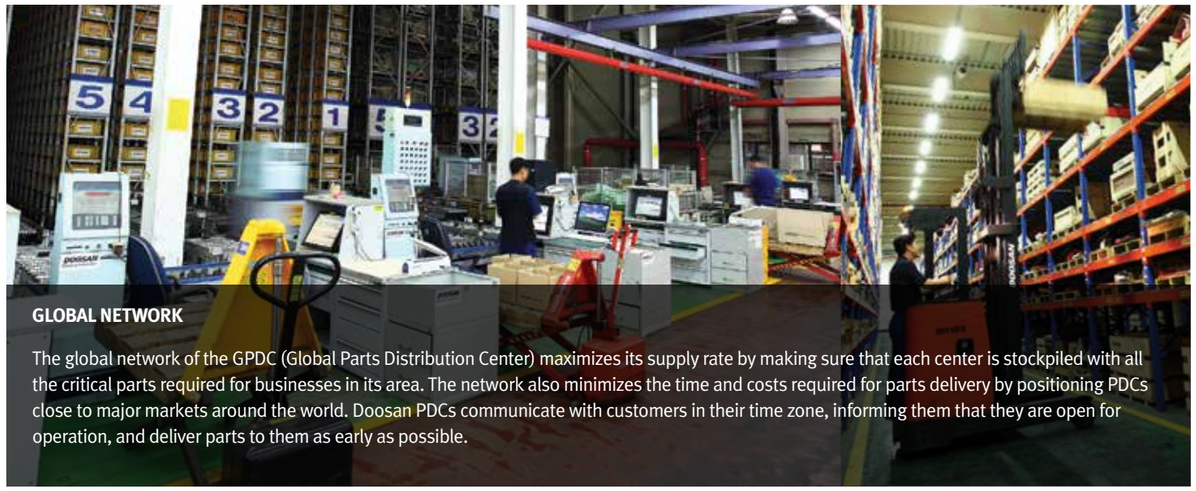
Doosan

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

GLOBAL PARTS NETWORK

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 stockpiled 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 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)

MPDC : Mother Parts Distribution Center

PDC : Parts Distribution Center

PDC BENEFIT

- **Distribution Cost Reduction**
- **Maximum Parts supply rate**
- **Shortest distance/time parts delivery**
- **Real-time service support**
- **Minimum downtime**

TECHNICAL SPECIFICATIONS

ENGINE

Model
YANMAR \ 4TNV98-EXS

Number of cylinders
4

Nominal flywheel power
53 HP @ 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

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
99 dB

Cab sound level
74 dB

REFILL CAPACITIES

Fuel tank
130l

Cooling system (Radiator capacity)
10l

Engine oil
11.6l

Swing drive
1.5l

Final drive (each)
1.3l

Hydraulic tank
90l

WEIGHT

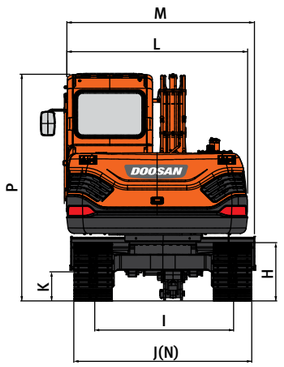
Boom : 3,620 mm Arm : 1,670 mm Bucket : SAE 0.3 m3

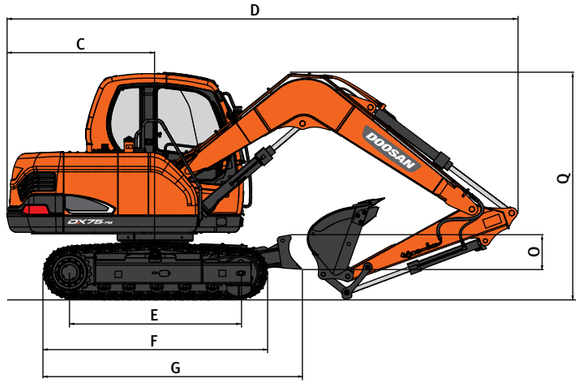
	Shoe width	Operating weight	Ground pressure (kgf/cm^2)
Triple Grouser	450 mm	7,500 kg (with dozer)	0.36 kgf/cm^2

WEIGHT

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

DIMENSIONS





WEIGHT

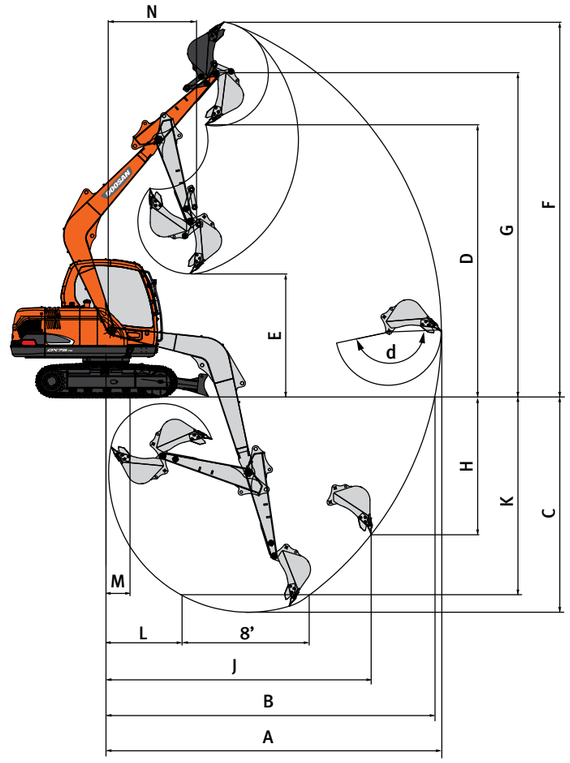
BOOM TYPE (ONE PIECE)		**(mm)**	**3,620**
ARM TYPE		**(mm)**	**1,670**
BUCKET TYPE (SAE)		**(m^3)**	**0.3**
C	**TAIL SWING RADIUS**	(mm)	1,750
D	**SHIPPING LENGTH**	(mm)	6,030
E	**TUMBLER DISTANCE**	(mm)	2,110
F	**TRACK LENGTH**	(mm)	2,750
G	**TRACK LENGTH(DOZER)**	(mm)	3,210
H	**TRACK HEIGHT**	(mm)	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^3**
Digging force	5,340 kgf
	52.36 kN
	11,772.7 lbf

Arm	**1,670 mm**
Digging force	3,690 kgf
	36.19 kN
	8,135 lbf

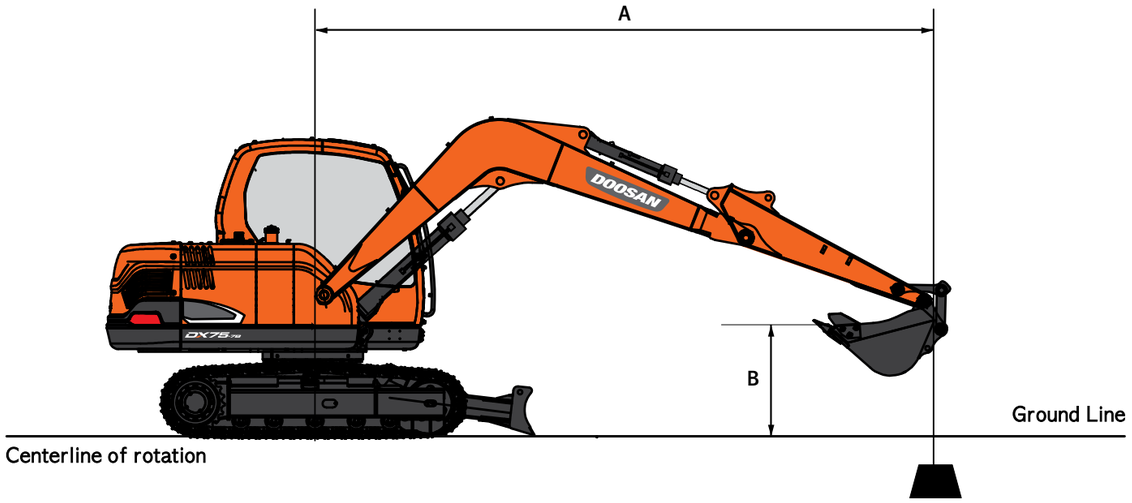
WORKING RANGES



WORKING RANGE

BOOM TYPE (ONE PIECE)		**(mm)**	**3,620**
ARM TYPE		**(mm)**	**1,670**
BUCKET TYPE (SAE)		**(m^3)**	**0.3**
A	**MAX. DIGGING REACH**	(mm)	6,270
B	**MAX.DIGGING REACH (Gradeability)**	(mm)	6,115
C	**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
H	**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

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) / B(m)	2	3	4	5	2	3	4	5	Max. Reach		
											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 0 kg, ALL OPERATING FLUIDS AND A 75 kg OPERATOR.
6. LIFT CAPACITIES ARE IN COMPLIANCE WIHT ISO 10567.

: RATING OVER FRONT
: 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) / B(m)	1		2		3		4		5		Max. Reach		
													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

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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, 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.

: RATING OVER FRONT
: RATING OVER SIDE OR 360 degree

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

DIPBE-01-2008

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