


Seoul Office :

Doosan Tower 27th FL. 18-12, Euljiro-6 Ga,
Jung-Gu, Seoul, Korea 100-730
Tel : +82-2-3398-8049
Fax : +82-2-3398-8117

www.doosaninfracore.com

Doosan Infracore Europe S.A.

1A, Rue Achille Degrace, 7080 Frameries, Belgium
Tel : +32-65-61-3230 Fax : +32-65-67-7338

Doosan Infracore U.K., Ltd.

Doosan House, Unit 6, 3 Heol Y Gamlas, Parc Nantgarw, Nantgarw,
Cardiff. CF15 7QU, U.K.
Tel : +44-1443-84-2273 Fax : +44-1443-84-1933

Doosan Infracore Europe S.A. Gernay

Heinrich-von- Stephan str. 2 40764 Langenfeld, Germany
Tel : +49-2173-2035-210 Fax : +49-2173-2035-219

Doosan Infracore France

ZAC de La Clef Saint Pierre - Buroplus 2 1A Avenue Jean d'Alembert
78990 Elancourt, France
Tel : +33-(0)1-30-16-21-41 Fax : +33-(0)1-30-16-21-44

Doosan Infracore America Corporation

2905 Shawnee Industrial Way, Suwanee, Georgia 30024, U. S. A
Tel : +1-770-831-2200 Fax : +1-770-831-0480

Doosan Infracore China Co., Ltd.

#28, Wuzhishan Road, Eco. & Tech, Development Zone,
Yantai, Shandong, China
Tel : +86-535-638-2000 Fax : +86-535-638-2004

Doosan Infracore South Africa (PTY) LTD.

60C Electron Road, Isando 1600, Johannesburg, South Africa
Tel : 27-11-974-2095 Fax : 27-11-974-2778

Doosan Infracore Middle East Center (Dubai)

P.O.Box 183127, Al-Serkal Building, Air Port Road, Dubai, U.A.E
Tel : +971-4-295-2781~2 Fax : +971-4-295-2783

Doosan Infracore do Brasil Serviços de Suporte Comercial Ltda.

Alameda Santos 2222 Cj52 CEP 01418.200 São Paulo ,SP, Brasil
Tel : +55-11-3061-3227 Fax : +55-11-3061-2731

Doosan Infracore India Pvt. Ltd.

Plot No. 34, Door No. 1/61-19, Palwels street, Ravi Colony, St.
Thomas Mount, Chennai-600 016
Tel : +91-44-4222-3900 Fax : +91-44-4222-3905



PBP S075C500 0712

The illustrations do not necessary show the product in standard version.
All products and equipments are not available in all markets.
Materials and specifications are subjects to change without prior notice.





Doosan Infracore
Construction Equipment

SOLAR75V

Engine Power : DIN 6271,net 40.2kw(54.6ps)@2,000 rpm

SAE J1349,net 40.2kw(53.9HP)@2,000 rpm

Operational Weight : 8,000kg (17,643 lb)

Bucket capacity(PCSA) : 0.11 ~ 0.28m³(0.14 ~ 0.37 cu.yd)







Convenient and Comfortable Operation!

This standard-duty machine, offers a spacious operating area that is only found in medium and heavy-duty machines. The working controls in the cabin are ergonomically designed to ensure convenience and comfort for the operator. Resulting in operator comfort and convenient operation.



Comfortable Operating Area

The internal operating controls are arranged in a convenient and ergonomic fashion. This allows for maximized operating efficiency. A large capacity air-conditioning system has been installed for operator comfort in all seasons. The open and spacious cabin provides the operator with a wide field of view for the best possible working conditions.

Low operating noise

The overall operating noise of the machine has been dramatically reduced for environmental considerations. The low noise cabin design has lowered the noise in the cabin to a comfortable 74 dB(A) even during travel and operation. This ensures a more comfortable and pleasant working environment.



SOLAR 75V

Fixed-Type Instrument Panel

Compact and elegantly designed central instrument panel makes it easy to check for various implementations.

Gauges

- ① Digital Clock
- ② Engine Gauge
- ③ Fuel Gauge
- ④ Hour Meter
- ⑤ Engine Oil Pressure Warning Pilot
- ⑥ Charging Warning Pilot
- ⑦ Engine Check Warning Light
- ⑧ Clogging Air Cleaner Filter Warning Pilot
- ⑨ Overload Warning Light
- ⑩ Glow Plug Pilot



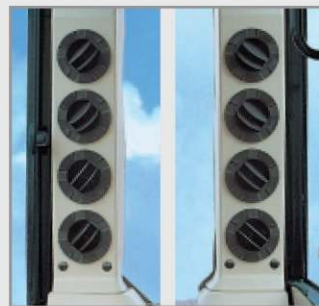
Rectangular Structure Cabin

For safety purposes and to protect the operator against falling objects at various working sites, the cabin structure is designed in a rectangular shape, ensuring operator safety.



Control Levers and Switches

Hydraulic joystick type lever is adopted for convenient control, and ensures precise control and excellent maneuverability. Various switches are centrally arranged to the right side of the seat for improved accessibility.



High-Output Air-Conditioner and Defroster

The air-conditioner capacity has been greatly improved and the vents have been installed at both the front and rear of the operator's seat to maximize air-conditioning efficiency. A defroster has been installed to prevent the front windshield from becoming frosted in the cold season resulting in safer operation.



Left and Right Control Stands



• Front Defroster and Lower Vent

Various Convenience Devices



• Flexible Antenna



• High-end Car Stereo



• Footwear Storage Box



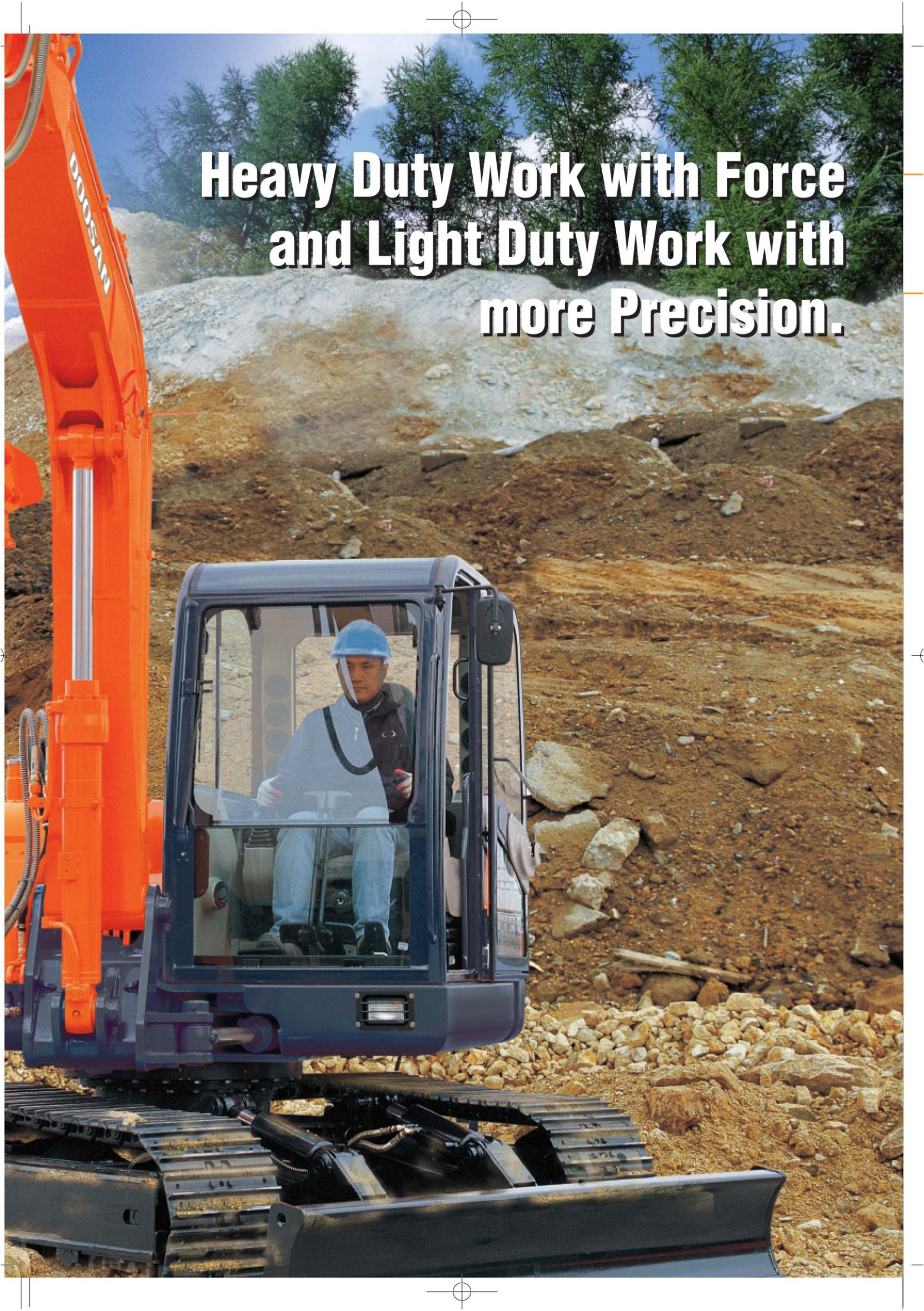
• Handle Release Device



• Foot Rest/Travel Pedal



• Cup Holder



**Heavy Duty Work with Force
and Light Duty Work with
more Precision.**



Best Performance Ensured at Any Work S

SOLAR 75-V ensures best performance with powerful excavating force and high-tech hydraulic system for better operation efficiency at any work site! Excellent performance is its basic feature! Its excellent performance with safety and convenience taken into account will help safe and convenient operation.



Powerful Excavating Force

Powerful excavating force of 5.5 tons from the 53.9HP (SAE J1349, net) engine achieves excellent performance quickly within a short time under any working conditions. In addition, a rpm controlling lever is installed on the left control lever in the cabin to make it easy to control working speed.

Composite Operation Capability Improved

Maximum combined operation capability is guaranteed by a sophisticated engine and hydraulic system control system. This system allows the engine and hydraulic system to be controlled to fit various working environments such as excavating or lifting operations requiring high pressure and large hydraulic flow or grading operations requiring low pressure and small hydraulic flow rate.



Breaker-Dedicated Line Installed

The hydraulic pipes have been installed up to the front end of the arm as standard equipment, for easy installation of the hydraulic breaker. A lock device is mounted on the end of the hydraulic line to prevent leakage of hydraulic oil when connecting the breaker.



A Dial-type Electric Engine Throttle Ensures Exact and Assistant Control



Site!

SOLAR 75V

Dozer Blade Control Lever

The dozer blade control lever is positioned above the right-hand control stand to secure easy and convenient access.



Bucket End and Dozer Blade Arrangement

The bucket end is designed to reach the dozer blade when the arm is folded. This feature improves efficiency in grading operation as well as stone lifting operation.



Large-capacity Dozer Blade

This machine is equipped with a large-capacity dozer blade (422 x 2,200 mm) ensuring excellent earth-moving operation. Its powerful dozer blade force can be used efficiently for operations on a slope.



Highest Dump Height

The maximum dump height of 4,290mm is the highest among the same-grade machines and enables easy loading operation onto a 15-ton dump truck.



Large-Capacity Fuel Tank

This machine is equipped with a large-capacity fuel tank (110 l) enabling continuous operation for two days before refueling. The fuel port has been raised in height to prevent oil leak when operating on a slope.



Low-Noise High-Power Engine

The 53.9HP (SAE J1349, net) engine produces outstanding power and is known for its durability. This results in excellent operation in high-load operations. In addition, it features a low noise and low emissions suitable for operation in noise sensitive areas and at night.



Quick and Easy Maintenance of Optimal

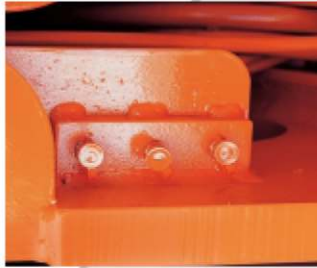
Sturdy SOLAR 75-V!

Special and scrupulous care has been given to even unseen features for trouble free operation and easy maintenance.



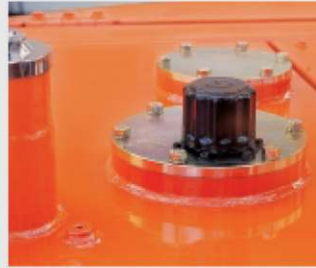
Fuel Level Gauge

The fuel level gauge has been relocated to the lower section and makes it easy to check the remaining fuel level.



Grease Piping

Integrated grease piping is designed to easily maintain the swing bearing, boom swing cylinder.



Air Breather

The mounted large-capacity air breather prevents possible damage to the pump from cavitation.



Prefabricated Track Guard

The track guard, which protects the vital track components is a prefabricated component and allows for easy replacement.



Working Condition!

SOLAR 75V



Dual-Filter Air Cleaner

The high-performance dual-filter air cleaner eliminates dust from entering the engine. The cover is an one-touch open/close type allowing easy maintenance.



Engine Oil Filter

The engine oil filter is attached to the engine body and extends out for easy maintenance.



Fan Belt Easy Tension Adjustment and Replacement

The spacious area around the fan belt enables easy tension adjustment and replacement. The mounted B-type belt has a greatly extended replacement interval.



Radiator

The large-capacity radiator provides excellent performance in severe and continuous operations. Simply removing the counterweight enables the radiator to be removed for easy maintenance.



Technical Data

Engine

Model	YANMAR 4TNV98-Z
Type	Water-cooled, 4-cycle, direct injection .
Aspiration	Natural
No. of cylinders	4
Rated flywheel horse power	
DIN 6271, net	40.2 KW (54.6 PS) at 2,000 rpm
SAE J1349, net	40.2 KW (53.9 HP) at 2,000 rpm
Displacement	3,319 cc (202.52 cu.in)
Maximum torque	23.2~ 25.3 kgf.m (235 Nm, 173.6 lbf.ft) @ 1,300 ±100rpm
Bore and stroke	98mm × 110mm (3.85" × 4.33")
Starting system	12V Electric motor
Batteries	1 × 12V × 100 AH

Hydraulic system

Load sensing system allows the operator to maximize work efficiency over a full range of operating conditions and to minimize fuel consumption.

- Hydraulic system assures fully independent and combined operations.

Main pumps	Variable displacement axial piston pump.
Max. oil flow	135 ℓ/min (35.66 US gpm, 29.97 lmp gpm)
Pilot pump	Gear pump
Max. oil flow	21 ℓ/min (5.55US gpm, 4.66 lmp gpm)
Swing motor	
Relief valve	215.6bar (3,130 psi, 220 kgf/cm ²)
Main relief valves	
Boom/Arm/Bucket	294bar (4,270 psi, 300 kgf/cm ²)
Travel circuit.....	274.5bar (3,980 psi, 280 kgf/cm ²)

Hydraulic cylinders

High-strength piston rods and tubes are used. Cylinder cushion mechanism is provided for all cylinders to assure shock-free operation and extend life of cylinder.

Cylinders	Q'ty	Bore × Rod dia. × Stroke
Boom	1	115 × 70 × 772mm (4.52" × 2.75" × 2'6")
Arm	1	95 × 60 × 820mm (3.74" × 2.36" × 2'8")
Bucket	1	85 × 55 × 690mm (3.34" × 2.16" × 2'3")
Dozer	2	100 × 60 × 141mm (3.94" × 2.36" × 5.55")
Boom swing	1	110 × 55 × 738mm (4.33" × 2.16" × 2'5")

Super-structure revolving frame

A deep, full-reinforced box section. Heavy-gauge steel plates used for ruggedness.

Operator's cab

A roomy, independent, shock and noise-free operator's cab, 4 side safety glass windows give all-round visibility. Front window slides up and stores in the roof and side window can be opened for ventilation. Fully adjustable suspension seat. Air conditioner. ISO standard cab.

Noise Levels (dynamic value)

LwA External noise

Guaranteed Sound Power Level **101 dB (A)** (2000/14/EC)

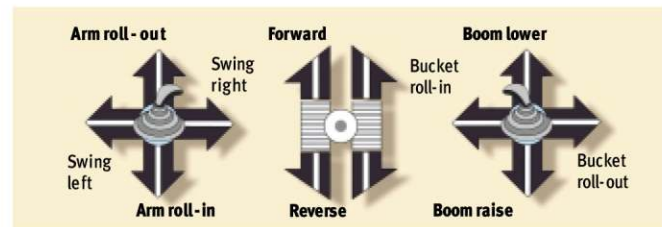
Measured Sound Power Level **100 dB (A)** (2000/14/EC)

LpA Operator noise

74 dB (A) (ISO 6396)

Controls. 2 implement levers

Pilot pressure control type. Right lever is boom and bucket control, left lever for swing and arm control.



2 Travel pedals with levers

Pilot pressure control type. Independent drive at each track allows counter-rotation of the tracks. Levers are detachable.



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 parking brake is spring-set, hydraulic-released disc type.

- **Swing speed** 0 to 9.6 rpm(min⁻¹)
- **Rear swing radius** 1,700 mm(5'7")

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) 4.4/2.7km/h
(2.7/1.7 mph)

Maximum traction force 6,400 kgf (14,088 lbf)

Gradeability 30° (57%) continuous

Undercarriage

Tractor type undercarriage. Heavy-duty track frame, all welded stress-relieved structure. Top grade materials are used for toughness. Side frames are welded, securely and rigidly, to the track frame. Lifetime-lubricated track rollers, idlers and sprockets with floating seals. Track shoes of induction-hardened rolled alloy with triple grousers. Specially heat-treated connecting pins. Hydraulic track adjusters with shock-absorbing recoil springs.

Number of rollers and shoes (each side) ground contact area

Upper rollers 1

(Standard shoe)

Lower rollers 5

Track shoes 38

Overall track length 5,852mm(19'2")

Buckets

Capacity		Width		Weight	Recommendation	
PCSA, heaped	CECE, heaped	Without side cutters	With side cutters		1.8m (5'11")Arm	2.2m (7'3")Arm
0.11m ³ (0.14yd ³)	0.10m ³ (0.13yd ³)	382mm (1'3")	482mm (1'7")	173kg (381.5 lb)	A	A
0.28m ³ (0.37yd ³)	0.24m ³ (0.31yd ³)	792mm (2'7")	901mm (2'11")	255kg (562.2 lb)	A	A

Brake

Two oil disc brake on final drive input shafts. Parking brake is spring-set, hydraulic-released disc type.

Weight

Equipped with 3.1m(10'2") boom, 1.6m(5'3") arm, and 0.28m³(0.37yd³; PCSA heaped) bucket.

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	450mm (1'6")	8,000 kg (17,643 lb)	0.38kgf/cm ² (37kpa, 5.4psi)
Rubber	450mm (1'6")	7,980 kg (17,600 lb)	0.37kgf/cm ² (36kpa, 5.26psi)

Service refill capacities

	Liters	US gal	Imp gal
Fuel tank	110	29.05	24.42
Cooling system	10	2.64	2.22

Lubrication	Liters	US gal	Imp gal
Engine oil	9.7	2.56	2.15
Swing drive	1.5	0.39	0.33
Final drive(each)	1.2	0.32	0.26
Hydraulic system	150	39.62	33.30
Hydraulic tank	94	24.83	20.86

Optional equipment

Safety

- Boom lock valve
- Over-load warning device travel alarm

Cabin & Interior

- Sun visor

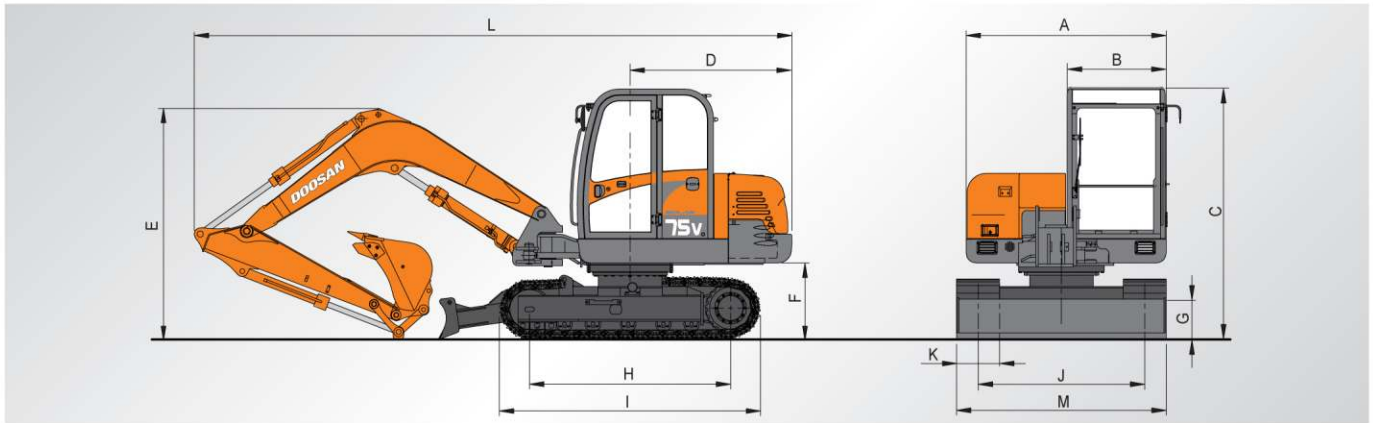
Others

- ARM 2.2m
- Two way piping
- Rubber track



Dimensions & Working Ranges

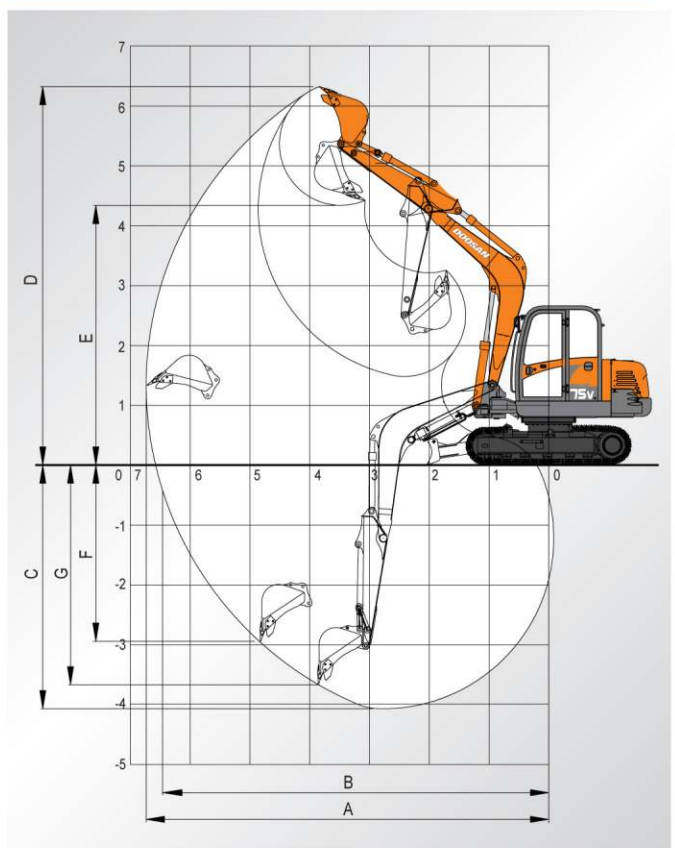
Dimensions (3.1m(10'2") Boom, 1.8m(5'11") Arm, 450mm(1'6") Shoe)



A Overall width of upper structure	2,210mm (7'3")
B Overall width of cab	1,030mm (3'4")
C Overall height of cab	2,630mm (8'8")
D Tail swing radius	1,700mm (5'7")
E Overall height	2,420mm (7'11")
F Clearance under counterweight	785mm (2'7")
G Ground clearance	365mm (1'2")
H Tumbler distance	2,130mm (7'0")
I Track length	2,775mm (9'1")
J Track gauge	1,750mm (5'9")
K Track shoe width	450mm (1'6")
L Overall length	6,280mm (20'7")
M Overall track width with 450 mm (17.7") shoe	2,200mm (7'3")

*Overall height (Arm 2.2m) 3,215(10'7")

Working ranges



Digging forces (Maximum radial tooth forces)

	1.8m (5'11") Arm	2.2m (7'3") Arm
Bucket digging force *	4,900 kgf 48.05 kN 10,805 lbf	4,900 kgf 48.05 kN 10,805 lbf
Arm digging force *	3,500 kgf 34.32 kN 7,718 lbf	3,500 kgf 34.32 kN 7,718 lbf

Boom length	3.1m (10'2")	
Arm length	1.8m (5'11")	2.2m (7'3")
A. Max. digging reach	6,650mm (21'10")	7,020mm (23')
B. Max. digging reach at ground level	6,495mm (21'4")	6,880mm (22'7")
C. Max. digging depth	4,020mm (13'2")	4,420mm (14'6")
D. Max. digging height	6,250mm (20'6")	6,490mm (21'3")
E. Max. dumping height	4,290mm (14'1")	4,525mm (14'10")
F. Max. vertical wall digging depth	2,910mm (9'7")	3,345mm (11')
G. Max. digging depth (8' level)	3,625mm (11'11")	4,090mm (13'5")

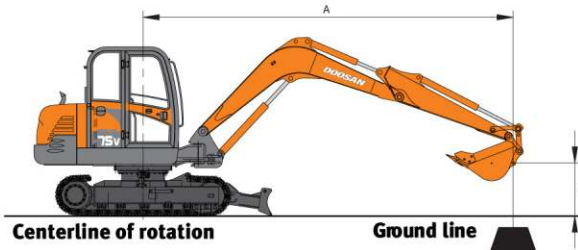




Lifting Capacities

SOLAR 75v

Standard



Boom : 3.1m (10'2")
Arm : 1.8m (5'11")
Bucket : PCSA 0.28m² (CECE 0.24m²)
Shoe : 450mm (1'6")

Metric Without Dozer

Unit : 1,000 kg

A(m)	2		3		4		5		Max. Reach		A(m)	
	□	□	□	□	□	□	□	□	□	□		
5										*1.46	*1.46	3.82
4					*1.5	*1.51				*1.37	1.30	4.77
3					*1.7	1.71	1.43	1.18		1.29	1.07	5.30
2			*2.9	2.57	2.00	1.64	1.40	1.16		1.17	0.97	5.56
1			3.04	2.42	1.93	1.58	1.36	1.12		*1.14	0.94	5.60
0	*2.33	*2.33	2.96	2.35	1.88	1.53	1.34	1.10		1.18	0.97	5.43
-1	*3.83	*3.83	2.95	2.33	1.86	1.51	1.33	1.09		1.33	1.09	5.00
-2	*5.68	4.71	2.97	2.35	1.87	1.52				1.71	1.40	4.24
-3	*3.60	*3.60								*2.49	*2.49	2.76

Feet

Unit : 1,000 lb

A(ft)	7.5'		10'		12.5'		15'		17.5'		Max. Reach		A(ft)	
	□	□	□	□	□	□	□	□	□	□	□	□		
15'												*3.09	*3.09	14'00"
12.5'							*3.51	3.07				*3.02	2.73	16'00"
10'					*3.81	*3.81	3.66	3.03				2.87	2.38	17'30"
7.5'	*7.99	*7.99	*5.64	5.63	*4.66	3.96	3.59	2.97	2.79	2.31	2.64	2.18	18'00"	
5'			6.71	5.36	4.68	3.82	3.51	2.89	2.74	2.27	2.53	2.09	18'40"	
2.5'	*4.79	*4.79	6.48	5.16	4.55	3.70	3.43	2.82	2.70	2.23	2.51	2.07	18'30"	
0'	*6.47	*6.47	6.36	5.05	4.46	3.62	3.38	2.77	2.67	2.20	2.60	2.14	17'80"	
-2.5'	*8.90	8.03	6.33	5.02	4.42	3.58	3.35	2.74			2.82	2.32	16'80"	
-5'	*10.73	8.08	6.34	5.03	4.42	3.58	3.36	2.75			3.27	2.68	15'20"	
-7.5'	*10.7	8.18	6.41	5.09	4.48	3.63					4.27	3.48	12'80"	
-10'	*6.50	*6.50									*5.49	*5.49	8'66"	

Option

Metric Without Dozer

Boom : 3.1m (10'2") **Arm : 2.2m (7'3")** **Bucket : SAE 0.28m²(CECE 0.24m²)heaped** **Shoe : 450mm (1'6")** Unit : 1,000 kg

A(m)	2		3		4		5		6		Max. Reach		A(m)	
	□	□	□	□	□	□	□	□	□	□	□	□		
5												*1.19	*1.19	4.4
4							*1.40	1.22				*1.12	1.12	5.2
3							1.45	1.20				*1.14	0.95	5.7
2			*2.3	*2.3	*1.9	1.67	1.41	1.17				1.05	0.87	5.9
1			3.10	2.47	1.95	1.60	1.37	1.13	1.02	0.84		1.02	0.84	6.0
0	*2.21	*2.21	2.98	2.36	1.89	1.54	1.34	1.10				1.05	0.87	5.8
-1	*3.30	*3.30	2.94	2.33	1.86	1.51	1.32	1.08				1.16	0.95	5.4
-2	*4.74	4.66	2.95	2.33	1.86	1.51						1.42	1.16	4.7
-3	*5.15	4.76	3.00	2.38								2.21	1.79	3.6

Feet

Unit : 1,000 lb

A(ft)	7.5'		10'		12.5'		15'		17.5'		Max. Reach		A(ft)	
	□	□	□	□	□	□	□	□	□	□	□	□		
15'							*2.99	2.99				*2.53	*2.53	15'8"
12.5'							*2.95	*2.95	*2.56	2.39		*2.47	2.37	17'5"
10'							*3.21	3.08	2.86	2.38		2.50	2.11	18'7"
7.5'					*3.97	3.97	3.63	3.01	2.82	2.34		2.36	1.96	19'4"
5'	*10.6	8.73	*6.59	5.49	4.75	3.89	3.55	2.93	2.77	2.29		2.27	1.88	19'7"
2.5'	*6.30	*6.30	6.58	5.24	4.60	3.75	3.46	2.84	2.72	2.24		2.26	1.86	19'6"
0	*6.38	*6.38	6.41	5.09	4.49	3.64	3.39	2.78	2.67	2.20		2.32	1.91	19'1"
-2.5'	*7.95	7.95	6.33	5.02	4.42	3.58	3.34	2.74	2.65	2.18		2.48	2.04	18'2"
-5'	*10.2	8.02	6.31	5.00	4.40	3.56	3.33	2.72				2.79	2.29	16'8"
-7.5'	*10.75	8.09	6.35	5.04	4.43	3.59						3.42	2.80	14'8"
-10'	*9.27	8.23	6.40	5.13								5.06	4.09	11'6"

Note 1. Ratings are based on SAE J1097

2. The load point is a hook located on the back of the bucket.

3. * : * Rated loads are based on hydraulic capacity.

4. Rated loads do not exceed 87% of hydraulic capacity or 75% of tipping capacity.

□ : Rating over front

□ : Rating over side or 360 degree

0 : Ground

