

D O O S A N D A E W O O · W H E E L · L O A D E R

# **MEGA** **200-V**

## **DOOSAN DAEWOO NEW WHEEL LOADER**

- Operating Weight : 11,000kg (24,250lb)
- Bucket Capacity : 1.8 m<sup>3</sup> (2.35cu · yd)
- Rated Engine Power : 103kw (138HP)/2,200 rpm



**DOOSAN**  
*Infracore*

# Specifications



## Engine "Emissions Certified"

Emissions		Stage-I (Tier-I)	Stage-II (Tier-II)
Make and model		DOOSAN DB58Ti diesel engine	DOOSAN DB58TiS diesel engine
Type		4-Cycle, Turbo after cooled, direct injection	
Flywheel horse power	Gross (SAE J1995)	-	Rated. 143HP(107kw)/2,200rpm Max. 158HP(118kw)/2,000rpm
	Net (SAE J1349)	138HP(103kw)/2,200rpm	-
Max. Torque	Gross (SAE J1995)	-	64kg.m(463t.lb)/1,600rpm
	Net (SAE J1349)	57kg.m(412t.lb)/1,500rpm	-
Cooling type		pusher plastic fan pressurised radiator	Sucker plastic fan driven by hydraulic fan motor

"High torque rise"

Fuel system delivers a controlled increase of fuel as the engine lugs back from rated speed.

This results in horsepower greater than rated power.

The combination of increased torque rise and maximum horsepower improves response, provides greater rimpull, more lift force and faster cycle times. The maximum horsepower occurs at 2000rpm when power is needed during the working cycle.

Total displacement ..... 5.8 liter (353 in<sup>3</sup>)

No. of cylinders ..... 6

Bore x stroke ..... 102 (4") x 118 (4.6")

Air cleaner ..... Dry type(double stage)



## Electrical system

Voltage ..... 24v

Batteries, in series ..... 2 x 12v

- total capacity ..... 100 Ah

- type ..... maintenance-free

Starter motor ..... 24v x 4.5 Kw

Alternator capacity ..... 50A



## Torque converter

Type ..... 3-element, 1 stage, single phase

Torque stall ratio ..... 2.91



## Transmission

Type: Full Auto Power-shift countershaft design with four forward and three reverse speeds.

Control: single lever electric "fingertip" type.

Forward speeds

	17.5x25 (STD)	20.5x25(OPT)
1	7.3 (4.5)	8.2 (5.1)
2	12.7 (7.9)	14.3 (8.9)
3	22.0 (13.7)	25.0 (15.5)
4	36.0 (22.4)	39.0 (24.2)

Reverse speeds

1	7.6 (4.7)	8.5 (5.3)
2	13.3 (8.3)	15.0 (9.3)
3	23.4 (14.5)	26.3 (16.3)

Safety device prevents engine starting while in neutral gear



## Axles

Rigid front axle, oscillating rear axle designed for heavy duty applications

Rear axle oscillation ..... ±11°

Hermetically sealed final drives and wet disc brakes



## Brakes

type ..... wet multi disc brakes

fully hydraulic operated brake circuit

Independent circuit for each axle dual pedal braking system

Transmission declutch during braking can be preselected by a switch on the control stand panel

Parking brake: dry disc mounted on front axle

Spring applied, electric-hydraulic released via a switch on the control stand panel

The brake circuit complies with the following international standards ..... ISO3450, EEC 71/320, SAE J1473



## Tires

Type ..... Tubeless

Choice of ..... 17.5X25X12PR (L2)

17.5X25X12PR (L3)

20.5X25X12PR (L3)

20.5 R25XHAT2 (L3)

20.5 R25 VKT (L2)



## Hydraulic system

Type ..... sealed system with anticavitation and relief valves

Pump ..... gear type with steel case and automatic wear compensation

- max. flow delivery ..... 175 l/min (46 gal/min)

- max. working pressure ..... 200 kg/cm<sup>2</sup> (2,845 psi)

Control ..... Pilot, single lever

Double-acting hydraulic cylinders

Loader arm (2EA)

  bore x stroke ..... 120mm(4.7") x 793mm(31.2")

Bucket (1EA)

  bore x stroke ..... 140mm(5.5") x 490mm(19.3")

Operating time

  lift ..... 5.0 s

  lower ..... 3.3 s

  dump ..... 1.2 s

Hydraulic lines and connecting flanges are equipped with O-ring seals.

Invaluable for loading and transport on uneven terrain.



## Steering

Type ..... Load sensing orbitrol type steering control, full hydraulic, power steering.

Pump ..... gear type

Max. flow rate ..... 85 l/min (22 gal/min)

Max. working pressure ..... 175kg/cm<sup>2</sup> (2,490 psi)

Cylinders

  bore x stroke ..... 70 mm(2.76") x 370mm(14.6")

Emergency steering circuit with hydraulic pump driven by electric DC-motor.



## Cab

ROPS / FOPS integrated cab. Excellent all-round visibility.

The ROPS/FOPS complies with the following standards:

ROPS - ISO3471-SAE 1040

FOPS - ISO 3449/SAE J 231

\* External sound power level

Guaranteed sound power level ..... LWA 105 dB (A)

(According to EU Directive 2000/14/EC)



## Capacities

### ENGINE

Lube oil ..... 21 litres (5.5 gal)

Coolant ..... 31 litres (8.2 gal)

Fuel tank ..... 260 litres (68.7gal)

Transmission oil ..... 30 litres (7.9gal)

Hydraulic system ..... 150 litres (39.6 gal)

### AXLES

Front ..... 20 litres (5.3 gal)

Rear ..... 20 litres (5.3 gal)

## Standard equipment

- Car stereo(AM / FM)
- 2 Road lights with high / low beams
- 2 Front directional indicators
- 2 Combination : tail light, stop light and directional indicators
- 2 Front and rear working lights
- Hourmeter, speedometer and tachometer
- Electronic display / monitoring system
- Engine coolant temp. gauge
- Torque converter oil temp. gauge
- Fuel level indicator
- Horn
- Neutral safety start system
- Fully adjustable suspension seat and seat belt
- ROPS Cab with window washer and wipers and rear view mirrors
- Sunvisor, sliding door windows (LH Only)
- Arm Rest & Wrist Rest
- Front and rear fenders
- Rear frame side covers
- Heater and defroster
- Air conditioner
- Pull hitch
- Automatic electro-magnetic return to dig
- Boom kick - out

## Optional equipment

- Auxiliary hydraulic function
- Emergency steering
- Fuel feeding pump
- Fork equipment
- Limited slip differential axle
- Rear full fender
- Timber grapple
- Boom float kick-out
- Rotating beacon
- Under guard
- LIS (Boom suspension) system
- CCTV camera
- 3-spool piping
- Wheel chocks
- Two lever
- Ergo lever

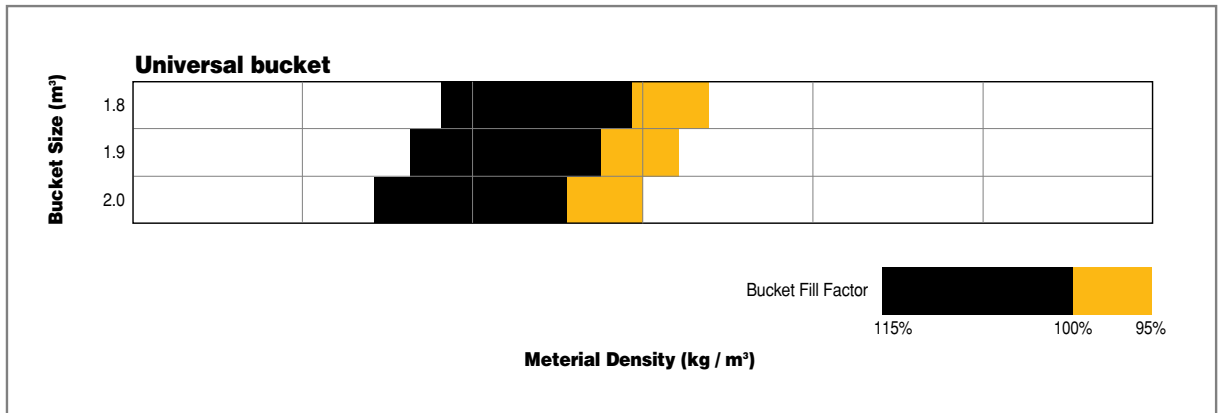
## Weights and dimensions (supplemental specifications)

	Operating weight	Overall width (Outside tires)	Vertical dimension	Static tipping load-straight
20.5-R25 XHAT2 (L3)	+160kg (+353lb)	+7mm (+0.28inches)	-4mm (-0.16inches)	+90kg (+198lb)
20.5-R25 VMT (L2)	+80kg (+176lb)	+5mm (+0.2inches)	+10mm (+0.39inches)	+42kg (+93lb)

## Typical material densities-Loose

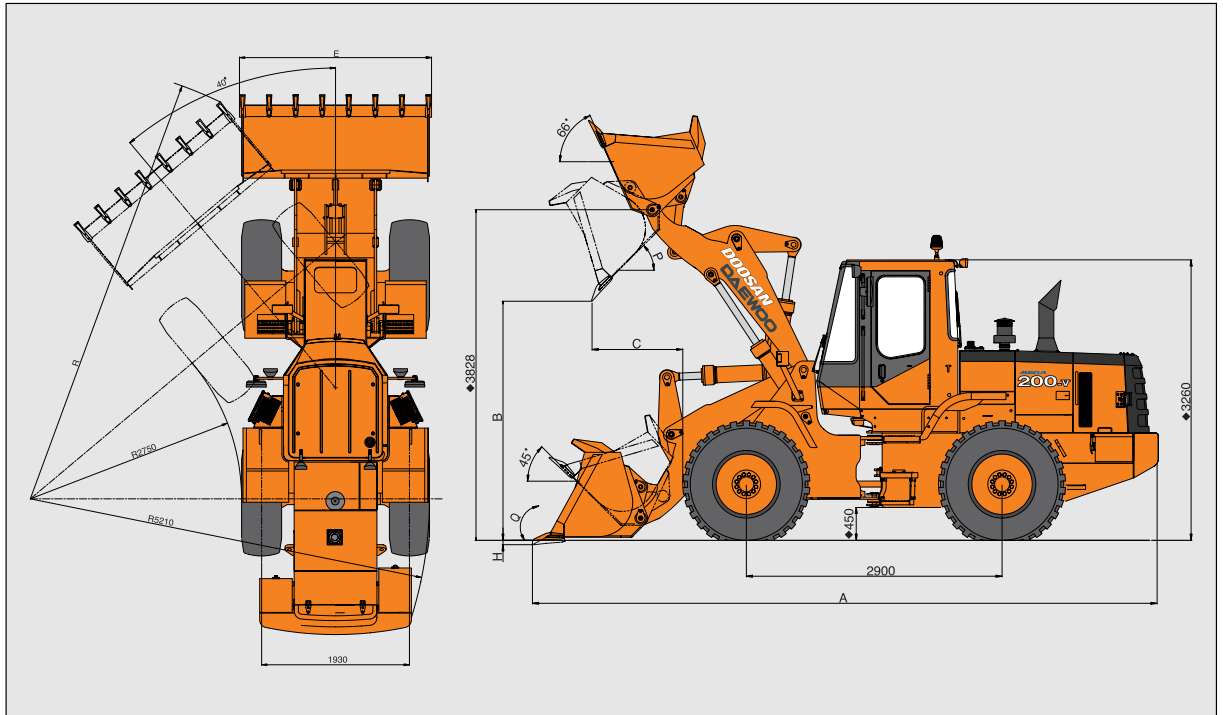
Material	Condition	Density kg/m (lb / yd)	Material	Condition	Density kg/m (lb / yd)
Gravel	dry	1,510 (2,545)	Clay	natural	1,660 (2,800)
	dry, 6-50 mm	1,690 (2,850)		dry	1,480 (2,495)
	wet, 6-50 mm	2,020 (3,405)		wet	1,660 (2,800)
Sand	dry	1,420 (2,395)	Limestone	soft	1,540 (2,595)
	damp	1,690 (2,850)		hard	1,650 (2,780)
	wet	1,840 (3,100)	Stone	crushed	1,600 (2,700)
Clay & Gravel	dry	1,420 (2,395)	Granite	broken	1,660 (2,800)
	wet	1,540 (2,595)	Slag	broken	1,750 (2,950)
Earth	dry	1,510 (2,545)	Gypsum	broken	1,810 (3,050)
	wet	1,600 (2,700)		crushed	1,600 (2,700)
Sand & Clay	loose	1,600 (2,700)	Basalt		1,960 (3,305)
Sand & Gravel	dry	1,720 (2,900)	Slate		1,250 (2,105)
	wet	2,020 (3,405)	Sandstone		1,510 (2,545)

## Bucket selection guide / Material densities



# Dimension

## Z-bar linkage



## Specifications

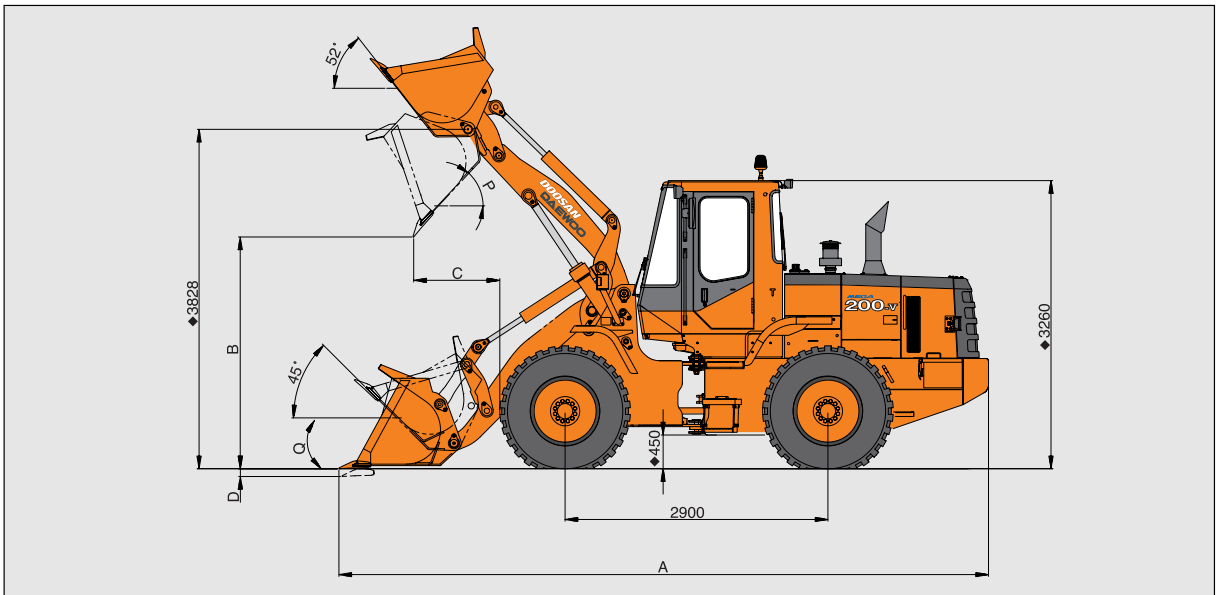
Bucket type	Unit	Universal bucket			
		Teeth	Cutting edge	Teeth (Standard)	Cutting edge
Capacity heaped	m <sup>3</sup> (yd <sup>3</sup> )	1.8(2.4)	1.9(2.5)	1.9(2.5)	2.0(2.6)
Tire		17.5-25		20.5-25	
Bucket weight	kgf (lb)	872(1,922)	895(1,973)	884(1,949)	911(2,008)
E Bucket width	mm (ft. in)	2,450(8'0")	2,450(8'0")	2,550(8'4")	2,550(8'4")
Static tipping load, straight	kgf (lb)	8,500(18,740)	8,480(18,695)	8,500(18,740)	8,470(18,673)
ful turn(40°)	kgf (lb)	7,400(16,315)	7,380(16,270)	7,400(16,315)	7,370(16,248)
Breakout force	kgf (lb)	10,500(23,150)	10,489(23,124)	10,500(23,150)	10,470(23,082)
A Overall length	mm (ft. in)	7,025(23'05")	6,932(23'74")	7,035(23'08")	6,942(23'78")
B Dump Height at 45°	mm (ft. in)	2,720(8'92")	2,788(9'15")	2,730(8'96")	2,798(9'18")
C Dump Reach at 45°	mm (ft. in)	1,090(3'58")	1,029(3'38")	960(3'15")	899(2'95")
D Digging depth	mm (ft. in)	50(16")	50(16")	50(16")	50(16")
R Turning radius at bucket	mm (ft. in)	5,654(18'6")	5,610(18'4")	5,659(18'6")	5,614(18'4")
Q Max. tilt angle on ground	deg	40	40	40	40
P Max. dump angle at fully raised	deg	46	46	46	46
Operating weight	kgf (lb)	11,000(24,250)	11,023(24,302)	11,200(24,690)	11,227(24,751)

※ Measured to the tip of the bucket teeth or cutting edge.

※ If fitted with tires sized 17.5-25 : vertical heights-80mm (indicated "◆")

# Dimension

## Parallel linkage



## Specifications

Bucket type	Unit	W/O Coupler		W/O Coupler	
Capacity heaped	m <sup>3</sup> (yd <sup>3</sup> )	1.8 (2.4)	1.9 (2.5)	1.9 (2.5)	
Tire		17.5-25	20.5-25	17.5-25	17.5-25
Material density	kg/m <sup>3</sup> (lb .yd)	1,800 (3,033)		1,800 (3,033)	
Static tipping load, straight	kgf (lbf)	8,000 (17,636)	8,150 (17,960)	7,700 (16,986)	7,850 (17,310)
ful turn(40°)	kgf (lbf)	6,950 (15,320)	7,080 (15,600)	6,750 (14,880)	6,880 (15,160)
Breakout force	kgf (lbf)	10,800 (23,800)		10,400 (22,930)	
A Overall length	mm (ft .in)	7,280 (23'1")		7,280 (23'1")	
B Dump Height at 45° (w/o teeth)	mm (ft .in)	2,710 (8'11")	2,792 (9'2")	2,679 (8'9")	2,679 (8'9")
Dump Height at 45° (w/ teeth)	mm (ft .in)	2,584 (8'6")	2,666 (8'9")	2,553 (8'4")	2,553 (8'4")
C Dump Reach at 45°	mm (ft .in)	1,041 (3'5")	971 (3'2")	1,075 (3'6")	1,075 (3'6")
E Bucket width	mm (ft .in)	2,450 (8'1")	2,550 (8'4")	2,743 (9'0")	
D Digging depth	mm (ft .in)	172 (6.8")	84 (3.3")	172 (6.8")	172 (6.8")
R Turning radius (at tire center)	mm (ft .in)	4,949 (16'2")		4,949 (16'2")	
Q Max. tilt angle on ground	deg	46		46	
P Max. dump angle at fully raised	deg	46		46	
Operating weight	kgf (lb)	11,000 (24,250)	11,200 (26,690)	11,490 (25,330)	11,490 (25,330)

\* Measured to the tip of the bucket teeth or cutting edge

\* If fitted with tires sized 17.5-25 : vertical heights-80mm (indicated "◆")



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\*Specifications are subject to change without prior notice.

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### Seoul Office

Doosan Tower 26TH FL. 18-12, Euljiro-6Ga,  
Jung-Gu, Seoul, Korea 100-730  
Tel : +82-2-3398-8114 Fax : +82-2-3398-8117  
Website : www.doosaninfracore.com

### Doosan Infracore Europe S.A.

1A, Rue Achille Degrace, 7080 Frameries, Belgium  
Tel : +32-65-61-3231 Fax : +32-65-61-3238

### Doosan Infracore U.K., Ltd.

Doosan House, Unit 6.3, Nantgarw Park,  
Cardiff CF47QU, U.K.  
Tel : +44-1443-84-2273 Fax : +44-1443-84-1933

### Doosan Infracore Germany GmbH.

Hans-Böckler strasse 29, D-40764, Langenfeld-Fuhrkamp,  
Germany  
Tel : +49-2173-8509-20 Fax : +49-2173-8509-60

### Doosan Infracore France

(Doosan Infracore Europe S.A. France Office)  
2Eme Etage, 1/3 Avenue Pavlov, Z.A.I. Des Bruyeres,  
78190 Trappes France  
Tel : +33-1-3016-2140 Fax : +33-1-3016-2144

### 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 Xinjiang Machinery Co., Ltd.

No. 178, Hetanbei Road, Wulumuqi, Xinjiang, China  
Tel : +86-991-469-7217 Fax : +86-991-469-8641

### Doosan Infracore Liaoning Machinery Co., Ltd.

No.32 DongLing Road, DongLing District, ShenYang, Liaoning, China  
Tel : +86-24-8841-1407 Fax : +86-24-8841-1404

### Doosan Infracore South Africa Pty Ltd.

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