



Doosan Infracore  
Construction Equipment

# DX300LL TECHNICAL DATA



## GENERAL SPECIFICATIONS

	ITEMS	UNIT	STANDARD
ENGINE	MODEL		Doosan DL08
	NUMBER OF CYLINDERS		6
	RATED FLYWHEEL POWER (hp PER SAE J1995) GROSS	hp / rpm	202 / 1,900
		kW / rpm	151 / 1,900
	RATED FLYWHEEL POWER hp PER SAE J1349) NET	hp / rpm	197 / 1,900
		kW / rpm	147 / 1,900
	MAXIMUM TORQUE (GROSS) (SAE J1995)	ft lb / rpm	687 / 1,300
		Nm / rpm	932 / 1,300
	PISTON DISPLACEMENT	in. <sup>3</sup>	466
		cc	7,640
	BORE AND STROKE	in. x in.	4.3 x 5.5
		mm x mm	108 x 139
	STARTER	V / kW	24 V, 6 kW
BATTERIES	V / AH	2 x 12 V x 150 AH	
AIR CLEANER		Double element with auto dust evacuation.	
MAIN PUMPS – 2 VARIABLE DISPLACEMENT AXIAL PISTON PUMPS MAX FLOW	US gpm	2 x 65	
	L / min.	2 x 246	
PILOT PUMP (GEAR DESIGN)	MAXIMUM FLOW	US gpm	7.5
		L / min.	28.5
	RELIEF PRESSURE	psi	569
		bar	39
MAXIMUM SYSTEM PRESSURE	BOOM/ARM/BUCKET (NORMAL MODE)	psi	4,694
		bar	324
	BOOM/ARM/BUCKET (POWER MODE)	psi	4,978
		bar	343
	TRAVEL	psi	4,765
		bar	328
	SWING	psi	3,911
		bar	270
UNDERCARRIAGE	UPPER ROLLERS		2 each track (STD. Shoes)
	LOWER ROLLERS		9 each track
	NUMBER OF SHOES (LINKS PER SIDE)		51 each track (Double Grouser)
	TOTAL LENGTH OF TRACK	ft. in.	16' 2"
mm		4,920	
ENVIRONMENT	SOUND LEVEL (2000/14/EC)	dB(A)	104
	CABIN SOUND LEVEL (ISO 6396)	dB(A)	73
SWING MECHANISM	SWING SPEED	rpm	0 - 9.9
DRIVE SYSTEM	TRAVEL SPEED (FAST/SLOW)	mph	2.9 / 1.9
		km / h.	4.6 / 3.1
	DRAWBAR PULL	lb.	61,288
		kg	27,800
	MAXIMUM GRADE	%	70
		°	35

	ITEMS	UNIT	STANDARD
REFILL CAPACITIES	FUEL TANK	US gal.	132
		L	500
	COOLING SYSTEM (RADIATOR CAPACITY)	qt.	37
		L	35
	ENGINE OIL	qt.	38
		L	36
	SWING DRIVE	qt.	6.3
		L	6
	FINAL DRIVE (EACH SIDE)	qt.	5.8
		L	5.5
	HYDRAULIC SYSTEM	US gal.	126.8
		L	480
HYDRAULIC TANK	US gal.	74	
	L	280	

## WEIGHT

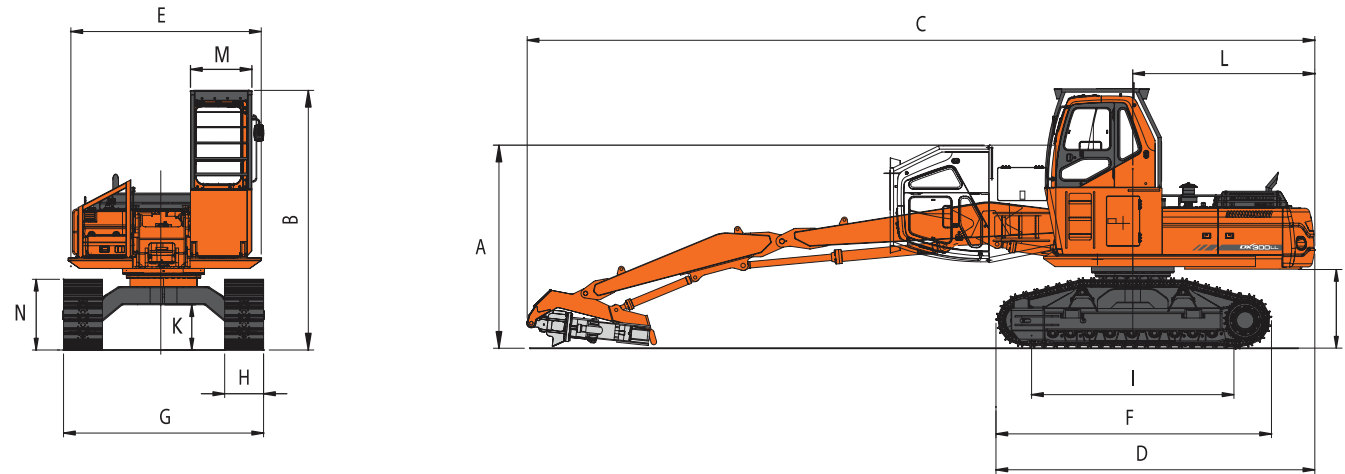
<b>BOOM</b>	<b>20' 8" (6,300 mm)</b>	
<b>ARM</b>	<b>12' 10" (3,910 mm)</b>	
<b>GRAPPLE</b>	<b>None</b>	
SHOE WIDTH (DOUBLE GROUSER)	OPERATING WEIGHT	GROUND PRESSURE
2'4" (700 mm)	77,381 lb. (35,100 kg)	8.25 psi (0.57 bar)

## 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.

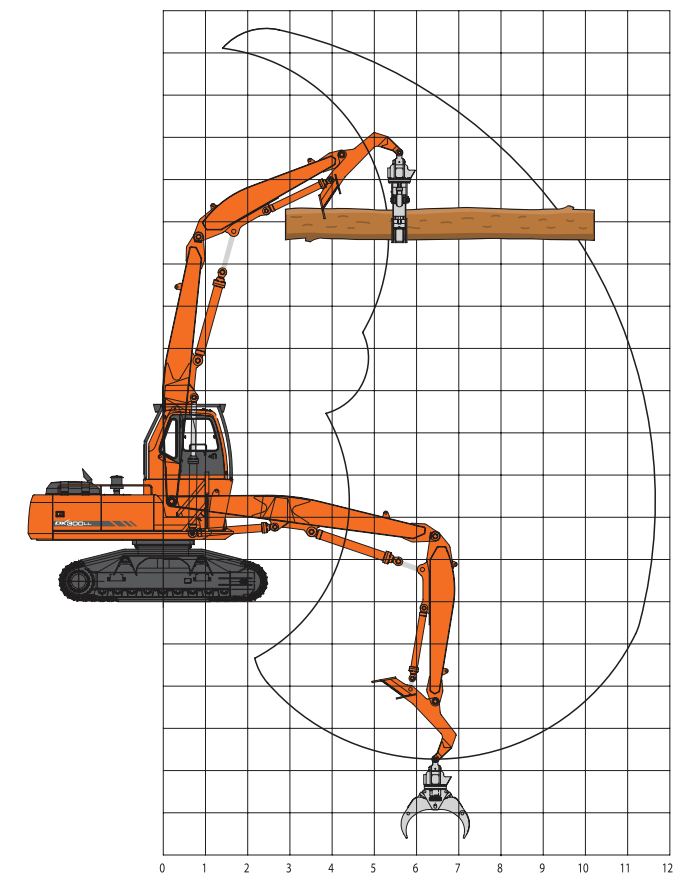
CYLINDERS	QUANTITY	BORE x ROD DIAMETER x STROKE
BOOM	2	5.9" x 3.9" x 3' 11" (150 x 100 x 1,190 mm)
ARM	1	7.0" x 4.7" x 4' 7" (180 x 120 x 1,405 mm)
BUCKET	1	5.9" x 3.9" x 3' 4" (150 x 100 x 1,010 mm)

## DIMENSIONS



<b>BOOM TYPE</b>		<b>20' 8"</b> <b>(6,300 mm) Log Loader Boom</b>
<b>ARM TYPE</b>		<b>12' 10"</b> <b>(3,910 mm) Log Loader Arm</b>
<b>GRAPPLE</b>		<b>None</b>
<b>SHOE TYPE</b>		<b>Double Grouser</b>
OVERALL TRANSPORT HEIGHT W/ ATTACHMENT	A	11' 9" (3,590 mm)
OVERALL HEIGHT	B	15' 3" (4,650 mm)
OVERALL LENGTH	C	47' 8" (14,540 mm)
OVERALL LENGTH (WITHOUT ATTACHMENT)	D	18' 7" (5,675 mm)
WIDTH OF UPPER STRUCTURE	E	11' 5" (3,480 mm)
TRACK OVERALL LENGTH	F	16' 2" (4,920 mm)
TRACK OVERALL WIDTH	G	11' 10" (3,600 mm)
TRACK SHOE WIDTH	H	2' 4" (700 mm)
TUMBLER DISTANCE	I	13' 2" (4,010 mm)
COUNTERWEIGHT CLEARANCE	J	4' 8" (1,415 mm)
MINIMUM GROUND CLEARANCE	K	2' 7" (790 mm)
TAIL SWING RADIUS	L	10' 6" (3,200 mm)
CABIN GUARD WIDTH	M	3' 8" (1,105 mm)
TRACK HEIGHT	N	4' 1" (1,250 mm)

## WORKING RANGE



MAX. LOADING REACH	38' 3" (11,650 mm)
MAX. LOADING DEPTH	12' 3" (3,728 mm)
MAX. LOADING HEIGHT	44' 7" (13,580 mm)
REAR SWING RADIUS	10' 6" (3,200 mm)
MIN. SWING RADIUS	13' 9" (4,182 mm)

## STANDARD EQUIPMENT

### ENGINE:

- DOOSAN DL08F:
  - Turbo Charged Air to Air Intercooler
- Electronically Controlled Common Rail Direct Injected
- 466 cu.in., 6 Cylinder
- 197 SAE Net Flywheel Horsepower @ 1,900 rpm
- Auto Idle System
- Equipped with the Fuel Pre-Filter with Water Separator & Built in Priming Pump
- Radiator Reserve Tank
- Large Capacity Double Element Air Cleaner with Evacuator and Pre-Cleaner
- Electronic Engine Speed Control
- Engine Overheat and Low Oil Pressure Prevention System

### HYDRAULIC SYSTEM:

- Pilot Operated Control Valves, (9) Spools
- Main Pump, Tandem Variable Axial Piston Type:
  - Pressure Setting 4,978 psi
- Pilot Circuit, Gear Type Pump
- Swing Motor, Axial Piston Type
- Swing Speed Control up to 9.9 rpm
- Spring Set, Hydraulic-Released Brakes
- Travel Motor, Axial Piston Type, Automatic 2-Speed Control
- Travel Speed (High / Low), 2.9 mph / 1.9 mph
- In-Shoe Design, Oil Disc Parking Brake
- Cross Sensing Pump Control for Fuel Saving
- Two Operating Modes, Two Power Modes
- Button Control of Flow in Auxiliary Equipment Circuits
- Computer-Aided Pump Power Control
- e-EPOS (Electronic Power Optimizing System) Controller

### CAB:

- Steel, All Weather Sound Suppressed Type
- 4' Cab Riser with Guarding and Hydraulic Tilt
- Fully Automatically Controlled Air Conditioner with Heat
- Multi-Function Color LCD Monitor Panel
- Cigarette Lighter with Ashtray
- Door Locks
- Front Windshield Wiper with Washer

### Radio:

- AM/FM Stereo with Cassette
- Remote Radio On / Off Switch, Control Volume, Channel Selection

### Switches:

- Auxiliary Mode Switch
- Engine Emergency Stop Switch
- Work Light Switch
- Travel Speed Selector Switch
- Breaker, Power-Up, Shear Switch

### Glass Antenna

### Safety Glass, Tinted

### Safety Lock Lever

### Seat:

- Suspension with Seat Belt (2" Wide)
- Reclining, Height Adjustable
- Adjustable Arm Rests
- Sliding Control Console
- Weight Adjustment Knob

### Skylight

### Pull Up Type Front Window

### Removable Lower Front Window

### Sliding Side Windows

### Front Window Air Defroster

### Travel Pedals with Hand Levers

### Emergency Breakout Tool

### Lunch Box with Hot & Cool Air

### 12V Power Socket

### Joystick Lever with 3 Switches

### Cup Holder

### Room Light

### Serial Communication Port for Laptop PC Interface (DMS, Edoctor)

### Viscous Cab Mounts

### ELECTRICAL:

#### Alternator:

- 80 Amp

#### Batteries:

- (2) 12V, 150 Amp Hrs 950 CCA ea.

#### Starter:

- 24V, 6.0 kW

#### Lights:

- (4) Front Cab
- (2) Rear Cab

#### Electric Horn

#### Hour Meter

#### Alarm Buzzer for:

- Engine Oil Pressure
- Coolant Temperature

#### Electronic Monitor for:

- Engine Coolant Temperature Gauge
- Fuel Gauge
- Hydraulic Oil Temperature Gauge

#### Multi-Function Display for:

- Engine rpm
- Battery Voltage
- Front and Rear Hydraulic Pump Pressure
- Hydraulic Oil Overheating Warning
- Fuel Shortage Warning
- Air Cleaner Clogging Warning
- Pilot Filter Clogging Warning
- Return Filter Clogging Warning
- Digital Clock
- Engine Check Warning Light
- Engine Oil Pressure Warning Light
- Charge Warning Light
- Preheat Indicator Light
- Coolant Temperature Warning Light
- Work Light Indicator Light

#### Operation Modes for:

- Power Mode Select Button
- Flow Rate Control
- Auto Idle Select Button
- 4 Display Selection Buttons
- Trenching Mode Select Button

### UNDERCARRIAGE:

#### High-Walker Car Body:

- 11'-10" Overall Width, 31" Ground Clearance
- H.D. Chain with 28" Double Grouser Pads
- Swivel Guard

#### H.D. Track Guiding Guards (Full Length)

#### H.D. Top Rollers with Special Clean-Out Brackets in Place of Standard Carrier Rollers

#### H.D. Final Drive Motor Guarding

### UPPER STRUCTURE:

#### H.D. Mainframe Reinforcement

#### Full Under Upper H.D. Plate Guarding

#### H.D. Catwalks Integral with Upper Plate Guarding

#### H.D. Side Doors with Guarding Over Pump & Radiator Doors

#### H.D. Undercarriage Guarding with Integral Catwalks

### OTHER STANDARD EQUIPMENT:

#### Joystick Pattern Change Valve

#### Counterweight:

- 13,889 lb. (6,300 kg)

#### Sealed Pins, Boom, Arm and Bucket Linkages

#### Swing Mechanism, Internal Gear and Pinion

#### Integrated Track Spring and Idler

#### Centralized Lube Points

#### Large Handrail

#### Punched Metal Anti-Slip Plates

#### Ultra-Hard Wear-Resistant Disc at the Bucket Pivot

#### Engine Restart Prevention System

#### Self-Diagnostic System

#### Manuals:

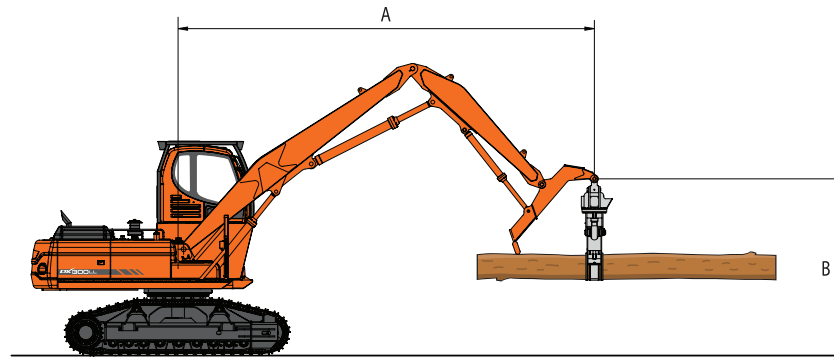
- Parts and Operator's

#### GPS with 1 Year Subscription



## LIFTING CAPACITY

**Boom: 20'6" (6,250 mm)**  
**Arm: 10'2" (3,100 mm)**  
**Grapple: None**  
**Shoe: 2'4" (700 mm)**  
**Counterweight: 6.90 ton (6.3 metric ton)**



Unit: 1,000 lb

Feet B (ft.)	A (ft.)													
	5		10		15		20		25		MAX. REACH		A (ft.)	
30												12.96*	12.96*	19.57
25												11.70*	11.70*	24.23
20							14.50*	14.50*	14.05*	14.05*	11.29*	11.29*		27.18
15			30.18*	30.18*	20.44*	20.44*	16.76*	16.76*	15.00*	15.00*	11.34*	11.34*		28.99
10					26.37*	26.37*	19.60*	19.60*	16.44*	15.49	11.80*	11.80*		29.85
5					30.89*	30.89*	22.17*	20.58	17.86*	15	12.72*	11.62		29.85
0 (GROUND)			17.12*	17.12*	32.80*	30.51	23.79*	20	18.82*	14.65	14.30*	11.97		28.98
-5	20.96*	20.96*	29.62*	29.62*	32.57*	30.37	24.12*	19.78	18.87*	14.54	16.98*	13.03		27.18
-10	33.15*	33.15*	42.63*	42.63*	30.36*	30.36*	22.75*	19.92			17.79*	15.39		24.22
-15			34.60*	34.60*	25.1*	25.15*					18.34*	18.34*		19.56

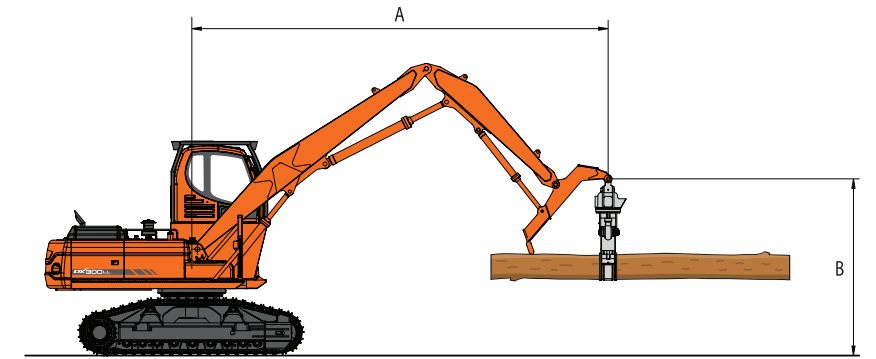
Unit: 1,000 kg

Metric B (m)	A (m)																			
	2		3		4		5		6		7		8		9		MAX. REACH		A (m)	
9																		5.80*	5.80*	6.13
8												5.82*	5.82*					5.40*	5.40*	7.09
7												6.24*	6.24*					5.20*	5.20*	7.80
6												6.65*	6.65*	6.44*	6.44*	6.39*	6.39*	5.11*	5.11*	8.33
5							8.10*	8.10*	7.33*	7.33*	6.85*	6.85*	6.57*	6.57*				5.12*	5.12*	8.71
4							11.80*	11.80*	9.46*	9.46*	8.17*	8.17*	7.37*	7.37*	6.88*	6.66		5.20*	5.20*	8.97
3							14.26*	14.26*	10.88*	10.88*	9.06*	9.06*	7.95*	7.95*	7.24*	6.53	6.20*	5.46	5.36*	9.10
2							12.87*	12.87*	12.10*	12.10*	9.89*	9.67	8.51*	7.76	7.61*	6.4	6.75*	5.39	5.61*	9.13
1							12.43*	12.43*	12.97*	12.27	10.55*	9.44	8.99*	7.59	7.92*	6.29	6.38*	5.33	5.97*	9.04
0 (GROUND)			7.52*	7.52*	14.41*	14.41*	13.45*	12.08	10.98*	9.28	9.31*	7.47	8.13*	6.21				6.49*	5.43	8.83
-1	8.17*	8.17*	11.18*	11.18*	17.07*	17.07*	13.56*	12	11.15*	9.19	9.45*	7.41	8.16*	6.18				7.22*	5.7	8.51
-2	11.91*	11.91*	15.21*	15.21*	16.53*	16.53*	13.33*	12	11.03*	9.18	9.32*	7.4	7.89*	6.2				7.82*	6.16	8.04
-3	15.92*	15.92*	19.66*	19.66*	15.58*	15.58*	12.69*	12.09	10.54*	9.24	8.79*	7.47						8.06*	6.94	7.41
-4	20.83*	20.83*	17.52*	17.52*	14.06*	14.06*	11.52*	11.52*	9.45*	9.39								8.26*	8.26*	6.58
-5			14.33*	14.33*	11.60*	11.60*	9.31*	9.31*										8.30*	8.30*	5.42

- LOAD POINT IS THE END OF THE ARM.
- CAPACITIES MARKED WITH AN ASTERISK (\*) ARE LIMITED BY HYDRAULIC CAPACITIES.
- LIFT CAPACITIES SHOWN DO NOT EXCEED 75% OF MINIMUM TIPPING LOADS OR 87% OF HYDRAULIC CAPACITIES.
- THE LEAST STABLE POSITION IS OVER THE SIDE.
- THE TOTAL MASS OF MACHINE IS 32,900 kg INCLUDED IN THIS MASS BOOM 6.25 m, ARM 3.10 m, 6,300 kg COUNTERWEIGHT, BUCKET WEIGHT 0 kg, ALL OPERATING FLUIDS AND A 75 kg OPERATOR.
- LIFT CAPACITIES ARE IN COMPLIANCE WITH ISO 10567.

Rating Over Front  
 Rating Over Side or 360 degree

**Boom: 20'8" (6,300 mm)**  
**Arm: 12'10" (3,910 mm)**  
**Grapple: None**  
**Shoe: 2'4" (700 mm)**  
**Counterweight: 6.90 ton (6.3 metric ton)**



Unit: 1,000 lb

Feet B (ft.)	A (ft.)														
	15		20		25		30		MAX. REACH		A (ft.)				
35													27.68*	25.75	18.77
30													22.63*	16.88	24.67
25													18.49	13.51	28.47
20													16.13	11.78	31.02
15													14.87	10.85	32.62
10													14.3	10.41	33.39
5													14.25	10.37	33.38
0 (GROUND)													13.39*	10.71	32.61
-5													15.34*	12.69	28.71

Unit: 1,000 kg

Metric B (m)	A (m)																			
	4		5		6		7		8		9		10		MAX. REACH		A (m)			
11																		13.49*	13.49*	5.20
10																		11.28*	9.33	6.62
9																		10.14*	7.47	7.64
8																		8.77	6.41	8.43
7																		7.87	5.75	9.04
6																		7.27	5.31	9.49
5																		6.87	5.01	9.83
4																		6.62	4.82	10.06
3																		6.48	4.72	10.18
2																		6.45	4.69	10.20
1																		6.51	4.73	10.12
0 (GROUND)																		6.07*	4.86	9.94
-1																		6.49*	5.3	9.31
-2																		7.75*	6.56	7.94

- LOAD POINT IS THE END OF THE ARM.
- CAPACITIES MARKED WITH AN ASTERISK (\*) ARE LIMITED BY HYDRAULIC CAPACITIES.
- LIFT CAPACITIES SHOWN DO NOT EXCEED 75% OF MINIMUM TIPPING LOADS OR 87% OF HYDRAULIC CAPACITIES.
- THE LEAST STABLE POSITION IS OVER THE SIDE.
- THE TOTAL MASS OF MACHINE IS 33,300 kg INCLUDED IN THIS MASS BOOM 6.30 m, ARM 3.91 m, 6,300 kg COUNTERWEIGHT, BUCKET WEIGHT 0 kg, ALL OPERATING FLUIDS AND A 75 kg OPERATOR.
- LIFT CAPACITIES ARE IN COMPLIANCE WITH ISO 10567.

Rating Over Front  
 Rating Over Side or 360 degree



OUTPUT DATE 2010-05-17

BRO-DX300LL-TD-2010-05-17

For more information, call 1.888.323.9661,  
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