

# DOOSAN DAEWOO HYDRAULIC EXCAVATOR

## SOLAR 225/300LL

### DOOSAN DAEWOO NEW CRAWLER TYPE LOG LOADER EXCAVATOR

#### SOLAR 225LL

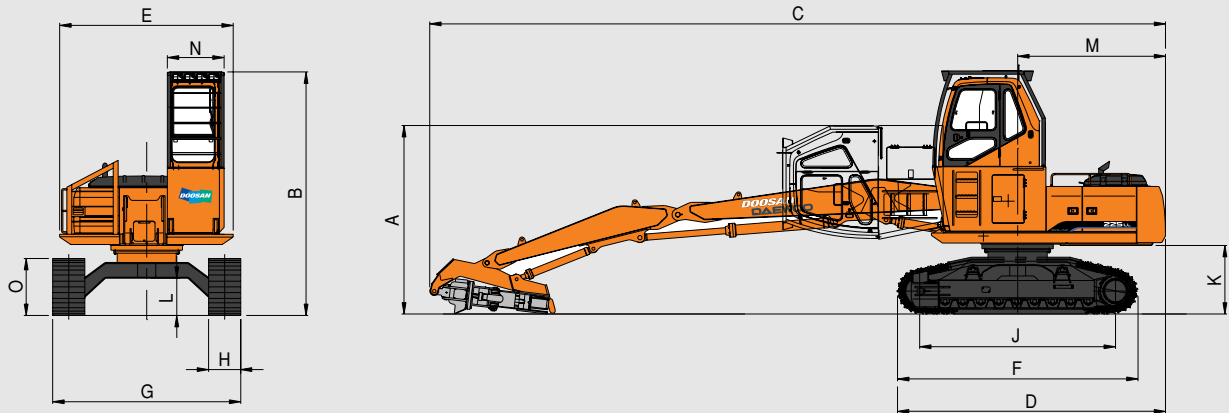
- Operating Weight (Without Grapple) : 27,450 kg (60,500lb)
- Rated Engine Power :
  - DIN 6271,gross ..... 114kw (155ps)/2,000rpm
  - DIN 6271,net ..... 110kw (150ps)/2,000rpm
  - SAE J1349,gross ..... 114kw (153HP)/2,000rpm
  - SAE J1349,net ..... 110kw (148HP)/2,000rpm

#### SOLAR 300LL

- Operating Weight (Without Grapple) : 34,850 kg (78,600lb)
- Rated Engine Power :
  - DIN 6271,gross ..... 151kw (205ps)/1,900rpm
  - DIN 6271,net ..... 147kw (200ps)/1,900rpm
  - SAE J1349,gross ..... 151kw (202HP)/1,900rpm
  - SAE J1349,net ..... 147kw (197HP)/1,900rpm



# Dimensions



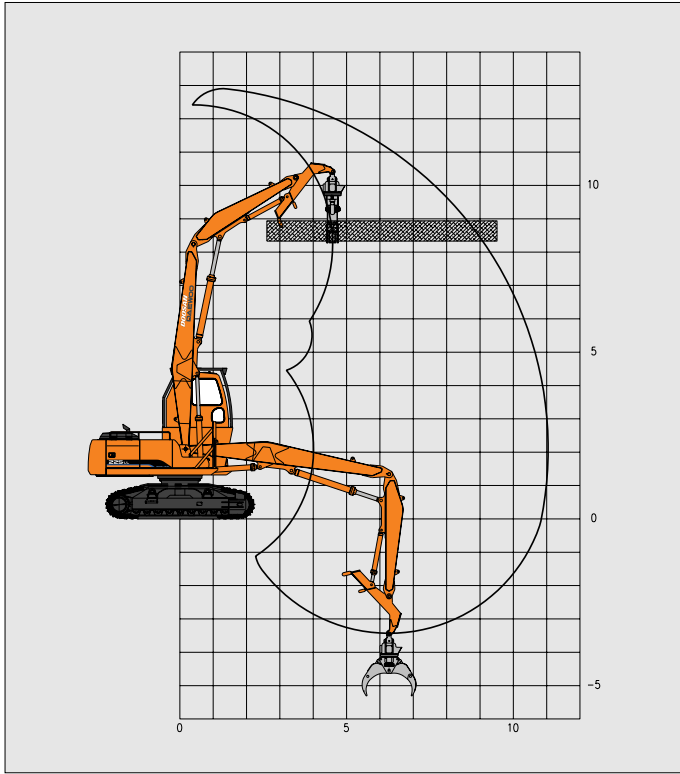
	Model	Unit	Solar 225LL	Solar 300LL
A	Overall Transport Height W/Attachment	mm (ft · in)	3,505 (11' 6")	3,660 (12')
B	Overall Height	mm (ft · in)	4,525 (14' 10")	4,683 (15' 5")
C	Overall Length	mm (ft · in)	13,678 (44' 11")	14,680 (48' 2")
D	Overall Length (Without Attachment)	mm (ft · in)	4,984 (16' 5")	5,675 (18' 7")
E	Width of Upper Structure	mm (ft · in)	3,226 (10' 7")	3,476 (11' 5")
F	Track Overall Length	mm (ft · in)	4,472 (14' 8")	4,950 (16' 2")
G	Track Overall Width	mm (ft · in)	3,500 (11' 6")	3,600 (11' 10")
H	Track Shoe Width	mm (ft · in)	600 (2')	700 (2' 4")
J	Tumbler Distance	mm (ft · in)	3,645 (11' 11")	4,010 (13' 2")
K	Upper Structure Ground Clearance	mm (ft · in)	1,274 (4' 3")	1,415 (4' 8")
L	Minimum Ground Clearance	mm (ft · in)	690 (2' 4")	773 (2' 7")
M	Tail Swing Radius	mm (ft · in)	2,750 (9')	3,200 (10' 6")
N	Cabin Guard Width	mm (ft · in)	1,055 (3' 6")	1,055 (3' 6")
O	Track Height	mm (ft · in)	1,056 (3' 6")	1,246 (4' 1")

## Specifications

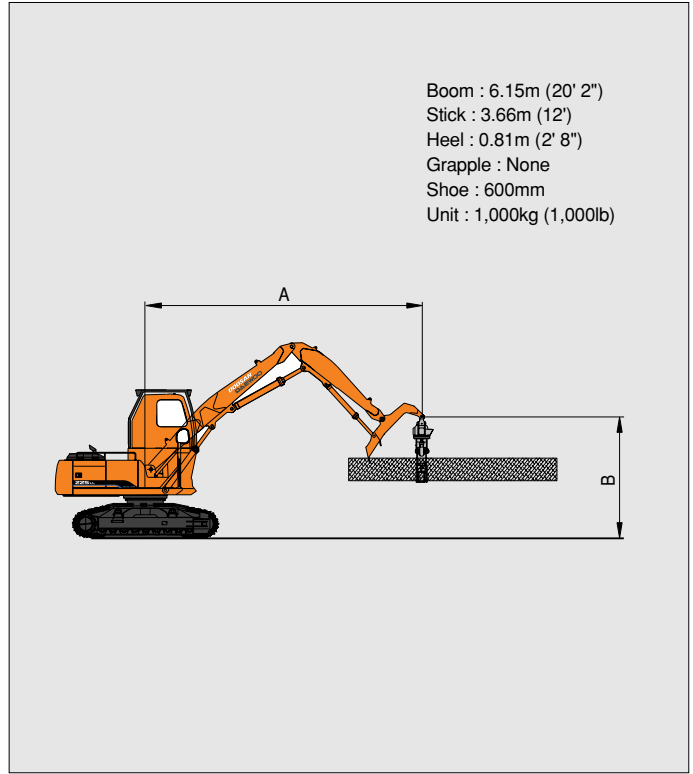
Model	Unit	Solar 225LL	Solar 300LL
Operating Weight (w/o grapple)	kg (lb)	27,450 (60,500)	34,850 (78,600)
Max. Reach @ Ground Level	mm (ft · in)	10,840 (35' 6")	11,400 (37' 5")
Max. Heel Height	mm (ft · in)	12,900 (42' 4")	13,580 (44' 7")
Undercarriage Length	mm (ft · in)	4,500 (14' 8")	4,950 (16' 3")
Track Pad (Heavy-duty 2-bar)	mm (ft · in)	600 (2')	700 (2' 4")
Overall Width (Undercarriage)	mm (ft · in)	3,500 (11' 6")	3,600 (11' 10")
Length of Track on Ground	mm (ft · in)	3,645 (11' 11")	4,010 (13' 2")
Ground Clearance	mm (ft · in)	690 (2' 4")	773 (2' 7")
DOOSAN Engine	—	DB58TIS	DB08TIS
Horsepower	kw/hz (Hp/rpm)	110/33(148/2,000)	147/32(197/1,900)

# Working Ranges & Lifting Capacity

## Working Range (S225LL)



## Lifting Capacity (S225LL)



A m(ft) B m(ft)	3.05 (10)		4.57 (15)		6.10 (20)		7.62 (25)		9.14 (30)		10.67 (35)	
12.19 (40)	13.209 (*29.12)	13.209 (*29.12)										
10.67 (35)			8.396 (*18.51)	8.396 (*18.51)	7.643 (*16.85)	7.548 (16.64)						
9.14 (30)			7.933 (*17.49)	7.933 (*17.49)	6.917 (*15.25)	6.917 (*15.25)	6.505 (*14.34)	5.303 (11.69)				
7.62 (25)			7.952 (*17.53)	7.952 (*17.53)	6.845 (*15.09)	6.845 (*15.09)	6.278 (*13.84)	5.433 (12.00)	4.903 (10.81)	3.901 (8.60)		
6.10 (20)			8.341 (*18.39)	8.341 (*18.39)	7.199 (*15.87)	7.199 (*15.87)	6.409 (*14.13)	5.420 (11.95)	4.944 (10.90)	3.942 (8.69)		
4.57 (15)			8.636 (*19.04)	8.636 (*19.04)	7.884 (*17.38)	7.625 (16.81)	6.645 (14.65)	5.307 (11.70)	4.917 (10.84)	3.915 (8.63)	3.783 (8.34)	2.985 (6.58)
3.05 (10)			10.959 (*24.16)	10.959 (*24.16)	8.705 (*19.19)	7.285 (16.06)	6.468 (14.26)	5.139 (11.34)	4.840 (10.67)	3.837 (8.46)	3.760 (8.29)	2.957 (6.25)
1.52 (5)			12.465 (*27.48)	10.718 (23.63)	8.850 (19.51)	6.931 (15.28)	6.278 (13.84)	4.962 (10.94)	4.749 (10.47)	3.759 (8.28)	3.738 (8.24)	2.939 (6.48)
0 (Ground)			12.011 (*26.48)	10.206 (22.50)	8.564 (18.88)	6.663 (14.69)	6.128 (13.51)	4.817 (10.62)	4.681 (10.32)	3.688 (8.13)	3.738 (8.24)	2.939 (6.48)
-1.52 (-5)	4.010 (*8.84)	4.010 (*8.84)	8.870 (*21.76)	8.870 (*21.76)	8.414 (18.55)	6.523 (14.38)	6.046 (*13.33)	4.740 (10.45)	4.654 (10.26)	3.661 (8.07)		
-3.05 (-10)			10.523 (*23.20)	9.952 (21.94)	7.888 (*17.39)	6.491 (14.31)	6.015 (13.26)	4.713 (10.39)				

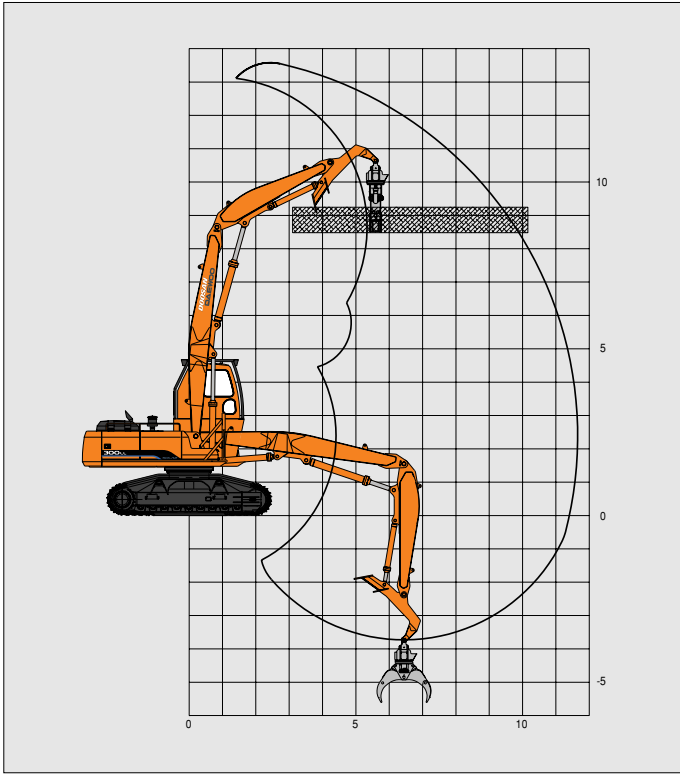
1. The load point is a pin located on the top of the heel.

2. \* "Rated loads are based on hydraulic capacity.

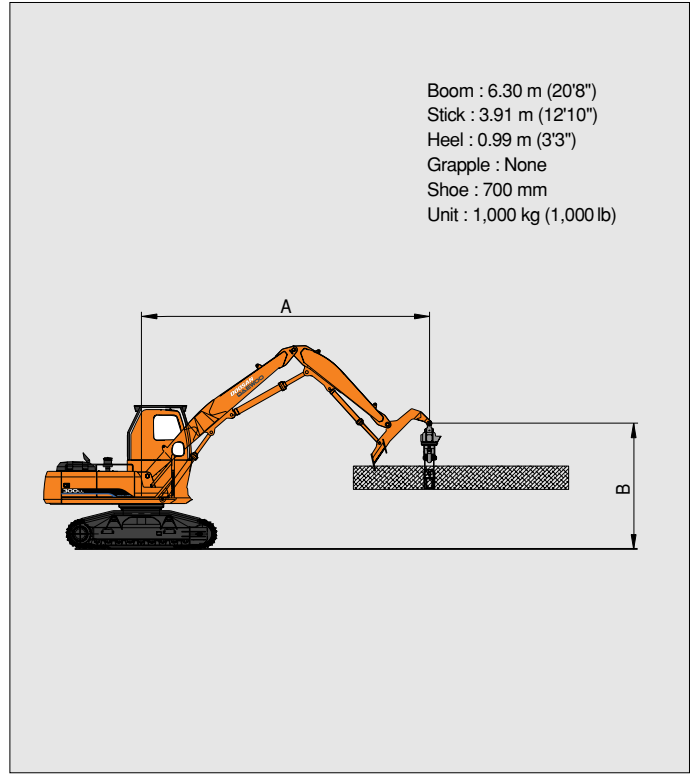
3. Rated loads do not exceed 87% of hyd. Capacity or 75% of tipping capacity.

: Rating over front  
 : Rating over side

## Working Range (S300LL)



## Lifting Capacity (S300LL)



A m(ft) B m(ft)	3.05 (10)		4.57 (15)		6.10 (20)		7.62 (25)		9.14 (30)		10.67 (35)	
12.19 (40)			11.508 (*25.37)	11.508 (*25.37)	9.498 (*20.94)	9.498 (*20.94)						
10.67 (35)					8.759 (*19.31)	8.759 (*19.31)	8.342 (*18.39)	7.366 (16.24)				
9.14 (30)					8.237 (*18.16)	8.237 (*18.16)	7.825 (*17.25)	7.593 (16.74)	7.480 (*16.49)	5.529 (12.09)		
7.62 (25)					8.364 (*18.44)	8.364 (*18.44)	7.788 (*17.17)	7.661 (16.89)	7.330 (*16.16)	5.557 (12.25)		
6.10 (20)					9.018 (*19.88)	9.018 (*19.88)	8.119 (*17.90)	7.584 (16.72)	7.416 (*16.35)	5.566 (12.27)	5.806 (12.80)	4.218 (9.30)
4.57 (15)			8.255 (*18.20)	8.255 (*18.20)	10.111 (*22.29)	10.111 (*22.29)	8.695 (*19.17)	7.403 (16.32)	7.498 (16.53)	5.489 (12.10)	5.774 (12.73)	4.187 (9.23)
3.05 (10)			14.089 (*31.06)	14.089 (*31.06)	11.263 (*24.83)	10.129 (22.33)	9.358 (*20.63)	7.149 (15.76)	7.366 (16.24)	5.362 (11.82)	5.738 (12.65)	4.150 (9.15)
1.52 (5)			16.402 (*36.16)	14.701 (32.41)	12.397 (*27.33)	9.607 (21.18)	9.562 (21.08)	6.890 (15.19)	7.226 (15.93)	5.230 (11.53)	5.688 (12.54)	4.105 (9.05)
0 (Ground)			11.245 (*24.79)	11.245 (*24.79)	12.959 (*28.57)	9.222 (20.33)	9.335 (20.58)	6.681 (14.73)	7.112 (15.68)	5.121 (11.29)	5.656 (12.47)	4.073 (8.98)
-1.52 (-5)	4.069 (*8.97)	4.069 (*8.97)	7.661 (*16.89)	7.661 (*16.89)	12.610 (*27.80)	9.027 (19.90)	9.213 (20.31)	6.568 (14.48)	7.058 (15.56)	5.071 (11.18)	5.652 (12.46)	4.069 (8.97)
-3.05 (-10)			*11.335 (24.99)	11.335 (*24.99)	11.331 (*24.98)	8.986 (19.81)	8.763 (*19.32)	6.536 (14.41)				

1. The load point is a pin located on the top of the heel.

2. " \* " Rated loads are based on hydraulic capacity.

3. Rated loads do not exceed 87% of hyd. Capacity or 75% of tipping capacity.

: Rating over front  
 : Rating over side



# Technical Data



## Hydraulic system

e-EPOS (Electronic Power Optimizing 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.
- Automatic 2 speed travel system for high traction force and travel speed.
- Cross-sensing and fuel saving pump system.
- Auto idle system.
- 2-Working / 2-power mode selection system.
- Computer aided engine-pump control.

### S225LL

Main pumps	2 variable displacement axial piston pumps.
Max. oil flow	2 × 212 ℓ/min (2 × 56 US gpm, 2 × 46.6 Imp gpm)
Pilot pump	Gear pump
Max. oil flow	30 ℓ/min (7.9 US gpm, 6.6 Imp gpm)
Swing motor	
Relief valve	275bar (3,980psi, 280 kgf/cm <sup>2</sup> )
Main relief valves	
Hoist/Stick/Heel	Normal : 324bar (4,690psi, 330kgf/cm <sup>2</sup> ) Power Boost : 343bar (4,980 psi, 350kgf/cm <sup>2</sup> )
Travel circuit	324bar (4,690psi, 330kgf/cm <sup>2</sup> )

### S300LL

Main pumps	2 variable displacement axial piston pump
Max. oil flow	2 × 246 ℓ/min (2 × 65 US gpm, 2 × 54 Imp gpm)
Pilot pump	Gear pump
Max. oil flow	28.5 ℓ/min (7.5 US gpm, 6.3 Imp gpm)
Swing motor	
Relief valve	279 bar (4,050 psi, 285 kgf/cm <sup>2</sup> )
Main relief valves	
Hoist/stick/Heel	Normal : 324bar (4,690 psi, 330kgf/cm <sup>2</sup> ) Power Boost : 343bar (4,980psi, 350 kgf/cm <sup>2</sup> )
Travel circuit	324 bar (4,690 psi, 330kgf/cm <sup>2</sup> )



## 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. A two position swing lock secures the super-structure for transportation.

### S225LL

- Swing speed 0 to 12 rpm (min<sup>-1</sup>)
- Rear swing radius 2,750mm (9')

### S300LL

- Swing speed 0 to 10.1 rpm (min<sup>-1</sup>)
- Rear swing radius 3,200mm (10'6")



## Standard equipment

All-weather steel cab with 360° visibility. Safety glass windows. Wide window wiper. Sliding fold-in front window. Sliding side window. Lockable door. Deluxe fully adjustable reclining seat. Lever lock. Cab heater, air conditioning, stereo cassette/radio. Hydraulic tilt cab riser with log guard.

## Instrument panel

Engine coolant temperature gauge. Electric hour meter. Fuel meter. Tachometer. Voltmeter. Hydraulic oil pressure gauge. Operations monitor : (Engine oil pressure, battery charge, engine oil filter clogging, air cleaner clogging and hydraulic oil filter clogging). Alarm buzzer (Engine oil pressure and engine coolant temperature.)



## Superstructure revolving frame

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



## 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.

### S225LL

Travel speed (High/Low)	5.4/3.0km/h (3.4/1.9mph)
Maximum traction force	20,800kgf (45,860 lbf)
Gradeability	35°(70%) continuous

### S300LL

Travel speed (High/Low)	5.0/3.1km/h (3.3/2.1mph)
Maximum traction force	23,400kgf (51,587 lbf)
Gradeability	35°(70%) continuous



## 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.

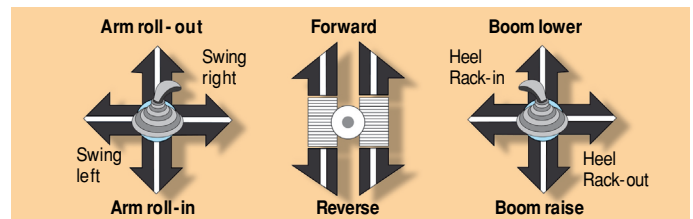


## Brakes

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

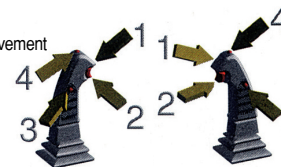


## Controls



### • Left Control

- 1) Swing and Arm Movement
- 2) Grapple Open
- 3) Horn
- 4) Grapple Rotation-Counter Clockwise



### • Right Control

- 1) Control for Boom and Heel Rack
- 2) Grapple Close
- 3) Lift Power Button
- 4) Grapple Rotation Clockwise



## Undercarriage

Tractor-type undercarriage. Heavy-duty track frame. Side frames are welded, securely and rigidly, to the track frame. Lifetime-lubricated track rollers, idlers and sprockets with floating seals. Track shoes, idlers and sprockets with floating seals. Track shoes of induction hardened rolled alloy with double grousers. Specially heat treated connecting pins. Hydraulic track adjusters with shock-absorbing recoil springs with walker car body 3,500 (11'6") (S225LL), 3,600 (11'10") (S300LL) overall width and heavy-duty swivel guard. Final drive protected by heavy-duty plate.

**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-Böeckler 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

\* Specifications are subject to change without prior notice

Distributed By:

**Nationwide Equipment Company**

11950 New Kings Road  
Jacksonville, Florida USA 32219  
Ph: (904) 924-2500 Email: sales@nwe-usa.com  
www.NationwideEquipment.com PBP S000C50L 0507