

Doosan Infracore  
Construction Equipment

# SOLAR225LL / 300LL

## SOLAR 225LL

### Engine Power :

DIN 6271,net 114kw(155ps)@2,000 rpm

SAE J 1349,net 110kw(150HP)@2,000 rpm

SAE J1349,gross 114kw (153HP) @2,000 rpm

SAE J1349,net 110kw (148HP) @2,000 rpm

Operational Weight (Without Grapple) : 27,450 kg (60,500lb)

## SOLAR 300LL

### Engine Power :

DIN 6271,net 151kw(205ps)@1,900 rpm

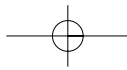
SAE J 1349,net 147kw(200HP)@1,900 rpm

SAE J1349,gross 151kw (202HP) @2,000 rpm

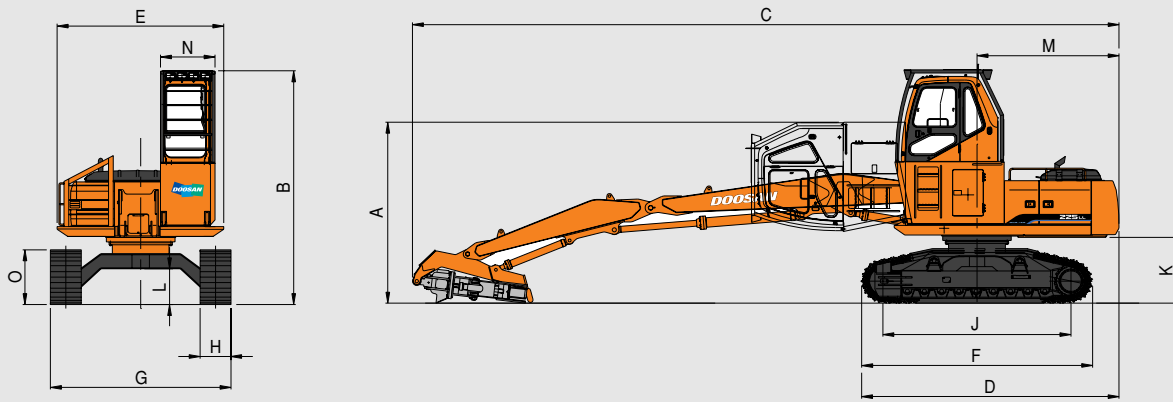
SAE J1349,net 147kw (197HP) @2,000 rpm

Operational Weight (Without Grapple) : 34,850 kg (78,600lb)





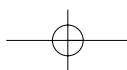
## Dimensions

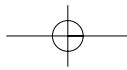


| Model                                   | Unit         | Solar 225LL      | Solar 300LL     |
|-----------------------------------------|--------------|------------------|-----------------|
| A Overall Transport Height W/Attachment | mm (ft · in) | 3,505 (11' 6")   | 3,660 (12')     |
| B Overall Height                        | 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

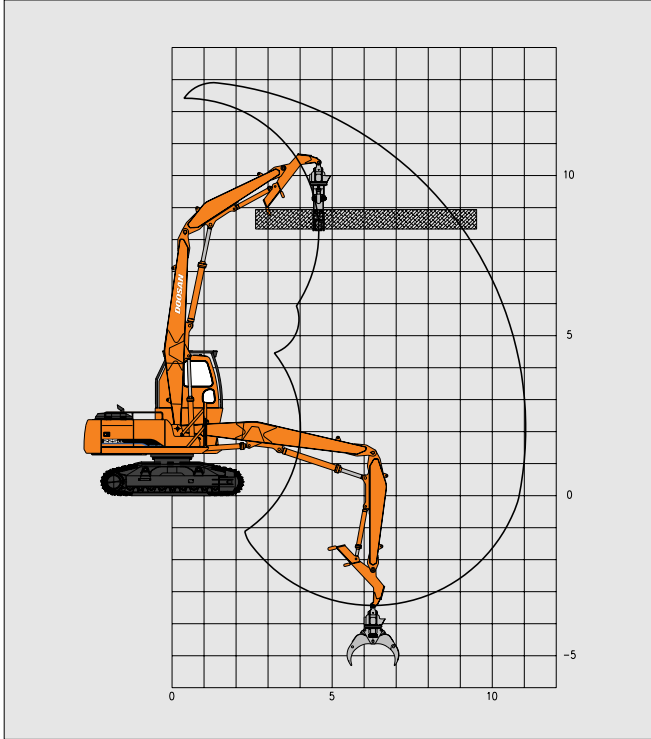
| Model                          | Unit           | Solar 225LL       | Solar 300LL       |
|--------------------------------|----------------|-------------------|-------------------|
| Operating Weight (w/o grapple) | kg (lb)        | 27,450 (60,500)   | 34,850 (78,600)   |
| Max. Reach @ Ground Level      | 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           | DE08TIS           |
| Horsepower                     | kw/hz (Hp/rpm) | 110/33(148/2,000) | 147/32(197/1,900) |



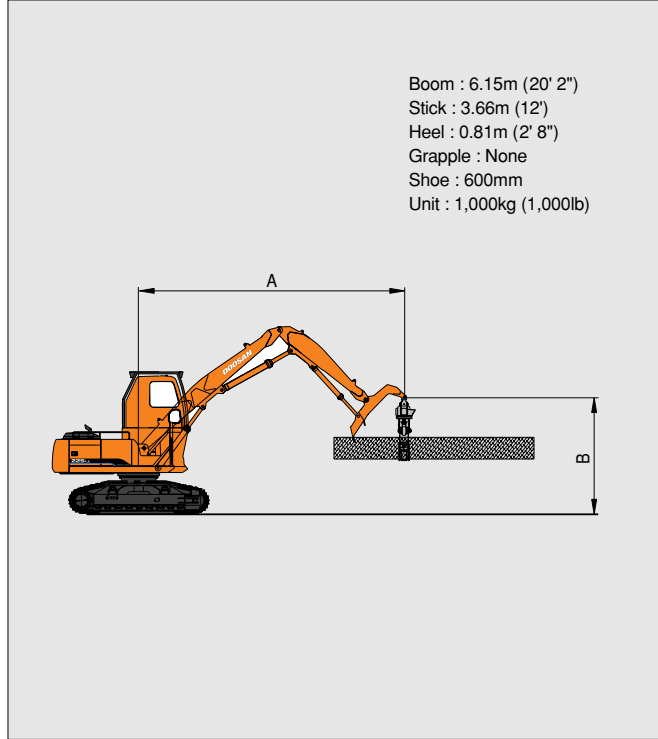


# Working Ranges & Lifting Capacity

## Working Range (S225LL)



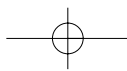
## Lifting Capacity (S225LL)

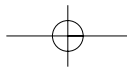


| B m(ft)        | A m(ft) 3.05 (10)  |                    | 4.57 (15)          |                    | 6.10 (20)         |                   | 7.62 (25)         |                  | 9.14 (30)        |                 | 10.67 (35)      |                 |
|----------------|--------------------|--------------------|--------------------|--------------------|-------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

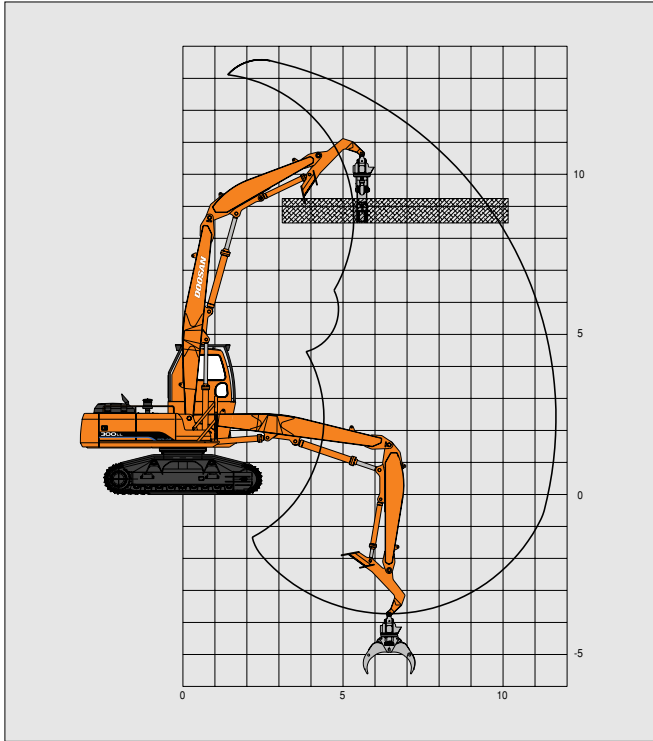
1. The load point is a pin located on the top of the heel.  
 2. \* \* \* Rated loads are based on hydraulic capacity.  
 3. Rated loads do not exceed 87% of hyd. Capacity or 75% of tipping capacity.

☺ : Rating over front  
 ☹ : Rating over side

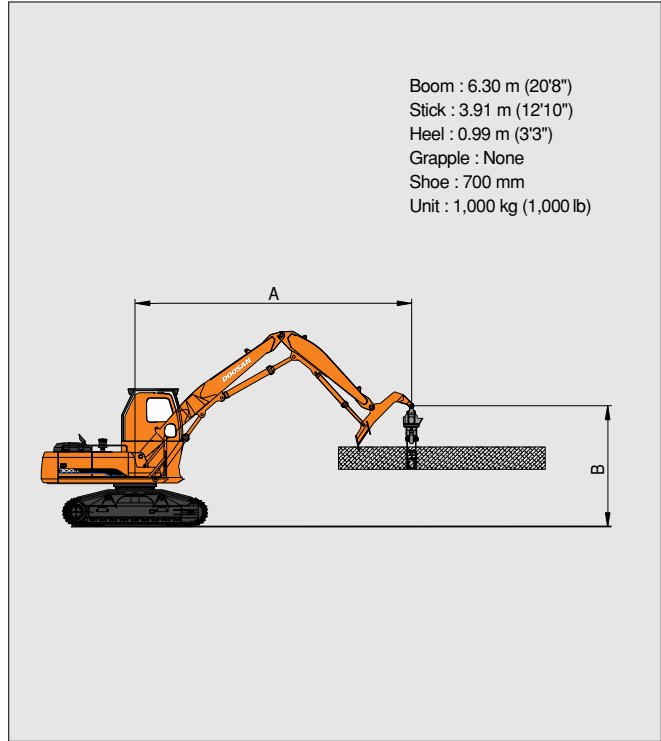




## Working Range (S300LL)



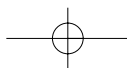
## Lifting Capacity (S300LL)

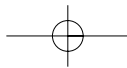


| A m(ft)<br>B m(ft) | 3.05 (10)        |                  | 4.57 (15)          |                    | 6.10 (20)          |                    | 7.62 (25)         |                  | 9.14 (30)         |                  | 10.67 (35)       |                 |
|--------------------|------------------|------------------|--------------------|--------------------|--------------------|--------------------|-------------------|------------------|-------------------|------------------|------------------|-----------------|
|                    | ☺                | ☹                | ☺                  | ☹                  | ☺                  | ☹                  | ☺                 | ☹                | ☺                 | ☹                | ☺                | ☹               |
| 12.19<br>(40)      |                  |                  | 11.508<br>(*25.37) | 11.508<br>(*25.37) | 9.498<br>(*20.94)  | 9.498<br>(*20.94)  |                   |                  |                   |                  |                  |                 |
| 10.67<br>(35)      |                  |                  |                    |                    | 8.759<br>(*19.31)  | 8.759<br>(*19.31)  | 8.342<br>(*18.39) | 7.366<br>(16.24) |                   |                  |                  |                 |
| 9.14<br>(30)       |                  |                  |                    |                    | 8.237<br>(*18.16)  | 8.237<br>(*18.16)  | 7.825<br>(*17.25) | 7.593<br>(16.74) | 7.480<br>(*16.49) | 5.529<br>(12.09) |                  |                 |
| 7.62<br>(25)       |                  |                  |                    |                    | 8.364<br>(*18.44)  | 8.364<br>(*18.44)  | 7.788<br>(*17.17) | 7.661<br>(16.89) | 7.330<br>(*16.16) | 5.557<br>(12.25) |                  |                 |
| 6.10<br>(20)       |                  |                  |                    |                    | 9.018<br>(*19.88)  | 9.018<br>(*19.88)  | 8.119<br>(*17.90) | 7.584<br>(16.72) | 7.416<br>(*16.35) | 5.566<br>(12.27) | 5.806<br>(12.80) | 4.218<br>(9.30) |
| 4.57<br>(15)       |                  |                  | 8.255<br>(*18.20)  | 8.255<br>(*18.20)  | 10.111<br>(*22.29) | 10.111<br>(*22.29) | 8.695<br>(*19.17) | 7.403<br>(16.32) | 7.498<br>(16.53)  | 5.489<br>(12.10) | 5.774<br>(12.73) | 4.187<br>(9.23) |
| 3.05<br>(10)       |                  |                  | 14.089<br>(*31.06) | 14.089<br>(*31.06) | 11.263<br>(*24.83) | 10.129<br>(22.33)  | 9.358<br>(*20.63) | 7.149<br>(15.76) | 7.366<br>(16.24)  | 5.362<br>(11.82) | 5.738<br>(12.65) | 4.150<br>(9.15) |
| 1.52<br>(5)        |                  |                  | 16.402<br>(*36.16) | 14.701<br>(32.41)  | 12.397<br>(*27.33) | 9.607<br>(21.18)   | 9.562<br>(21.08)  | 6.890<br>(15.19) | 7.226<br>(15.93)  | 5.230<br>(11.53) | 5.688<br>(12.54) | 4.105<br>(9.05) |
| 0<br>(Ground)      |                  |                  | 11.245<br>(*24.79) | 11.245<br>(*24.79) | 12.959<br>(*28.57) | 9.222<br>(20.33)   | 9.335<br>(20.58)  | 6.681<br>(14.73) | 7.112<br>(15.68)  | 5.121<br>(11.29) | 5.656<br>(12.47) | 4.073<br>(8.98) |
| -1.52<br>(-5)      | 4.069<br>(*8.97) | 4.069<br>(*8.97) | 7.661<br>(*16.89)  | 7.661<br>(*16.89)  | 12.610<br>(*27.80) | 9.027<br>(19.90)   | 9.213<br>(20.31)  | 6.568<br>(14.48) | 7.058<br>(15.56)  | 5.071<br>(11.18) | 5.652<br>(12.46) | 4.069<br>(8.97) |
| -3.05<br>(-10)     |                  |                  | *11.335<br>(24.99) | 11.335<br>(*24.99) | 11.331<br>(*24.98) | 8.986<br>(19.81)   | 8.763<br>(*19.32) | 6.536<br>(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> )<br>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      | 2x246 ℓ/min (2x65 US gpm, 2x54 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> )<br>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.

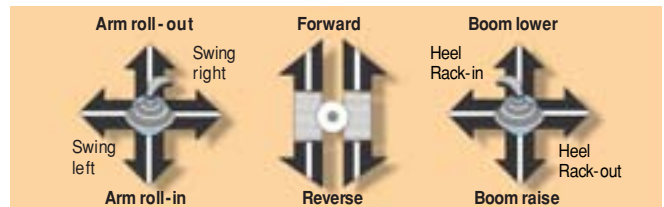


### Brakes

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



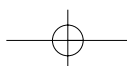
#### • Right Control

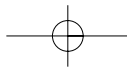
- 1) Control for Boom and Heel Rack
- 2) Grapple Close
- 3) Lift Power Button
- 4) Grapple Rotation Clockwise



### 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 27TH FL. 18-12, Euljiro-6Ga,  
 Jung-Gu, Seoul, Korea 100-730  
 Tel : +82-2-3398-8114  
 Fax : +82-2-3398-8117  
[www.doosaninfracore.com](http://www.doosaninfracore.com)

**Doosan Infracore Europe S.A.**  
 1A, Rue Achille Degrâce, 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 Germany GmbH**  
 Hans-Böeckler strasse 29, D-40764, Langenfeld-Fuhrkamp, Germany  
 Tel : +49-2173-8509-18 Fax : +49-2173-8509-45

**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 Xinjiang Machinery Co.,Ltd.**  
 No, 178, Hetanbei Road, Wurumuqi, 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

**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



PBP S000C50L 0701

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.

