# DOOSAN



	Bucket ( Heaped, IS	Capacity O / SAE	Operating	Weight	Rated Power Gross		
<b>D<u>L</u> 300</b> -5	4.2 yd <sup>3</sup>	3.2 m <sup>3</sup>	41,484 lb.	(18 980 kg)	271 hp	(202 kW)	
<b>DL 350</b> -5	4.8 yd <sup>3</sup>	3.7 m <sup>3</sup>	43,451 lb.	(19 750 kg)	271 hp	(202 kW)	
<b>D<u>L</u> 420</b> -5	5.5 yd <sup>3</sup>	4.2 m <sup>3</sup>	50,783 lb.	(23 035 kg)	345 hp	(257 kW)	
<b>D<u>L</u> 450</b> -5	6.3 yd <sup>3</sup>	4.8 m <sup>3</sup>	56,868 lb.	(25 795 kg)	345 hp	(257 kW)	
<b>D<u>L</u>550</b> -5	7.5 yd <sup>3</sup>	5.7 m <sup>3</sup>	69,897 lb.	(31 705 kg)	380 hp	(283 kW)	

# A HERITAGE OF DEDICATION





While Doosan is a relatively young brand in the North American construction equipment market, the organization has a heritage in equipment manufacturing that goes back to 1937. And since 2005, we've grown to become the fifth largest construction equipment manufacturer in the world.



Today, Doosan Infracore Construction Equipment America (DICEA) and its affiliates are industry leaders in the engineering, manufacturing and marketing of construction equipment, including:

- Skid-Steer Loaders
- Excavators
- Wheel Loaders
- Articulated Dump Trucks
- Attachments
- Air Compressors
- Lighting Systems
- Generators
- Compact Construction Equipment
- Engine Power Systems

#### **Building Your Tomorrow Today**

Beyond its products for the construction industry, Doosan Infracore Support Business (ISB) segments include forklifts, material handling, machine tools, castings, forgings, construction, engineering, power generation, water treatment and desalination, plus renewable energy.

#### Your North American Partners.

With our network of dealers and a company infrastructure that spans North America, we can fully support your equipment from coast to coast.

**West Fargo, ND**Sales & Marketing

**Tucson, AZ**Product Training & Testing

**Litchfield, MN** *Heavy Attachments* 

**Chicago, IL** *Parts Distribution* 

**Suwanee, GA**Service Training
& Product Management

#### **PERFORMANCE**



#### **Optimized Engine Horsepower**

A finely-tuned horsepower curve and increased torque make you the picture of productivity. The SCR catalyst system reduces emissions.



# Outstanding Traction and Pushing Power

Doosan axles are carefully designed to work with the model you choose, maximizing your traction for easy maneuverability and providing excellent pushing power to take a big, satisfying bite out of any pile.

**Limited Slip Differential** allows the wheel with the most traction to receive the proper torque, providing superior tractive effort and maneuverability in tough terrain.



Hydraulic Locking Front Differential (opt\*) locks the front wheels together, providing superior traction for driving over loose, slippery terrain or pushing into big, heavy piles.

\*Standard on the DL550-5

**Self-Adjusting Brakes** increase performance and minimize maintenance. If needed, a technician can easily check the brakes and adjust externally. The brake piping is integrated with the axle housing to protect it from jobsite debris damage.

#### **Engine Power Modes**

Choose from three different engine power modes to change machine performance for job conditions or to reduce fuel consumption.

**Power Mode** delivers the highest level of performance for fast loading and travel to finish loads of heavy-duty work in less time.

**Normal Mode** is ideal for general work conditions and optimal fuel consumption.

**Economy Mode** minimizes fuel consumption and engine sound levels for comfortable, economical light-duty work.

#### **Planetary Final Drives**

The planetary final drives transfer torque to the wheels through the transmission and differential. They enable higher travel speeds

and great torque reduction. The outboard, hub-mounted design makes maintenance easy.



## **PRODUCTIVITY**



Tier 4 (T4) Compliant

Optimized to provide more power output with reduced fuel consumption, Doosan wheel loaders are designed with T4 compliant engines to reduce air pollution.

## Cooled Exhaust Gas Recirculation (CEGR)

CEGR recycles a portion of the engine exhausts to reduce oxygen (O) and lower the temperature in the combustion chamber. This reduces nitrogen oxide (NO<sub>x</sub>) emissions.

## Diesel Oxidation Catalyst (DOC)

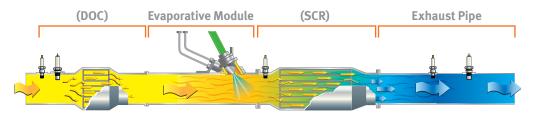
In the DOC, carbon monoxide (CO) and particulate matter (PM) emissions are transformed into harmless water (H<sub>2</sub>O) and carbon dioxide (CO<sub>2</sub>).

#### **Evaporative Module**

In the evaporative module, or mixing pipe, diesel exhaust fluid (DEF) solution is injected in small doses and mixed with hot exhaust gases, decomposing it into urea (CO(NH<sub>2</sub>)<sub>2</sub>) and water vapor, which then catalyzes into carbon dioxide and ammonia (NH<sub>3</sub>)

## Selective Catalyst Reduction (SCR)

In the SCR canister, nitrogen oxide  $(NO_x)$  mixes with ammonia, and a chemical reaction takes place resulting in nitrogen (N) and water vapor emitting from the system. The SCR canister also acts as the silencer or muffler.





#### Diesel Exhaust Fluid (DEF)

DEF is a solution of pure urea and deionized water. A minimum level of DEF is required for proper machine operation, and the DEF supply tank is heated for proper operation in cold weather. DEF is available from your Doosan dealer in various container sizes.

#### (DEF Tank)



#### **Optional Load Isolation System**

The load isolation system, sometimes referred to as "ride control," cushions the lift arm while traveling over rough terrain, minimizing the amount of material spillage while carrying a load and reducing operator fatigue. It also comes in handy when your customers pay for material by the bucket.





#### **Fuel Efficiency**

Fuel use is a significant cost of operation, and Doosan efficiently delivers more work for the money. In our fuel efficiency tests against equivalent machines from other manufacturers, the Doosan wheel loader consistently moved more material per gallon of fuel.

## **PRODUCTIVITY**

Whether you're loading a small truckload or moving a mountain of material, Doosan delivers amazing results in less time.



#### **Transmission Modes**

With three separate transmission modes, you can choose the transmission you want for the working conditions you face, making it easy to tailor performance for better productivity.



Transmission Optimization is a key feature of the automatic transmission modes. It calibrates different shift points to tailor the amount of power and engine torque per gear. When you engage either Auto 1-4 or Auto 2-4 in Economy Mode, the automatic transmission shifts at the optimal point for increased fuel efficiency. In Power Mode or Normal Mode, the transmission shift point occurs 20 percent later — allowing more torque and power within each gear range.

**Manual** is ideal when the job requires precise speed control.

Auto 1-4 automatically shifts up when you need more speed and downshifts when the job demands more power or torque. It's excellent for heavy-duty applications.

Auto 2-4 with Manual Kickdown gives you automatic shifting between gears 2 through 4, with a manual downshift into first gear when you need it. It provides the best performance for less demanding work conditions.

#### **Transmission Cutout**

Need more engine power for lift arm speed? In lower gears, simply depress the left brake pedal to disengage the transmission. Disengage transmission cutout with your switch panel to start moving on an incline with greater ease.

#### **Torque Converter**

The torque converter improves power train efficiency in load and carry operations, which contributes to improved fuel efficiency.

The Optional Torque Converter Lockup Clutch enables nearly 100 percent torque transfer directly from the engine to the transmission, for quicker acceleration and climbing uphill. Engaged via a dash-mounted switch, it increases productivity up to 20 percent in stockpiling applications and improves gear shifting for faster cycle times during truck loading and boasts high-gear performance during load-and-carry operations.

#### Auto Idle

The standard auto idle feature automatically reduces the engine RPM to standby idle a few seconds after the steering wheel, gearshift control lever and accelerator cease movement. This reduces noise, improves jobsite communications and saves fuel. When you move the controls, the loader automatically returns to working idle.



**Z-Bar Lift Arm Linkage** is designed for heavy lifting in loading applications, with geometry that enables rapid bucket movement and proper angle positioning in every situation.

**Standard Z-Bar** has excellent break-out forces for easier digging and penetration into tough materials — and it increases the lifting capacity of every Doosan loader.

High Lift Z-Bar is optional and is designed for applications requiring the highest possible dumping height. It's ideal for cement plants, scrap, mulch or wastewater transfer stations.

## DURABILITY / RELIABILITY





#### Tough, Rigid Frame

Each frame section is designed to maximize the life of the machine. Thick steel plates, cross members and gussets join to form a strong, durable articulation joint that stands up to years of difficult work.



#### Double Roller Articulation Joint Bearing

To create an articulation pivot point with superior strength, tough double roller bearings are used at both the top and bottom hinge points between the front and rear frames.



Large Center Driveline Bearing

An oversized bearing, vented to prevent over greasing, increases durability of the front drive shaft.



#### **All-Steel Panels**

Access panels on Doosan wheel loaders allow easy maintenance access. But more than that, they're durable formed-metal parts that protect critical engine, hydraulic and electrical components.



#### **Lift Arm Pin Protection**

Lift arm pins are protected with bushings and dust covers to increase pin life and reduce maintenance.

#### Variable Speed Cooling Fan

The variable speed fan slows and speeds up as required by the work demands of your loader. In lighter-duty conditions, the coolant temperature is low and the fan slows — saving fuel and extending the cooling system's life.



#### **Reversible Cooling Fan**

By pressing a console switch, the cooling fan can be reversed to assist in keeping the cooling system clean in extremely dusty applications. Press it to keep the machine running at optimal temperature. You can also set it to auto reverse for a few minutes at a time at different intervals – at 30, 60, 90 or 120 minutes depending on work conditions.

## Separate Cooling and Engine Compartments

Doosan isolates the wheel loader engine from the cooling system. This design increases cooling capacity and extends the life of your engine components.



#### **Exhaust Heat Exchanger**

As exhaust leaves the muffler on your Doosan wheel loader, it enters a larger external riser pipe with rain shield. This design creates a vacuum that pulls hot air out of the engine compartment, making your engine and cooling system run more efficiently.

#### **COMFORT**





#### **Electric Steering Option**

Optional electric steering allows you to control direction and steer the machine with easy-to-operate switches on the left arm rest, providing extra operator comfort during repetitive cycle operations.

#### **Easy Entry and Exit**

Grab handles and offset steps with slip-resistant surfaces provide easy access to the cabin and easy exit when work is finished. A 180-degree swinging door that can lock to the open position provides a wide opening to move in and out of the machine. Inside, ample floor space gives you room to work and exceptional comfort.

#### **Ergonomic Controls**

All controls are located within easy reach for intuitive, easy operation, from the steering wheel and joystick to the switches for optional equipment.



#### **Optional Rearview Camera**

Provides you with an additional means of viewing the machine's surroundings, allowing for increased productivity.

#### **Heated Mirrors**

Heated mirrors melt frost and snow quickly to provide visibility aid during operation.

#### **Automotive-Style Heat and Air Conditioning**

High-capacity heating and cooling vents and an easy-to-control temperature keep you comfortable all year long. Automatic temperature control senses and adjusts to the temperature setting automatically. A memory function returns it to your preferred temperature if you shut the machine off and restart later.

#### Easy-to-Read LCD Display Panel

An easy-to-read LCD display panel is placed within easy view for monitoring critical machine data and receiving machine warnings.



#### Standard Radio with CD-Player and Player Input

Tune into your favorite over-the-air stations, or take your favorite digital music format with you to make every hour on the job more enjoyable.

#### **Adjustable Comfort**

The standard air suspension seat has multiple adjustment points, allowing you to select the most comfortable position.

- A Seat Height
- **B** Seat Fore/Aft
- C Back Recline
- **D** Lumbar Support
- E Armrest Angle
- F Seat Heater
- **G** Headrest Up/Down



### **EASY MAINTENANCE**





#### Sight Glass for Major Fluid Levels

Sight glasses on the machine provide quick, easy fluid-level checks. All it takes is a quick visual check to know if your fluid reservoirs are properly filled.



## Color-Coded, Labeled Wiring and Hydraulic Hoses

Strategically labeled wiring enables plugand-play installation for electrical accessories, such as the rotating beacon. It also allows quicker, easier electrical troubleshooting of the electrical and hydraulic systems.

#### **Self-Diagnostics**

The LCD monitor helps you monitor critical systems in real time. Plus, you can access historical machine alerts right from the screen in the cabin. Hydraulic pressures previously monitored with remote check ports are now viewable on the main display monitor to improve serviceability.



## Doosan Monitoring System with Laptop Access

The Doosan Monitoring System is a diagnostic program that gives your dealer's technician a direct communications link with your wheel loader. During operation, it monitors all critical data and provides a complete history of operation and a realtime log of machine failures. Armed with information like this, your dealer service personnel can fix issues fast – and you can get back to work.

#### **DEF Tank Fill**

An easy DEF fluid fill ensures your T4-compliant Doosan machine operates at its full potential with fewer harmful emissions. DEF is available



from your Doosan dealer in various container sizes.

## **VERSATILITY**







# Hydraulic Quick Coupler Change your wheel loader attachments quickly and easily. Two different coupler styles allow you to easily match attachments to the machine.

#### **Boom Float**

The boom float allows your bucket to follow the ground contours, which saves you time and protects productivity when backdragging during snow removal.



## **General Purpose Bucket**



With a sloped bottom for maximum filling and material retention, this is the perfect bucket for day-to-day material handling. Capacities range from 4 to 6.5 yd<sup>3</sup>.

Available for DL300-3, DL350-3, DL420-3, DL450-3 and DL550-3 wheel loaders. All available with bolt-on cutting edge or teeth.

#### Pin-On

**Quick Coupler** 





## **Multi-Purpose Bucket**



Leveling, dozing, digging, grappling, loading and dumping – this multi-purpose bucket is ready for whatever you've got. Capacities from 3.5 to 4 yd<sup>3</sup>.

Available for DL300-3 and DL350-3 wheel loaders. All available with bolt-on cutting edge or teeth.

#### Pin-On

**Quick Coupler** 





## **Rock Bucket**



Severe digging is no problem for this tough bucket. Spade nose style. Weld-on teeth come standard. Capacities from 4 to 6 yd<sup>3</sup>.

Available for DL420-3, DL450-3 and DL550-3 wheel loaders.

#### Pin-On



## **Pallet Fork**



Easily lift, carry and place materials. Pallet forks with 72" forks available for DL300-3, DL350-3, DL420-3, DL450-3 and DL550-3 wheel loaders.

#### **Quick Coupler**



Quick couplers are available in two designs – JRB and ISO style. For more information on Doosan attachments, refer to the Doosan Wheel Loader Attachment literature.

# **General Specs**

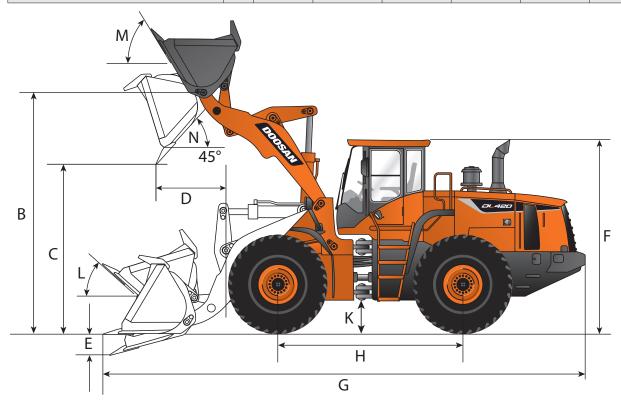
			<b>DL300-5</b> Standard (US10)	<b>DL350-5</b> Standard (US10)	<b>DL420-5</b> Standard (US10)	<b>DL450-5</b> Standard (US10)	<b>DL550-5</b> Standard (US10)
ENGINE							
MAKE			Scania	Scania	Scania	Scania	Scania
MODEL			DC09	DC09	DC13	DC13	DC13
NUMBER OF CYLINDERS		INLINE	5	5	6	6	6
RATED POWER, GROSS (per	r SAE J1995)	hp (kW) @ rpm	271 (202) @ 1800	271 (202) @ 1800	345 (257) @ 1800	345 (257) @ 1800	380 (283) @ 1800
MAXIMUM TORQUE, GROS	SS (per SAE J1995)	ftlb. (Nm) @ rpm	940 (1275) @ 1400	940 (1275) @ 1400	1,180 (1520) @ 1400	1,180 (1520) @ 1400	1,302 (1520) @ 1400
PISTON DISPLACEMENT		in³ (L)	568 (9.3)	568 (9.3)	775 (12.7)	775 (12.7)	775 (12.7)
BORE AND STROKE		in. x in. (mm x mm)	5.1 x 5.5 (130 x 140)	5.1 x 5.5 (130 x 140)	5.1 x 6.3 (130 x 160)	5.1 x 6.3 (130 x 160)	5.1 x 6.3 (130 x 160)
STARTER		V, hp (Kw)	24, 8 (6)	24, 8 (6)	24, 8 (6)	24, 8 (6)	24, 8 (6)
BATTERY (2)		V, AH, CCA	12, 200, 1300	12, 200, 1300	12, 200, 1300	12, 200, 1300	12, 150, 1050
ALTERNATOR		V, amp	28, 100	28, 100	28, 100	28, 100	28, 100
AIR CLEANER			Double Element	Double Element	Double Element	Double Element	Double Element
HYDRAULICS							
MAIN PUMPS		gpm (L/min)	38 (145)	38 (145)	70.3 (266)	70.3 (266)	55.5 (210)
SYSTEM PRESSURE (WORK)	)	psi (kg/cm2)	3626 (255)	3626 (255)	3989 (280)	3989 (280)	3989 (280)
SYSTEM PRESSURE (STEER)		psi (kg/cm2)	3046 (214)	3046 (214)	2901 (204)	2901 (204)	2901 (204)
BOOM SPEED	UP	sec.	5.8	5.9	6	6.3	6.4
500.11.01.225	DOWN	sec.	3.2	3.5	3	3	4.2
BUCKET SPEED	CROWD	sec.	2.4	2	2.3	2.3	2.1
DOCKET STEED	DUMP	sec.	1.6	1.4	1.7	1.6	1.4
TRANSMISSION SPEEDS							
TRAVEL SPEED - FORWARD	(4)	mph (km/h)	3.9 / 7.3 / 14.5 / 22.4 (6.2 / 11.7 / 23.3 / 36.0)	3.8 / 7.1 / 14.3 / 22.4 (6.1 / 11.5 / 23.0 / 36.0)	4.5 / 7.6 / 11.5 / 22.4 (7.2 / 12.1 / 18.5 / 36.0)	4.0 / 7.6 / 11.9 / 22.4 (6.5 / 12.2 / 19.1 / 36.0)	3.9 / 7.3 / 11.6 / 22.4 (6.3 / 11.8 / 18.6 / 36)
TRAVEL SPEED - REVERSE (3	3)	mph (km/h)	4.2 / 7.3 / 16.8 (6.7 / 11.8 / 27.1)	4.0 / 7.3 / 17.1 (6.5 / 11.7 / 27.5)	4.5 / 7.6 / 11.5 (7.2 / 12.2 / 18.5)	4.0 / 7.5 / 16.4 (6.5 / 12.1 / 26.4)	3.9 / 7.3 / 16.1 (6.3 / 11.8 / 25.9)
MAXIMUM GRADE		% (°)	51 (27)	51 (27)	51 (27)	58 (30)	58 (30)
ENVIRONMENT							
SOUND LEVEL (per ISO 6395	5)	dB(A)	107	106	105	106	107
CABIN SOUND LEVEL (per IS	SO 6394)	dB(A)	73	71	71	73	72
REFILL CAPACITIES							
FUEL TANK		gal. (L)	64 (241)	64 (241)	73 (277)	89 (336)	117 (441)
DIESEL EXHAUST FLUID TAN	NK	gal. (L)	10 (38)	10 (38)	16 (60)	16 (60)	16 (60)
COOLING SYSTEM (RADIATE	OR)	gal. (L)	13 (50)	13 (50)	16 (60)	16 (60)	16 (60)
ENGINE OIL		gal. (L)	9 (34)	9 (34)	10 (39)	10 (39)	12 (45)
TRANSMISSION		gal. (L)	14 (54)	14 (54)	14 (54)	14 (54)	14 (54)
FRONT AXLE		gal. (L)	11 (42)	11 (42)	11 (42)	11 (42)	16.5 (62.5)
REAR AXLE		gal. (L)	11 (42)	11 (42)	11 (42)	11 (42)	16.9 (64)
HYDRAULIC SYSTEM		gal. (L)	48 (180)	61 (230)	61 (230)	61 (230)	65 (247)
HYDRAULIC CYLINDERS							
STEERING (2)	BORE x ROD x STROKE	in. x in. x in. (mm x mm x mm)	3.1 x 1.6 x 17.7 (80 x 40 x 450)	3.9 x 2 x 17.7 (100 x 50 x 450)	3.9 x 2 x 17.7 (100 x 50 x 450)	3.9 x 2 x 17.7 (100 x 50 x 450)	4.3 x 2.4 x 18.3 (110 x 60 x 465)
LIFT (2)	BORE x ROD x STROKE	in. x in. x in. (mm x mm x mm)	5.5 x 3.1 x 32.7 (140 x 80 x 831)	5.9 x 3.7 x 31.5 (150 x 95 x 800)	6.7 x 4.1 x 31.1 (170 x 105 x 789)	6.7 x 4.1 x 31.1 (170 x 105 x 789)	7.5 x 4.1 x 35 (190 x 105 x 890)
Bucket (1)	BORE x ROD x STROKE	in. x in. x in. (mm x mm x mm)	7.1 x 4.1 x 20.3 (180 x 105 x 515)	7.1 x 4.1 x 21.1 (180 x 105 x 535)	7.5 x 4.7 x 23.2 (190 x 120 x 590)	7.5 x 4.7 x 23.2 (190 x 120 x 590)	8.7 x 5.1 x 24 (220 x 130 x 610)

NOTE — Where applicable, dimensions are in accordance with Society of Automotive Engineers (SAE) and ISO standards. Specifications and design are subject to change without notice. Images of Doosan wheel loaders may show other than standard equipment. All dimensions are shown in inches. Respective metric dimensions are enclosed by parentheses. Doosan Construction Equipment is manufactured with a Quality Management System that is in compliance with ISO 9001:2008.

All dimensions are given for Doosan wheel loaders equipped with standard tires.

# **Operational Data**

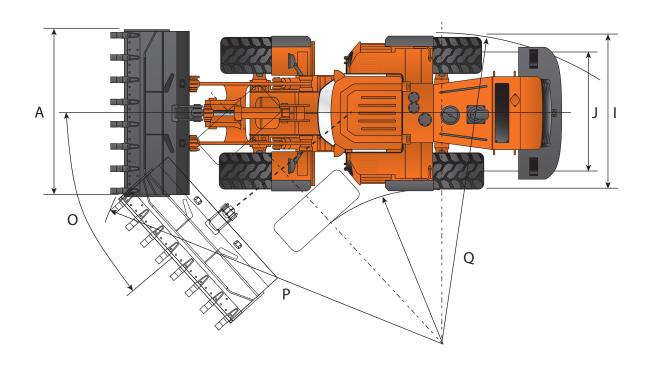
			DL3	00-5	DL3	50-5	DL4	20-5
			Standard (US10)	High Lift (US20)	Standard (US10)	High Lift (US20)	Standard (US10)	High Lift (US20)
DIMENSION & WORKING RANGE								
BUCKET CAPACITY, HEAPED ISO / SAE		yd3 (m3)	4.2 (	3.2)*	4.8 (	3.7)*	5.5 (	4.2)*
BUCKET WIDTH	А	ft. in. (mm)	9' 6''	(2920)	9' 10"	(3000)	10' 9"	(3290)
HINGE PIN HEIGHT, MAXIMUM	В	ft. in. (mm)	13' (3975)	14' 10" (4530)	13' 8" (4170)	15' 4" (4695)	14' (4280)	15' 6" (4745)
DUMP HEIGHT (45°) - FULLY RAISED	С	ft. in. (mm)	9'4'' (2845)	11'1" (3395)	10' (3040)	11' 8" (3565)	10' 1" (3075)	11' 9" (3585)
DUMP REACH (45°) - FULLY RAISED	D	ft. in. (mm)	3' 9" (1160)	3' 10" (1185)	4' (1220)	4' 8" (1425)	4' 1" (1240)	4' 4" (1310)
DIGGING DEPTH	E	ft. in. (mm)	5" (125)	10" (250)	4" (90)	10" (235)	6" (150)	8" (185)
OVERALL HEIGHT, ROPS CABIN	F	ft. in. (mm)	11' 4"	(3475)	11' 4"	(3475)	11' 7" (3535)	
OVERALL LENGTH	G	ft. in. (mm)	26' 6" (8095)	28' 2" (8605)	27' 3" (8320)	29' 4" (8960)	28' 7" (8720)	30' 9" (9395)
WHEEL BASE	Н	ft. in. (mm)	10' 5"	(3200)	10' 9"	(3300)	11' 5" (3500)	
WIDTH AT TIRES	1	ft. in. (mm)	9' 1" (	(2776)	9' 1"	(2776)	9' 9" (2984)	
TREAD WIDTH	J	ft. in. (mm)	7' (2	150)	7' (2	150)	7' 6" (2300)	
GROUND CLEARANCE	К	ft. in. (mm)	1' 6"	(460)	1' 4"	(430)	1' 7" (495)	
MAX. TILT ANGLE ON GROUND		۰	4	5	4	5	45	
MAX. TILT ANGLE AT CARRY POSITION	L	۰	49	51	48	51	48	51
MAX. TILT ANGLE AT FULLY RAISED	М	۰	61	57	64	63	63	64
MAX. DUMP ANGLE (FULLY RAISED)	N	۰	4	5	4	5	4	16
STEERING ANGLE, MAXIMUM	0	۰	4	0	4	0	4	10
EXTERNAL RADIUS, BUCKET EDGE	Р	ft. in. (mm)	21' (6405)	21' 9" (6650)	21' 8" (6615)	22' 8" (6915)	22' 10" (6955)	23' 1" (7035)
EXTERNAL RADIUS, OUTSIDE TIRE	Q	ft. in. (mm)	19' (5	5800)	19' 10'	(6050)	21' 7 "	(6570)
TIRE SIZE			23.	5-25	23.	5-25	26.	5-25
OPERATING WEIGHT		lb. (kg)	41,844 (18 980)	42,869 (19 445)	43,541 (19 750)	44,743 (20 295)	50,783 (23 035)	51,919 (23 550)
STATIC TIPPING LOAD (STRAIGHT)		lb. (kg)	33,907 (15 380)	26,918 (12 210)	34,855 (15 810)	27,470 (12 460)	40,256 (18 260)	32,320 (14 660)
STATIC TIPPING LOAD (AT FULL TURN)		lb. (kg)	29,939 (13 580)	23,766 (10 780)	30,776 (13 960)	24,251 (11 000)	35,550 (16 125)	28,550 (12 950)
BREAKOUT FORCE		lbf. (kgf)	37,767 (17 131)	36,643 (16 621)	36,869 (16 723)	35,969 (16 315)	47,209 (21 414)	45,186 (20 496



# Operational Data Continued

			DL4	50-5	DL5	50-5
			Standard (US10)	High Lift (US20)	Standard (US10)	High Lift (US20)
DIMENSION & WORKING RANGE						
BUCKET CAPACITY, HEAPED ISO / SAE		yd3 (m3)	6.3 (	4.8)*	7.5 (	5.7)*
BUCKET WIDTH	А	ft. in. (mm)	10' 9"	(3277)	11' 2"	(3405)
HINGE PIN HEIGHT, MAXIMUM	В	ft. in. (mm)	14' 9" (4500)	16' 4" (4985)	15' 8" (4795)	17' 1" (5220)
DUMP HEIGHT (45°) - FULLY RAISED	С	ft. in. (mm)	10' 7" (3240)	12' 2" (3730)	11' 2" (3405)	12' 6" (3830)
DUMP REACH ( 45°) - FULLY RAISED	D	ft. in. (mm)	4' 2" (1280)	4' 10" (1480)	4' 7" (1400)	5' 3" (1620)
DIGGING DEPTH	Е	ft. in. (mm)	4" (105)	10" (270)	3" (80)	8" (205)
OVERALL HEIGHT, ROPS CABIN	F	ft. in. (mm)	11' 9"	(3581)	12' 5"	(3785)
OVERALL LENGTH	G	ft. in. (mm)	30' (9155)	32' (9755)	31' 9" (9680)	33' 7" (10 255)
WHEEL BASE	Н	ft. in. (mm)	11' 7"	(3550)	12' 1"	(3700)
WIDTH AT TIRES	1	ft. in. (mm)	9' 9"	(2984)	14' 7"	(4458)
TREAD WIDTH	J	ft. in. (mm)	7' 6"	(2300)	7' 11"	(2420)
GROUND CLEARANCE	К	ft. in. (mm)	1' 5"	(455)	1' 6" (480)	
MAX. TILT ANGLE ON GROUND		۰	45	44	43	
MAX. TILT ANGLE AT CARRY POSITION	L	٥	50	51	48	50
MAX. TILT ANGLE AT FULLY RAISED	М	۰	66	63	67	62
MAX. DUMP ANGLE (FULLY RAISED)	N	۰	4	15	4	7
STEERING ANGLE, MAXIMUM	0	۰	4	10	4	0
EXTERNAL RADIUS, BUCKET EDGE	Р	ft. in. (mm)	23' 6" (7160)	24' 4" (7420)	24' 8" (7515)	25' 6" (7790)
EXTERNAL RADIUS, OUTSIDE TIRE	Q	ft. in. (mm)	21' 5"	(6540)	21' 5''	(6540)
TIRE SIZE			26.	5-25	29.5	5-25
OPERATING WEIGHT		lb. (kg)	56,868 (25 795)	57,618 (26 135)	69,897 (31 705)	71,617 (32 485)
STATIC TIPPING LOAD (STRAIGHT)		lb. (kg)	45,228 (20 515)	42,902 (19 460)	53,175 (24 120)	43,453 (19 710)
STATIC TIPPING LOAD (AT FULL TURN)		lb. (kg)	39,937 (18 115)	37,875 (17 180)	46,947 (21 295)	38,371 (17 405)
BREAKOUT FORCE		lbf. (kgf)	51,930 (23 555)	51,256 (23 249)	55,303 (25 085)	56,877 (25 799)

\* Bucket Type = Pin-On, General Purpose with Bolt-On Cutting Edge



# **Standard/Optional Equipment**

		22000	DL420-3	DL430-3	DL550-5
ENGINE					
Emissions (EPA)	T4	T4	T4	T4	T4
High Pressure Common Rail (HPCR)	•	•	•	•	•
Cooled Exhaust Gas Recirculation (CEGR)	•	•	•	•	•
Exhaust Brake	•	•	•	•	•
Selective Catalyst Reduction (SCR)	•	•	•	•	•
Diesel Exhaust Fluid (DEF)	•	•	•	•	•
Fuel Filter with Water Separator	•	•	•	•	•
Coolant Recovery tank	•	•	•	•	•
Dual Element Dry-Type Air Filter with Evacuator	•	•	•	•	•
Pre Cleaner	•	•	•	•	•
Electronic Engine Control (ECU)	•	•	•	•	•
Auto-Idle (Working to Standby)	•	•	•	•	•
Overheat & Low Oil Pressure Engine Protection	•	•	•	•	•
Cooling Fan - Radiator, Variable Speed	•	•	•	•	•
Cooling Fan - Radiator,		•	•		_
Automatic Reversible	•	_ •	•	•	•
Block Heater	-	•	•	-	•
HYDRAULIC					
Variable Displacement Axial Piston Pump	•	•	•	•	•
Closed-Center System	•	•	•	•	•
Pilot-Operated Control Valves	•	•	•	•	•
Remote Test Ports	•	•	•	•	•
Spring Applied Hydraulic Release Brake	•	•	•	•	•
Auxiliary Hydraulics (3rd Valve)	•	•	•	•	•
Automatic Boom/Lift Kick-Out, Adjustable (in cab)	•	•	•	•	•
Automatic Return-to-Dig Position, Adjustable	•	•	•	•	•
Boom Float	•	•	•	•	•
Load Isolation System			-		
ELECTRICAL					
System Voltage - 24V	•	•	•	•	•
Alternator - 24V, 100 Amp	•	•	•	•	•
2 x 12V Batteries, 200 AH Reserve Capacity	•	•	•	•	•
Blade Type Fuse Panel	•	•	•	•	•
Main Circuit Breaker		•	•	•	•
Light, Work (Halogen): Front (2), Rear (2)	•	•	•	•	•
Light, Headlights (High/Low Beams) (2)	•	•	•	•	•
Light, Stop, Tail & Direction Indicators	•	•	•	•	•
Rotating Beacon	-	-	-		
Hour Meter	•	•	•	•	•
Rear View Camera	-	•	_	•	•
Laptop Service Port	•	•	•	•	•
Self-Diagnostics System	•	•	•	•	•
Jen Diagnostics System				_	_

	DL300-5	DL350-5	DL420-5	DL450-5	DL550-5
CABIN					
Steel, All-Weather & Sound Suppressed	•	•	•	•	•
ROPS (ISO 3471)	•	•	•	•	•
Front & Rear Window with Wiper/Washer	•	•	•	•	•
Tinted Safety Glass	•	•	•	•	•
Visor, Retractable	•	•	•	•	•
Defrost	•	•	•	•	•
Lockable Doors	•	•	•	•	•
Seat - Air Suspension - 2" (51 mm) Seat Belt - Adjustable Height & Recline - Adjustable Arm Rests - Adjustable Fore/Aft	•	•	•	•	•
Seat - Heater	•	•	•	•	•
3" (76 mm) Seat Belt	-	-	-	-	•
Control Stand - Sliding (Fore/Aft)	•	•	•	•	•
Storage	•	•	•	•	•
Mirror, Rear View (1)	•	•	•	•	•
Mirrors, Exterior (2) Heated	•	•	•	•	•
Fully Automatic HVAC w/ Ambient		_		_	
Temperature Sensor	•	•	•	•	•
Multi-Function LCD	•	•	•	•	•
Cigarette Lighter	•	•	•	•	•
AM/FM Stereo with CD Player & MP3 Port	•	•	•	•	•
Speakers (2)	•	•	•	•	•
Antenna, Roof-Mounted	•	•	•	•	•
Power Socket, 12V	•	•	•	•	•
Beverage Holder	•	•	•	•	•
Hot/Cold Compartment	•	•	•	•	•
Interior Light	•	•	•	•	•
CONTROLS					
Adjustable steering column - Tilting -Telescoping	•	•	•	•	•
Electric Steering (Left Armrest Joystick)	-	-	•	-	•
Throttle Pedal (Accelerator)	•	•	•	•	•
Brake Pedal, Right	•	•	•	•	•
Brake Pedal, Left (Transmission Kick Out)	•	•	•	•	•
Gear Selector (FnR)	•	•	•	•	•
Joystick Control	•	•	•	•	•
Finger Tip Control (3 Lever)	-	•	-	•	•
Switches, Console-Mounted - Starter (Key) - Parking Brake - Pilot Cutoff - Transmission Cutoff - Work Light - Reversible Cooling Fan	•	•	•	•	•
Power Mode (P, S, E)	•	•	•	•	•
Transmission Mode	•	•	•	•	•
Wiper Control Panel	•	•	•	•	•
Audio Control Panel	•	•	•	•	•

<sup>•</sup> Standard Equipment

Optional Equipment

<sup>-</sup>N/A

# Standard/Optional Equipment Continued

	DL300-5	DL350-5	DL420-5	DL450-5	DL550-5
FRAME & DRIVELINE					
Z-Bar Lift Arm	•	•	•	•	•
Z-Bar Lift Arm, High Lift	-	-	-	-	
Steering Cylinder, Double-Acting (2)	•	•	•	•	•
Transmission, Automatic - Power Shift - (4F / 3R Speed)	•	•	•	•	•
Transmission, Automatic - Power Shift - (5F / 3R Speed)	•	•	•	•	-
Torque Converter	•	•	•	•	•
Torque Converter, Lock-Up Clutch	-	-	-	-	•
Differential, Front - Limited Slip	•	•	•	•	-
Differential, Front - Hydraulic Locking	•	-	-	-	•
Differential, Rear - Limited Slip	•	•	•	•	•
Hydraulic Power Steering	•	•	•	•	•
Outboard Planetary Axles	•	•	•	•	•
Fixed Front Axle	•	•	•	•	•
Oscillating Rear Axle	•	•	•	•	•
Axle Oil Cooler	•	-	-	-	•
Parking Brake, Spring-Applied Hydraulic-Release	•	•	•	•	•
Sealed, Self-Adjusting Brakes	•	•	•	•	•
Tires, 23.5R25 Radial	•	•	-	-	-
Tires, 23.5R25 Bias	-	•	-	-	-
Tires, 26.5R25 Radial	-	-	•	•	-
Tires, 26.5R25 Bias	-	-	-	•	-
Tires, 29.5R25 Radial	-	-	-	-	•
Tires, 29.5R25 Bias	_	_	-	_	•

DISPLAY MONITOR & WARNINGS	DL300-5	DL350-5	DL420-5	DL450-5	DL550-5
Buzzer					
- Engine Oil Pressure					
- Coolant Temperature		-	_		-
- Transmission Overheat					
Gauges					
- Fuel Level - DEF Level					
- Engine Coolant Temperature					
- Transmission Oil Temperature					
- Engine RPM					
- Speedometer - Transmission Gear Indicator					
- Battery Voltage		-	-		
- ECO					
- Digital Clock					
- Trip Meter - Hour Meter					
- Total Operation Time					
- Fuel Consumption					
Warning & Indicator Lights					
- Seat Belt					
- Error Code					
- SCR Warning					
- Check Engine - Engine Oil Pressure					
- Engine Pre-Heat Engaged					
- Radiator Coolant Level & Temperature					
- Air Filter - Fuel Level					
- Puel Level - DEF Level					
- Water in Fuel					
- Battery Charge					
- Lights (High, Main, Work, Beacon) - Direction Signal		•	•		
- Emergency Steering		-	-		-
- Hydraulic Oil Temperature					
- Hydraulic Charge Pressure Warning - Hydraulic Pilot Filter					
- Hydraulic Return Filter					
- Transmission Mode					
- Transmission Warning					
- Transmission Lock-Up - Transmission Oil Temp					
- Transmission Gear Indicator					
- Brake Fluid Pressure Warning					
- Reverse Fan Indicator - Mirror Heat Indicator					
- Mirror Heat Malcator - Parking Brake Indicator					
	•	•	•	•	•
Back-Up Alarm  OTHER					
Centralized Lubrication					
	•	•	•	•	•
Automatic Lubrication System	•	•	•	•	•
Automatic Lubrication System Handrails & Service Platforms	•	•	•	•	•
Automatic Lubrication System Handrails & Service Platforms Skid-Resistant Steps & Service Platforms	•	•	•	•	•
Automatic Lubrication System Handrails & Service Platforms	•	•	•	•	•
Automatic Lubrication System Handrails & Service Platforms Skid-Resistant Steps & Service Platforms	•	•	•	•	•
Automatic Lubrication System Handrails & Service Platforms Skid-Resistant Steps & Service Platforms Drawbar and Pin	•	•	•	•	•
Automatic Lubrication System Handrails & Service Platforms Skid-Resistant Steps & Service Platforms Drawbar and Pin Wheel Chocks Rear Fender, Full	•	•	•	•	•
Automatic Lubrication System Handrails & Service Platforms Skid-Resistant Steps & Service Platforms Drawbar and Pin Wheel Chocks Rear Fender, Full Additional Counterweight	•	•	•	•	•
Automatic Lubrication System Handrails & Service Platforms Skid-Resistant Steps & Service Platforms Drawbar and Pin Wheel Chocks Rear Fender, Full	•	•	•	•	•
Automatic Lubrication System Handrails & Service Platforms Skid-Resistant Steps & Service Platforms Drawbar and Pin Wheel Chocks Rear Fender, Full Additional Counterweight * Additional counterweight is standard on all High Lift machines.	•	•	•	•	•
Automatic Lubrication System Handrails & Service Platforms Skid-Resistant Steps & Service Platforms Drawbar and Pin Wheel Chocks Rear Fender, Full Additional Counterweight * Additional counterweight is standard on all High Lift machines. Manuals	•	•	•	•	•
Automatic Lubrication System Handrails & Service Platforms Skid-Resistant Steps & Service Platforms Drawbar and Pin Wheel Chocks Rear Fender, Full Additional Counterweight * Additional counterweight is standard on all High Lift machines.	•	•	•	•	•
Automatic Lubrication System Handrails & Service Platforms Skid-Resistant Steps & Service Platforms Drawbar and Pin Wheel Chocks Rear Fender, Full Additional Counterweight * Additional counterweight is standard on all High Lift machines.  Manuals - Operation & Maintenance	•	•	•	•	•
Automatic Lubrication System  Handrails & Service Platforms  Skid-Resistant Steps & Service Platforms  Drawbar and Pin  Wheel Chocks  Rear Fender, Full  Additional Counterweight  * Additional counterweight is standard on all High Lift machines.  Manuals  - Operation & Maintenance - Parts	•	•	•	•	•
Automatic Lubrication System Handrails & Service Platforms Skid-Resistant Steps & Service Platforms Drawbar and Pin Wheel Chocks Rear Fender, Full Additional Counterweight * Additional counterweight is standard on all High Lift machines.  Manuals - Operation & Maintenance - Parts - AEM Safety Manual	•	•	•	•	•
Automatic Lubrication System Handrails & Service Platforms Skid-Resistant Steps & Service Platforms Drawbar and Pin Wheel Chocks Rear Fender, Full Additional Counterweight * Additional counterweight is standard on all High Lift machines.  Manuals - Operation & Maintenance - Parts - AEM Safety Manual  Telematics, Three-Year Subscription Vandalism Protection - Lockable Panels	•	•	•	•	•
Automatic Lubrication System Handrails & Service Platforms Skid-Resistant Steps & Service Platforms Drawbar and Pin Wheel Chocks Rear Fender, Full Additional Counterweight * Additional counterweight is standard on all High Lift machines.  Manuals - Operation & Maintenance - Parts - AEM Safety Manual  Telematics, Three-Year Subscription Vandalism Protection - Lockable Panels - Lockable Fluid Fill Points	•	•	•	•	•
Automatic Lubrication System Handrails & Service Platforms Skid-Resistant Steps & Service Platforms Drawbar and Pin Wheel Chocks Rear Fender, Full Additional Counterweight * Additional counterweight is standard on all High Lift machines.  Manuals - Operation & Maintenance - Parts - AEM Safety Manual  Telematics, Three-Year Subscription Vandalism Protection - Lockable Panels	•	•	•	•	•

DL300-5 DL350-5 DL420-5 DL450-5 DL550-5

<sup>•</sup> Standard Equipment

Optional Equipment

<sup>-</sup> N/A





1.877.745.7814

Doosan Equipment.com/WL

Doosan and the Doosan logo are registered trademarks of Doosan Corp. in the United States and various other countries around the world.

©2015 Doosan Infracore Construction Equipment America. All rights reserved.

DOOSAN