

* | 264 kW (354 HP) at 1800 rpm

 | (Straight / full turn) 21.2 / 18.7 t

 | 4.5 m³

* | 283 kW (380 HP) at 1800 rpm

 | (Straight / full turn) 25.1 / 22.1 t

 | 5.4 m³



DL450-3 / DL550-3

Wheel Loader



DL 450-3

DL 650-3



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DL450-3 & DL550-3 – WE PREPARE THE WAY



DO YOU WANT LOWER RUNNING COSTS, THE MOST EFFICIENT TECHNOLOGY AND FIRST-CLASS OPERATOR COMFORT?

The new DL450-3 and DL550-3 leave the competition behind, with technologies that reduce fuel consumption and set new standards for comfort in the cab:

- **SCR technology** ensures the engine meets **Stage IIIB regulations**. No need for exhaust recirculation or particulate filters which can sometimes reduce performance and increase fuel consumption
- A 5-gear **ZF powershift transmission** and torque converter lock-up combine to deliver the **highest traction** and **lowest fuel consumption**
- Many **extras are standard** to increase **operator comfort**: auto lube, heated air suspended seat, heated mirrors, load isolation system, automatically reversing fan, and many more...

TAKE A TOUR

Wide range of attachments such as rock, high dump and high volume buckets

Long lift arm available as an option for better dump reach

Load isolation system included as standard

"Lift arm raise kick-out" and "return to dig" functions operated electronically from inside the cab

Standard 3rd spool

Load-sensing closed centre hydraulic system

Convenient width for transport (below 3 meters for DL450-3)

Automatic limited slip differentials (DL450-3) or differential hydraulic lock (standard on DL550-3) with latest generation ZF axles

COMFORT AND CONVENIENCE

- Spacious, comfortable cab
- Heated air suspended seat
- Rear view camera
- New LCD monitor
- Heated mirrors
- Large storage compartments
- Large windows for better visibility
- Robust shark antenna

POWER AND FUEL EFFICIENCY

- Scania DC13 engine (264 kW / 283 kW at 1800 rpm)
- High torque at low rpm for better response
- SCR technology, avoiding the need for exhaust recirculation or DPF for more performance and less fuel consumption
- Torque converter lock-up, engages automatically from 2nd to 5th gear, depending on transmission torque
- Intelligent clutch cut-off via brake pedal
- 5-gear transmission
- Power up function via acceleration pedal
- Load sensing hydraulic system
- Auto-idle function

3-stage air filter with Turbo 3 cyclone dust separator

Cooling compartment separated from the engine compartment to prevent warm and dusty air from entering and allow better control of air intake

Hydraulically driven, automatically reversing fan as standard

Easy access to maintenance components from the ground. Standard auto-lubrication

Fenders, radiator grille, engine bonnet and other parts made of robust steel, easy to repair

5-gear ZF powershift transmission with automatic and manual shift modes plus torque converter

Clean, solid articulation hinge design

DL 550-3

More power that lifts productivity to new heights

■ Strength and intelligence – a winning combination

Exceptional power combined with the finest workmanship results in a machine that will perform at the highest level. The DL450-3 and DL550-3 enhance your output from every angle. Impressive digging power and high traction make penetration easy and allow you to tackle the hardest materials. Work is quick and efficient with a powerful hydraulic system. A new Scania DC13 engine with SCR technology provides the power you need while meeting Stage IIIB environmental regulations.

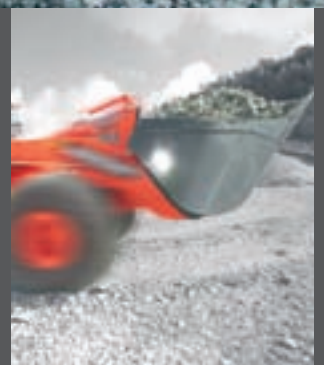


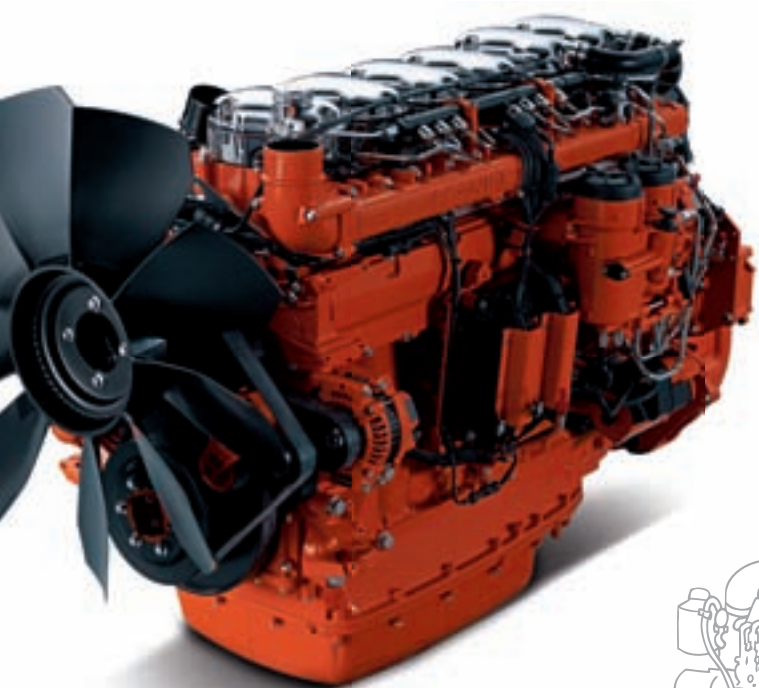
6 ESSENTIAL ASSETS:

- **Power:** 264 kW and 283 kW at 1800 rpm (SAE J1995)
- **Productivity:** Shortest turning radius in its class
- **Breakout force:** 23.5 t and 26.5 t
- **Dump height (at 45°):** 3115 mm and 3285 mm
- **Maximum steering angle:** 40°
- **Transportability:** width at tyres below 3 m (DL450-3)

Load Isolation System (LIS)

The bucket is suspended using a closed accumulator to reduce material loss as well as stress on the driver and machine structure. The system is automatic and depends on the speed of operation.

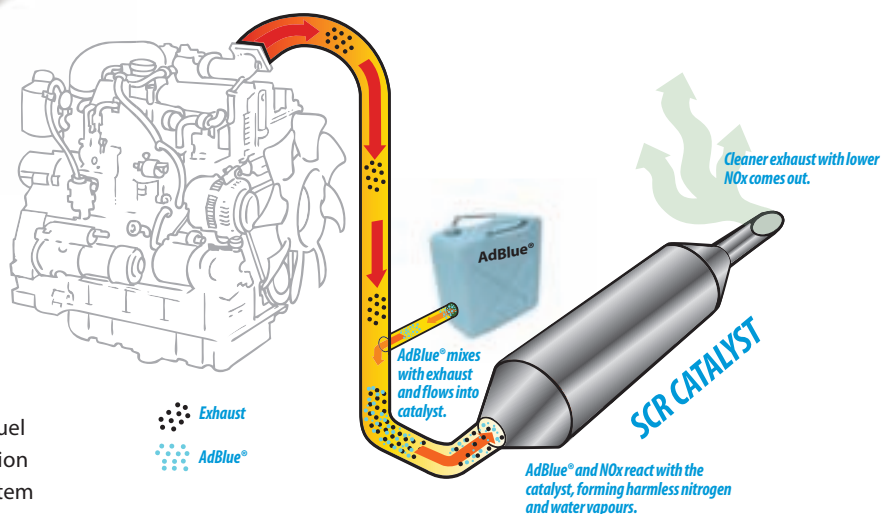




EFFICIENT FUEL AND HYDRAULICS MANAGEMENT

Scania engines are renowned for excellent fuel efficiency, serviceability and long service life. They combine their exceptional power output with quick response, delivering high torque at low revs.

- The Scania EMS (Engine Management System) uses a CAN (Controller Area Network) to provide a constant flow of operating information as well as diagnostic and ECU programming functions
- A dual oil filter system ensures maximum filtration and minimum wear
- XPI common-rail fuel injection is combined with a wastegate turbocharger for faster machine response
- SCR technology ensures compliance with Stage IIIB regulations



Selective Catalytic Reduction (SCR)

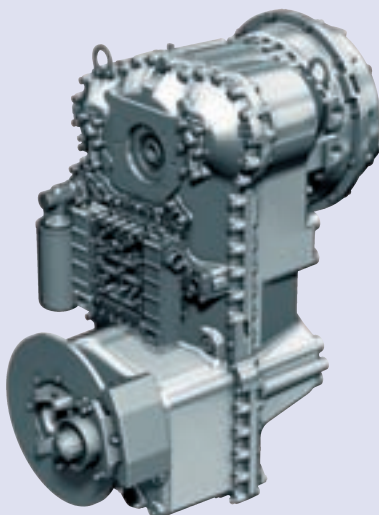
SCR reduces NOx and soot particles in the exhaust by two methods: the use of a catalyst and the injection of the urea solution, AdBlue®, into the exhaust flow. This creates better fuel efficiency and, as there is no need for Exhaust Gas Recirculation or a Particulate Filter, increases engine performance. The system is simple, durable and easy to maintain.

ZF Powershift Transmission

The new Doosan ZF transmission has 5 gears to boost acceleration performance, especially on slopes. The gear ratios are optimised and smooth, shock-free shifts contribute to the high overall level of operator comfort. Traction force is also maximised.

Together, these qualities enable a high working speed in all conditions.

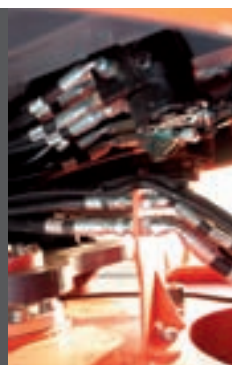
Excellent penetration power ensures optimum bucket filling during each cycle.



The transmission has 3 modes of operation:

- Manual
- Automatic (travelling, 2nd to 5th gear)
- Automatic (working, 1st to 5th gear)

A kick-down function enables manual shifting down in automatic modes. The DL450-3 and DL550-3 also features torque converter lock-up. When this is activated, the engine automatically connects directly to the transmission, depending on speed and travel resistance, even in low gears. The transmission receives the full engine power. This can save you up to 10% in fuel costs.



Load sensing hydraulic system

This system provides maximum hydraulic performance, without producing excess capacity. This saves fuel and extends the lifetime and reliability of vital components such as the pumps and MCV valves.



"Z" kinematics

The "Z" form lifting geometry is extremely robust and especially tailored for demanding jobs. Particularly effective in penetrating piles of hard material, it delivers superior breakout force and loader stability. This is achieved with fewer moving parts and reduced stress on components. Performance improves with rapid bucket movements and correct angle positioning in every situation. With greater dumping and lifting speed for the bucket and lift arm, faster cycle times and increased productivity are ensured.

Comfort at its best – take a seat!

■ The workspace you've always wanted

The productivity of your wheel loader is directly linked to the operator's performance. That's why Doosan has placed comfort at the very centre of its design priorities for the DL450-3 and DL550-3. More space, better visibility, air conditioning, a comfortable seat and plenty of storage space make it easy to work for hours without fatigue or discomfort. There's no need to pay extra for the options you want – most of them are standard features on this loader.



Heated air suspension seat

Vertical and horizontal air suspension reduces vibration for maximum operator comfort and less fatigue.



Enhanced view

The front and side windows were enlarged to provide the operator with a better overview of the worksite, especially the areas to the left and right of the bucket.





Air conditioning with climate control

The automatic climate control is newly designed. Its 6000 kcal capacity ensures quick warming up and plenty of cooling power. A recirculated air function is also available.

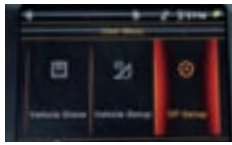


Extras

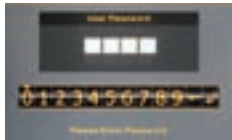
- ① CD/MP3 radio (optional)
- ② Heated mirrors
- ③ Shark antenna
- ④ Large storage compartments and cool box behind the seat

Expert control for stress-free operation

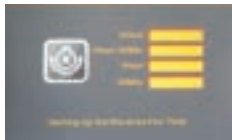
Power alone is not enough. For maximum efficiency, it needs to be matched by precise control. Our unique range of features allows any operator to get the most out of this impressive machine.



User menu



Anti-theft protection



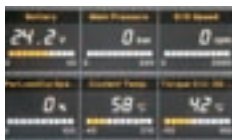
Fan reverse intervals



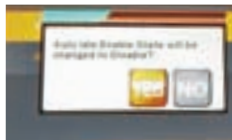
Failure log information



Filter/oil information



Monitoring



Auto-idle



Colour LCD monitor panel

The 5.5" TFT LCD panel is suitable for day and night work. The monitor is user-friendly and gives full access to machine settings and maintenance data. Any abnormality is clearly displayed on the screen, allowing you to work safely and confidently with an accurate overview of all conditions.

Gauges

Engine coolant and transmission oil temperatures, fuel and DEF (AdBlue®) levels.

ECO bar

Informs the operator about the fuel efficiency of the current driving style.

Auto-idle

Automatically decreases engine rpm when the controls are not operated.

Tailored performance for maximum efficiency

The DL450-3 and DL550-3 allow you to select from 3 different working modes: ECO, Normal and Power.

It also features an additional Power-up function which lets the operator switch the machine into a higher working mode with lower transmission shift intervals by fully applying the acceleration pedal.



① Torque converter lock-up switch

The torque converter lock-up function automatically links the impeller (input side) with the turbine (output side). This provides a mechanical connection between the engine and transmission for direct drive. With no power loss, fuel consumption is reduced and traction force is increased. Unlike most other systems, the Doosan torque converter lock-up is automatically engaged from 2nd to 5th gear, depending on transmission torque.

② Automatic lift arm kick-out switch

The boom raise kick-down positions create faster cycle times and can be adjusted from within the cab. An optional "return to dig" position is available.

Rear view camera

A camera provides a clear view of what's happening behind the machine for added safety and peace of mind. The monitor is aligned with the rear mirrors.

Central indicator panel

An easy to read LCD indicator panel gives the operator full visibility of essential loader functions.





Easy to reach control panel

All controls are placed to the right, top and front of the operator. They are clearly positioned for comfortable access and grouped by function, enabling safe, confident operation.



Transmission cut-off

The transmission cut-off function disconnects the driveline from the engine if the brake pedal is engaged. This delivers the full engine power to the hydraulics, speeding up cycle times and boosting fuel efficiency. The brake pressure needed for activation is automatically controlled, depending on speed, pedal angle and transmission resistance.

Joystick or fingertip control

The bucket can be moved using a convenient joystick with an FNR switch and kick-down function. The operator can also choose the option of fingertip control.

Doosan reliability – options are now standard!

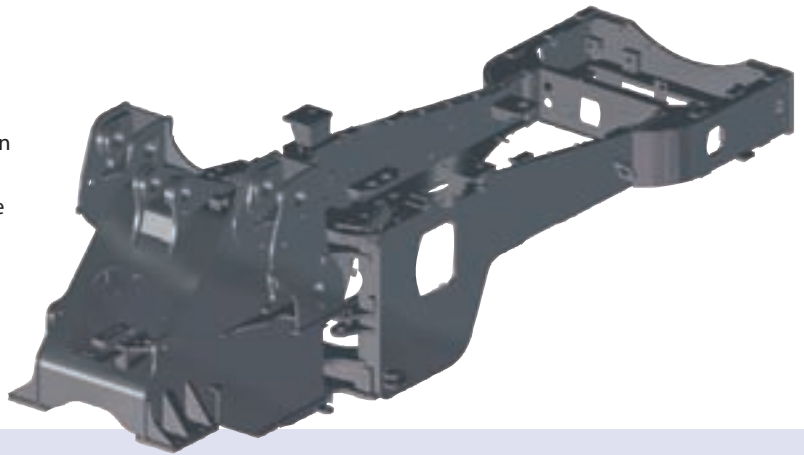
■ Dependable performance for low lifetime cost

Doosan has been building heavy construction equipment for 40 years. This long experience is reflected in the superior design and development of our wheel loaders as well as by an extensive logistics network. At no extra cost, our standard machines include a wide range of features that other manufacturers only offer as options.

Designed to last

We pay the highest attention to the design and manufacture of structural components.

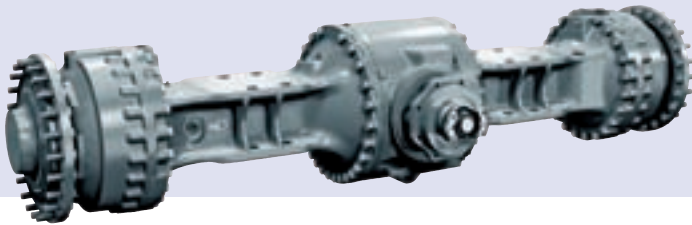
Finite Element Analysis is used to ensure an extended lifetime for main structures such as the chassis, joints and lift arm. After modelling, they are subjected to intensive laboratory and field testing in extreme conditions. Ongoing statistical analysis is used to constantly increase the level of reliability.



Limited slip differentials

Limited slip differentials at the front and rear automatically ensure maximum tractive effort and easy driving over soft and muddy ground with no need for a manual differential lock. They also reduce the risk of skidding and prevent excessive tyre wear. The brake discs in the planetary reduction gears are reinforced, ensuring long hours of operation and easy maintenance access.

Hydraulic differential locks are available as an option for DL450-3 and standard for DL550-3. Two modes are available. In manual mode, the operator can use a foot switch to lock the differential completely. Alternatively, it can be automatically engaged, depending on transmission torque, in the first and second gears.



Auto-lube

The DL450-3 and DL550-3 are equipped with an SKF automatic central greasing system. Auto lube protects components for a longer machine lifetime.



3rd spool

An auxiliary line for hydraulic attachments is included as standard.



Turbo 3 pre-cleaner

The loader features a 3-stage air filtration system as standard. The Turbo 3 cyclone separator pre-cleans air before filtering it through an inner and outer filter.



ORFS (O-Ring Face Seal)

All hydraulic lines, even the low pressure circuits, are sealed with ORFS couplings to prevent leaks.



Durable steel parts

Rear parts such as the radiator grille, engine bonnet and fenders are made of solid steel. They are designed for easy repair, reducing the need to replace them in the event of damage.



Articulation hinges

The robust hinges feature a clean, solid design. The articulation angle and steering radius are the best in their class.



Exhaust

The inner exhaust pipe sucks air out of the engine compartment through an outer pipe. This "chimney" effect provides constant air circulation and prevents deposits of flammable material on hot parts.



Cab filter

Double cab filtration ensures a constant supply of fresh air to the cab, even in dusty environments.

Easy maintenance for less downtime

Short and simple maintenance operations at long intervals mean that your machine is available on site when you need it. Our service centre in the heart of Europe has more than 40000 parts in stock to supply you with top quality components as quickly as possible.

Reversing 90° swing fan

Standard intervals for fan reverse can be set by the operator from inside the cab. The hydraulic fan motor is controlled by the ECU. Its performance is regulated for lower fuel consumption and shorter warm-up periods.



Accessible components

- The front and rear of the radiator are easily accessible. It is made of aluminium for the highest pressure resistance and a long lifetime
- Air enters through the side and top. Swing doors provide easy access for maintenance





Triple-element air filter

The forced-air cleaner removes 99 % of particles and is backed up by a turbo pre-filter. Cleaning and cartridge replacement are only needed at long intervals.



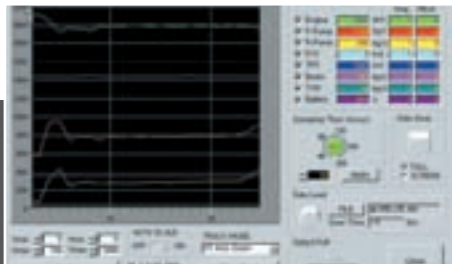
Transmission filters

The transmission filters are easy to reach. Like all other maintenance components, they can be checked from ground level.



Easy access

All maintenance and control points are easy to reach from ground level.



PC monitoring

A PC monitoring function enables connection to the ECU. Various parameters can be checked during maintenance, including pump pressures, engine rotation and engine speed. These can be saved and printed for analysis.



Failure codes

Failure codes and descriptions are clearly communicated to the operator. This reduces the time needed for diagnostics and repair.



Drains

Coolant and engine oil drains make cleaning and changing more convenient.



Hydraulic test points

The pressure test points (main pressure, steering, braking, etc.) are grouped together for easy access.

Technical specifications

* Engine

• Model	
SCANIA DC13 Turbo-charged, air-to-air intercooled XPI direct injection (Extra high Pressure Injection)	
• No. of cylinders	
6	
• Nominal power	
DL450-3:	359 PS at 1800 rpm (DIN 6271) 264 kW (354 HP) at 1800 rpm (SAE J1995)
DL550-3:	385 PS at 1800 rpm (DIN 6271) 283 kW (380 HP) at 1800 rpm (SAE J1995)
• Maximum power	
DL450-3:	264 kW (354 HP) at 1800 rpm (SAE J1995)
DL550-3:	283 kW (380 HP) at 1800 rpm (SAE J1995)
• Maximum torque	
DL450-3:	155 kgf/m (1521 Nm) at 1400 rpm
DL550-3:	178 kgf/m (1746 Nm) at 1400 rpm
• Piston displacement	
12.7 litres	
• Bore x stroke	
130 mm x 160 mm	
• Starter	
24 V / 6.0 kW	
• Batteries	
2 x 12 V / 150 Ah	
• Air filter	
Double element and pre-filtered Turbo 3 cyclone dust separator with automatic dust evacuation.	
• Cooling	
Automatically reversing fan to facilitate cleaning. Automatic rotation speed adjustment according to temperature conditions.	

* Lift arm

Z-kinematics with simple lifting piston system designed for heavy duty. From 23.5 to 26.5 t breakout force combines with a bucket angle that is maintained throughout the range of movement. Bucket angles are optimised in the travelling position and at ground level. Load Isolation System (LIS) is fitted as standard for improved comfort and output.

Cylinders	Quantity	Bore x rod diameter x stroke (mm)
DL450-3		
Lift	2	170 x 105 x 789
Bucket	1	190 x 120 x 590
DL550-3		
Lift	2	190 x 105 x 890
Bucket	1	220 x 130 x 610

* Transmission

5-Gear powershift transmission with 3 operating modes: manual, fully automatic or semi-automatic with "kick-down" function. Based on high quality components. Equipped with a modulation system for protection and smooth gear and direction changes. A manual transmission control lever is located to the left of the operator. Direction change function also available in automatic or semi-automatic mode. Transmission can be disengaged by the brake pedal to deliver full engine power to the hydraulics. A safety device prevents the engine from starting if the transmission is not in neutral. Torque converter lock-up function from 2nd to 5th gear. Transmission testing and adjustment equipment available. PC-compatible for operation history monitoring.

• Gearbox

DL450-3:	ZF 5 WG 260 + lock-up
DL550-3:	ZF 5 WG 310 + lock up

• Torque converter

Simple stage / mono phase / free wheel stator

• Speeds km/h

Forward 1 / 2 / 3 / 4 / 5:

DL450-3:	6.5 / 12.5 / 19.5 / 26.5 / 38.0
DL550-3:	6.5 / 12.4 / 19.7 / 28.0 / 36.0

Reverse 1 / 2 / 3:

DL450-3:	6.5 / 12.5 / 19.5
DL550-3:	6.5 / 12.1 / 19.0

• Maximum traction

DL450-3:	21.5 t
DL550-3:	30.6 t

• Maximum gradeability

58 % / 30°

* Axles

• ZF Axles

Fully suspended front and rear drive axles with planetary reduction gears in the hubs. Front and rear equipped with limited slip differentials – DL450-3 – and differential hydraulic lock for front axle – DL550-3. Optimum traction in all conditions. From 23.6 to 30.6 t traction power allows operation on slopes of 58 %.

• Maximum lock ratio

DL450-3:	Front (30 %) / Rear (30 %)
DL550-3:	Full differential lock by manual engagement

• Oscillation angle

+/- 11°

• Brakes

Dual multi-disc circuit with sintered metal discs for extended service life. Braking system activated by a pump and accumulator circuits. Spring-applied, hydraulically released parking brake mounted on the transmission shaft.

* Hydraulic system

Two load-sensing axial piston pumps with variable displacement. Hydraulic control valve has a third port for powering an auxiliary hydraulic function. Closed centre control valve.

• Main pumps

Dual piston pumps with variable flow

• Maximum flow

DL450-3:	300 l/min
DL550-3:	480 l/min

• Operating pressure

316 bar

• Pilot system

Automatic functions for positioning the bucket for digging as well as a function for stopping the lift arm at the desired height and low position by manual adjustment by switch are standard.

A simple floating position is also standard.

Operating pressure: 30 bar

• Filters

In the oil return to the tank, the glass fibre filter has a filtering capability of 10 micron.

* Steering system

Load sensing type with amplification stage and priority valve.

• Steering angle

40°

• Oil flow

DL450-3:	210 l/min
DL550-3:	270 l/min

• Operating pressure

DL450-3:	185 bar
DL550-3:	275 bar

• Steering cylinders

Emergency steering system with electric motor-driven hydraulic pump.

Cylinders	Quantity	Bore x rod diameter x stroke (mm)
DL450-3		
Steer	2	100 x 50 x 450
DL550-3		
Steer	2	110 x 60 x 465

* Fluid capacities (litres)

Fuel tank:	DL450-3:	420
	DL550-3:	564
Cooling system:	DL450-3:	55
	DL550-3:	60
Urea tank:		60
Engine oil:	DL450-3:	34
	DL550-3:	45
Front axle:	DL450-3:	51
	DL550-3:	50
Rear axle:	DL450-3:	51
	DL550-3:	50
Hydraulic system:	DL450-3:	230
	DL550-3:	247

* Cab

Spacious modular cab with excellent all-round visibility, ample storage space and cool box. Good overview of the bucket, tyres and loading area. Push button controlled air conditioning and heating with air recirculation function. Double cab air filter installed in the cab with extra protection for the operator in dusty or polluted environments. Viscous suspension mount for maximum comfort. High quality heated seat with air suspension. All operating information clearly displayed in front of the operator. Control functions are centralised on a console on the right. Adjustable seat, arm rests and steering column.

• Doors

1

• Emergency exits

2

• Safety standards

ROPS ISO 3471:2008

FOPS ISO 3449

• Noise levels

LwA external noise:

DL450-3: 108 dB(A) (ISO 6395)

DL550-3: 109 dB(A) (ISO 6395)

LpA operator noise:

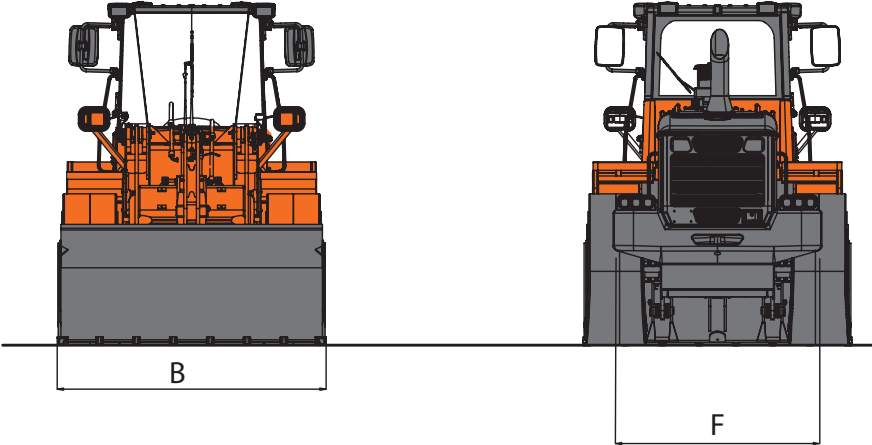
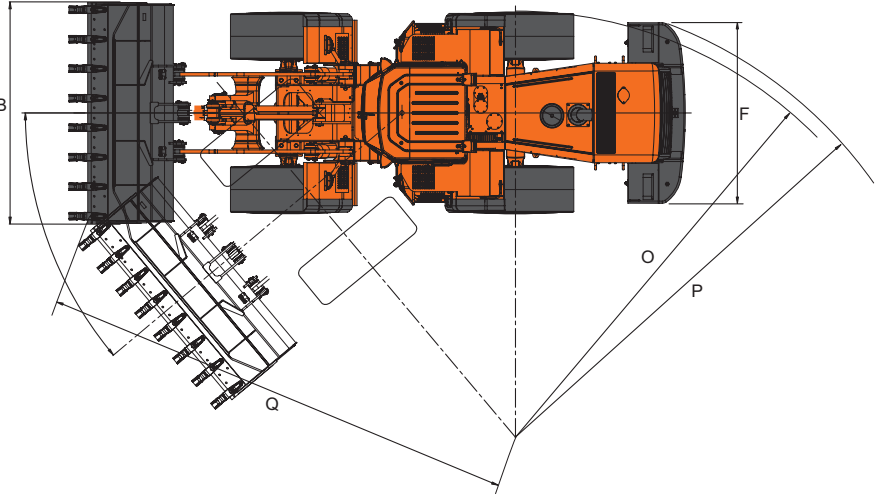
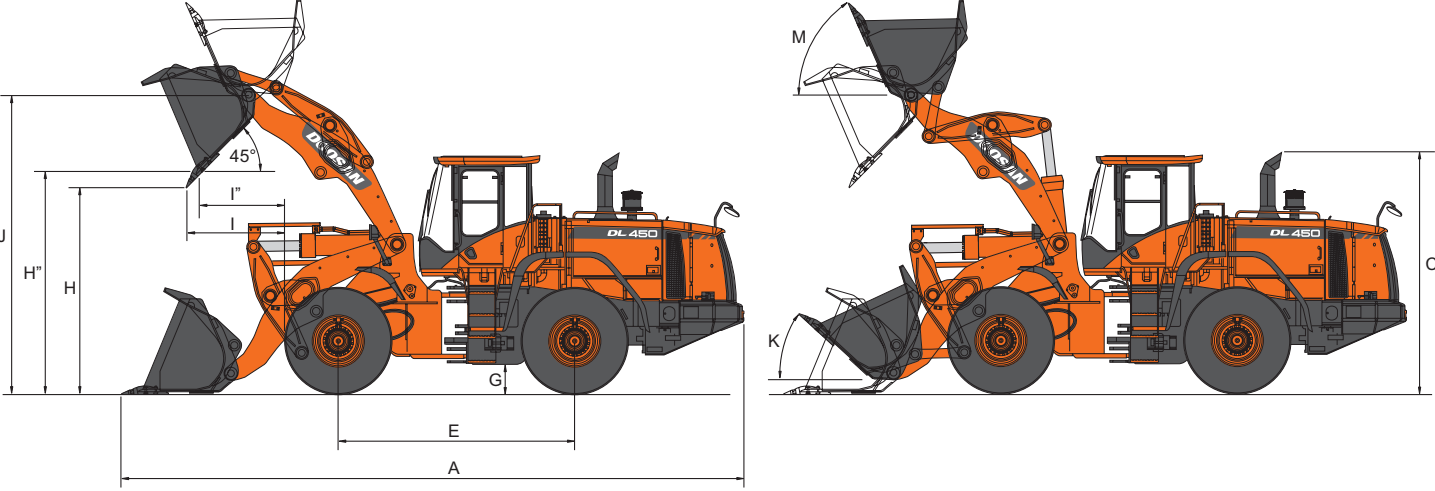
73 dB(A) (ISO 6396)

* Pressure settings

Working (pump cut-off):	DL450-3:	310 ± 10 bar
	DL550-3:	275 ± 10 bar
Steering relief (LS port side):		185 ± 5 bar
(steering pump side):	DL450-3:	220 ± 5 bar
	DL550-3:	210 ± 5 bar
Pilot control:	DL450-3:	28 + 2 bar
	DL550-3:	30 + 2 bar
Brake accumulator charging:		120 ~ 140 bar
Service brake:		80 ± 3 bar
Fan motor:	DL450-3:	110 ± 10 bar
	DL550-3:	125 ± 10 bar
Parking brake release:		120 ± 5 bar
Transmission selection pressure:		17 ± 1 bar

	Performance	Unit	Speed-force	
			DL450-3	DL550-3
Lift arm	Up	sec	6.1 ± 0.5	6.1 ± 0.5
	Down	sec	3.0 ± 0.4	4.2 ± 0.4
Bucket	Crowd	sec	2.3 ± 0.3	2.1 ± 0.3
	Dump	sec	1.6 ± 0.3	1.1 ± 0.3
Steering	Lock to lock	turn	4	4
Engine rpm	High	rpm	2100 ± 50	2180 ± 50
	Low	rpm	750 ± 25	750 ± 25
Engine rpm	Hydraulic stall	rpm	1940	2170 ± 50
	Converter stall	rpm	1900	2100 ± 50
	T/C + Hyd. stall	rpm	1850	1600 ± 50
Cooling fan	Engine high	rpm	1100	500~1200
Braking distance		m	6.9 at 34 km/h	10.4 at 36 km/h
Max. traction		kg	23600	30600
Breakout force		kg	23500	26500
Payload		kg	9380	11075
Static tipping load (straight)		kg	21250	25080
Static tipping load (full turn)		kg	18760	22145

Dimensions and operational data



* Dimensions & operational data

DL450-3 – Bucket mounting		Pin-on			
Tyre size 26.5 R25 (L3)		General purpose		Rock	High lift
Configuration		Teeth (std.)	Bolt-on edge	Teeth	Bolt-on edge
Capacity heaped ISO/SAE	m ³	4.5	4.8	4.0	4.8
Tooth type		Adapter tooth	Bolt-on	Adapter tooth	Bolt-on
B Bucket width	mm	3300	3300	3340	3300
Breakout force	kN	231	231	230	228
Static tipping load (straight)	kg	21250	20880	21180	17300
Static tipping load (at 40°)	kg	18760	18440	18700	14990
H Dump height (at 45° – fully raised)*	mm	3115	3240	3105	3730
I Dump reach (at 45° – fully raised)*	mm	1420	1280	1430	1482
Dump height (at max. dump – at max. reach)*	mm	605	780	595	810
Dump reach (at max. dump – at max. reach)*	mm	1665	1595	1565	2257
Digging depth	mm	108	104	163	270
J Height at bucket pivot point	mm	4500	4500	4500	4987
Max. tilt angle in carry position	°	50	50	50	51
Max. tilt angle fully raised	°	66	66	66	63
K Max. tilt angle on ground	°	45	45	45	44
J Max. tilt angle at max. reach	°	71	71	69	61
K Max. dump angle at max. reach	°	70	70	70	64
Max. dump angle on ground	°	69	69	69	71
M Max. dump angle fully raised	°	47	47	47	50
O External radius at tyre side	mm	6540	6540	6540	6540
Q External radius at bucket edge	mm	7206	7158	7154	7418
E Wheel base	mm	3550	3550	3550	3550
Width at tyres	mm	2975	2975	2975	2975
F Tread	mm	2300	2300	2300	2300
G Ground clearance - at 11°	mm	455 - 433	455 - 433	455 - 433	455 - 433
A Overall length	mm	9340	9153	9350	9753
Overall height	mm	3583	3583	3583	3583
Operating weight	kg	25520	25640	25710	26435

* Measured to the tip of the bucket teeth or bolt-on edge. All dimensions given with 26.5 R25 (L3) tyres.

DL550-3 – Bucket mounting		Pin-on							
Tyre size 29.5 R25 (L3)		General purpose						Rock	High lift
Configuration		Teeth	Bolt-on edge	Teeth	Teeth	Teeth & segments	Bolt-on edge	Teeth	Bolt-on edge
Capacity heaped ISO/SAE	m ³	5.4	5.7	5.0	5.0	5.2	5.2	4.5	5.7
Tooth type		Adapter tooth	-	Mono tooth	Adapter tooth	Adapter tooth	-	Adapter tooth	-
B Bucket width	mm	3405	3405	3405	3405	3405	3405	3440	3405
Breakout force	kN	260	260	283	283	282	282	266	253
Static tipping load (straight)	kg	25080	24690	25245	25265	24745	24880	24425	19890
Static tipping load (at 40°)	kg	22145	21800	22290	22310	21850	21970	21565	17565
H Dump height (at 45° – fully raised)*	mm	3285	3405	3355	3380	3480	3355	3330	3830
I Dump reach (at 45° – fully raised)*	mm	1535	1400	1460	1435	1325	1460	1545	1620
Dump height (at max. dump – at max. reach)*	mm	685	855	785	820	955	785	730	870
Dump reach (at max. dump – at max. reach)*	mm	1830	1750	1790	1770	1710	1790	1855	2295
Digging depth	mm	80	80	80	80	80	80	45	205
J Height at bucket pivot point	mm	4795	4795	4795	4795	4795	4795	4795	5220
Max. tilt angle in carry position	°	48	48	48	48	48	48	48	50
Max. tilt angle fully raised	°	67	67	67	67	67	67	67	62
K Max. tilt angle on ground	°	43	43	43	43	43	43	43	43
J Max. tilt angle at max. reach	°	68	68	68	68	68	68	68	62
K Max. dump angle at max. reach	°	68	68	68	68	68	68	68	65
Max. dump angle on ground	°	79	79	79	79	79	79	79	79
M Max. dump angle fully raised	°	47	47	47	47	47	47	47	47
O External radius at tyre side	mm	6550	6550	6550	6550	6550	6550	6550	6550
Q External radius at bucket edge	mm	7565	7515	7525	7535	7485	7485	7555	7790
E Wheel base	mm	3700	3700	3700	3700	3700	3700	3700	3700
Width at tyres	mm	3040	3040	3040	3040	3040	3040	3040	3040
F Tread	mm	2420	2420	2420	2420	2420	2420	2420	2420
G Ground clearance - at 11°	mm	480 - 497	480 - 497	480 - 497	480 - 497	480 - 497	480 - 497	480 - 497	480 - 497
A Overall length	mm	9870	9680	9760	9725	9575	9760	9805	10255
Overall height	mm	3785	3785	3785	3785	3785	3785	3785	3785
Operating weight	kg	31470	31595	31295	31340	31540	31465	31625	32050

* Measured to the tip of the bucket teeth or bolt-on edge. All dimensions given with 29.5 R25 (L3) tyres.

Attachments

* Attachments

Whether direct-mounted or with quick-coupler, a variety of buckets and other attachments for many different applications make the DL450-3 and DL550-3 very versatile wheel loaders.



Bucket, rock

Used for loosening and digging of hard compacted material and blasted rock in mining or quarry applications, where high break-out force is required.



Bucket, light material

Ideally suited for materials such as corn, silage, hay, cottonseed, snow.



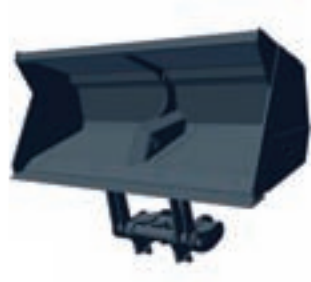
Bucket, general purpose

General purpose buckets provide good all-round performance for stockpiling, rehandling, excavating and other material-handling operations.



Bucket, heavy-duty

Especially useful in demolition or recycling.



Bucket, high dump

This type of bucket is very useful when a high dumping height is required for handling relatively light, loose material.



Pallet forks

For loading and unloading different types of pallets as well as normal forklift operations.



Quick-coupler

Particularly interesting when the machine has a wide variety of jobs to carry out, this hydraulic quick coupler enables a fast and safe change of different attachments.

* Bucket selection chart DL450-3

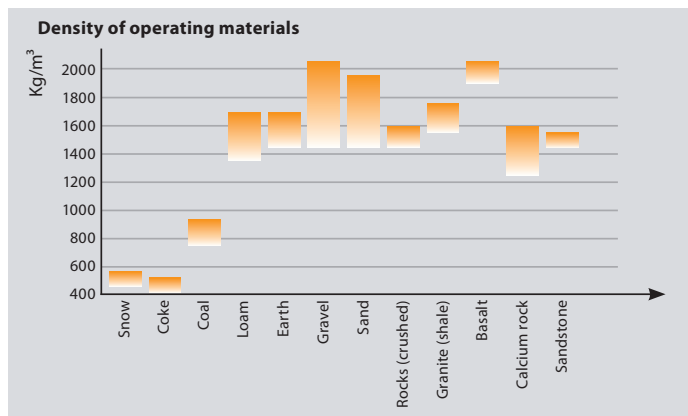
Lift arm	Bucket	m ³	Material Density [t/m ³]													
			1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	
Standard lift arm	General purpose	Tooth	4.5								5.2 m ³					4.3 m ³
		Cutting edge tooth	4.8								5.5 m ³					4.6 m ³
	Rock	V-type	4.0								4.6 m ³					3.8 m ³
High lift arm	General purpose	Cutting edge tooth	4.8	5.5 m ³											4.6 m ³	

* Bucket selection chart DL550-3

Lift arm	Bucket	m ³	Material Density [t/m ³]																							
			1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2											
Standard lift arm	General purpose	Tooth	5.4													6.2 m ³									5.1 m ³	
		Cutting edge tooth	5.7														6.6 m ³									5.4 m ³
		Mono tooth	5.0														5.8 m ³									4.8 m ³
		Tooth	5.0														5.8 m ³									4.8 m ³
		Teeth & segment	5.2														6.0 m ³									4.9 m ³
		Cutting edge tooth	5.2														6.0 m ³									4.9 m ³
		Rock	V-type	4.5													5.2 m ³									4.3 m ³
High lift arm	General purpose	Cutting edge tooth	5.7	6.6 m ³																				5.4 m ³		

Compliance to ISO 14397-1 (2007)

The filling factor depends on the type of material, the working conditions and the experience of the operator.



The specific weight of the material largely depends on the level of humidity, the degree of compaction, composition, etc.





Standard and optional equipment

DL 450-3
DL 550-3

* Standard equipment

Engine
Three-stage air cleaner with Turbo-3 cyclone pre-cleaner
Water separator
Fuel filter
Hydraulically driven fan, automatically reversing
External drains for engine oil and coolant changes
Engine power mode selector switch (Standard / Economy & Power mode)
Self-diagnosis system
Lifting and hydraulic system
Robust Z bar lifting system
General purpose bucket 4.5 m ³ and 5.4 m ³ (SAE, heaped)
Hydraulic control valve with 3 spools
Automatic lift arm kick-out
Levelling function (floating mode)
Fast couplers for hydraulic check
2 variable displacement load sensing pumps
Mono control lever (FNR)
Additional lever for 3rd function
Load isolation system (LIS)
Steering system
Emergency steering pump driven by electric motor
Load sensing
External equipment
Bottom protection plates
Lifting hooks
Articulation lock in the transport position
Towing hitch
Tool compartment
Full fenders with rubber protection
Wheel chocks
Lift arm float kick-out
Auto-lube system
Electric system
Alternator 70 A / 24 V
Work lights: 2 at the front and 4 at the rear (6 x 70 W)
Travel lights: low and high beam
Tail indicators, stop, reversing lights
Reverse travel alarm
Rotating beacon
Drive line and brake system
Intelligent transmission clutch cut-off via the brake pedal
Transmission with self-diagnosis and monitoring indicator, plus electronic plug for fast adjustment
Transmission mode selector switch (Manual / Auto 1 ↔ 5 / Auto 2 ↔ 5 with kick-down)
Starting safety system
DL450-3: Limited slip differentials on front and rear axles
DL550-3: Differential hydraulic lock on front axle
Dual brake circuits with accumulator
Tyres: DL450-3: 26.5 R25 (L3) / DL550-3: 29.5 R25 (L3)
Dual service brake pedals
Parking brake on the transmission, spring-applied hydraulic release
Torque converter lock-up
Cab
ROPS cab (SAE J 394, SAE 1040, ISO 3471) / FOPS cab (SAE J 231, ISO 3449)
Air conditioning with climate control
Double filtered air cab
Air suspension seat with safety belt
Adjustable steering column (inclination & telescopic)
Floor mat
Tinted glass
Left sliding window
Front and rear wiper and washer
Sun visor
Interior cab light
Interior rear view mirrors and heated side mirrors
Machine monitoring (dials, gauges and lamps)
Horn
Cigarette lighter and 12 Volt power socket
Multiple storage compartments & cup holder
Shark antenna
Loudspeakers and connections for radio

* Optional equipment

Engine
Diesel heater
Tyres
L3, L4, L5, various brands
Lifting and hydraulic system
Three hydraulic levers with FNR switch
Automatic return to dig
Electric system
Additional lighting
Fuel filling pump
Electric steering
Cab
Video system with colour LCD and O Lux camera
Radio / CD / MP3
Fuel heater switch
External equipment
Semi-fender
Additional counterweight
Differential hydraulic lock for DL450-3
High lift arm



High lift arm
Better dump reach and height at bucket pivot point.



Electric steering
For fast and convenient loading cycles, joystick steering is available. 2 steering modes: one for long distance travelling and one for better manoeuvrability in confined areas. With this feature, conventional steering remains available.



Fingertip control
3 levers control for lift arm, bucket and 3rd circuit. FNR switch for changing travel direction as well as kick-down, return to dig, lift arm raise kick-out and floating mode.



Differential hydraulic lock
For automatic (depending on transmission torque) or manual differential lock (optional on DL450-3).



Heavy-duty tyre
To guarantee your machine the best performances under the toughest conditions.

Some of these options may be standard in some markets. Some of these options may not be available for certain markets. Please check with your local DOOSAN dealer for more information about availability or to adapt your machine to your application needs.

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