

DOOSAN

Wheel Loaders |
DL550-5 / DL580-5



Maximum power: 380 hp / 380 hp
Operating weight: 33073 kg / 36030 kg
Bucket capacity: 5.7 m³ / 6.0 m³



Doosan Group – Building your tomorrow today

▣ Be part of the great Doosan family

The Doosan Group - founded in 1896 and headquartered in Seoul, South Korea - is one of the fastest-growing companies in the world:

- With more than 37,500 employees in 38 countries, we are a major player in a variety of industries worldwide.
- A global leader in the Infrastructure Support Business (ISB), with 56 subsidiaries and 3,700 distributors worldwide.
- Dramatic growth over the past two decades, with an annual Doosan Group revenue rising from €2.4 billion in 1998 to €12.8 billion in 2016.

▣ Doosan Group – a top player worldwide



Doosan Infracore

- Among the world's Top 5 manufacturers of construction equipment



Doosan Bobcat

- A leading company in the design, manufacture, marketing, distribution and service of small equipment and attachments for construction, agriculture, and landscaping
- Leading position in the global compact equipment market
- N° 1 in North America for SSL, CTL and MEX



Doosan Heavy Industries & Construction

- World N° 1 in desalination plant construction
- World N° 1 in heat recovery steam generator market
- World N° 1 in mould & tool steel
- World N° 3 in crankshafts



Doosan Engineering & Construction

A pioneering leader in construction of residential and public buildings, civil works and industrial facilities.

- World N° 1 chemical process equipment products



▣ Doosan Infracore Construction Equipment

Creating construction equipment for over 40 years

For over 40 years, we've been building a global production and business network to become one of the world's foremost construction equipment manufacturers.

A solid partner, close to you

A truly global player in every respect, we have large-scale factories, sales subsidiaries and dealers all over the world.



Doosan facilities in Europe

▣ From machine manufacturer... to full solution provider

To ensure the highest trade-in and residual values, our parts and service support professionals maintain the performance, productivity and reliability that you expect of our products throughout their lifetime.

▣ Ask your dealer for a full range of services designed especially for you!

As your local specialist, your dealer ensures that you receive the maximum benefit from our integrated package. Plan ahead to ensure the success of your equipment!



Doosan approved attachments



Genuine parts



Extension of warranty



Financial solutions



Maintenance contract



Telematics



Monitoring systems



▣ Experience the Doosan product range!



Articulated Dump Trucks



Wheel Loaders



Wheeled Excavators



Mini Excavators



Crawler Excavators

Raise productivity, fuel-efficiency & profits

► Productivity

Thanks to their robust design and use of high-quality components, Doosan wheel loaders deliver very high performance – ensuring you the best productivity and reliability.

⊙ **Z-bar:** Heavy-duty “Z” kinematic delivers possibility to handle extra heavy materials – especially as block handler (handles blocks up to 25 tons).

⊙ **Work tools:** Wide range of heavy-duty attachments includes 7.5 m³ bucket to answer all of your needs.

⊙ **Simplicity of operations:** "Lift arm raise & down kick-out" and "return to dig" bucket – Automated function operated electrically from inside the cab.

⊙ **Versatility:** 3rd valve feature increases versatility of your investment.

⊙ **Load Isolation System:** Ride control feature reduces pitch effect and vibrations to provide the best comfort.

⊙ **Automatic hydraulic differential 100% lock:** The machine delivers all of its performance, while preserving fuel consumption by less rolling resistance.

⊙ **Axle oil cooling system:** Feature available to ensure maximum performances even in extreme conditions.

⊙ **Hydraulic system:** Load sensing closed center system provides the operator with precision & smoothness while reducing fuel consumption.



Total cost of ownership ▲

Minimizing your operating costs is at the heart of the Doosan wheel loaders' design, every day.

Ⓢ **Safety:** Always a critical factor for your company and your employees – so, these machines feature large platforms, hand rails, and 2 emergency exits, with maintenance performed from the ground.

Ⓢ **Spacious cab:** Operator enjoys comfortable driving, with many ergonomic features as standard.

Ⓢ **Power:** Exceptionally powerful, with high torque at low revs, the Stage IV compliant Scania engines do not need a Diesel Particulate Filter (DPF) and associated regeneration system, so they deliver greater fuel efficiency.



DOOSAN CONNECT

Ⓢ **Telematics:** Monitor your fleet online.

As standard, Doosan Connect system with dual mode (satellite, GSM). Check productivity, fuel consumption, system warnings, maintenance status, etc.

Ⓢ **Axles cooler:** To ensure that your machine performs optimally, even in very hard applications, the axles are equipped with an oil cooling system and thus ensure proper operation under any conditions.

Ⓢ **Cooling performances:** Cooling compartment separated from the engine compartment to prevent warm and dusty air from entering and allow better control of air intake. Automatic reversing fan as standard.

Ⓢ **Full fenders:** As standard, to keep your machine clean and your operators even safer.

Ⓢ **Serviceability:** Spacious access to main components allows quick and easy daily maintenance.



Powertrain: made with very high precision and the best technology, Doosan's efficiency package includes Powershift transmission and heavy-duty axles, thus providing more than the sum of individual advantages. 6 disc brakes allow safe and precise manipulation in any heavy application.



Top performance and fuel efficiency



Strength and intelligence – a winning combination!

Exceptional power – combined with the finest workmanship – results in a machine that performs at the highest level. The DL550-5 & DL580-5 enhance your output from every angle:

- Impressive breakout force and high traction make penetration easy and allow you to tackle the hardest materials
- Powerful hydraulic system makes work quick and efficient
- Reliable engine with SCR technology provides the power you need while meeting Stage IV environmental regulations

The combination of these features gives Doosan wheel loaders excellent penetration power, ensuring optimum bucket load in each cycle.



New engine – lower emissions / higher torque

The DL550-5 and DL580-5 are equipped with Scania engines. Famous for excellent fuel efficiency, reliability and long service life, these engines combine exceptional power output and high torque at low revs. Common-rail fuel injection is combined with a Variable Geometry Turbocharger for faster machine response, even at very low speed.

Selective Catalytic Reduction (SCR) technology, combined with a Diesel Oxidation Catalyst (DOC), ensures compliance with Stage IV environmental regulations. As there is no need for a particulate filter, there is no need for regeneration.



Save fuel, save money

To improve your fuel efficiency, an auto shut-down reduces the idle time of the engine, to prevent over-consumption and useless operating hours. You can easily set the auto shut-down (to stop the engine after 3 to 60 minutes) via the LCD display.

Tailored performance

You can select from 3 different working modes: Eco, Normal and Power, while the Power-up function lets you switch the machine into a higher working mode with lower transmission shift intervals by fully applying the acceleration pedal.

ECO gauge

Shows the average fuel efficiency for 1 minute of operation.

Transmission

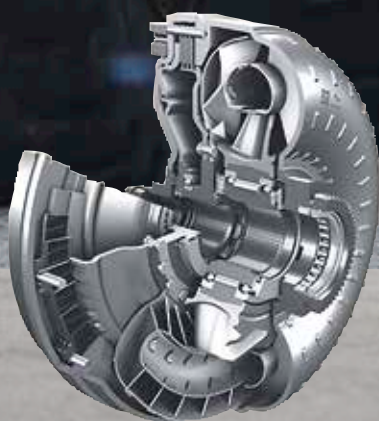
The Doosan ZF transmission has 5 gears to boost acceleration performance, especially on climbs with the lock-up. The gear ratios are optimized and smooth, and shock-free shifts contribute to the high overall level of operator comfort. Traction force is also maximized. Together, these qualities enable high working speed in all conditions. The transmission has 3 operating modes:

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

An automatic kick-down improves the machine's penetration into the pile.

Load-sensing hydraulic closed center system

This system provides maximum hydraulic performance, without producing excess capacity, thus saving fuel and extending the lifetime and reliability of vital components (such as the pumps and the main control valves).



Lock-up: The DL550-5 & DL580-5 also feature torque converter lock-up. When this is activated, the engine automatically connects directly to the transmission (depending on speed and travel resistance), even from 2nd gear. The transmission receives the full engine power without hydraulic slip – thus increasing speed on slope dramatically.

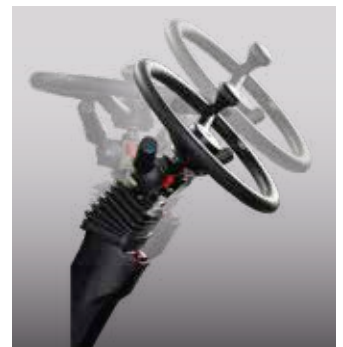
This feature can save you up to 10% in fuel costs.

Operating in comfort

▣ Comfort – why do without?

The productivity of your wheel loader is directly linked to the operator's performance. That's why Doosan has placed comfort at the very center of its design priorities for the DL550-5 & DL580-5.

More space, better visibility, a high comfortable seat, and plenty of storage space make it easy to work for hours without fatigue or discomfort. And there's no need to pay extra for the options you want – most of them are standard features on this loader!



Operator environment

A modern and attractive work space offers generous head room, and seat movement provides lots of leg room. Interior materials are selected for their high quality and easy cleaning. In addition, your belongings are right at hand, thanks to several storage boxes throughout the cab.

Comfortable automatic lift arm

Save time and reduce the number of operations with the "lift arm raise kick-out" and "return to dig" system. These functions are operated electronically from inside the cab. Different types of control are available, joystick with FNR and proportional thumbwheel for auxiliary hydraulic line, or fingertip control levers also with FNR feature.

High-comfort air suspension seat

With vertical and horizontal suspension, the ultra-comfortable, heated and fully adjustable Grammer seat is featured as standard, giving you the feeling of being comfortably installed in your own sofa.

Load Isolation System

This standard feature provides a smooth ride over rough ground, operator comfort, and reduced cycle times due to improved vehicle stability in movement. Higher productivity and better fuel efficiency while performing load & carry applications. Speed for automatic activation is adjustable by the operator.

Accurate & smooth joystick steering

Keep your concentration and reduce strain with the comfortable joystick steering integrated on the armrest. Drive your machine easily, especially in repetitive tasks and tight spaces.

Automatic air conditioning

Day and night, whatever the weather, set your preferred temperature for the best working conditions. Fully automatic climate control system adjusts air temperature and fan speed to maintain your ideal climate setting.

Adjustable steering column

Enhance your driving comfort, and work without fatigue, by easily adjusting the steering column's tilt and telescopic movements to fit your preferred position.

Color LCD monitor panel

The 5.7" LCD panel is suitable for day and night work. The user-friendly monitor has two customisable screen displays (per operator's preference), giving 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.



1. Color rear-view camera
2. Emergency exit
3. Cup holders and a lot of other storage space in the cab
4. Intuitive and grouped controls
5. Fully adjustable console with right armrest and joystick
6. Color LCD monitor panel
7. Steering wheel adjustable in all directions

8. Electric joystick steering with F/R on left armrest
9. Premium heated air-suspension seat with many set-up options
10. Fire extinguisher bracket

Expert control with maximum safety

▣ Safe operation in all simplicity

Power alone is not enough – for maximum efficiency, it needs to be matched by precise control. Our unique range of features allows every operator to get the most out of these impressive machines.

Safety is crucial to your company and your employees – so, these machines feature large platforms, hand-rails, and 2 emergency exits, with maintenance performed from the ground.



Rear-view camera

A camera provides a clear view of what's happening behind the machine for added safety and peace of mind. The full color display screen in the cab shows the operator what the camera sees. The panoramic view shows trucks coming up behind the loader or people on the ground, and some indicators provide a good perception of distances.

External mirrors

The external mirrors are heated to ensure visibility and prevent accidents in cold weather.

Full fenders

To keep them clean and avoid mud splashing on the windows or accidents on slippery steps, Doosan's wheel loaders are standard equipped with full fenders and mud guards.

Cab

To ensure a healthy work environment, the cab air is filtered twice to eliminate all particles larger than 2 microns. Plus, the cab satisfies ROPS/FOPS regulations – a wide emergency exit (located on the right side) provides fast, easy evacuation in a critical situation.

Safe maintenance

Daily checking of all gauges takes place from the ground, to keep maintenance quick and safe for everyone.

Doosan has also installed an automatic greasing system (as standard) to reduce working time and increase operating comfort.

Safe access

To facilitate access and mobility on the machine, multiple hand-rails ensure that the operator always has a firm support to hold on to.

Driving assistance

- Automatic transmission with smooth shift transition
- Automatic transmission kick-down
- Automatic Hydraulic Differential Lock (HDL)
- Automatic Load Isolation System (LIS)
- Automatic kick-out function on lift arm
- Automatic return to dig position
- Automatic reversing fan
- Automatic greasing system
- Automatic lock-up on torque converter



Electric joystick steering

Fingertip levers

Ergonomic controls: All controls are placed within the operator's easy reach. Clearly positioned for comfortable access, and grouped by function, they enable safe, confident operation. The bucket is controlled by using a convenient joystick or with fingertip levers. Both include an FNR reversing switch and kick-down function.

Reliability, the habit of a lifetime

▣ Dependable performance for low lifetime cost

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



Designed to last

We pay the closest 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. Then, after modelling, they are subjected to intensive laboratory and field testing in extreme conditions. Ongoing statistical analysis is used to continually increase reliability.

Durable steel parts

Rear parts – such as the radiator grille, engine bonnet and fenders – are made of solid steel. They're also designed for easy repair, reducing the need to replace them if they are damaged.

Automatic hydraulic differential lock

Hydraulic differential lock on the front engages automatically to ensure maximum tractive effort with a lock of 100% and driving ease. Muddy and slippery areas can be navigated by the operator with the manual foot control.

These features also reduce the risk of skidding and prevent excessive tire wear. The brake discs in the planetary reduction gears are reinforced, ensuring long hours of operation and easy maintenance access.

Articulation hinges

The robust hinges feature a clean and solid design – and the 40° 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.

Auto-lube

The DL550-5 & DL580-5 are standard equipped with an automatic central greasing system: 'Auto-lube' protects components for longer machine lifetime.

ORFS (O-Ring Face Seal)

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

Engine pre-cleaner

This basic feature is a cyclone-separator type, which separates more than 99% of 20 micron and larger particles. In addition to extending the air filter's lifetime, it also ensures better combustion and a longer engine lifetime.



Axle oil cooler: To ensure you the maximum performance from your machine, even in very hard applications, the axles can be equipped with an oil cooling system, thus ensuring proper operation in any conditions.

Simple maintenance with maximum uptime

■ Excellent service accessibility

Short maintenance operations at long intervals mean you can depend on your equipment being available on-site when it's needed. Our machines are designed for simple routine maintenance, while skilled Doosan technicians are available to provide extra support when you need it. To get the most out of your machine, you can choose the package you need from a broad range of service agreements. Uptime, productivity and residual value are all maximized, making these wheel loaders an economical and rewarding choice.

Building further on the success of the Stage IIIB engines, the stage IV Scania engine does not need a DPF filter to meet the Stage IV emissions requirements. Which means no maintenance required – resulting in more uptime!



Maintenance access made simple

- The front and rear of the radiator – which is made of aluminium for the highest pressure resistance and a long lifetime – are easily accessible
- Air enters through the sides and top. Swing doors provide easy access for maintenance
- A battery cut-off switch makes it easy to disconnect the battery during long-term storage
- The hour meter display can be easily checked without turning the engine on

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.

Engine

The Doosan 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.

Urea Tank

Connected to the ECU, sensors in the tank detect low levels of AdBlue® and any system malfunction.

Global Doosan network

With a network of Doosan Dealers & Parts Distribution Centers worldwide, your Doosan wheel loader can be serviced & maintained wherever you are. Our service center in the heart of Europe has more than 40,000 parts in stock to supply you with top-quality components as quickly as possible.

Full solution provider

- The Doosan Telematic system is available as standard – offering you all of the features for reading out vehicle operating & production parameters remotely, and providing you with total ease-of-mind
- Protection+: an extended warranty covering parts, travel and service (check with your local dealer)
- Maintenance contract: your dealer will support you with routine service at regular intervals
- Genuine parts: manufactured and tested to ensure they always meet the same high quality standards as the original components

Reversing 90° swing fan

The fan is located behind the radiator, and air is sucked in from the sides, not from behind the machine. Easier cleaning access to one-block radiator from the rear and the front. The operator can easily set standard intervals for fan reverse from the LCD display. Performance is regulated for lower fuel consumption and shorter warm-up periods.



Wheel chocks



Battery cut-off switch



Centrifugal pre-cleaner
Top Spin™ Donaldson® series



Easy maintenance access

Technical specifications

Engine

Designed to deliver superior performance and fuel efficiency, the Scania Stage IV diesel engine fully meets the latest emissions regulations STAGE IV. To optimize machine performance, the engine uses extra high-pressure fuel injectors, air-to-air inter-cooler and electronic engine controls. Variable Geometry Turbocharged (VGT), Exhaust Gas Recirculation (EGR), Diesel Oxidation Catalyst (DOC) & Selective Catalytic Reduction (SCR) with no Diesel Particulate Filter (DPF).

	DL550-5	DL580-5
Model	Scania DC13	
Regulation compliant	Stage IV	
No. of cylinders	6	
Nominal power - gross (SAE J1995)	380 HP (283 kW) at 1800 rpm	
Maximum torque - gross	1765 Nm at 1300 rpm	
Engine speed (auto-idle - idle - high)	750 - 950 - 2200 rpm [+/- 20]	
Displacement	12.7 litres	
Bore x stroke	130 mm x 160 mm	
Starter	24 V - 6 kW	
Batteries - alternator	2 x 12 V, 200 Ah - 28 V, 100 A	
Air filter	Centrifugal pre-cleaner Top Spin™ Donaldson® with 2-stage dry filter.	
Cooling	Cooling package with automatic reversing fan to facilitate radiator cleaning. Automatic rotation speed adjustment according to temperature conditions.	

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 steering wheel. 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 system. 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.

	DL550-5	DL580-5
Type	5 speed auto Powershift with lock-up	
Torque converter	Simple stage / mono phase / fixed wheel stator	
Speeds - Forward 1-2-3-4-5	6 - 12 - 19 - 26 - 37 km/h	
Speeds - Reverse 1-2-3	6 - 12 - 26 km/h	
Maximum traction	31 t	
Maximum gradeability	58% / 30°	

Axles

Front & rear axles manufactured by ZF with outboard planetary reduction gears. The front is equipped with Hydraulic Differential Lock (HDL), which means the machine has the best traction with little rolling resistance. 31 t traction power allows operation on slopes of 30°.

	DL550-5	DL580-5
HDL lock ratio	100% (Front)	
Oscillation angle	+/- 10°	
Tire size - standard	29.5 R25 (L5)	

Hydraulic system

	DL550-5	DL580-5
Type	Load sensing - closed center hydraulic system	
Main pump	Dual variable displacement axial pistons pumps	
Maximum flow	480 l/min	
Maximum pressure	315 bar	
Pilot system	Automatic functions for positioning the bucket ready to dig and a function for stopping the lift arm at the desired height, and low position adjusted manually by switch, are standard.	
Filtration	In the oil return to the tank, the fibre glass filter has a filtering capability of 10 micron.	

Lift arm

Z-kinematics with simple lifting piston system designed for heavy-duty applications. 247 kN breakout force combines with a bucket angle that is maintained throughout the range of movement. Bucket angles are optimized in the travelling position and at ground level. Load Isolation System (LIS) is fitted as standard for improved operator comfort, output and lifetime.

► Load cycle

	DL550-5	DL580-5
Lift arm - up	6.4 s	6.6 s
Lift arm - down	4.1 s	4.6 s
Bucket - crowd	1.2 s	1.2 s
Bucket - dump	1.5 s	1.2 s

► Hydraulic cylinders

		DL550-5	DL580-5
	Quantity	Bore x rod diameter x stroke (mm)	
Lift	2	190 x 105 x 890	190 x 105 x 890
Bucket	1	220 x 130 x 610	220 x 130 x 610

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 is mounted on the transmission shaft and accumulator circuits and is electronically activated. Brake type: spring-applied / hydraulically released. Brake pump with variable displacement axial pistons provide 60 l/min. Operator can activate/deactivate the Clutch Cut Off on the brake pedal from a switch and can adjust the sensor proximity with the same switch. The emergency brakes are composed of a double system continually under pressure by accumulators.

	DL550-5	DL580-5
Braking distance	11.0 m at 32.4 km/h	11.0 m at 32.4 km/h
Number of disc brakes per wheel (front / rear)	7 / 7	
Accumulators	0.75 l - 30 bar	

➤ Cab

Safety compliance with Roll Over Protection System (ROPS) and Falling Object Protective Structure (FOPS) requirements.
Spacious modular cab with excellent all-round visibility and ample storage space. Good overview of the bucket, tires and loading area thanks to wide windows. 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. Adjustable high-quality heated seat with air suspension, arm rests and height and tilt adjustable steering column. All operating information clearly displayed in front of the operator. Control functions are centralized on a console on the right.

	DL550-5	DL580-5
Safety standards	ROPS ISO 3471:2008 FOPS ISO 3449	
Door	1	
Emergency exits	2	

➤ Noise emissions

	DL550-5	DL580-5
A weighted emission sound pressure level at the operator position (ISO 6396)	Declared: 72 dB(A) Measured: 71 dB(A)	Declared: 72 dB(A) Measured: 71 dB(A)
A weighted emission sound power level at external position (ISO 6395)	Declared: 107 dB(A) Measured: 106 dB(A)	Declared: 107 dB(A) Measured: 106 dB(A)

➤ Fluid capacities

	DL550-5	DL580-5
Fuel tank	441 l	441 l
Urea (AdBlue®) tank	60 l	60 l
Cooling system	58 l	58 l
Engine oil	45 l	45 l
Transmission oil	67 l	67 l
Front axle	62.5 l	62.5 l
Rear axle	64 l	64 l
Hydraulic system	242 l	242 l
Hydraulic tank	169 l	169 l

➤ Steering system

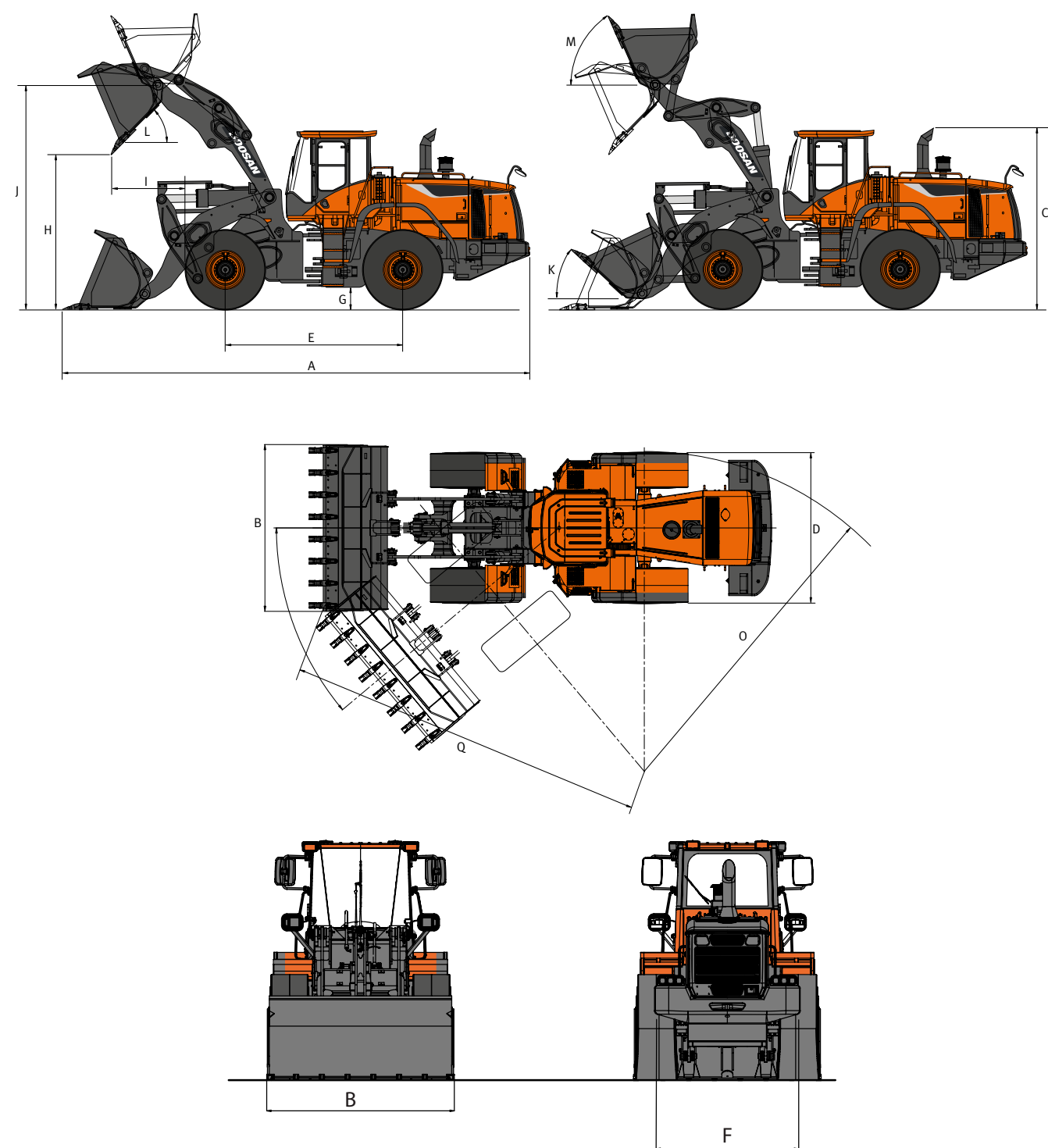
	DL550-5	DL580-5
Type	Load sensing with amplification stage and priority valve	
Steering angle	40°	
Oil flow	270 l/min	270 l/min
Operating pressure	200 bar	200 bar
Steering cylinders (2)	Emergency steering system with electric motor-driven hydraulic pump.	
Bore × rod diameter × stroke	110 × 60 × 465	120 × 70 × 465

➤ Pressure settings

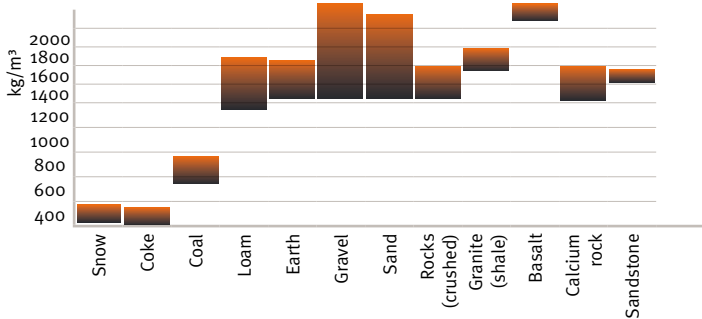
	DL550-5	DL580-5
Working (pump cut-off)	275 ± 10 bar	275 ± 10 bar
Steering relief – LS port side	185 ± 5 bar	185 ± 5 bar
Steering relief – steering pump side	200 ± 5 bar	200 ± 5 bar
Pilot control	30 ± 2 bar	30 ± 2 bar
Brake accumulator charging	100~160 bar	100~160 bar
Service brake	80 ± 3 bar	80 ± 3 bar
Fan motor	155 ± 10 bar	155 ± 10 bar
Parking brake release	120 ± 5 bar	120 ± 5 bar
Transmission selection pressure	17 ± 1 bar	17 ± 1 bar



Technical specifications



Density of operating materials



Bucket selection chart DL550-5 & DL580-5

	Fill factor	Material density
Earth or Clay	115%	1.4-1.7
Sand or Gravel	110%	1.5-1.8
Aggregate	105%	1.6-1.7
Rock	< 95%	1.7

➤ Dimensions and operational data DL550-5

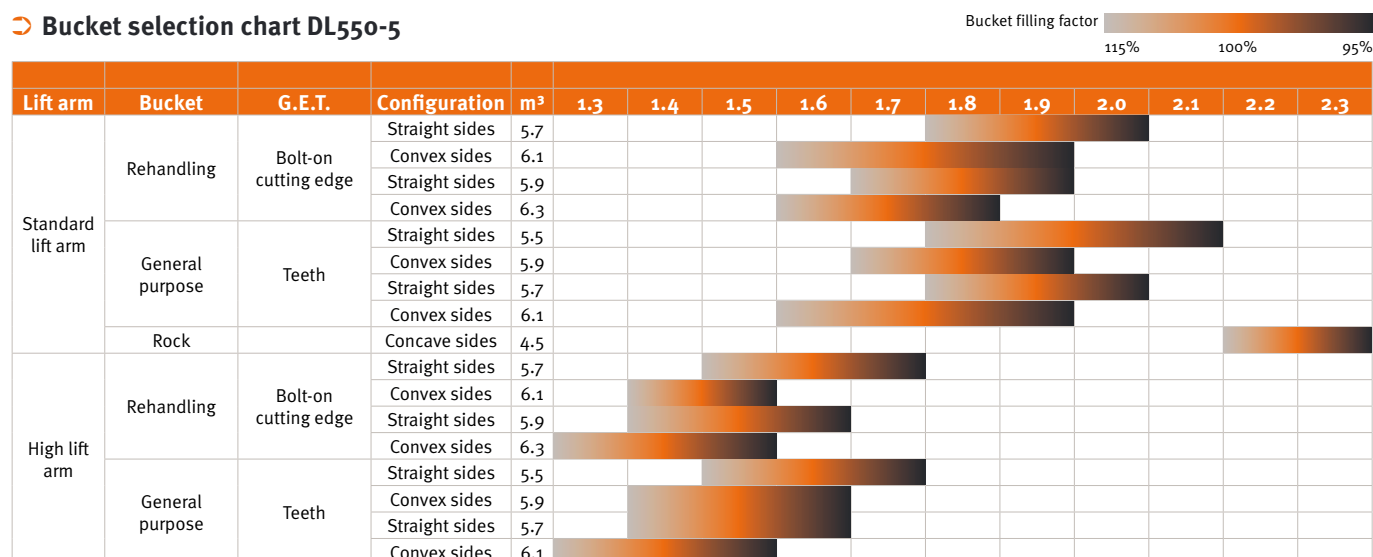
DL550-5 – Pin-on		Rehandling configurations				General purpose configurations				Rock	High Lift	QC
Ground Engaging Tools		Bolt-on cutting edge				Teeth				Teeth		
Configuration		Straight sides	Convex sides	Straight sides	Convex sides	Straight sides	Convex sides	Straight sides	Convex sides	Concave sides		
	Capacity heaped ISO/SAE	m³	5.7	6.1	5.9	6.3	5.5	5.9	5.7	6.1	4.5	=
	Capacity at 110% fill factor	m³	6.2	6.7	6.5	7.0	6.1	6.5	6.3	6.8	5.0	=
B	Bucket width	mm	3400	3400	3400	3400	3400	3400	3400	3405	=	=
	Breakout force	kN	247	247	246	245	247	247	246	245	+ 7	- 11
	Static tipping load (straight)	kg	24932	25437	25360	25292	25513	25448	25371	25303	- 4091	- 2425
	Static tipping load (at full turn)	kg	22017	22455	22378	22310	22531	22466	22389	22321	- 3598	- 2297
H	Dump height (at 45° – fully raised)*	mm	3417	3417	3392	3392	3284	3284	3260	3260	3330	396
I	Dump reach (at 45° – fully raised)*	mm	1403	1403	1428	1428	1536	1536	1560	1560	1545	+ 234
	Digging depth	mm	80	80	80	80	80	80	80	80	45	+ 35
J	Height at bucket pivot point	mm	4795	4795	4795	4795	4795	4795	4795	4795	4795	+ 465
	Max. tilt angle in carry position	°	48	48	48	48	48	48	48	48	+ 3	=
M	Max. tilt angle fully raised	°	67	67	67	67	67	67	67	67	+ 1	=
K	Max. tilt angle on ground	°	43	43	43	43	43	43	43	43	+ 1	=
	Max. tilt angle at max. reach	°	68	68	68	68	68	68	68	68	=	=
	Max. dump angle at max. reach	°	68	68	68	68	68	68	68	68	- 13	=
	Max. dump angle on ground	°	79	79	79	79	79	79	79	79	=	=
L	Max. dump angle fully raised	°	47	47	47	47	47	47	47	47	+ 1	=
O	External radius at tire side	mm	6550	6550	6550	6550	6550	6550	6550	6550	=	=
Q	External radius at bucket edge	mm	7515	7515	7530	7530	7599	7599	7615	7615	7555	+ 275
E	Wheel base	mm	3700	3700	3700	3700	3700	3700	3700	3700	3700	=
D	Width at tires	mm	3186	3186	3186	3186	3186	3186	3186	3186	=	=
F	Tread	mm	2420	2420	2420	2420	2420	2420	2420	2420	=	=
G	Ground clearance (at 12° osc.)	mm	480	480	480	480	480	480	480	480	=	=
A	Overall length	mm	9684	9684	9719	9719	9871	9871	9906	9906	9805	+ 596
C	Overall height	mm	3785	3785	3785	3785	3785	3785	3785	3785	3785	=
	Operating weight	kg	32132	32953	33030	33098	32877	32942	33019	33087	33233	+ 1537

(*): All capacities according ISO 7546, with straight blade [measure at the tip of bucket teeth or cutting edge], tires 26.5 R25 (L3), Base EU configuration.

➤ Dimensions and operational data DL550-5

		29.5 R25 - L3	29.5 R25 - L4	29.5 R25 - L5
	Width at tires edge - Empty	mm	- 4	- 2
	Width at tires edge - Loaded	mm	- 9	- 11
C	Overall height	mm	- 30	- 10
G	Ground clearance (at 12° osc.)	mm	- 30	- 10
J	Height at bucket pivot point	mm	- 30	- 10
	Static tipping load (straight)	kg	-995	-570
	Static tipping load (at full turn)	kg	-878	-503
	Operating weight	kg	- 1397	- 758

➤ Bucket selection chart DL550-5



Compliant with ISO 14397-1 (2007). The filling factor depends on the type of material, the working conditions and the experience of the operator.

Attachments

➤ Dimensions and operational data DL580-5

DL580-5 – Pin-on			Rehandling configurations				General purpose configurations				Rock	QC
Ground Engaging Tools			Bolt-on cutting edge				Teeth				Teeth	
Configuration			Straight sides	Convex sides	Straight sides	Convex sides	Straight sides	Convex sides	Straight sides	Convex sides	Concave sides	
B	Capacity heaped ISO/SAE	m³	5.9	6.3	6.2	6.7	5.7	6.1	6.0	6.5	5.0	=
	Capacity at 110% fill factor	m³	6.5	7.0	6.8	7.3	6.3	6.8	6.6	7.1	5.0	=
	Bucket width	mm	3400	3400	3400	3400	3400	3400	3400	3400	3440	=
	Breakout force	kN	229	228	227	226	229	228	227	226	225	- 12
	Static tipping load (straight)	kg	29492	29994	29849	29784	30073	30005	29860	29789	26690	- 2733
	Static tipping load (at full turn)	kg	26089	26524	26379	26314	26603	26535	26390	26319	26220	- 2573
H	Dump height (at 45° – fully raised)*	mm	3380	3380	3345	3345	3248	3248	3212	3212	3175	- 212
I	Dump reach (at 45° – fully raised)*	mm	1490	1490	1525	1525	1622	1622	1658	1658	1545	+ 212
	Digging depth	mm	85	85	85	85	85	85	85	85	45	=
J	Height at bucket pivot point	mm	4780	4780	4780	4780	4780	4780	4780	4780	4780	=
	Max. tilt angle in carry position	°	48	48	48	48	48	48	48	48	48	=
M	Max. tilt angle fully raised	°	67	67	67	67	67	67	67	67	46	=
K	Max. tilt angle on ground	°	43	43	43	43	43	43	43	43	42	=
	Max. tilt angle at max. reach	°	68	68	68	68	68	68	68	68	68	=
	Max. dump angle at max. reach	°	68	68	68	68	68	68	68	68	67	=
	Max. dump angle on ground	°	79	79	79	79	79	79	79	79	80	=
L	Max. dump angle fully raised	°	47	47	47	47	47	47	47	47	46	=
O	External radius at tire side	mm	6550	6550	6550	6550	6550	6550	6550	6550	6550	=
Q	External radius at bucket edge	mm	7530	7530	7553	7553	7615	7615	7637	7637	7544	+ 135
E	Wheel base	mm	3700	3700	3700	3700	3700	3700	3700	3700	3700	=
D	Width at tires	mm	3186	3186	3186	3186	3186	3186	3186	3186	3186	=
F	Tread	mm	2420	2420	2420	2420	2420	2420	2420	2420	2420	=
G	Ground clearance (at 12° osc.)	mm	480	480	480	480	480	480	480	480	480	=
A	Overall length	mm	9860	9860	9910	9910	10047	10047	10097	10097	10150	+ 300
C	Overall height	mm	3785	3785	3785	3785	3785	3785	3785	3785	3785	=
	Operating weight	kg	34902	35726	35871	35936	35647	35715	35860	35931	36030	+ 1999

(*): All capacities according ISO 7546, with straight blade [measure at the tip of bucket teeth or cutting edge], tires 26.5 R25 (L3), Base EU configuration.

➤ Dimensions and operational data DL580-5

		29.5 R25 - L3	29.5 R25 - L4	29.5 R25 - L5
Width at tires edge - Empty		mm - 4	- 2	3186
Width at tires edge - Loaded		mm - 9	- 11	3266
C	Overall height	mm - 30	- 10	Base
G	Ground clearance (at 12° osc.)	mm - 30	- 10	Base
J	Height at bucket pivot point	mm - 30	- 10	Base
Static tipping load (straight)		kg -995	-570	Base
Static tipping load (at full turn)		kg -878	-503	Base
Operating weight		kg -1397	- 758	Base

➤ Bucket selection chart DL580-5

Bucket filling factor
115% 100% 95%

Lift arm	Bucket	G.E.T.	Configuration	m³	1.8	1.9	2	2.1	2.2	2.3	2.4	2.5	2.6
Standard lift arm	Rehandling	Bolt-on cutting edge	Straight sides	5.9									
			Convex sides	6.3									
			Straight sides	6.2									
			Convex sides	6.7									
	General purpose	Teeth	Straight sides	5.7									
			Convex sides	6.1									
			Straight sides	6.0									
			Convex sides	6.5									
	Rock		Concave sides	5.0									

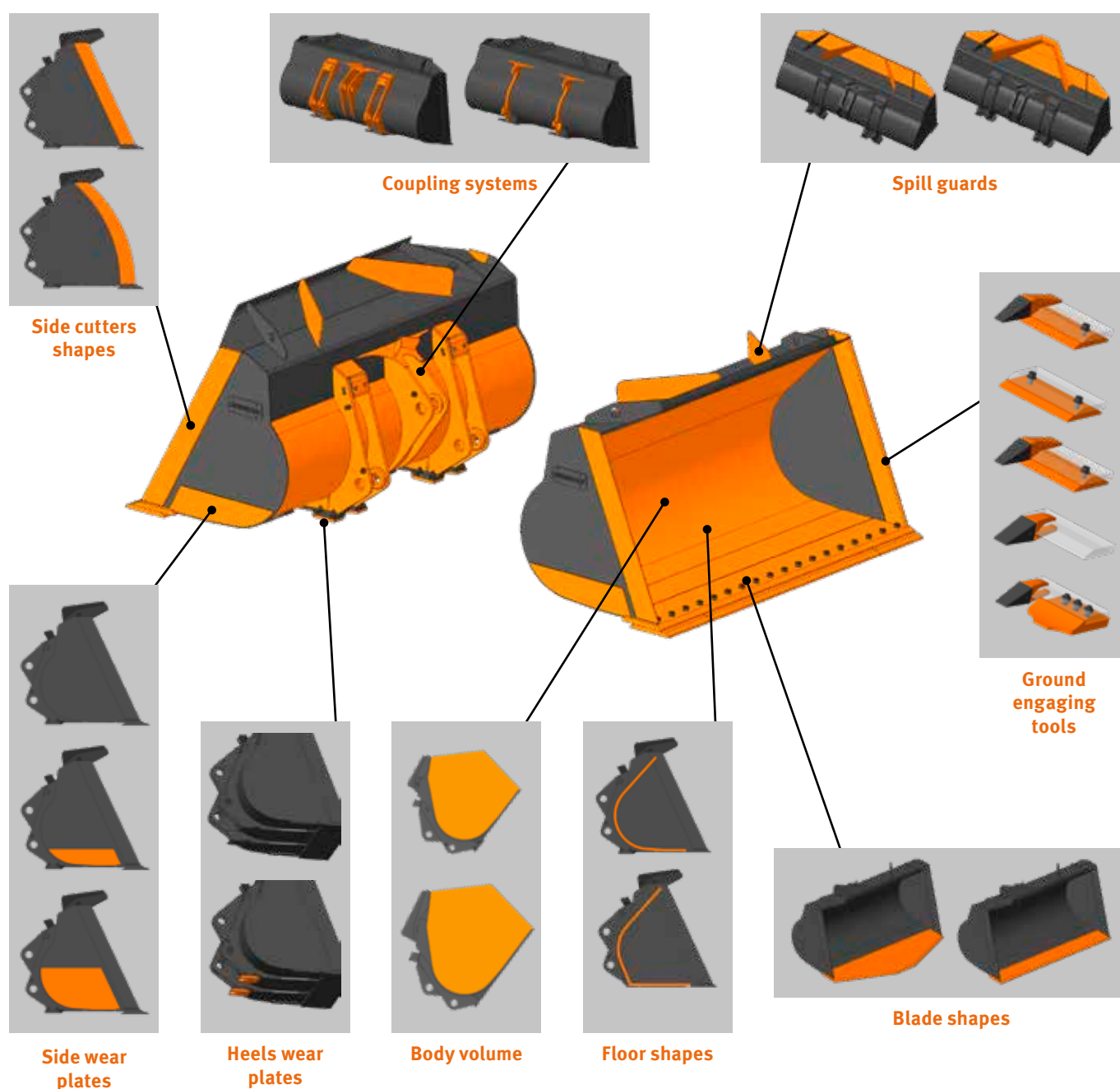
Compliant with ISO 14397-1 (2007). The filling factor depends on the type of material, the working conditions and the experience of the operator.

Work tools

▣ Configurable general purpose buckets

The Doosan range of configurable general purpose buckets offers you the possibility to configure the bucket that matches your application perfectly.

Now, in addition to deciding about teeth or bolt-on edge, you choose the coupling system, floor shape, spillguard type, bucket protection, and blade shape - all according to your needs!



Your Doosan dealer will help you configure your bucket for your application - so that you maximize your productivity, and get the level of protection you need.

Standard and optional equipment

Performance

	DL550-5	DL580-5
Scania, Stage IV compliant, SCR, EGR, DOC, water-cooled, diesel engine with Variable Turbo Charger and air-to-air intercooler	●	●
No DPF	●	●
Engine power mode selector switch (Standard / Economy & Power mode)	●	●
Power-up pedal function by full stroke of acceleration	●	●
Auto shut-off engine	●	●
Fuel heater	●	●
Torque converter lock-up	●	●
Transmission clutch cut-off via the brake pedal	●	●
Transmission mode selector switch (Manual / Auto 1 ↔ 5 / Auto 2 ↔ 5 with kick-down)	●	●
Hydraulic load sensing system, variable displacement pump	●	●
Hydraulic lock differential on front	●	●
Axle oil cooler system	○	●
Counterweight	●	●
Additional counterweight	○	○
Robust Z bar lifting system	●	●
High lift loader	○	-
Quick coupler	○	○
Wide range of buckets	○	○

Comfort

Load isolation system (LIS)	●	●
Automatic lift arm kick-out	●	●
Automatic return to dig	●	●
Levelling function	●	●
3 rd hydraulic function	●	●
Automatic air conditioning with electronic climate control	●	●
Grammer air-suspension seat with safety belt 2 points	●	●
Grammer air-suspension seat with safety belt 3 points	○	○
Electric joystick steering on armrest	●	●
Joystick lever with FNR and thumbwheel roller	●	●
Fingertip levers	○	○
Adjustable steering column (tiltable & telescopic)	●	●
Tinted safety glass	●	●
Left sliding window	●	●
Right opening window (180°)	●	●
Floor mat	●	●
Multiple storage compartments	●	●
Cup holder	●	●
Loudspeakers and connections for radio	●	●
Lift arm float kick-out	●	●
Alternator 28 V / 100 Ah	●	●
Dashboard monitoring with LCD display (dials, gauges and lamps)	●	●
Interior cab light	●	●
Cigarette lighter and 12 & 24 Volt power sockets	●	●
Weighing system	○	○
Grammer air-suspension seat with safety belt 3 points	○	○

Safety

Emergency steering pump driven by electric motor	●	●
Full fenders with rubber protection	●	●
ROPS cab (SAE J 394, SAE 1040, ISO 3471)	●	●
FOPS cab (SAE J 231, ISO 3449)	●	●
Double filtered air cab	●	●
Right opening window (emergency exit)	●	●
Front and rear wiper and washer	●	●
Retractable roller sun visor front & rear	●	●
Road lights: low and high beam, tail indicators, stop, reversing lights	●	●
Work lights: 2 LED at the front and 4 halogen at the rear (6 x 70W)	●	●
Reverse travel alarm	●	●
Rotating beacon	●	●
Horn	●	●
Heated external mirrors	●	●
Interior rear view mirrors	●	●
Anti-slip steps & platforms	●	●
Starting safety system	●	●
Brake circuits with accumulator	●	●
Dual service brake pedals	●	●
Electric parking brake on the transmission, spring-applied hydraulic release	●	●
Wheel chocks	●	●
Handrail on top of the cab and anti-slip platforms on front frame	●	●

Other

Bottom protection plates	●	●
Tie hooks	●	●
Articulation lock in the transport position	●	●
Towing hitch	●	●
Tires 29.5 R25 (L3)	○	○
Tires 29.5 R25 (L5)	●	●
Automatic lubrication system	●	●
Hydraulic reversing engine fan	●	●
"Doosan Connect" Telematic system	●	●

Maintenance

	DL550-5	DL580-5
Self-diagnosis system & monitoring indicator by the dashboard, plus electronic plug for fast adjustment	●	●
Fast couplers for hydraulic check	●	●
External drains for engine oil and coolant changes	●	●
Bio oil	○	○
3-year or 5-year warranty	○	○
Protection+ warranty	○	○

Standard: ●
Optional: ○



Electric joystick steering



Fingertip control



High lift arm



Differential hydraulic lock



Heavy-duty tire



Protection+ warranty



Quick coupler



Attachments

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.

WORK EFFICIENCY MANAGEMENT

JOB SITE MANAGEMENT

PROACTIVE SERVICE

PREVENTIVE MAINTENANCE

OPERATION TREND

Total operation hours and operation hours by mode

FUEL EFFICIENCY*

Fuel level and fuel consumption

LOCATION

GPS and geo-fence

REPORTS

Operation report & utilization

WARNING & ALERT

Detect machine warnings, antenna disconnection, and geo/time fence

FILTER & OIL MANAGEMENT

Preventive maintenance by item replacement cycle

TELEMATICS TERMINAL

Terminal device is installed and connected to a machine to get machine data.



TELECOMMUNICATION

Doosan provides Dual mode (Mobile, Satellite) communication to maximize communication coverage.



DOOSANCONNECT WEB

Users can monitor machine status from DoosanCONNECT Web.



DOOSAN