

**DOOSAN**

Construction Equipment

# DL420A

Engine Power	SAE J1995, gross 210 kW @ 2,100 rpm
Operational Weight	21,955 kg (49,603 lb)
Bucket Capacity (SAE)	3.5 ~ 7.0 m <sup>3</sup> (4.8 ~ 9.2 yd <sup>3</sup> )



DOOSAN DL420A WHEEL LOADER :

# A POWERFUL WHEEL LOADER WITH NOVEL FEATURES

*DL 420A*



## THE NEW DL420A WHEEL LOADER HAS ALL THE ADVANTAGES

The new DL420A wheel loader has all the advantages of the previous model, The key phrase used during the development of the DL420A was “giving optimum value to the end user.”

**INCREASED PRODUCTION**, due to the powerful 11 liter engine and the excellent synchronisation of the drive train with the hydraulics system

**IMPROVED ERGONOMICS**, increased comfort and excellent all round visibility ensuring safe and pleasant working conditions.

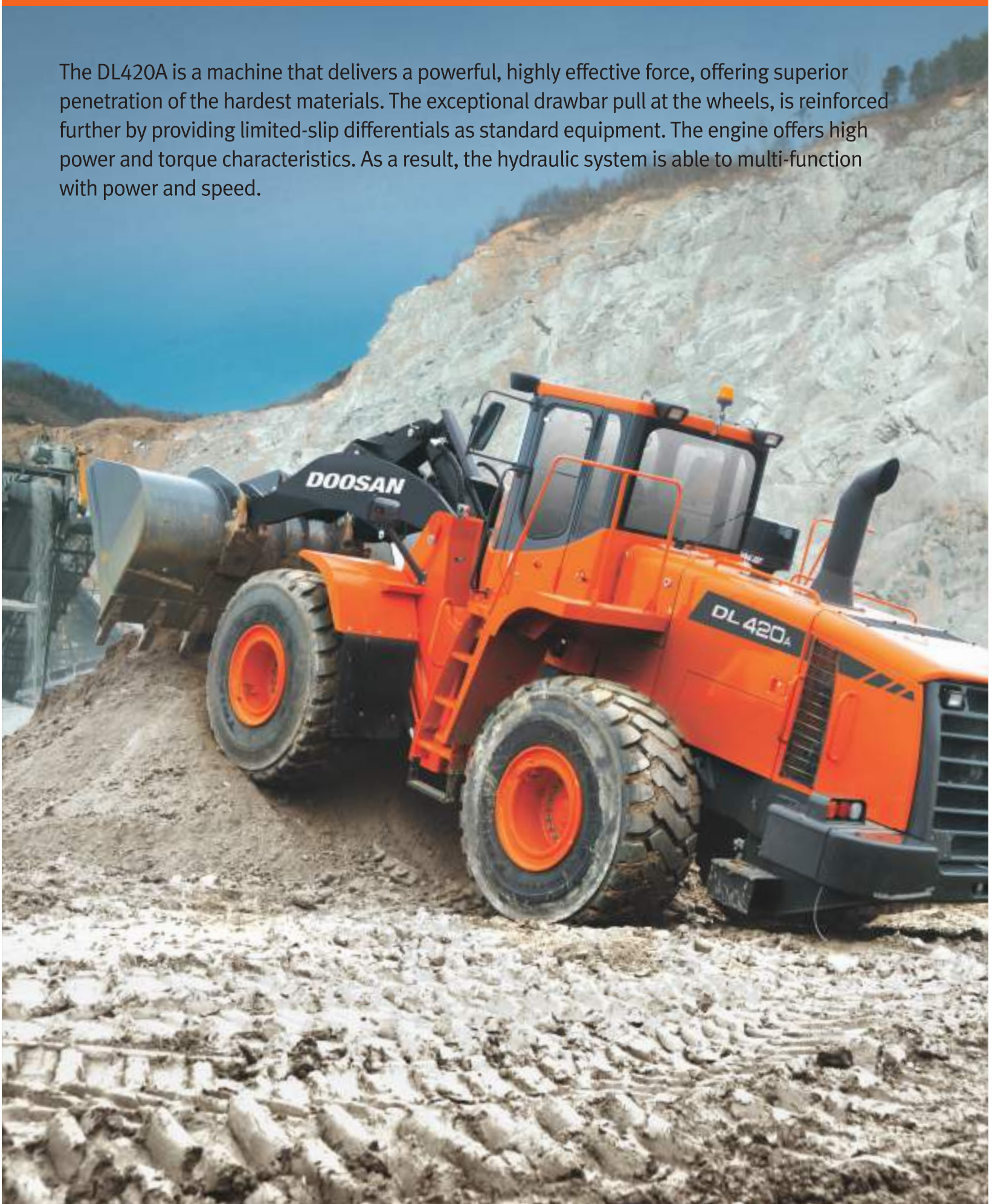
**IMPROVED RELIABILITY**, through the use of higher performance new materials, the development of new computer-assisted structural design techniques and by intensive and systematic test programs. All of these combine to increase the life of vital components and reduce operating costs.





# PERFORMANCE & PRODUCTIVITY

The DL420A is a machine that delivers a powerful, highly effective force, offering superior penetration of the hardest materials. The exceptional drawbar pull at the wheels, is reinforced further by providing limited-slip differentials as standard equipment. The engine offers high power and torque characteristics. As a result, the hydraulic system is able to multi-function with power and speed.



## TURBO CHARGED-AIR COOLED INTERCOOLER ENGINE

Doosan product gives high performance through in-house engine

Our many years of experience in engine design and production have resulted in the emergence of a highly efficient and very powerful engine that boasts the highest power in its class. Doosan in-house mechanical engine has advantage of easy maintenance and low maintenance cost.



## FULL AUTO TRANSMISSION

The electronic powershift transmission is particularly smooth and gear ratios perfectly spaced to give optimal speed. That gives comfort at the same time that it delivers excellent traction in every working conditions. Built-in electronic controls enhance productivity and durability.

The transmission has three modes of operation:

- Manual
- Automatic (automatic shift for all gears)
- Semi - Automatic (automatic with a "kick down" for first gear)



### 1 AXLE

Improved internal oil flow greatly reduced the temperature difference between the hub and the differential, as well as prevents premature disc wear due to overheating of the internal hub components.

### 2 LIMITED SLIP ZF DIFFERENTIAL

The standard equipment limited slip differential allows easy driving through soft and swampy grounds.

### 3 HYDRAULIC POWER STEERING

Works with a flow amplifier and priority valve. And the emergency steering system is equipped as an option to secure a safety against a malfunction of steering system during traveling.

### 4 HIGH LIFT (OPTIONAL)

As High Lift is equipped besides Standard Lift, customers have further options.

### 5 INCREASED AXLE DURABILITY

The brake discs have been repositioned to the rear part of the reduction gear where the rotation speed is lower. As a result, the discs are exposed to lower rpm's and heat generation is reduced and the life span of the discs is greatly extended. Automatic disc clearance regulator has been integrated into the design and the disc clearance is maintained at the optimum level at all times as the discs wear out. These prevent any lag in brake response. Another convenient feature is that brake disc wear can easily be measured without disassembling the hub.

The brake piping has been redesigned into the axle housing and is protected from damage from external shock as the machine drives over rough terrain.

### 6 QUICK COUPLER PIPING (OPTIONAL)

Versatility improvement

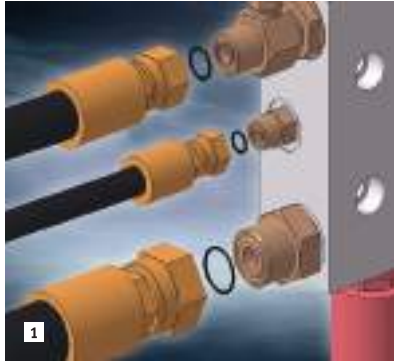
- Add piping, valve and switch for quick coupler
- Customer can use a quick coupler easily



# DURABILITY & RELIABILITY

Every morning, when the operators commence work, they know that things will go smoothly- because Doosan has taken care of it. The product is solid. Operators know that they have significant reserves at hand and that they won't have to push the machine to its limit. The Doosan DL420A wheel loader is designed and built to last. For Doosan, 'reliable' means availability, accessibility and simplicity.





1



2



3



4



5



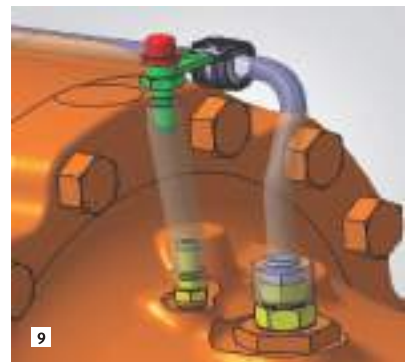
6



7



8



9

## 1 ORFS-ALL PORTS (EVEN IN PILOT LINE AND LOW PRESSURE LINE)

## 2 2-PIECE TYPE TOOTH (PIN-ON+BOLT-ON ADAPTER)

## 3 DURABLE FAN MOTOR

- More durable fan motor
- Design margin and motor durability is increased
- Motor case material changes from aluminum to cast iron

## 4 RUBBER-MOUNTING (FOR RADIATOR: LATERAL 2EA / VERTICAL 2EA)

## 5 PROPELLER SHAFT

A protective cover has been installed to protect the oil seal from dust, foreign objects and premature wear.

## 6 RADIATOR GRILL (STEEL STRUCTURE)

## 7 LARGE CAPACITY TRANSMISSION OIL COOLER

The large capacity transmission oil cooler ensures durable and stable operation of transmission.

## 8 REINFORCED BUCKET

The lower and side panels of the bucket have been reinforced with additional plates (standard)

- Reinforcement : At both sides - 1 point each
- At lower panel - 3 point

## 9 REMOTE TYPE AXLE BREATHER

Axle durability improvement

- Add remote type axle breather for rear axle like a front axle
- Increase the length of front axle breather for prevention of pollution from particle matter



# OPERATOR COMFORT

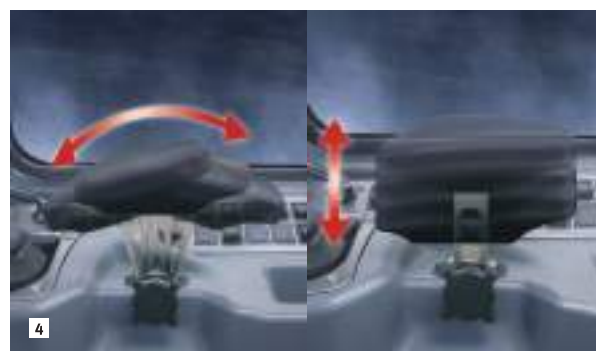
From the beginning, Doosan has had great concern for machine operators. People need to work in a well designed and comfortable environment. The work area is spacious, with several places for storage. The checking and monitoring devices are comprehensive. There is an open view of the work area. For night work, operators are provided with powerful front and rear lighting.



## AIR CONDITIONING & DEFROSTER SYSTEM

Double filtered air cab, air ducts are properly placed all around the cab with proportional sensitive controls and air re-circulation facility. we offer the same comfort as a passenger car.

# DL 420<sub>A</sub>



## 1 THE STEERING COLUMN

The steering column features both tilting and telescopic functions.

## 2 VARIOUS CONTROL LEVER (OPTIONAL)

The joystick installed in compliance with various needs and preferences of operators ensures more convenient work.

## 3 CENTRAL MONITOR PANEL

The compact central monitor panel is ergonomically designed and allows the operator to monitor the status and warning lights at a single glance.

## 4 ARM REST

The tilting and telescopic wrist rest allows the operator to work more comfortably.

## 5 SWITCH PANEL

The ergonomically laid out switch panel in line with the natural movements of the body allows for very convenient operation. The spare switch cut-outs allows easy installation of additional electric accessories.

## 6 SUNVISOR & ROOM MIRROR

## 7 REAR VIEW CAMERA (OPTIONAL)

## AIR-SUSPENSION SEAT (OPTIONAL)

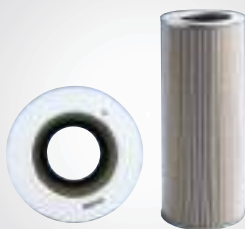
Now available Air-suspension seats provide more comfort and support for the operator.





# EASY MAINTENANCE

A liquid crystal display conveys information to the operator relative to the ZF transmission. At the same time, it reports the nature of a problem (if one exists). When servicing the loader, a specialised apparatus can be used to adjust the clutch disks to compensate for their wear. Additionally, by connecting a lap top computer, a complete transmission diagnostic can be performed.



## HYDRAULIC OIL RETURN FILTER

The high-efficiency, large-capacity return filter manufactured with the glass-fiber media can eliminate foreign substances up to 99.5 percent to protect the costly hydraulic equipment and substantially extend the replacement cycle.

\* Option spec info is included to the images contained in this material and may not be the same with the actual specs.



1



2



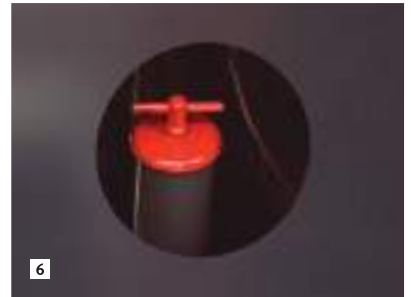
3



4



5



6



7



8



9

## 1 CENTRAL JOINTS

A good accessibility at the articulation joint is essential for an easy maintenance.

## 2 AIR-CLEANER FILTER

The high capacity air cleaner eliminates harmful particles from the air and extends the life of the engine and replacement intervals.

## 3 REMOTE GREASING LUBRICATION PORTS

The front pins can be lubricated from the outside of the machine without crawling under the machine or in awkward positions through the lubrication ports.

## 4 TRANSMISSION FILTER

The transmission filters are within easy reach and like the rest of the machine's service components, can be checked from ground level.

## 5 CENTRAL REMOTE HYDRAULIC CHECK PORT

The centralized remote hydraulic check ports allow main, steering, brake charge, pilot, unloading and transmission clutch pressures to be checked at a convenient.

## 6 CONVENIENT TRANSMISSION OIL FILLING

The oil filler pipe is located near the articulation joint for easy access.

## 7 TRANSMISSION DIAGNOSIS

The transmission can be diagnosed using a laptop computer to interface with the diagnostic system.

## 8 REMOTE ENGINE OIL & COOLANT DRAIN

Remote drain valves have been installed in an easily accessible location for convenient draining of fluids. (Coolant - upper, Engine oil - lower)

## 9 SWING OUT COOLING FAN

Our fan assembly has been designed with the one touch swing out mechanism and cleaning the radiator core is very easy.

## SIGHT GAUGES

Well-located, yet easily visible sight gauges for the hydraulic oil and radiator coolant allow easy daily checks while reducing the risk of contaminants entering the systems.



# TELEMATICS SERVICE (OPTIONAL)

## TELECOMMUNICATIONS

Data flow from machine to web



**TELEMATICS SERVICE TERMINAL**




Telematics Service terminal is installed to machine / connected to EPOS™




**TELECOMMUNICATION**



GPS, EPOS™ data is sent to designated server by GSM, Satellite telecommunication



**DOOSAN TELEMATICS SERVICE WEB**



Doosan, Dealer, Customer can easily monitor the GPS, EPOS™ data from Core Telematics Service web

## FUNCTIONS

Doosan Telematics Service provides various functions to support your great performance



GPS



Fuel information



Preventive maintenance



Operation hours



Fault code/warning



ADT Productivity



Reports

## TELEMATICS SERVICE BENEFITS

Doosan and dealer support customers to improve work efficiency with timely and responsive services

### Customer

- Improve work efficiency
- Timely and preventive service
- Improve operator's skills by comparing work pattern
- Manage fleet more effectively

### Dealer

- Better service for customers
- Provide better quality of service
- Maintain machine value
- Better understanding of market needs

### Doosan

- Responsive to customer's voice
- Utilize quality-related field data
- Apply customer's usage profile to developing new machine

	FUNCTION	EXCAVATOR	WHEEL LOADER	ADT
GPS	<ul style="list-style-type: none"> <li>Location</li> <li>Geo-fence</li> </ul>	All models	All models	All models
E-mail reports	<ul style="list-style-type: none"> <li>Daily, Weekly, Monthly report</li> </ul>	All models	All models	All models
Operation hours	<ul style="list-style-type: none"> <li>Total operation hours</li> <li>Operation hours by mode</li> </ul>	All models Tier 4 only	All models Tier 4 only	All models
Maintenance parts	<ul style="list-style-type: none"> <li>Preventive maintenance by item replacement cycle</li> </ul>	All models	Tier 4 only	All models
Fault code/ Warning	<ul style="list-style-type: none"> <li>Fault code</li> <li>Machine Warnings on Gauge Panel</li> </ul>	All models	Tier 4 only	All models
Fuel information	<ul style="list-style-type: none"> <li>Fuel level</li> <li>Fuel consumption</li> </ul>	All models Tier 4 only	Tier 4 only	All models
Dump capacity	<ul style="list-style-type: none"> <li>Dump tonnage</li> <li>Count of Work Cycle</li> </ul>	N/A	N/A	All models



# GLOBAL PARTS NETWORK

## GLOBAL PDC (PARTS DISTRIBUTION CENTER) NETWORK

Doosan provides fast and precise worldwide delivery of genuine Doosan parts through its global PDC (parts distribution center) network.



### GLOBAL NETWORK

The global network of the GPDC (Global Parts Distribution Center) maximizes its supply rate by making sure that each center is stockpiled with all the critical parts required for businesses in its area. The network also minimizes the time and costs required for parts delivery by positioning PDCs close to major markets around the world. Doosan PDCs communicate with customers in their time zone, informing them that they are open for operation, and deliver parts to them as early as possible.

### The Global Parts Distribution Center Network

PDCs had been set up as shown below, including Mother PDC in Ansan, Korea. The seven other PDCs include one in China (Yantai), one in the USA (Chicago), one in Brazil (Campinas), two in Europe (Germany and the UK), one in the Middle East (Dubai), and one in Asia (Singapore).



### PDC BENEFIT



Distribution Cost Reduction



Maximum Parts supply rate



Shortest distance/time parts delivery



Real-time service support

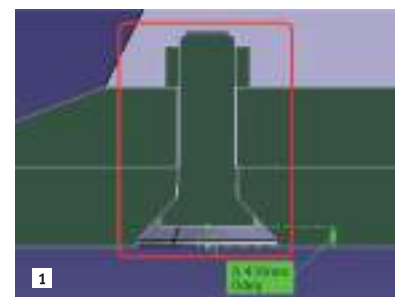
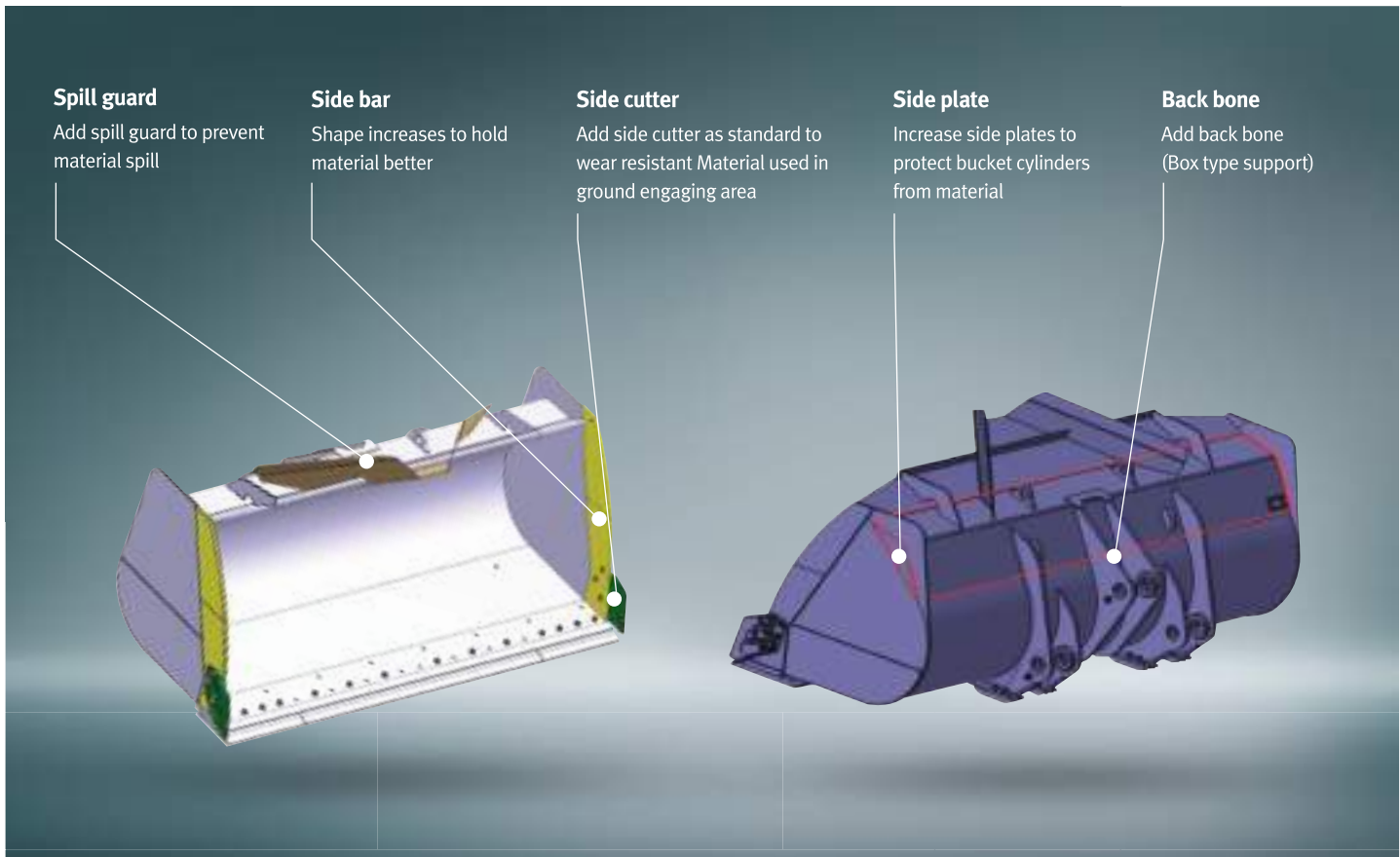


Minimum downtime



# ATTACHMENTS

Material handler bucket, is the most commonly used bucket in the construction equipment market and is designed mainly for use in heavy construction but also used in low density mining and quarry application.



## PLOW BOLT FOR CHANGEABLE PARTS

New plow bolt will be applied on tooth adaptor and cutting edge



## CHANGEABLE BOTTOM PLATES

Operator can change wear plate easily

**BUCKETS**

	General Purpose	Light Material	V-Shape Rock	Material Handler
	Mounting type	Capacity	Width	
GENERAL PURPOSE	Direct mount	3.7 / 3.9 / 4.0 / 4.1 / 4.2 m <sup>3</sup>	3,040 / 3,200 / 3,270 / 3,354 mm	
	Quick coupling	3.9 m <sup>3</sup>	3,297 mm	
LIGHT MATERIAL	Direct mount	4.3 / 4.5 / 7.0 m <sup>3</sup>	3,200 / 3,300 / 3,354 mm	
	Quick coupling	7.0 m <sup>3</sup>	3,300 mm	
V-SHAPE ROCK	Direct mount	3.5 m <sup>3</sup>	3,230 mm	
	Quick coupling	3.9 m <sup>3</sup>	3,297 mm	
MATERIAL HANDLER	Direct mount	4.0 / 4.2 / 4.5 / 4.7 m <sup>3</sup>	3,270 / 3,270 / 3,354 / 3,354 mm	



Quick Coupler

**CONNECTING**

	Model	Mounting type	Weight
QUICK COUPLER	Quick coupling	DLQC42	760 kg



Pallet Fork

General purpose

Tropical type  
Log Grapple

Sorting type

**MATERIAL HANDLING**

	Model	Length
PALLET FORK	DLPF42	60" / 72"

	Model	Type
LOG GRAPPLE	DLLG42	General purpose
		Tropical type
		Sorting type

# TECHNICAL SPECIFICATIONS

## ENGINE

The High performance Doosan DE12TIS 6 cylinders, direct injection, turbo charged, air–air intercooler engine offers low fuel consumption and low exhaust emissions, which are well below the requirements of the Phase II legislation.

-GROSS SAE J1995

### Model

DOOSAN DE12TIS

### Number of cylinders

6

### Rated power

210 kW (281 HP) @ 2,100 rpm (SAE J1995, gross)

### Max torque

130 kgf.m (1,275 N.m) @ 1,200 rpm

### Displacement

11,051 cc (674 cu.in)

### Bore dia & stroke

Ø 123 x 155 mm

3 stages Air cleaner including a very efficient pre-cleaner, main and safety elements.

Hydraulically driven puller type fan with possibility of adjustment.

### Battery

System voltage : 24 V

Quantity : 12 V x 2

Capacity(AMP) : 150 Ah

### Starter power

24 V / 6.6 kW

### Alternator output

24 V / 60 A

## AXLES

The front and rear axles with planetary hub reductions are built on the base of very reputed components.

Fitted as standard, the front and rear limited slip differentials, ensure the traction is optimal in all circumstances.

### Type

Fully floating planetary-type

### Limited slip Differential (front and rear)

30%

### Oscillation angle

+/- 12°

### Brake

Dual circuit multi-plate wet discs.

Hydraulic actuation with pump and accumulator.

The sintered metal brake discs extended discs service intervals : increased three times

A spring applied and hydraulically released parking brake is mounted on the transmission shaft.

## TRANSMISSION

“Full Power Shift” transmission. It can be used in manual or automatic modes.

This transmission is based on components having excellent worldwide reputations. It is equipped with a modulation system allowing soft gear shifting and inversion of travel direction. Safety devices also protect the transmission of bad operations.

The gear and direction shifting is operated by a single lever to the left of the steering wheel. A travel direction control is also mounted on the hydraulic joystick.

With a special electronic device, the transmission can be tested and adjusted easily for optimum performance and efficiently.

The transmission can be de-clutched by the operation of brake pedal to increase the power available to the hydraulic pumps.

A safety device prevents the starting of the engine when not in neutral.

### Torque converter

Type : 4 Speed, full auto power-shift, countershaft, engine mounted w/ flexible plate

Stall ratio : 3.089

### Travel speed, kph

Forward : 7.7 - 12.7 - 27 - 39 (1 - 2 - 3 - 4)

Reverse : 7.7 - 12.7 - 27 (1 - 2 - 3)

## HYDRAULIC SYSTEM

Main control valve of double acting 2-spool is controlled by standard single lever.

Automatic boom kick out and bucket return to dig. Is standard.

All of hydraulic lines are equipped with special seals (ORFS)

---

### Max flow main

240 ℓ/min (63.4 gal/min)

---

### Working Pressure

200 bars

---

### Pressure of the pilot circuit

28 bars

---

### Filtration capacity on the return line

10 microns

---

### Loading cycles time

Lifting speed (loaded) : 6 seconds

Dumping speed (loaded) : 1.3 seconds

Lowering speed (empty) : 4.2 seconds

## OPERATOR' CAB

The modular cab allows excellent visibility in all directions. The optimal ventilation is obtained by numerous ventilation outlets. Touch buttons control the air re-circulation air conditioning and heating systems. The air of the cab is filtered.

All necessary information for the operator are centralized in front of him.

The main functions are actuated via switches located on a console at the right of the operator.

Generous storage places are well located. The cab, mounted on viscous element and equipped with an air suspended seat, offers a better comfort for the operator.

---

### Access door : 1

---

### Emergency exits : 2

The cab conforms ROPS ISO 3471 and  
FOPS : ISO 3449

## STEERING

The steering system is a load sensing type with a flow amplifier and a priority valve.

---

### Steering angle

40°

---

### Oil flow

194 ℓ/min (51.2 gal/min)

---

### Working pressure

185 bars

---

### Steering cylinders (2)

bore x dia x stroke : 100 x 50 x 450 mm

Emergency steering system with hydraulic pump driven by electric motor. (Optional)

## LIFTING SYSTEM

The lifting system with two cylinders and Z configuration is designed for the toughest jobs. The breakout force (20 ton with a 3.9m³ bucket) is very important and the bucket movements are fast.

The bucket angles are well kept in good positions on all the range of bucket movement.

---

### Lifting cylinders (2)

bore x stroke : 180 x 928 mm

---

### Bucket cylinders (1)

bore x stroke : 200 x 600 mm

## MAINTENANCE

Maintenance is easy due to excellent access.

The transmission is electronically controlled. An error coding system allows easy diagnosis of the systems and proper intervention.

**Engine (oil)** - 25 ℓ (6.6 US gal)

**Radiator (cooling liquid)** - 50 ℓ (13.2 US gal)

**Fuel** - 348 ℓ (91.9 US gal)

**Hydraulic oil** - 265 ℓ (67.6 US gal)

**Gear box and torque converter** - 54 ℓ (14.3 US gal)

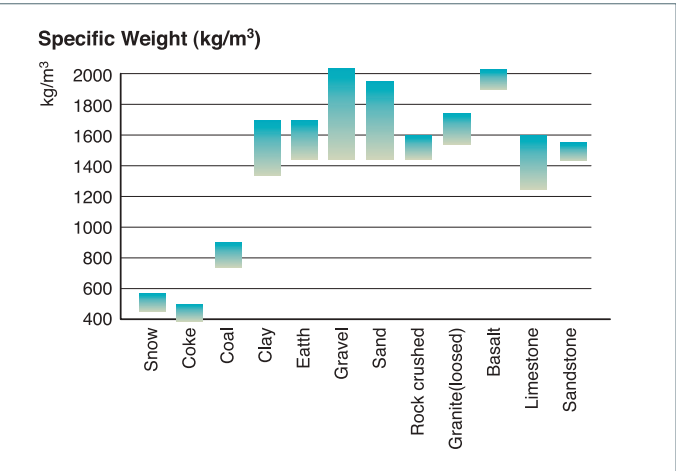
**Front axle** - 45 ℓ (11.9 US gal)

**Rear axle** - 42 ℓ (11.1 US gal)

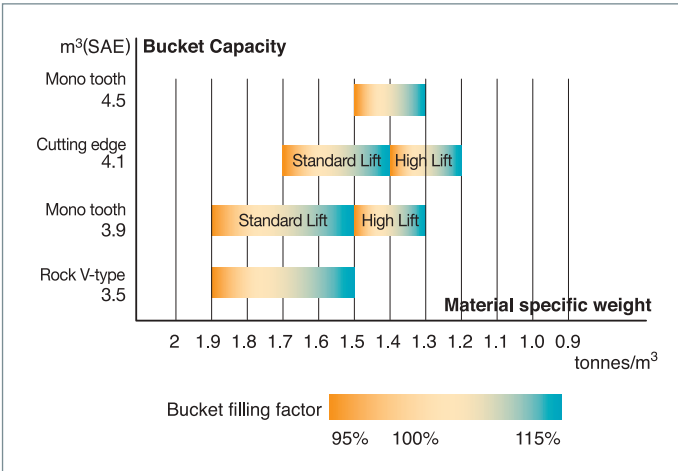
# OPERATIONAL DATA

Bucket type			General purpose							Rock		Light material		
Configuration	Code	Unit	Teeth (std.)	Teeth	Teeth	Teeth	Bolt-on edge	Bolt-on edge	Bolt-on edge	Teeth & segments	Teeth	Teeth	Bolt-on edge	Teeth
Capacity heaped ISO/SAE		m3	3.9	3.7	3.9	4.0	3.9	4.1	4.2	4.1	3.5	4.3	4.5	4.5
Tooth type			Mono tooth	Adapter tooth	Adapter tooth	Adapter tooth	-	-	-	Adapter tooth	Adapter tooth	Adapter tooth	-	Mono tooth
Bucket width	B	mm	3,200	3,040	3,200	3,270	3,040	3,200	3,270	3,200	3,231	3,354	3,200	3,354
Breakout force		kN	197	198	197	197	197	196	196	195	196	183	181	170
Static tipping load (straight)		kg	17,900	18,030	17,840	17,820	17,830	17,670	17,635	17,635	17,600	17,620	17,420	17,125
Static tipping load (at full turn)		kg	15,135	15,250	15,490	15,070	15,075	14,935	14,905	14,905	14,875	14,895	14,720	14,460
Dump height (at 45°) <sup>1)</sup> (at fully raised)	H	mm	2,985	2,960	2,960	2,960	3,085	3,085	3,085	2,960	2,985	2,985	3,025	2,855
Dump reach (at 45°) <sup>1)</sup> (at fully raised)	I	mm	1,395	1,425	1,425	1,425	1,285	1,285	1,285	1,425	1,395	1,480	1,350	1,535
Digging depth		mm	105	105	105	105	105	105	105	105	105	105	105	105
Height at bucket pivot point	J	mm	4,295	4,295	4,295	4,295	4,295	4,295	4,295	4,295	4,295	4,295	4,295	4,295
Max. tilt angle at carry position	K	degree	47	47	47	47	47	47	47	47	47	47	47	47
Max. tilt angle at fully raised	M	degree	55	55	55	55	55	55	55	55	55	55	55	55
Max. tilt angle on ground		degree	43	43	43	43	43	43	43	43	43	43	43	43
External radius at tire side	O	mm	6,380	6,380	6,380	6,380	6,380	6,380	6,380	6,380	6,380	6,380	6,380	6,380
External radius at bucket edge	Q	mm	6,875	6,970	6,860	6,970	6,955	6,845	6,955	6,930	6,875	7,055	7,035	7,035
Wheel base	E	mm	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500
Width at tires	N	mm	2,975	2,975	2,975	2,975	2,975	2,975	2,975	2,975	2,975	2,975	2,975	2,975
Tread	F	mm	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300
Ground clearance	G	mm	465	465	465	465	465	465	465	465	465	465	465	465
Overall length	A	mm	8,850	8,890	8,890	8,890	8,700	8,700	8,700	8,890	8,850	8,975	8,790	9,030
Overall height	C	mm	-	3,535	3,535	3,535	3,535	3,535	3,535	-	-	-	-	-
Operating weight		kg	21,915	21,785	21,955	21,980	21,900	22,060	22,095	22,140	22,210	22,040	22,150	22,170

1) Measured to the tip of the bucket teeth.



The specific weight of material largely depends on moisture rate, compacting value, percentage of various components etc... This chart is given only for information.



The Bucket filling factor depends also of the nature of material, the working conditions and the operator ability.

# STANDARD AND OPTIONAL EQUIPMENT

## STANDARD EQUIPMENT

### Engine

---

- DOOSAN DE012TIS Diesel engine
- Air cleaner - Double element cartridge + Cyclone filtration in prior stage
- Fuel filter - Main fuel filter and fuel pre-filter with water separator
- External drains for engine oil and coolant changes
- Hydraulic radiator fan
- Fuel filler pump

### Hydraulic System

---

- Hydraulic control valve - 2 spool
- Hydraulic main pump - Vane
- Hydraulic control levers
- Boom kick out - Automatic
- Bucket return to dig - Automatic

### Cabin and Interior

- 12V power socket
- Double filtered air cab
- Air conditioner and heater with recirculation function
- Cup holder
- Tinted glasses
- Floor mat
- AM/FM Radio + MP3(USB)
- Windshield washer front and rear
- Windshield wipers front and rear
- Cigarette lighter
- Multiple storage compartments
- Sun visor
- Glass antenna
- Seat - Mechanical suspension
- ROPS cabin - ISO 3471
- FOPS cabin - ISO 3449
- Adjustable steering column
- Rear view mirrors - Interior 2
- Rear view mirrors - Exterior 2

### Electrical and lighting

---

- Battery cut-off switch
- Working light - Front 2 + Rear 4
- Driving light - Low and high beams
- Tail indicators - Stop, reversing lights
- Reversing alarm
- Electric horn
- Alternator - 24V, 60A
- Self-diagnostic system

### Linkage

---

- Z-bar loader linkage

### Drivetrain and Brake system

---

- Gear shift switch - Manual, Auto 1 ↔ 4, Auto 2 ↔ 4
- Kickdown and travelling direction selection
- Starting safety system
- Dual brake circuits with accumulator
- Dual service brake pedals
- Secondary brake system
- Parking brake - Electrical, hydraulic
- Differential - Limited slip

### Steering system

---

- Load sensing steering system

### External equipment

---

- Fender

\* Standard specification and options may vary by country.

\*\* Specification is subject to change without prior notice for quality enhancement.

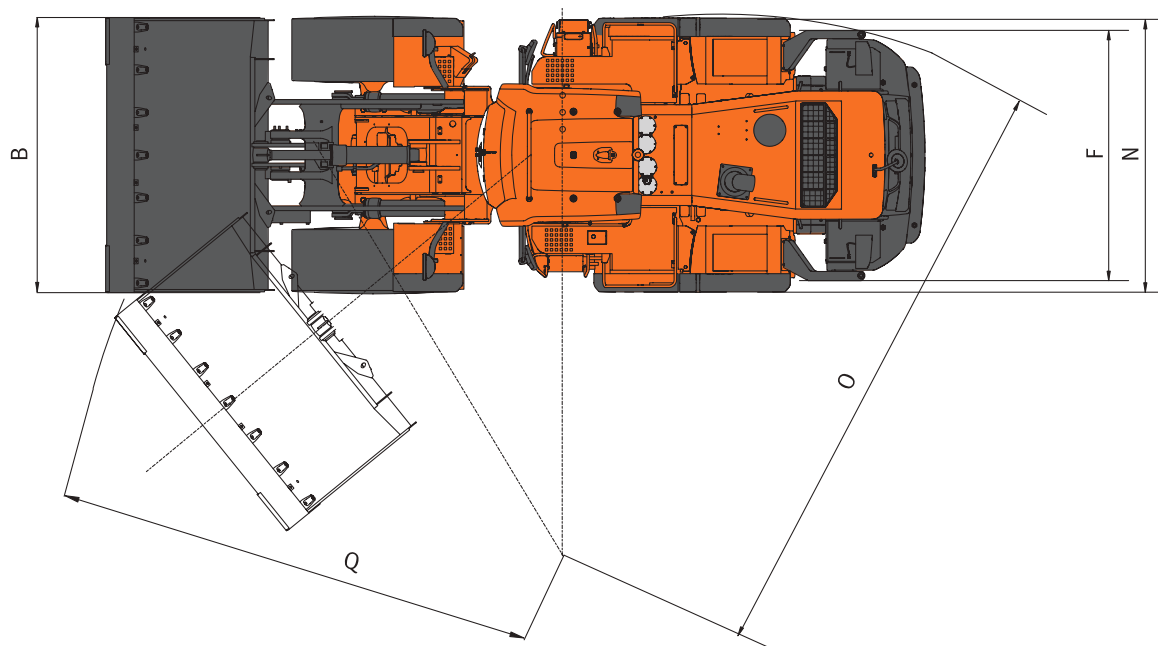
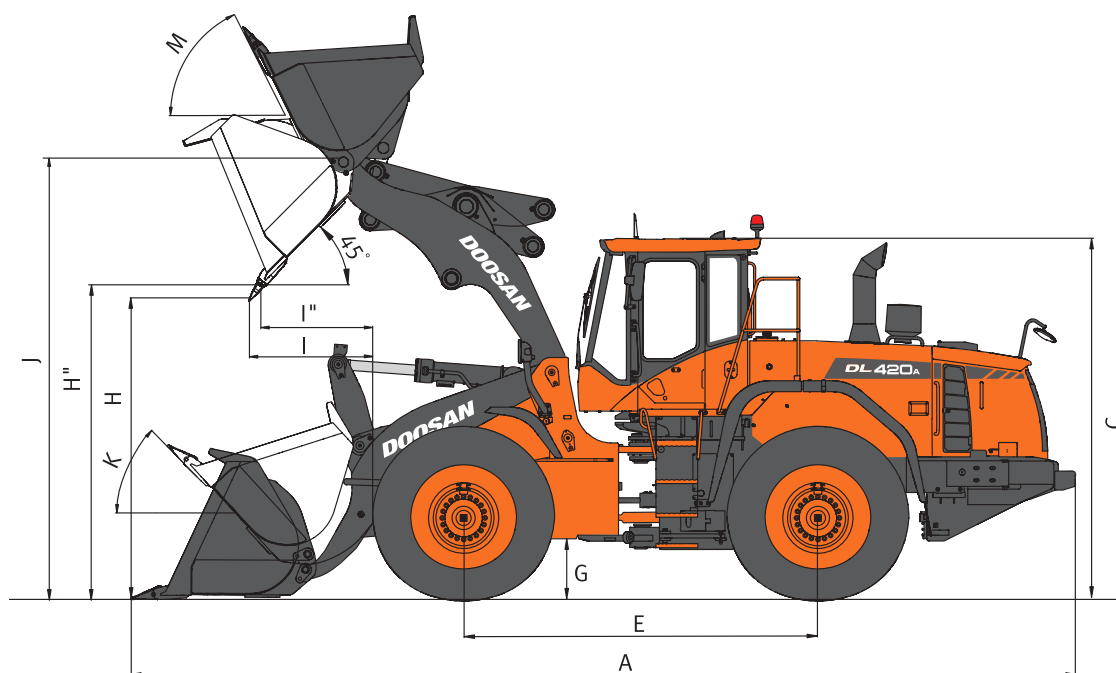
OPTIONAL EQUIPMENT

Some of these optional equipments may be standard in some markets. Some of these optional equipments cannot be available on some markets. You must check with the local Doosan dealer to know about the availability or to release the adaptation following the needs of the application.

<b>Hydraulic System</b>
<ul style="list-style-type: none"><li>• Hydraulic Oil - VG32 Cold Weather</li><li>• Hydraulic Oil - VG46 Normal Weather</li><li>• Hydraulic Oil - VG68 Tropical Weather</li><li>• Hydraulic control valve - 3 spool</li><li>• Load isolation system (LIS)</li><li>• Hydraulic control levers - Mono</li><li>• Hydraulic control levers - FNR</li><li>• Hydraulic control levers - Finger tip</li><li>• Quick coupler piping and switch</li></ul>
<b>Cabin and Interior</b>
<ul style="list-style-type: none"><li>• Seat - Air suspension</li><li>• Camera - Rear view</li><li>• Heat wire - Mirror</li></ul>
<b>Eletrical and lighting</b>
<ul style="list-style-type: none"><li>• License lamp</li><li>• Beacon - Rotating</li><li>• Alternator - 24V, 80A</li><li>• EMI Filter</li></ul>

<b>Linkage</b>
<ul style="list-style-type: none"><li>• Z-bar high lift loader linkage</li></ul>
<b>Drivetrain and Brake system</b>
<ul style="list-style-type: none"><li>• High effort brake pedal</li><li>• Axle oil cooler</li></ul>
<b>Steering system</b>
<ul style="list-style-type: none"><li>• Emergency steering pump</li></ul>
<b>External equipment</b>
<ul style="list-style-type: none"><li>• Fender - Full fender + rubber protector</li><li>• Fender - Rubber protector</li><li>• Wheel chocks</li><li>• Anti-noise Kit</li><li>• Counterweight - 0.3t</li><li>• Tool Kit</li><li>• Mud guard</li></ul>

# DIMENSIONS



# Doosan is

Since 1896, Doosan, the oldest company in Korea, has evolved with its people. The company grew up rapidly for last 10 years with reputation. For human-oriented vision, Doosan has been building constructions, energy, machines, infra structures globally. As a global leader of infra structure, Doosan continues its vision to make human-oriented future.

First in Korea, Doosan self-developed excavators in 1985 and continued building versatile construction machines including excavators, wheel loaders, articulated dump trucks to execute its human-oriented philosophy. Doosan became a global leader of heavy construction machine industry by achieving global sales line, producing line, and distribution line. Along with large production bases in Korea, China, USA, Belgium, Czech, Brazil, Doosan has 1400 dealer networks and Doosan is providing reliable products and trusted solutions for your stable business at no risk.



**Doosan Infracore Korea Office (HQ)**  
27F, Doosan Tower, 275, Jangchungdan-ro,  
Jung-gu, Seoul, Korea(04563)  
Tel : 82 2 3398 8114

[www.doosaninfracore.com/ce/](http://www.doosaninfracore.com/ce/)

DIPBE-1006-01-1605

Materials and Specifications in the catalogue are subject to change without notice.