

DOOSAN

Construction Equipment

DX400LC-5

Engine Power	317 HP
Operational Weight	40,200 kg
Bucket Capacity (SAE/PCSA)	2.01 m ³ ~ 2.32 m ³



WHEN THE JOB IS TOUGH,
I COUNT ON DOOSAN TO BE TOUGHER.

DX400LC-5

DIFFERENTIATED PRODUCTIVITY & POWER

DX400LC-5 provides incomparably superior productivity thanks to outstanding engine and pump power. Increased digging power makes great digging performance in heavy quarry and mining job sites.

EXCELLENT QUALITY, RELIABILITY & DURABILITY

DX400LC-5 maximized its uptime by improving quality, reliability and durability while minimized Total Cost of Ownership(TCO) achieved through installing highly advanced fuel saving technics.





RAISE PROFITS, PRODUCTIVITY & FUEL EFFICIENCY

DX400LC-5

High productivity & low cost of ownership

Delivers higher productivity & reduced fuel consumption in an efficient & comfortable work environment.

RELIABILITY

Reinforced castings and forged steel pivot points and reinforced heavy-duty arm and boom to withstand high-impact materials. Large, robust boom and arm cylinders for smooth, powerful operation. Advanced pin & bushing technology.

SAFETY

Rear camera and large side mirrors, powerful lighting, & anti-slip steps and platforms. Guard rails on upper structure.

CONTROLLABILITY

Exclusive jog shuttle switch, 4 work & 4 power modes, proportional control, user-friendly 7" TFT LCD colour monitor.

PRODUCTIVITY

State-of-the-art bucket and arm digging forces.



COMFORT

One of the most spacious cabs in the market, with low noise & vibration levels and excellent all-round visibility. Fully adjustable heated air suspension seat, air conditioning with climate control as standard.

ADVANCED TECHNOLOGIES

Exclusive ECO power system for more performance in combined movements, more comfort, more smoothness and more accuracy.

POWER

Exceptionally powerful - with high torque at low revs - the Stage IV compliant Scania engines are free from Diesel Particulate Filter (DPF) and associated regeneration system for more fuel efficiency.

EFFICIENT FUEL MANAGEMENT

This generation of Scania engines uses up to 10% less fuel. A new SPC (Smart Power Control) system, combined with settable engine shut-off, provides an additional reduction of up to 5%.

EASY MAINTENANCE

Easy access to all compartments. Radiator and oil cooler separated for better cooling and easier access. Maintenance data directly available from control panel.

ADVANCED FILTRATION

Highest efficiency filters & cleaners remove water, dust & particles to protect your investment optimally.

UNDERCARRIAGE DURABILITY

Forged steel and deep-hardened top rollers – oil-lubricated rollers – heat-treated sprocket – deep-hardened, heat-treated, grease lubricated & longer life track chains.

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



TOP PERFORMANCE AND FUEL EFFICIENCY

DX400LC-5



THE POWER TO RAISE PRODUCTIVITY

DX400LC-5 takes even the heaviest tasks in their stride with efficient, dependable performance that saves you time and money:

- Improved hydraulic system uses the engine power more effectively, maximising pump output and offering more comfort, smoothness and accuracy
- Increased digging power, lifting capacities and traction force combine for performance you can rely on, day after day
- Greater fuel efficiency means you can keep costs down and reduce environmental impact



OPTIMISED POWER MANAGEMENT

DX400LC-5 is equipped with a Scania engine. Famous for excellent fuel efficiency, reliability and long service life, it combines exceptional power output and high torque at low revs. XPI (extra-high pressure injection) common-rail fuel injection (2400 bar) 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 regulations. As there is no need for a particulate filter, there is no need for regeneration.

If the engine is the heart of the excavator, the e-EPOS is its brain - providing a perfectly synchronised communication link between the engine's ECU (Electronic Control Unit) and the hydraulic system. A CAN (Controller Area Network) system enables a constant flow of information between engine and hydraulic system, so that power is delivered exactly as needed.

Exclusive ECO power system which combines electric control of the pump power with a closed-centre main control valve. Results show more powerful performance in combined movements, more comfort, more smoothness and more accuracy.

EFFICIENT FUEL MANAGEMENT

- Choice between 4 power modes and 4 working modes guarantees optimum performance in all conditions
- SPC (Smart Power Control): reduces engine RPM during low load demand & ensures pump torque control, thus ensuring fuel efficiency and low emissions
- Engine auto-shut-off: shuts down the engine after the machine has been idling for a specified time
- Electronic control of fuel consumption optimises efficiency
- Auto-idle function saves fuel
- Eco guidance in real time: eco gauge provides information about fuel consumption relative to machine performance in real-time. By trying to keep the right-hand LED bar from rising, the operator can teach himself how to save fuel and work efficiently
- Separate radiator & hydraulic oil cooler assemblies: allows the hydraulically-driven oil cooler's fan speed to be controlled by the electronics in order to maintain the optimum oil temperature and reduce noise & fuel consumption



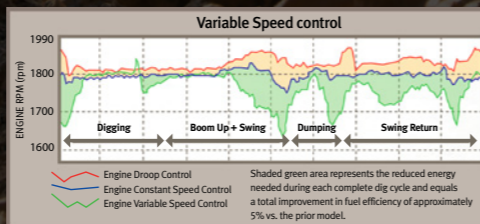
D-ECOPOWER

REAL BREAKTHROUGH TECHNOLOGY THAT WILL SET NEW STANDARDS IN THE INDUSTRY:

The exclusive ECO power system improves productivity and saves fuel. A pressure-controlled pump, closed-center main control valve and 9 sensors electronically detect and control the precise amount of hydraulic oil required to perform a task and precisely meter the amount of oil required rather than continuously forcing a fixed amount of oil through the system, thereby improving efficiency. The hydraulic system output requirements are optimized with engine horsepower. The resulting efficiency sharply improves productivity and reduces fuel consumption. Improved feedback through the controls results in an outstanding level of operator comfort and much smoother machine control.

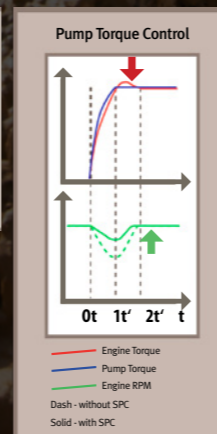
DOUBLE PUMP FLOW (OPTION)

Combines the power of the 2 variable displacement tandem axial piston pumps to deliver extra flow for attachments requiring high hydraulic capacity.



SPC (SMART POWER CONTROL)

Two systems (Variable Speed Control and Pump Torque Control) work together to improve efficiency while maintaining productivity.



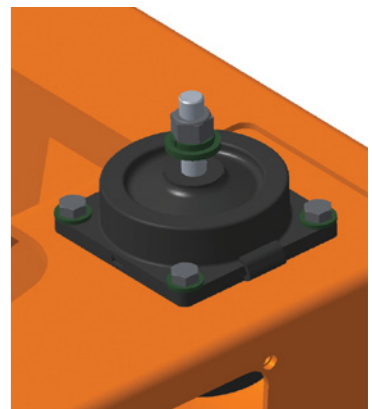


- 1. Large sun roof
- 2. Sun visor
- 3. Storage compartment for sunglasses
- 4. Window grip
- 5. Hot/cool box
- 6. Upper front window is strut-assisted for easy, reliable adjustment and integrates a sun shade
- 7. Photo sensor detects radiant energy from the sun and adjusts temperature automatically

- 8. Improved visibility on the bottom right
- 9. Joysticks and switches are integrated in adjustable control consoles
- 10. Separate seat height adjustment lever and cushion tilting function
- 11. Straight ergonomic pedals
- 12. Flat, spacious, easy-to-clean floor
- 13. Pedal for auxiliary control 1 & 2 ways
- 14. Engine emergency stop switch

THE IDEAL WORKSPACE – DESIGNED AROUND YOU

DX400LC-5 is designed to provide you with the best possible working conditions. The pressurized cab is ISO-certified for your safety. Its spacious interior offers a fully adjustable, heated air suspension seat. Comfortably seated, you have easy access to several storage compartments and a clear all-round view of the worksite. Noise and vibration levels have been reduced, while air conditioning and automatic climate control allow you to keep working for hours on end without feeling tired.



BEST-IN-CLASS OPERATOR ENVIRONMENT

Doosan Crawler Excavators are powered by industry-leading engines that save on fuel and meet the latest Stage IV European regulations in addition to all noise regulations. The low levels of cab vibration and noise provide exceptional operator comfort - and the cab air is filtered to ensure a healthy work environment.

STRAIGHT TRAVEL PEDAL

For straight machine movement – ensures comfort during on hill operation or front equipment combined movements such as boom/arm or boom/ swing.

TWO-WAY PROPORTIONAL PEDAL

For maximum comfort when operating attachments - operator can easily set his preference in the control panel to operate with the rollers on joystick or with the pedal.

HEATED AIR SUSPENSION SEAT (STANDARD)

In addition to being adjustable and providing lumbar support, the seat has an air suspension system to reduce vibrations. It also features a seat heating system (activated at the touch of a button). A storage box has been placed under the seat for extra convenience.

AIR CONDITIONING WITH CLIMATE CONTROL

The operator can choose from 5 different modes to regulate the airflow, while the system adjusts the air temperature & fan speed to maintain the operator's selected temperature. A recirculated air function is also available.

MP3/USB RADIO

MP3 player

STORAGE SPACE

The new cab contains 7 storage compartments including one hot/cool box (linked to the HVAC system).

CABSUS MOUNT

The cab's new suspension system (CabSus mount) dampens high vibrations and provides outstanding protection against impact. The system absorbs shocks and vibrations much more effectively than a conventional viscous suspension system.



TOTAL CONTROL IN ALL SIMPLICITY

DX400LC-5



SIMPLE CONTROL

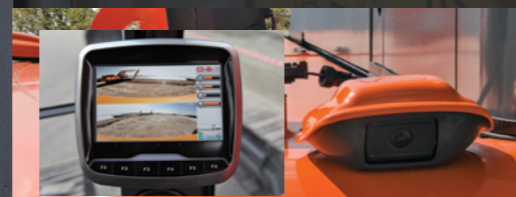
Doosan's exclusive jog shuttle switch for easy and precise control over all machine functions.



1. Power Boost switch & One-touch deceleration switch
2. Thumb wheel switch allow proportional control of attachments
3. "Short stroke" joysticks enable easy, precise control of all operations
4. Exclusive jog shuttle switch
5. Automatic travel speed switch
6. Working lights switch
7. Climate control & HVAC
8. Remote control of radio
9. Wipers control
10. Power socket 12V

YOUR SAFETY

standard cab and boom lights, large side mirrors and rear view camera improve all-round visibility and thus safety. Other standard safety features: anti-slip plates, automatic overheating alarm warning, low oil pressure sensor, engine emergency cut-off switch, auxiliary mode switch (allows a safe level of hydraulics operation in case of EPOS failure), overload warning device. Optional travel/swing alarm and side view camera are also available.



Rear & side view cameras



Work lights

THE HIGHEST STANDARDS OF EFFICIENCY AT YOUR FINGERTIPS

The advanced & user-friendly technologies are just some of the many advantages of this generation. The ergonomic controls and the easy-to-view colour monitor place the machine firmly in your hands.

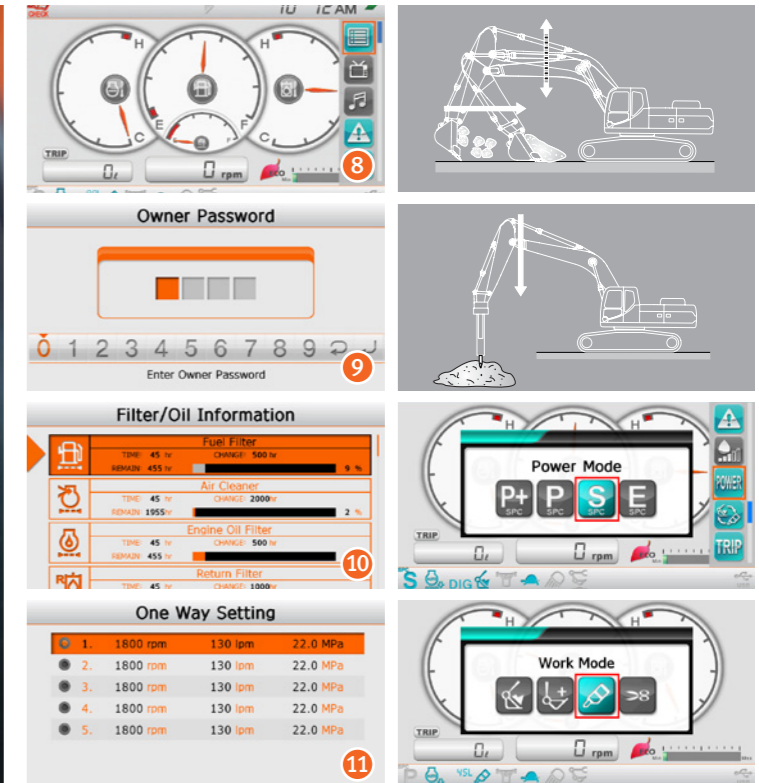
- The new multi-function 7" TFT LCD monitor displays a comprehensive range of useful technical information, allowing you to check the machine's status and settings at a glance
- Highly sensitive & low-effort joysticks and clear convenient controls enable you to work safely, smoothly & confidently with minimum effort for increased comfort, efficiency and production
- Doosan's unique jog shuttle switch gives you easy, precise control over all machine functions
- Proportional auxiliary flow means precision control, smoothness & efficiency when using attachments



TFT LCD COLOUR MONITOR PANEL

The upgraded 7" Thin-Film-Transistor (TFT is a technology that improves image quality) LCD panel features a day and night display. The user-friendly monitor 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. All functions are totally controllable, directly via the screen or using the exclusive jog shuttle switch.

1. Fuel consumption level: current, total & daily average fuel consumption
2. Fuel level
3. AdBlue® level
4. Eco symbol: changes colour when operating conditions change (idle, normal or loading)
5. Eco gauge: shows the average fuel efficiency
6. Engine coolant and hydraulic oil temperatures
7. Warning symbols
8. New shortcut menu: displayed on the right for rapid access to main functions
9. Optional anti-theft password-controlled starting
10. Filter oil information
11. Attachment management: stores up to 10 different attachment presets, enabling the operator to set hydraulic flow & pressure according to his needs



DYNAMIC POWER MANAGEMENT

- Automatic travel speed function
- Activating the power boost control system increases digging force by 10%
- A one-touch deceleration button immediately reduces engine speed to low or idle
- Auto-idling starts 4 seconds after all controls are returned to neutral - decreasing fuel consumption and reducing noise levels in the cab

INTELLIGENT FLOATING BOOM MODE (OPTIONAL)

The "intelligent floating boom" function allows the boom to move up & down freely according to application:

- Hydraulic breaker setting: during boom down operation the boom moves down freely under its own weight, which reduces vibration, stress on the machine & increases breaker life
- Fully floating mode: during boom down selection the boom is allowed to rise & fall as required while the bucket is drawn across the ground

4 WORK MODES & 4 POWER MODES

Deliver the needed power according to your specific application while minimising fuel consumption:

- 1-way mode, 2-way mode, Digging mode and Lifting mode
- Power-plus mode, Power mode, Standard mode, Economy mode



RELIABILITY, THE HABIT OF A LIFETIME

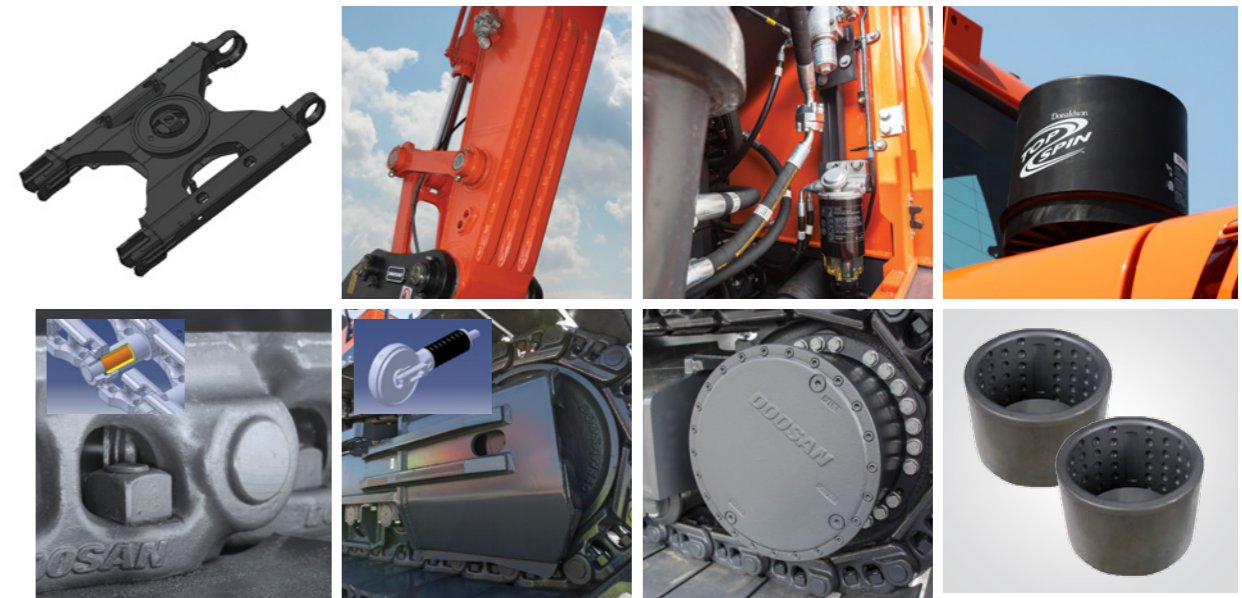
DX400LC-5



DESIGNED FOR LONG-TERM ALL-ROUND HEAVY DUTY PERFORMANCE

In your profession, you need equipment you can depend on. At Doosan, we use highly specialised design and analysis tools to make sure our machines are as robust and durable as can be. Our materials and structures undergo stringent testing for strength and resilience under the most extreme conditions.

And we continually manufacture the most durable machines to ensure lower cost of ownership.



EXTRA-STRONG X-CHASSIS

Designed using Finite Element Analysis and 3D computer simulation, the X-shaped undercarriage ensures optimum structural integrity and durability.

UNDERCARRIAGE DURABILITY

- The chain is composed of sealed, self-lubricating links for long-term dependability. For improved protection, alignment and performance, there are 3 types of guard - normal, double or full-length - according to the model
- The track spring and idler are joined for long-lasting performance and easy maintenance
- Cast steel heavy-duty sprockets guarantee the highest resistance
- Track rollers lubricated for life

STRENGTHENED BOOM & ARM

Finite Element Analysis has been used to calculate the best load distribution throughout the boom structure. Combined with thicker material, this means that element fatigue is limited and both reliability and component life are increased.

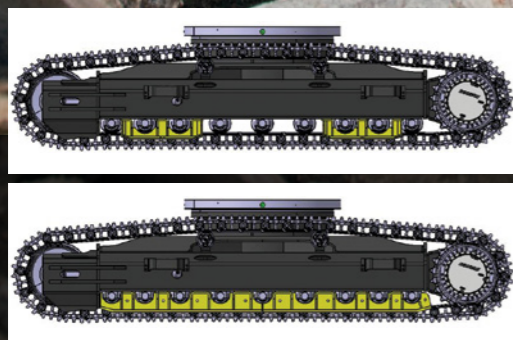
To better protect the base of the arm, reinforced bars have been added and the arm centre and end boss have been strengthened.

ADVANCED FILTRATION

- Fuel filters & water separator: a filter-type high-performance water separator effectively captures moisture in the fuel, reducing impurities and helping minimise any fuel-related issues. Pre-filters and dual main filters as standard minimise fuel system failures
- Cyclonic air pre-cleaner: air filter life & engine efficiency are directly related to the amount of debris ingested through the engine's air intake. Therefore, a cyclonic air pre-cleaner (as standard) is the first stage of an air intake system that prevents the majority of heavier-than-air particles from entering. Self-cleaning and maintenance-free, the system is able to expel all types of mixed debris, including mud, snow, rain, leaves, sawdust, chaff, etc

PIN & BUSHING ADVANCED TECHNOLOGY

Highly lubricated metal is used for the boom pivot to increase the component's lifetime and lengthen greasing intervals. The bucket pivot features EM (Enhanced Macrosurface) bushings, which have a tailored surface pattern and self-lubricating coating to optimise greasing and make removal of debris more efficient. Ultra-hard wear-resistant discs & bucket pivot polymer shim increase durability even more.



TRACK GUARDS

to provide better protection, track alignment, and performance of machine while travelling. 2 guards per track as standard (double and full-length track guards available as options). These various track guard options provide you with optimal solutions for your extreme applications.



SIMPLE MAINTENANCE WITH MAXIMUM UPTIME

DX400LC-5



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, should you need it. Choose the package you need from a broad range of service agreements to get the most out of your machine. Uptime, productivity and residual value are all maximised, making these excavators an economical and rewarding choice.

Building further on the success of the Stage IIIB engines, the new Stage IV Scania engine has no need for a DPF filter to meet the Stage IV emissions requirements - which means no maintenance required, so more uptime!



MAINTENANCE ACCESS MADE SIMPLE

- Large guard rails are installed along with anti-slip steps and plates, for safer, easier access to the whole upper structure
- The cab's air-conditioning filter is lockable and placed on the side of the cab for easy access
- A battery cut-off switch makes it easy to disconnect the battery during long-term storage
- The hour meter display can be easily checked from ground level
- Shut-off valves have been fitted on the pre-filter piping line and fuel tank drain piping to make servicing easier and prevent pollution from leakage
- Engine parts can be easily reached via the top and side panels
- The radiator and oil cooler have been separated, making access for cleaning easier
- For extra accessibility and servicing convenience, all filters (engine oil filter, fuel pre-filter, fuel filter and pilot filter) are located in the pump compartment

GLOBAL DOOSAN NETWORK

With a network of Doosan dealers & Parts Distribution centres worldwide, your Doosan excavator can be serviced & maintained wherever you are.

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 complete peace of mind
- 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

SCR TANK

Connected to the ECU, sensors in tank detect low level of AdBlue® & any system malfunction

LONGER SERVICE INTERVALS

More than 99.5% of foreign particles are filtered out in oil return filters and engine oil filters - so the oil & filter change interval is longer.

CENTRALISED GREASING POINTS

To make maintenance easier, the greasing points have been centralised.



Battery cut-off switch

Guard rails (Option)

SCR Tank

Hour meter (from ground level)

TECHNICAL SPECIFICATIONS

ENGINE

Designed to deliver superior performance and fuel efficiency, the Scania Stage IV diesel engine fully meets the latest emissions regulations. To optimise machine performance, the engine uses high-pressure fuel injectors, air-to-air inter-cooler and electronic engine controls. 4-Cycle Water-Cooled, Variable Geometry Turbocharged, Exhaust Gas Recirculation (EGR) & Selective Catalytic Reduction (SCR) with no Diesel Particulate Filter (DPF).

Model	Scania DC09
No. of cylinders	5
Rated power at 1800 rpm	(SAE J1995) 237 kW (317.6 HP) (SAE J1349) 233 kW (312.2 HP) (ISO 9249) 233 kW (316.9 PS)
Max. torque at 1300 rpm	135 kgf.m (1,324 Nm)
Idle (low - high)	800[±20] - 1,850[±25] rpm
Piston displacement	9,300 cm ³
Bore x stroke	130 mm x 140 mm
Starter	24 V x 6 kW
Batteries - Alternator	2 x 12 V, 200 Ah - 24 V, 100 Ah
Air filter	Double element air cleaner and prefiltered Cyclone Turbo dust separator

HYDRAULIC SYSTEM

The e-EPOS (Electronic Power Optimising System) is the brain of the excavator - minimising fuel consumption and enabling the efficiency of the hydraulic system to be optimised for all working conditions. To harmonise the operation of the engine and the hydraulics, the e-EPOS is connected to the engine's electronic control unit (ECU) via a data transfer link.

- The hydraulic system enables independent or combined operations
- 2 travel speeds offer either increased torque or high speed
- Cross-sensing pump system for fuel savings
- Auto-deceleration system
- 4 working mode, 4 power mode
- Flow and pressure control of auxiliary

Pumps & system pressure

Main pumps, type	2 x variable displacement tandem axial piston pumps
Maximum flow at 1800 rpm	2 x 350 l/min
Pilot pump, type	Gear pump
Maximum flow at 1800 rpm	24.12 l/min

Relief valve settings

Implement	350 kg/cm ²
Travel	350 kg/cm ²
Swing	300 kg/cm ²
Pilot	40.8 kg/cm ²

HYDRAULIC CYLINDERS

High-strength steel piston rods and cylinder bodies. Shock-absorbing mechanism fitted in all cylinders for shock-free operation and extended piston life.

Cylinders	Quantity	Bore x Rod diameter x stroke (mm)
Boom	2	160 x 105 x 1,450
Arm	1	170 x 120 x 1,805
Bucket	1	150 x 100 x 1,300

WEIGHT

DX400LC-5	Shoe width (mm)	Operating weight (t)	Ground pressure (kPa)
Triple grouser	600 (Std)	40.2	0.73
	750	40.9	0.60
	800	41.2	0.56
	900	41.6	0.50
Double grouser	600	40.3	0.73

COMPONENT WEIGHTS

Item	Unit	DX400LC-5	Remarks
Upper structure without front	kg	17,200	With counterweight
Lower structure assembly	kg	14,925	
Front assembly	kg	8,136	Based on standard *
Boom	mm	6,500	Including bushing
	kg	3,028	
Arm	mm	2,600 / 3,200 / 3,950	Including bushing
	kg	1,183 / 1,733 / 1,548	

(*) DX400LC-5: standard front – 6500 mm boom, 3200 mm arm, 1.61 m³ GP bucket.

SWING MECHANISM

The swing mechanism uses an axial piston motor, driving a 2-stage planetary reduction gear bathed in oil for maximum torque.

- Swing bearing: single-row, shear type ball bearing with induction hardened internal gear
- Internal gear and pinion immersed in lubricant

Swing speed & torque

Maximum swing speed	9.6 rpm
Maximum swing torque	14,570 kgf/m

DRIVE

Each track is driven by an independent, high-torque axial piston motor through a planetary reduction gearbox. Two levers / foot pedals guarantee smooth travel with counter-rotation on demand. The track frame protects the travel motor, brake and planetary gears. The multi-disc track brakes are spring-applied and hydraulic released.

Speed & traction

Travel speed (low - high)	3.4 - 5.9 km/h
Maximum traction	39.7 t
Maximum gradeability	35° / 70%

FLUID CAPACITIES

Fuel tank	600 l
Cooling system (radiator)	52 l
Urea (def) tank	70 l
Hydraulic oil tank	380 l
Engine oil	36 l
Swing drive	7.0 l
Travel device	2 x 7.0 l

BUCKETS

		C/W (ton)		7.4		
		SHOE (mm)		600		
Bucket Type	Capacity		Width W/O Cutter (mm)	Weight (kg)	6.5m HD Boom	
	SAE/PCSA (m ³)	CECE (m ³)			2.6m Arm	3.2m HD
H Class	1.44	1.30	1,200	1,309	A	A
	1.66	1.49	1,350	1,401	A	A
	1.81	1.61	1,450	1,495	A	A
	2.03	1.80	1,600	1,587	A	B
	2.32	2.05	1,800	1,711	B	C
S Class	1.56	1.40	1,350	1,865	A	A
	1.71	1.53	1,450	1,943	A	A
	1.78	1.59	1,500	1,982	A	A
	1.92	1.71	1,600	2,060	A	C
	2.07	1.84	1,700	2,138	B	C

A : Suitable for materials with a density less than or equal to 2100 kg/m³
B : Suitable for materials with a density less than or equal to 1800 kg/m³

C : Suitable for materials with a density less than or equal to 1500 kg/m³
D : Suitable for materials with a density less than or equal to 1200 kg/m³
Based on ISO 10567 and SAE J296, arm length without quick-coupler. For reference only

UNDERCARRIAGE

Extremely robust construction throughout - made of high-quality, durable materials, with all welded structures designed to limit stresses.

- Track rollers lubricated for life
- Idlers and sprockets fitted with floating seals
- Track shoes made of induction-hardened alloy with triple grouser
- Heat-treated connecting pins
- Hydraulic track adjuster with shock-absorbing tension mechanism

Number of rollers and track shoes per side

Upper rollers (standard shoe)	2
Lower rollers	9
Number of links & shoes per side	50
Link pitch	216 mm
Overall track length	5,200 mm

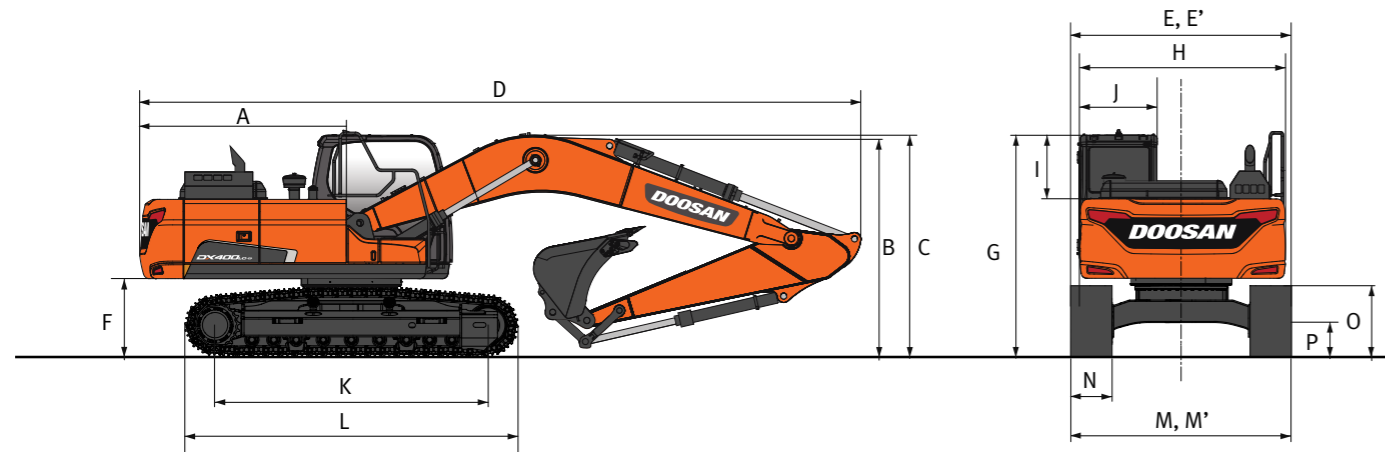
CAB

The air-conditioning and heating systems are integrated for optimal climate control. An automatically-controlled fan supplies the pressurized and filtered cab air, which is distributed throughout the cab from multiple vents. The heated air suspension, adjustable operator's seat includes a seat belt. The operator can adjust the ergonomic seat and joystick console separately according to his preferences.

Noise emission

A-weighted emission sound pressure level at the operator's position, LpAd (ISO 6396:2008)	71 dB(A)
A-weighted sound power level, LwAd (2000/14/EC)	Declared : 105 dB(A) Measured : 103 dB(A)

DIMENSIONS



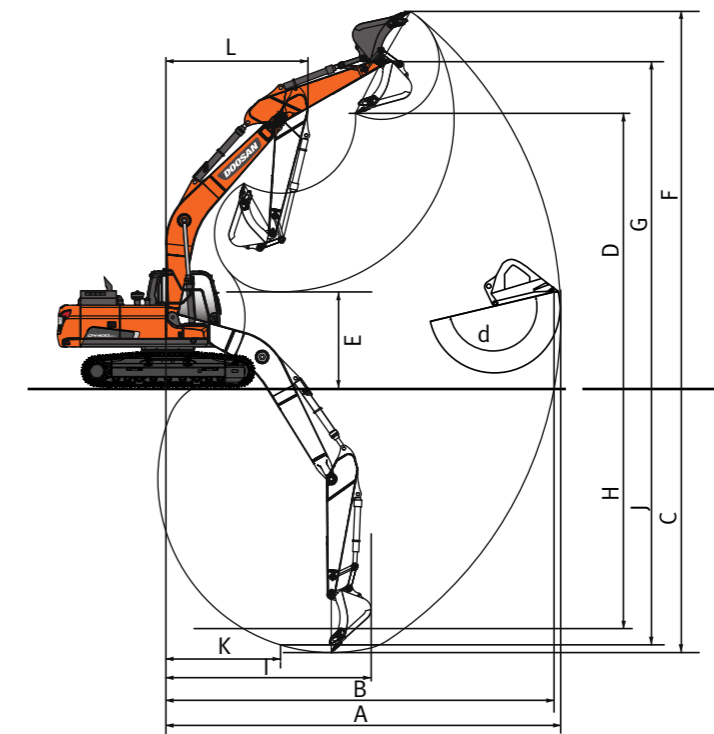
DIMENSIONS

	DX400LC-5		
	One-piece boom - 6,500		
Boom length - mm			
Arm length - mm	2,600	3,200	3,950
Bucket capacity - m ³	1.83	1.61	1.25
A Tail swing radius - mm	3,500	3,500	3,500
B Shipping height (boom) - mm	3,505	3,225	3,390
C Shipping height (hose) - mm	3,650	3,390	3,535
D Shipping length - mm	11,375	11,280	11,285
E Shipping width std. - mm	3,350	3,350	3,350
E' Shipping width narrow - mm	3,000	3,000	3,000
F Counterweight clearance - mm	1,265	1,265	1,265
G Height over cab - mm	3,148	3,148	3,148
H House width - mm	2,990	2,990	2,990
H' House width (catwalk) - mm	-	-	-
I Cab height above house - mm	845	845	845
J Cab width - mm	1,010	1,010	1,010
K Tumbler distance - mm	4,250	4,250	4,250
L Track length - mm	5,200	5,200	5,200
M Undercarriage width std - mm	3,350	3,350	3,350
M' Undercarriage width narrow - mm	3,000	3,000	3,000
N Shoe width std. - mm	600	600	600
O Track height - mm	1,140	1,140	1,140
P Ground clearance - mm	540	540	540

DIGGING FORCES (ISO)

	DX400LC-5		
	One-piece boom - 6,500		
Boom length - mm			
Arm length - mm	2,600	3,200	3,950
Bucket capacity - m ³	1.83	1.61	1.25
BUCKET (Normal/Press. Up) - ton	24.4 / 25.9	24.4 / 25.9	24.4 / 25.9
ARM (Normal/Press. Up) - ton	22.0 / 23.3	17.9 / 18.9	15.1 / 15.9

WORKING RANGES



WORKING RANGES

	DX400LC-5		
	One-piece boom - 6,500		
Boom length - mm			
Arm length - mm	2,600	3,200	3,950
Bucket capacity - m ³	1.83	1.61	1.25
A Max. digging reach - mm	10,585	11,170	11,930
B Max. digging reach (ground) - mm	10,360	10,970	11,730
C Max. digging depth - mm	6,860	7,460	8,220
D Max. loading height - mm	6,940	7,250	7,710
E Min. loading height - mm	3,385	2,710	2,025
F Max. digging height - mm	10,040	10,390	10,890
G Max. bucket pin height - mm	8,640	8,880	9,410
H Max. vertical wall depth - mm	5,020	5,890	6,815
I Max. radius vertical - mm	7,710	7,720	7,780
J Max. digging depth (8" level) - mm	6,630	7,345	8,070
K Min. radius 8" level - mm	3,270	3,320	3,390
L Min. digging reach - mm	2,100	710	-400
M Min. swing radius - mm	4,480	4,455	4,515
d Bucket angle - °	178	178	178

DOOSAN BUCKETS

4 More. More choice - More durable - More strength - More performance!



General Construction Bucket
The General purpose bucket is designed for digging and re-handling soft to medium materials (e.g. materials with low wear characteristics such as top-soil, loam, coal).



Heavy Construction Bucket
The Heavy duty bucket is designed for mass excavations in dense materials such as hard packed clay, shot limestone, limited rock content and gravel.

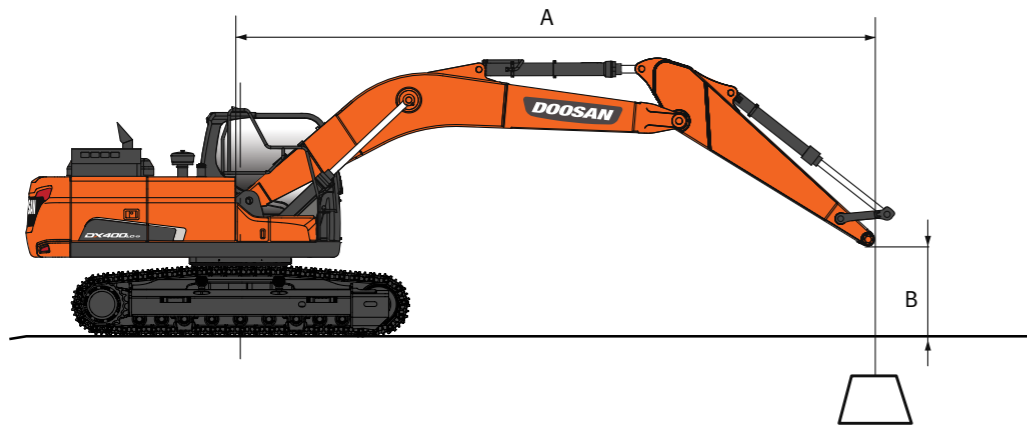


Severe Mining Bucket
The Severe duty bucket is designed for durability in digging compact materials like loose or blasted rock, hard packed clay and stone.



X-treme Mining Bucket
The X-treme duty bucket is designed as a long-life version of the Severe duty bucket for digging in the most abrasive materials.

LIFTING CAPACITY



Option 1

Standard track : 3,350 mm Boom : 6.5m Arm : 2.6m Without bucket Shoe : 600mm Counterweight : 7.4t Unit : 1,000kg

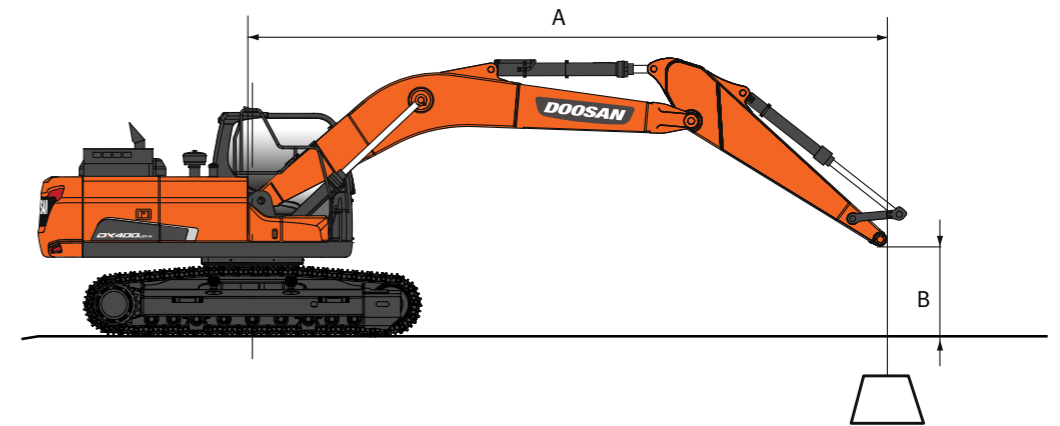
A(m)	1.5		3		4.5		6		7.5		9		Max. Reach		A(m)	
7.5														10.53 *	8.54	7.05
6														10.43 *	6.9	7.99
4.5					16.65 *	15.74			11.33 *	10.86	10.50 *	7.67		10.38	6.06	8.56
3									14.69 *	9.79	12.01 *	7.18		9.73	5.64	8.84
1.5									16.09 *	9.35	12.23	6.93		9.57	5.51	8.86
0 (Ground)					21.70 *	13.59			16.68 *	9.11	12.05	6.77		9.89	5.65	8.61
-1.5			15.84 *	15.84 *	21.46 *	13.65	16.35 *	9.06	12.01	6.74				10.83	6.15	8.08
-3			24.88 *	24.88 *	19.29 *	13.86	14.90 *	9.18						11.88 *	7.25	7.20
-4.5			19.39 *	19.39 *	15.24 *	14.3								11.65 *	10.01	5.80

Option 2

Standard track : 3,350 mm Boom : 6.5m Arm : 3.2m Without bucket Shoe : 600mm Counterweight : 7.4t Unit : 1,000kg

A(m)	1.5		3		4.5		6		7.5		9		Max. Reach		A(m)	
7.5									9.20 *	7.85				7.78 *	7.37	7.78
6									9.64 *	7.76				7.60 *	6.12	8.64
4.5					14.86 *	14.86 *	11.90 *	10.51	10.41 *	7.51	9.00 *	5.62		7.69 *	5.45	9.17
3					18.90 *	14.81	13.82 *	9.9 1	1.41 *	7.2	9.48	5.48		8.02 *	5.1	9.43
1.5					21.69 *	13.87	15.47 *	9.38	12.22	6.91	9.31	5.34		8.64 *	4.98	9.44
0 (Ground)					22.53 *	13.5	16.40 *	9.05	11.99	6.71	9.2	5.24		8.9	5.08	9.21
-1.5			15.35 *	15.35 *	22.02 *	13.44	16.46 *	8.93	11.89	6.62				9.61	5.45	8.71
-3	18.17 *	18.17 *	23.86 *	23.86 *	20.36 *	13.58	15.51 *	8.98	11.96	6.68				11.07 *	6.26	7.91
-4.5			22.83 *	22.83 *	17.16 *	13.94	12.98 *	9.24						11.16 *	8.08	6.66

- Ratings are based on sae j1097
 - Load point is the hook on the back of the bucket.
 - * = Rated loads are based on hydraulic capacity.
 - Rated loads do not exceed 87% of hyd. capacity or 75% of tipping capacity.
- : Nominal force
 : Nominal force at the side or 360°



Option 3

Standard track : 3,350 mm Boom : 6.5m Arm : 3.95m Without bucket Shoe : 600mm Counterweight : 7.4t Unit : 1,000kg

A(m)	1.5		3		4.5		6		7.5		9		Max. Reach		A(m)	
9														6.27 *	6.27 *	
7.5														6.10 *	6.10 *	7.54
6														5.69 *	5.69 *	8.69
4.5									8.59 *	7.9	7.48 *	5.81		5.54 *	5.29	9.46
3									10.55 *	10.55 *	9.45 *	7.61	8.83 *	5.68	5.57 *	4.77
1.5									16.69 *	15.29	12.59 *	10.06	10.56 *	7.25	9.40 *	5.49
0 (Ground)									20.17 *	14.08	14.50 *	9.44	11.65 *	6.9	9.29	5.3
-1.5	9.94 *	9.94 *	14.04 *	14.04 *	22.21 *	13.19	16.32 *	8.77	11.75	6.48	9.03	5.07		7.61 *	4.7	9.54
-3	14.97 *	14.97 *	20.03 *	20.03 *	21.24 *	13.23	15.92 *	8.74	11.73	6.46				9.22 *	5.27	8.80
-4.5	21.04 *	21.04 *	26.32 *	26.32 *	18.92 *	13.48	14.32 *	8.89	10.77 *	6.62				10.23 *	6.42	7.70
-6			19.52 *	19.52 *	14.40 *	14.01	10.22 *	9.34						10.02 *	9.24	6.05

Option 4

Standard track : 3,350 mm Boom : 6.5m Arm : 3.2m Without bucket Shoe : 800mm Counterweight : 7.4t Unit : 1,000kg

A(m)	1.5		3		4.5		6		7.5		9		Max. Reach		A(m)	
7.5									9.20 *	8.01				7.78 *	7.52	7.78
6									9.64 *	7.92				7.60 *	6.25	8.64
4.5					14.86 *	14.86 *	11.90 *	10.71	10.41 *	7.67	9.00 *	5.75		7.69 *	5.57	9.17
3					18.90 *	15.11	13.82 *	10.1	11.41 *	7.36	9.7	5.61		8.02 *	5.21	9.43
1.5					21.69 *	14.17	15.47 *	9.58	12.33 *	7.07	9.54	5.46		8.64 *	5.1	9.44
0 (Ground)					22.53 *	13.8	16.40 *	9.26	12.28	6.86	9.43	5.36		9.12	5.2	9.21
-1.5			15.35 *	15.35 *	22.02 *	13.74	16.46 *	9.13	12.17	6.77				9.84	5.58	8.71
-3	18.17 *	18.17 *	23.86 *	23.86 *	20.36 *	13.89	15.51 *	9.18	12.00 *	6.83				11.07 *	6.41	7.91
-4.5			22.83 *	22.83 *	17.16 *	14.24	12.98 *	9.44						11.16 *	8.26	6.66

- Ratings are based on sae j1097
 - Load point is the hook on the back of the bucket.
 - * = Rated loads are based on hydraulic capacity.
 - Rated loads do not exceed 87% of hyd. capacity or 75% of tipping capacity.
- : Nominal force
 : Nominal force at the side or 360°

STANDARD AND OPTIONAL EQUIPMENT

STANDARD EQUIPMENT

Engine

- Scania, Stage IV compliant, SCR, EGR, DOC, water-cooled diesel engine
- with Variable Turbo Charger and air-to-air intercooler
- Auto-idle function
- Auto shut-off
- No DPF

Hydraulic system

- ECOPOWER
- Boom and arm flow regeneration
- Swing anti-rebound valves
- Spare ports (valve)
- One-touch power boost function
- Smart Power Control (SPC)
- Breaker piping
- Cylinder cushioning & contamination seals
- Control of auxiliary hydraulic flow and pressure from the display panel

Cab & Interior

- Pressurized, sound-insulated and CabSus mounted cab
- Heated, adjustable air suspension seat with adjustable headrest and armrest
- Air conditioning with climate control
- Pull-up type front window with sun roller blind and removable lower front window
- Sliding left window
- Intermittent upper and lower windshield wiper
- Rear window defroster switch
- Adjustable PPC wrist control levers for arm, boom, bucket and swing
- Joysticks and pedals provide proportional control of auxiliary lines for attachments
- Travel pedals and hand levers
- Jog shuttle switch
- 7" (18 cm) TFT LCD colour monitor panel
- Attachment management system
- Automatic travel speed
- 4 operating modes & 4 working modes
- Electric horn
- Cigarette lighter
- Ceiling light
- Cup holder
- Multiple storage compartments (e.g. document holder under seat)
- Storage area (tools, etc.)
- Hot and cool box
- Flat, spacious, easy-to-clean floor
- Master key
- Anti-theft protection
- 12 V spare power socket
- Serial communication port for laptop PC interface
- Remote radio ON/OFF switch
- Loudspeakers and connections for radio

Safety

- Roll Over Protective Structure (ROPS)
- Boom and arm cylinder safety valves
- Overload warning device
- Rotating beacon
- Rear-view camera
- Punched metal anti-slip plates
- Hydraulic safety lock lever
- Safety glass
- Hammer for emergency escape
- Right and left rear-view mirrors
- Lockable fuel cap and covers
- Battery cut-off switch
- Engine restart prevention system
- Parking brake
- Work lights (2 front frame, 4 front cab-mounted, 2 rear cab-mounted, 2 boom-mounted and 1 rear side)
- Emergency engine stop switch and hydraulic pump control switch

Other

- Boom: 6.50 m – arm: 3.20 m HD – Counterweight: 7400 kg
- "DOOSAN CONNECT" Telematic system
- Auto shut-off fuel filler pump
- Double element air cleaner and pre-filtered Cyclone Turbo dust separator
- Fuel pre-filter with water separator sensor
- Dust screen for radiator/oil cooler
- Hydraulically-driven oil cooler fan
- Self-diagnostic function
- Alternator (24 V, 100 A) - Battery (2 x 12 V, 200 Ah)
- Hydrostatic 2-speed travel system with automatic shift
- Remote greasing for swing circle and work group pivot points
- Guards for work lights

Undercarriage

- Hydraulic track adjuster
- Normal track guards
- Greased and sealed track links
- 600 mm triple grouser shoe

OPTIONAL EQUIPMENT

Cab & Interior

- MP3/USB radio

Safety

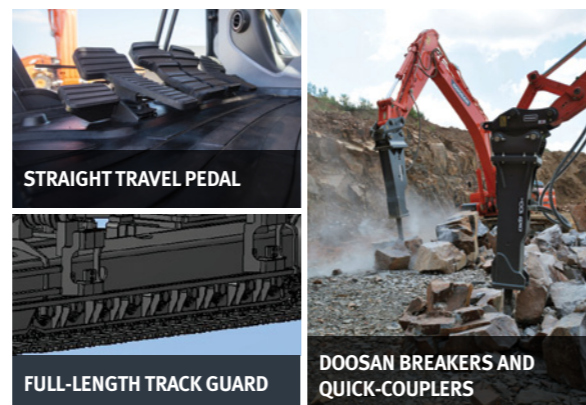
- FOGS cab - top and front cab guards (ISO 10262)
- Front window upper and lower guards
- Side-view camera
- Large guard rails on upper structure and steps

Other

- Arms: 2.60 m, 3.95 m Boom: 6.50 m HD
- Heavy-duty bottom cover
- Doosan buckets: full range of GP, HD & Rock buckets
- Doosan breakers and Doosan quick-couplers
- Hydraulic piping for crusher, quick-coupler, tilting and rotating buckets
- Additional filter for breaker piping
- Floating boom
- Double pump flow
- Engine coolant heater
- Oil-washed air cleaner
- Straight travel pedal (not to be combined with two-piece boom)
- Bio oil
- Automatic lubrication system
- Alarm for travel & swing

Undercarriage

- Double track guards
- Full-length track guards
- 600 mm double grouser shoe
- 750, 800, 900 mm triple grouser shoe



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.



DOOSAN CONNECT TELEMATIC SYSTEM

is the technology of sending, receiving and storing information via telecommunication devices in conjunction with affecting control on remote objects.

It will provide in a dual mode (satellite, GSM) many details about the performances of your equipment such as operation hours, fuel efficiency, GPS, fault code/warning and reports.

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.



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