



Doosan Infracore
Construction Equipment



ESCORTS
CONSTRUCTION EQUIPMENT

DX360LCA

Engine Power: SAE J1349:185kw 247HP@1,800rpm

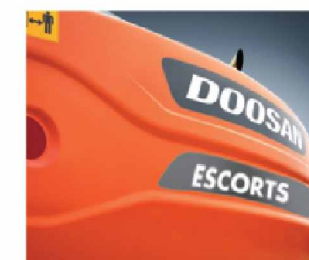
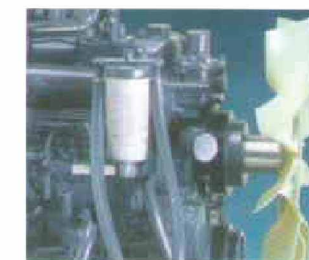
Operational Weight: 35,110kg (77,404lb)

Bucket Capacity(SAE): 1.49 ~ 2.35m³

HD⁺ 



DX360LCA HD+ Version



Doosan's revolutionary design philosophy revolves around the common objective of "Optimum value to the End user".

Built to deliver exceptional productivity

Perfectly matched synchronization of Doosan manufactured engine and hydraulics delivers more tons per hour

Powerful & fuel-efficient Doosan Engine

Intelligent e-EPOS excavator control

High pump capacity to match high engine power

Range of Buckets (1.5 – 2.35 cu.m)

DX360LCA HD+ Version



Reinforced Idler Guard

Heavy duty LC undercarriage

- 9 Track rollers with 3 track guards
- Reinforced idler guards
- Sturdy tracks
- Optional heavy duty full length track roller guards

Excellent visibility, precise control & spacious cabin enable increased productivity due to high efficiency of operator

- Better stability with LC undercarriage and heavy counterweight
- Air conditioned cabin
- Improved front visibility from cabin
- Better rear visibility with low height of engine hood



Hardox reinforcement strips

Superior durability of structures built for long service life in demanding sites and work environments

- Heavy duty structures
 - Reinforced heavy duty boom & arm
 - Hardox reinforcement strips
 - HD bucket linkages
- Reinforced long undercarriage
- Enhanced engine life due to robust design

Easy maintenance with most items accessible from ground level

- Long service intervals
- Lowest operating cost
- Ease of maintenance
 - Self – diagnosis function keeps a log of issues
 - Operational memory provides graphic display of status of the machine
 - Maintenance and oil change schedules can be notified
 - Fuel filler pump



PERFORMANCE

The DX360LCA and is engineered for tough and heavy work conditions which demand massive forces over long working hours.



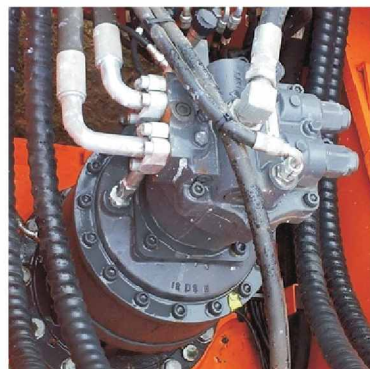
Doosan DE12TIS Engine

The powerful DOOSAN DE12TIS engine, coupled with the intelligent e-EPOS controlled Hydraulic system gives the DX360LCA exceptional power and unmatched fuel efficiency.



Hydraulic Pump

The main pump has a capacity of 2x274 l/min reducing cycle time while a high capacity gear pump improves pilot line efficiency.



Swing Drive

Shocks during rotation are minimized, while increased torque is available to ensure rapid cycle.

DX360LCA HD+ Version

COMFORT

The cab of the DX360LCA has been designed to improve the efficiency and safety of the operator. The air conditioned cabin is comfortable, spacious and all controls are easily accessible.



Air Suspension Seat

Equipped with various functions of adjustment forth and back and lumbar support, it reduces the vibration of equipment transmitted during work, in an effective way.



- Gauges
- Navigation modes, rear view camera, display selector
- Working modes, auto – idle & flow rate control



Comfortable 2 – stage sliding seat



Control stand (Telescopic Function)

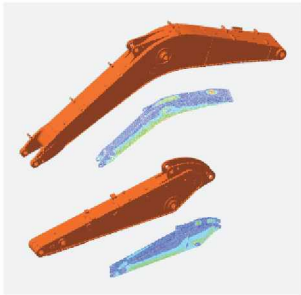


Control lever

Very precise control of the equipment enables versatility and safety. The control levers have additional buttons for controlling additional equipment (for example, grabs, crushers, rippers, etc.)

RELIABILITY

DOOSAN uses computer – assisted design techniques, highly durable materials and a quality engineered structure for the DX360LCA. Our research and development engineers certify all the products under the most extreme test conditions. Durability, reliability and product longevity are Doosan’s top priorities.

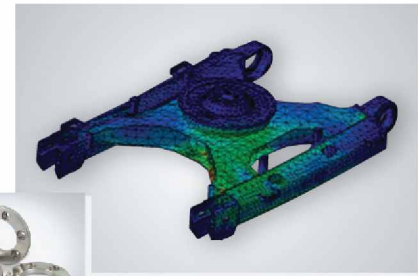


Strengthened Boom & Arm Assembly

The shape of the boom has been optimized using finite elements design, allowing load to be better distributed throughout the structure. This combined with increased material thickness results in improved durability and reliability by limiting material fatigue. The arm assembly has an increased life and greater strength as a result of being manufactured with cast elements and reinforcement around the boss – area.

X – Chassis

The X – chassis frame section has been designed using finite element and 3 – dimensional computer simulation techniques, to ensure greater durability and optimum structural integrity.



Ultra – hard wear – resistant disc

New materials have been used in order to increase the wear resistance and to increase the service intervals.



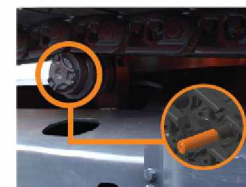
Bushing

A highly lubricated metal is used for the boom pivot in order to increase the lifetime and extend the greasing intervals to 250 hours.



Integrated Track Spring and Idler

The track spring and the idler have been joined directly to achieve high durability and improved maintenance convenience.



Tracks

The chain is composed of self – lubricating sealed links isolated from all external contamination. The tracks are locked by mechanically bolted pins.

MAINTENANCE

DOOSAN has developed the DX360LCA profitability with end-user in mind. Easy maintenance operations at long intervals increase the availability of the equipment on site.

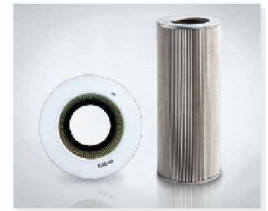


Easy maintenance

Access to the radiator, oil cooler and most filters is easy and maintenance can be carried out from ground level.

Hydraulic oil return filter

The glass fibre filter technology used in the main oil return filter ensures that more than 99.5% of foreign particles are filtered out, and as a result the oil change interval is increased.



Fuel pre – filter

High efficiency fuel filtration is attained by the use of multiple filters, including a fuel pre-filter fitted with a water separator that removes most moisture from the fuel.

Air cleaner

The large capacity air cleaner removes over 99% of airborne particles, reducing the risk of engine contamination.

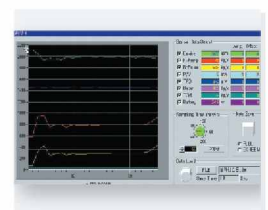


Convenient fuse box

The fuse box is conveniently located in a section of the storage compartment behind the operator's seat providing a clean environment and easy access.

PC Monitoring (DMS)

A PC monitoring function enables connection to the e-EPOS system, allowing various parameters, to be checked during maintenance.



TECHNICAL SPECIFICATIONS

ENGINE

Model	Doosan DE12TIS
Type	4 – Cycle ATA intercooler in – line
Number of Cylinders	6
Rated Flywheel Horse Power	195 kW (262 HP) @ 1,800 rpm (SAEJ 1995)
	185 kW (247 HP) @ 1,800 RPM (SAEJ 1349)
Max Torque	114 kg.m at 1,400 rpm
Piston Displacement	11,051 cc
Bore & Stroke	123 mm x 155 mm
Starting Motor	24V / 6.0 kW
Batteries	2 X 12 V / 150 Ah
Air Cleaner	Double element

UNDER CARRIAGE

Upper Rollers	2
Lower Rollers	9
Shoes	48

HYDRAULIC CYLINDERS

The piston rods and cylinder bodies are made of high-strength steel. A shock absorbing mechanism is fitted in all cylinders to ensure shock-free operation and extended piston life.

Cylinder	Quantity	Bore x Rod diameter x Stroke
Boom	2	150 x 100 x 1,430 mm
Arm	1	170 x 120 x 1,805 mm
Bucket	1	150 x 100 x 1,300 mm

REFILL CAPACITIES

Fuel Tank	550 ℓ
Cooling System (Radiator capacity)	340 ℓ
Engine Oil	28 ℓ
Swing Drive (Each)	6 ℓ
Travel Drive (Each)	2 x 5.5 ℓ
Hydraulic Tank	380 ℓ

OPERATING WEIGHT

Considering standard configuration of 6.5 m Boom, 2.6 m Arm and 1.65 cu.m Bucket

	Shoe width (STD)	Operating Weight (ton)	Ground Pressure (kgf/cm ²)
Triple Grouser	600 mm	35.1	0.66

HYDRAULIC SYSTEM

The heart of the system is the e-EPOS (Electronic Power Optimizing System). It allows the efficiency of the system to be optimized for all working conditions and minimizes fuel consumption.

The hydraulic system enables independent or combined operations.

Cross-sensing pump system for fuel savings.

Button control of flow in auxiliary equipment circuits.

Computer-aided pump power control.

Main Pumps	Parallel, Bentaxial, Piston
	Max Flow: 2 x 274 ℓ/ min.

Gear Pump	Max Flow: 22.5 ℓ/min
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Main Relief Pressure	
Boom/Arm/Bucket	Working, Travel: 330 kg/cm ²
Pressure up	350 kg/cm ²

SWING MECHANISM

High torque, axial piston motor with planetary reduction gear bathed in oil. Swing circle is single row, shear type ball bearing with induction-hardened internal gear. Internal gear and piston gear immersed in lubricant.

Swing Speed	0 to 8.9 rpm
Max. Swing Torque	11,660 kgf.m

DRIVE

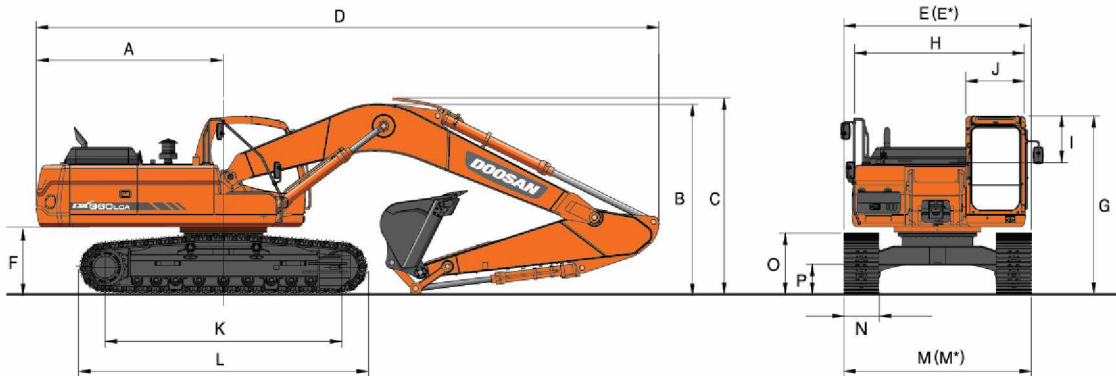
Each track is driven by an independent, high-torque axial piston motor through planetary reduction gear. Two levers or foot pedal control provides smooth travel or counter-rotation upon demand.

Travel Speed (fast/slow)	3.1/4.7 km/hr
Maximum traction force	27.0/15.1 ton
Gradeability	70% (35°)

BUCKET

Size (cu.m)	Type	Boom Arm	6.5 m (STD) 2.6 m (STD)	6.5 m 3.2 m	6.2 m 2.6 m
1.65	GP		x	✓	x
2.01	GP		✓	x	✓
2.35	GP		✓	x	✓
1.83	HD		✓	x	✓
1.49	HD		✓	✓	✓

DIMENSIONS



Boom Type (One piece)	(mm)	6,500	6,200	
Arm Type	(mm)	3,200	2,600	2,600
Bucket Type	(m ³)	1.49	1.83	2.01
A Tail Swing Radius	(mm)	3,500	3,500	3,500
B Shipping Height (Boom)	(mm)	3,220	3,475	3,620
C Shipping Height (Hose)	(mm)	3,360	3,592	3,720
D Shipping Length	(mm)	11,280	11,380	11,080
E Shipping Width (Std.)	(mm)	3,280	3,280	3,280
F C/Weight Clearance	(mm)	1,195	1,195	1,195
G Height Over Cab.	(mm)	3,125	3,125	3,125

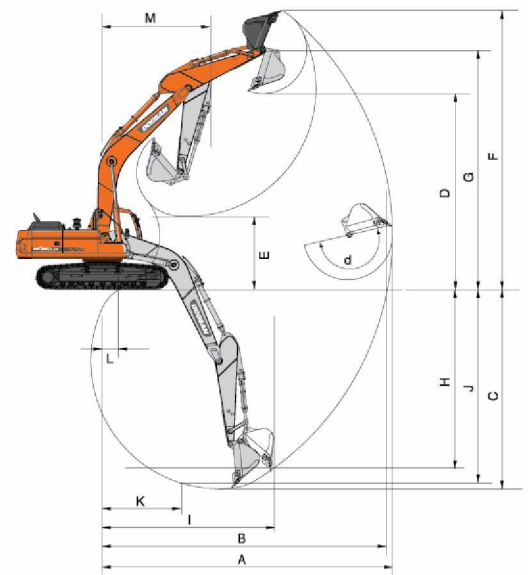
H House Width	(mm)	2,990	2,990	2,990
I Cab, Height Above House	(mm)	845	845	845
J Cab. Width	(mm)	1,010	1,010	1,010
K Tumbler Distance	(mm)	4,040	4,040	4,040
L Track Length	(mm)	4,940	4,940	4,940
M Undercarriage Width(Std.)	(mm)	3,280	3,280	3,280
N Shoe Width	(mm)	600	600	600
O Track Height	(mm)	1,048	1,048	1,048
P Car Body Clearance	(mm)	510	510	510

DIGGING FORCE (ISO)

Arm		Length	Digging force (Max, ton)	Bucket	Digging force (Max, ton)	
					G.P	H.D
	STD. Arm	3,200 mm	17.9		24.5	
	Short Arm	2,600 mm	22.0		24.8	

WORKING RANGE

Boom Type (One piece)	(mm)	6,500	6,200	
Arm Type	(mm)	3,200	2,600	2,600
Bucket Type	(m ³)	1.49	1.83	2.01
A Max. Digging Reach	(mm)	11,168	10,586	10,200
B Max. Digging Reach (ground)	(mm)	10,975	10,382	9,990
C Max. Digging Depth	(mm)	7,533	6,931	6,635
D Max. Loading Height	(mm)	7,196	6,882	6,695
E Min. Loading Height	(mm)	2,704	3,355	3,245
F Min. Digging Height	(mm)	10,345	9,994	9,510
G Max. Bucket Pin Height	(mm)	8,898	8,584	8,315
H Max. Vertical Wall Depth	(mm)	5,916	5,121	2,185
I Max. Radius Vertical	(mm)	7,713	7,711	9,265
J Max. Digging Depth 8' Line	(mm)	7,361	6,719	6,400
K Min. Radius 8' Line	(mm)	3,393	3,345	3,085
L Min. Digging Reach	(mm)	723	2,180	1,950
M Min. Swing Radius	(mm)	4,413	4,438	4,275
d Bucket Angle	(deg)	178	178	178



STANDARD EQUIPMENT

HYDRAULIC SYSTEM

Boom and arm flow regeneration
Swing anti-rebound valves
Spare Ports (Control valve)

CABIN & INTERIOR

Air suspension seat
Viscous cab mounts
All weather sound suppressed type cab
Air conditioner & Heater
Adjustable suspension seat with head rest and adjustable arm rest
Pull-up type front window and removable lower front window
Room light
Intermittent windshield wiper
Engine overheat prevention system

CUP HOLDER

LCD color monitor panel
Engine RPM control dial
Audio system
Serial communication port for laptop PC interface
Joystick lever with 2 switches

SAFETY

Large handrails and step
Convex metal anti-slip plates
Seat belt
Hydraulic safety lock lever
Safety glass
Hammer for emergency escape
Right and left rear view mirrors
Battery protector cover

OTHERS

Double element air cleaner
Water separator
Fuel filter
Dust screen for radiator/oil cooler
Engine restart prevention system
Self-diagnostic system
Electric horn
Halogen working lights (frame mounted 1, boom mounted 2)
Track guards
Greased and sealed track link
Hydraulic oil tank air breather filter
Fuel filter pump
Hydraulic track adjuster

OPTIONAL EQUIPMENT

Some optional equipment may be standard in some markets. You must check with the local DOOSAN dealer to know more about the availability or to release the adaptation following the needs of the applications.

CABIN & INTERIOR

Rain shield

SAFETY

Boom and arm hose rupture protection valve
Overload warning device
Cabin top/Front guard (ISO 10262, FOGS standard)
Travel & swing alarm
Rotation beacon
Lock valve

OTHERS

Piping for crusher
Piping for quick clamp
Piping option
- Breaker with flow control valve
- Clamshell-quick clamp
700mm/800mm/900mm shoe
Lower wiper
Fuel heater

WORKING LIGHTS

- 4-front/2-rear on cabin
- 2-front on cabin
- 1 on counterweight

COUNTERWEIGHT

GPRS- Remote Monitoring System

FULL TRACK GUARD



Doosan Infracore
Construction Equipment



ESCORTS
CONSTRUCTION EQUIPMENT

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Disclaimer : * Accessories shown in the images are not a part of standard equipment. Photographs are for illustration purpose only.