DOOSAN

Construction Equipment

DX215-5B

Engine Power	115 kW (154 HP) / 1,900 rpm
Operational Weight	20,600 kg
Bucket Capacity (SAE)	0.86 m^3

Competitive & Durable 20-ton-class Equipment

DX215-5B

Highly durable components have been produced with elaborate structure and production technology, offering strong merit and providing high profit to all construction clients.

APPLICATION

General engineering, urban infrastructure, roads construction

OPTIMIZED STRUCTURAL CHASSIS

With the optimization of the chassis structure design, overall task stability and durability have been improved.

MAINTENANCE

The distribution of maintenance areas and design are rational. This is able to be operated simply on a surface through regular checks.

DELUXE CABIN

A deluxe, adjustable seat and comfort features ensure that operators stay productivity and push performance to the limit in DX215-5B.

DURABILITY & RELIABILITY

The connecting part uses an assembled cast, reinforcing the panel thickness of the core part. By developing the structure, durability has been largely increased.

HIGH-EFFICIENCY HYDRAULIC SYSTEM

Minimum loss of energy through the perfect harmonization of overall hydraulic system performance and engine output rate.

① Fuel Saving
Improvement over preceding products

10%

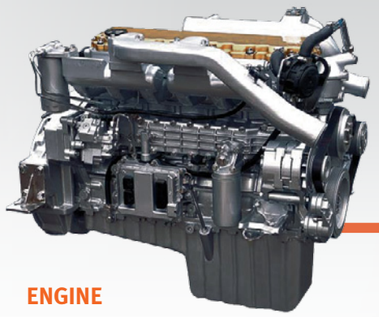
② Swing torque
Improvement over preceding products

13%

③ Drive Pulling Power
Improvement over preceding products

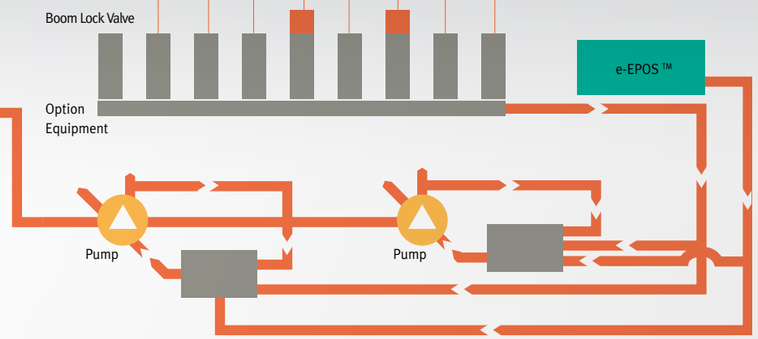
8%

The data presented hereinabove are measured in the test environment of the manufacturer and subject to change according to the test conditions. The applicability of the data shall be limited to reference purpose only.



ENGINE

Manufacturer	Doosan
Rated Power	115 kW (154HP) / 1,900 rpm
No. of Cylinders	6
Displacement	5,890 cc



SPC MODE

In a real work environment, work load of the equipment is Smart-sensed, automatically controlling engine RPM and main pump torque. By doing this, oil consumption is reduced, while also satisfying task efficiency.

EPOS SYSTEM

Based in a real work environment, Power Mode (P), Standard Mode (S), and Economic Mode (E), can be chosen from freely. Furthermore, by Smart-controlling the idle speed, main pump flow rate, and hydraulic system pressure, loss of output has been reduced, and low oil consumption has been made a reality.

COMFORT

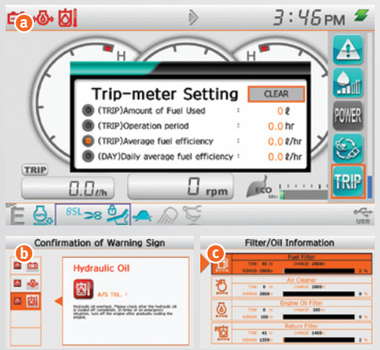
DX215-5B

With the design ideology “The true heart of the driver”, interior sounds and vibrations inside the driver's cabin have been reduced to the bare minimum. An LCD measuring instrument is also available, improving both ease of use and comfort on the job.

1

The cutting-edge color LCD display system easily grasps equipment operative information and increases the convenience of the task.

- (a) New dashboard : The newly designed dashboard displays more information, making it easier to understand the equipment status.
- (b) Warning Info Confirmation: Equipment warning information can be checked on the measuring instrument.
- (c) Oil Filter System Information: Maintenance product usage time, replacement cycle, time, etc can be checked on the measuring instrument. The usage time can be reset, and the maintenance product replacement cycle can be changed.



360 CHALLENGE BEARING DRIVING VIEW

The glass area in the driver's cabin has expanded to the maximum, bringing to life a 360 degree area of sight.

2

a

CONCENTRATED SWITCH DESIGN

With the switch concentration design, the ease of equipment operation has been sharply raised, and the efficiency of work in the driver's cabin has been improved.

b

ENGINE EMERGENCY BRAKE BUTTON ADDITION

c

CONVENIENT STORAGE SPACE AND POWER SUPPLY

Containing small object storage as well as a 12V rechargeable power supply, cellphones and electrical equipment can be charged and stored safely. A quickly operational air conditioner switch has been installed, enabling quicker and easier operation.

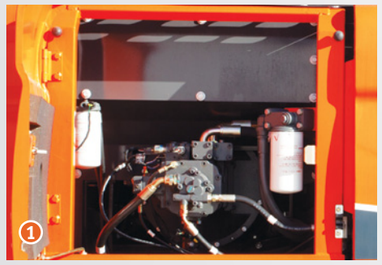
LOW-NOISE DESIGN HEAT PRODUCTION SYSTEM

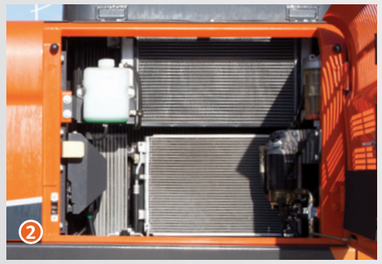
Sounds inside the driver's cabin have been largely reduced, and comfort has been improved.

RELIABILITY

Reliability has been improved through more advanced design procedures and repeating, strict simulation tests.

The expected work life of DX215-5B has been extended to the maximum through further advanced computer 3D designs and multiple-time reliability tests, creating far higher added value for the customer.

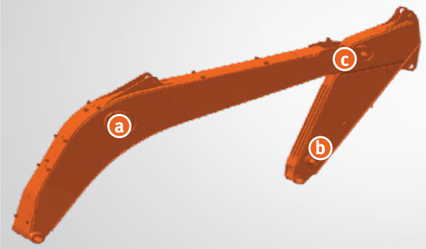




MULTIPLEX OIL FILTER SYSTEM

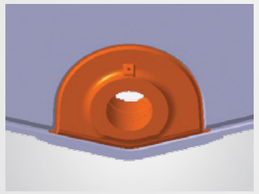
The 3-floor oil filter system strengthens the filtering performance of combustion oil and increases reliability, thus increasing the engine's ability to adapt to low-grade oil, reducing failure rate, and allowing big savings on expenses and cost ratios.

③ BOOM & ARM WITH REINFORCED DESIGN

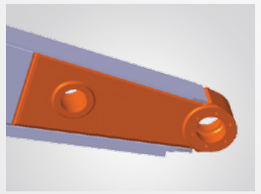


With boom bottom bard unification design, welding spot s of the boom and arm has been reduced. The structure has been developed as well, leading to the prevention of stress concentration. The thickness of the core region panel has been reinforced, raising the durability and structural stability of the boom and arm and allowing even easier adaptation to poor work environments.

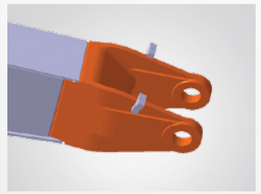
ⓐ Arm Center Boss



ⓑ End of the Arm



ⓒ End of the Boom



STRUCTURAL OPTIMIZATION

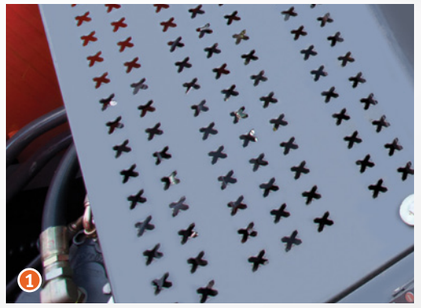
The area that receives strength from the front connective region has been expanded, and the board has been thickened. The manufacturing process has been developed as well, remodeled with an all-in-one cast, largely extending the window of use.

MAINTENANCE

DX215-5B

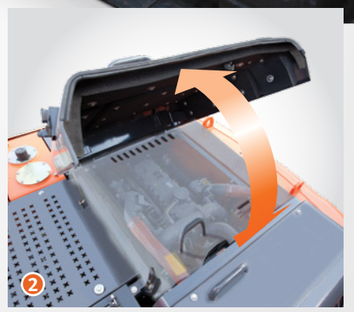
Convenient, Fast, and Economic Maintenance

Convenient and quick maintainability design,
effectively shortening equipment maintenance time



UPPER SLIPPERINESS-PREVENTION COVER

The new black slipperiness-prevention panel uses a shock-pulse-style design. The slipperiness-prevention surface area has been expanded, increasing maintenance convenience and working to allow the optimum slipperiness-prevention effect.



IMPROVED ENGINE COVER

The present integral cover has been remodeled with a separating sieve design, creating easier and more convenient equipment maintenance protection work.

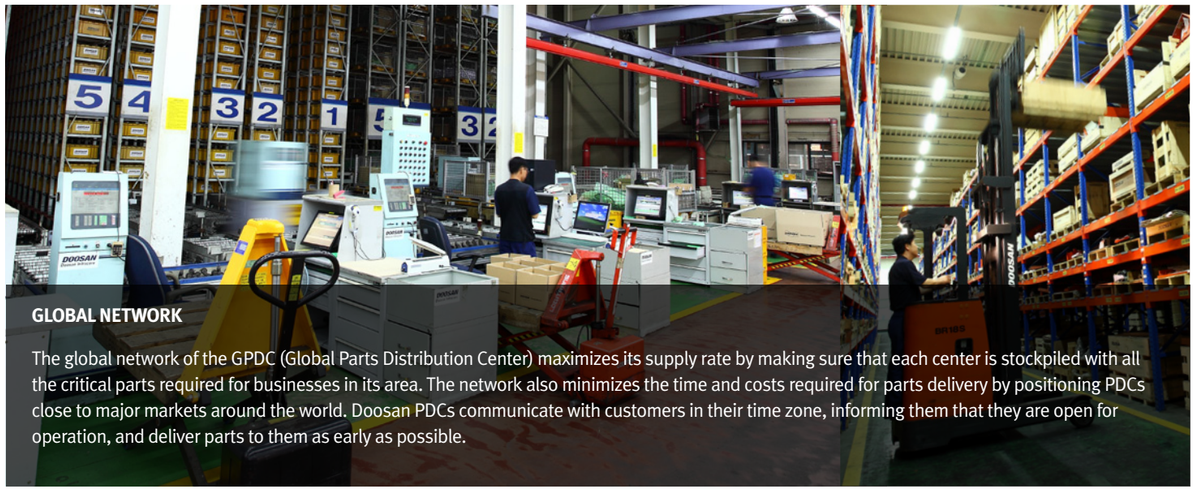
HYDRAULIC OIL & COOLANT FLUID EXCHANGE PERIOD MAGNIFIED

Hydraulic Oil: 4000 Hours
Coolant Fluid: 4000 Hours
Combustion Oil Tank Volume Increase

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**

TECHNICAL SPECIFICATIONS

Main Specification

Engine	
Model	DL06
Type	Serial
Intake	Turbine Presser
No. of Cylinders	6
Cylinder Dia.	100 mm
Piston Stroke	125 mm
Rated Power	115 kW (154 HP) / 1,900 rpm

Swing System	
Drive Type	Hydraulic drive
Reducer	Planetary gear reducer
Swing Brake	Wet, multi-disc brake
Swing Speed	9.8 rpm

Drive and Brake	
Feed-forward Control	Pedal & joystick integral
Drive Type	Hydraulic drive
Travel Motor	Axial piston hydraulic motor
Travel Speed (High/Low)	5.3/2.9 km/h
Brake Operation	Hydraulic Brake
Parking Brake	Wet, multi-disc brake

Travel Mechanism	
Center Frame	X-shaped
Track Frame	Box-type section
Sealed Track	Auto-greased track
Track Adjustment (Height)	Grease adjustment
No. of Track Shoes	45 each side
Carrier Roller	2 each side
Track Roller	7 each side

Hydraulic System

Hydraulic Motor	
Travel Motor	Axial Piston Type X 2
Swing Brake	Wet, multi-disc brake

Main Pump	
Type	Variable piston pump
Max. flowrate	2 X 191 ℓ /min

Safety Valve Setting	
Hydraulic Circuit for Attachment	350 kgf/cm^2
Hydraulic Circuit for Travel	350 kgf/cm^2
Hydraulic Circuit for Swing	270 kgf/cm^2

Tank Capacity	
Oil tank	400 ℓ
Hydraulic oil tank (full)	195 ℓ

Cooling Water/Lubricant Refill Capacity			
Radiator	Engine	Travel Reduce Gear Oil	Swing Reducer
26 ℓ	27 ℓ	2 X 3.3 ℓ	5 ℓ

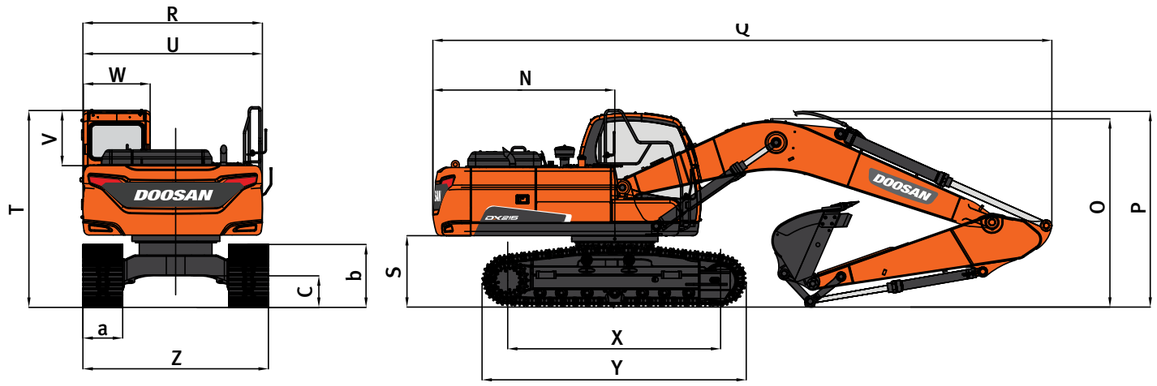
Operational Weight

(With operator, lubricant, coolant, full tanks, and standard specification)	
Boom	5,700 mm
Dipper Stick	2,900 mm
Bucket	SAE 0.86 m^3
Track Link	600 mm
Operational Weight	20.6 ton
Ground Contact Pressure	45.8 kpa

Oil Cylinder	
Boom	2-120 mm X 85 mm X 1,263 mm
Dipper Stick	1-135 mm X 95 mm X 1,450 mm
Bucket	1-115 mm X 80 mm X 1,060 mm

Max. Digging Force (ISO)	
Bucket	13.9 ton
Dipper Stick	10 ton

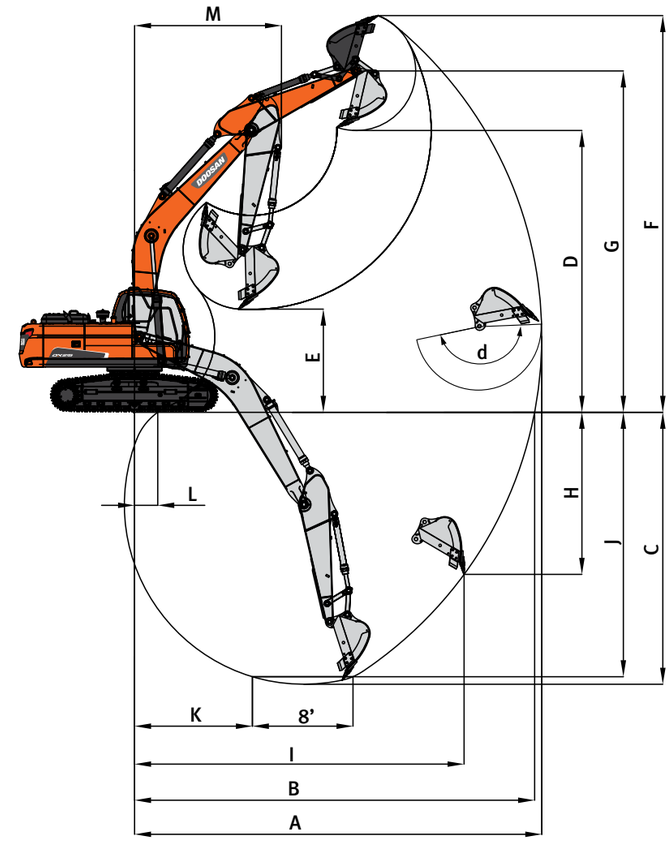
DIMENSIONS



DIMENSIONS

N	Tail swing radius	(mm)	2,794
O	Shipping height (to top of swing arm)	(mm)	2,891
P	Shipping height (to top of rubber tube)	(mm)	3,005
Q	Shipping length	(mm)	9,506
R	Shipping width	(mm)	2,800
S	C/weight clearance	(mm)	1,096
T	Height over cabin	(mm)	2,985
U	House width	(mm)	2,709
V	Cabin height above house	(mm)	832
W	Cabin width	(mm)	1,008
X	Tumbler distance	(mm)	3,270
Y	Track length	(mm)	4,060
Z	Undercarriage width	(mm)	2,800
a	Track width	(mm)	600
b	Track height	(mm)	950
C	Car body clearance	(mm)	475

WORKING RANGES



WORKING RANGE

A	Max. digging reach	(mm)	9,873
B	Max. digging reach (ground)	(mm)	9,699
C	Max. digging depth	(mm)	6,592
D	Max. loading height	(mm)	6,830
E	Max. loading height	(mm)	2,501
F	Max. digging height	(mm)	9,616
G	Max. height of bucket pin shaft	(mm)	8,274
H	Max. vertical wall depth	(mm)	3,929
I	Max. radius vertical	(mm)	7,988
J	Max. depth to 8' line	(mm)	6,411
K	Max. radius 8' line	(mm)	2,858
L	Min. digging reach	(mm)	562
M	Min. swing radius	(mm)	3,560
d	Bucket angle	(°)	177

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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