

**DOOSAN**

Construction Equipment

# DX200A-7M

Powered by **Innovation**

Certain specification(s) are based on engineering calculations and are not actual measurements. Specification(s) are provided for comparison purposes only and are subject to change without notice. Specification(s) for your individual Doosan equipment will vary based on normal variations in design, manufacturing, operating conditions, and other factors. Pictures of Doosan units may show other than standard equipment.

**DOOSAN**

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DIPBE-00-2109

Powered by **Innovation**

Photos may include optional equipment



# PURPOSE-BUILT

## DX200A-7M

**Perfectly Fitted for Urban Life,  
Perfectly Tailored to Works with Speed**

Mech. Engine

Don't be attracted to superficial glow of massive body or the empty formality of mere power of others when there is a perfectly fitted one for you.

Perfectly fitted in the work of urban environment. Every DX200A-7M is designed to excel in specialized area of performance, speed and efficiency. Purposed built to be suitable for entering virtually any narrow workplace. Undercarriage and full track length shorter than DX200A-7M, which simply means that it can go wherever most other equipment can't. Its enhanced speed and maneuverability ensure you to cut short on time in clogged road or picky conditions.

Smaller but not lesser. Discover new possibilities made by agile and efficient DX200A-7M.





# IMPECCABLE, IN EVERY WAY

## The Evolution of Steady-Seller All New DX200A-7M Hydraulic Excavator



## SETTING THE STANDARD

### When it Changes, the World of 20 ton Excavator Changes

From the moment the first DX225 launched, it quickly became one of the most powerful excavators in its class. The latest iteration of steady seller, DX200A-7M has finally reached the level of perfection. Including all the advantages of the previous best-selling model, proven power and performance, the new DX200A-7M now offers additional value to the operator. Introduction of VBO system maximized fuel efficiency. Low fuel cost, upgraded powerful performance, operator comfort and easy maintenance all combined to guarantee the best performance.

Ultimate performance is not only achieved through the engine power. The new DX200A-7M equipped with fortified structure and cutting-edge technology. New level of interior comfort and a range of attachment options to suit your environment. All the craftsmanship details and techniques planted to maximize its performance, yet the whole excavator exceed the sum of its exceptional parts. Experience all the values merged into apparatus.

Doosan has always committed to increase the optimum return on your investment and maximizing uptime. Raging the bar once again, we are ready to show you all the progress we made.

## IMPECCABLE, IN EVERY WAY - All NEW DX200A-7M

### 1. HIGH PERFORMANCE

DX200A-7M, as an epitome of 22ton excavator, has always gained global recognition for powerful performance. Doosan's engine has finally reached the highest level, going through numerous innovation. Digging force and lifting capacity ever more advanced than its predecessor. Elevating the concept of excavator. Still boasting the best power. Experience the new DX200A-7M and all the progress.

### 2. LOW FUEL COST

Increased productivity and decreased fuel consumption. We proudly introduce Doosan's cutting-edge technology, VBO (Virtual Bleed Off) system. VBO System combined all the best aspects of existing hydraulic systems. This new system electronically controls the pump, to generate the virtual hydraulic flow. Along with Doosan's unrivalled tuning technique, operator can reduce fuel consumption up to 15% compared to previous model.

### 3. HIGH DURABILITY

New DX200A-7M gained customer's credibility by reaching the incredible durability. Every key component fulfills the DI global standard. Hydraulic components and engine tank strengthened by using reinforced material. Frames and structures armed with robust design to stand whatever lies ahead. 20 ton class tail frame applied and counterweight mounting structure also improved. Every detail applied strict criteria to raise the quality to the next level.

### 4. LOW MAINTENANCE

Maintain this superior apparatus as the way it was. We lowered the entry barrier of maintenance. The strength of mechanical engine – easy maintenance became easier. Engine part could be reached by ground access. Other features also offer simple and easy access thanks to a wide panel. Via TMS service, you can always be connected to your vehicles. TMS offers information including location, operational condition, engine and hydraulic system. You can be informed of the component's operational data in hourly cycle, without the trouble to open up the panel of your excavator.



# WE ARE BACK WITH NEW FEATURES

All The Nice Features of Previous Model  
Bodily Succeeded, Even Nicer Things to Come.

## ELECTRIC PUMP CONTROL SYSTEM

- Electronically control the pump by generating virtual hydraulic flow.
- Effectively reduce fuel consumption.

## DOOSANCONNECT TELEMATICS SERVICE (OPTIONAL)

- Offering preventive maintenance service based on web data.
- Provides an expert level consultation to dealers.
- Functions as fleet management tool for the customers.

## ERGONOMICALLY DESIGNED WORK PEDAL

- Ergonomically designed Work pedals placed at both ends.
- Reducing fatigue and to lessen the load of operator.

## OPG (OPERATOR PROTECTIVE GUARD) (OPTIONAL)

- Design changed for better visibility.

## NEW LOOK & ENHANCED STRUCTURE

- Applied new decal and changed counterweight design. featured with stable and segmented bonnet mounting, reinforced counterweight and track frame.

## FORTIFIED STRUCTURE

- Reinforced counterweight and track frame.
- Stable, segmented Bonnet mounting.
- Enhanced corrosive and wear resistance – bucket pin link -Y seal.

## VERSATILITY & VARIOUS ATTACHMENT

- Two pump option for high flow attachment.
- New bucket line up : R2H +, R2S +.

## MORE COMFORT

- Fully adjustable suspension seat and air conditioning function
- DAB (Digital Radio Broadcasting), Microphone
- Head lamp placed near to the cabin door. It helps operators to secure visibility with less shadow.

## NEW 8-INCH TOUCH MONITOR

- Bigger LCD monitor with user-friendly touch screen panel.
- Allowing easy access to machine settings and maintenance data.

## IMPROVED AIR FLOW SYSTEM FOR DEFROSTING AND AIR CONDITIONING

- The air conditioning system has also improved aerodynamically, for a pleasant working environment.

## IMPROVED COVER DESIGN

- Honey comb design on the side door to minimize the in flow of dust.

## SIDE AND REAR VIEW CAMERA (OPTIONAL)

- We made it possible for the operator to proceed in optimal conditions by installing devices such as rear cameras, which make it easy to recognize the invisible space.





# ADVANCE AT GLANCE

## 1. HONED FOR FUEL EFFICIENCY

- More efficiency means more action. DX200A-7M makes you find the perfect tailored model for your environment and working style. Engine, pump matching technology adjoined with right combination of technologies, guarantee 15% improved fuel efficiency. .

## 2. FITTED IN URBAN CONSTRUCTION

- DX200A is 380mm shorter than the DX225LCA in track length, which makes the DX200A-7M suitable for the small space where LC equipment is too wide to enter. Optimized in housing and narrow urban region.

## 3. DURABILITY IN EVERY DETAIL

- Keeping the excellent performance with added durability and quality on structure components. Computer assisted design technique applied to remote possibilities in hydraulic system and frame structures. Undercover mounting fortified and track idler bracket reinforced. Advanced undercarriage with strengthen sprocket structure and tooth. The torsionally flexible D-type frame and X-chassis frame add strength and minimize distortion to the shock.





# DoosanCONNECT® 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 sedignated server by GSM, Satellite telecommunication



**DOOSAN TELEMATICS SERVICE WEB**

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

**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 deveping new machine

**FUNCTIONS (WEB/APP)** Doosan Telematics Service provides various functions to support your great performance



• GPS



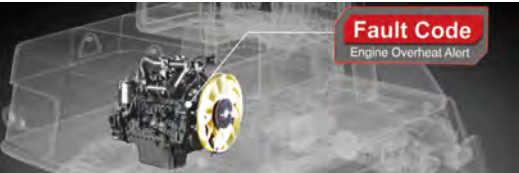
• Fuel information



• Preventive maintenance



• Operation hours



• Fault code / warning



• ADT Productivity

• Reports

FUNCTION		EXCAVATOR	WHEEL LOADER	ADT
GPS	· Location · Geo-fence	All models	All models	All models
Operation hours	· Daily, Weekly, Monthly report	All models	All models	All models
Operation hours	· Total operation hours · Operation hours by mode	All models	All models	All models
Maintenance parts	· Preventive maintenance by item replacement cycle	All models	Tier 4 only	All models
Fault code / Warning	· Fault code · Machine Warnings on Gauge Panel	All models	Tier 4 only	All models
Fuel information	· Fuel level · Fuel consumption	All models Tier 4 only	Tier 4 only	All models
Dump capacity	· Dump tonnage · Count of Work Cycle	N/A	N/A	All models

# GLOBAL PARTS NETWORK

**QUALITY-PROVEN MAIN COMPONENTS**

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 nine other PDCs include one in China (Yantai), Four in USA (Seattle and Atlanta, Suwanee, Miami), 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 SPECIFICATION

## ENGINE

Model
Doosan DB58TIS 2 valves per cylinder, vertical injectors, water cooled, turbo charged with air to air intercooler. The emission levels are well below the values required for Tier/Stage-II.
Number of cylinders
6
Nominal flywheel power
NET POWER :128kW (174.4PS, 172HP) @ 2,000 rpm (SAE J1349)
Max torque
66 kgf.m @ 1,400 rpm
Piston displacement
5,785 cc (353 cu.in)
Bore & stroke
102 mm x 118 mm (4.0” x 4.6”)
Starter
24 V / 4.5 kW
Batteries
2 X 12 V / 100 Ah
Air cleaner
Double element with auto dust evacuation.

## 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 shockfree operation and extend piston life.

Cylinders	Quantity	Bore x Rod diameter x stroke
Boom	2	120 x 85 x 1,263 mm
Arm	1	135 x 95 x 1,443 mm
Bucket	1	120 x 80 x 1,060 mm

## WEIGHT

Boom 5,700 mm (18’8”) Arm 2,900 mm (9’6”) Bucket SAE H Class 1.0 m<sup>3</sup> (1.20 yd<sup>3</sup>)

	Shoe width	Operating weight	Ground pressure
Triple Grouser	(Std) 600 mm (2’)	20,700 kg (45,636 lb)	0.49 kgf/cm <sup>2</sup>
	800 mm (2’ 8”)	21,300 kg (46,958 lb)	0.38 kgf/cm <sup>2</sup>

## HYDRAULIC SYSTEM

The heart of the system is the 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.
- Two travel speeds offer either increased torque or high speed tracking.
- Cross-sensing pump system for fuel savings.
- Auto deceleration system.
- Two operating modes, two power modes.
- Button control of flow in auxiliary equipment circuits.
- Computer-aided pump power control.

Main pumps
2 variable displacement axial piston pumps Max flow : 2 x 222.3 l/min
Pilot pump
Gear pump - max flow : 27 l/min
Maximum system pressure
Front Normal mode : 350 kgf/cm <sup>2</sup> Power mode : 370 kgf/cm <sup>2</sup> Travel : 370 kgf/cm <sup>2</sup> Swing : 270 kgf/cm <sup>2</sup>

## SWING MECHANISM

- An axial piston motor with two-stage planetary reduction gear is used for the swing.
- Increased swing torque reduces swing time.
- Internal induction-hardened gear.
- Internal gear and pinion immersed in lubricant bath.
- The swing brake for parking is activated by spring and released hydraulically.

Swing speed : 0 to 11 rpm

## UNDERCARRIAGE

Chassis are of very robust construction, all welded structures are designed to limit stresses. High-quality material used for durability. Lateral chassis welded and rigidly attached to the undercarriage. Track rollers lubricated for life, idlers and sprockets fitted with floating seals.

Tracks shoes made of induction-hardened alloy with double grouser. Heat-treated connecting pins. Hydraulic track adjuster with shock-absorbing tension mechanism.

Number of rollers and track shoes per side
Upper rollers : 2 (Standard Shoes) Lower rollers: 7 Shoes : 45 Total length of track : 4,065 mm (13’ 3”)

## DRIVE

Each track is driven by an independent axial piston motor through a planetary reduction gearbox. Two levers with control pedals guarantee smooth travel with counter rotation on demand.

Travel speed (fast / slow)
5.9 / 3.2 km/h (3.7 / 2.0 mph)
Maximum traction force
10,300 / 22,500 kgf (22,708 / 49,604 lbf)
Maximum grade
35 (70%)

## BUCKET

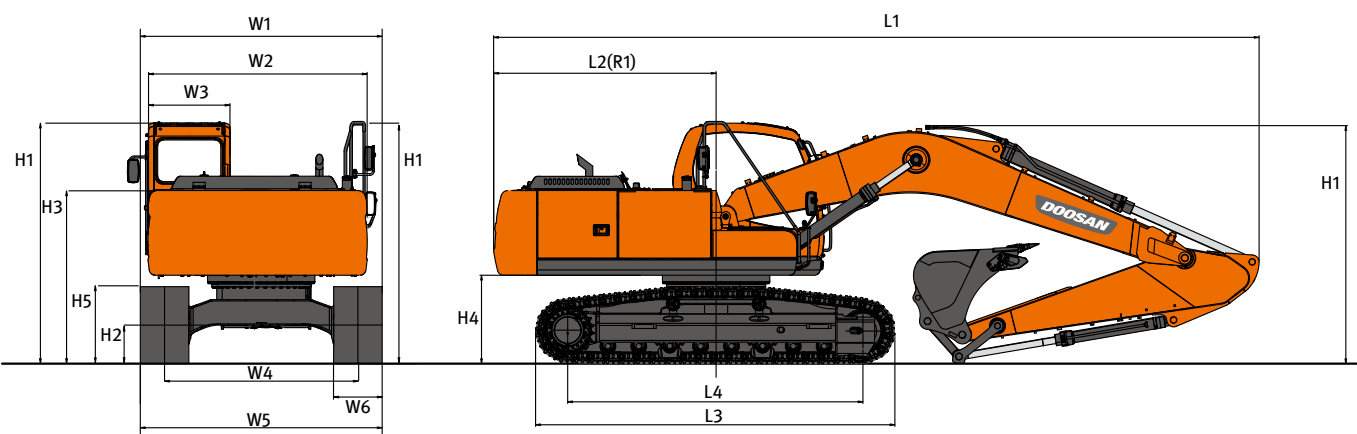
					C/W (ton)	3.8
					SHOE (mm)	800
Bucket Type	Capacity (m³)		Width (mm)		Weight (kg)	5.7m Boom
	SAE/PCSA	CECE	W/O Cutter	With Cutter		2.9m Arm
GP	0.39	0.35	825	736	345	-
	0.51	0.47	768	722	549	A
	0.81	0.72	1,125	1,065	684	A
	1.0	0.81	1,233	1,173	724	B
	1.05	1.0	1,369	1,309	776	C
R1H	1.0	0.80	1,198	1,264	740	B
	1.05	0.90	1,331	1,397	787	C
	1.2	1.03	1,453	1,519	848	D
DC	0.54	0.46	1,800	-	358	-
R1S	1.05	1.0	1,331	1,397	990	D
R2H	1.0	0.83	1,050	1,096	867	B
	1.08	0.97	1,200	1,246	939	D
	1.24	1.11	1,350	1,369	1,011	D
R2H+	1.08	0.97	1,200	1,246	1,033	D
R2S	0.91	0.82	1,050	1,094	1,078	C
	1.07	0.96	1,200	1,244	1,182	D
Maximum load pin-on(payload+bucket)						2533

Based on ISO 10567 and SAE J296, arm length without quick change clamp  
A : Suitable for materials with density of 2,100kg/m (3,500lb/yd ) or less  
B : Suitable for materials with density of 1,800kg/m (3,000lb/yd ) or less

C : Suitable for materials with density of 1,500kg/m (2,500lb/yd ) or less  
D : Suitable for materials with density of 1,200kg/m (2,000lb/yd ) or less  
X : Not recommended



DIMENSIONS

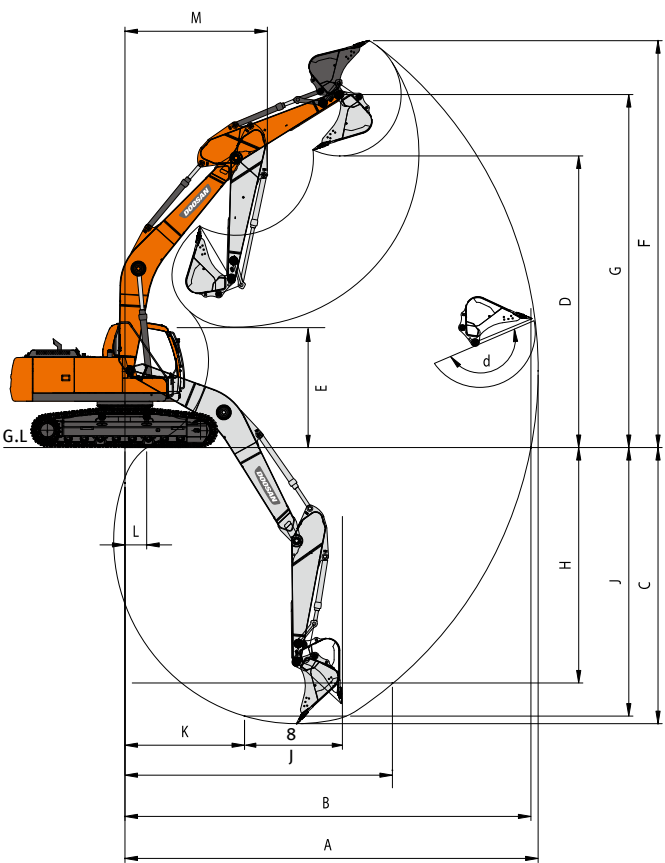


DIMENSIONS

Model				DX200A-7M	
Dimension				STD	
Boom				mm	5,700
Arm				mm	2,900
Bucket (PCSA)				m³	1.0
Undercarriage (Track+Grouser)				mm	STD+TG
Overall	L1	Overall Length		mm	9,570
	L1'	Overall Length w/o Front		mm	4,871
	H1	Overall Height	Boom	mm	2,890
			Hose	mm	3,005
			Cabin	mm	2,980
			Hand / Guard Rail	mm	3,190
	W1	Overall Width		mm	2,990
Swing Body	R1	Rear Swing Radius		mm	2,909
	H2	Ground Clearance*		mm	*450.5
	W2	House Width		mm	2,710
	W3	Cabin Width		mm	1,010
	H3	Height Over Cover		mm	2,140
Undercarriage	H4	Counterweight Clearance*		mm	*1,066
	H5	Track Height*		mm	*883
	L3	Track Length		mm	4,065
	L4	Tumbler Distance		mm	3,270
		Track Gauge		mm	2,200
	W5	Undercarriage Width	STD / LC	mm	3,000
	W6	Shoe Width		mm	800
		Grouser Height		mm	26

\*Grouser 미포함

WORKING RANGES



WORKING RANGE

BOOM LENGTH		mm	5,700
ARM TYPE		mm	(Std.)2,900
BUCKET TYPE (SAE / PCSA)		m³	1.0
A	MAX. DIGGING REACH	mm	9,865
B	MAX. DIGGING REACH (GROUND)	mm	9,695
C	MAX. DIGGING DEPTH	mm	6,590
D	MAX. DUMPING HEIGHT	mm	6,830
E	MIN. DUMPING HEIGHT	mm	2,500
F	MAX. DIGGING HEIGHT	mm	9,620
G	MAX. BUCKET PIN HEIGHT	mm	8,270
H	MAX. VERTICAL WALL DEPTH	mm	5,525
I	MAX. RADIUS VERTICAL	mm	6,415
J	MAX. DIGGING DEPTH (8'LEVEL)	mm	6,395
K	MIN. RADIUS 8' LINE	mm	2,820
L	MIN. DIGGING REACH	mm	575
M	MIN. SWING RADIUS	mm	3,560
D.	BUCKET ANGLE (DEG)	°	177



# STANDARD & OPTION

## STANDARD EQUIPMENT

Boom & Arm
<ul style="list-style-type: none"><li>• 5.7 m Boom</li><li>• 2.9 m Arm</li></ul>
Hydraulic System
<ul style="list-style-type: none"><li>• Boom and arm flow regeneration</li><li>• Boom and arm holding valves (MCV)</li><li>• Swing anti-rebound valves</li><li>• Spare ports (Control valve)</li><li>• One-touch power boost</li></ul>
Cabin & Interior
<ul style="list-style-type: none"><li>• All weather sound suppressed type cab</li><li>• Air conditioner &amp; Heater</li><li>• Adjustable suspension seat with head rest and adjustable arm rest</li><li>• Pull-up type front window and removable lower front window</li><li>• Room light</li><li>• Intermittent windshield wiper</li><li>• Cup holder</li><li>• Hot &amp; Cool box</li><li>• LCD color monitor panel</li><li>• E/G RPM control dial</li><li>• AM/FM radio + MP3 (USB)</li><li>• Remote radio ON / OFF switch</li><li>• 12 V, 24 V power socket</li><li>• Serial communication port for laptop PC interface</li><li>• Joystick lever with 3 switches</li></ul>

Safety
<ul style="list-style-type: none"><li>• Large handrails and step</li><li>• Convex metal anti-slip plates</li><li>• Seat belt</li><li>• Hydraulic safety lock lever</li><li>• Safety glass</li><li>• Hammer for emergency escape</li><li>• Right and left rearview mirrors</li><li>• Travel alarm</li><li>• Battery protector cover (Optional)</li></ul>
Others
<ul style="list-style-type: none"><li>• Double element air cleaner</li><li>• Additional water separator</li><li>• Dry type pre cleaner</li><li>• Fuel filter</li><li>• Dust screen for radiator / oil cooler</li><li>• Engine overheat prevention system</li><li>• Engine restart prevention system</li><li>• Self-diagnostic system</li><li>• 60 A Alternator (24 V, 50 amps)</li><li>• Electric horn</li><li>• Halogen working lights (frame mounted 1, boom mounted 5)</li><li>• Hydraulic track adjuster</li><li>• Track guards</li><li>• Greased and sealed track link</li><li>• Hydraulic oil tank air breather filter</li><li>• Long &amp; Fixed track</li></ul>

## OPTIONAL EQUIPMENT

Some of optional equipments may be standard in some markets. Some of this optional equipment are not available in 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 applications

Safety	Others
<ul style="list-style-type: none"><li>• Boom and arm hose rupture protection valve</li><li>• Overload warning device</li><li>• FOGS (ISO 10262, FOGS standard)</li><li>• Cabin Front Upper / Lower Guard</li><li>• Travel &amp; swing alarm</li><li>• Rotating</li><li>• Rear lamp</li><li>• Side &amp; Rear view camera</li><li>• LED lights</li></ul>	<ul style="list-style-type: none"><li>• Piping option<ul style="list-style-type: none"><li>- Piping for Crusher</li><li>- Piping for Breaker</li><li>- Piping for Quick clamp</li></ul></li><li>• 600mm / 800mm shoe</li><li>• Lower wiper</li><li>• 60A / 80A alternator</li><li>• Fuel filler pump</li><li>• Working Lights<ul style="list-style-type: none"><li>- 4-front / 2-rear on cabin</li><li>- 2-front on cabin</li><li>- 1 on counterweight</li></ul></li><li>• Hydraulic Oil<ul style="list-style-type: none"><li>- Cold weather (VG32)</li><li>- Normal (VG46)</li><li>- Tropical weather (VG68)</li></ul></li><li>• Breaker filter</li><li>• Water separator with heater</li><li>• Short &amp; Fixed track</li></ul>
Cabin & Interior	
<ul style="list-style-type: none"><li>• Air suspension seat</li><li>• Rain Shield</li><li>• High seat Mount</li><li>• Breaker pedal</li><li>• ROPS / FOGS Cabin</li><li>• Cabin front guard (Upper and lower guard)</li><li>• Steel roof cover</li><li>• Additional mirror</li><li>• DAB Audio</li></ul>	