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**DEVELON**

**DEVELON**

Excavators

**DX225LCA-7M**  
**DX220AF-7M**



Photos may include optional equipment



# DIG MORE, GAIN MORE

## DX225LCA-7M

The Evolution of Develon Excavator  
Mech. Engine



Photos may include optional equipment

**Develon's new excavators  
are simply the best  
solution for every dig.**

DX225LCA-7M offers you the unbeatable performance in every job site, improved fuel efficiency and customer-oriented convenience.

Develon's proven electrically controlled pump technology, improved engine and system power, a precise combination of engine and pump power, all of them focused on unbeatable performance while burning less fuel. Convenience features, options, and highly customer focused switch layout in cabin.

Develon 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.

**Unearth maximum profit  
when you dig with Develon**

### HIGH PRODUCTIVITY

Improved engine and system power, lifting capacity and market focused attachments, Develon will take your business to the next level.

### IMPROVED FUEL EFFICIENCY

We proudly introduce develon's cutting-edge technology, electric pump control system. Electric pump control 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 develon's unrivalled tuning technique, operator can reduce fuel consumption up to 14% compared to previous model.

### BETTER QUALITY

DX225LCA-7M meet the new quality standard of Develon. Every key component fulfills the HDI single platform verified in global market. Frames and structures armed with robust design to stand whatever lies ahead. All features applied strict criteria into raise the quality to the next level.

### EASY MAINTENANCE

We lowered the entry barrier of maintenance. The mechanical engine, ground accessible filters and simple layout offer easy maintenance to our customer. Via DEVELON Fleet Management service, you can always be connected to your vehicles. DEVELON Fleet Management 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.



#### ELECTRIC PUMP CONTROL SYSTEM

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

#### DEVELON FLEET MANAGEMENT (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 PEDAL

- Ergonomically designed 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+.

# WE ARE BACK WITH NEW FEATURES

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

#### 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.



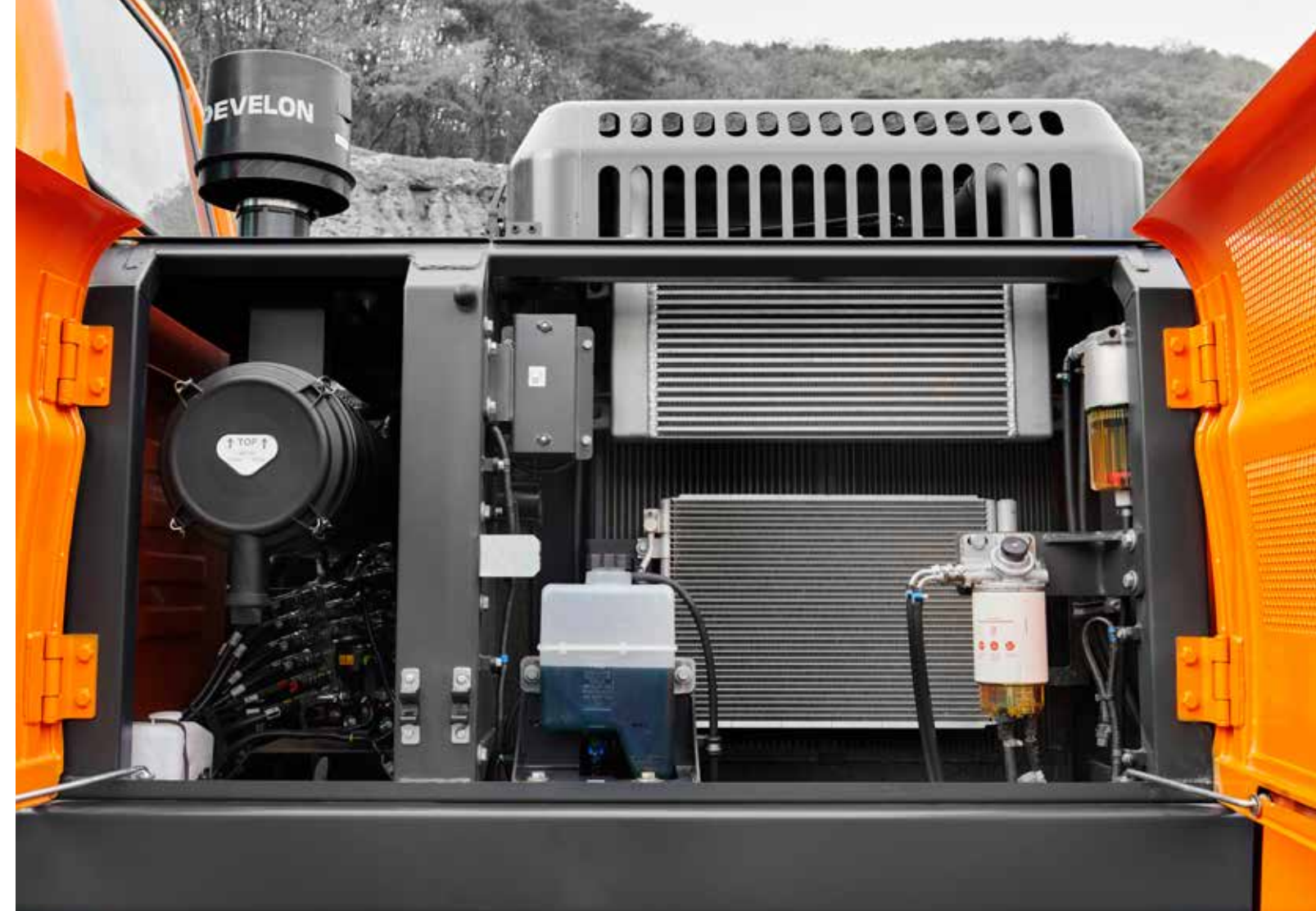
\*Option spec info is included to the images contained in this material and may not be the same with the actual specs.



# THE POWER YOU WAITED FOR

## The Philosophy of Absolute Performance, It's Your Turn to Experience

Powerful performance is engraved on its gene. DX225LCA-7M provides superior performance among 22-ton class excavators. It can break- its way -through even in the heaviest loads and the most rugged works. Its enhanced engine power and hydraulic system enable to create an unbeatable power and torque characteristic. Its finest engineering offers surprisingly agile and precise operation but still true to it's root, power. Digging power and lifting capacities can all be optimized through Develon's unrivalled tuning system. Designed to give you the best possible performance all the time.



### DEVELON "DB58TIS" ENGINE

Develon product gives high performance through in-house engine. Develon engine perfectly harmonized with the hydraulic system and provides strong power. Mechanical engine provides high resistance to moisture, dust, and bad fuel quality. The best engine power in the industry provides stable working speed even in the heavy workload situation.



### ELECTRONICALLY CONTROLLED PUMP

Electronically control the pump by generating virtual hydraulic flow, which effectively works on effectively reduce fuel consumption and high productivity.

### SWING DRIVE

Increased torque is available to ensure rapid cycle, minimizing the shocks during the rotation.

### TRAVEL DEVICE

In-house travel device provides simple internal structure and increases efficiency of the performance. Thicker sprocket minimizes incoming debris and provides higher durability.

### EXCAVATOR CONTROL

Improved excavator control by new EPOS™. Acting as a brain of hydraulic excavator, EPOS™ have been optimized in association with CAN (Controller Area Network) communication link.





# DO MORE

## A Master Key for Every Challenge

DX225LCA-7M is versatile enough to be a key point of your business. Whichever section of the construction industry, DX225LCA-7M can be optimized to do the particular job.

Maximize productivity and profitability by combining the DX225LCA-7M with a range of durable attachments. To find the optimum productivity suitable for each customer, Develon Provides various enable options. Two pump for high flow attachment and lifting high, breaker option. New bucket equipped to meet operator needs of different environment. Increase your versatility and perform a variety of tasks - all while experiencing faster cycle times and excellent control.

### DIVERSIFICATION OF ADDITIONAL COUNTERWEIGHT OPTION

Additional counterweight can be assembled with standard counterweight. Increases tipping load of the machine to raise. You can choose between 3.8 ton, 4.1 ton and 5.3 ton options. 3.8 ton option newly added for further choices.

### NEWLY ADDED BUCKET LINE

For ideal matching to the various job, a broad selection of buckets is provided. Newly launched R2H+ line up enables more breakout force, leading up to give faster and more efficient bucket fill.

### TWO PUMP

Two pump provided for attachments which require high flow.

### BREAKER ASSIST SWITCH

Breaker assist switch is equipped for maximum attachment performance. Works for maintaining consistent downward pressure for high productivity. Easily controlled and can vary the speed.





# BEST IN CLASS EFFICIENCY

## Experience All-Time Best, with 14% Improved Fuel Efficiency.

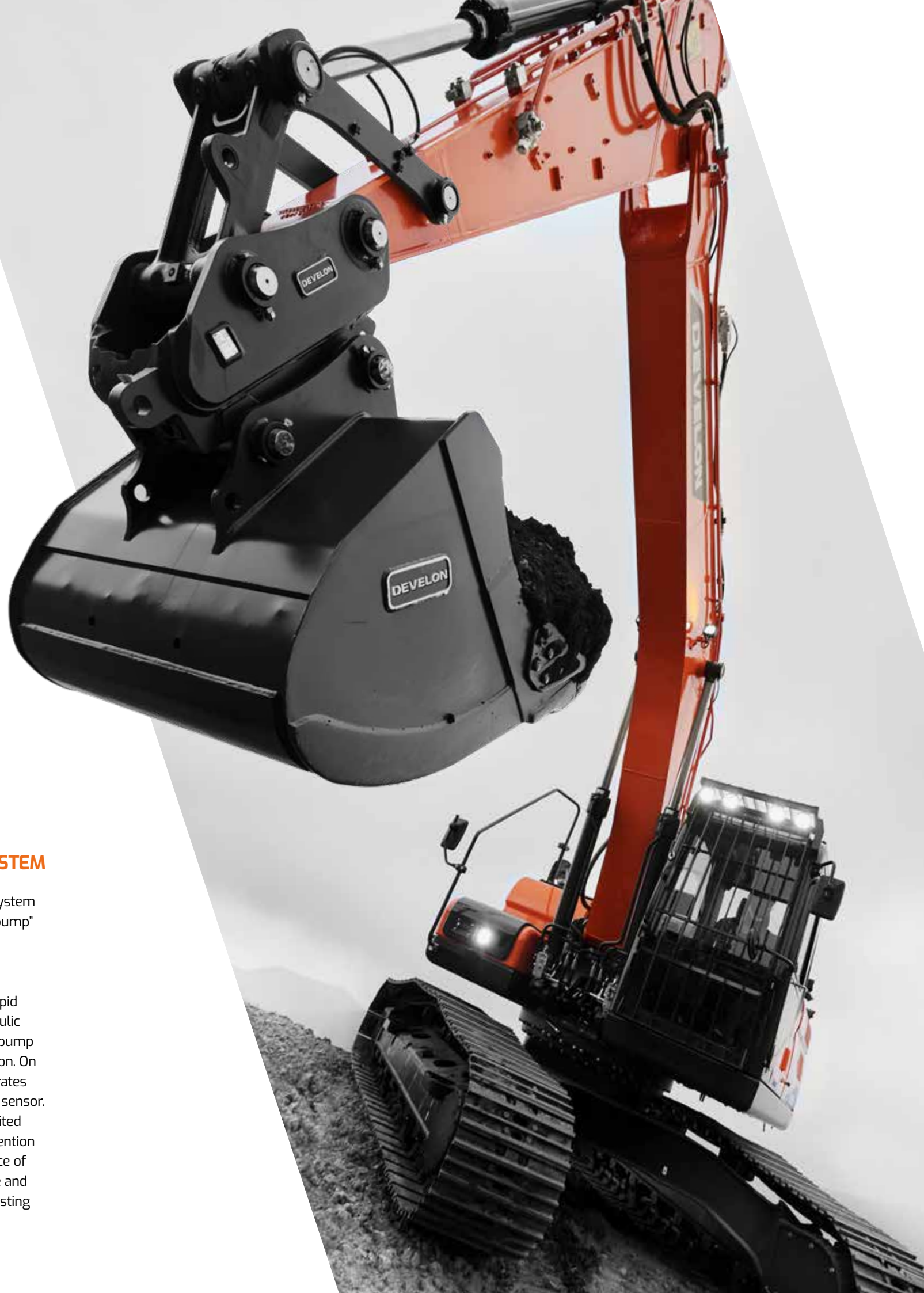
Merely presenting the figures of fuel consumption doesn't give you the full picture of the productivity. Everything from the DX225LCA-7M the powertrain is engineered to save fuel without sacrificing performance or productivity. To maximize the fuel efficiency, the new DX225LCA-7M introduced the 'Develon electronic controlled pump - VBO (Virtual Bleed Off ) system'- result of technological integration. As a result, up to 14% enhancement compared to previous model. From every angle, it can deliver even greater productivity to your business.



### VBO (VIRTUAL BLEED OFF) SYSTEM

VBO system is Develon's own hydraulic system based on "Develon electronic controlled pump"

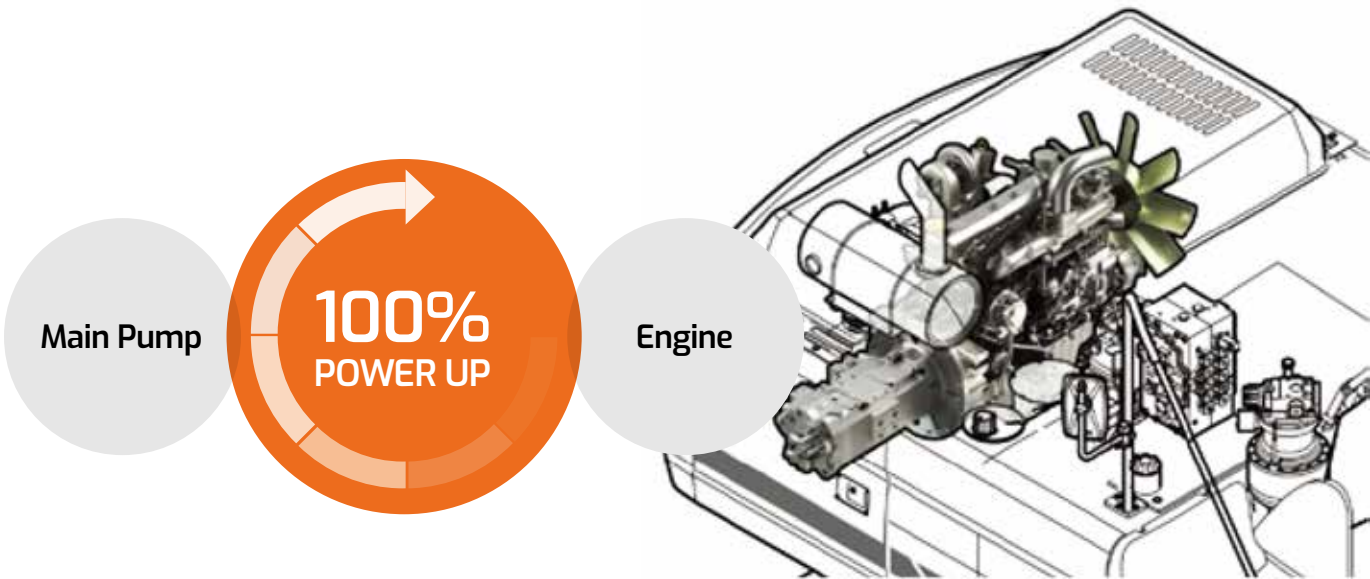
Generally, most excavators use hydraulic system, transferring the energy by using hydraulic flow. In order to facilitate the rapid response to the joystick signal, this hydraulic flow is continuously generated from the pump even when the excavator is not in operation. On the contrary, VBO system 'virtually' generates the hydraulic flow through the electronic sensor. Due to its means, customer can be benefited from VBO system in every way. Not to mention the fuel efficiency and the safe sustenance of the system, but also immediate response and familiar controllability, the strength of existing hydraulic system.





**PUMP MATCHING TECHNOLOGY**

'Develon's engine and pump matching technology' fully uses every drop of fuel to resolve the fuel efficiency problem. By matching the response time between pump and engine, the system not only reduces unnecessary fuel consumption but also controls exhaust fumes. Effectively contributing to eco friendly lifestyle by reducing your carbon footprint.



**POWER MODE**

(P+ mode / P mode / S mode / E mode) Four different power modes give you precise control over the excavator's powertrain. The system automatically identifies working mode and adjusts engine RPM to supply proper pump torque. Potential fuel consumption significantly reduced compared to permanently maintaining the same mode. Controlling this technology is intuitive and straightforward. Simple switch allows you to flick easily between modes.





# ULTIMATE DURABILITY & RELIABILITY

## Rough Work Calls For a Robust Vehicle

DX225LCA-7M superior quality is not due to just one change. Rather, it is the result of hundreds of improvements in every element we've made throughout.

A reliable and durable structure is the foundation of maximized uptime. Durability reinforced by applying highly durable materials to structures of overall frames. Every component is engineered for uptime and extensively tested to validate its performance. The most updated and proved HDI global platform was applied, which has been proved in diverse advanced market. All combined to increase the life of vital components and reduce operating costs.

The durability you need to get the job done.

### Heavy Duty Boom and Arm

A. CENTER BOSS PLATE  
Size increased 40%

B. BOOM END BRACKET  
Single piece of casting type

C. ARM BOTTOM PLATE  
Increase plate thickness 20%

D. ARM SIDE PLATE  
Increase plate thickness 15%

E. HEAVY DUTY BUCKET  
Enhanced design new bucket

F. BOOM PLATE  
Increase boom foot height and decrease width  
Increase plate thickness 15%







#### IMPROVED ENGINE DURABILITY BY TECHNOLOGICAL IMPLEMENT

Additional water separator in fuel to prevent engine damage. Large capacity of forced air cleaner also removes over 99% of airborne particles, reducing the risk of engine contamination and lengthen the cartridge change intervals. All improvements of engine components offer a high degree of reliability and an extended service life.



#### STABLE, SEGMENTED BONNET

Mounting advanced standard counterweight structure to stably control the enlarged bucket. Additional counterweight options supplied for customers who need more tipping load.



#### X-CHASSIS UNDERCARRIAGE

X-chassis undercarriage enables increased ground clearance and improved maneuvering ability. Sloped surface design optimized to shed debris and maximize uptime.



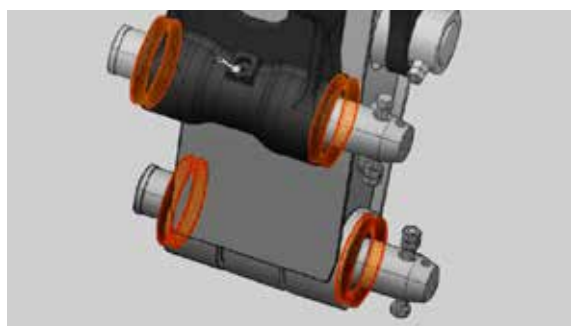
#### TRACK COMPONENT IMPROVEMENT

The chain composed of self-lubricating sealed links, impervious to external contamination. Track frame firmly locked by mechanically bolted pins



#### LIFTING HOLE

For better and easier work, we've added lifting hole in the front.



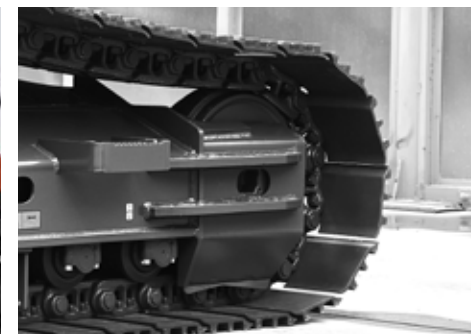
#### ARM END LINK WITH Y-SEAL

Applied Y-seal to prevent pollutant from bucket connection.



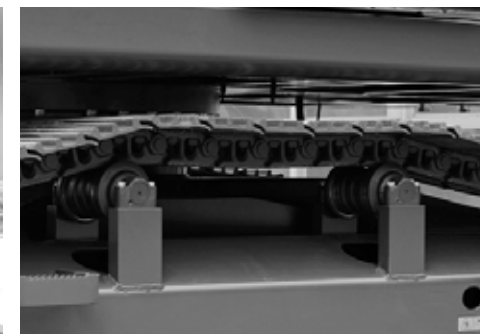
#### STRUCTURE REINFORCEMENT

Strength and stiffness reinforcement through improved welding process and also applying 25 ton class tail frame.



#### IDLER BRACKET IMPROVEMENT (DX220AF-7M)

Idler bracket has been fitted with reinforced bar. Thick and wider strip idler applied to add strength and avoid bending distortion. Protect the main components from external impacts.



#### UPPER ROLLER ENHANCEMENT (DX220AF-7M)

Reinforced design to meet the tough forestry market durability requirements.







# EXCLUSIVELY, FOR OPERATOR

## Ergonomically Designed Features and Enhanced Controllability Maximize Operator's Satisfaction

Some of DX225LCA-7M strongest performance don't even come from the engine. At first glance and upon closer inspection, DX225LCA-7M shows what is important in the construction industry. Every part of spacious cabin interior is the result of Develon's endeavor to see things in the operator's point of view.

Exclusive interior with its new gauge panel and high ergonomic design. Enhancing better visibility, air conditioning system for intuitive controllability and comfort. Also assuring operator's safety by establishing protective and adaptive working environment. Thinking about all the possible outbreaks you can have, we went ahead and fitted some of the advanced safety systems into equipment.

To be an office on wheels and your smart work partner at same time. The best seat is reserved for the operator.





#### OPG (OPERATOR PROTECTIVE GUARD) (OPTIONAL)

Operator Protective Guard assures operator safety and accessibility to major components. Allows simple and safe access to maintenance point.



#### HVAC SYSTEM FILTER COVER (ROPS)

Air ventilation filter and the cover equipped to avoid contamination and system durability. Easy to access for quick and simple maintenance.



#### SIDE AND REAR VIEW CAMERA (OPTIONAL)

Optional side and rear-view camera keep watch in ways beyond operator's sight. Additional LED lighting system attached on each side for the clear identification.



#### EMERGENCY STOP SWITCH

For enhanced safety and to enable fast reactions in an emergency, DX225LCA-7M equipped with an emergency stop switch that allows the interruption of certain body functions whilst allowing the vehicle to remain running.





1



2



3



4



5



6

### 1. NEW 8-INCH MONITOR

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

### 2. ERGONOMICALLY DESIGNED PEDAL

Ergonomically designed pedals placed at both ends. Pedal angle adjusted to relieve the pressure on ankle and joints, reducing fatigue and to lessen the load of operator.

### 3. HEAD LAMP

Head lamp placed near the cabin door which secures operator's visibility by preventing the shadow. This new head lamp system contributes to enhanced safety through improved illumination of the way. Enhances driving comfort and driving safety.

### 4. AIR CONDITIONING AND DEFROSTING SYSTEM

Aerodynamically designed air conditioner equipped for inner climate control.

### 5. CONTROL LEVER

Precise control of the equipment increases versatility, safety and facilitates tricky operations requiring great precision. Leveling operations and the movement of lifted load made easier and safer.

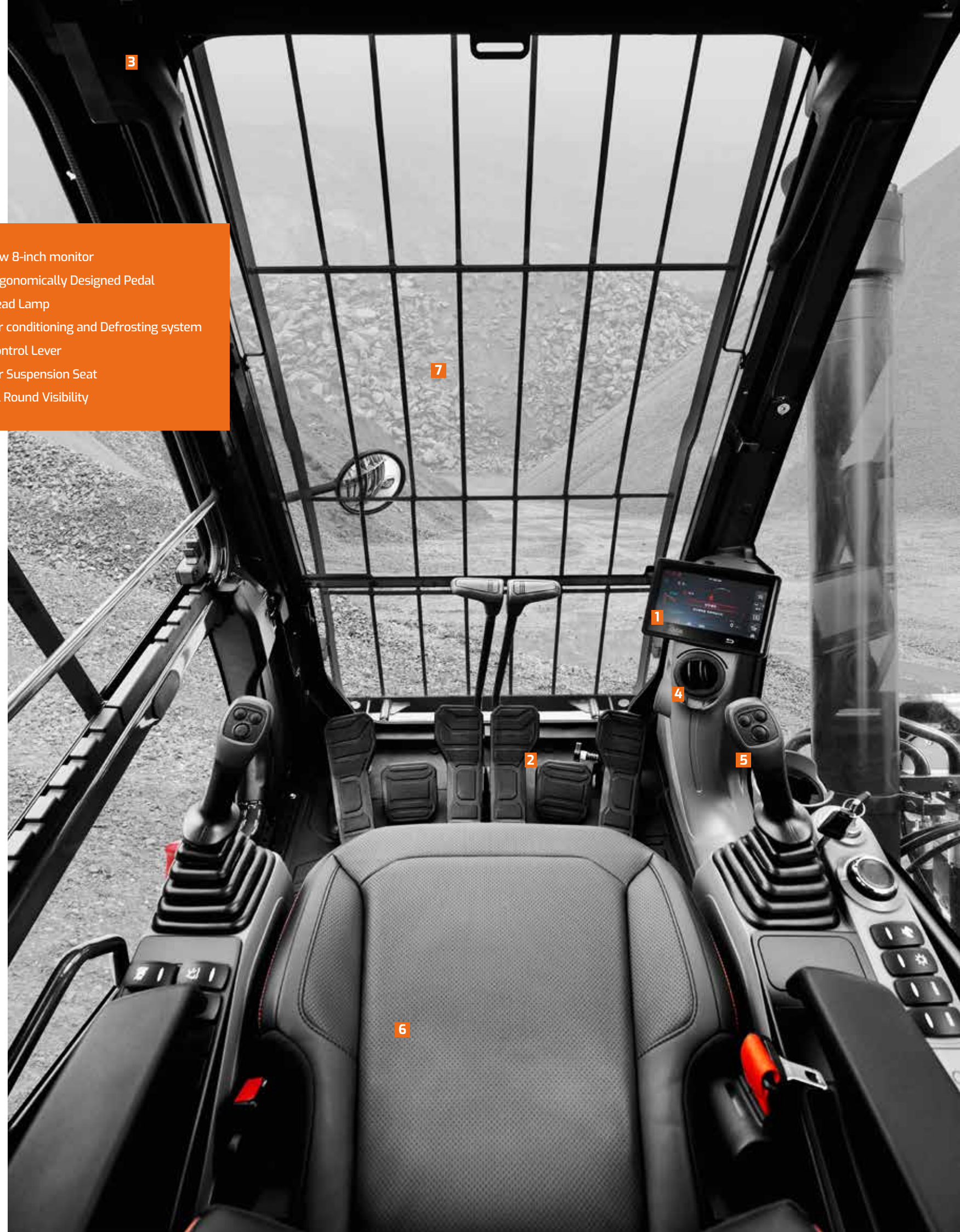
### 6. AIR SUSPENSION SEAT (OPTIONAL)

Equipped with various functions including the adjustment forth and back. Lumbar support effectively reduces the vibration of apparatus during work. Considering the cold environment, seat heating function also equipped in seat.

### 7. ALL ROUND VISIBILITY

Enlarged front shield assures best possible all-around visibility. Panoramic cabin windows and suitable seat position assists on safety and controllability promotion via enhanced lower part of visibility on side position. In crowded city streets or in hazardous construction workplace, operator can get better control and command of surroundings.

1. New 8-inch monitor
2. Ergonomically Designed Pedal
3. Head Lamp
4. Air conditioning and Defrosting system
5. Control Lever
6. Air Suspension Seat
7. All Round Visibility



3

7

1

4

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# MAINTENANCE

## Easy Maintenance, Start at Once. Smart Maintenance, All by Itself

Maintain this superior equipment as the way it was. Safe and easy maintenance feature facilitates apparatus to operate in best condition at long intervals. DX225LCA-7M allows easy access to engine component parts and short maintenance procedure. Familiar and intuitive. DEVELON Fleet Management provides you the operational machine data in an hourly cycle. You can even control most functions outside the equipment.



### 1. SIMPLE MECHANICAL ENGINE

- In-house mechanical engine with approachable structure
- Engine bonnet equipped with wide open side panel

### 2. EASY ACCESS TO DAILY MAINTENANCE POINTS

- Wide open panels allowing easy access to service points**
  - Allowing quick replacement filters and daily maintenance check easier
- Easily accessible filter located at ground level**
  - Located at ground level with wide open side doors
- Centralized grease inlets for easy maintenance**
  - The boom & arm grease inlets are grouped for easy access

### 3. LARGE GUARD RAILS (OPTIONAL)

- Assuring operator's safety during the work hour
- Easy access / Anti skid

### 4. DEVELON FLEET MANAGEMENT (TMS SYSTEM)

- Maintenance data be directly available from control panel
- Allows daily maintenance check easier



### ENGINE OIL FILTER

Engine oil filter offers a high level of filtration, lengthen the oil change interval to 500 hours. Positioned in place which is resistant to contamination and impervious in environment condition, but easy to access for filter change.



### EASY MAINTENANCE ON RADIATORS

Approach to various radiator is easy, making cleaning easier. Engine part accessibility is also enhanced, can be checked through via top and side panels.



### HYDRAULIC OIL RETURN FILTER

Glass fiber filter technology filtering out up to 99.5 % of impurities, increasing oil change interval.



### AIR CLEANER

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



### WATER SEPARATOR

Highly efficient water separator in fuel to prevent engine damage by removing moisture. Reducing the risk of external engine contamination and lengthen the engine's lifespan.



### PRE-CLEANER

Rotor type dry pre-cleaner attached as a standard option.



# ALL THE WEATHER, ALL THE TERRAINS



## DX220AF-7M A True Forestry Worker, Exceptionally Crafted for Uptime Mech. Engine

Head out with fortitude. DX220AF -7M will give you the unmatched confidence to forge through any rough workplaces. It is designed and engineered for exceptional off-road performance. Fully armored from top to down, all improvements help you maximize uptime in all the extreme terrains.

Take full command on all trails. Being supremely capable in demanding situations, DX220AF -7M is ready to overcome any obstacle. Inherited all the performance in its family gene, combined with advanced undercarriage and fortified frame details. Effortless performance on rubble, snow, sand, or unsurfaced road with superior chassis concept which offsets the vibration. Even the trickiest environment can become another chance to show you the exceptional quality and durability of its foundation.

Whatever the surroundings are, inside climate can be maintained perfect. An interface with clear vision and intuitive steering wheel control. A new generation of an impressive display and technology makes your own personal space and at the same time connects you to the world.

More exploring with fewer compromises. Go further and do farther, to the range you ever thought possible, with durable DX220AF -7M.

## Advance at Glance

### 1. DAMAGE-PROOFED DURABILITY

Strong foundation to build on. Flexible and robust in operation, the D type frame which shaped to add solidity and X-chassis frame designed using reliable element and formed in optimal structural integrity. Reinforced undercarriage with newly designed track idler, rollers and track guards. Travel motor fortified with bolt head guard. Ensuring long life and high uptime even in extreme terrains

### 2. PERFORMANCE EXCEL IN FORESTRY

Working in forestry application becomes more stable with its long and large crawler. With impressive ground clearance and superior structure concept, Vibration control due to outstanding torsional flexibility, fully welded frame ensure long service life. Uses highly durable materials and structures tested under extreme conditions.

### 3. A DESIRABLE WORKPLACE

Comfortable driver's workplace which also serves as an information and command center at the same time. Enjoy your enhanced personal space with completely re-designed cabin interior. Panoramic cabin for the optimal view of the working area. Every feature is intuitive, acceptable, and accessible. Refined interior with enhanced legroom and storage space guarantees a serene ride to you.



# DEVELON FLEET MANAGEMENT

## Telematics Service (OPTIONAL)

**TELECOMMUNICATIONS** Data flow from machine to web



### TELEMATICS TERMINAL

Terminal device is installed and connected to a machine to get machine data.

### TELECOMMUNICATION

DEVELON provides Dual mode (Cellular, Satellite) communication to maximize communication coverage

### DEVELON FM WEB

User can monitor machine status from DEVELON FM Web

**TELEMATICS SERVICE BENEFITS** Develon 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

#### DEVELON

Responsive to customer's voice

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

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



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	All models	All models
Fault code / Warning	· Fault code · Machine Warnings on Gauge Panel	All models	All models	All models
Fuel information	· Fuel level · Fuel consumption	All models	All models	All models
Dump capacity	· Dump tonnage · Count of Work Cycle	N/A	N/A	All models

# GLOBAL PARTS NETWORK

## QUALITY-PROVEN MAIN COMPONENTS

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

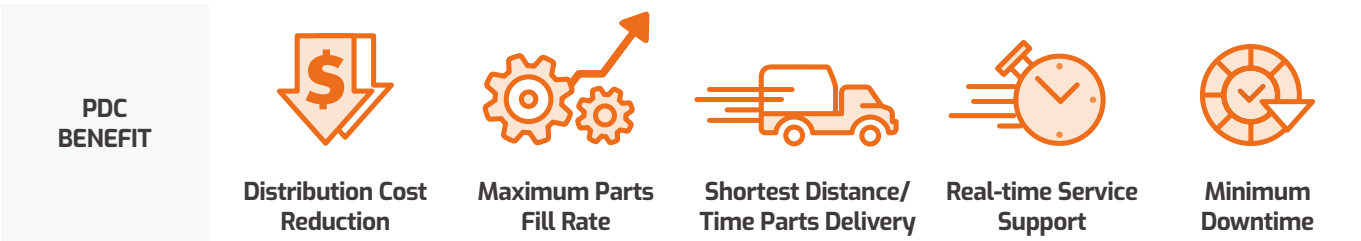


### GLOBAL NETWORK

The global network of the GPDC (Global Parts Distribution Center) maximizes its fill 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. Develon 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), three in USA (Atlanta, Seattle and Miami), two in Europe (Germany and the UK), one in the Middle East (Dubai) and two in Asia (Singapore and Indonesia).





# TECHNICAL SPECIFICATION

## ENGINE

Model
Develon DB58TI 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 phase II.
Number of cylinders
6
Nominal flywheel power
GROSS POWER 126.5 kW (172PS, 170HP) @ 2,000 rpm (SAE J1995) NET POWER Tropical 120 kW (163PS, 161HP) @ 2,000 rpm (SAE J1349) Standard 121 kW (164PS, 162HP) @ 2,000 rpm (SAE J1349)
Max torque
70 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	125 x 85 x 1,263 mm
Arm	1	140 x 100 x 1,443 mm
Bucket	1	120 x 80 x 1,060 mm

## ENVIRONMENT

Noise levels comply with environmental regulations (dynamic values).

Sound level guarantee
106 DB (A) (2000/14/EC)
Cab sound level
75 DB (A) (ISO 6396)

## WEIGHT

Boom 5,700 mm (18'8") Arm 2,900 mm (9'6") Bucket SAE H Class 0.92 m<sup>3</sup> (1.20 yd<sup>3</sup>)

	Shoe width	Operating weight	Ground pressure
Triple Grouser	(Std) 600 mm (2')	21,700 kg (47,840 lb)	0.46 kgf/cm <sup>2</sup>
	700 mm (2' 4")	22,000 kg (48,502 lb)	0.4 kgf/cm <sup>2</sup>
	800 mm (2' 8")	22,300 kg (49,163 lb)	0.36 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
<b>Front</b> 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 11.4 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.

Number of rollers and track shoes per side
Upper rollers : 2 (standard shoes)
Lower rollers: 8
Shoes : 49
Total length of track : 4,445 mm (14' 7")

## 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)
6.5 / 3.5 km/h (4.0 / 2.2 mph)
Maximum traction force
10,300 / 22,500 kgf (22,708 / 49,604 lbf)
Maximum grade
35 (70%)

## BUCKET DIGGING FORCES

Bucket Type	Capacity (m <sup>3</sup> )	DIGGING FORCE (NOM/PRESS UP, TON)
	SAE	
GP	0.92 / 0.51 / 0.81 / 1.05	[SAE] 13.3 / 14.1 [ISO] 15.6 / 16.4
DITCH	0.54	
(SLR) GP	0.39	[SAE] 8.6 / 9.1 [ISO] 10.0 / 10.6
R1H	0.92 / 1.05 / 1.17	[SAE] 12.9 / 13.7 [ISO] 14.5 / 15.3
R1S	1.05	
R2H	0.92 / 1.08 / 1.24	
R2H+	1.08	
R2S	0.91 / 1.07	[SAE] 13.6 / 14.3 [ISO] 14.9 / 15.7

## BUCKET

					C/W (ton)	4.1			5.3
					SHOE (mm)	600			600
Bucket Type	Capacity (m³)		Width (mm)		Weight (kg)	5.7m Boom			SLR (8.5m)
	SAE/PCSA	CECE	With Cutter	W/O Cutter		2.4m HD Arm	2.9m HD Arm	3.5m Arm	SLR (6.2m)
GP	0.39	0.35	825	736	345	-	-	-	A
	0.35	0.47	768	722	549	A	A	A	-
	0.81	0.72	1,125	1,065	684	A	A	A	-
	0.92	0.81	1,233	1,173	724	A	A	A	-
	1.05	0.92	1,369	1,309	776	A	B	B	-
R1H	0.92	0.80	1,198	1,264	740	A	A	A	-
	1.05	0.90	1,331	1,397	787	A	B	B	-
	1.17	1.03	1,453	1,519	848	B	C	C	-
DC	0.54	0.46	1,800	-	358	-	-	-	C
R1S	1.05	0.92	1,331	1,397	990	A	B	C	-
R2H	0.92	0.83	1,050	1,096	867	A	A	B	-
	1.08	0.97	1,200	1,246	939	A	B	C	-
	1.24	1.11	1,350	1,369	1,011	B	C	D	-
R2H+	1.08	0.97	1,200	1,246	1,033	B	C	C	-
R2S	0.91	0.82	1,050	1,094	1,078	A	B	C	-
	1.07	0.96	1,200	1,244	1,182	B	C	D	-
Maximum load pin-on (payload+bucket)						3,242	2,953	2,683	1,311

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

## REFILL CAPACITIES

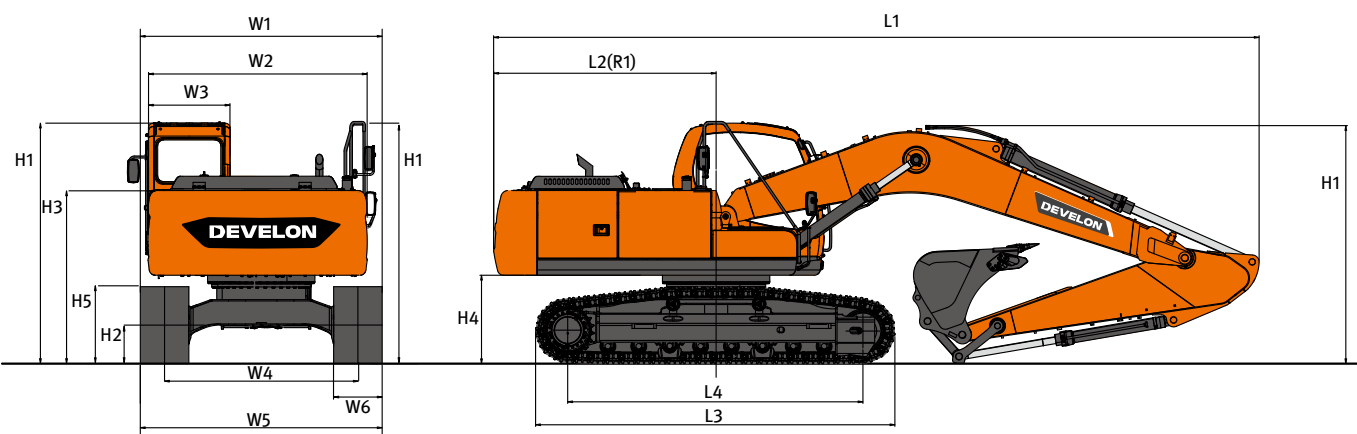
Fuel tank
400 L (105.7 US gal)
Cooling system (Radiator capacity)
28.4 L (7.5 US gal)
Engine oil
28 L (7.4 US gal)
Swing drive
5 L (1.32 US gal)
Final drive (each =Travel Device = travel motor + travel reduction gear)
2 X 4 L (2 X 1.06 US gal)
Hydraulic tank
196 L (51.8 US gal)

## ARM DIGGING FORCES

	LENGTH (mm)	WEIGHT (kg)	DIGGING FORCE (NOM/PRESS UP, TON)
STD. ARM	2,900	648	[SAE] 10.5 / 11.1, [ISO] 10.9 / 11.5
LONG ARM	3,500	797	[SAE] 9.4 / 9.9, [ISO] 9.7 / 10.3
SLR ARM	6,200	1,055	[SAE] 5.7 / 6.2, [ISO] 5.8 / 6.2
FORESTRY ARM	2,900	715	[SAE] 10.5 / 11.1, [ISO] 10.9 / 11.5
HD ARM	2,900	761	[SAE] 10.5 / 11.1, [ISO] 10.9 / 11.5
HD ARM	2,400	688	[SAE] 12.2 / 12.9, [ISO] 12.7 / 13.4



DIMENSIONS

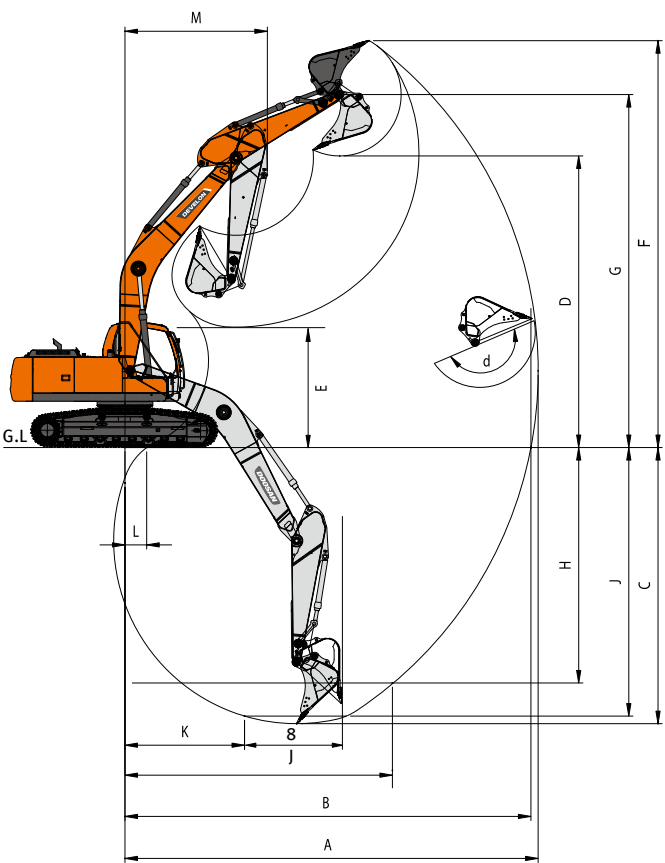


DIMENSIONS

Model				DX225LCA-7M				DX220AF-7M
Dimension				STD	OPT1	OPT2	OPT3	STD
Boom				mm	5,700	5,700	5,700	8,500
Arm				mm	2,900	2,400	3,500	6,200
Bucket				m³	0.92	1.08	0.81	0.39
Undercarriage (Track+Grouser)				mm	LC+TG	LC+TG	LC+TG	LC+TG
Overall	L1	Overall Length		mm	9,570	9,600	9,610	12,390
	H1	Overall Height	Boom	mm	2,890	2,940	3,110	3,295
			Hose	mm	3,005	3,105	3,305	3,385
			Cabin	mm	2,980	2,980	2,980	2,980
			Hand/Guard Rail	mm	3,190	3,190	3,190	3,190
Swing Body	W1	Overall Width		mm	2,990	2,990	2,990	2,990
	L2 (R1)	Rear Swing Radius		mm	2,909	2,909	2,909	2,909
	H2	Ground Clearance*		mm	*450.5	*450.5	*450.5	*450.5
	W2	House Width		mm	2,710	2,710	2,710	2,710
	W3	Cabin Width		mm	1,010	1,010	1,010	1,010
Undercarriage	H3	Height Over Cover		mm	2,140	2,140	2,140	2,140
	H4	Counterweight Clearance*		mm	*1,066	*1,066	*1,066	*1,066
	H5	Track Height*		mm	*883	*883	*883	*923
	L3	Track Length		mm	4,445	4,445	4,445	4,445
	L4	Tumbler Distance		mm	3,650	3,650	3,650	3,650
	W4	Track Gauge		mm	2,390	2,390	2,390	2,390
	W5	Undercarriage Width	STD	mm	2,990	2,990	3,190	3,190
W6				Shoe Width	mm	600	600	800
				Grouser Height	mm	26	26	26

\*Grouser not included

WORKING RANGES



WORKING RANGE

BOOM LENGTH		mm	5,700		8,500
ARM TYPE		mm	(Std.) 2,900	2,400	3,500
BUCKET TYPE (SAE / PCSA)		m³	(Std.) 0.92	1.05	0.81
A	MAX. DIGGING REACH	mm	9,865	9,460	10,385
B	MAX. DIGGING REACH (GROUND)	mm	9,695	9,280	10,220
C	MAX. DIGGING DEPTH	mm	6,590	6,105	7,210
D	MAX. DUMPING HEIGHT	mm	6,830	6,675	6,960
E	MIN. DUMPING HEIGHT	mm	2,500	2,985	1,870
F	MAX. DIGGING HEIGHT	mm	9,620	9,425	9,635
G	MAX. BUCKET PIN HEIGHT	mm	8,270	8,130	8,415
H	MAX. VERTICAL WALL DEPTH	mm	5,525	5,385	5,995
I	MAX. RADIUS VERTICAL	mm	6,415	6,025	6,740
J	MAX. DIGGING DEPTH(8'LEVEL)	mm	6,395	5,890	7,030
K	MIN. RADIUS 8' LINE	mm	2,820	2,840	2,790
L	MIN. DIGGING REACH	mm	575	1,690	-225
M	MIN. SWING RADIUS	mm	3,560	3,575	3,615
D.	BUCKET ANGLE (DEG)	°	177	177	177



# STANDARD & OPTION

## STANDARD EQUIPMENT

Boom & Arm
<div><div></div><div><ul style="list-style-type: none"><li>• 5.7 m Boom (Heavy duty)</li><li>• 2.9 m Arm (Heavy duty)</li></ul></div></div>
Hydraulic system
<div><div></div><div><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></div></div>
Cabin & Interior
<div><div></div><div><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></div></div>

Safety
<div><div></div><div><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></ul></div></div>
Others
<div><div></div><div><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 2)</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></div></div>

## OPTIONAL EQUIPMENT

Some of optional equipments may be standard in some markets. Some of this optional equipment is not available in some markets. You must check with the local DEVELON dealer to know about the availability or to release the adaptation following the needs of the applications.

Boom & Arm	Others
<div><div></div><div><ul style="list-style-type: none"><li>• 5.7 m Boom</li><li>• 8.5 m Boom</li><li>• 2.4 m Arm (Heavy duty)</li><li>• 2.9 m Arm</li><li>• 3.5 m Arm</li><li>• 6.2 m Arm</li></ul></div></div>	<div><div></div><div><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>• 700 mm / 800 mm shoe</li><li>• Lower wiper</li><li>• 60 A / 80 A 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>• Counterweight<ul style="list-style-type: none"><li>- 4.1 Ton / 5.3 Ton / 3.8 Ton</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></ul></div></div>
Safety	
<div><div></div><div><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>• Travel &amp; swing alarm</li><li>• Rotating Beacon</li><li>• Rear lamp</li><li>• Cabin Front Upper/Lower Guard</li><li>• Side &amp; Rear view camera</li><li>• LED lights</li><li>• Battery protector cover</li></ul></div></div>	
Cabin & Interior	
<div><div></div><div><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>• Steel roof cover</li><li>• Additional mirror</li><li>• DAB Audio</li></ul></div></div>	