

## > We are DEVELON

We trace our roots to 1937 as one of Korea's first large scale machine plant. Throughout time we have consistently delivered exceptional products and solutions.

DEVELON is a bold name that reflects our core ambition to continue developing onwards and leaving behind a positive footprint in our world. Moving forward, we seek to be part of our customers and partners' endeavor to build a better world.

Powered by **Innovation**



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HDIPBE-01-2307

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[develon-ce.com](https://develon-ce.com)

# DEVELON

SD Wheel Loaders

## SD310





# SD310

## THE RIGHT ONE TO OVERCOME NEXT CHALLENGE

### BALANCED POWER, PROVEN TO EXCEL

- Stronger breakout force and tractive force, reflecting excellent performance in a high-load working environment.
- Match between transmission and torque converter fully plays engine power and enables the whole machine to deliver stronger traction force.
- Low-speed in-house engine, and reasonable matched technology, ensures a more reliable and efficient performance.

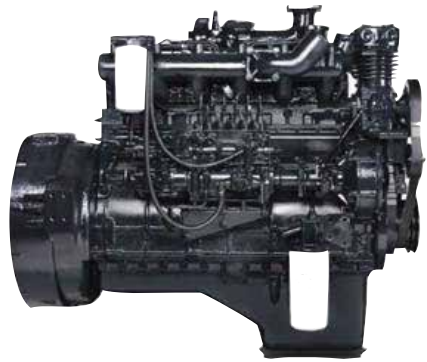
### PRO SAFETY ALL-ROUND COMFORT

- Noise reduction technology complying with international standards provides protection and boosts work efficiency.
- Interior of the cabin features an ergonomic design comprising a large operational space, a wide visual field and a user-friendly control unit.



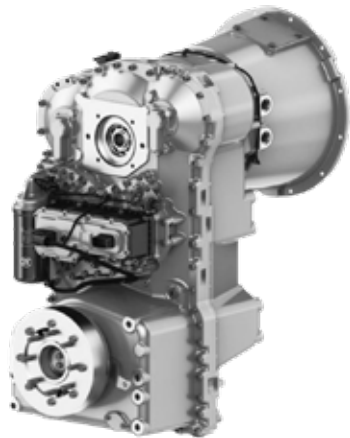


## BIGGER EFFICIENCY



### ENGINE (Develon DE08TIS)

SD310 gives high performance through in-house engine. Outputs of 160 kW, strong power and impressive torque range enables to precisely deliver the stable working speed. Our many years of experience in engine provide both highly efficient and reliable performance.



### ZF TRANSMISSION

Full automatic transmission with four forward gears and three backward gears enables smooth speed change. It has gear ratios perfectly spaced to give optimal speed.

### SMALLER TURNING RADIUS AND AGILITY

Ideal operating speed and 40-degree steering angle, sharply improve work efficiency, especially in a narrow job site.

### TORQUE CONVERTER

The torque converter with a simple structure provides convenient operation and high transmission efficiency.

### ACCELERATION PERFORMANCE

The injection pump has undergone special test and greatly improved engine acceleration performance and speed.

### STRONG BREAKOUT FORCE AND TRACTION FORCE

Through the combination of hydraulic systems, SD310 delivers excellent breakout and traction force in every working condition.

## PROVEN RELIABILITY

### SOLID FRAME STRUCTURE

The most advanced 3D CAD and FEM technologies are adopted in the frame structure design. These technologies greatly improve the strength, durability and reliability of the device.

### REINFORCED PIN BUSHING

Pin bushing made of high anti-abrasion materials, improved resistance to wear and abrasion.

### AIR CONDENSOR ASSEMBLED WITH RADIATOR AIR

Conditioning condenser without electric fan motor is integrated with radiator and has fewer quality problems.

### PROVEN DURABILITY

SD310's working attachments and articulated pin are properly matched in size and are optimally positioned in force bearing area. Increased diameters of the boom, front and back frame pin roll, also enhance durability.

### ALUMINUM RADIATOR

SD310 used aluminum radiator, which is stronger and guarantees better quality, enhancing the machine reliability.

### TRANSMISSION SHAFT

Double bearing supporting propeller shaft in dual configuration improves the reliability of propeller shaft. Lubricating oil can be infused in shaft easily, enhancing the durability.





# EASY MAINTENANCE



## CONVENIENT INSPECTION ON HYDRAULIC LEVEL

Monitoring the hydraulic oil level has made easier, to reduce maintenance time and to improve device service lifetime.

## FULLY TILTED ENGINE COVER

Engine cover part is integrated in one-piece. United cover makes it easy to repair engine and sub parts.



## EASILY ADJUSTABLE MAINTENANCE WINDOW

Maintenance windows have been added to each side of the engine hood. Providing a quick and direct view, saving daily monitoring and maintenance time.



## OUTDOOR POWER SWITCH

To enhance maintenance safety and convenience, power switch is equipped on outdoor to cut off battery power when needed.



## QUICKLY CHANGEABLE BREAK DISCS

The use of quick-change brake discs allows the user to check brake pads for excessive wear at any time and change the brake pads more easily without removing the tires.





# NEW STANDARD OF COMFORT

## CABIN COMFORT

Ample space, wide visual field and intuitive features will guarantee a pleasant work. Noise inside cabin is lower, comfortable working space with multi angle adjustable steering wheel.

## LED LAMP

New additional working lamp contributes to enhanced safety through improved illumination. Existing front lamp has been upgraded to LED and totally six more lights have been added. Two additional LED lights and cables on the front and four more on the back.

## AIR FLOW INCREASED BY 30%

Excellent air-conditioning system and air circulation function with perfect defrost system provide operator a more comfortable operating environment.

## REAR WIPER

In case of rain and dust in the work environment, rear wiper has been set up to improve rear visibility.

## ERGONOMICALLY DESIGNED PEDAL

The ergonomically designed pedals reduce fatigue and the load of operator.

## DELUXE SEAT

High back, deep-seated position, dual armrests and multi-level spring shock absorption enable a comfortable operation.

## NEW OPERATOR PANEL

The instrument gauge panel has been changed simple and intuitively to show essential information right in front of the operator.

## LOWER NOISE

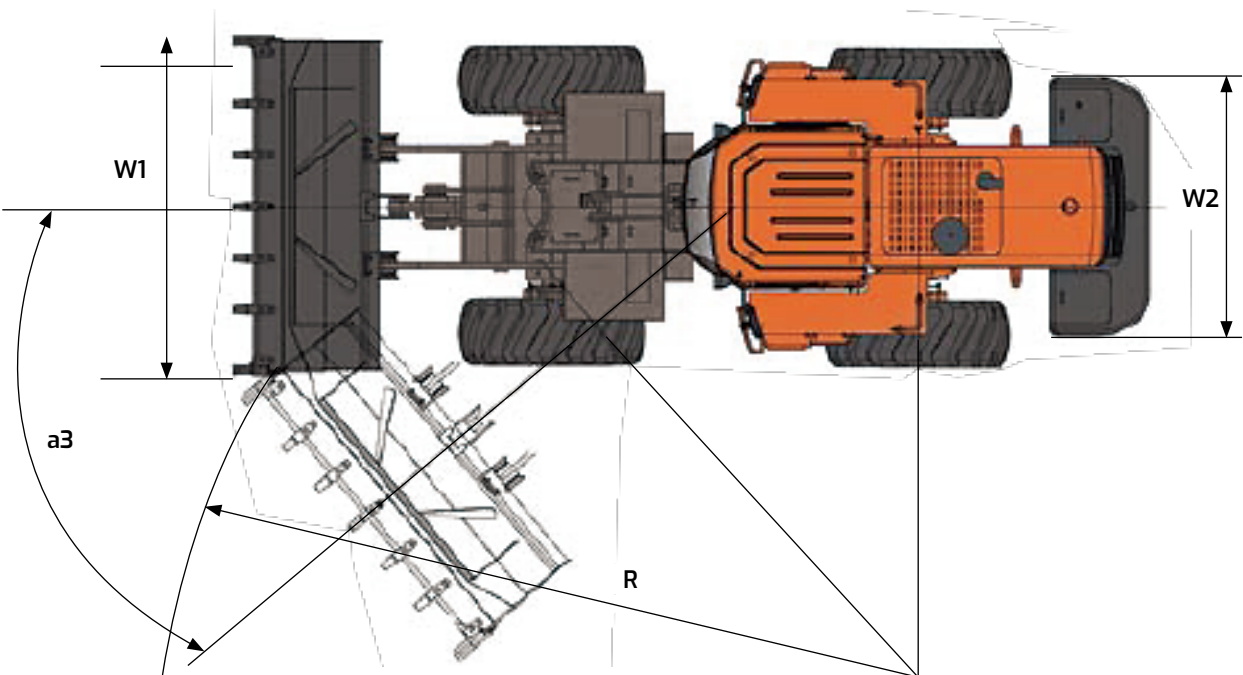
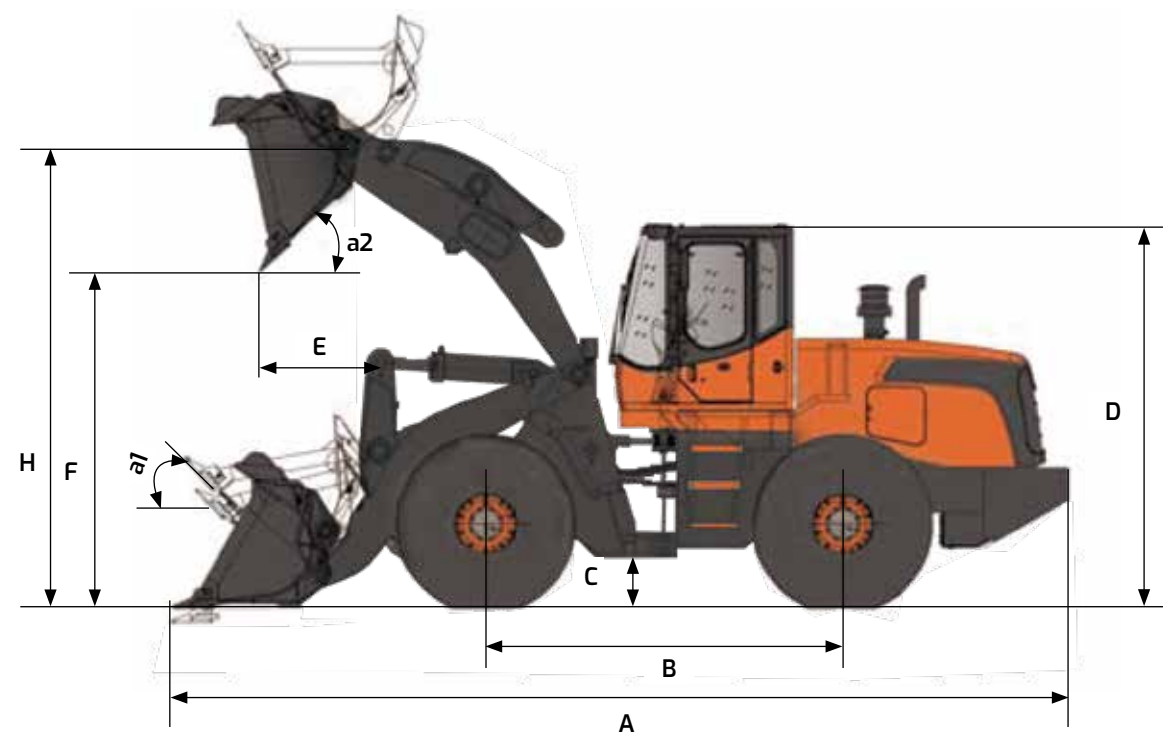
SD310's cabin offers a quiet and comfortable working environment and improved work efficiency.





# TECHNICAL SPECIFICATION

# DIMENSIONS & WORKING RANGE



## ENGINE

Model	Develon DE08TIS (Tier-2)
Rated Power (SAE J1995 Gross)	160 kW (217 ps) @ 2,000 rpm
Max. Torque (SAE J1995 Gross)	902 N.m @ 1,300 rpm
Number of cylinders/bores/strokes	6 / 111 mm / 139 mm
Displacement	8,071 cc
Fuel Consumption	215 g/kW.h @ rated speed

## HYDRAULIC SYSTEM

Main Pump Type	Fixed gear
Main Pump Displacement	100 cc/rev
Max. Flow Rate	196 ℓ/min

## GENERAL SPECIFICATIONS

Operating Weight	17.3 ton
Bucket Capacity (SAE HEAPED)	3.0 m <sup>3</sup>
Travel Speed (1/2)	11 / 36 km/h
Payload	5,000 kg
Static Tipping Load (straight)	13,300 kg
System Pressure (Work/Steer)	170/140 kg/cm <sup>2</sup>
Sound Level in CAB (ISO 6396)	81 dB (A)
External Sound Power Level (2000/14/EC)	112 dB (A)
Fuel Tank Capacity	350 ℓ
Tire Size	23.5 - 25 - 16 PR

## TRANSMISSION

Type	4 speed, Power-shift, Countershaft, Engine remote mounted with propeller shaft & damper
Torque Converter Stall Ratio/Size	2.280 / 340 mm

ITEMS			UNIT	STD.	OPT 1	OPT 2	OPT 3
Operating Weight			ton	17.3	17.4	17.6	17.5
Bucket Capacity (SAE HEAPED)			m <sup>3</sup>	3.0	2.7	2.7	4.0
Arm				STD.	LONG	STD.	STD.
Breakout Force			ton	16.2	15.9	16.2	13.4
Dimension	Overall Length	A	mm	8,260	8,625	8,302	8,287
	Overall Width	W1	mm	2,992	2,992	2,992	3,092
	Overall Height	D	mm	3,520	3,520	3,520	3,520
	Ground Clearance	C	mm	420	420	420	420
	Wheelbase	B	mm	3,200	3,200	3,200	3,200
	Tread	W2	mm	2,174	2,174	2,174	2,174
Working Range	Dump Height at 45° (with tooth)	F	mm	3,089	3,384	3,117	3,012
	Dump Reach at 45° (with tooth)	E	mm	1,308	1,366	1,335	1,276
	Max. Dump Angle (fully raised)	a2	degree (°)	49	49	49	49
	Max. Tilt Angle (on ground)		degree (°)	45	45	45	45
	Max. Tilt Angle (at fully raised)		degree (°)	59	59	59	59
	Max. Tilt Angle (at carry)	a1	degree (°)	50	50	50	50
	Height at bucket pivot point	H	mm	4,150	4,450	4,150	4,150
	Digging Depth (0° level)		mm	120	200	122	90
	Max. Steering Angle	a3	degree (°)	40	40	40	40
	External radius at bucket edge	R	mm	5,800	5,800	5,800	5,800
Gradeability			% (°)	58 (30)			