

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-01-2305

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 Develon equipment will vary based on normal variations in design, manufacturing, operating conditions, and other factors. Pictures of Develon units may show other than standard equipment.

develon-ce.com

DEVELON

Wheel Excavators

DX190WA



Photos may include optional equipment.



Great Productivity & High Fuel Efficiency with Excellent Quality

DX190WA has been built for the industry's No.1 productivity and fuel efficiency thanks to high durable parts with advanced fuel-control technology.

RELIABILITY

Durable components guarantee enough working hours without any down-time

PROTECTION COVERS FOR DOZER & OUTRIGGER



MECHANICAL ENGINE WITH HIGH-EFFICIENT FILTERS



HIGH GROUND CLEARANCE



DRY TYPE PRE CLEANER (OPTIONAL)



LOW CENTER OF GRAVITY DESIGNED COUNTER-WEIGHT



HEAVY-DUTY BOOM, ARM & CYLINDERS



EM BUSH



DURABILITY-IMPROVED HYDRAULIC HOSES



PERFORMANCE & STABILITY

MAXIMUM PERFORMANCE BY DEVELON IN HOUSE ENGINE

- Develon in house engine perfectly harmonized with the hydraulic system and provides strong power.
- Mechanical engine providing high resistance to moisture, dust, and bad fuel quality.

DEVELON DX190WA ENGINE

Model	Develon DB58T1S 6-Cylinders
Type	Turbo charged
Rated Horse Power	123 kW (167 PS, 165 HP) @1,900 rpm (SAE J1995) 116 kW (157 PS, 155 HP) @1,900 rpm (SAE J1349)
Torque	70 kgf.m @ 1,400 rpm
Alternator	24 V x 60 A



The Industry's Best stability

- 3.0 ton Counter weight (The biggest)
- 2,700 Wheel based (The widest)



SMOOTH SWING WITH INCREASED SWING TORQUE

New mottrol swing reduction gear minimizes shocks during rotation while making increased swing torque.



Swing Torque (kg.m)

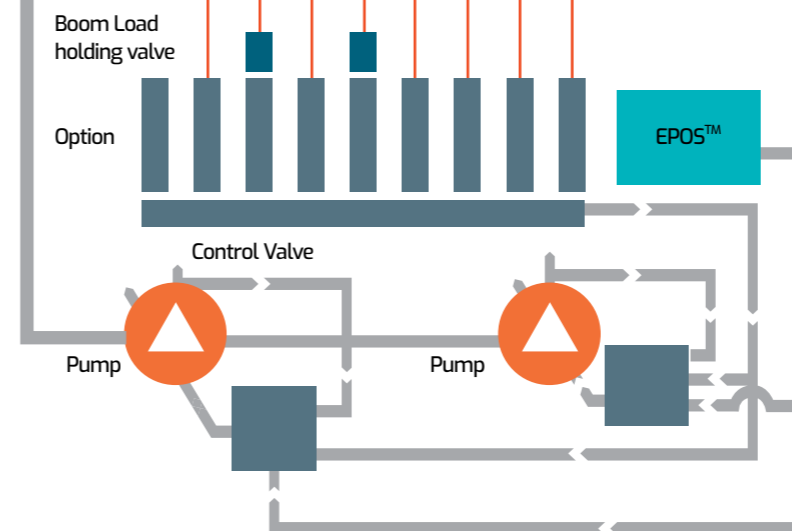
4,965

7.9% UP

4,600

DX190WA

Previous Model



IMPROVED EXCAVATOR CONTROL BY NEW EPOS™ SYSTEM

The brains of the hydraulic excavator, the EPOS™ (Electronic Power Optimizing system), have been improved, through a CAN (Controller Area Network) communication link, enabling a continuous exchange of information between the engine and the hydraulic system.

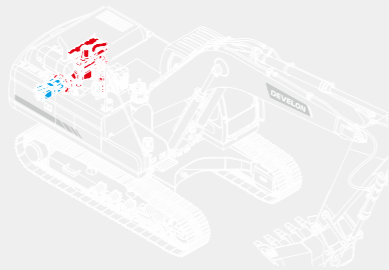
The advantages of the new EPOS™ impacts at several levels, Ease of operation and user-friendliness:

- The availability of a power mode and standard mode guarantee maximum efficiency under all conditions.
- The automatic deceleration mode enables fuel saving.
- Regulation and precise control of the flow rate required by the equipment are available as standard.
- A self-diagnosis function enables technical problems to be resolved quickly and efficiently.
- An operational memory provides a graphic display of the status of the machine.
- Maintenance and oil change intervals can be displayed.

FUEL EFFICIENCY

RELIEF CUTOFF TO PREVENT TRANSFER OF UNNECESSARY FLOW

1. Typically, the pump tends to supply flow even when the maximum pressure on the system is reached due to severe working environments and large workloads.
2. Relief cutoff technology of Develon prevent transfer of unnecessary flow to keep powerful working level at the maximum value while reducing consumption of fuel.



RELIEF CUTOFF

Relief cutoff technology saves 20~30% of fuel consumption in the heavy workload.



OPTIMIZED LEVER CONTROL & AUTO IDLE TO PREVENT UNNECESSARY FUEL CONSUMPTION

1. When operator takes break for rest with the joystick kept fixed, both of the engine and the pump are kept in standby mode with maximum rotation rate and hydraulic power. In such a case, unnecessary fuel consumption takes place.
2. The auto idle technology effectively controls the engine, and prevents unnecessary fuel consumption while the engine is kept in standby mode. Further, the optimized lever control technology effectively controls the pump to keep power of the pump maximum and prevent fuel consumption while the system is kept shut down.
3. When operating the joystick, rotation rate of the engine and maximum hydraulic power of the pump increase simultaneously for efficient consumption of fuel. The technologies of Develon enable operation of the system with maximum power in time.

OPTIMIZED LEVER CONTROL

In auto idle, you can save 90% of fuel than in operation.

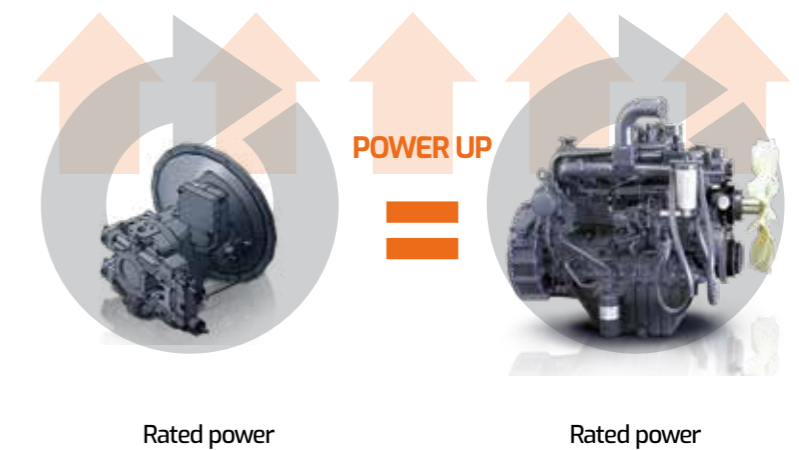


ENGINE & PUMP MATCHING TO REDUCE MATCHING RESPONSE TIME OF THE SYSTEM

1. It is common that response time of the system (time for generating rated power from the minimum power) is slower than response speed of the pump. In such a case, the pump is kept in standby mode until the engine reaches the rated power to cause unnecessary fuel consumption. In addition, more fuel is supplied to the engine for matching the pump speed with the engine to result in more exhaust fumes.
2. Engine & pump matching, the new technology of Develon, fully resolves these problems. Matching response time between pump and engine efficiently reduces unnecessary fuel consumption as well as exhaust fumes.

ENGINE & PUMP MATCHING

Matching response time between pump and engine makes higher performance with reduced fuel consumption.



THE MOST ECONOMIC MODEL WITH GREAT PRODUCTIVITY IN MIDDLE WHEEL EXCAVATOR

“NEW CONTROL LOGIC” FOR BETTER FUEL EFFICIENCY



FUEL EFFICIENCY

**↑ 12.4%
BETTER**

FUEL CONSUMPTION

**↓ 3.0%
SAVING**

HANDLING & COMFORT



1. CELLULAR PHONE BOX

2. STORAGE SPACE



3. AIR CONDITIONING WITH CLIMATE CONTROL

The high performance, electronically controlled air conditioning features 5 different operating modes allowing the operator to adjust the airflow to suit conditions. A re-circulated air function is also available. Temperature is adjustable from 17°C (62°F) to 32°C (90°F) by 0.5°C (1°F) increments.

4. STEERING COLUMN

The Forward/Neutral/Reverse & gear selection switch is mounted on the steering column to minimize operator movements while traveling so that safety and operator comfort are ensured. The lower part of Steering Column can be tilted for improved operator comfort.



5. DOZER/OUTRIGGER CONTROL

The dozer/outrigger control lever, combined with the associated switches, allows for the operator to select between any combination of independent or simultaneous operation of the dozer/outriggers.



6. CONTROL PANEL

The control panel is clear, simple to read and positioned for easy use, allowing you to work safely and confidently.



7. THIRD GEAR SPEED CONTROLLER

8. REAR-VIEW CAMERA



9. 7 INCH MONITOR

- Gauges
- Navigation modes
- Rear view camera
- Display selector
- Working modes
- Auto-idle & flow rate control

10. AIR SUSPENSION SEAT (OPTIONAL)

An air suspension seat is available as an option, which further reduces any vibration being transmitted to the operator while working or travelling. In addition, this option is fitted with a heating system for operator comfort in cold weather.



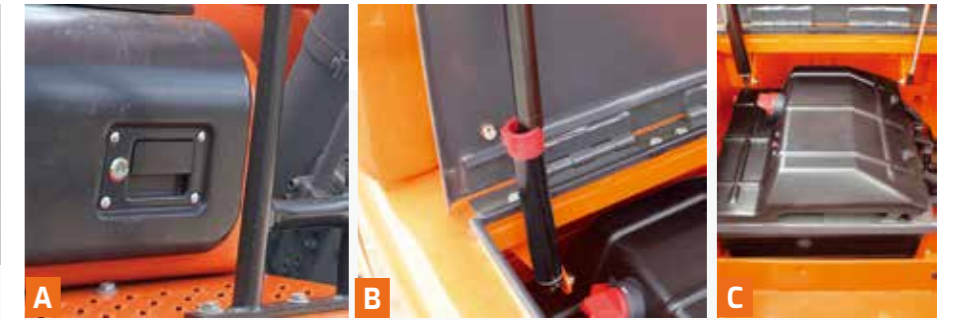


MAINTENANCE & SAFETY



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.



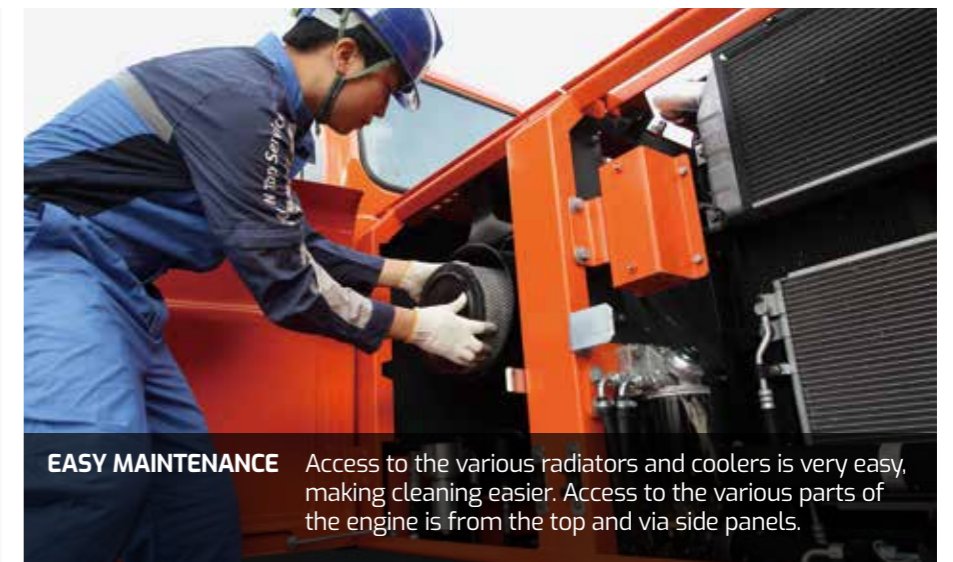
NEW BATTERY BOX

A. Cut-off switch easier to reach
 B. New spring to facilitate fixing
 C. New locking device



HYDRAULIC OIL RETURN FILTER

The protection of the hydraulic system is more effective, using glass fiber filter technology in the main oil return filter. This means that with more than 99.5% of foreign particles filtered out, the oil change interval is increased.



EASY MAINTENANCE Access to the various radiators and coolers is very easy, making cleaning easier. Access to the various parts of the engine is from the top and via side panels.



FUEL PRE-FILTER

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



AIR CLEANER

The large capacity forced air cleaner removes over 99% of airborne particles, reducing the risk of engine contamination and making the cleaning and cartridge change intervals greater.



REMOTE GREASING POINTS

For comfortable maintenance, the arm and boom greasing points have been centralised. Remote & grouped greasing points on boom & arm.



PC MONITORING

A PC monitoring function enables connection to the e-EPOS system. Thus, various parameters can be checked during maintenance, including pump pressures, engine rotation and engine speed. These can be stored and printed for analysis.



LARGER ANTI-SLIP SURFACE

High friction coefficient guarantees user's safety while maintaining main parts in wet condition.



IMPROVED RIM & RUBBER SPACE

New type Rim makes it possible to inject air from outside of machine. And expanded rubber space increases safety for maintenance.

TECHNICAL SPECIFICATION

ENGINE

Model

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 II.

Number of cylinders

6

Rated Horse Power

123 kW (167 PS, 165 HP) @1,900 rpm (SAE J1995, Gross)
116 kW (157 PS, 155 HP) @1,900 rpm (SAE J1349, Net)

Max torque

70 kgf.m @ 1,400 rpm

Piston displacement

Ø102 mm X 118 mm

Starter

24 V / 4.5 kW

Batteries

2 X 12 V / 100 Ah

Air cleaner

Double element with auto dust evacuation.

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 new EPOS™ is connected to the engine electronic control via a data transfer link to harmonize the operation of the engine and hydraulics.

- The hydraulic system enables independent or combined operations.
- 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 200ℓ/min (2 X 61.21 US gpm, 2 X 50.97 Imp gpm)

Pilot pump

Gear pump - max flow: 26.1ℓ/min (7.24 US gpm, 6.03 Imp gpm)

Maximum system pressure

Boom/arm/Bucket:

- Normal mode: 330 kgf/cm² (324 bar)
- Power mode: 350 kgf/cm² (343 bar)
Travel: 350 kgf/cm² (343 bar)
Swing: 270 kgf/cm² (265bar)

UNDERCARRIAGE

Heavy-duty frame, all-welded stress-relieve structure. Top grade materials used for toughness. Specially heat-treated connecting pins. 10.0-20-14PR double tires with tire spacer. Front axle oscillating hydraulically.

DRIVE

Fully hydrostatic driven, 3 speed power shift transmission, variable displacement, high torque, axial piston motor, foot pedal controls provide smooth travel, hub reduction type front steering axle and rear rigid axle.

Travel speed (high)

36 km/h

Maximum traction force

10,900 kgf

Maximum grade

37.4° / 75 %

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 extend piston life.

Cylinders	Quantity	Bore x Rod diameter x stroke
Boom	2	120 x 85 x 1,195 mm
Arm	1	125 x 90 x 1,470 mm
Bucket	1	115 x 80 x 1,025 mm

ENVIRONMENT

Noise levels comply with environmental regulations (dynamic values).

LWA EXTERNAL SOUND LEVEL

101 dB (A) (2000/14/EC)

LPA OPERATOR SOUND LEVEL

75 dB (A) (ISO 6396)

REFILL CAPACITIES

Fuel tank

310ℓ

Cooling system (Radiator capacity)

24ℓ

Engine oil

25ℓ

Hydraulic tank

116ℓ

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 10.9 rpm

WEIGHT

Operating weight including Boom, Arm, Bucket, Undercarriage attachment, operator, lubricant, coolant, full fuel tank and the standard equipment.

Front Combination		Undercarriage Type		Operating Weight
Boom	Arm	Front	Rear	
5,600 mm	2,600 mm	Cradle	Dozer	18,500 kg / 18,610 kg
5,600 mm	2,600 mm	Dozer	Outrigger	19,600 kg / 19,710 kg
5,360 mm (Two-Piece)	2,300 mm	Cradle	Dozer	18,600 kg / 18,710 kg
5,360 mm (Two-Piece)	2,600 mm	Dozer	Outrigger	19,750 kg / 19,860 kg

DIGGING FORCES (SAE)

DX190WA	Unit	Boom : 5,200 mm Arm : 2,600 mm	Boom: 5,200 mm Arm: 2,200 mm	Boom: 5,200 mm Arm: 3,100 mm
Bucket	t	11.8	11.8	11.8
Arm	t	8.4	9.8	7.8

TECHNICAL SPECIFICATION

BUCKET

		Track		F/C + R/D Up						
		C/W (ton)		3.0						
Bucket Type	Capacity (m ³)		Width (mm)		Weight (kg)	5.2m Boom			Arti Boom (5.36 m)	
	SAE/PCSA	CECE	W/O Cutter	With Cutter		2.2m Arm	2.6m Arm	3.1m Arm	2.3m Arm	2.6m Arm
GP	0.38	0.35	604	640	441	A	A	A	A	A
	0.45	0.41	727	775	465	A	A	A	A	A
	0.57	0.51	865	913	520	A	A	B	B	B
	0.70	0.62	1,015	1,063	567	B	C	D	C	D
	0.76	0.67	1,079	1,127	602	C	C	D	D	D
	0.80	0.70	1,123	1,171	616	C	D	D	D	D
	0.93	0.81	1,267	1,315	664	D	D	X	X	X
H Class	0.51	0.47	750	N/A	588	A	A	B	A	B
	0.65	0.58	900	N/A	651	B	C	D	C	D
	0.78	0.70	1,050	N/A	735	D	D	X	D	X
	0.82	0.74	1,100	N/A	756	D	D	X	X	X
	0.91	0.82	1,200	N/A	798	D	X	X	X	X
Maximum load pin-on (payload+bucket)						1,899	1,792	1,598	1,671	1,602

		Track		F/C + R/D DN						
		C/W (ton)		3.0						
Bucket Type	Capacity (m ³)		Width (mm)		Weight (kg)	5.2m Boom			Arti Boom (5.36 m)	
	SAE/PCSA	CECE	W/O Cutter	With Cutter		2.2m Arm	2.6m Arm	3.1m Arm	2.3m Arm	2.6m Arm
GP	0.38	0.35	604	640	441	A	A	A	A	A
	0.45	0.41	727	775	465	A	A	A	A	A
	0.57	0.51	865	913	520	A	A	A	A	A
	0.70	0.62	1,015	1,063	567	A	A	A	A	A
	0.76	0.67	1,079	1,127	602	A	A	B	B	B
	0.80	0.70	1,123	1,171	616	A	B	B	B	B
	0.93	0.81	1,267	1,315	664	B	C	C	C	C
H Class	0.51	0.47	750	N/A	588	A	A	A	A	A
	0.65	0.58	900	N/A	651	A	A	A	A	A
	0.78	0.70	1,050	N/A	735	A	B	C	B	C
	0.82	0.74	1,100	N/A	756	B	B	C	C	C
	0.91	0.82	1,200	N/A	798	C	C	D	C	D
Maximum load pin-on (payload+bucket)						2,418	2,245	2,064	2,173	2,046

Based on ISO 10567 and SAE J296, arm length without quick change clamp
A : Suitable for materials with density of 2,100kg/m³ (3,500lb/cu.yd) or less
B : Suitable for materials with density of 1,800kg/m³ (3,000lb/cu.yd) or less
C : Suitable for materials with density of 1,500kg/m³ (2,500lb/cu.yd) or less
D : Suitable for materials with density of 1,200kg/m³ (2,000lb/cu.yd) or less
X : Not recommended

This bucket recommendation is based on machine stability considering the tipping load with certain density of handling material, and should be strictly followed. It's more recommendable to use a smaller size of bucket than recommendation under the severe working condition and application to avoid the durability risks.

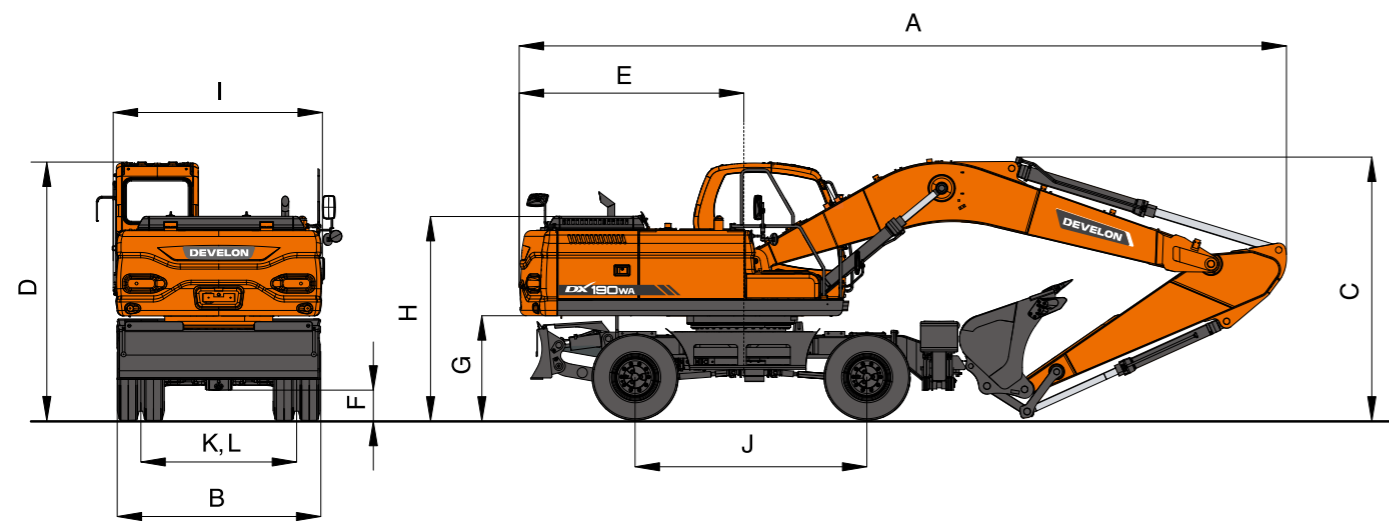
		Track		F/D DN + R/O DN = F/O DN + R/D DN						
		C/W (ton)		3.0						
Bucket Type	Capacity (m ³)		Width (mm)		Weight (kg)	5.2m Boom			Arti Boom (5.36 m)	
	SAE/PCSA	CECE	W/O Cutter	With Cutter		2.2m Arm	2.6m Arm	3.1m Arm	2.3m Arm	2.6m Arm
GP	0.38	0.35	604	640	441	A	A	A	A	A
	0.45	0.41	727	775	465	A	A	A	A	A
	0.57	0.51	865	913	520	A	A	A	A	A
	0.70	0.62	1,015	1,063	567	A	A	A	A	A
	0.76	0.67	1,079	1,127	602	A	A	A	A	A
	0.80	0.70	1,123	1,171	616	A	A	A	A	A
	0.93	0.81	1,267	1,315	664	A	A	A	A	A
H Class	0.51	0.47	750	N/A	588	A	A	A	A	A
	0.65	0.58	900	N/A	651	A	A	A	A	A
	0.78	0.70	1,050	N/A	735	A	A	A	A	A
	0.82	0.74	1,100	N/A	756	A	A	A	A	A
	0.91	0.82	1,200	N/A	798	A	A	A	A	A
Maximum load pin-on (payload+bucket)						3,538	3,290	3,048	3,242	3,062

		Track		F/O DN + R/O DN						
		C/W (ton)		3.0						
Bucket Type	Capacity (m ³)		Width (mm)		Weight (kg)	5.2m Boom			Arti Boom (5.36 m)	
	SAE/PCSA	CECE	W/O Cutter	With Cutter		2.2m Arm	2.6m Arm	3.1m Arm	2.3m Arm	2.6m Arm
GP	0.38	0.35	604	640	441	A	A	A	A	A
	0.45	0.41	727	775	465	A	A	A	A	A
	0.57	0.51	865	913	520	A	A	A	A	A
	0.70	0.62	1,015	1,063	567	A	A	A	A	A
	0.76	0.67	1,079	1,127	602	A	A	A	A	A
	0.80	0.70	1,123	1,171	616	A	A	A	A	A
	0.93	0.81	1,267	1,315	664	A	A	A	A	A
H Class	0.51	0.47	750	N/A	588	A	A	A	A	A
	0.65	0.58	900	N/A	651	A	A	A	A	A
	0.78	0.70	1,050	N/A	735	A	A	A	A	A
	0.82	0.74	1,100	N/A	756	A	A	A	A	A
	0.91	0.82	1,200	N/A	798	A	A	A	A	A
Maximum load pin-on (payload+bucket)						4,300	3,996	3,709	3,966	3,746

Based on ISO 10567 and SAE J296, arm length without quick change clamp
A : Suitable for materials with density of 2,100kg/m³ (3,500lb/cu.yd) or less
B : Suitable for materials with density of 1,800kg/m³ (3,000lb/cu.yd) or less
C : Suitable for materials with density of 1,500kg/m³ (2,500lb/cu.yd) or less
D : Suitable for materials with density of 1,200kg/m³ (2,000lb/cu.yd) or less
X : Not recommended

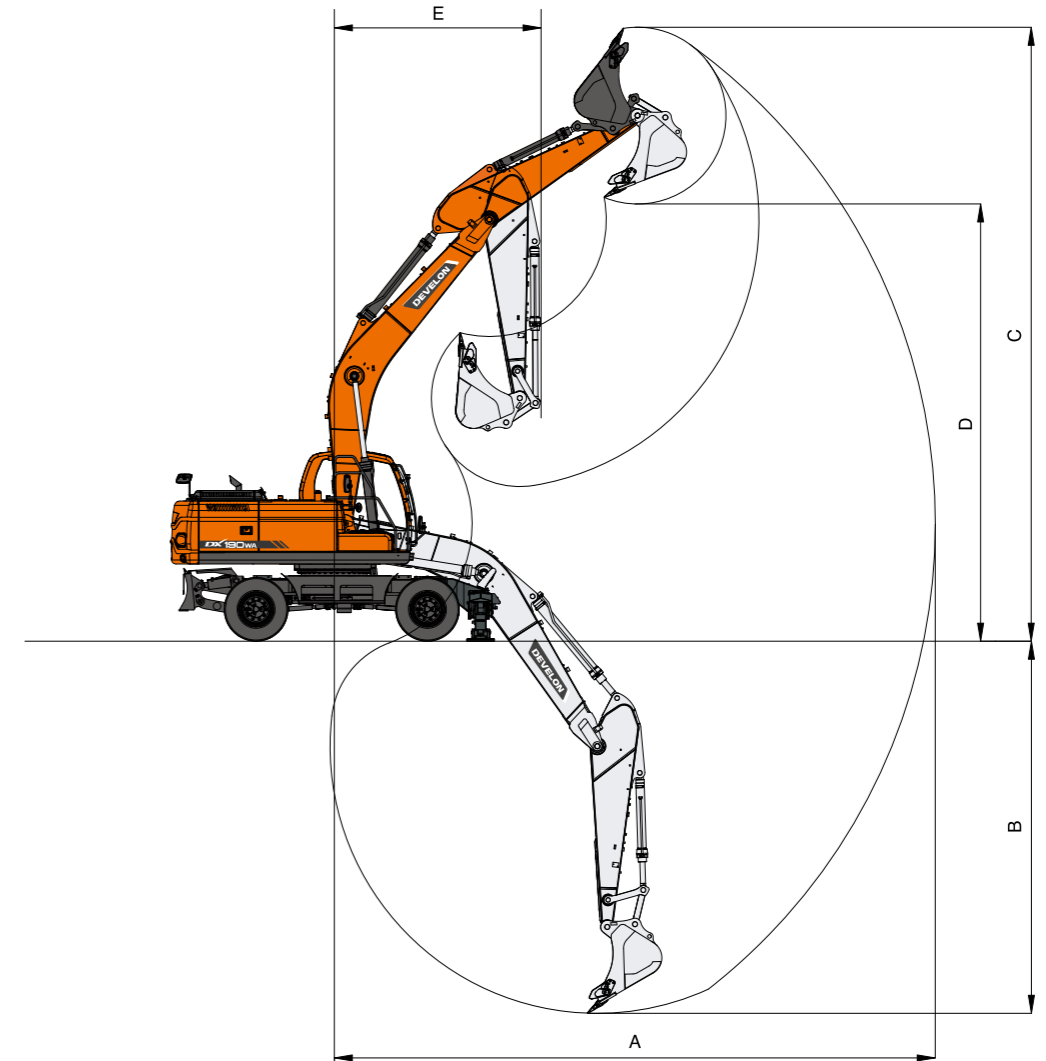
This bucket recommendation is based on machine stability considering the tipping load with certain density of handling material, and should be strictly followed. It's more recommendable to use a smaller size of bucket than recommendation under the severe working condition and application to avoid the durability risks.

DIMENSIONS



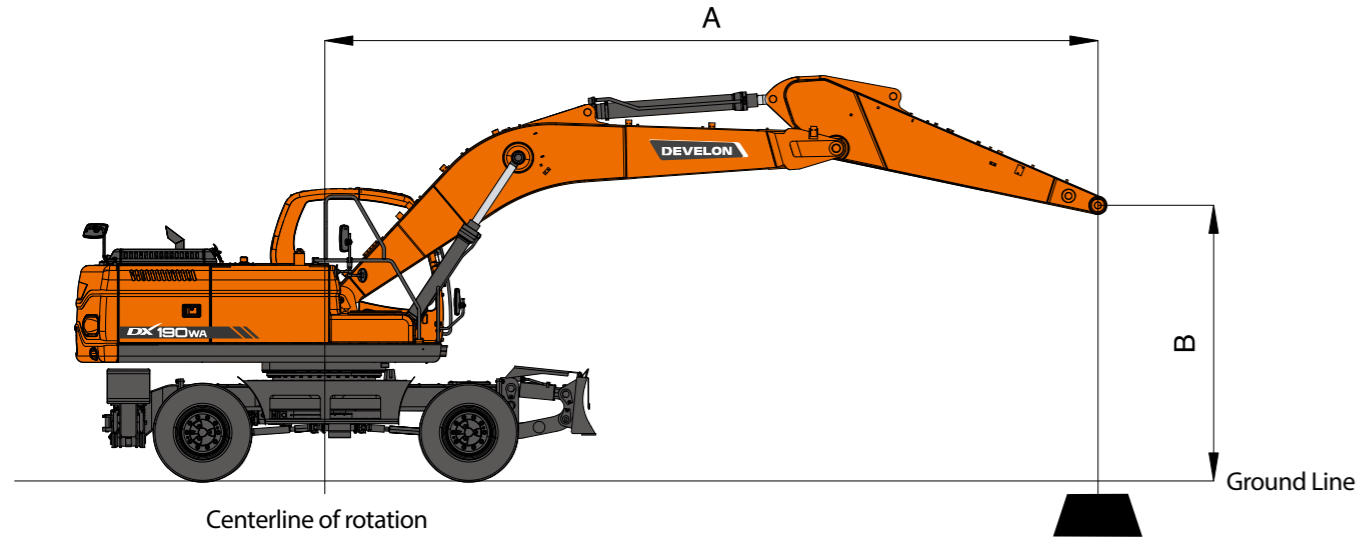
Reference	Description	5.2 m One-Piece Boom		
		2.6 m Arm	2.2 m Arm	3.1 m Arm
A	Shipping Length	8,659 mm	8,715 mm	8,507 mm
B	Shipping Width	2,496 mm	←	←
C	Shipping Height(Boom)	3,310 mm	3,212 mm	3,772 mm
D	Height Over Cab	3,135 mm	←	←
E	Counter Weight Swing Clearance	2,450 mm	←	←
F	Ground Clearance	350 mm	←	←
G	Counter Weight Clearance	1,249 mm	←	←
H	Engine Cover Height	2,530 mm	←	←
I	Upper Housing Width	2,494 mm	←	←
J	Wheelbase	2,700 mm	←	←
K, L	Tread Width	1,944 mm	←	←

WORKING RANGES



Reference	Description	5.2 m One-Piece Boom		
		2.6 m Arm	2.2 m Arm	3.1 m Arm
A	Max. Digging Reach	9,190 mm	8,810 mm	9,545 mm
B	Max. Digging Reach(Ground)	8,985 mm	8,600 mm	9,350 mm
C	Max. Digging Depth	5,950 mm	5,550 mm	6,450 mm
D	Max. Loading Height	6,665 mm	6,435 mm	6,660 mm
E	Min. Loading Height	2,540 mm	2,960 mm	2,040 mm
F	Max. Digging Height	9,335 mm	9,105 mm	9,265 mm
G	Max. Bucket Pin Height	8,080 mm	7,850 mm	8,075 mm
H	Max. Vertical Wall Depth	4,855 mm	4,475 mm	4,950 mm
I	Max. Radius Vertical	6,130 mm	5,990 mm	6,560 mm
J	Max. Depth to 2.5m Line	5,740 mm	5,310 mm	6,235 mm
K	Min. Radius 2.5m Line	2,425 mm	2,415 mm	2,325 mm
L	Min. Digging Reach	215 mm	1,195 mm	-350 mm
M	Min Swing Radius	3,200 mm	3,195 mm	3,185 mm

LIFTING CAPACITY



STANDARD

Boom : 5.2m(17'06") One-Piece Boom Arm : 2.6m (8'64") Bucket : Without Bucket Counterweight : 1,000kg

Metric Unit : 1,000kg

A(m) B(m)	Classis Frame Attachment	Metric (1,000kg)											A(m)	
		1.5	3	4.5	6	7.5	Max. Reach							
7.5	R-Rear Dozer Only Up											*3.31	*3.31	5.34
	R-Rear Dozer Only Down										*3.31	*3.31		
	F-Dozer + R-Outrigger Down										*3.31	*3.31		
	4-Outrigger Down										*3.31	*3.31		
6	R-Rear Dozer Only Up											*2.95	*2.39	6.59
	R-Rear Dozer Only Down										*2.95	*2.95		
	F-Dozer + R-Outrigger Down										*2.95	*2.95		
	4-Outrigger Down										*2.95	*2.95		
4.5	R-Rear Dozer Only Up											*6.36	4.34	7.33
	R-Rear Dozer Only Down										*6.36	5.38		
	F-Dozer + R-Outrigger Down										*6.36	4.88		
	4-Outrigger Down										*6.36	5.59		
3	R-Rear Dozer Only Up											7.2	3.97	7.71
	R-Rear Dozer Only Down										*7.91	4.99		
	F-Dozer + R-Outrigger Down										*7.91	4.71		
	4-Outrigger Down										*7.91	5.73		
1.5	R-Rear Dozer Only Up											6.81	3.64	7.78
	R-Rear Dozer Only Down										*9.31	4.64		
	F-Dozer + R-Outrigger Down										*9.31	6.96		
	4-Outrigger Down										*9.31	8.72		
0	R-Rear Dozer Only Up													7.55
	R-Rear Dozer Only Down										*6.89	*6.89		
	F-Dozer + R-Outrigger Down										*6.89	*6.89		
	4-Outrigger Down										*6.89	*6.89		
-1.5	R-Rear Dozer Only Up											*7.10	*7.10	6.99
	R-Rear Dozer Only Down										*7.10	*7.10		
	F-Dozer + R-Outrigger Down										*7.10	*7.10		
	4-Outrigger Down										*7.10	*7.10		
-3	R-Rear Dozer Only Up											11.94	11.94	5.99
	R-Rear Dozer Only Down										11.94	11.94		
	F-Dozer + R-Outrigger Down										11.94	11.94		
	4-Outrigger Down										11.94	11.94		
-4.5	R-Rear Dozer Only Up													4.12
	R-Rear Dozer Only Down										*5.19	*5.19		
	F-Dozer + R-Outrigger Down										*5.19	*5.19		
	4-Outrigger Down										*5.19	*5.19		

1. Ratings are based on SAE J1097
 2. Load point is the end of arm.
 3. * Rated loads are based on hydraulic capacity.
 4. Rated loads do not exceed 87% of hydraulic capacity or 75% of tipping capacity.

: Rating Over Front
 : Rating Over Side or 360 Degree

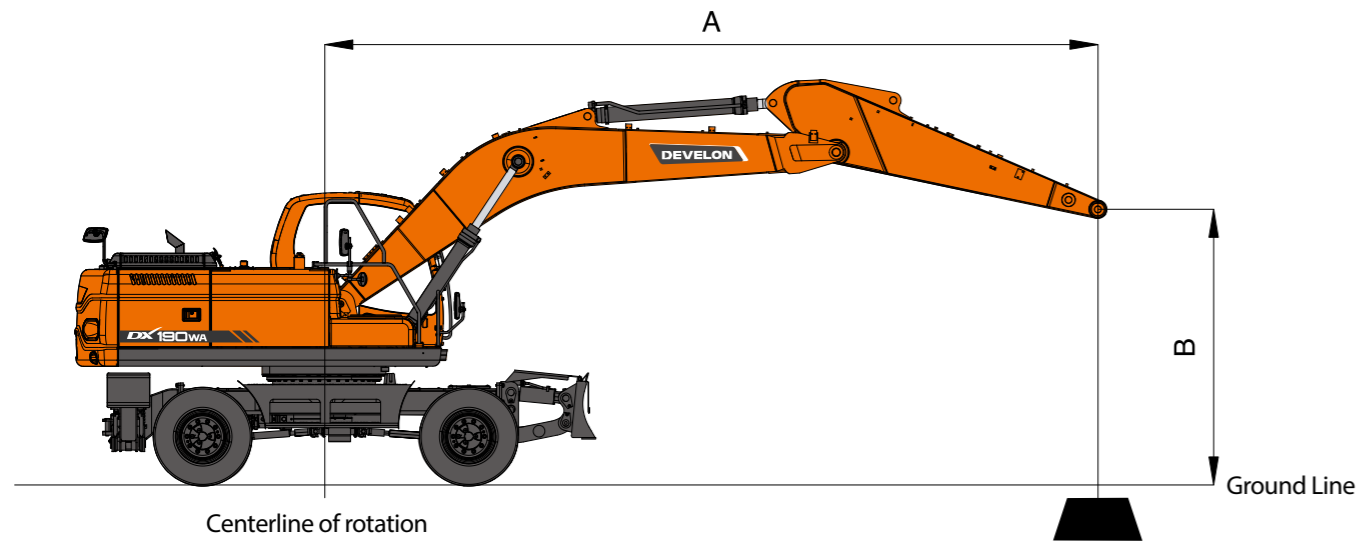
Feet Unit : 1,000lb

A(ft) B(ft)	Classis Frame Attachment	Feet (1,000lb)												A(ft)	
		5	10	15	20	7.5	Max. Reach								
25	R-Rear Dozer Only Up												*7.41	*7.41	17.05
	R-Rear Dozer Only Down											*7.41	*7.41		
	F-Dozer + R-Outrigger Down											*7.41	*7.41		
	4-Outrigger Down											*7.41	*7.41		
20	R-Rear Dozer Only Up											*9.82	6.1	21.42	
	R-Rear Dozer Only Down										*9.82	7.51			
	F-Dozer + R-Outrigger Down										*9.82	*9.82			
	4-Outrigger Down										*9.82	*9.82			
15	R-Rear Dozer Only Up													23.98	
	R-Rear Dozer Only Down										13.77	9.37			
	F-Dozer + R-Outrigger Down										13.77	13.77			
	4-Outrigger Down										13.77	13.77			
10	R-Rear Dozer Only Up													25.28	
	R-Rear Dozer Only Down										26.90	15.25			
	F-Dozer + R-Outrigger Down										26.90	26.90			
	4-Outrigger Down										26.90	26.90			
5	R-Rear Dozer Only Up													25.53	
	R-Rear Dozer Only Down										14.66	7.87			
	F-Dozer + R-Outrigger Down										20.13	10.01			
	4-Outrigger Down										20.13	18.74			
0	R-Rear Dozer Only Up													24.77	
	R-Rear Dozer Only Down										15.78	13.3			
	F-Dozer + R-Outrigger Down										15.78	15.78			
	4-Outrigger Down										15.78	15.78			
-5	R-Rear Dozer Only Up											15.86	15.86	22.88	
	R-Rear Dozer Only Down										15.86	15.86			
	F-Dozer + R-Outrigger Down										15.86	15.86			
	4-Outrigger Down										15.86	15.86			
-10	R-Rear Dozer Only Up											26.84	26.84	19.55	
	R-Rear Dozer Only Down										26.84	26.84			
	F-Dozer + R-Outrigger Down										26.84	26.84			
	4-Outrigger Down										26.84	26.84			

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 3. * Rated loads are based on hydraulic capacity.
 4. Rated loads do not exceed 87% of hydraulic capacity or 75% of tipping capacity.

: Rating Over Front
 : Rating Over Side or 360 Degree

LIFTING CAPACITY



OPTION 1

Boom : 5.2m(17'06") One-Piece Boom Arm : 2.2m (7'26") Bucket : Without Bucket Counterweight : 1,000kg

Metric Unit : 1,000kg

A(m) B(m)	Classis Frame Attachment	Reach (m)										A(m)		
		1.5	3	4.5	6	7.5	Max. Reach							
7.5	R-Rear Dozer Only Up			*5.83	4.46							*4.87	4.03	4.76
	R-Rear Dozer Only Down			*5.83	5.51							*4.87	*4.87	
	F-Dozer + R-Outrigger Down			*5.83	*5.83							*4.87	*4.87	
	4-Outrigger Down			*5.83	*5.83							*4.87	*4.87	
6	R-Rear Dozer Only Up						4.76	2.75				*4.26	2.63	6.14
	R-Rear Dozer Only Down						*5.06	3.41				*4.26	3.26	
	F-Dozer + R-Outrigger Down						*5.06	4.87				*4.26	*4.26	
	4-Outrigger Down						*5.06	*5.06				*4.26	*4.26	
4.5	R-Rear Dozer Only Up			*6.82	4.22	4.69	2.69					3.69	2.1	6.93
	R-Rear Dozer Only Down			*6.82	5.26	*5.88	3.34					*4.10	2.62	
	F-Dozer + R-Outrigger Down			*6.82	*6.82	*5.88	4.8					*4.10	3.78	
	4-Outrigger Down			*6.82	*6.82	*5.88	5.83					*4.10	*4.10	
3	R-Rear Dozer Only Up			7.06	3.85	4.53	2.55					3.32	1.85	7.33
	R-Rear Dozer Only Down			*8.32	4.87	*6.46	3.19					*4.17	2.33	
	F-Dozer + R-Outrigger Down			*8.32	7.22	*6.46	4.64					*4.17	3.4	
	4-Outrigger Down			*8.32	*8.32	*6.46	5.66					*4.17	4.13	
1.5	R-Rear Dozer Only Up			6.7	3.54	4.36	2.4					3.21	1.77	7.41
	R-Rear Dozer Only Down			*9.54	4.54	*7.02	3.04					*4.46	2.24	
	F-Dozer + R-Outrigger Down			*9.54	6.85	*7.02	4.47					*4.46	3.29	
	4-Outrigger Down			*9.54	8.6	*7.02	5.48					*4.46	4.01	
0	R-Rear Dozer Only Up			6.53	3.4	4.26	2.31					3.33	1.82	7.16
	R-Rear Dozer Only Down			*9.88	4.39	*7.25	2.94					*5.05	2.32	
	F-Dozer + R-Outrigger Down			*9.88	6.69	*7.25	4.37					*5.05	3.42	
	4-Outrigger Down			*9.88	8.43	*7.25	5.38					*5.05	4.17	
-1.5	R-Rear Dozer Only Up			12.34	6.24	6.53	3.4	4.26	2.31			3.78	2.07	6.56
	R-Rear Dozer Only Down			12.34	8.35	*9.32	4.38	*6.82	2.94			*5.93	2.63	
	F-Dozer + R-Outrigger Down			12.34	12.34	*9.32	6.68	*6.82	4.37			*5.93	3.88	
	4-Outrigger Down			12.34	12.34	*9.32	8.42	*6.82	5.37			*5.93	4.74	
-3	R-Rear Dozer Only Up			10.42	6.44	6.66	3.51					4.96	2.71	5.50
	R-Rear Dozer Only Down			10.42	8.56	*7.61	4.51					*5.73	3.44	
	F-Dozer + R-Outrigger Down			10.42	10.42	*7.61	6.82					*5.73	5.09	
	4-Outrigger Down			10.42	10.42	*7.61	*7.61					*5.73	*5.73	

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3. * Rated loads are based on hydraulic capacity.
4. Rated loads do not exceed 87% of hydraulic capacity or 75% of tipping capacity.

: Rating Over Front
 : Rating Over Side or 360 Degree

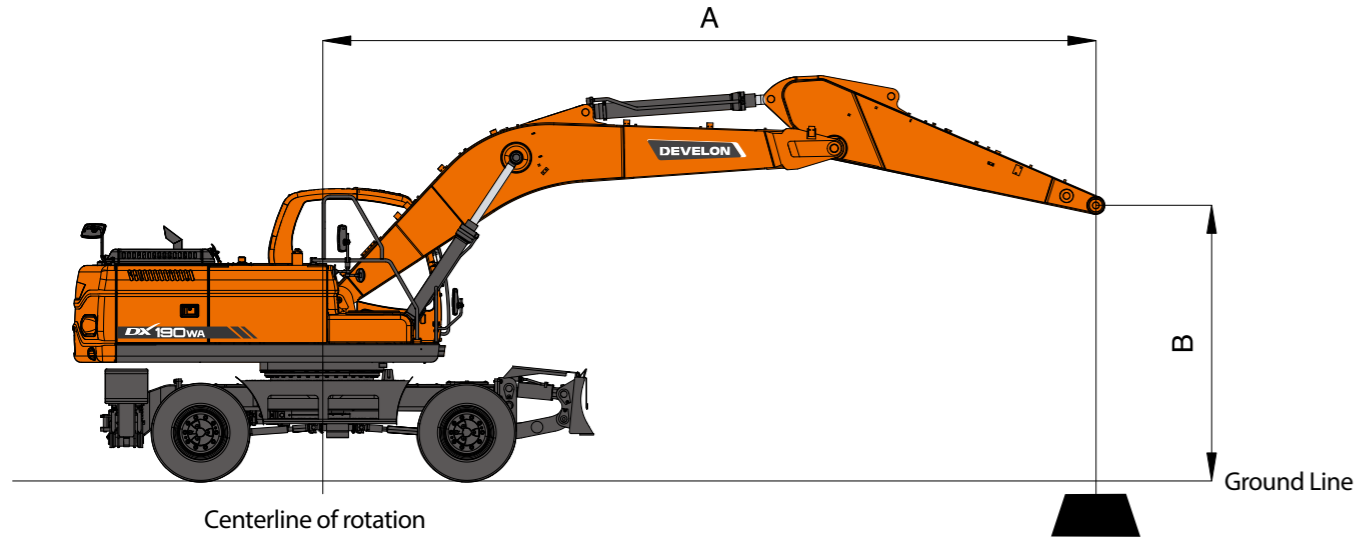
Feet Unit : 1,000lb

A(ft) B(ft)	Classis Frame Attachment	Reach (ft)										A(ft)		
		5	10	15	20	25	Max. Reach							
25	R-Rear Dozer Only Up											11.26	9.51	15.14
	R-Rear Dozer Only Down											11.26	11.26	
	F-Dozer + R-Outrigger Down											11.26	11.26	
	4-Outrigger Down											11.27	10.1	
20	R-Rear Dozer Only Up													19.93
	R-Rear Dozer Only Down													
	F-Dozer + R-Outrigger Down													
	4-Outrigger Down													
15	R-Rear Dozer Only Up											14.77	9.12	22.65
	R-Rear Dozer Only Down											14.77	11.34	
	F-Dozer + R-Outrigger Down											14.77	12.85	
	4-Outrigger Down											14.80	9.71	
10	R-Rear Dozer Only Up											15.22	8.33	24.03
	R-Rear Dozer Only Down											17.95	10.51	
	F-Dozer + R-Outrigger Down											17.95	15.55	
	4-Outrigger Down											15.51	8.93	
5	R-Rear Dozer Only Up											14.42	7.66	24.30
	R-Rear Dozer Only Down											20.62	9.8	
	F-Dozer + R-Outrigger Down											20.62	14.76	
	4-Outrigger Down											14.72	8.27	
0	R-Rear Dozer Only Up											14.05	7.34	23.50
	R-Rear Dozer Only Down											21.41	9.46	
	F-Dozer + R-Outrigger Down											21.41	14.39	
	4-Outrigger Down											14.35	7.95	
-5	R-Rear Dozer Only Up											28.17	13.41	21.49
	R-Rear Dozer Only Down											28.17	17.9	
	F-Dozer + R-Outrigger Down											28.17	28.17	
	4-Outrigger Down											28.16	14.45	
-10	R-Rear Dozer Only Up											22.51	13.85	17.89
	R-Rear Dozer Only Down											22.51	18.39	
	F-Dozer + R-Outrigger Down											22.51	22.51	
	4-Outrigger Down											22.57	14.89	

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: Rating Over Front
 : Rating Over Side or 360 Degree

LIFTING CAPACITY



OPTION 2

Boom : 5.2m(17'06") One-Piece Boom Arm : 3.1m (10'02") Bucket : Without Bucket Counterweight : 1,000kg

Metric Unit: 1,000kg

A(m)	B(m)	Classis Frame Attachment	1.5		3		4.5		6		7.5		Max. Reach		A(m)			
7.5	5.84	R-Rear Dozer Only Up											*3.02	2.97				
		R-Rear Dozer Only Down												*3.02	*3.02			
		F-Dozer + R-Outrigger Down												*3.02	*3.02			
		4-Outrigger Down												*3.02	*3.02			
		R-Rear Dozer Only Up							*4.42	2.86				*2.78	2.14			
6	7.01	R-Rear Dozer Only Down							*4.42	3.53				*2.78	2.66			
		F-Dozer + R-Outrigger Down							*4.42	*4.42				*2.78	*2.78			
		4-Outrigger Down							*4.42	*4.42				*2.78	*2.78			
		R-Rear Dozer Only Up							4.78	2.76	3.29	1.86		*2.73	1.75			
		R-Rear Dozer Only Down							*5.09	3.42	*3.46	2.33		*2.73	2.21			
4.5	7.72	F-Dozer + R-Outrigger Down							*5.09	4.89	*3.46	3.37		*2.73	*2.73			
		4-Outrigger Down							*5.09	*5.09	*3.46	*3.46		*2.73	*2.73			
		R-Rear Dozer Only Up			10.83	7.31	*7.20	4	4.58	2.58	3.21	1.79		*2.81	1.56			
		R-Rear Dozer Only Down			10.83	9.54	*7.20	5.03	*5.79	3.23	*4.68	2.26		*2.81	1.99			
		F-Dozer + R-Outrigger Down			10.83	10.83	*7.20	*7.20	*5.79	4.69	*4.68	3.3		*2.81	*2.81			
3	8.07	4-Outrigger Down			10.83	10.83	*7.20	*7.20	*5.79	5.72	*4.68	4		*2.81	*2.81			
		R-Rear Dozer Only Up							*7.54	6.29	*6.79	3.6	4.37	2.39	3.12	1.7	2.75	1.48
		R-Rear Dozer Only Down			*7.54	*7.54	*8.76	4.61	*6.54	3.04	*5.42	2.17		*3.03	2.82			
		F-Dozer + R-Outrigger Down			*7.54	*7.54	*8.76	6.94	*6.54	4.48	*5.42	3.2		*3.03	2.82			
		4-Outrigger Down			*7.54	*7.54	*8.76	8.72	*6.54	5.5	*5.42	3.9		*3.03	*3.03			
1.5	8.14	R-Rear Dozer Only Up			*8.15	5.98	6.5	3.36	4.22	2.26	3.05	1.63		2.82	1.51			
		R-Rear Dozer Only Down			*8.15	8.07	*9.64	4.35	*7.04	2.89	5.48	2.1		*3.43	1.94			
		F-Dozer + R-Outrigger Down			*8.15	*8.15	*9.64	6.65	*7.04	4.32	*5.59	3.13		*3.43	2.9			
		4-Outrigger Down			*8.15	*8.15	*9.64	8.39	*7.04	5.33	*5.59	3.83		*3.43	*3.43			
		R-Rear Dozer Only Up			*7.06	*7.06	11.46	5.97	6.4	3.27	4.15	2.19			3.1	1.66		
-1.5	7.38	R-Rear Dozer Only Down			*7.06	*7.06	11.46	8.06	*9.65	4.26	*7.06	2.83		*4.17	2.13			
		F-Dozer + R-Outrigger Down			*7.06	*7.06	11.46	11.46	*9.65	6.55	*7.06	4.26		*4.17	3.18			
		4-Outrigger Down			*7.06	*7.06	11.46	11.46	*9.65	8.29	*7.06	5.26		*4.17	3.9			
		R-Rear Dozer Only Up			10.88	10.88	12.53	6.11	6.44	3.31	4.19	2.23			3.79	2.03		
		R-Rear Dozer Only Down			10.88	10.88	12.53	8.21	*8.71	4.3	*6.26	2.87			*5.55	2.61		
-3	6.46	F-Dozer + R-Outrigger Down			10.88	10.88	12.53	12.53	*8.71	6.6	*6.26	4.3		*5.55	3.89			
		4-Outrigger Down			10.88	10.88	12.53	12.53	*8.71	8.34	*6.26	5.3		*5.55	4.78			
		R-Rear Dozer Only Up					*8.93	6.42	*6.15	3.51				*5.36	3.12			
		R-Rear Dozer Only Down					*8.93	8.55	*6.15	4.51				*5.36	3.99			
		F-Dozer + R-Outrigger Down					*8.93	*8.93	*6.15	*6.15				*5.36	*5.36			
-4.5	4.91	4-Outrigger Down					*8.93	*8.93	*6.15	*6.15				*5.36	*5.36			

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: Rating Over Front
 : Rating Over Side or 360 Degree

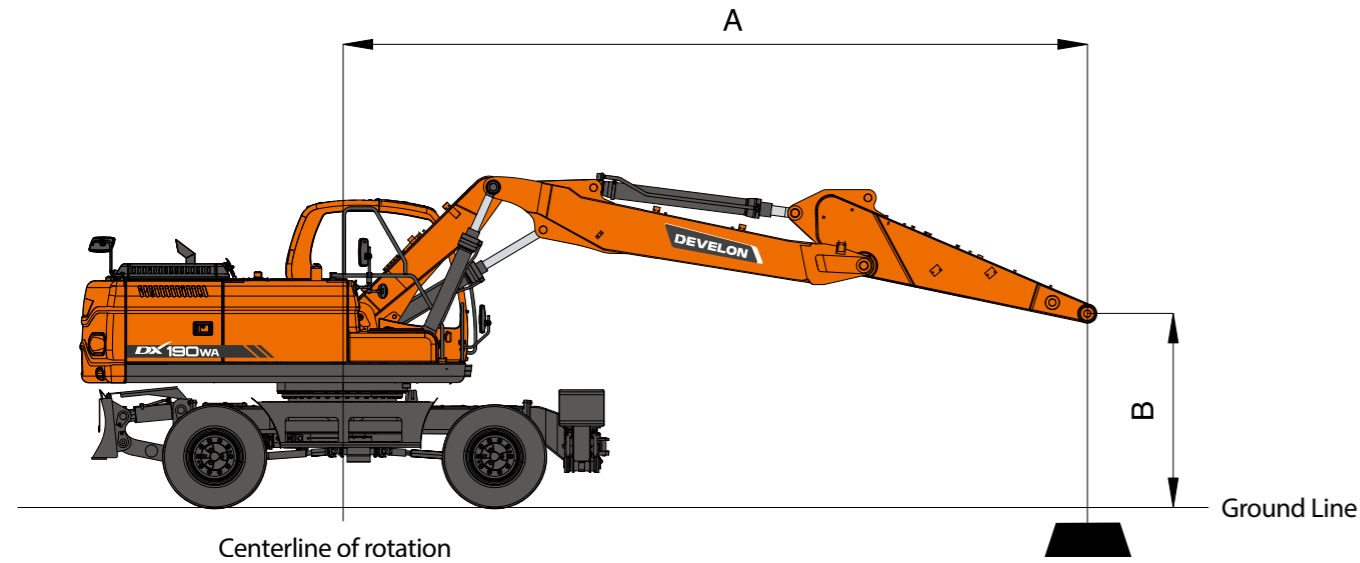
Feet Unit: 1,000lb

A(ft)	B(ft)	Classis Frame Attachment	5		10		15		20		25		Max. Reach		A(ft)								
25	18.78	R-Rear Dozer Only Up												*6.74	*6.74								
		R-Rear Dozer Only Down													*6.74	*6.74							
		F-Dozer + R-Outrigger Down													*6.74	*6.74							
		4-Outrigger Down													*6.74	*6.74							
		R-Rear Dozer Only Up									*9.47	6.14			*6.15	4.79							
20	22.81	R-Rear Dozer Only Down								*9.47	7.57			*6.15	5.96								
		F-Dozer + R-Outrigger Down								*9.47	*9.47			*6.15	*6.15								
		4-Outrigger Down									*9.47	*9.47			*6.15	*6.15							
		R-Rear Dozer Only Up								10.28	5.94	*6.59	3.97		*6.02	3.9							
		R-Rear Dozer Only Down								11.11	7.35	*6.49	4.99		*6.02	4.9							
15	25.22	F-Dozer + R-Outrigger Down								11.11	10.51	*6.59	*6.59	*6.02	*6.02								
		4-Outrigger Down								11.11	11.11	*6.59	*6.59	*6.02	*6.02								
		R-Rear Dozer Only Up								23.10	15.81	15.54	8.64		9.86	5.56	6.91	3.83	*6.19	3.45			
		R-Rear Dozer Only Down								23.10	20.58	15.54	10.85		12.59	6.96	*9.60	4.85	*6.19	4.39			
		F-Dozer + R-Outrigger Down								23.10	23.10	15.54	15.54	12.59	10.1	*9.60	7.09	*6.19	*6.19				
10	26.46	4-Outrigger Down								23.10	23.10	15.54	15.54	12.59	12.3	*9.60	8.60	*6.19	*6.19				
		R-Rear Dozer Only Up								17.77	13.59	14.61	7.78		9.42	5.16	6.71	3.65	6.06	3.27			
		R-Rear Dozer Only Down								17.77	17.77	18.94	9.94		14.19	6.55	11.52	4.66	*6.67	4.19			
		F-Dozer + R-Outrigger Down								17.77	17.77	18.94	14.94		14.19	9.65	11.52	6.89	*6.67	6.23			
		4-Outrigger Down								17.77	17.77	18.94	18.71		14.19	11.83	11.52	8.4	*6.67	*6.27			
5	26.70	R-Rear Dozer Only Up								18.58	12.87	13.97	7.24		9.08	4.86	6.56	3.52	6.21	3.32			
		R-Rear Dozer Only Down								18.58	17.32	20.88	9.37		15.27	6.23	11.48	4.52	*7.55	4.28			
		F-Dozer + R-Outrigger Down								18.58	18.58	20.88	14.31		15.27	9.31	11.48	6.74	*7.55	6.39			
		4-Outrigger Down								18.58	18.58	20.88	18.02		15.27	11.48	11.48	8.25	*7.55	*7.55			
		R-Rear Dozer Only Up								15.75	15.75	26.01	12.84		13.75	7.05	8.94	4.73		6.85	3.66		
-5	24.19	R-Rear Dozer Only Down								15.75	15.75	26.01	17.29		20.90	9.17	15.28	6.1		*9.22	4.71		
		F-Dozer + R-Outrigger Down								15.75	15.75	26.01	26.01		20.90	14.09	15.28	9.17		*9.22	7.03		
		4-Outrigger Down								15.75	15.75	26.01	26.01		20.90	17.78	15.28	11.32		*9.22	8.62		
		R-Rear Dozer Only Up								24.42	24.42	27.09	13.14		13.86	7.15	9.04	4.83			8.43	4.53	
		R-Rear Dozer Only Down								24.42	24.42	27.09	17.62		18.79	9.27	13.38	6.2			12.24	5.8	
-10	21.06	F-Dozer + R-Outrigger Down								24.42	24.42	27.09	27.09		18.79	14.2	13.38	9.27			12.24	8.65	
		4-Outrigger Down								24.42	24.42	27.09	27.09		18.79	17.91	13.38	11.44			12.24	10.63	
		R-Rear Dozer Only Up														18.92	13.84	12.80	7.61			11.75	7.11
		R-Rear Dozer Only Down														18.92	18.39	12.80	9.76			11.75	9.08
		F-Dozer + R-Outrigger Down														18.92	18.92	12.80	12.80			11.75	11.75
-15	15.81	4-Outrigger Down													18.92	18.92	12.80	12.80			11.75	11.75	

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3. * Rated loads are based on hydraulic capacity.
4. Rated loads do not exceed 87% of hydraulic capacity or 75% of tipping capacity.

: Rating Over Front
 : Rating Over Side or 360 Degree

LIFTING CAPACITY



OPTION 3

Boom : 5.36m(17'07") Two-Piece Boom Arm : 2.6m (8'63") Bucket : Without Bucket Counterweight : 1,000kg

Metric Unit : 1,000kg

A(m)	Classis Frame Attachment	1.5		3		4.5		6		7.5		Max. Reach		A(m)
		☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞		
9	R-Rear Dozer Only Up											*3.76	*3.76	3.68
	R-Rear Dozer Only Down											*3.76	*3.76	
	F-Dozer + R-Outrigger Down											*3.76	*3.76	
	4-Outrigger Down											*3.76	*3.76	
7.5	R-Rear Dozer Only Up											*2.60	*2.60	5.78
	R-Rear Dozer Only Down											*2.60	*2.60	
	F-Dozer + R-Outrigger Down											*2.60	*2.60	
	4-Outrigger Down											*2.60	*2.60	
6	R-Rear Dozer Only Up				*4.10	*4.10	*4.23	2.84				*2.24	2.11	6.96
	R-Rear Dozer Only Down				*4.10	*4.10	*4.23	3.52				*2.24	*2.24	
	F-Dozer + R-Outrigger Down				*4.10	*4.10	*4.23	*4.23				*2.24	*2.24	
	4-Outrigger Down				*4.10	*4.10	*4.23	*4.23				*2.24	*2.24	
4.5	R-Rear Dozer Only Up		*6.40	*6.40	*5.11	4.32	*4.60	2.73	3.3	1.83		*2.08	1.74	7.66
	R-Rear Dozer Only Down		*6.40	*6.40	*5.11	*5.11	*4.60	3.41	*3.46	2.31		*2.08	*2.08	
	F-Dozer + R-Outrigger Down		*6.40	*6.40	*5.11	*5.11	*4.60	*4.60	*3.46	3.38		*2.08	*2.08	
	4-Outrigger Down		*6.40	*6.40	*5.11	*5.11	*4.60	*4.60	*3.46	*3.46		*2.08	*2.08	
3	R-Rear Dozer Only Up				*6.74	3.88	4.59	2.54	3.23	1.77		*2.05	1.56	8.02
	R-Rear Dozer Only Down				*6.74	4.93	*5.33	3.21	*4.79	2.25		*2.05	2	
	F-Dozer + R-Outrigger Down				*6.74	*6.74	*5.33	4.7	*4.79	3.31		*2.05	*2.05	
	4-Outrigger Down				*6.74	*6.74	*5.33	*5.33	*4.79	4.04		*2.05	*2.05	
1.5	R-Rear Dozer Only Up				6.73	3.49	4.38	2.36	3.14	1.69		*2.10	1.49	8.09
	R-Rear Dozer Only Down				*8.34	4.51	*6.15	3.02	*5.17	2.17		*2.10	1.93	
	F-Dozer + R-Outrigger Down				*8.34	6.88	*6.15	4.49	*5.17	3.23		*2.10	*2.10	
	4-Outrigger Down				*8.34	*8.34	*6.15	5.53	*5.17	3.95		*2.10	*2.10	
0	R-Rear Dozer Only Up				6.49	3.29	4.24	2.23	3.09	1.63		*2.26	1.53	7.87
	R-Rear Dozer Only Down				*9.33	4.3	*6.78	2.88	*5.49	2.11		*2.26	1.98	
	F-Dozer + R-Outrigger Down				*9.33	6.65	*6.78	4.35	*5.49	3.17		*2.26	*2.26	
	4-Outrigger Down				*9.33	8.42	*6.78	5.38	*5.49	3.89		*2.26	*2.26	
-1.5	R-Rear Dozer Only Up		*9.65	5.97	6.44	3.25	4.2	2.19				*2.58	1.71	7.33
	R-Rear Dozer Only Down		*9.65	8.1	*9.61	4.26	*7.04	2.84				*2.58	2.2	
	F-Dozer + R-Outrigger Down		*9.65	*9.65	*9.61	6.6	*7.04	4.3				*2.58	*2.58	
	4-Outrigger Down		*9.65	*9.65	*9.61	8.37	*7.04	5.33				*2.58	*2.58	
-3	R-Rear Dozer Only Up				6.55	3.34	4.29	2.27				4.2	2.23	6.09
	R-Rear Dozer Only Down				*9.11	4.35	*6.56	2.93				*6.41	2.87	
	F-Dozer + R-Outrigger Down				*9.11	6.7	*6.56	4.39				*6.41	4.3	
	4-Outrigger Down				*9.11	8.48	*6.56	5.43				*6.41	5.31	

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 ☞☞ : Rating Over Side or 360 Degree

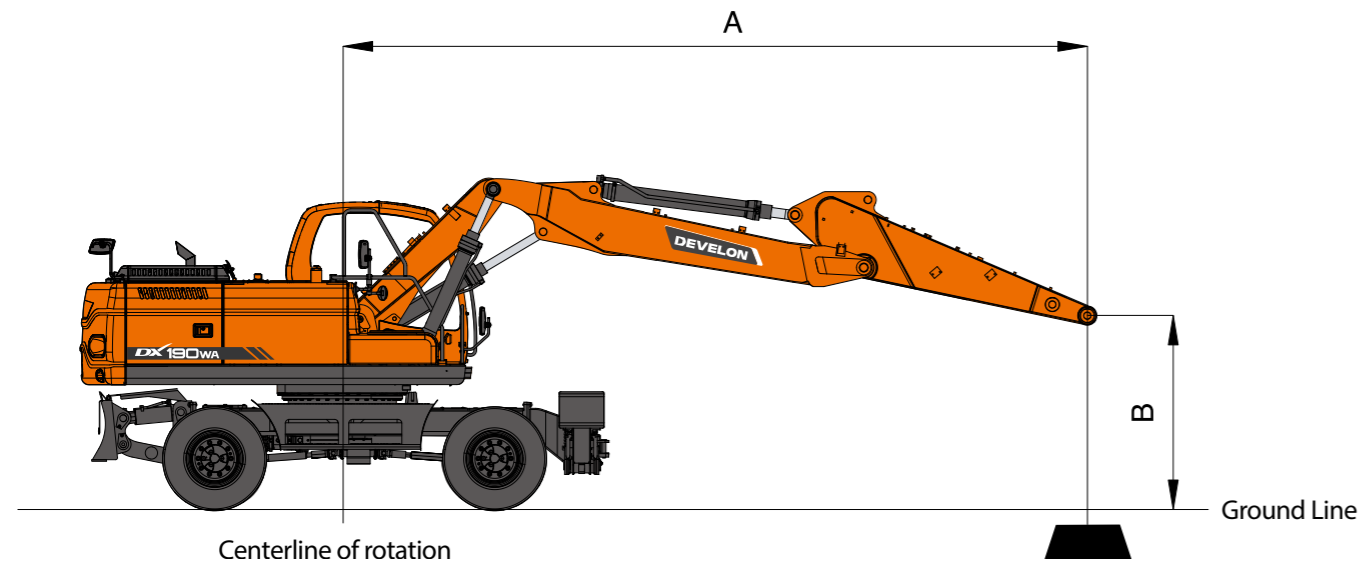
Feet Unit : 1,000lb

A(ft)	Classis Frame Attachment	5		10		15		20		25		Max. Reach		A(ft)
		☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	
25	R-Rear Dozer Only Up					*8.92	*8.92					*5.84	*5.84	18.57
	R-Rear Dozer Only Down					1.48	*8.89					0.37	*5.83	
	F-Dozer + R-Outrigger Down					*8.92	*8.92					*5.84	*5.84	
	4-Outrigger Down					*8.91	*8.92					*5.84	*5.84	
20	R-Rear Dozer Only Up					*8.97	*8.97	*9.36	6.09			*4.96	4.74	22.62
	R-Rear Dozer Only Down					1.41	*8.93	0.29	6.09			*4.95	4.7	
	F-Dozer + R-Outrigger Down					*8.97	*8.97	*9.36	*9.36			*4.96	*4.96	
	4-Outrigger Down					*8.97	*8.97	*9.36	*9.36			*4.96	*4.96	
15	R-Rear Dozer Only Up			13.59	13.59	11.05	9.34	10.05	5.88	*4.97	3.88	*4.60	3.86	25.05
	R-Rear Dozer Only Down			2.49	13.54	0.92	9.3	0.1	5.84	*4.96	3.84	*4.59	3.82	
	F-Dozer + R-Outrigger Down			13.59	13.59	11.05	11.05	10.05	10.05	*4.97	*4.97	*4.60	*4.60	
	4-Outrigger Down			13.59	13.59	11.05	11.05	10.05	10.05	*4.97	*4.97	*4.60	*4.60	
10	R-Rear Dozer Only Up					14.51	8.4	9.89	5.49	6.95	3.8	*4.51	3.44	26.30
	R-Rear Dozer Only Down					0.17	8.35	11.53	5.44	10.46	3.75	*4.49	3.4	
	F-Dozer + R-Outrigger Down					14.51	14.51	11.59	10.12	10.51	7.13	*4.51	*4.51	
	4-Outrigger Down					14.51	14.51	11.59	11.59	10.51	8.68	*4.51	*4.51	
5	R-Rear Dozer Only Up					14.5	7.55	9.44	5.09	6.77	3.63	*4.63	3.29	26.54
	R-Rear Dozer Only Down					17.93	7.48	13.27	5.04	11.24	3.59	*4.61	3.25	
	F-Dozer + R-Outrigger Down					18.00	14.83	13.33	9.67	11.29	6.95	*4.63	*4.63	
	4-Outrigger Down					18.00	18.00	13.33	11.9	11.29	8.5	*4.63	*4.63	
0	R-Rear Dozer Only Up					13.97	7.1	9.13	4.81	6.65	3.52	*4.98	3.38	25.81
	R-Rear Dozer Only Down					20.12	7.03	14.64	4.76	11.03	3.48	*4.96	3.34	
	F-Dozer + R-Outrigger Down					20.20	14.3	14.71	9.36	11.05	6.83	*4.98	*4.98	
	4-Outrigger Down					20.20	18.09	14.71	11.58	11.05	8.38	*4.98	*4.98	
-5	R-Rear Dozer Only Up			21.99	12.82	13.86	7.01	9.04	4.73			*5.69	3.78	24.00
	R-Rear Dozer Only Down			22.01	12.72	20.75	6.94	15.20	4.68			*5.67	3.73	
	F-Dozer + R-Outrigger Down			21.99	21.99	20.83	14.19	15.26	9.28			*5.69	*5.69	
	4-Outrigger Down			21.99	21.99	20.83	17.97	15.26	11.48			*5.69	*5.69	
-10	R-Rear Dozer Only Up					14.09	7.2					9.48	5.03	19.67
	R-Rear Dozer Only Down					19.62	7.14					14.32	4.98	
	F-Dozer + R-Outrigger Down					19.69	14.42					14.38	9.71	
	4-Outrigger Down					19.69	18.22					14.38	12	

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LIFTING CAPACITY



OPTION 4

Boom : 5.36m(17'07") Two-Piece Boom Arm : 2.3m (7'65") Bucket : Without Bucket Counterweight : 1,000kg
Attachment : Front Clamshell Cradle & Rear Dozer Blade

Metric

Unit : 1,000kg

A(m) B(m)	Classis Frame Attachment	1.5		3		4.5		6		7.5		Max. Reach		A(m)
7.5	R-Rear Dozer Only Up					*4.41	*4.41					*2.80	*2.80	5.35
	R-Rear Dozer Only Down					*4.41	*4.41					*2.80	*2.80	
	F-Dozer + R-Outrigger Down					*4.41	*4.41					*2.80	*2.80	
	4-Outrigger Down					*4.41	*4.41					*2.80	*2.80	
6	R-Rear Dozer Only Up					*4.44	*4.44	*4.52	2.76			*2.36	*2.36	6.61
	R-Rear Dozer Only Down					*4.44	*4.44	*4.52	3.44			*2.36	*2.36	
	F-Dozer + R-Outrigger Down					*4.44	*4.44	*4.52	*4.52			*2.36	*2.36	
	4-Outrigger Down					*4.44	*4.44	*4.52	*4.52			*2.36	*2.36	
4.5	R-Rear Dozer Only Up			*7.22	*7.22	*5.45	4.22	4.73	2.67			*2.18	1.83	7.35
	R-Rear Dozer Only Down			*7.22	*7.22	*5.45	5.29	*4.82	3.34			*2.18	*2.18	
	F-Dozer + R-Outrigger Down			*7.22	*7.22	*5.45	*5.45	*4.82	*4.82			*2.18	*2.18	
	4-Outrigger Down			*7.22	*7.22	*5.45	*5.45	*4.82	*4.82			*2.18	*2.18	
3	R-Rear Dozer Only Up					*7.07	3.78	4.53	2.49	3.18	1.72	*2.14	1.63	7.72
	R-Rear Dozer Only Down					*7.07	4.82	*5.52	3.15	*4.48	2.21	*2.14	2.09	
	F-Dozer + R-Outrigger Down					*7.07	*7.07	*5.52	4.63	*4.48	3.27	*2.14	*2.14	
	4-Outrigger Down					*7.07	*7.07	*5.52	*5.52	*4.48	3.99	*2.14	*2.14	
1.5	R-Rear Dozer Only Up					6.64	3.41	4.33	2.31	3.11	1.66	*2.20	1.56	7.79
	R-Rear Dozer Only Down					*8.59	4.43	*6.28	2.97	*5.29	2.14	*2.20	2.01	
	F-Dozer + R-Outrigger Down					*8.59	6.79	*6.28	4.44	*5.29	3.19	*2.20	*2.20	
	4-Outrigger Down					*8.59	8.58	*6.28	5.47	*5.29	3.91	*2.20	*2.20	
0	R-Rear Dozer Only Up					6.44	3.24	4.2	2.2	3.07	1.62	*2.38	1.61	7.56
	R-Rear Dozer Only Down					*9.43	4.25	*6.85	2.85	*3.49	2.1	*2.38	2.08	
	F-Dozer + R-Outrigger Down					*9.43	6.6	*6.85	4.31	*3.49	3.16	*2.38	*2.38	
	4-Outrigger Down					*9.43	8.37	*6.85	5.34	*3.49	*3.49	*2.38	*2.38	
-1.5	R-Rear Dozer Only Up			10.30	5.99	6.43	3.23	4.19	2.18			*2.75	1.81	7.00
	R-Rear Dozer Only Down			10.30	8.12	*9.55	4.24	*7.01	2.83			*2.75	2.34	
	F-Dozer + R-Outrigger Down			10.30	10.30	*9.55	6.58	*7.01	4.29			*2.75	*2.75	
	4-Outrigger Down			10.30	10.30	*9.55	8.36	*7.01	5.32			*2.75	*2.75	

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: Rating Over Front
 : Rating Over Side or 360 Degree

Feet

Unit : 1,000lb

A(ft) B(ft)	Classis Frame Attachment	5		10		15		20		25		Max. Reach		A(ft)
25	R-Rear Dozer Only Up					*9.92	9.75					*6.30	*6.30	17.10
	R-Rear Dozer Only Down					*9.92	*9.92					*6.30	*6.30	
	F-Dozer + R-Outrigger Down					*9.92	*9.92					*6.30	*6.30	
	4-Outrigger Down					*9.92	*9.92					*6.30	*6.30	
20	R-Rear Dozer Only Up					*9.71	*9.71	10.02	5.91			*5.24	*5.09	21.46
	R-Rear Dozer Only Down					*9.71	*9.71	10.02	7.37			*5.24	*5.24	
	F-Dozer + R-Outrigger Down					*9.71	*9.71	10.02	10.02			*5.24	*5.24	
	4-Outrigger Down					*9.71	*9.71	10.02	10.02			*5.24	*5.24	
15	R-Rear Dozer Only Up							15.29	15.29	11.78	9.11	10.17	5.74	24.01
	R-Rear Dozer Only Down							15.29	15.29	11.78	11.41	10.53	7.19	
	F-Dozer + R-Outrigger Down							15.29	15.29	11.78	11.78	10.53	10.4	
	4-Outrigger Down							15.29	15.29	11.78	11.78	10.53	10.53	
10	R-Rear Dozer Only Up									15.21	8.17	9.75	5.36	25.32
	R-Rear Dozer Only Down									15.21	10.41	11.99	6.79	
	F-Dozer + R-Outrigger Down									15.21	15.21	11.99	9.98	
	4-Outrigger Down									15.21	15.21	11.99	11.99	
5	R-Rear Dozer Only Up									14.29	7.37	9.33	4.98	25.57
	R-Rear Dozer Only Down									18.52	9.36	13.63	6.4	
	F-Dozer + R-Outrigger Down									18.52	14.63	13.63	9.56	
	4-Outrigger Down									18.52	18.45	13.63	11.78	
0	R-Rear Dozer Only Up									13.86	7	9.06	4.74	24.81
	R-Rear Dozer Only Down									20.40	9.17	14.86	6.15	
	F-Dozer + R-Outrigger Down									20.40	14.19	14.86	9.29	
	4-Outrigger Down									20.40	17.97	14.86	11.51	
-5	R-Rear Dozer Only Up									23.49	12.86	13.82	6.97	22.92
	R-Rear Dozer Only Down									23.49	17.42	20.70	9.14	
	F-Dozer + R-Outrigger Down									23.49	23.49	20.70	14.16	
	4-Outrigger Down									23.49	23.49	20.70	17.94	

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STANDARD & OPTION

STANDARD EQUIPMENT

Hydraulic system

- Boom and arm flow regeneration
- Boom and arm holding valves
- Swing anti-rebound valves
- Spare ports(valve)
- One-touch power boost

Cabin & Interior

- Viscous cab mounts
- All weather sound suppressed type cab
- Air conditioner
- 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
- Cigarette lighter and ashtray
- Cup holder
- Hot & Cool box
- LCD color monitor panel
- Engine speed (RPM) control dial
- AM/FM radio and cassette player
- Remote radio ON/OFF switch
- 12V spare powers socket
- Serial communication port for laptop PC interface
- Joystick lever with 3 switches
- Sunvisor
- Sun roof
- wiper

Safety

- Large handrails and step
- Punched metal anti-slip plates
- Seat belt
- Hydraulic safety lock lever
- Safety glass
- Hammer for emergency escape
- Right and left rearview mirrors
- Reverse travel alarm
- Emergency engine stop
- LED stop lamps

Others

- Double element air cleaner
- Fuel pre-filter
- Dust screen for radiator/oil cooler/charged air cooler
- Engine overheat prevention system
- Engine restart prevention system
- Self-diagnostic system
- Large capacity alternator (24V, 60 amps)
- Electric horn
- Halogen working lights (frame mounted 2, boom mounted 2)

Undercarriage

- 10.0-20-14PR double tires
- Heavy duty axles
- Parallel dozer blade & individually controlled outriggers
- Tool box
- Front axle oscillation auto lock

OPTIONAL EQUIPMENT

Some of these optional equipments may be standard in some markets. Some of these optional equipments cannot be available on 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.

Safety

- Boom and arm hose rupture protection valve
- Overload warning device
- Cabin Top/Front guard (ISO 10262, FOGS standard)
- Travel & swing alarm
- Rotation beacon
- Mirror & Lamp on counter weight
- Rear View Camera

Cabin & Interior

- Air suspension seat
- MP3/CD player
- Rain shield
- 2 front lamps
- 4 front + 2 rear lamps

Others

- Piping for crusher
- Piping for quick clamp
- Piping for front attachment rotation
- Breaker filter
- Lower wiper
- Fuel heater
- Fuel filler pump

Undercarriage

- 10.0-20-14PR double tire