

DOOSAN

Wheeled Excavators |
DX140W-5

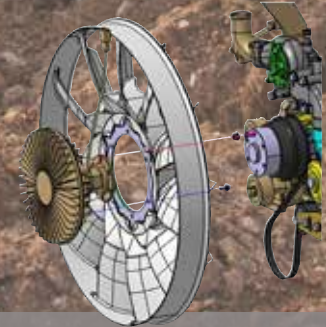


Maximum power: 137 HP
Operating weight: 14.4 t
Max. bucket capacity: 0.76 m³

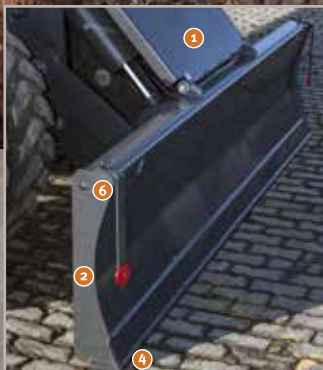




Wastegate turbocharger: Diverts exhaust gases away from the turbine wheel to better regulate max boost pressure & protect engine. Also reduces lag time before turbo begins to spool/create boost maximising torque plus reduces wear in high rpm & low load conditions. Turbocharger increases the density of the air enabling the engine to produce more power with few effects from altitude.



Electrical viscous fan clutch: For optimum cooling fan speed is controlled electronically by a fan clutch resulting in lower fan noise and better fuel efficiency.



Exclusive parallel dozer and independent stabiliser design:

- 1. Large reinforced covers protect the dozer and stabiliser cylinders
- 2. The dozer blade design facilitates pulling and mixing of materials
- 3. The Stabilisers are kept well within the machine envelope and the position of the pins is kept high to avoid bumping while moving over the ground
- 4. Parts in contact with the ground have been carefully designed to prevent damage to the surface
- 5. Wide pads to reduce ground pressure
- 6. Lifting eyes on dozer for secure transport additional 4 eyes are on the undercarriage

► Swing mechanism

The swing mechanism uses an axial piston motor driving a 2-stage planetary reduction gear bathed in oil for maximum torque.

- Swing bearing: single-row shear type ball bearing with induction hardened internal gear
- Internal gear and pinion immersed in lubricant
- Increased swing torque reduces swing time
- The swing brake for parking is activated by spring and released hydraulically

► Swing speed & torque

DX140W-5	
Swing speed	11.4 rpm
Maximum swing torque	3744 kgf·m

► Drive

The wheels are driven by an bent axial piston engine via a two-speed powershift transmission. In addition to the two-speed powershift transmission there is also an economy mode and a switch for the creep speed. A button makes it possible to pass from high to low in work mode.

Two travel speed ranges offer a choice between increased torque or high speed.

► Speed & traction

DX140W-5	
Travel speed (creep / low / high)	3.5 / 10 / 37 km/h
Maximum traction force	8.1 ton
Minimum turning radius	64 m
Gradeability	32° (62%)

► Buckets

Bucket Type	Capacity (m³) SAE	Width (mm)		Weight (kg)	One-piece boom 4.4 m	One-piece boom 4.6 m		Two-piece boom 4.988 m	
		With side cutters	W/O side cutters		Arm 2.1 m	Arm 2.1 m	Arm 2.5 m	Arm 2.1 m	Arm 2.5 m
GP	0.24	534	468	292	A	A	A	A	A
	0.39	820	736	350	A	A	A	A	A
	0.45	911	824	389	A	A	A	A	A
	0.51	991	907	398	A	A	A	A	A
	0.59	1081	997	420	A	A	A	A	A
	0.64	1167	1083	443	A	A	A	A	B
HD	0.76	1220	1120	437	A	A	B	B	C
	0.42	827	762	462	A	A	A	A	A
	0.49	913	848	497	A	A	A	A	A
	0.54	981	916	517	A	A	A	A	A

A: Suitable for materials with a density less than or equal to 2100 kg/m³

B: Suitable for materials with a density less than or equal to 1800 kg/m³

► Fluid capacities

DX140W-5	
Fuel tank	280 l
Cooling system	20 l
Engine oil	22 l
Swing device	3 l
Hydraulic tank	102 l
Urea tank	31.5 l

► Cab

ROPS cab large and roomy interior. Travel pedal with FNR switch on the right joystick. Audio system with remote control independently adjustable joystick consoles. Excellent all-round visibility transparent roof hatch 2-piece sliding door window narrow and easily adjustable steering column. The removable lower front glass can be stored behind the seat. Interior lighting. The pressurised and filtered cab air is supplied by numerous vents. Climate-control provides fast defrosting and high cooling and heating performance. Viscous/spring mounted suspension cushions reduce vibrations. Heated air suspension seat with adjustable seat suspension height tilt recline and forward-backward settings. Adjustable easy to read 7 LCD colour monitor provides real-time information on machine functions and diagnostic information and is switchable to rear view camera (std) and side view camera (optional).

► Noise emission

DX140W-5	
A-weighted emission sound pressure level at the operator's position LpAd (ISO 6396:2008)	70 dB(A)
A-weighted sound power level LwAd (2000/14/EC)	101 dB(A)

Note – Declared single-number noise emission values are the sum of measured values and the associated uncertainty and they represent upper boundaries of the range of values which is likely to occur in measurements.

C: Suitable for materials with a density less than or equal to 1500 kg/m³

D: Suitable for materials with a density less than or equal to 1200 kg/m³

Based on ISO 10567 and SAE J296 arm length without quick-coupler. For reference only.

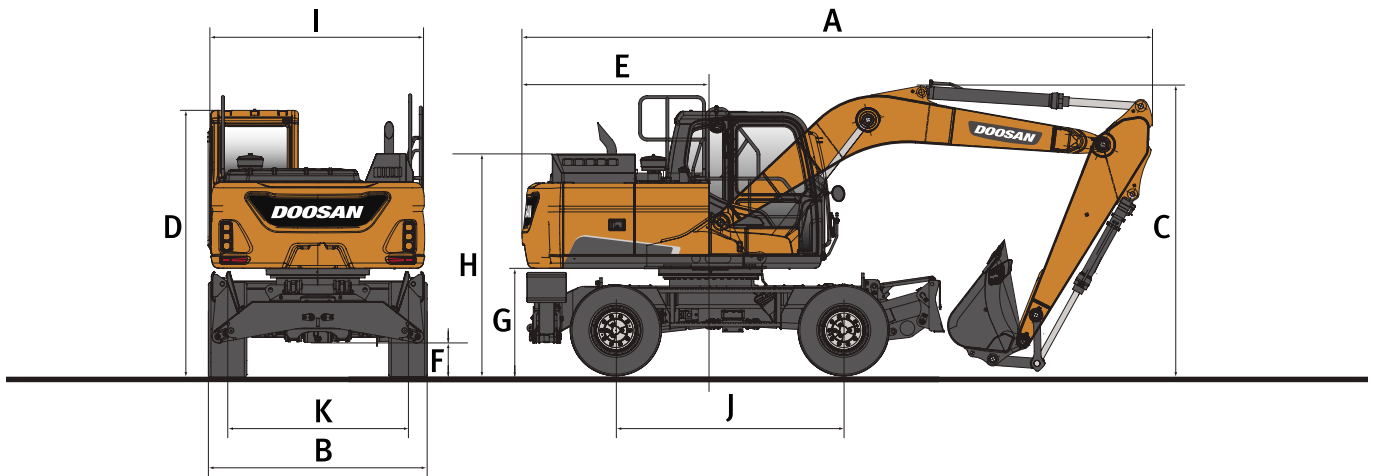
► Weight

Including standard digging bucket 0.59 m³

Boom (mm)	Arm (mm)	Chassis - Front	Chassis - Rear	Total weight (kg)
1-piece boom (4600)	2100	-	Dozer	14450
		Dozer	Stabiliser	15600
		Stabiliser	Dozer	15600
		Stabiliser	Stabiliser	16200
		-	Dozer	14450
		Dozer	Stabiliser	16200
1-piece boom (4600)	2500	Stabiliser	Dozer	16200
		Stabiliser	Stabiliser	16200
		-	Dozer	14450
		Dozer	Stabiliser	16200
		Stabiliser	Dozer	16200
		Stabiliser	Stabiliser	16200

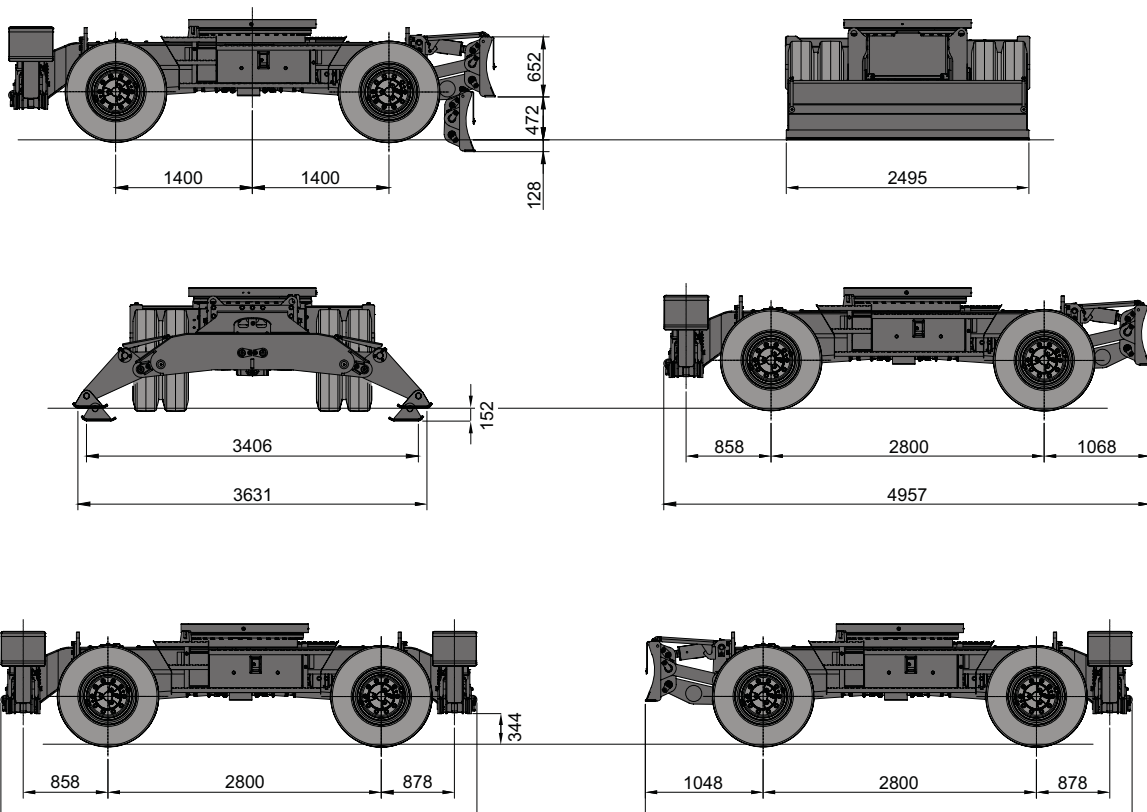
Boom (mm)	Arm (mm)	Chassis - Front	Chassis - Rear	Total weight (kg)
1-piece boom (4400)	2100	-	Dozer	14450
		-	Dozer	14450
		Dozer	Stabiliser	15600
		Stabiliser	Dozer	15600
2-piece boom (4988)	2100	-	Dozer	15050
		Dozer	Stabiliser	16200
		Stabiliser	Dozer	16200
	2500	Stabiliser	Stabiliser	16750
		-	Dozer	15050
		Dozer	Stabiliser	16200
Stabiliser	Dozer	16200		
Stabiliser	Stabiliser	16750		

Dimensions

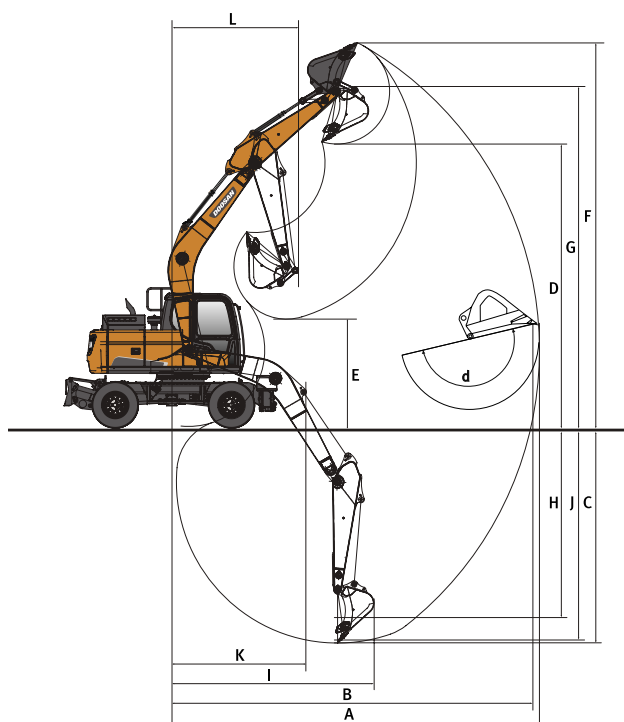


▮ Dimensions

Boom length - mm Arm length - mm	One-piece boom			Two-piece boom	
	4400	4600		4988	
	2100	2100	2500	2100	2500
A Shipping length - mm	7420	7630	7585	8010	7975
B Shipping width - mm	2500	2500	2500	2500	2500
C Shipping height (boom) - mm	2995	2865	3210	2940	3105
D Height over cab - mm	3052	3052	3052	3052	3052
E Tail swing radius - mm	2205	2205	2205	2205	2205
F Ground clearance - mm	347	347	347	347	347
G Counterweight clearance - mm	1215	1215	1215	1215	1215
H Engine cover height - mm	2212	2212	2212	2212	2212
I Upper housing width - mm	2490	2490	2490	2490	2490
J Wheel base - mm	2800	2800	2800	2800	2800
K Tread width - mm	1944	1944	1944	1944	1944



Working range



Working range

	One-piece boom			Two-piece boom	
	4400	4600		4988	
Boom length - mm	4400	4600		4988	
Arm length - mm	2100	2100	2500	2100	2500
A Max. digging reach - mm	7585	7765	8235	8210	8670
B Max. digging reach (ground) - mm	7375	7560	8040	8020	8490
C Max. digging depth - mm	4490	4620	5020	5025	5455
D Max. loading height - mm	5905	6060	6510	6715	7175
E Min. loading height - mm	2625	2836	2465	3365	3015
F Max. digging height - mm	8195	8340	8850	9060	9565
G Max. bucket pin height - mm	7125	7275	7730	7930	8395
H Max. vertical wall depth - mm	3445	3480	4265	3840	4410
I Max. radius vertical - mm	5480	5695	5555	5825	5680
J Max. digging depth (8° level) - mm	4215	4345	4805	4905	5345
K Min. radius 8° line - mm	2105	2240	2315	865	865
L Min. swing radius - mm	2340	885	505	2650	2850
d Bucket angle - °	173.7	173.7	173.7	173.7	173.7

Digging forces (ISO)

	One-piece boom			Two-piece boom	
	4400	4600		4988	
Boom length - mm	4400	4600		4988	
Arm length - mm	2100	2100	2500	2100	2500
BUCKET (Normal/Press. Up) - ton	10.00/10.57	10.00/10.57	10.00/10.57	11.08/11.71	11.08/11.71
ARM (Normal/Press. Up) - ton	7.59/8.03	7.59/8.03	6.53/6.9	7.59/8.03	6.53/6.9

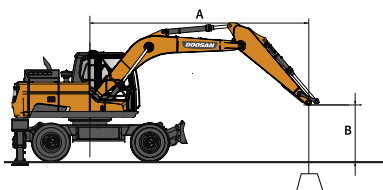
Lifting capacities

DX140W-5

W/O Bucket

Unit: 1000 kg	A B	Chassis Frame Attachment	1.5 m		3.0 m		4.5 m		6.0 m		Max. reach		
													A
One-piece boom 4.4 m Arm 2.1 m Counterweight 2.2 t	6.0 m	R-Dozer Up					3.61*	3.61*			3.14*	3.14*	4.63
		R-Dozer Down					3.61*	3.61*			3.14*	3.14*	
		F-Dozer + R-Stabilizer Down					3.61*	3.61*			3.14*	3.14*	
		F-Stabiliser + R-Stabiliser Down					3.61*	3.61*			3.14*	3.14*	
	4.5 m	R-Dozer Up					5.65*	3.66			2.97*	2.55	5.68
		R-Dozer Down					5.65*	4.06			2.97*	2.82	
		F-Dozer + R-Stabilizer Down					5.65*	5.65*			2.97*	2.97*	
		F-Stabiliser + R-Stabiliser Down					5.65*	5.65*			2.97*	2.97*	
	3.0 m	R-Dozer Up			9.58*	6.36	6.65*	3.5	4.15*	2.29	3.07*	2.18	6.19
		R-Dozer Down			9.58*	7.21	6.65*	3.89	4.15*	2.54	3.07*	2.42	
		F-Dozer + R-Stabilizer Down			9.58*	9.58*	6.65*	5.88	4.15*	3.78	3.07*	3.07*	
		F-Stabiliser + R-Stabiliser Down			9.58*	9.58*	6.65*	6.65*	4.15*	4.15*	3.07*	3.07*	
	1.5 m	R-Dozer Up			10.02*	5.84	7.06	3.31	4.48	2.22	3.39*	2.06	6.31
		R-Dozer Down			10.02*	6.66	7.52*	3.7	5.28	2.47	3.39*	2.3	
		F-Dozer + R-Stabilizer Down			10.02*	10.02*	7.52*	5.67	5.61*	3.7	3.39*	3.39*	
		F-Stabiliser + R-Stabiliser Down			10.02*	10.02*	7.52*	6.83	5.61*	4.39	3.39*	3.39*	
	0.0 m	R-Dozer Up			10.78*	5.68	6.91	3.2	4.42	2.17	4.07*	2.14	6.07
		R-Dozer Down			10.78*	6.5	7.74*	3.58	4.79*	2.42	4.07*	2.39	
		F-Dozer + R-Stabilizer Down			10.78*	10.78*	7.74*	5.54	4.79*	3.65	4.07*	3.6	
		F-Stabiliser + R-Stabiliser Down			10.78*	10.78*	7.74*	6.69	4.79*	4.34	4.07*	4.07*	
	-1.5 m	R-Dozer Up	8.49*	8.49*	10.01*	5.71	6.89	3.18			5.19	2.51	5.39
		R-Dozer Down	8.49*	8.49*	10.01*	6.52	6.94*	3.57			5.43*	2.8	
		F-Dozer + R-Stabilizer Down	8.49*	8.49*	10.01*	10.01*	6.94*	5.52			5.43*	4.25	
		F-Stabiliser + R-Stabiliser Down	8.49*	8.49*	10.01*	10.01*	6.94*	6.67			5.43*	5.07	
-3.0 m	R-Dozer Up			6.73*	5.87					4.84*	3.74	4.09	
	R-Dozer Down			6.73*	6.69					4.84*	4.2		
	F-Dozer + R-Stabilizer Down			6.73*	6.73*					4.84*	4.84*		
	F-Stabiliser + R-Stabiliser Down			6.73*	6.73*					4.84*	4.84*		

One-piece boom 4.6 m Arm 2.5 m Counterweight 2.5 t	7.5 m	R-Dozer Up									2.77*	2.77*	3.93
		R-Dozer Down									2.77*	2.77*	
		F-Dozer + R-Stabilizer Down									2.77*	2.77*	
		F-Stabiliser + R-Stabiliser Down									2.77*	2.77*	
	6.0 m	R-Dozer Up					3.98*	3.97			2.27*	2.27*	5.55
		R-Dozer Down					3.98*	3.98*			2.27*	2.27*	
		F-Dozer + R-Stabilizer Down					3.98*	3.98*			2.27*	2.27*	
		F-Stabiliser + R-Stabiliser Down					3.98*	3.98*			2.27*	2.27*	
	4.5 m	R-Dozer Up					4.68*	3.88	3.54*	2.49	2.13*	2.13*	6.44
		R-Dozer Down					4.68*	4.3	3.54*	2.75	2.13*	2.13*	
		F-Dozer + R-Stabilizer Down					4.68*	4.68*	3.54*	3.54*	2.13*	2.13*	
		F-Stabiliser + R-Stabiliser Down					4.68*	4.68*	3.54*	3.54*	2.13*	2.13*	
	3.0 m	R-Dozer Up			8.98*	6.73	6.30*	3.69	4.75	2.42	2.15*	1.95	6.90
		R-Dozer Down			8.98*	7.61	6.30*	4.1	4.84*	2.68	2.15*	2.15*	
		F-Dozer + R-Stabilizer Down			8.98*	8.98*	6.30*	6.14	4.84*	3.95	2.15*	2.15*	
		F-Stabiliser + R-Stabiliser Down			8.98*	8.98*	6.30*	6.30*	4.84*	4.65	2.15*	2.15*	
	1.5 m	R-Dozer Up					7.28*	3.47	4.65	2.33	2.29*	1.86	7.01
		R-Dozer Down					7.28*	3.87	5.49	2.59	2.29*	2.07	
		F-Dozer + R-Stabilizer Down					7.28*	5.89	5.55*	3.85	2.29*	2.29*	
		F-Stabiliser + R-Stabiliser Down					7.28*	7.08	5.55*	4.55	2.29*	2.29*	
	0.0 m	R-Dozer Up			8.23*	5.91	7.15	3.33	4.57	2.26	2.59*	1.92	6.79
		R-Dozer Down			8.23*	6.75	7.68*	3.73	5.4	2.52	2.59*	2.13	
		F-Dozer + R-Stabilizer Down			8.23*	8.23*	7.68*	5.73	5.64*	3.77	2.59*	2.59*	
		F-Stabiliser + R-Stabiliser Down			8.23*	8.23*	7.68*	6.91	5.64*	4.47	2.59*	2.59*	
-1.5 m	R-Dozer Up	6.29*	6.29*	10.47*	5.91	7.1	3.29	4.56	2.25	3.22*	2.16	6.20	
	R-Dozer Down	6.29*	6.29*	10.47*	6.75	7.22*	3.69	5.06*	2.51	3.22*	2.41		
	F-Dozer + R-Stabilizer Down	6.29*	6.29*	10.47*	10.47*	7.22*	5.69	5.06*	3.76	3.22*	3.22*		
	F-Stabiliser + R-Stabiliser Down	6.29*	6.29*	10.47*	10.47*	7.22*	6.86	5.06*	4.46	3.22*	3.22*		
-3.0 m	R-Dozer Up			7.93*	6.03	5.47*	3.36			4.34*	2.85	5.11	
	R-Dozer Down			7.93*	6.88	5.47*	3.76			4.34*	3.18		
	F-Dozer + R-Stabilizer Down			7.93*	7.93*	5.47*	5.47*			4.34*	4.34*		
	F-Stabiliser + R-Stabiliser Down			7.93*	7.93*	5.47*	5.47*			4.34*	4.34*		



: Rating over front.
 : Rating over side or 360°.

- Lifting capacities are in compliance with ISO 10567:2007(E).
- The load point is at the end of the arm.
- * = The nominal loads are based on hydraulic capacity.
- The nominal loads shown do not exceed 75% of tipping loads or 87% of hydraulic lifting capacity.
- For lifting capacity with bucket simply subtract the actual weight of the bucket from the values.
- The configurations indicated do not necessarily reflect the standard equipment of the machine.

Lifting capacities

DX140W-5

W/O Bucket

Unit: 1000 kg	A	Chassis Frame Attachment	1.5 m		3.0 m		4.5 m		6.0 m		Max. reach		A
			⌋	⌋	⌋	⌋	⌋	⌋	⌋	⌋	⌋	⌋	
Two-piece boom 4.988 m Arm 2.5 m Counterweight 2.5 t	7.5 m	R-Dozer Up					3.34*	3.34*			2.83*	2.83*	4.69
		R-Dozer Down					3.34*	3.34*			2.83*	2.83*	
		F-Dozer + R-Stabilizer Down					3.34*	3.34*			2.83*	2.83*	
		F-Stabiliser + R-Stabiliser Down					3.34*	3.34*			2.83*	2.83*	
	6.0 m	R-Dozer Up					4.14*	4	2.81*	2.48	2.41*	2.41*	6.10
		R-Dozer Down					4.14*	4.14*	2.81*	2.75	2.41*	2.41*	
		F-Dozer + R-Stabilizer Down					4.14*	4.14*	2.81*	2.81*	2.41*	2.41*	
		F-Stabiliser + R-Stabiliser Down					4.14*	4.14*	2.81*	2.81*	2.41*	2.41*	
	4.5 m	R-Dozer Up					4.81*	3.86	4.28*	2.47	2.27*	1.93	6.92
		R-Dozer Down					4.81*	4.28	4.28*	2.73	2.27*	2.15	
		F-Dozer + R-Stabilizer Down					4.81*	4.81*	4.28*	4.03	2.27*	2.27*	
		F-Stabiliser + R-Stabiliser Down					4.81*	4.81*	4.28*	4.28*	2.27*	2.27*	
	3.0 m	R-Dozer Up					5.87*	3.6	4.74	2.37	2.27*	1.72	7.35
		R-Dozer Down					5.87*	4.02	4.76*	2.63	2.27*	1.92	
		F-Dozer + R-Stabilizer Down					5.87*	5.87*	4.76*	3.92	2.27*	2.27*	
		F-Stabiliser + R-Stabiliser Down					5.87*	5.87*	4.76*	4.63	2.27*	2.27*	
	1.5 m	R-Dozer Up					6.93*	3.35	4.61	2.25	2.39*	1.64	7.45
		R-Dozer Down					6.93*	3.75	5.23*	2.51	2.39*	1.84	
		F-Dozer + R-Stabilizer Down					6.93*	5.79	5.23*	3.79	2.39*	2.39*	
		F-Stabiliser + R-Stabiliser Down					6.93*	6.93*	5.23*	4.5	2.39*	2.39*	
	0.0 m	R-Dozer Up					7.06	3.19	4.51	2.17	2.65*	1.69	7.24
		R-Dozer Down					7.45*	3.6	5.36	2.43	2.65*	1.89	
		F-Dozer + R-Stabilizer Down					7.45*	5.61	5.49*	3.7	2.65*	2.65*	
		F-Stabiliser + R-Stabiliser Down					7.45*	6.81	5.49*	4.41	2.65*	2.65*	
-1.5 m	R-Dozer Up			8.71*	5.7	7.01	3.15	4.49	2.15	3.16*	1.88	6.70	
	R-Dozer Down			8.71*	6.54	7.26*	3.56	5.30*	2.41	3.16*	2.1		
	F-Dozer + R-Stabilizer Down			8.71*	8.71*	7.26*	5.57	5.30*	3.68	3.16*	3.16*		
	F-Stabiliser + R-Stabiliser Down			8.71*	8.71*	7.26*	6.76	5.30*	4.39	3.16*	3.16*		
-3.0 m	R-Dozer Up			8.74*	5.83	6.19*	3.22			4.37*	2.37	5.71	
	R-Dozer Down			8.74*	6.68	6.19*	3.62			4.37*	2.65		
	F-Dozer + R-Stabilizer Down			8.74*	8.74*	6.19*	5.64			4.37*	4.03		
	F-Stabiliser + R-Stabiliser Down			8.74*	8.74*	6.19*	6.19*			4.37*	4.37*		

Doosan Buckets

4 More. More choice - More durable - More strength - More performance!

General Construction Bucket



The General purpose bucket is designed for digging and re-handling soft to medium materials (e.g. materials with low wear characteristics such as top-soil loam coal).

Heavy Construction Bucket



The Heavy duty bucket is designed for mass excavations in dense materials such as hard packed clay shot limestone limited rock content and gravel.

Severe Mining Bucket



The Severe duty bucket is designed for durability in digging compact materials like loose or blasted rock hard packed clay and stone.

X-treme Mining Bucket



The X-treme duty bucket is designed as a long-life version of the Severe duty bucket for digging in the most abrasive materials.