

M313D

Wheel Excavator

The D Series incorporates innovations for improved performance and versatility.

High lifting capacity, fast cycle times and ease of operation lead to increased productivity and lower operating costs.



Engine

The EU Stage IIIA compliant C4.4 offers increased performance and reliability while reducing fuel consumption and sound levels.

Environmentally Responsible Design

Helping to protect our environment, the engine has low operator and spectator sound levels, longer filter change intervals and is more fuel-efficient.

Hydraulics

The state of the art load-sensing hydraulic system combined with a separate dedicated swing pump provides fast cycle times, increased lift capacity and high bucket and stick forces. This combination maximizes your productivity in any job.

Serviceability

For increased safety, all daily maintenance points are accessible from ground level. A centralized greasing system allows lubrication of critical points.

Operator Comfort

The operator station maximizes comfort while increasing safety. The available auto-weight adjusted air-suspension seat with heated and cooled ventilated cushions improves operator comfort. Safety is enhanced by the new color monitor and standard rear-mounted camera.

Undercarriage

Various undercarriage configuration with blade and outriggers are available to provide the best solution for you.



M313D Wheel Excavator Specifications

Engine

Engine Model	Cat® C4.4 with ACERT™ Technology
Ratings	2,000 rpm
Gross Power	102 kW (139 hp)
Net Power	
ISO 9249	95 kW (129 hp)
80/1269/EEC	95 kW (129 hp)
Bore	105 mm
Stroke	127 mm
Displacement	4.4 L
Cylinders	4
Maximum Torque at 1,400 rpm	550 N·m

- All engine horsepower (hp) are metric.
- EU Stage IIIA compliant.
- Full engine net power up to 3000 m altitude.

Hydraulic System

Tank Capacity	95 L
System	180 L
Maximum Pressure	
Implement Circuit	
Normal	350 bar
Heavy Lift	375 bar
Travel Circuit	350 bar
Auxiliary Circuit	
High Pressure	350 bar
Medium Pressure	185 bar
Swing Mechanism	350 bar
Maximum Flow	
Implement/Travel Circuit	190 L/min
Auxiliary Circuit	
High Pressure	190 L/min
Medium Pressure	50 L/min
Swing Mechanism	80 L/min

Weights

VA Boom*	
Rear Dozer Only	13 800 kg
Rear Dozer, Front Outriggers	14 750 kg
Front and Rear Outriggers	15 050 kg
One-Piece Boom*	
Rear Dozer Only	13 500 kg
Rear Dozer, Front Outriggers	14 450 kg
Front and Rear Outriggers	14 750 kg
Offset Boom*	
Rear Dozer Only	14 350 kg
Rear Dozer, Front Outriggers	15 300 kg
Front and Rear Outriggers	15 600 kg
Sticks	
Short (2000 mm)	370 kg
Medium (2300 mm)	390 kg
Long (2600 mm)	440 kg
Industrial (2900 mm)	380 kg
Dozer Blade	750 kg
Outriggers	960 kg
Counterweight	
Standard	2900 kg
Optional	3300 kg

* Machine weight with medium stick, 3300 kg counterweight, with operator and full fuel tank, without work tool. Weight varies depending on configuration.

Transmission	
Forward/Reverse	
1st Gear	9 km/h
2nd Gear	37 km/h
Creeper Speed	
1st Gear	3 km/h
2nd Gear	13 km/h
Drawbar Pull	76 kN
Maximum Gradeability	58%

M313D Wheel Excavator Specifications

Swing Mechanism

Swing Speed	10.5 rpm
Swing Torque	35 kN·m

Tires

Standard

- 10.00-20 (dual pneumatic)

Optional

- 11.00-20 (dual pneumatic)
- 18 R 19.5 XF (single pneumatic)
- 10.00-20 (dual solid rubber)

Undercarriage

Ground Clearance	370 mm
Maximum Steering Angle	35°
Oscillation Axle Angle	± 9°
Minimum Turning Radius	
Outside of Tire	6200 mm
End of VA Boom	6700 mm
End of One-Piece Boom	8100 mm

Service Refill Capacities

Fuel Tank	235 L
Cooling	31 L
Engine Crankcase	8 L
Rear Axle Housing (differential)	11.2 L
Front Steering Axle (differential)	9 L
Final Drive	2.4 L
Powershift Transmission	2.5 L

Sound Levels

Exterior Sound

- The labeled spectator sound power level measured according to the test procedures and conditions specified in 2000/14/EC is 102 dB(A).

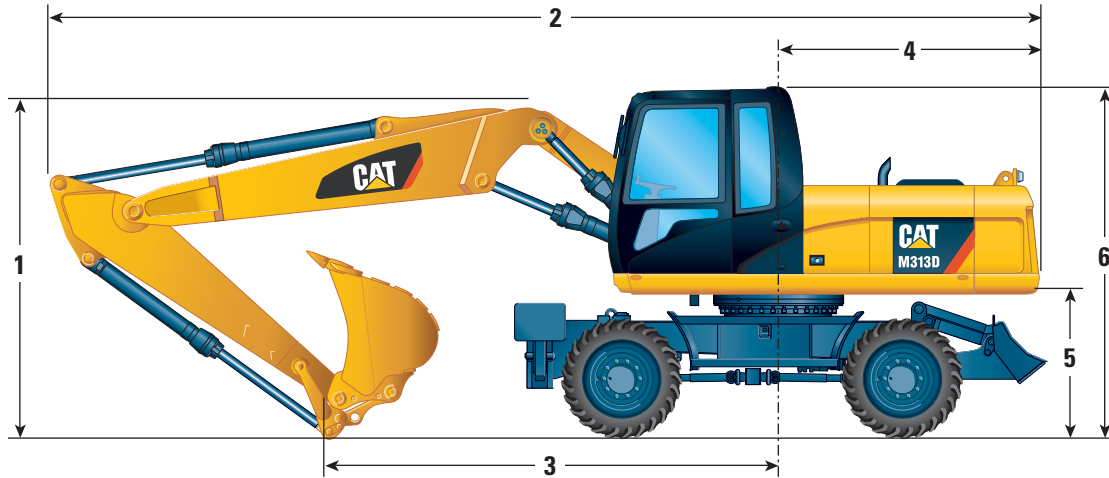
Cab/ROPS/FOGS

- Cat cab with integrated Roll Over Protective Structure (ROPS) meets ISO 12117-2:2008 criteria.
- Cab with Falling Object Guard Structure (FOGS) meets ISO 10262.

M313D Wheel Excavator Specifications

Dimensions

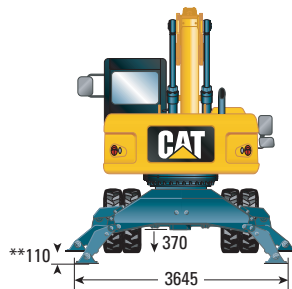
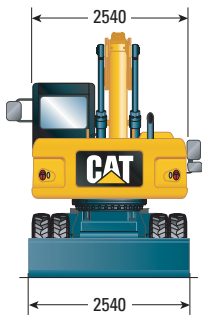
All dimensions are approximate.



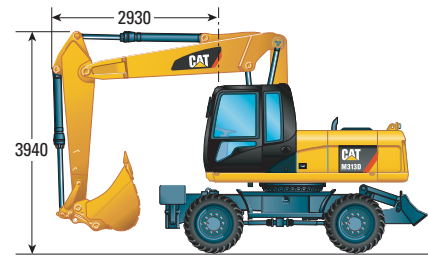
		VA Boom				One-Piece Boom				Offset Boom	
Stick Length	mm	2000	2300	2600	*2900	2000	2300	2600	*2900	2000	2300
1 Shipping Height	mm	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120
2 Shipping Length	mm	8310	8300	8290	8130	8090	8080	8090	7950	8300	8300
3 Support Point	mm	3820	3470	3320	3580	3480	3120	2950	3170	3820	3460
4 Tail Swing Radius	mm	2060				2060				2060	
5 Counterweight Clearance	mm	1230				1230				1230	
6 Cab Height	mm	3120				3120				3120	

* Industrial stick

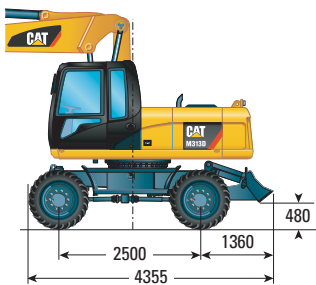
** Maximum tire clearance with outrigger fully down



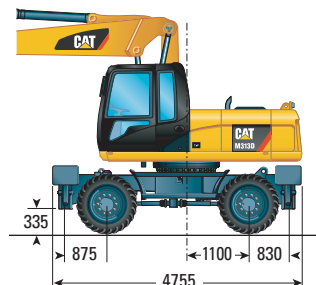
Roading position with 2300 mm stick



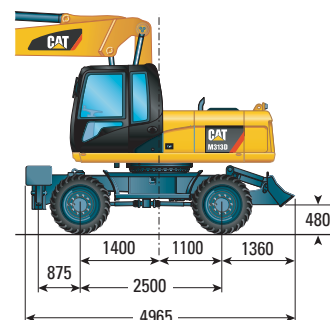
Undercarriage with dozer only



Undercarriage with 2 sets of outriggers

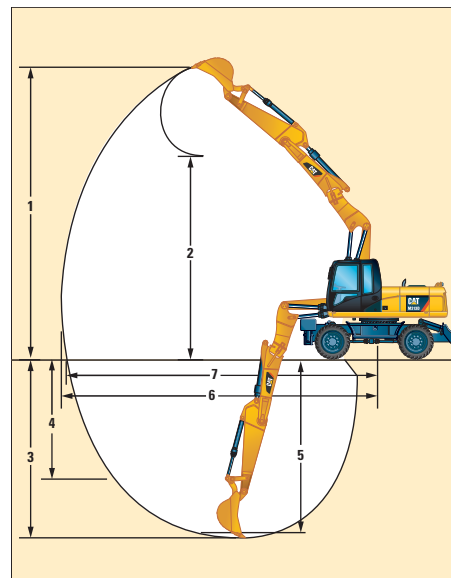
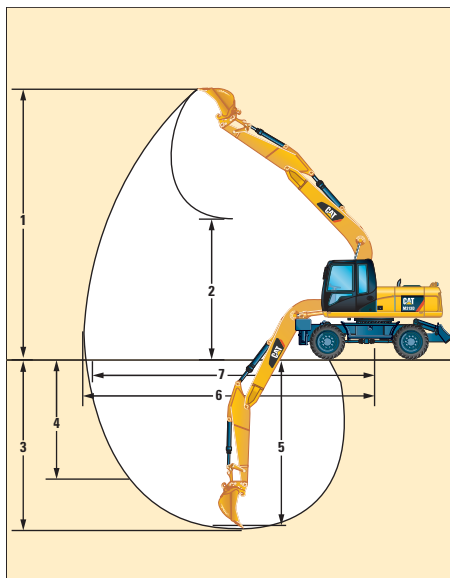
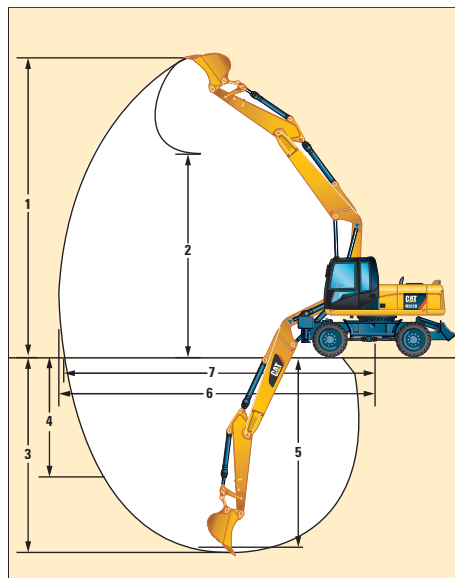


Undercarriage with 1 set of outriggers and dozer



M313D Wheel Excavator Specifications

Working Ranges



	mm	VA Boom				One-Piece Boom				Offset Boom	
		2000	2300	2600	*2900	2000	2300	2600	*2900	2000	2300
Stick Length	mm	2000	2300	2600	*2900	2000	2300	2600	*2900	2000	2300
1 Digging Height	mm	9670	9820	10 060	8500	8600	8620	8790	7140	9670	9820
2 Dump Height	mm	6900	7060	7290	4020	5910	5970	6140	3160	6900	7060
3 Digging Depth	mm	5160	5450	5750	4670	4990	5290	5590	4500	5160	5450
4 Vertical Wall Digging Depth	mm	3500	3600	3890	–	3410	3370	3670	–	3500	3600
5 Depth 2.5 m Straight Clean-Up	mm	4920	5230	5550	–	4750	5070	5390	–	4920	5230
6 Reach	mm	8670	8920	9210	7910	8420	8660	8950	7610	8670	8920
7 Reach at Ground Level	mm	8490	8740	9030	7710	8230	8480	8770	7400	8490	8740
Bucket Forces (ISO 6015)	kN	93	93	93	–	93	93	93	–	93	93
Stick Forces (ISO 6015)	kN	73	67	62	–	73	67	62	–	73	67

* Industrial stick has no bucket linkage. All dimensions refer to sticknose.

Values 1-7 are calculated with bucket and quick coupler with a tip radius of 1400 mm.

Breakout force values are calculated with heavy lift on (no quick coupler) and a tip radius of 1236 mm.













M313D Wheel Excavator Specifications

Lift Capacities – Variable Adjustable Boom (5020 mm)













All values are in kg, without bucket and without QC, with counterweight (3300 kg), heavy lift on.

 Load at maximum reach (sticknose/bucket pin)
  Load over front
  Load over rear
  Load over side
  Load point height

Short Stick 2000 mm

Undercarriage configuration	3.0 m			4.5 m			6.0 m			7.5 m			m
													
6.0 m				*5000	3900	3550				*3550	2550	2300	5.82
Rear dozer up					*5000	4100					*3550	2650	
Rear dozer down					*5000	*5000					*3550	*3550	
Dozer and stabilizer down					*5000	*5000					*3550	*3550	
2 sets of stabilizers down				*5000	*5000	*5000				*3550	*3550	*3550	
4.5 m				*5450	3750	3400	3500	2400	2200	2900	2000	1800	6.71
Rear dozer up					*5450	3950		*4500	2550		*3250	2100	
Rear dozer down					*5450	*5450		*4500	3850		*3250	3200	
Dozer and stabilizer down					*5450	*5450	*4500	*4500	4500	*3250	*3250	*3250	
2 sets of stabilizers down				*5450	*5450	*5450	*4500	*4500	4500	*3250	*3250	*3250	
3.0 m				5250	3500	3200	3400	2300	2100	2600	1750	1600	7.16
Rear dozer up					*6250	3700		*4750	2450		*3200	1850	
Rear dozer down					*6250	5850		*4750	3750		*3200	2850	
Dozer and stabilizer down					*6250	*6250	*4750	*4750	4400	*3200	*3200	*3200	
2 sets of stabilizers down				*6250	*6250	*6250	*4750	*4750	4400	*3200	*3200	*3200	
1.5 m				5000	3300	2950	3300	2200	2000	2500	1700	1550	7.28
Rear dozer up					*6750	3450		*4900	2350		*3300	1800	
Rear dozer down					*6750	5600		*4900	3650		*3300	2750	
Dozer and stabilizer down					*6750	6650	*4900	*4900	4250	*3300	*3300	3200	
2 sets of stabilizers down				*6750	*6750	*6750	*4900	*4900	4250	*3300	*3300	3200	
0.0 m				4900	3200	2850	3250	2150	1950	2600	1750	1600	7.06
Rear dozer up					*6500	3350		*4750	2250		*3600	1850	
Rear dozer down					*6500	5450		*4750	3600		*3600	2850	
Dozer and stabilizer down					*6500	6500	*4750	*4750	4200	*3600	*3600	3350	
2 sets of stabilizers down				*6500	*6500	*6500	*4750	*4750	4200	*3600	*3600	3350	
-1.5 m				*6700	5950	5200	4900	3150	2850	2950	1950	1800	6.48
Rear dozer up					*6700	6250		*5550	3350		*3300	2050	
Rear dozer down					*6700	*6700		*5550	5450		*3300	3250	
Dozer and stabilizer down					*6700	*6700		*5550	5450		*3300	3250	
2 sets of stabilizers down				*6700	*6700	*6700	*5550	*5550	*5550	*4000	*4000	*4000	

Medium Stick 2300 mm

Undercarriage configuration	3.0 m			4.5 m			6.0 m			7.5 m			m			
																
6.0 m				*4600	3950	3600	*3500	2450	2250				*2900	2350	2150	6.13
Rear dozer up					*4600	4150		*3500	2550					*2900	2450	
Rear dozer down					*4600	*4600		*3500	*3500					*2900	*2900	
Dozer and stabilizer down					*4600	*4600		*3500	*3500					*2900	*2900	
2 sets of stabilizers down				*4600	*4600	*4600	*3500	*3500	*3500				*2900	*2900	*2900	
4.5 m				*5200	3800	3450	3550	2450	2200				*2750	1900	1700	6.98
Rear dozer up					*5200	4000		*4350	2550					*2750	2000	
Rear dozer down					*5200	*5200		*4350	3900					*2750	*2750	
Dozer and stabilizer down					*5200	*5200	*4350	*4350	4350					*2750	*2750	
2 sets of stabilizers down				*5200	*5200	*5200	*4350	*4350	4350				*2750	*2750	*2750	
3.0 m				5300	3550	3200	3400	2350	2100				2450	1650	1500	7.42
Rear dozer up					*6050	3750		*4650	2450					*2700	1750	
Rear dozer down					*6050	5900		*4650	3800					*2700	*2700	
Dozer and stabilizer down					*6050	*6050	*4650	*4650	4400					*2700	*2700	
2 sets of stabilizers down				*6050	*6050	*6050	*4650	*4650	4400				*2700	*2700	*2700	
1.5 m				5000	3300	3000	3300	2200	2000	2400	1600	1450	2400	1600	1450	7.52
Rear dozer up					*6700	3500		*4900	2350		*3050	1700		*2850	1700	
Rear dozer down					*6700	5600		*4900	3650		*3050	2650		*2850	2650	
Dozer and stabilizer down					*6700	6650	*4900	*4900	4300	*3050	*3050	*3050	*2850	*2850	*2850	
2 sets of stabilizers down				*6700	*6700	*6700	*4900	*4900	4300	*3050	*3050	*3050	*2850	*2850	*2850	
0.0 m				4900	3150	2850	3200	2150	1950				2450	1650	1500	7.32
Rear dozer up					*6600	3350		*4800	2250					*3150	1750	
Rear dozer down					*6600	5450		*4800	3600					*3150	2700	
Dozer and stabilizer down					*6600	6500	*4800	*4800	4200					*3150	*3150	
2 sets of stabilizers down				*6600	*6600	*6600	*4800	*4800	4200				*3150	*3150	*3150	
-1.5 m				*6800	5850	5150	4850	3150	2850	3200	2100	1950	2750	1850	1650	6.76
Rear dozer up					*6800	6200		*5800	3350		*4200	2250		*3300	1950	
Rear dozer down					*6800	*6800		*5800	5450		*4200	3550		*3300	3050	
Dozer and stabilizer down					*6800	*6800		*5800	5450		*4200	3550		*3300	3050	
2 sets of stabilizers down				*6800	*6800	*6800	*5800	*5800	*5800	*4200	*4200	4150	*3300	*3300	*3300	
-3.0 m							*4150	3200	2900							
Rear dozer up							*4150	3400								
Rear dozer down							*4150	*4150								
Dozer and stabilizer down							*4150	*4150								
2 sets of stabilizers down							*4150	*4150								

*Limited by hydraulic rather than tipping load.

Lift capacity ratings are based on ISO 10567:2007, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. The load point is the center line of the bucket pivot mounting pin on the stick. The oscillating axle must be locked. Lifting capacities are based on the machine standing on a firm uniform supporting surface and the Variable Boom Cylinder adjusted to the maximum length. For lifting capacity including bucket and/or quick coupler, the respective weight has to be subtracted from above values. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

M313D Wheel Excavator Specifications

Lift Capacities – Variable Adjustable Boom (5020 mm)

All values are in kg, without bucket and without QC, with counterweight (3300 kg), heavy lift on.

Long Stick 2600 mm	Load at maximum reach (sticknose/bucket pin)	Load over front	Load over rear	Load over side	Load point height	Undercarriage configuration												m
						3.0 m			4.5 m			6.0 m			7.5 m			
						Stick	QC	Stick	QC	Stick	QC	Stick	QC	Stick	QC	Stick	QC	
6.0 m	Rear dozer up				*4000	*4000	3650	3600	2500	2250				*2500	2150	1950	6.49	
	Rear dozer down					*4000	*4000		*3650	2600					*2500	2250		
	Dozer and stabilizer down					*4000	*4000		*3650	*3650					*2500	*2500		
	2 sets of stabilizers down				*4000	*4000	*4000	*3650	*3650	*3650				*2500	*2500	*2500		
4.5 m	Rear dozer up				*4500	3850	3500	3550	2450	2250				*2350	1750	1600	7.29	
	Rear dozer down					*4500	4000		*4200	2550					*2350	1850		
	Dozer and stabilizer down					*4500	*4500		*4200	3900					*2350	*2350		
	2 sets of stabilizers down				*4500	*4500	*4500	*4200	*4200	*4200				*2350	*2350	*2350		
3.0 m	Rear dozer up					5300	3550	3250	3400	2350	2100	2450	1650	1500	2300	1550	1400	7.71
	Rear dozer down						*5850	3750		*4500	2450		*3350	1750	*2350	1650		
	Dozer and stabilizer down						*5850	*5850		*4500	3800		*3350	2700	*2350	*2350		
	2 sets of stabilizers down				*5850	*5850	*5850	*4500	*4500	4400	*3350	*3350	3100	*2350	*2350	*2350		
1.5 m	Rear dozer up					5050	3300	3000	3300	2200	2000	2400	1600	1450	2250	1500	1350	7.81
	Rear dozer down						*6550	3500		*4800	2350		*3550	1700	*2450	1600		
	Dozer and stabilizer down						*6550	5600		*4800	3650		3750	2650	*2450	*2450		
	2 sets of stabilizers down				*6550	*6550	*6550	*4800	*4800	4250	*3800	*3800	3050	*2450	*2450	*2450		
0.0 m	Rear dozer up					4850	3150	2850	3200	2100	1900	2350	1550	1400	2300	1500	1400	7.61
	Rear dozer down						*6650	3350		*4800	2250		*3550	1650	*2700	1600		
	Dozer and stabilizer down						*6650	5450		*4800	3550		*3550	2600	*2700	2550		
	2 sets of stabilizers down				*6650	*6650	6500	*4800	*4800	4150	*3550	*3550	3050	*2700	*2700	*2700		
-1.5 m	Rear dozer up	*6400	5800	5050	4800	3100	2800	3150	2100	1900					2550	1700	1550	7.08
	Rear dozer down		*6400	6100		*6000	3300		*4350	2200						*3150	1800	
	Dozer and stabilizer down		*6400	*6400		*6000	5400		*4350	3500						*3150	2800	
	2 sets of stabilizers down	*6400	*6400	*6400	*6000	*6000	*6000	*4350	*4350	4150					*3150	*3150	*3150	
-3.0 m	Rear dozer up				*4550	3150	2850	*2900	2150	1950								
	Rear dozer down					*4550	3350		*2900	2250								
	Dozer and stabilizer down					*4550	*4550		*2900	*2900								
	2 sets of stabilizers down				*4550	*4550	*4550	*2900	*2900	*2900								

Industrial Stick 2900 mm

Industrial Stick 2900 mm	Load at maximum reach (sticknose/bucket pin)	Load over front	Load over rear	Load over side	Load point height	Undercarriage configuration												m
						3.0 m			4.5 m			6.0 m			7.5 m			
						Stick	QC	Stick	QC	Stick	QC	Stick	QC	Stick	QC	Stick	QC	
6.0 m	Rear dozer up				*4150	*4150	3850	3800	2700	2500				*3150	2300	2150	6.60	
	Rear dozer down					*4150	*4150		*4000	2800					*3150	2400		
	Dozer and stabilizer down					*4150	*4150		*4000	*4000					*3150	*3150		
	2 sets of stabilizers down				*4150	*4150	*4150	*4000	*4000	*4000				*3150	*3150	*3150		
4.5 m	Rear dozer up				*4600	4050	3700	3750	2650	2450				2700	1900	1750	7.39	
	Rear dozer down					*4600	4250		*4250	2750					*3100	2000		
	Dozer and stabilizer down					*4600	*4600		*4250	4100					*3100	3000		
	2 sets of stabilizers down				*4600	*4600	*4600	*4250	*4250	*4250				*3100	*3100	*3100		
3.0 m	Rear dozer up					5550	3800	3500	3650	2550	2350	2600	1850	1700	2450	1700	1600	7.80
	Rear dozer down						*5850	4000		*4650	2650		*3800	1950	*3200	1800		
	Dozer and stabilizer down						*5850	*5850		*4650	4000		*3800	2900	*3200	2700		
	2 sets of stabilizers down				*5850	*5850	*5850	*4650	*4650	4600	*3800	*3800	3300	*3200	*3200	3100		
1.5 m	Rear dozer up					5300	3550	3250	3500	2400	2200	2550	1800	1650	2400	1650	1500	7.90
	Rear dozer down						*6700	3750		*5000	2550		3900	1850	*3400	1750		
	Dozer and stabilizer down						*6700	5850		*5000	3850		3950	2800	*3400	2600		
	2 sets of stabilizers down				*6700	*6700	*6700	*5000	*5000	4500	*4000	*4000	3250	*3400	*3400	3000		
0.0 m	Rear dozer up					5100	3400	3050	3400	2300	2150	2550	1750	1600	2450	1700	1550	7.71
	Rear dozer down						*6950	3550		*5100	2450		3850	1850	*3700	1750		
	Dozer and stabilizer down						*6950	5700		*5100	3750		*3900	2800	*3700	2700		
	2 sets of stabilizers down				*6950	*6950	6750	*5100	*5100	4400	*3900	*3900	3200	*3700	*3700	3100		
-1.5 m	Rear dozer up	*7400	6050	5300	5050	3350	3000	3350	2300	2100					2650	1800	1650	7.18
	Rear dozer down		*7400	6350		*6450	3500		*4750	2400						*3600	1900	
	Dozer and stabilizer down		*7400	*7400		*6450	5600		*4750	3700						*3600	2950	
	2 sets of stabilizers down	*7400	*7400	*7400	*6450	*6450	*6450	*4750	*4750	4350					*3600	*3600	3400	
-3.0 m	Rear dozer up	*6950	6150	5400	5050	3350	3050	3400	2300	2100					3200	2200	2000	6.25
	Rear dozer down		*6950	6450		*5150	3550		*3600	2450						*3300	2300	
	Dozer and stabilizer down		*6950	*6950		*5150	*5150		*3600	*3600						*3300	*3300	
	2 sets of stabilizers down	*6950	*6950	*6950	*5150	*5150	*5150	*3600	*3600	*3600					*3300	*3300	*3300	

*Limited by hydraulic rather than tipping load.


Lift capacity ratings are based on ISO 10567:2007, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. The load point is the center line of the bucket pivot mounting pin on the stick. The oscillating axle must be locked. Lifting capacities are based on the machine standing on a firm uniform supporting surface and the Variable Boom Cylinder adjusted to the maximum length. For lifting capacity including bucket and/or quick coupler, the respective weight has to be subtracted from above values. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.














M313D Wheel Excavator Specifications

Lift Capacities – One-Piece Boom (4815 mm)














All values are in kg, without bucket and without QC, with counterweight (3300 kg), heavy lift on.

 Load at maximum reach (sticknose/bucket pin)
  Load over front
  Load over rear
  Load over side
  Load point height

Short Stick 2000 mm

Undercarriage configuration	3.0 m			4.5 m			6.0 m						m
													
4.5 m Rear dozer up Rear dozer down Dozer and stabilizer down 2 sets of stabilizers down				*5100 3800 *5100	3800 3950 *5100	3450 *5100	3500 *4450	2400 *4450	2250 2550 *4450	*3000 *3000 *3000	2150 *3000 *3000	2000 2250 *3000	6.44
3.0 m Rear dozer up Rear dozer down Dozer and stabilizer down 2 sets of stabilizers down				5300 *6000 *6000	3600 3750 *6000	3250 5900 *6000	3450 *4700	2350 *4700	2150 2450 3800	2750 *2950 *2950	1900 *2950 *2950	1750 2000 *2950	6.91
1.5 m Rear dozer up Rear dozer down Dozer and stabilizer down 2 sets of stabilizers down				5050 *6750 *6750	3350 3550 *6750	3050 5650 6700	3350 *4950	2250 *4950	2050 3700 4400	2650 *3100 *3100	1800 *3100 *3100	1650 1900 2900	7.03
0.0 m Rear dozer up Rear dozer down Dozer and stabilizer down 2 sets of stabilizers down				4950 *6800 *6800	3250 3450 *6800	2950 5500 6550	3250 *4950	2200 *4950	2000 3600 4200	2750 *3450 *3450	1850 *3450 *3450	1700 1950 3050	6.80
-1.5 m Rear dozer up Rear dozer down Dozer and stabilizer down 2 sets of stabilizers down	*8300	6000 *8300	5300 6350 *8300	4900 *6100	3250 3400 *6100	2950 5500 *6100	3250 *4250	2200 *4250	2000 2300 3600	3150 *3900	2100 *3900	1950 2250 3450	6.20
-3.0 m Rear dozer up Rear dozer down Dozer and stabilizer down 2 sets of stabilizers down	*5800	*5800 *5800	5400 *5800	*4250 *5800	3300 *4250	3000 3500 *4250				*3300 *3300	2850 *3300	2600 3000 *3300	5.07

Medium Stick 2300 mm

Undercarriage configuration	3.0 m			4.5 m			6.0 m						m
													
6.0 m Rear dozer up Rear dozer down Dozer and stabilizer down 2 sets of stabilizers down										*2700 *2700	2600 *2700	2350 *2700	5.81
4.5 m Rear dozer up Rear dozer down Dozer and stabilizer down 2 sets of stabilizers down				*4850	3850 *4850	3500 4000 *4850	3550 *4250	2450 *4250	2250 2550 3900	*2500 *2500	2050 *2500	1850 2150 *2500	6.70
3.0 m Rear dozer up Rear dozer down Dozer and stabilizer down 2 sets of stabilizers down				5350 *5800	3600 *5800	3300 3800 *5800	3450 *4550	2350 *4550	2150 2500 3800	*2500 *2500	1800 *2500	1650 1900 *2500	7.16
1.5 m Rear dozer up Rear dozer down Dozer and stabilizer down 2 sets of stabilizers down				5100 *6650	3400 *6650	3050 3550 5650 *6650	3350 *4900	2250 *4900	2050 2400 3700 4300	2500 *2650	1700 *2650	1550 1800 *2650	7.27
0.0 m Rear dozer up Rear dozer down Dozer and stabilizer down 2 sets of stabilizers down	*4500	*4500 *4500	*4500 *4500	4950 *6850	3250 *6850	2950 3450 5500 6550	3250 *4950	2200 *4950	2000 2300 3600 4200	2600 *3000	1750 *3000	1600 1850 2850 *3000	7.05
-1.5 m Rear dozer up Rear dozer down Dozer and stabilizer down 2 sets of stabilizers down	*8650	5950 *8650	5250 6300 *8650	4900 *6300	3200 *6300	2900 3400 5450 *6300	3250 *4450	2150 *4450	2000 2300 3600 4200	2950 *3650	1950 *3650	1800 2100 3250 *3650	6.47
-3.0 m Rear dozer up Rear dozer down Dozer and stabilizer down 2 sets of stabilizers down	*6550	6100 *6550	5350 6400 *6550	*4750 *6550	3300 *4750	2950 3450 *4750				*3450 *3450	2550 *3450	2350 2700 *3450	5.40

*Limited by hydraulic rather than tipping load.

Lift capacity ratings are based on ISO 10567:2007, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. The load point is the center line of the bucket pivot mounting pin on the stick. The oscillating axle must be locked. Lifting capacities are based on the machine standing on a firm uniform supporting surface. For lifting capacity including bucket and/or quick coupler, the respective weight has to be subtracted from above values. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

M313D Wheel Excavator Specifications

Lift Capacities – One-Piece Boom (4815 mm)

All values are in kg, without bucket and without QC, with counterweight (3300 kg), heavy lift on.

Long Stick 2600 mm	Load at maximum reach (sticknose/bucket pin)	Load over front	Load over rear	Load over side	Load point height	Undercarriage configuration												m	
						3.0 m			4.5 m			6.0 m			7.5 m				
						Stick up	Stick down	2 sets down	Stick up	Stick down	2 sets down	Stick up	Stick down	2 sets down	Stick up	Stick down	2 sets down		
7.5 m	Rear dozer up															*2750	*2750	*2750	4.69
	Rear dozer down															*2750	*2750	*2750	
6.0 m	Dozer and stabilizer down															*2750	*2750	*2750	
	2 sets of stabilizers down															*2750	*2750	*2750	
6.0 m	Rear dozer up								*2900	2450	2250					*2300	*2300	2150	6.17
	Rear dozer down								*2900	2600						*2300	*2300	*2300	
4.5 m	Dozer and stabilizer down								*2900	*2900	*2900					*2300	*2300	*2300	
	2 sets of stabilizers down								*2900	*2900	*2900					*2300	*2300	*2300	
4.5 m	Rear dozer up								3550	2450	2250					*2150	1900	1750	7.01
	Rear dozer down								*4050	2550						*2150	2000	2000	
3.0 m	Dozer and stabilizer down								*4050	*4050	*4050					*2150	*2150	*2150	
	2 sets of stabilizers down								*4050	*4050	*4050					*2150	*2150	*2150	
3.0 m	Rear dozer up					5350	3650	3300	3450	2350	2150					*2200	1700	1550	7.45
	Rear dozer down						*5500	3800		*4400	2500					*2200	*2200	1750	
1.5 m	Dozer and stabilizer down						*5500	*5500		*4400	3800					*2200	*2200	*2200	
	2 sets of stabilizers down						*5500	*5500		*4400	*4400					*2200	*2200	*2200	
1.5 m	Rear dozer up					5100	3400	3050	3350	2250	2050	2400	1600	1500		*2300	1600	1450	7.55
	Rear dozer down						*6450	3550		*4800	2400		*2650	1700		*2300	*2300	1700	
0.0 m	Dozer and stabilizer down						*6450	5650		*4800	3700		*2650	*2650		*2300	*2300	*2300	
	2 sets of stabilizers down						*6450	*6450		*4800	*4800		*2650	*2650		*2300	*2300	*2300	
0.0 m	Rear dozer up	*4800	*4800	*4800	4900	3250	2900	3250	2150	2000						2450	1650	1500	7.35
	Rear dozer down		*4800	*4800		*6800	3400		*4950	2300						*2550	*2550	1750	
-1.5 m	Dozer and stabilizer down		*4800	*4800		*6800	5500		*4950	3600						*2550	*2550	*2550	
	2 sets of stabilizers down	*4800	*4800	*4800	*6800	*6800	6550	*4950	*4950	4200						*2550	*2550	*2550	
-1.5 m	Rear dozer up	*8050	5900	5200	4850	3200	2850	3200	2150	1950						2700	1800	1650	6.79
	Rear dozer down		*8050	6200		*6400	3350		*4600	2250						*3100	*3100	1900	
-3.0 m	Dozer and stabilizer down		*8050	*8050		*6400	5450		*4600	3550						*3100	*3100	3000	
	2 sets of stabilizers down	*8050	*8050	*8050	*6400	*6400	*6400	*4600	*4600	4150						*3100	*3100	*3100	
-3.0 m	Rear dozer up	*7200	6000	5250	4900	3200	2900									3400	2300	2100	5.79
	Rear dozer down		*7200	6300		*5100	3400									*3450	*3450	2400	
-3.0 m	Dozer and stabilizer down		*7200	*7200		*5100	*5100									*3450	*3450	*3450	
	2 sets of stabilizers down	*7200	*7200	*7200	*5100	*5100	*5100									*3450	*3450	*3450	

Industrial Stick 2900 mm

Industrial Stick 2900 mm	Load at maximum reach (sticknose/bucket pin)	Load over front	Load over rear	Load over side	Load point height	Undercarriage configuration												m		
						3.0 m			4.5 m			6.0 m			7.5 m					
						Stick up	Stick down	2 sets down	Stick up	Stick down	2 sets down	Stick up	Stick down	2 sets down	Stick up	Stick down	2 sets down			
6.0 m	Rear dozer up									*3500	2700	2500					*3050	2550	2350	6.23
	Rear dozer down										*3500	2800					*3050	*3050	2650	
4.5 m	Dozer and stabilizer down										*3500	*3500					*3050	*3050	*3050	
	2 sets of stabilizers down										*3500	*3500					*3050	*3050	*3050	
4.5 m	Rear dozer up									3750	2650	2450					2900	2050	1900	7.06
	Rear dozer down										*4100	2800					*3000	*3000	2150	
3.0 m	Dozer and stabilizer down										*4100	*4100					*3000	*3000	*3000	
	2 sets of stabilizers down										*4100	*4100					*3000	*3000	*3000	
3.0 m	Rear dozer up					*5500	3850	3550	3650	2550	2350						2650	1850	1700	7.50
	Rear dozer down						*5500	4050		*4500	2700						*3100	*3100	1950	
1.5 m	Dozer and stabilizer down						*5500	*5500		*4500	4000						*3100	*3100	2900	
	2 sets of stabilizers down						*5500	*5500		*4500	*4500						*3100	*3100	*3100	
1.5 m	Rear dozer up					5350	3650	3300	3550	2450	2250	2600	1800	1650		2550	1800	1650	7.60	
	Rear dozer down						*6550	3800		*4900	2600		*3800	1900		*3350	*3350	1850		
0.0 m	Dozer and stabilizer down						*6550	5900		*4900	3900		*3800	2850		*3350	*3350	2800		
	2 sets of stabilizers down						*6550	*6550		*4900	*4900		*3800	*3800		*3350	*3350	3200		
0.0 m	Rear dozer up	*6350	6200	5450	5150	3450	3150	3450	2350	2200						2600	1800	1650	7.40	
	Rear dozer down		*6350	*6350		*7050	3650		*5150	2500						*3850	*3850	1900		
-1.5 m	Dozer and stabilizer down		*6350	*6350		*7050	5750		*5150	3800						*3850	*3850	2850		
	2 sets of stabilizers down	*6350	*6350	*6350	*7050	*7050	6750	*5150	*5150	4400						*3850	*3850	3300		
-1.5 m	Rear dozer up	*9100	6150	5450	5100	3400	3100	3400	2350	2150						2850	1950	1800	6.85	
	Rear dozer down		*9100	6450		*6800	3550		*4950	2450						*4150	*4150	2100		
-3.0 m	Dozer and stabilizer down		*9100	*9100		*6800	5650		*4950	3750						*4150	*4150	3150		
	2 sets of stabilizers down	*9100	*9100	*9100	*6800	*6800	6700	*4950	*4950	4350						*4150	*4150	3600		
-3.0 m	Rear dozer up	*8100	6200	5500	5100	3400	3100									3550	2400	2200	5.86	
	Rear dozer down		*8100	6550		*5700	3600									*4050	*4050	2550		
-3.0 m	Dozer and stabilizer down		*8100	*8100		*5700	5650									*4050	*4050	3900		
	2 sets of stabilizers down	*8100	*8100	*8100	*5700	*5700	*5700									*4050	*4050	*4050		

*Limited by hydraulic rather than tipping load.

Lift capacity ratings are based on ISO 10567:2007, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. The load point is the center line of the bucket pivot mounting pin on the stick. The oscillating axle must be locked. Lifting capacities are based on the machine standing on a firm uniform supporting surface and the Variable Boom Cylinder adjusted to the maximum length. For lifting capacity including bucket and/or quick coupler, the respective weight has to be subtracted from above values. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.













M313D Wheel Excavator Standard Equipment

Lift Capacities – Offset Boom (5020 mm)













All values are in kg, without bucket and without QC, with counterweight (3300 kg), heavy lift on.

 Load at maximum reach (sticknose/bucket pin)
  Load over front
  Load over rear
  Load over side
  Load point height

Short Stick 2000 mm

Undercarriage configuration	3.0 m			4.5 m			6.0 m			7.5 m			m
													
6.0 m	Rear dozer up			*4850	3850	3500				*3400	2400	2200	5.81
	Rear dozer down				*4850	4050					*3400	2550	
	Dozer and stabilizer down				*4850	*4850					*3400	*3400	
	2 sets of stabilizers down			*4850	*4850	*4850				*3400	*3400	*3400	
4.5 m	Rear dozer up			*5250	3650	3300	3400	2300	2050	2800	1850	1650	6.70
	Rear dozer down				*5250	3850		*4300	2400		*3100	1950	
	Dozer and stabilizer down				*5250	*5250		*4300	3750		*3100	3100	
	2 sets of stabilizers down			*5250	*5250	*5250	*4300	*4300	*4300	*3100	*3100	*3100	
3.0 m	Rear dozer up			5100	3300	3000	3250	2150	1950	2450	1600	1450	7.16
	Rear dozer down				*6000	3500		*4550	2300		*3050	1700	
	Dozer and stabilizer down				*6000	5700		*4550	3650		*3050	2750	
	2 sets of stabilizers down			*6000	*6000	*6000	*4550	*4550	4250	*3050	*3050	*3050	
1.5 m	Rear dozer up			4750	3000	2700	3100	2000	1800	2350	1500	1350	7.27
	Rear dozer down				*6400	3200		*4650	2150		*3200	1600	
	Dozer and stabilizer down				*6400	5350		*4650	3500		*3200	2600	
	2 sets of stabilizers down			*6400	*6400	6400	*4650	*4650	4100	*3200	*3200	3100	
0.0 m	Rear dozer up			4600	2850	2550	3050	1950	1750	2450	1550	1400	7.05
	Rear dozer down				*6150	3050		*4500	2050		*3450	1650	
	Dozer and stabilizer down				*6150	5150		*4500	3400		*3450	2700	
	2 sets of stabilizers down			*6150	*6150	*6150	*4500	*4500	4000	*3450	*3450	3200	
-1.5 m	Rear dozer up	*6400	5450	4700	4600	2850	2550	3050	1950	1750	1750	1600	6.47
	Rear dozer down		*6400	5750		*5200	3050		*3700	2050	*3050	1900	
	Dozer and stabilizer down		*6400	*6400		*5200	5150		*3700	3400	*3050	*3050	
	2 sets of stabilizers down	*6400	*6400	*6400	*5200	*5200	*5200	*3700	*3700	*3700	*3050	*3050	

Medium Stick 2300 mm

Undercarriage configuration	3.0 m			4.5 m			6.0 m			7.5 m			m			
																
6.0 m	Rear dozer up			*4600	3950	3550	*3350	2350	2150				*2800	2250	2050	6.12
	Rear dozer down				*4600	4100		*3350	2450					*2800	2350	
	Dozer and stabilizer down				*4600	*4600		*3350	*3350					*2800	*2800	
	2 sets of stabilizers down			*4600	*4600	*4600	*3350	*3350	*3350				*2800	*2800	*2800	
4.5 m	Rear dozer up			*5050	3750	3400	3450	2300	2100				*2650	1750	1600	6.97
	Rear dozer down				*5050	3900		*4200	2450					*2650	1850	
	Dozer and stabilizer down				*5050	*5050		*4200	3800					*2650	*2650	
	2 sets of stabilizers down			*5050	*5050	*5050	*4200	*4200	*4200				*2650	*2650	*2650	
3.0 m	Rear dozer up			5150	3400	3050	3300	2200	1950				2350	1500	1350	7.41
	Rear dozer down				*5800	3550		*4450	2300					*2600	1600	
	Dozer and stabilizer down				*5800	5750		*4450	3650					*2600	2600	
	2 sets of stabilizers down			*5800	*5800	*5800	*4450	*4450	4300				*2600	*2600	*2600	
1.5 m	Rear dozer up			4800	3050	2700	3150	2050	1850	2250	1450	1300	2250	1450	1300	7.52
	Rear dozer down				*6350	3200		*4650	2150		*2900	1550		*2750	1550	
	Dozer and stabilizer down				*6350	5350		*4650	3500		*2900	2500		*2750	2500	
	2 sets of stabilizers down			*6350	*6350	*6350	*4650	*4650	4100	*2900	*2900	*2900	*2750	*2750	*2750	
0.0 m	Rear dozer up			4600	2850	2550	3050	1950	1750				2300	1450	1300	7.31
	Rear dozer down				*6250	3050		*4550	2050					*3050	1550	
	Dozer and stabilizer down				*6250	5150		*4550	3400					*3050	2550	
	2 sets of stabilizers down			*6250	*6250	6200	*4550	*4550	4000				*3050	*3050	3000	
-1.5 m	Rear dozer up	*7000	5350	4650	4550	2850	2500	3000	1900	1700			2550	1650	1500	6.75
	Rear dozer down		*7000	5650		*5450	3000		*3950	2050				*3100	1750	
	Dozer and stabilizer down		*7000	*7000		*5450	5150		*3950	3350				*3100	2850	
	2 sets of stabilizers down	*7000	*7000	*7000	*5450	*5450	*5450	*3950	*3950	*3950			*3100	*3100	*3100	
-3.0 m	Rear dozer up				*3800	2950	2600									
	Rear dozer down				*3800	3100										
	Dozer and stabilizer down				*3800	*3800										
	2 sets of stabilizers down				*3800	*3800	*3800									

*Limited by hydraulic rather than tipping load.

Lift capacity ratings are based on ISO 10567:2007, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. The load point is the center line of the bucket pivot mounting pin on the stick. The oscillating axle must be locked. Lifting capacities are based on the machine standing on a firm uniform supporting surface and the Variable Boom Cylinder adjusted to the maximum length. For lifting capacity including bucket and/or quick coupler, the respective weight has to be subtracted from above values. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

M313D Wheel Excavator Optional Equipment

Standard Equipment

Standard equipment may vary. Consult your Cat dealer for details.

ELECTRICAL

- Alternator, 75 A
- Lights
 - Boom working light
 - Cab interior light
 - Roading lights two front
 - Roading lights two rear
 - Rotating beacon on cab
 - Working lights, cab mounted (front and rear)
- Main shut-off switch
- Maintenance free batteries
- Signal/warning horn

ENGINE

- Automatic engine speed control
- Automatic starting aid
- Cat C4.4 with ACERT Technology EU Stage IIIA compliant
- Fuel/water separator with level indicator

HYDRAULICS

- Heavy lift mode
- Load-sensing Plus hydraulic system
- Manual work modes (economy, power)
- Separate swing pump
- Stick regeneration circuit

OPERATOR STATION

- ROPS cab structure compliant with 2006/42/EC and tested according to ISO 12117-2:2008
- Adjustable armrests
- Air conditioner, heater and defroster with automatic climate control
- Ash tray with cigarette lighter (24 volt)
- Beverage cup/can holder
- Bolt-on FOGS capability
- Bottle holder
- Bottom mounted parallel wiping system that covers the upper and lower windshield glass
- Camera mounted on counterweight displays through cab monitor
- Coat hook
- Floor mat, washable, with storage compartment
- Fully adjustable suspension seat
- Instrument panel and gauges
 - Information and warning messages in local language
 - Gauges for fuel level, engine coolant and hydraulic oil temperature
 - Filters/fluids change interval
 - Indicators for headlights, turning signal, low fuel, engine dial setting
- Clock with 10-day backup battery

OPERATOR STATION (cont'd)

- Laminated front windshield
- Left side console, tiltable, with lock out for all controls
- Literature compartment behind seat
- Literature holder in right console
- Mobile phone holder
- Parking brake
- Positive filtered ventilation
- Power supply, 12V-7A
- Rear window, emergency exit
- Retractable seat belt
- Skylight
- Sliding door windows
- Steering column, tiltable
- Storage area suitable for a lunch box
- Sunshade for windshield and skylight

UNDERCARRIAGE

- Heavy-duty axles, advanced travel motor, adjustable braking force
- Oscillating front axle with remote greasing
- Tires, 10.00-20 16 PR, dual
- Tool box in undercarriage
- Two-piece drive shaft

OTHER EQUIPMENT

- Automatic swing brake
- Counterweight, 2900 kg
- Mirrors, frame and cab
- Product Link ready

M313D Wheel Excavator

Optional Equipment

Optional equipment may vary. Consult your Cat dealer for details.

AUXILIARY CONTROLS AND LINES

- Auxiliary boom and stick lines
- Anti-drift valves for bucket, stick, VA boom and tool control/multi-function circuits
- Basic control circuits:
 - Medium pressure
 - Two-way, medium pressure circuit, for rotating or tilting of work tools
 - Tool control/multi function
 - One/two-way high pressure for hammer application or opening and closing of a work tool
 - Programmable flow and pressure for up to 10 work tools – selection via monitor
 - Second high pressure
 - Additional two-way, high pressure circuit, for tools requiring a second high or medium pressure function
 - Quick coupler control
- Cat BIO HYDO Advanced HEES™ biodegradable hydraulic oil
- Lowering control devices for boom and stick
- SmartBoom™

FRONT LINKAGE

- Booms
 - One-piece boom, 4815 mm
 - VA boom (two piece), 5020 mm
 - Offset boom, 5020 mm
- Bucket linkage with diverter valve
- Sticks
 - 2000, 2300, 2600 mm
 - 2900 mm industrial with drop nose

ELECTRICAL

- Back-up alarm with three selectable modes
- Heavy-duty maintenance free batteries
- Refueling pump

OPERATOR STATION

- Adjustable hydraulic sensitivity
- Falling objects guard
- Joystick steering
- CD/MP3 Radio (12V) at rear location including speakers and 12V converter
- Seat, adjustable high-back
 - mechanical suspension
 - air suspension (vertical)
 - deluxe with headrest, air suspension
- Travel speed lock
- Vandalism guards
- Visor for rain protection
- Windshield
 - One-piece high impact resistant
 - 70/30 split, openable

UNDERCARRIAGE

- Dozer blade, front or rear mounted
- Outriggers, front and/or rear mounted
- Second tool box for undercarriage
- Spacer rings for tires

OTHER EQUIPMENT

- Auto-lube system (implements and swing gear)
- Cat Machine Security System
- Cat Product Link
- Counterweight, 3300 kg
- Mirrors heated, frame and cab
- Ride Control
- Tires (see pg. 3)
- Tool box in upperframe, lockable

Materials and specifications are subject to change without notice.

Featured machines in photos may include additional equipment.

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com.

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