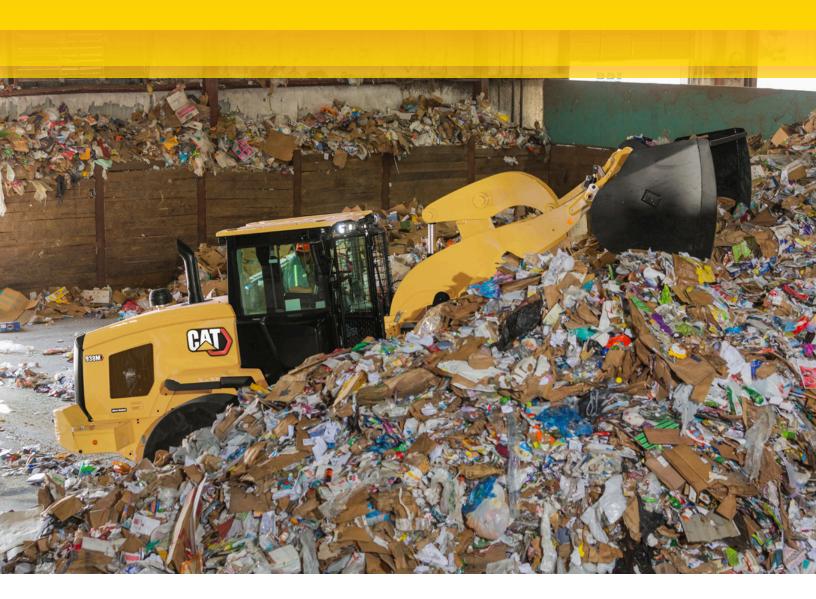
# **Small Wheel Loaders**



Waste Handler Arrangements



	926M Waste Handler	930M Waste Handler	938M Waste Handler
Engine Model*	Cat® C7.1	Cat C7.1	Cat C7.1
Engine Power:			
ISO 14396	125 kW (168 hp)	125 kW (168 hp)	140 kW (188 hp)
ISO 14396 metric	170 hp	170 hp	190 hp
Bucket Capacity	3.0-5.0 m³ (3.9-6.5 yd³)	3.0-5.0 m³ (3.9-6.5 yd³)	3.0-5.0 m³ (3.9-6.5 yd³)
Full Turn Tip Load*	7461 kg (16,448 lb)**	8573 kg (18,900 lb)**	9795 kg (21,594 lb)**
	8491 kg (18,719 lb)~	9525 kg (20,998 lb)^	10 741 kg (23,679 lb)^
Operating Weight	13 913 kg (30,672 lb)**	15 381 kg (33,908 lb)**	17 258 kg (38,046 lb)**
	15 695 kg (34,600 lb)~	17 107 kg (37,713 lb)^	18 958 kg (41,794 lb)^

<sup>\*</sup>Engine meets U.S. EPA Tier 4 Final/EU Stage V and Korea Tier 4 Final emission standards.

<sup>\*\*</sup>Dimensions listed are for a machine configured with optional counterweights, waste guarding, 80 kg (176 lb) operator, and Michelin 20.5 R25 XMINE D2 tires.

<sup>~</sup>Dimensions listed are for a machine configured with heavy counterweights, waste guarding, 80 kg (176 lb) operator, and new solid tires.

<sup>^</sup>Dimensions listed are for a machine configured with standard counterweights, waste guarding, rear waste gate, 80 kg (176 lb) operator, and new solid tires.

# **Making Your Choice Easy**

# **Application Specific Configuration**

Maximize productivity while keeping operating costs low. Cat Waste Handlers are built for the most demanding environments with a range of options to protect both you and the machine.

### **Efficiently Powerful**

Experience Hybrid like, industry leading, fuel efficiency with an intelligent hydrostatic power train. For your highest production work, a new Performance Mode will allow you to boost the power and hydraulic speed in all ranges to get the job done even quicker.

# **Work Made Easy**

Move more with the Caterpillar patented quick loading Performance Series buckets and optimized Z-bar linkage which has been enhanced to maximize visibility. Multi-function work has never been easier with dedicated pumps and a flow sharing implement valve.

# **Enjoy All Day Comfort**

Have a seat in the M Series Small Wheel Loader and enjoy whisper quiet sound levels, all around visibility and seat mounted joystick controls. The large spacious cab combined with the Caterpillar advanced hydraulic cylinder dampening make this the most comfortable seat on your job site.

### **Contents**

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Environmental and customer friendly — up to 95% recyclable content by weight



The Cat 926M, 930M and 938M Waste Handlers set a new standard for productivity, fuel efficiency and comfort.

A high torque, low speed C7.1 engine works in concert with an intelligent hystat power train to deliver fuel efficiency as standard. A complete range of guarding and debris management solutions are available to meet the needs of the most demanding environments. Extremely low sound levels, large spacious cab and intuitive controls keep you working comfortably all day and even all night! Experience the new industry benchmark.



# **Application Specific Configuration**

Maximize performance and productivity while minimizing operating costs.

### **Guard Your Investment**

Choose from a complete range of optional guarding to protect your machine from the harsh environment of a waste handling application. The machine guarding is purpose built to protect the machine's major components and systems to keep you on the job and maximize production rates.

### **Breathe Clean**

Maximize your engine life and extend filter cleaning intervals with a turbine precleaner. Keep cool with a reversing fan to purge the single plane, widely spaced core cooling package and brush-less sealed alternator. Breath clean with a powered RESPA system for the operator environment designed to eliminate 90% of the particulate in the air and filter the remaining 10%.

### **Maximize Tire Life**

Fine tune your wheel torque to match the underfoot conditions and maximize performance while extending tire life. Cat Waste Handlers feature wheel torque adjustments through an exclusive Rimpull Control feature designed to keep your operating costs low.













# Customize Your Experience Make it yours.

Work as one with your machine by customizing the controls.

### **Flexible Power Train**

A smooth, step-less electronically controlled hydrostatic transmission provides adjustable power to the ground with excellent groundspeed control and customizable feel.

- Select your Power Train Mode:
- Torque Converter (TC) for smooth rollout.
- Hystat for aggressive hydraulic braking.
- Default mode which blends the best of Hystat and Torque Converter characteristics.
- Reduce tire wear using Rimpull control which enables you to match available tractive power to underfoot conditions.
- **Set Directional Shift Response**, soft and smooth for material handling applications or sharp for aggressive operation.



### **Adjustable Electro Hydraulic Controls**

Easily customize the hydraulic performance through touch screen display to optimize your efficiency.

- Optimize hydraulic modulation with Fine Mode control when working with forks.
- Quicker Hydraulic response for fine grading at speed and quick functions through Lift and Tilt response settings.
- Fully adjustable ride control activation speed along with 3rd function auxiliary flow for powering a roll out bucket.

### **Operator Profiles and Coded Start**

 The M Series Wheel Loaders will remember you and your personal settings with unique operator codes to make this machine truly yours and keep it secure on the job site.

# **Efficiently Powerful**

Experience hybrid-like fuel efficiency with more power when you need it.



### **Power on Demand**

A choice of Power Modes allows you to choose between maximum fuel efficiency or boosted power along with hydraulic speed to get your work done even quicker.



### Standard Power Mode

- Saves up to 10% fuel compared to previous K Series models while running at an efficient 1,600 rpm.
- Recommended for load and carry to maximize fuel efficiency.
- Power-by-range logic increases power in speed Range 4 automatically to maximize travel speed and grade climbing performance.
- Reduces cab sound levels down to a whisper quiet 64 dB(A) typical.
- Improved 930M standard power mode comes with a 5% horsepower boost when compared to earlier M Series models.

# **Performance Power Mode**

- Enabled at the push of a button (HP+).
- Boosts engine power by up to 10% in all speed ranges.
- Boosts engine speed by over 12%.
- Increases hydraulic cycle times and productivity.

# **Six Cylinders of Efficient Power**

The Cat C7.1 engine provides more efficient, quieter operation while delivering superior performance and durability through a high torque, low speed design, with a Clean Emissions Module that is designed to manage itself so you can concentrate on your work.

- No downtime for regeneration with a passive low temperature system that keeps you on the job.
- Fit for Life Diesel Particulate Filter that is designed to exceed the engine overhaul life.
- Extended fluid fill intervals with minimal use of Diesel Exhaust Fluid (DEF) with up to four fuel tank fills per DEF fill.
- Configurable auto idle shut down based on time and ambient temperature to further reduce fuel burn and keep operating costs low.





### **Power to the Ground**

Lock up and go with fully locking front differential axle that can be engaged on the move at full torque with the pull of a trigger on the seat mounted joystick. Maximize your traction with optional Limited Slip Differential on the rear axle to keep you climbing.

Independent service brakes on front and rear axles provide robust stopping performance while a push button electronic park brake allows you to safely secure the machine with ease.





# **Work Made Easy**

Getting the job done.



# **Optimized Z-bar Linkage**

The Caterpillar patented optimized Z-bar linkage combines the digging efficiency of a traditional Z-bar with integrated tool carrier capabilities for great performance and versatility.

- Perfect Parallelism functionality available in Fork Mode gives truly predictable performance while high tilt forces throughout the working range help you safely and confidently handle loads with precise control.
- Forward Visibility has been maximized with the introduction of Gen III lift arms which bring a cast torque tube resulting in class leading front visibility when combined with the new cast couplers.\*
- Enhanced coupler options, new ISO or Fusion™ Cast Couplers offers additional visibility when compared with previous plate style couplers.

\*New lift arms available on standard lift 926M, 930M and 938M.

# **Quick Loading, Performance Series Buckets**

Performance Series Buckets deliver up to 10% higher fill factors and better material retention for significant productivity and fuel efficiency improvements. The buckets feature a longer floor to take a bigger bite of the pile, an open throat to heap higher and curved side bars to help with material retention. This optimized shape is echoed across the General Purpose, Light Material, and High Dump bucket families.



### Smooth and Predictable Multi-Function Performance

M Series machines feature an electro-hydraulic control system that is governed by the Intelligent Power Management system for peak efficiency. The load-sensing, variable flow system senses work demand and adjusts flow and pressure to match the operators request.

- Multi-Function without compromise through the Caterpillar exclusive dedicated hydraulic systems featuring three pumps.
- 1st pump for Intelligent Hydrostatic drive
- 2nd pump for implements
- 3rd pump for steering system

Drive, Lift and Steer simultaneously with smooth predictable control. The M Series simply does what you ask it to.

- Programmable in-cab kick-outs are easy to set on the go for tilt, lower and lift. This feature is ideal for applications where the work cycle is repeatable allowing you to quickly return to programmed set points and to significantly reduce operator fatigue and work tool or cutting edge wear.
- Fine tune hydro-mechanical performance with fully adjustable 3rd and 4th function flow through the touch screen display (when equipped) for a perfect marriage between machine and attachments.







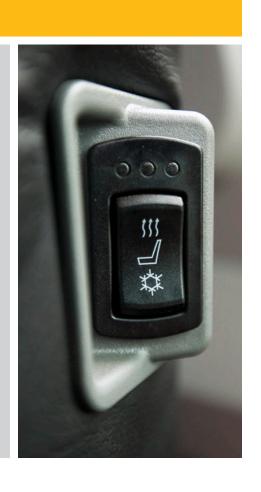
# **Enjoy All Day Comfort**

Best seat on the job site.

# **Have a Seat and Experience:**

- Seat-mounted controls featuring a low effort joystick for lift and tilt functions along with integrated Forward/Neutral/Reverse switch, differential lock trigger and optional third and fourth auxiliary functions.
- Superior all around visibility with single piece front windshield, new parabolic external mirrors, redesigned Generation III linkage and clean hydraulic lines routing.
- Automatic climate control with heated rear glass and external mirrors for a
  quick defrost.
- Fully adjustable controls including steering column, joystick and seat suspension.
- Information at a glance with large primary LCD display and 178 mm (7 in) color touch screen display.
- An extra eye on the job site with standard rear view camera, optional integrated rear object detection and optional\* forward facing camera system.
- A heated and cooled seat option for added comfort in a wide range of climates.

\*Forward facing camera system may be required for local EU requirements. Consult your local Cat dealer for additional information.





# An easy day at work with:

- A spacious, safe, quiet operator environment featuring ergonomic controls, seat belt notification and optional Bluetooth® radio with integrated microphone and multiple USB charging ports and AUX audio connectors.
- Easy access to vital machine parameters with the optional\* touch screen display that works in conjunction with the standard soft touch panel to allow real time adjustments to machine features and an integrated help button with over 25 languages.
- Comfortable soft stops at cylinder end stroke conditions and programmable kickout points with the Caterpillar advanced electro-hydraulic cylinder snubbing.
- An even smoother ride with optional Ride Control when working unloaded and loaded with excellent material retention.
- Early starts and late finishes are made easier with optional LED lighting package that includes engine and DEF compartment lighting to illuminate the way for checking oil, and coolant level along with refueling the machine in dark conditions.
- On board operator coaching via help button on the optional\* secondary display.





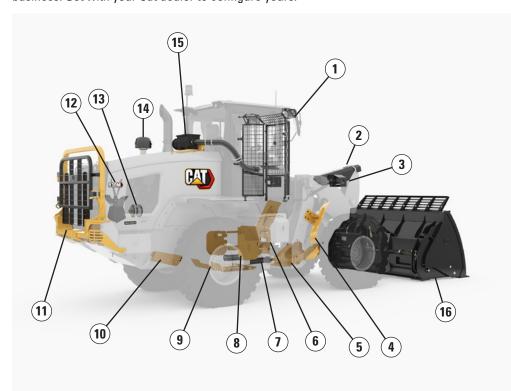
<sup>\*</sup>Standard in Europe.

# **Configured for Success**

Ready to work for you.

# The Way You Want It

A complete range of optional equipment and work tools gives you the versatility to configure a Waste Handler to be successful in your business. Get with your Cat dealer to configure yours.



# 28 29 20 20 20 21

### **Guards:**

- 1) Windshield
- 2) Tilt cylinder
- 3) Lights
- 4) Fender deflectors
- 5) Drive shaft
- 6) Hitch
- 7) Steering cylinders
- 8) Side power train
- 9) Lower power train
- 10) Crank case
- 11) Rear radiator (930/938 only)

# **Debris Packages:**

- 12) Reversing fan
- 13) Sealed alternator
- 14) Turbine precleaner
- 15) RESPA precleaner

### **Work Tools**

16) Full range of tools

# **Operator Environment:**

- 17) Seat, deluxe or premium
- 18) Deluxe cab (with touch screen display)

# **Other Options:**

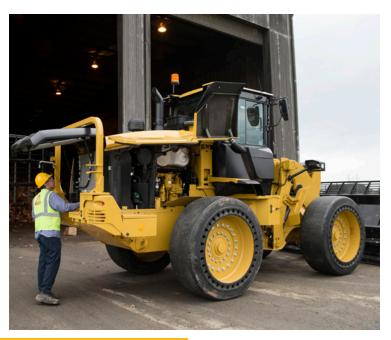
- 19) Autolube
- 20) High lift linkage
- 21) Coupler: Fusion™ and ISO 23727
- 22) Auxiliary hydraulics: 3rd and 4th
- 23) Window washing access
- 24) Ride control
- 25) Fenders: extended and full coverage
- 26) Counterweights
- 27) Cold start package
- 28) Rear object detection
- 29) Blue Angel certification
- 30) Beacon
- 31) LED auxiliary lights
- 32) CPM Cat Production Measurement
- 33) TPM Tire Pressure Monitoring

# **Serviceability**

# Schedule your downtime to maximize your up time.

Get up and running quickly with ground level, daily service access and optional engine compartment lighting. Three large service doors can be opened and closed in any order to give full access to filters and service points. Extended service intervals on hydraulic and power train filters reduce service time and maximize uptime. Additional service features include:

- Product Link<sup>™</sup> PRO standard with a trial subscription to VisionLink<sup>®</sup>.
- Maintenance reminders through touch screen display at scheduled intervals.
- Fit for Life Diesel Particulate Filter that is designed to exceed the engine overhaul life.
- Quick fuel filter service with the Caterpillar exclusive electric fuel priming pump.
- Jump start studs as standard equipment.
- Extended cleanouts with single plane cooling system and wide spaced six fins per inch coolers as standard.
- Integrated Autolube (optional) with adjustable greasing frequency.



# **Customer Support**

Unmatched service makes the difference.



# **Renowned Cat Dealer Support**

**Rely on your Cat dealer** to help you every step of the way with new or used machine sales, rental or rebuild options to meet your business needs.

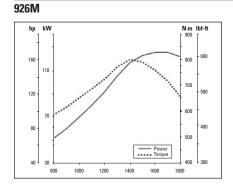
**Maximize your machine** uptime with unsurpassed worldwide parts availability, trained technicians and customer support agreements.

**Let us earn your business.** Experience an M Series Small Wheel Loader and join the Caterpillar family.

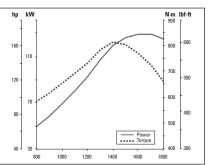
Cat C7.1**		926	M		· ·	930	M			938	SM	
Power Mode		mance P+)	Stan	dard		mance P+)	Stan	dard		mance P+)	Stan	ndard
	Ranç	je 1-4	Rang	e 1-3*	Ranç	je 1-4	Rang	e 1-3*	Rang	je 1-4	Rang	e 1-3*
Maximum Gross Power	kW	hp	kW	hp	kW	hp	kW	hp	kW	hp	kW	hp
Maximum Engine Speed	1,800	) rpm	1,600	) rpm	1,800	) rpm	1,600	) rpm	1,800	) rpm	1,600	) rpm
ISO 14396	125	168	119	160	125	168	119	160	140	188	129	173
ISO 14396 (metric)	170	) hp	162	2 hp	170	) hp	162	2 hp	190	) hp	176	6 hp
Net Power	1,800	) rpm	1,600	) rpm	1,800	) rpm	1,600	) rpm	1,800	) rpm	1,600	) rpm
SAE J1349 at Minimum Fan Speed	122	163	116	156	122	163	116	156	137	183	127	170
ISO 9249 at Minimum Fan Speed	122	164	116	156	122	164	116	156	137	184	127	170
ISO 9249 (metric) at Minimum Fan Speed	160	6 hp	158	3 hp	166	5 hp	158	hp	186	6 hp	172	2 hp
Maximum Gross Torque	N-m	lbf-ft	N⋅m	lbf-ft	N⋅m	lbf-ft	N⋅m	lbf-ft	N⋅m	lbf-ft	N⋅m	lbf-ft
ISO 14396	815	601	795	586	815	601	795	586	900	664	870	642
Maximum Net Torque												
SAE J1349	797	588	777	573	797	588	777	573	880	649	850	627
ISO 9249:2007	796	587	776	572	796	587	776	572	882	650	852	628
Displacement	7.0	1 L	427	7 in³	7.0	1 L	427	in³	7.0	1 L	427	7 in³
Bore	105	mm	4	in	105	mm	4	in	105	mm	4	in
Stroke	135	mm	5	in	135	mm	5	in	135	mm	5	in

<sup>\*</sup>Range 4 power and torque is equal to Performance Mode with Caterpillar Power by Range technology.

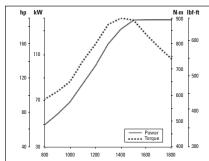
# **Engine Torque**



# 930M



# 938M



### Cab



- ROPS: ISO 3471: 2008, FOPS: ISO 3449: 2005 LEVEL II
- Declared Sound Levels
- Operator Sound Pressure Level (ISO 6396:2008): 68 dB(A)\*
- Exterior Sound Power Level (ISO 6395:2008): 101 dB(A)\*
- \* Measurements were conducted at 70% of maximum engine cooling fan speed. Sound level may vary at different engine cooling fan speeds. The cab was properly installed and maintained. The measurements were conducted with the cab doors and the cab windows closed.
- The Blue Angel environmental label is an optional attachment for Europe only.

# **Air Conditioning System**

The air conditioning system on this machine contains the flourinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.9 kg of refrigerant which has a CO<sub>2</sub> equivalent of 2.717 metric tonnes.

<sup>\*\*</sup>The Cat C7.1 engine meets Tier 4 Final/Stage V emission standards.

<sup>•</sup> Net power ratings are tested at the reference conditions for the specified standard and denote power available at the flywheel when the engine is equipped with alternator, air cleaner, emission components and fan at specified speed.

<sup>•</sup> No derating required up to 3000 m (10,000 ft) altitude. Auto derate protects hydraulic and transmission systems.

# **Loader Hydraulic System**



- Implement system uses a dedicated load sensing variable displacement pump with dual double acting lift cylinders and a single double acting tilt cylinder.
- Flow values listed are for a machine running in Performance Power Mode (1,800 rpm).
- \* 3rd and 4th function flow is fully adjustable from 20% to 100% of maximum flow through the touch screen display when equipped.

	926M		930M		938M		
Maximum Flow – Implement Pump	150 L/min	40 gal/min	190 L/min	50 gal/min	190 L/min	50 gal/min	
3rd Function Maximum Flow*	150 L/min	40 gal/min	190 L/min	50 gal/min	190 L/min	50 gal/min	
4th Function Maximum Flow*	150 L/min	40 gal/min	160 L/min	42 gal/min	160 L/min	42 gal/min	
Maximum Working Pressure – Implement Pump	26 000 kPa	3,771 psi	26 000 kPa	3,771 psi	28 000 kPa	4,061 psi	
Relief Pressure – Tilt Cylinder	28 000 kPa	4,061 psi	28 000 kPa	4,061 psi	30 000 kPa	4,351 psi	
3rd and 4th Function Maximum Working Pressure	26 000 kPa	3,771 psi	28 000 kPa	3,771 psi	28 000 kPa	4,061 psi	
3rd and 4th Function Relief Pressure	28 000 kPa	4,061 psi	28 000 kPa	4,061 psi	30 000 kPa	4,351 psi	
Lift Cylinder – Standard Lift Linkage:							
Bore Diameter	110 mm	4.3 in	120 mm	4.7 in	120 mm	4.7 in	
Rod Diameter	60 mm	2.4 in	65 mm	2.6 in	65 mm	2.6 in	
Stroke	728 mm	28.7 in	728 mm	28.7 in	789 mm	31.1 in	
Tilt Cylinder – Standard Lift Linkage:							
Bore Diameter	140 mm	5.5 in	150 mm	5.9 in	150 mm	5.9 in	
Rod Diameter	75 mm	3.0 in	90 mm	3.5 in	90 mm	3.5 in	
Stroke	516 mm	20.3 in	555 mm	21.9 in	555 mm	21.9 in	
Cycle Times: Performance (HP+) at 1,800 rpm/ Standard Power Mode at 1,600 rpm							
Raise (Ground Level to Maximum Lift)	5.5/6.2 secon	nds	5.1/5.7 seco	nds	5.5/6.2 secon	nds	
Dump (at Maximum Lift Height)	1.5/1.7 seconds		1.5/1.7 seco	nds	1.5/1.7 secon	nds	
Float Down (Maximum Lift to Ground Level)	2.6/2.6 seco	nds	2.7/2.7 seco	nds	2.7/2.7 secon	nds	
Total Cycle Time	9.6/10.5 seco	onds	9.3/10.1 sec	onds	9.7/10.6 seconds		

# **Steering**



- Steering system uses a dedicated load sensing variable displacement pump with dual double acting cylinders.
- Flow values listed are for a machine running in Performance Power Mode (1,800 rpm).

•						
	926M	,	930M		938M	
Steering Cylinder: Double Acting						
Bore Diameter	70 mm	2.8 in	70 mm	2.8 in	80 mm	3.1 in
Rod Diameter	40 mm	1.6 in	40 mm	1.6 in	50 mm	2 in
Stroke	438 mm	17.2 in	438 mm	17.2 in	399 mm	15.7 in
Maximum Flow – Steering Pump	130 L/min	34 gal/min	130 L/min	34 gal/min	130 L/min	34 gal/min
Maximum Working Pressure – Steering Pump	24 130 kPa	3,500 psi	24 130 kPa	3,500 psi	24 130 kPa	3,500 psi
Maximum Steering Torque						
0° (Straight Machine)	50 375 N·m	37,155 lbf-ft	50 375 N·m	37,155 lbf-ft	57 630 N·m	42,506 lbf-ft
40° (Full Turn)	37 620 N⋅m	27,747 lbf-ft	37 620 N·m	27,747 lbf-ft	42 570 N·m	31,398 lbf-ft
Steering Cycle Times (Full Left to Full Right)						
Minimum RPM: Pump Flow Limited	2.8 seconds		2.8 seconds		3.1 seconds	
Maximum RPM: 90 rpm Steering Wheel Speed	2.4 seconds		2.4 seconds		2.3 seconds	

926M

Fixed

# **Transmission**



\* Creeper control allows maximum speed range adjustability from 1 km/h (0.6 mph) to 13 km/h (8 mph) in Range 1 through the touch screen display when equipped. Factory default is 7 km/h (4.4 mph).

	926M		930M		938M	
Forward and Reverse			,			
Range 1*	1-13 km/h	0.6-8 mph	1-13 km/h	0.6-8 mph	1-13 km/h	0.6-8 mph
Range 2	13 km/h	8 mph	13 km/h	8 mph	13 km/h	8 mph
Range 3	27 km/h	17 mph	27 km/h	17 mph	27 km/h	17 mph
Range 4	40 km/h	25 mph	40 km/h	25 mph	40 km/h	25 mph

# **Power Train**

Front Axle



- Power train is governed by the Caterpillar exclusive Intelligent Power Management system to deliver peak performance and efficiency.
- Offset rims available to meet European roading requirements.

930M

Fixed

\*Differential front locking axle can be engaged on the go at full torque to 10 km/h (6.2 mph) on the 926M/930M and up to 20 km/h (12.4 mph) on the 938M.

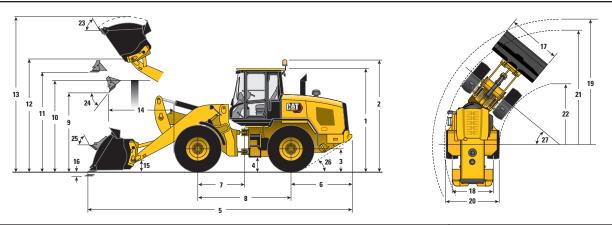
938M

Fixed

110110111110	1 11100		1 11100		1 11100		
Traction Aid (standard)	Locking differential		Locking	differential	Locking	differential	
Rear Axle	Oscillatin	ng	Oscillatin	ıg	Oscillatin	ıg	
Oscillation Angle by Tire Size							
17.5 R25	± 13.5 de	egrees	_		_		
20.5 R25, 550/65, 600/65, 650/65	± 10.5 de	egrees	± 10.5 de	grees	± 10.5 degrees		
23.5 R25	_		_		± 7 degre	ees	
Solid Tires, 750/65, 620/65, Skidder	± 7 degre	ees	± 7 degre	es	± 7 degre	es	
Traction Aid (optional)	Limited s	Limited slip differential		lip differential	Limited s	slip differential	
Brakes							
Service	Inboard	Inboard wet disc		wet disc	Inboard	wet disc	
Park	Spring applied hydraulically released		Spring ap hydraulic	oplied ally released	Spring applied hydraulically released		
Service Refill Capacities							
	926M		930M		938M		
Fuel Tank	195 L	51.5 gal	195 L	51.5 gal	195 L	51.5 gal	
Diesel Exhaust Fluid (DEF) Tank	19 L	5.0 gal	19 L	5.0 gal	19 L	5.0 gal	
Cooling System	30 L	7.9 gal	30 L	7.9 gal	32 L	8.5 gal	
Engine Crankcase	20 L	5.3 gal	20 L	5.3 gal	20 L	5.3 gal	
Transmission (Gear Box)	8.5 L	2.2 gal	8.5 L	2.2 gal	11 L	2.9 gal	
Axles							
Front	26 L	6.9 gal	26 L	6.9 gal	35 L	9.2 gal	
Rear	25 L	6.6 gal	25 L	6.6 gal	35 L	9.2 gal	
Hydraulic System (Including Tank)	160 L	42.3 gal	165 L	43.6 gal	170 L	44.9 gal	

# **Dimensions with Bucket**

All dimensions are approximate. Dimensions will vary with bucket, and tire choice. Refer to Operating Specifications with Buckets.



	y with bucket.			Stand	ard Lift			High Lift					
**Var	y with tire.	92	6M	93	0M	93	8M	926	M HL	9301	VI HL	9381	VI HL
		mm	ft/in	mm	ft/in	mm	ft/in	mm	ft/in	mm	ft/in	mm	ft/in
** 1	Height: Ground to Cab	3375	11'1"	3375	11'1"	3375	11'1"	3375	11'1"	3375	11'1"	3375	11'1"
** 2	Height: Ground to Beacon	3742	12'3"	3742	12'3"	3742	12'3"	3742	12'3"	3742	12'3"	3742	12'3"
** 3	Height: Ground Axle Center	720	2'4"	720	2'4"	720	2'4"	720	2'4"	720	2'4"	720	2'4"
** 4	Height: Ground Clearance	432	1'5"	432	1'5"	421	1'5"	432	1'5"	432	1'5"	421	1'5"
* 5	Length: Overall	7577	24'10"	7754	25'5"	7987	26'2"	8261	27'1"	8556	28'1"	8735	28'8"
6	Length: Rear Axle to Bumper	1953	6'5"	1993	6'6"	1968	6'5"	1953	6'5"	1993	6'6"	1968	6'5"
7	Length: Hitch to Front Axle	1500	4'11"	1500	4'11"	1525	5'0"	1500	4'11"	1500	4'11"	1525	5'0"
8	Length: Wheel Base	3000	9'10"	3000	9'10"	3050	10'0"	3000	9'10"	3000	9'10"	3050	10'0"
* 9	Clearance: Bucket at 45°	2702	8'10"	2635	8'8"	2569	8'5"	3212	10'6"	3242	10'8"	3168	10'5"
** 10	Clearance: Load Over Height	3386	11'1"	3366	11'1"	3389	11'1"	3585	11'9"	3575	11'9"	3596	11'10"
** 11	Clearance: Level Bucket	3611	11'10"	3615	11'10"	3676	12'1"	4108	13'6"	4208	13'10"	4257	14'0"
** 12	Height: Bucket Pin	3938	12'11"	3942	12'11"	4004	13'2"	4435	14'7"	4535	14'11"	4585	15'1"
** 13	Height: Overall	5235	17'2"	5344	17'6"	5574	18'3"	5732	18'10"	5937	19'6"	6155	20'2"
* 14	Reach: Bucket at 45°	976	3'2"	1146	3'9"	1309	4'4"	1329	4'4"	1487	4'11"	1603	5'3"
15	Carry Height: Bucket Pin	384	1'3"	393	1'3"	396	1'4"	587	1'11"	629	2'1"	617	2'0"
** 16	Dig Depth	65	2.6"	65	2.6"	66	2.6"	100	3.9"	100	3.9"	100	3.9"
17	Width: Bucket	2750	9'0"	2750	9'0"	2750	9'0"	2750	9'0"	2750	9'0"	2750	9'0"
18	Width: Tread Center	1930	6'4"	1930	6'4"	2083	6'10"	1930	6'4"	1930	6'4"	2083	6'10"
19	Turning Radius: Over Bucket	6058	19'10"	6096	20'0"	6229	20'5"	6385	20'11"	6492	21'4"	6606	21'8"
20	Width: Over Tires	2540	8'4"	2540	8'4"	2693	8'10"	2540	8'4"	2540	8'4"	2693	8'10"
21	Turning Radius: Outside of Tires	5402	17'9"	5402	17'9"	5546	18'2"	5402	17'9"	5402	17'9"	5546	18'2"
22	Turning Radius: Inside of Tires	2851	9'4"	2851	9'4"	2843	9'4"	2851	9'4"	2851	9'4"	2843	9'4"
23	Rack Angle at Full Lift	5	3°	5	4°	5	4°	5	1°	5	3°	5.	3°
24	Dump Angle at Full Lift	4	5°	4	5°	4	6°	4	4°	4	4°	4	4°
25	Rack Angle at Carry	4	2°	4	2°	4	3°	4	7°	4	9°	4	8°
26	Departure Angle	3	3°	3	3°	3:	3°	3	3°	33°		3:	3°
27	Articulation Angle	4	0°	4	0°	4	0°	4	0°	4	40°		0°
		kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb
_	Operating Weight	13 795	30,412	15 316	33,764	17 346	38,239	14 229	31,368	15 601	34,392	17 672	38,960

<sup>\*</sup>Dimensions listed are for a machine configured with Fusion Light Material buckets, bolt-on cutting edges, heavy counterweight, waste guarding, 80 kg (176 lb) operator, and Michelin 20.5 R25 (L-5) XMINE D2 tires.

# **Supplemental Operating Data – Tires on Standard Lift Linkage Machine**

		92	6 <b>M</b>			93	0 <b>M</b>			93	8 <b>M</b>	
	20.5 R	25 XHA2	New So	lid Tires	20.5 R2	25 XHA2	New So	lid Tires	20.5 R	25 XHA2	New So	lid Tires
Base Tire: 20.5 R25 L5	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
Vertical Heights	-35	-1.4	+4	+0.2	-35	-1.4	+4	+0.2	-35	-1.4	+4	+0.2
Reach: Bucket at 45°	+21	+0.8	+16	+0.6	+22	+0.8	+16	+0.6	+22	+0.8	+16	+0.6
	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb
Tipping Load – Straight	-401	-883	+1179	+2,600	-388	-856	+550	+1,212	-415	-914	+519	+1,143
Tipping Load – Full Turn	-346	-763	+1020	+2,248	-336	-740	+496	+1,094	-358	-790	+468	+1,032
Operating Weight	-605	-1,335	+1782	+3,929	-605	-1,335	+1462	+3,223	-656	-1,446	+1416	+3,121

All machines installed with solid tires are speed limited to 20 km/h (12.5 mph).

Solid tire information shown is for new tires and can substantially change as the tires wear.

Solid tires on 930M and 938M are not compatible with heavy counterweight and information includes change to standard counterweight.

# Supplemental Operating Data – Tires on High Lift Linkage Machine

		92	6 <b>M</b>			93	0M		938M				
	20.5 R2	25 XHA2	New So	lid Tires	20.5 R2	25 XHA2	New So	lid Tires	20.5 R2	25 XHA2	New So	lid Tires	
Base Tire: 20.5 R25 L5	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	
Vertical Heights	-35	-1.4	+4	+0.2	-35	-1.4	+4	+0.2	-35	-1.4	+4	+0.2	
Reach: Bucket at 45°	+22	+0.8	+16	+0.6	+22	+0.8	+16	+0.6	+22	+0.8	+16	+0.6	
	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	
Tipping Load – Straight	-315	-695	+928	+2,047	-301	-664	+427	+940	-328	-723	+410	+905	
Tipping Load – Full Turn	-273	-601	+803	+1,770	-260	-574	+385	+849	-284	-625	+371	+817	
Operating Weight	-605	-1,335	+1782	+3,929	-605	-1,335	+1462	+3,223	-656	-1,446	+1416	+3,121	

All machines installed with solid tires are speed limited to 20 km/h (12.5 mph).

Solid tire information shown is for new tires and can substantially change as the tires wear.

Solid tires on 930M and 938M are not compatible with heavy counterweight and information includes change to standard counterweight.

# **Operating Specifications with Light Material Buckets**

13				11			
926M Waste Handler Standard Lift		Pin	On	Fus	sion	ISO 2	23727
Rated Capacity	m³	3.5	4.2	3.5	4.2	3.5	4.2
	yd³	4.6	5.5	4.6	5.5	4.6	5.5
Width: Bucket	mm	2750	2750	2750	2750	2750	2750
	ft/in	9'0"	9'0"	9'0"	9'0"	9'0"	9'0"
Nominal Material Density	kg/m³	932	751	888	716	852	683
120% Fill Factor	lb/yd³	1,571	1,266	1,497	1,206	1,436	1,151
9 Clearance: Full Lift 45° Dump	mm	2660	2540	2630	2510	2564	2393
	ft/in	8'9"	8'4"	8'8"	8'3"	8'5"	7'10"
14 Reach: Full Lift 45° Dump	mm	1019	1139	1048	1169	1080	1200
	ft/in	3'4"	3'9"	3'5"	3'10"	3'7"	3'11"
5 Length: Overall	mm	7637	7807	7679	7849	7768	7938
	ft/in	25'1"	25'7"	25'2"	25'9"	25'6"	26'1"
13 Height: Overall	mm	5315	5476	5340	5502	5410	5576
	ft/in	17'5"	18'0"	17'6"	18'1"	17'9"	18'4"
Tipping Load – Straight ISO 14397-1*	kg	9154	8877	8764	8494	8408	8116
	lb	20,180	19,569	19,320	18,725	18,536	17,893
Tipping Load – Full Turn ISO 14397-1*	kg	7828	7573	7461	7213	7157	6886
	lb	17,257	16,696	16,447	15,901	15,778	15,180
Breakout Force	kg	8922	7817	8606	7560	8111	6831
	lb	19,670	17,234	18,972	16,667	17,881	15,058
Operating Weight	kg	13 565	13 695	13 913	14 043	13 837	14 000
	lb	29,905	30,191	30,672	30,958	30,505	30,864
926M Waste Handler High Lift			On		ion	ISO 2	
Rated Capacity	$m^3$	3.5	4.2	3.5	4.2	3.5	4.2
	yd <sup>3</sup>	4.6	5.5	4.6	5.5	4.6	5.5
Width: Bucket	mm	2750	2750	2750	2750	2750	2750
	ft/in	9'0"	9'0"	9'0"	9'0"	9'0"	9'0"
Nominal Material Density	kg/m³	679	545	638	512	619	493
120% Fill Factor	lb/yd³	1,144	919	1,076	863	1,043	831
<b>9</b> Clearance: Full Lift 45° Dump	mm	3172	3053	3142	3023	3077	2909
	ft/in	10'5"	10'0"	10'4"	9'11"	10'1"	9'7"
<b>14</b> Reach: Full Lift 45° Dump	mm	1373	1496	1403	1525	1436	1558
	ft/in	4'6"	4'11"	4'7"	5'0"	4'9"	5'1"
<b>5</b> Length: Overall	mm	8321	8491	8363	8533	8447	8617
	ft/in	27'4"	27'10"	27'5"	28'0"	27'9"	28'3"
13 Height: Overall	mm	5812	5973	5837	5999	5907	6074
	ft/in	19'1"	19'7"	19'2"	19'8"	19'5"	19'11"
Tipping Load – Straight ISO 14397-1*	kg	6733	6510	6378	6161	6181	5936
T' ' I 1 E 1 E 1 E 1 E 1 E 1 E 1 E 1 E 1 E 1	lb	14,843	14,352	14,061	13,581	13,626	13,085
Tipping Load – Full Turn ISO 14397-1*	kg	5700	5493	5362	5160	5197	4967
D 1 4 F	lb	12,566	12,110	11,821	11,375	11,458	10,950
Breakout Force	kg	7457	6512	7183	6289	6755	5664
On antine Weight	lb	16,438	14,357	15,835	13,865	14,891	12,486
Operating Weight	kg	14 006	14 135	14 354	14 483	14 278	14 441
	lb	30,876	31,162	31,643	31,929	31,476	31,835

<sup>\*</sup>Full compliance to ISO 14397-1:2007 Section 1 thru 6, which requires 2% verification between calculation and testing.

# **Light Material Buckets**

# **Operating Specifications with Light Material Buckets**

13				11			
930M Waste Handler Standard Lift		Pin	On	Fus	ion	ISO 2	23727
Rated Capacity	m³	3.8	5.0	3.8	5.0	3.5	5.0
	yd³	5.0	6.5	5.0	6.5	4.6	6.5
Width: Bucket	mm	2750	2750	2750	2750	2750	2750
	ft/in	9'0"	9'0"	9'0"	9'0"	9'0"	9'0"
Nominal Material Density	kg/m³	981	732	940	701	996	672
120% Fill Factor	lb/yd³	1,654	1,234	1,584	1,182	1,679	1,132
9 Clearance: Full Lift 45° Dump	mm	2608	2545	2578	2515	2570	2399
	ft/in	8'7"	8'4"	8'5"	8'3"	8'5"	7'10"
<b>14</b> Reach: Full Lift 45° Dump	mm	1174	1237	1203	1266	1178	1349
	ft/in	3'10"	4'1"	3'11"	4'2"	3'10"	4'5"
5 Length: Overall	mm	7794	7882	7836	7924	7844	8085
	ft/in	25'7"	25'10"	25'8"	26'0"	25'9"	26'6"
13 Height: Overall	mm	5391	5760	5418	5787	5414	5869
	ft/in	17'8"	18'11"	17'9"	19'0"	17'9"	19'3"
Tipping Load – Straight ISO 14397-1*	kg	10 520	10 347	10 119	9949	9866	9536
	lb	23,191	22,810	22,307	21,933	21,751	21,022
Tipping Load – Full Turn ISO 14397-1*	kg	8949	8786	8573	8413	8368	8059
	lb.	19,729	19,369	18,900	18,547	18,447	17,766
Breakout Force	kg	10 544	9332	10 180	9034	9746	8192
	lb	23,246	20,572	22,442	19,916	21,485	18,059
Operating Weight	kg	15 034	15 177	15 381	15 523	15 240	15 463
	1b	33,142	33,459	33,909	34,221	33,596	34,088
930M Waste Handler High Lift			On .		ion	ISO 2	
Rated Capacity	$m^3$	3.8	5.0	3.8	5.0	3.5	5.0
	yd³	5.0	6.5	5.0	6.5	4.6	6.5
Width: Bucket	mm	2750	2750	2750	2750	2750	2750
	ft/in	9'0"	9'0"	9'0"	9'0"	9'0"	9'0"
Nominal Material Density	kg/m³	703	522	666	494	714	478
120% Fill Factor	lb/yd³	1,185	880	1,122	832	1,204	806
<b>9</b> Clearance: Full Lift 45° Dump	mm	3215	3154	3186	3124	3177	3009
	ft/in	10'7"	10'4"	10'5"	10'3"	10'5"	9'10"
<b>14</b> Reach: Full Lift 45° Dump	mm	1517	1580	1546	1610	1520	1695
	ft/in	5'0"	5'2"	5'1"	5'3"	5'0"	5'7"
<b>5</b> Length: Overall	mm	8595	8684	8637	8726	8639	8881
	ft/in	28'2"	28'6"	28'4"	28'8"	28'4"	29'2"
13 Height: Overall	mm	5984	6352	6010	6380	6007	6461
	ft/in	19'8"	20'10"	19'9"	20'11"	19'8"	21'2"
Tipping Load – Straight ISO 14397-1*	kg	7617	7464	7259	7108	7161	6883
	lb	16,791	16,454	16,002	15,671	15,788	15,173
Tipping Load – Full Turn ISO 14397-1*	kg	6411	6264	6070	5926	6000	5736
	lb	14,132	13,809	13,382	13,065	13,227	12,645
Breakout Force	kg	10 281	9095	9924	8803	9499	7979
O W. 1	lb	22,664	20,051	21,877	19,407	20,940	17,591
Operating Weight	kg	15 319	15 462	15 666	15 808	15 525	15 748
	1b	33,770	34,088	34,537	34,849	34,225	34,716

<sup>\*</sup>Full compliance to ISO 14397-1:2007 Section 1 thru 6, which requires 2% verification between calculation and testing.

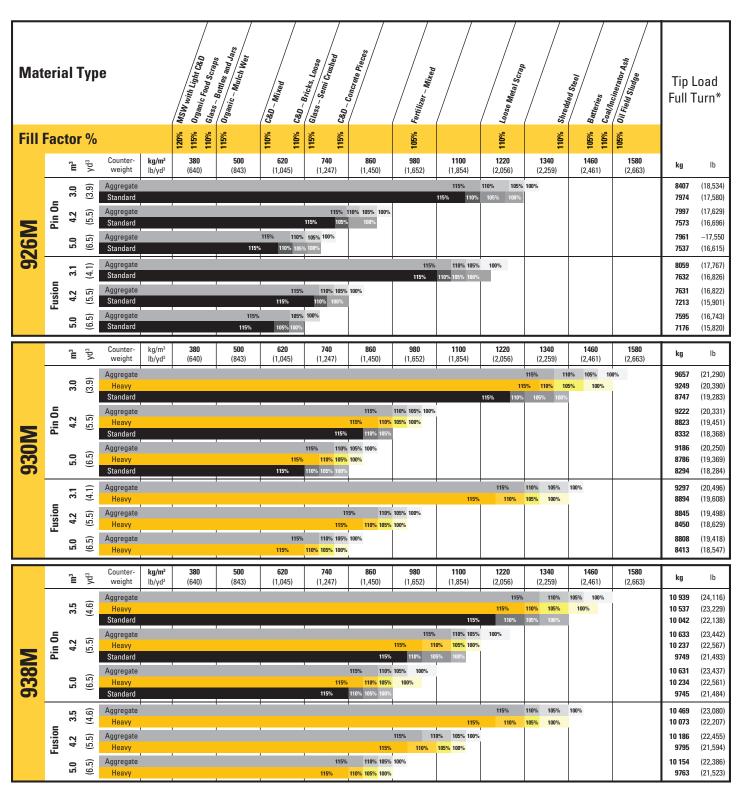
# **Operating Specifications with Light Material Buckets**

13				11				
938M Waste Handler Standard Lift		Pin	On	Fus	sion	ISO 2	23727	
Rated Capacity	m <sup>3</sup>	4.2	5.0	4.2	5.0	4.2	5.0	
	yd³	5.5	6.5	5.5	6.5	5.5	6.5	
Width: Bucket	mm	2750	2750	2750	2750	2750	2750	
	ft/in	9'0"	9'0"	9'0"	9'0"	9'0"	9'0"	
Nominal Material Density	kg/m³	1016	853	972	814	937	786	
120% Fill Factor	1b/yd³	1,712	1,437	1,638	1,371	1,580	1,325	
9 Clearance: Full Lift 45° Dump	mm	2606	2606	2569	2569	2459	2459	
	ft/in	8'7"	8'7"	8'5"	8'5"	8'1"	8'1"	
14 Reach: Full Lift 45° Dump	mm	1273	1273	1309	1309	1333	1384	
	ft/in	4'2"	4'2"	4'4"	4'4"	4'4"	4'6"	
<b>5</b> Length: Overall	mm	7935	7935	7987	7987	8066	8138	
	ft/in	26'0"	26'0"	26'2"	26'2"	26'6"	26'8"	
13 Height: Overall	mm	5542	5821	5574	5855	5642	5930	
	ft/in	18'2"	19'1"	18'3"	19'3"	18'6"	19'5"	
Tipping Load – Straight ISO 14397-1*	kg	12 057	12 058	11 582	11 552	11 174	11 159	
	1b	26,580	26,581	25,533	25,468	24,633	24,601	
Tipping Load – Full Turn ISO 14397-1*	kg	10 237	10 234	9795	9763	9449	9431	
	lb	22,567	22,561	21,594	21,523	20,832	20,792	
Breakout Force	kg	10 305	10 266	9912	9857	9063	9018	
	lb	22,717	22,633	21,851	21,731	19,981	19,881	
Operating Weight	kg	16 965	17 012	17 346	17 423	17 258	17 318	
	lb	37,400	37,503	38,239	38,410	38,046	38,178	
938M Waste Handler High Lift			On		sion	ISO 23727		
Rated Capacity	$m^3$	4.2	5.0	4.2	5.0	4.2	5.0	
	yd³	5.5	6.5	5.5	6.5	5.5	6.5	
Width: Bucket	mm	2750	2750	2750	2750	2750	2750	
	ft/in	9'0"	9'0"	9'0"	9'0"	9'0"	9'0"	
Nominal Material Density	kg/m³	747	626	709	591	690	577	
120% Fill Factor	lb/yd³	1,260	1,056	1,194	997	1,163	973	
<b>9</b> Clearance: Full Lift 45° Dump	mm	3205	3205	3168	3168	3061	3061	
	ft/in	10'6"	10'6"	10'5"	10'5"	10'1"	10'1"	
<b>14</b> Reach: Full Lift 45° Dump	mm	1566	1566	1603	1603	1629	1681	
	ft/in	5'2"	5'2"	5'3"	5'3"	5'4"	5'6"	
<b>5</b> Length: Overall	mm	8683	8683	8735	8735	8809	8881	
	ft/in	28'6"	28'6"	28'8"	28'8"	28'11"	29'2"	
13 Height: Overall	mm	6122	6402	6155	6436	6223	6511	
	ft/in	20'1"	21'0"	20'2"	21'1"	20'5"	21'4"	
Tipping Load – Straight ISO 14397-1*	kg	8959	8943	8543	8498	8319	8289	
	lb	19,751	19,716	18,835	18,735	18,339	18,273	
Tipping Load – Full Turn ISO 14397-1*	kg	7535	7517	7142	7096	6957	6925	
	lb_	16,610	16,572	15,746	15,644	15,336	15,266	
Breakout Force	kg	9896	9858	9517	9462	8700	8655	
	<u>lb</u>	21,817	21,733	20,980	20,859	19,179	19,080	
Operating Weight	kg	17 292	17 339	17 672	17 750	17 585	17 645	
	lb	38,120	38,224	38,960	39,130	38,767	38,898	

<sup>\*</sup>Full compliance to ISO 14397-1:2007 Section 1 thru 6, which requires 2% verification between calculation and testing.

# **Light Material Buckets**

# **Bucket Selection for Light Material Buckets – Standard Lift**

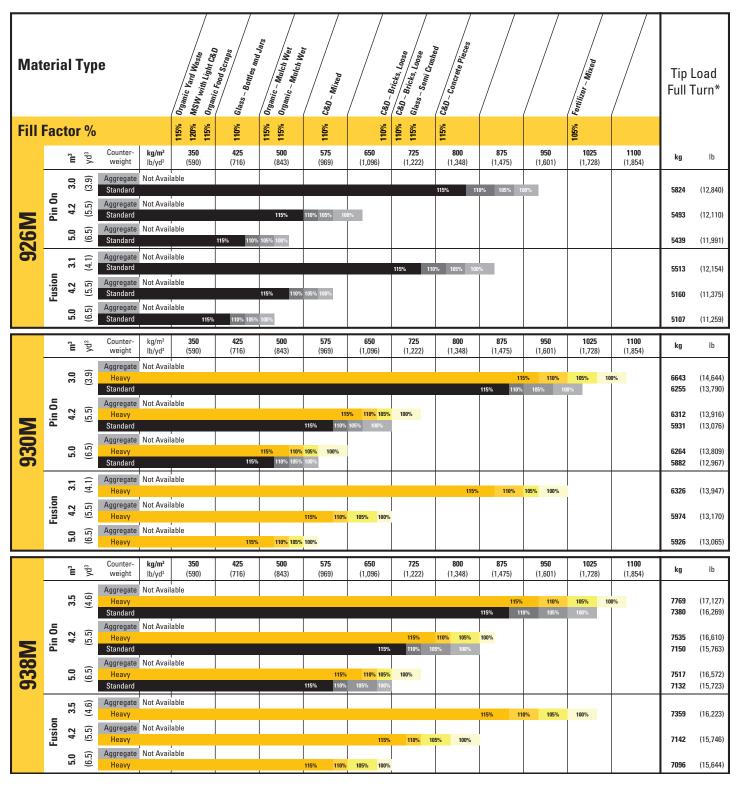


Material density, fill factor, and counterweight options are key variables when choosing the appropriate size of the bucket. The long floor and open throat design of the Performance Series Buckets along with the aggressive rack angles of the optimized linkage will demonstrate Fill Factors greater than 100% ISO rated. Refer to the expected Fill Factor % per Material Type at the top of the table and find a matching Counterweight and Fill Factor along the side for proper bucket sizing.

<sup>\*</sup>Full compliance to ISO 14397-1:2007 Section 1-6, which requires 2% verification between calculation and testing.

# **Light Material Buckets**

# **Bucket Selection for Light Material Buckets – High Lift**

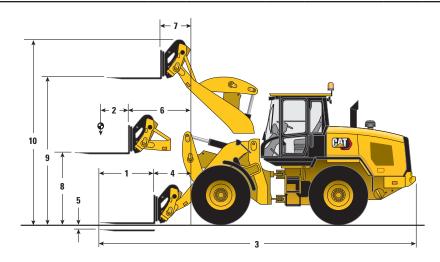


Material density, fill factor, and counterweight options are key variables when choosing the appropriate size of the bucket. The long floor and open throat design of the Performance Series Buckets along with the aggressive rack angles of the optimized linkage will demonstrate Fill Factors greater than 100% ISO rated. Refer to the expected Fill Factor % per Material Type at the top of the table and find a matching Counterweight and Fill Factor along the side for proper bucket sizing.

<sup>\*</sup>Full compliance to ISO 14397-1:2007 Section 1-6, which requires 2% verification between calculation and testing.

# **Operating Specifications**

# **Operating Specifications with Fusion Construction Forks**



	Standard Lift						High Lift					
	926M		930M		938M		926M HL		930M HL		938M HL	
	mm	ft/in	mm	ft/in	mm	ft/in	mm	ft/in	mm	ft/in	mm	ft/in
1 Fork Tine Length	1524	5'0"	1524	5'0"	1524	5'0"	1524	5'0"	1524	5'0"	1524	5'0"
2 Load Center	762	2'6"	762	2'6"	762	2'6"	762	2'6"	762	2'6"	762	2'6"
3 Length: Overall	8207	26'11"	8282	27'2"	8344	27'4"	8886	29'2"	9078	29'9"	9086	29'10"
4 Reach: Ground	965	3'2"	1000	3'3"	1037	3'5"	1644	5'5"	1796	5'11"	1779	5'10"
5 Height: Minimum (bottom of tine)	91	3.6"	91	3.6"	90	3.5"	126	5.0"	126	5.0"	124	4.9"
6 Reach: Level Arm	1559	5'1"	1606	5'3"	1655	5'5"	2129	7'0"	2259	7'5"	2262	7'5"
7 Reach: Full Lift	708	2'4"	804	2'8"	852	2'10"	1041	3'5"	1125	3'8"	1118	3'8"
8 Height: Level Arm (top of tine)	1728	5'8"	1759	5'9"	1795	5'11"	1759	5'9"	1759	5'9"	1795	5'11"
<b>9</b> Height: Full Lift (top of tine)	3655	12'0"	3660	12'0"	3723	12'3"	4153	13'7"	4252	13'11"	4304	14'1"
<b>10</b> Height: Overall	4966	16'4"	4970	16'4"	5034	16'6"	5463	17'11"	5563	18'3"	5615	18'5"
	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb
Tipping Load – Straight: ISO 14397-1*	6399	14,106	7539	16,620	8709	19,199	5060	11,155	5840	12,875	6907	15,226
Tipping Load – Full Turn: ISO 14397-1*	5470	12,058	6417	14,148	7402	16,318	4283	9,441	4921	10,848	5818	12,826
Operating Weight	13 562	29,898	14 964	32,990	16 865	37,179	14 002	30,869	15 249	33,618	17 192	37,900
Rated Load (% of Full Turn Tip):												
50% of tip: SAE J1197**	2735	6,029	3209	7,074	3701	8,159	2141	4,721	2460	5,424	2909	6,413
60% of tip: Rough Terrain EN474-3**	3282	7,235	3850	8,489	4441	9,791	2570	5,665	2952	6,509	3491	7,695
80% of tip: Firm and level EN474-3**	4376	9,646	5134	11,318	5922	13,054	3426	7,553	3937	8,678	4654	10,261

 $<sup>*</sup>Full \ compliance \ to \ ISO\ 14397-1:2007\ Sections\ 1\ thru\ 6, \ which\ requires\ 2\%\ verification\ between\ calculation\ and\ testing.$ 

Note: Dimensions listed are for a machine configured with optional counterweights, waste guarding, 80 kg (176 lb) operator, and Michelin 20.5 R25 XMINE D2 tires.

<sup>\*\*</sup>Compliance to EN474-3 and SAE J1197.

# **Operating Specifications with High Dump Buckets**

4 3 2								
926M Waste Handler Standard Lift		Pin	On	Fus	ion	ISO 2	3727	
Rated Capacity	m <sup>3</sup>	3.0	4.1	3.0	4.1	3.0	4.1	
1	vd³	4.0	5.4	3.9	5.4	3.9	5.4	
Bucket Width	mm	2528	3032	2528	3032	2528	3032	
	ft/in	8'4"	9'11"	8'4"	9'11"	8'4"	9'11"	
Nominal Material Density	kg/m³	945	647	941	624	876	592	
120% Fill Factor	lb/yd³	1,592	1,090	1,585	1,052	1,477	999	
1 Length: Overall	mm	7809	7887	7815	7959	8068	8146	
Length, Overan	ft/in	25'7"	25'11"	25'8"	26'1"	26'6"	26'9"	
2 Dump Clearance: Full Lift Rolled Out				4294		4408		
2 Dump Clearance: Full Lift Rolled Out	mm	4271	4211		4292		4475	
3 Clearance: Level bucket	ft/in	14'0"	13'10"	14'1"	14'1"	14'6"	14'8"	
3 Clearance: Level bucket	mm	4613	4598	4627	4668	4762	4846	
	ft/in	15'2"	15'1"	15'2"	15'4"	15'7"	15'11"	
4 Height: Overall	mm	6276	6319	6290	6389	6424	6547	
	ft/in	20'7"	20'9"	20'8"	21'0"	21'1"	21'6"	
5 Reach: Full Lift Rolled Out	mm	1311	1340	1307	1376	1494	1476	
	ft/in	4'4"	4'5"	4'3"	4'6"	4'11"	4'10"	
Tipping Load – Straight ISO 14397-1*	kg	8094	7575	8014	7346	7479	6983	
	lb	17,843	16,700	17,666	16,195	16,488	15,395	
Tipping Load – Full Turn ISO 14397-1*	kg	6864	6363	6772	6143	6309	5830	
	lb	15,132	14,029	14,929	13,543	13,909	12,852	
Breakout Force	kg	7439	6879	7634	6714	6328	5821	
	lb	16,400	15,166	16,830	14,801	13,950	12,834	
Operating Weight	kg	14 004	14 433	14 292	14 712	14 255	14 674	
operating weight	lb	30,872	31,817	31,509	32,434	31,427	32,350	
926M Waste Handler High Lift		Pin On			sion	ISO 2		
Rated Capacity	m <sup>3</sup>	3.0	4.1	3.0	4.1	3.0	4.1	
Rated Capacity	yd <sup>3</sup>	4.0	5.4	3.9	5.4	3.9	5.4	
Bucket Width	mm	2528	3032	2528	3032	2528	3032	
Bucket width	ft/in	8'4"	9'11"	8'4"	9'11"	8'4"	9'11"	
None in al Material Description		682						
Nominal Material Density 120% Fill Factor	kg/m <sup>3</sup>		455	668	433	628	413	
	lb/yd³	1,149	768	1,125	729	1,058	696	
1 Length: Overall	mm	8497	8572	8500	8640	8754	8828	
	ft/in	27'11"	28'1"	27'11"	28'4"	28'9"	29'0"	
2 Dump Clearance: Full Lift Rolled Out	mm	4727	4666	4750	4746	4858	4925	
	ft/in	15'6"	15'4"	15'7"	15'7"	15'11"	16'2"	
3 Clearance: Level Bucket	mm	5077	5062	5092	5132	5218	5306	
	ft/in	16'8"	16'7"	16'8"	16'10"	17'1"	17'5"	
4 Height: Overall	mm	6740	6783	6754	6852	6880	7007	
	ft/in	22'1"	22'3"	22'2"	22'6"	22'7"	23'0"	
5 Reach: Full Lift Rolled Out	mm	1656	1682	1652	1721	1843	1828	
	ft/in	5'5"	5'6"	5'5"	5'8"	6'1"	6'0"	
Tipping Load – Straight ISO 14397-1*	kg	5922	5436	5782	5204	5448	4978	
	1b	13,056	11,983	12,746	11,472	12,011	10,975	
Tipping Load – Full Turn ISO 14397-1*	kg	4953	4482	4807	4258	4521	4065	
rr o	lb	10,920	9,880	10,598	9,387	9,966	8,961	
Breakout Force	kg	6147	5634	6335	5516	5221	4754	
	lb	13,552	12,422	13,965	12,161	11,511	10,481	
Operating Weight	kg	14 444	14 873	14 733	15 153	14 696	15 115	
Speruning Weight	lb	31,843	32,788	32,479	33,405	32,397	33,321	
	10	31,043	52,100	34,419	33,403	1 34,391	33,341	

<sup>\*</sup>Full compliance to ISO 14397-1:2007 Section 1 thru 6, which requires 2% verification between calculation and testing.

Note: Dimensions listed are for a machine configured with optional counterweights, waste guarding, 80 kg (176 lb) operator, and Michelin 20.5 R25 XMINE D2 tires.

# **High Dump Buckets**

# **Operating Specifications with High Dump Buckets**

4 3 2							
930M Waste Handler Standard Lift			On	Fus		ISO 2	23727
Rated Capacity	m³	3.5	5.0	3.5	5.0	3.5	5.0
	yd³	4.6	6.5	4.6	6.5	4.6	6.5
Bucket Width	mm	2728	3032	2728	3032	2728	3032
	ft/in	8'11"	9'11"	8'11"	9'11"	8'11"	9'11"
Nominal Material Density	kg/m³	951	611	923	599	880	570
120% Fill Factor	lb/yd³	1,603	1,030	1,556	1,009	1,483	961
1 Length: Overall	mm	7885	8082 26'6"	7957 26'1"	8154	8144 26'9"	8341
2 Dump Clearance: Full Lift Rolled Out	ft/in	25'10" 4287	4134	4367	26'9" 4218	4551	27'4" 4404
2 Dump Clearance. Full Lift Rolled Out	mm ft/in	14'1"	13'7"	14'4"	13'10"	14'11"	14'5"
3 Clearance: Level bucket	mm	4627	4467	4644	4682	4876	4861
Generalice. Ecver oucket	ft/in	15'2"	14'8"	15'3"	15'4"	16'0"	15'11"
4 Height: Overall	mm	6333	6330	6350	6545	6582	6724
i iioigiiii o voimi	ft/in	20'9"	20'9"	20'10"	21'6"	21'7"	22'1"
5 Reach: Full Lift Rolled Out	mm	1404	1507	1436	1547	1533	1646
	ft/in	4'7"	4'11"	4'9"	5'1"	5'0"	5'5"
Tipping Load – Straight ISO 14397-1*	kg	9465	8759	9219	8618	8795	8217
	1b	20,866	19,310	20,325	19,000	19,389	18,114
Tipping Load – Full Turn ISO 14397-1*	kg	7991	7330	7756	7184	7391	6839
	1b	17,616	16,159	17,099	15,838	7621.1	15,077
Breakout Force	kg	8919	7653	8714	7494	7621	6577
	1b	19,662	16,871	19,211	16,522	16,801	14,499
Operating Weight	kg	15 498	15 937	15 784	16 214	15 747	16 176
930M Waste Handler High Lift	lb	34,165	35,135 <b>On</b>	34,797 <b>Fus</b>	35,745	34,715 ISO 2	35,661
Rated Capacity	m³	3.5	5.0	3.5	5.0	3.5	5.0
Rated Capacity	yd³	4.6	6.5	4.6	6.5	4.6	6.5
Bucket Width	mm	2728	3032	2728	3032	2728	3032
Bucket Width	ft/in	8'11"	9'11"	8'11"	9'11"	8'11"	9'11"
Nominal Material Density	kg/m³	676	426	648	411	623	394
120% Fill Factor	lb/yd³	1,139	718	1,092	693	1,050	665
1 Length: Overall	mm	8691	8885	8759	8952	8947	9141
	ft/in	28'6"	29'2"	28'9"	29'4"	29'4"	30'0"
2 Dump Clearance: Full Lift Rolled Out	mm	4856	4700	4935	4783	5116	4966
	ft/in	15'11"	15'5"	16'2"	15'8"	16'9"	16'4"
3 Clearance: Level Bucket	mm	5200	5047	5217	5255	5447	5432
A III day Occupati	ft/in	17'1"	16'7"	17'1"	17'3"	17'10"	17'10"
4 Height: Overall	mm	6906	6910	6923	7118	7153	7295
F. D. a. d., E. 11 I. G. D. 11, 4 Oct	ft/in	22'8"	22'8"	22'9"	23'4"	23'6"	23'11"
5 Reach: Full Lift Rolled Out	mm ft/in	1731 5'8"	1831	1766 5'10"	1872	1866 6'1"	1976 6'6"
Tipping Load – Straight ISO 14397-1*	kg	6819	6'0"	6577	6'2"	6334	6'6" 5814
11pping Load – Straight 150 1437/-1	lb	15,034	13,720	14,500	13,327	13,963	12,817
Tipping Load – Full Turn ISO 14397-1*	kg	5675	5110	5441	4931	5234	4734
11pping 2000 1 un 1um 100 1737/-1	lb	12,511	11,265	11,996	10,870	11,539	10,436
Breakout Force	kg	8688	7442	8488	7291	7423	6397
	lb	19,153	16,406	18,713	16,073	16,364	14,103
Operating Weight	kg	15 783	16 222	16 069	16 499	16 032	16 461
Operating weight	14.2	15 / 65		10 000	10 1//	10 052	

<sup>\*</sup>Full compliance to ISO 14397-1:2007 Section 1 thru 6, which requires 2% verification between calculation and testing.

Note: Dimensions listed are for a machine configured with optional counterweights, waste guarding, 80 kg (176 lb) operator, and Michelin 20.5 R25 XMINE D2 tires.

# **Operating Specifications with High Dump Buckets**

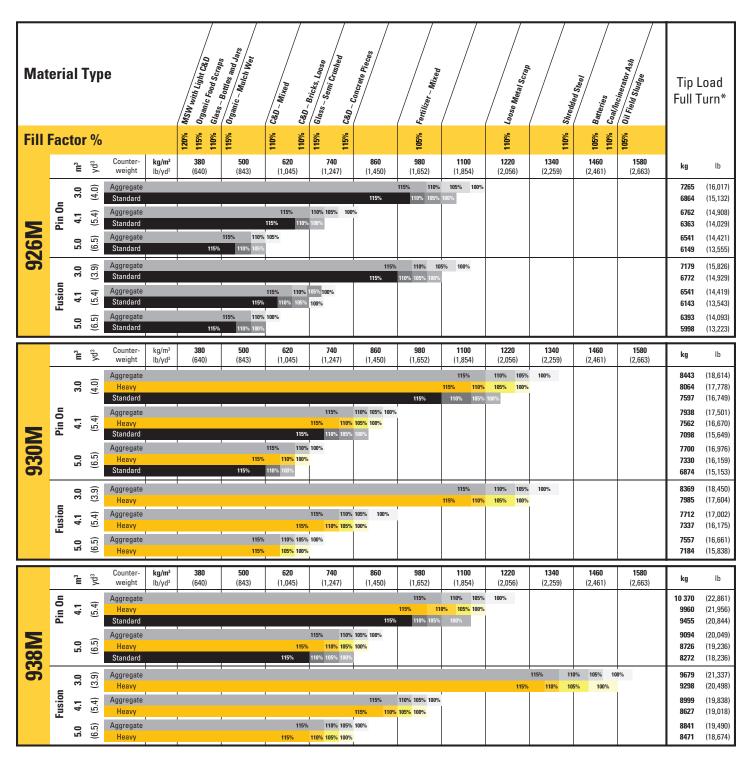
4 3 2								
938M Waste Handler Standard Lift		Pin	On	Fus	sion	ISO 2	23727	
Rated Capacity	m <sup>3</sup>	4.1	5.0	4.1	5.0	4.1	5.0	
1	vd³	5.4	6.5	5.4	6.5	5.4	6.5	
Bucket Width	mm	3030	3032	3032	3032	3032	3032	
	ft/in	9'11"	9'11"	9'11"	9'11"	9'11"	9'11"	
Nominal Material Density	kg/m³	1012	727	877	706	843	679	
120% Fill Factor	lb/yd³	1,706	1,226	1,478	1,190	1,420	1,144	
1 Length: Overall	mm	8015	8135	8098	8217	8274	8394	
Length, Overan	ft/in	26'4"	26'8"	26'7"	27'0"	27'2"	27'6"	
2 Dump Clearance: Full Lift Rolled Out		4299	4206	4389	4299	4566	4477	
2 Dunip Clearance. Full Lift Rolled Out	mm	4299 14'1"	13'10"	14'5"	4299 14'1"	15'0"		
3 Clearance: Level bucket	ft/in						14'8"	
3 Clearance: Level bucket	mm	4682	4682	4760	4760	4931	4931	
	ft/in	15'4"	15'4"	15'7"	15'7"	16'2"	16'2"	
4 Height: Overall	mm	6402	6545	6481	6623	6632	6794	
-	ft/in	21'0"	21'6"	21'3"	21'9"	21'9"	22'3"	
5 Reach: Full Lift Rolled Out	mm	1468	1543	1509	1588	1599	1679	
	ft/in	4'10"	5'1"	4'11"	5'3"	5'3"	5'6"	
Tipping Load – Straight ISO 14397-1*	kg	11 829	10 402	10 314	10 146	9917	9763	
	lb	26,078	22,931	22,737	22,368	21,862	21,522	
Tipping Load – Full Turn ISO 14397-1*	kg	9960	8726	8627	8471	8291	8146	
	1b	21,956	19,236	19,018	18,674	17,378	17,959	
Breakout Force	kg	9515	8492	8933	8224	8291	7292	
	lb	20,976	18,721	19,693	18,130	17,378	16,076	
Operating Weight	kg	17 631	17 731	18 015	18 114	17 932	18 031	
o F	lb	38,869	39,089	39,715	39,934	39,532	39,751	
938M Waste Handler High Lift		Pin On			sion	ISO 2		
Rated Capacity	m <sup>3</sup>	4.1	5.0	4.1	5.0	4.1	5.0	
rated capacity	yd³	5.4	6.5	5.4	6.5	5.4	6.5	
Bucket Width	mm	3030	3032	3032	3032	3032	3032	
Bucket Width	ft/in	9'11"	9'11"	9'11"	9'11"	9'11"	9'11"	
Nominal Material Density	kg/m³	722	528	628	504	609	489	
120% Fill Factor	lb/yd³	1,217	889	1,059	850	1,027	824	
		8764	8884	8842	8962	9020	9140	
1 Length: Overall	mm							
2 Down Classes F-11 Lie D-11-1 C	ft/in	28'9"	29'2"	29'0"	29'5"	29'7"	30'0"	
2 Dump Clearance: Full Lift Rolled Out	mm	4846	4750	4934	4841	5108	5017	
- CI	ft/in	15'11"	15'7"	16'2"	15'11"	16'9"	16'6"	
3 Clearance: Level Bucket	mm	5235	5235	5313	5313	5482	5482	
	ft/in	17'2"	17'2"	17'5"	17'5"	18'0"	18'0"	
4 Height: Overall	mm	6956	7099	7034	7176	7183	7345	
	ft/in	22'10"	23'3"	23'1"	23'7"	23'7"	24'1"	
5 Reach: Full Lift Rolled Out	mm	1743	1815	1786	1863	1882	1960	
	ft/in	5'9"	5'11"	5'10"	6'1"	6'2"	6'5"	
Tipping Load – Straight ISO 14397-1*	kg	8557	7659	7516	7374	7291	7156	
	1b	18,864	16,885	16,569	16,256	16,073	15,776	
Tipping Load – Full Turn ISO 14397-1*	kg	7107	6331	6183	6049	5996	5869	
	1b	15,668	13,957	13,631	13,336	13,219	12,938	
Breakout Force	kg	9259	8117	8561	7876	7555	6985	
	lb	20,413	17,895	18,873	17,364	16,656	15,398	
Operating Weight	kg	17 958	18 058	18 342	18 441	18 259	18 358	
	lb	39,590	39,809	40,435	40,655	40,252	40,472	
		. ,	- ,	,	. ,		., . =	

<sup>\*</sup>Full compliance to ISO 14397-1:2007 Section 1 thru 6, which requires 2% verification between calculation and testing.

Note: Dimensions listed are for a machine configured with, optional counterweights, waste guarding, 80 kg (176 lb) operator, and Michelin 20.5 R25 (L-5) XMINE D2 tires.

# **High Dump Buckets**

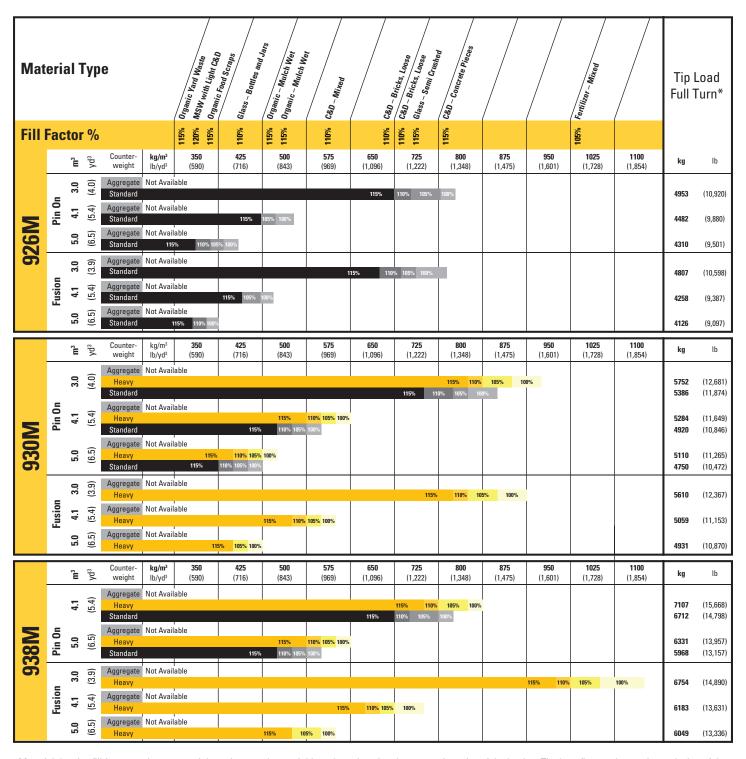
# **Bucket Selection for High Dump Buckets – Standard Lift**



Material density, fill factor, and counterweight options are key variables when choosing the appropriate size of the bucket. The long floor and open throat design of the Performance Series Buckets along with the aggressive rack angles of the optimized linkage will demonstrate Fill Factors greater than 100% ISO rated. Refer to the expected Fill Factor % per Material Type at the top of the table and find a matching Counterweight and Fill Factor along the side for proper bucket sizing.

<sup>\*</sup>Full compliance to ISO 14397-1:2007 Section 1-6, which requires 2% verification between calculation and testing.

# **Bucket Selection for High Dump Buckets – High Lift**



Material density, fill factor, and counterweight options are key variables when choosing the appropriate size of the bucket. The long floor and open throat design of the Performance Series Buckets along with the aggressive rack angles of the optimized linkage will demonstrate Fill Factors greater than 100% ISO rated. Refer to the expected Fill Factor % per Material Type at the top of the table and find a matching Counterweight and Fill Factor along the side for proper bucket sizing.

<sup>\*</sup>Full compliance to ISO 14397-1:2007 Section 1-6, which requires 2% verification between calculation and testing.

# **Supplemental Specifications**

# **Optional Equipment**

		926M				930	)M		938M				
		Operating weight		Tipping load — full turn with 3.0 m³ (3.9 yd³) Light Material Fusion bucket		Operating weight		Tipping load — full turn with 3.5 m³ (4.6 yd³) Light Material Fusion bucket		Operating		Tipping load – full turn with 4.2 m³ (5.5 yd³) Light Material Fusion bucket	
	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	
Change with options removed:													
Counterweight, heavy group*	0	0	0	0	-320	-705	-492	-1,085	-320	-705	-480	-1,059	
Guard, crankcase	-11	-23	-14	-30	-11	-23	-13	-29	-11	-24	-14	-30	
Guard, power train lower	-77	-170	-70	-155	-77	-170	-67	-149	-68	-150	-59	-129	
Guard, driveshaft	-44	-97	-12	-27	-44	-97	-12	-26	-45	-100	-12	-26	
Guard, front window	-41	-90	-23	-50	-41	-90	-22	-48	-41	-90	-22	-48	
Guard, power train side	-11	-24	_9	-20	-11	-24	_9	-19	-11	-24	_9	-19	
Roading fenders	-18	-39	-24	-53	-18	-39	-23	-51	-18	-39	-23	-50	
Secondary steer	-69	-152	-75	-165	-69	-152	-72	-158	-69	-152	-71	-156	
Ride control	-49	-108	-27	-59	-49	-108	-26	-57	-49	-108	-26	-57	
Guard, hitch	-22	-48	-15	-33	-22	-48	-14	-31	-22	-48	-14	-31	
Guard, steering cylinder	-15	-33	-11	-24	-15	-33	-10	-23	-18	-40	-12	-27	
Change with options added:													
Guard, rear waste gate	NA	NA	NA	NA	+264	+582	+456	+1006	+284	+626	+478	+1054	
Guard, tilt cylinder	+39	+86	-3	-7	+39	+86	-3	-6	+43	+95	-3	-7	
Tires, smooth solid**	+1782	+3,929	+1030	+2,272	+1462	+3,223	+496	+1,094	+1416	+3,121	+468	+1,032	

<sup>\*</sup>Not compatible with solid tires.

<sup>\*\*</sup>Includes removal of the heavy counterweight option for the 930M and 938M.

# **Small Wheel Loaders Waste Handler Standard and Optional Equipment**

# **Standard Equipment**

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

### **POWER TRAIN**

- Axle Duo-Cone<sup>TM</sup> seal guards
- · Auto idle shut down feature
- Cat C7.1 engine
- -Power modes (Standard and Performance)
- -Power by range (High Power in Range 4)
- -Turbocharged and aftercooled
- -Diesel particulate filter (Fit for Life)
- Coded start (requires secondary display)
- Differential lock in front axle
- Enclosed wet disc full hydraulic brakes
- Hydraulically driven demand cooling fan
- Hydrostatic transmission with electronic control
- Operator modes (Default, TC, Hystat, and Ice)
- Directional Shift Aggressiveness (fast, medium, slow)
- -Rimpull control, adjust wheel torque
- -Creeper control, adjust ground speed
- Parking brake, electric
- Single plane cooling package wide six fins per inch density
- Oil sampling ports
- Throttle lock and max speed limiter

### **HYDRAULICS**

- Automatic lift lower and tilt kickouts, adjustable in-cab
- Bucket and fork modes, adjustable in-cab
- Cylinder damping at kickout and mechanical end stops
- Fine mode control (fast, medium, slow)
- Hydraulic response setting (fast, medium, slow)
- Load sensing hydraulics and steering
- Seat-mounted hydraulic joystick controls

### **ELECTRICAL**

- Alternator, 115 amp, heavy duty
- Batteries, 1,000 CCA (2) 24V system, disconnect switch
- · Back-up alarm
- · Emergency shutdown switch
- Halogen work and roading lights, LED rear tail lights
- Product Link PRO with three year subscription
- Remote jump start post
- Resettable main and critical function breakers

### **OPERATOR ENVIRONMENT**

- 75 mm (3 in) High-Vis retractable seat belt, with audible alarm and indicator
- Automatic temperature control
- Cab, pressurized
- · Camera, rearview
- External heated mirrors with lower parabolic
- · Ground level cab door release
- Hydraulic control lockout
- · Mirror, single
- · Lunch box storage
- Radio ready speakers
- Rear window defrost, electric
- Column mounted multi function control lights, wipers, turn signal
- Tilt and telescopic steering wheel
- Tinted front glass
- Wet arm wiper/washer, 2-speed and intermittent, front, lights, wipers, turn signal
- Suspension seat, fabric

### **OTHER STANDARD EQUIPMENT**

- Large-access enclosure doors with adjustable close/open force
- Cat optimized Z-bar linkage with parallel lift
- Recovery hitch, with pin
- Remote mounted lubrication points
- Lockable compartments and enclosures

# **Optional Equipment**

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

- Autolube, integrated in secondary display
- Auxiliary flow, third and fourth function
- Differential, limited slip, rear
- · Beacon light, strobe
- Cab, deluxe (standard in Europe)
- Camera, rearview integrated into advanced display
- Electrically adjustable external heated mirrors (2)
- Secondary display to enable features and adjust parameters
- -LED interior lighting

separate display

- -Sunscreen, front and rear
- Touchscreen secondary display
- Ride control adjustable speed activation
- Preventative maintenance reminders
- Integrated help function (26 languages)
  Camera, roof mounted, front view with

- Cold start package
  - Ether starting aid, block heater and additional batteries, 1,000 CCA (4 total)
- · Counterweight, additional options
- Coupler, (Fusion and ISO 23727)
- Debris packages (low, medium, high)
- Fenders (extended cover and full coverage)
- Guarding packages
- Linkage, high lift
- Lights, auxiliary, halogen or LED with engine and DEF compartment lights
- · Payload Technology
- -Cat Production Measurement (CPM)
- -CPM Printer
- Product Link ELITE with capabilities for software push, data logging, histogram and trend mapping
- · Radio packages

- Rear Object Detection
- Ride Control System, adjustable through secondary display
- Seats
- Deluxe seat fully adjustable fabric air suspension seat with mid seat backrest
- Premium seat fully adjustable leather and fabric air suspension with high backrest and air lumbar support. Seat is heated and ventilated on bottom cushion and backrest.
- Steering
- Dual mode and secondary
- Tire Pressure Monitoring (TPM)

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