



#### WELCOME TO THE WORLD OF GREEN MACHINES

# **Where Innovation Beats Imitation**

Green Machines is among the oldest manufacturers of sweepers, dating back to 1965 and our first headquarters in Scotland. From the very first walk-behind sweepers with their exceptional maneuverability to state-of-the-art battery and hydrogen technology present in our sweepers, Green Machines has created a market which remains unrivaled to date. We currently operate from our offices in North Macedonia, the Netherlands, United Kingdom, Germany and USA, while we offer clients all around the world full support through our wide global dealership network. With our ambitious Green Machines vision, we plan to stay ahead of the game by bringing new product technologies to the highly demanding outdoor cleaning market.

For many years now, we have aimed to contribute decisively towards cleaner and tidier towns and cities by providing efficient and sophisticated sweeping machines. Our portfolio comprises 7 machine models and each one is unique in its own way. We offer you a wide range of choices by providing cleaning solutions that others have yet to catch up to. All of our machines are compact and swift enough to enable you to clean any urban area around the city with maximum efficiency, without worrying that they will disrupt your citizens. Our machines are purposefully designed in a way that does not impact the normal everyday functioning even of the busiest areas in your city.





## OUR MISSION: **ZERO EMISSIONS**

Green Machines realizes that the earth's environment is under severe stress from uncontrolled human activity, threatening the survival of our society and the performance of Green Machines' mission. We are dedicated to minimizing our own impact and maximizing the effective use of resources

Green Machines strives to develop and produce sustainable sweeping machines combined with excellent performance for a better world. Our vision is often far from the traditional approach but we are proud to take leadership in paving the path to an emissionfree world. Our vision focuses on minimizing global impact through the following auidelines:

- •Help our customers reduce their carbon footprint through the use of our eco-friendly products.
- ·Maximize the "End of Life Environmental Value" of our products.
- Work with suppliers who promote sustainable practices.
- ·Participate in efforts to further improve sustainable protection and understanding among our staff and end-users across the globe.
- •Listen to the voice of the customers

## KEEPS YOUR CITY CLEAN AND GREEN



#### **PORTFOLIO**

We have over 55 years of manufacturing experience and we are constantly improving our products based on direct customer feedback and the ongoing changes and trends on the market. Our current product portfolio comprises some of the world's most technologically advanced sweepers, and each of our machines is so unique that it is basically impossible to compare them to one another. Every machine is designed in a way that meets specific needs and we are confident that we have a machine that will meet your specific needs.



#### GM1ze

Fully electric, versatile, waste Vacuum Cleaner Small manoeuvrable and Compact, ideal for any City Centre.



#### GM200ze

100% electric twowheel tool carrier with a universal attachment adaptor in the front. It can be anything you want; from sweeper to leaf blower, snow plough, etc. The list is endless. Use it all year round, no matter the weather.



#### GM400ze/GM414

One of our latest environmental sweeper innovations, the 400ze is based on the world beating 400-series Sweeper. Compact, manoeuvrable. Operator friendly and now also Flectric



#### GM500ze

This marathon machine is the world's first-ever fully electric sweeper and offers lasting performance with the latest generation of Li-ion batteries. It is small. swift, and eco-friendly with superb ergonomic design. The 500ze is one of the most popular zero emission sweepers in the world.



#### GM500H2

The world's first-ever hvdrogen fuel cell sweeper. It runs 100% on hydrogen with zero emissions, while providing the same comfort and cleaning efficiency the 500ze offers. It comes in two types: with replaceable H2 pods or with a fixed hydrogen tank system.



#### **GM636HS**

Our dependable, hard working front line sweeper will remove debris from all surfaces and efficiently, it has a 1.5 m3 capacity, designed for maximum performance and minimum waste volume. With its sophisticated design details and ability to considerably reduce water consumption. the 636 cuts labor and maintenance costs.



#### **GM955**

The 955 is a 6 m3 mechanical sweeper supported by vacuum. The powerful sweeping mechanism is able to collect even the largest debris, the powerful Vacuum will remove the smallest dust particles with the 955 you have the best of two worlds.



The GM400ze is a fully electric vacuum sweeper. Equipped with a revolutionary air-recirculation system that not only increases the suction performance but also the dust filtration capacity. That makes that the particle exhaust decreased three times, without sacrificing the 400's incredible suction power. The 400ze removes almost everything: cans, cigarette ends, leaves, dirt and glass bottles. The new 400ze comes standard with an impeller that mulches debris to one third of its original size. The RS version of the 400ze comes with the patented fold-and-stow seat and switches from walk behind to ride-on in seconds.

# **400ze Technical Specifications**

Dimensions	
Width: All versions	45 inch   1,140 mm
Length	
Model GM400ze	99 inch   2,510 mm
Model GM400ze RS	118 inch   2,997 mm
Height	
Model GM400ze	45 inch   1,143 mm
Model GM400ze RS	49 inch   1,243 mm
Weight	
Model GM400ze	460 kg
Model GM400ze RS	500 kg
Turning circle - between walls	53 inch   1,350 mm

Turning circle - between walls	53 inch   1,350 mm
Sweeping system	
Туре	Air Sweeper
Cleaning path: Minimum	46 inch   1,170 mm
Sweeping Brush diameter	19 inch   470 mm
Brush Reach (Beyond Front of Unit)	17.3 inch   440 mm
Volume capacity (max)	75 Gal   284 L
Disposable Bag Size	
(Standard Trash Bag)	30 - 55 Gal   110 - 200 L
Vacuum Impeller Diameter	16.5 inch   420 mm
Vacuum Impeller	6 Blade Abrasion Resistant Steel
Construction	with Hard Faced Edges
Vacuum Impeller	Stainless Steel
Housing	0.25 inch (6 mm) Replaceable Wear Plates
Vacuum Impeller Speed, up to	2 800rpm
Debris Reduction Pulverizing Impeller	
Vacuum Hose Diameter	7.9 inch   200 mm
Wander Hose: Length	7.2 ft   2.2 m
Diameter	3.9 inch   100 mm

### **Dust control system**

Air recirculation system Du	st elimination with self-sustained air recirculation
Dust Filtration System	Two Stage Filtration
Stage 1:	Nylon Debris Screen Synthetic Dual Material
Stage 2:	Washable Filter Bag
Dust Suppression System Spray Nozzl	es Each Brush & at Vacuum Inlet
Water tank capacity	18.5 Gal   70 L
Water Control	Variable by Operator

Traction motor - power	3 kW
Fan motor - power	5.5 kW
Brush motor - power	2 x 0.2 kW
Li-Ion Battery - capacity	10 kWh
Travel speed	5.5 mph   8.8 km/h
Reverse speed	1.8 mph   3 km/h
Sweeping speed	5 mph   8 km/h
Drive Tires (2), pneumatic	6-pl
Tire Pressure	46 psi   3.2 ba

Quiet Operation	
Digital control display	
Ergonomic Control Handles	
Easy to Use Wander Hose	
Simple daily maintenance	
Manual Brush Raise/Lowering	
Large Oversized Zipper on Debris Bag	
Weather Proof Storage Compartment	

### **Accessories and optional equipment**



Model GM400ze S2D

**Operator ergonomics** 

Fold and Stow Seat (RS Version) Center Pivot Steering for Easy Manoeuvering

Model GM400ze RS





Snow Plow attachment



Solid Rubber

Pneumatic



#### **SWEEPER FEATURES**



#### Touchscreen tablet

A unique touchscreen control panel that allows the user to control and command the machine faster and easier in comparison with the old conventional buttons and switches system.



## **Air-recirculation**

Revolutionary air-recirculation system that improves the suction and dustfiltration and decreases particle exhaust. Packed cutting-edge technologies, designed with the operator in mind.



## **Ride on seat option**

Stow away seat system that allows more comfort and easier maneuverability and usability. The sweeper is perfect for narrow urban centers and alleys that are less accessible.



## **Mulchting Impellor**

The hardened steel impeller mulches and compacts debris to a 3:1 ratio, it breaks down glass to small manageable pieces.



The latest version of the 400 series sweeper is now fully electric, noise free and zero emissions. It has an improved suction and dust filtration system that makes the machines twice as powerful compared to the current diesel 400 model. The improvments are all thanks to the revolutionary air-recirculation system that is one of a kind on the market. The diesel engine is replaced with 4 electrical motors. The Li-Ion Battery has 10kWh installed capacity that can last 8 hours, full work-shift autonomy. Because the sweeper is 100% electric the machine is extremely quiet and also maneuverable. Perfect for narrow streets and heavily populated areas which makes it pedestrian friendly.











Green Machines International B.V. The Netherlands +389 43 551 100 office@greenmachines.com Green Machines Veles DOO North Macedonia +389 43 551 100 office@greenmachines.com Green Machines Inc. 5644 Kearny Mesa Rd, Unit B 92111 San Diego, CA T: +1 877 817 0342 T: +1 619 780 6772 F: +1 626 884 5164 GM Sweepers UK Ltd. United Kingdom Sales: +44 (0) 1324 611666 Spares: +44(0)1324 578880 sales@greenmachines.com spares@greenmachines. com Green Machines Deutschland GmbH Luisenstr. 16 D-99817 Eisenach Germany T+49 (0) 3691 72 41 566 M+49 (0) 151 175 61 468 office@greenmachines.com