GREEN MACHINES 500H2

MODEL: 500 H2



MACHINE DIMENSIONS – WORK MODE (BRUSHES IN)

Max Width – Work Mode (over brush plates)	1.105 mtrs (44 ins)		
Width over Body	1.2 mtrs (47 ins)		
Max Length (including brushes)	3.330 mtrs (131 ins)		
Length over Body	2.765 mtrs (109 ins)		
Max Height (excluding folding beacon)	1.98 mtrs (78 ins)		
Wheel Base	1.38 mtrs (54.3 ins)		
Minimum swept width	1.20 mtrs (47.2 ins)		
Max swept width	1.80 mtrs (72")		
Brush Diameter	650 mm (25.5 ins)		

MACHINE DIMENSIONS – WORK MODE (BRUSHES OUT)

Max Width (Brush tip to Brush tip)	1.900 mtrs (74.8 ins)
Max Length (including brushes)	3.330 mtrs (131 ins)
Max Height (excluding folding beacon)	1.98 mtrs (78 ins)
Wheel Base	1.38 mtrs (54.3 ins)
Max Hopper Dump (Unload) Height	1.4 mtrs (55.1 ins)

TRACK & INSIDE TRACK DIMENSIONS

(center of wheel to center of wheel)

Rear Wheels Inside Track		
(inner wheel to inner wheel)	845 mm	(33.8 ins)
Rear Wheels Track		

1,000 mm (37.6 ins)

TURNING CIRCLE

Kerb to kerb	5.5	m diam (2.75 m rad)
Over brushes	7.1	m diam (3.55 m rad)

VEHICLE WEIGHTS

Front Axle unladen	935 kg(2060 lbs)		
Front Axle Max Weight	1,020 kg (2248 lbs)		
Rear Axle unladen	1,035 kg (2281 lbs)		
Rear Axle Max Weight	1,385 kg (3052 lbs)		
Max Total Permissible Wht (GVW)	2,325 kg (5124 lbs)		
Foot Print	3.0 kg/cm2		

MAXIMUM HILL CLIMB 20%



VEHICLE SPEEDS

Forward Travel Mode (Transit)	25 km/h max (15.6 mph)		
Reverse	6 km/h max (4 mph)		
Forward Sweep (Brushes down)	12 km/h max (7.5 mph)		
Forward Travel Mode (Work Mode)			
(Brushes Up)	16 km/h max (10 mph)		
Reverse	6 km/h max (4 mph)		

HOPPER

Capa	icity		1.269 cu mtr Gross / 0.744 cu mtr Net

System Compaction Ratio 2:1

Clearance for tipping 1.4 mtrs (55 ins)

NOISE

Inside Cab with Fan at 2400 rpm	76 dB(A)
Drive By Noise (sweeping)	74 dB(A) @7m
Drive By Noise (Transit)	59 d(BA)

Sound Power Reading

99dB(A) 2000/14EC Equates to 74 dB(A) at 7 mtrs

WHOLE BODY VIBRATION

IHand Arm	0.48	m/s2 (Limit is 2.5	m/s2)
Whole Body	0.14	m/s2 (Limit is 0.5	m/s2)

Levels comply with Machinery Safety Directive 98/37/EC

STEERING SYSTEM

Gear type pump (1.1cc/rev) tandem driven with Aux pump off variable speed auxiliary electric motor

Open center Hydrostatic steering unit incorporating PRV & cylinder protection valves

DRIVE SYSTEM

Motor 3 Phase AC motors with vector control DC/AC

invertors – through rear differential axle

Rear Axle Double reduction beam axle with limited slip

differential and 18:1 reduction with coil

POWER SOURCE

Power system Fuel Cell

Fuel cell Type PEM (Proton Exchange membrane)

Power 15 kW

H2 TANKS

H2 capacity cartdridge 2x 0,55 kg = 1,1 kgH2 capacity fixed tank 2x 2 kg = 4 kgPressure cartridge 300 BarPressure fixed tank 700 Bar

Endurance under normal working situation

Cartridge 3 hours
Fixed tank 11 hours

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HYDRAULICS

Oil Specification Bio-degradable OECD 70% HFDU68

Hydraulic Tank 16 Its (4.2 US Gals)

Capacity

Brush Motor – max speed 105 rpm

Auxiliary System Max Pressures Max pressure – 210 bar

SUCTION FAN PERFORMANCE

Suction Fan – max RPM 2800 rpm

Maximum Flow Maximum 3600 m3/h (1m3/sec)

Pressure 33 mbar

NOZZLE & SUCTION TUBE DIMENSIONS

Nozzle Dimensions Suction 520 mm wide x 90 mm high (21" w x 4" H)

Tube 175 mm (7")

BRAKES

Front and Rear Brakes Knott 230x50 hydro servo with manual adjust

Brake Fluid Type DOT 4 - SAE J 1703 DOT 4

TIRES

Size 155/70 R12C - 8Ply - Tires on 4.5J rims -

Max Loading 750 kg (1650 lbs)
Tire Pressure 6.5 bar (94 psi)

Tire Footprint Loadings 3,40 kg/square centimeter (At GVW) Wheel (at GVW); 48.3 psi (3.32 bar)

WATER SYSTEM

Tank Capacity 121 Its (31 US Gals)
Max system Pressure 8 bar (118 psi)

Cloudmaker Flow Rate 15 It/hr (3.95 US Gals)

PRESSURE WASHER

Electro/Hydraulic driven high pressure piston pump

Water Flow 9 lts/min (2.32 US Gals)
Max Water Pressure 90 bar (1323 psi)

END OF LIFE ENVIRONMENTAL VALUE

Recycling -mass content

Stainless steel – Machine structure – Chassis frame, Access panels, Bumper, Hopper Components, Fasteners	370 kg
• Ferrous – Cast iron & mild steel, Axles, Suspension, Running Gear, Hyd. Cylinders, Brush Gear, Suction Nozzle, Wheels	410 kg
Lead -Battery – lead-acid automotive type lead content	7 kg
 Aluminium – door panels 17 kg; Hopper 195 kg; Cab 100 kg; Hyd. Manifolds 12 kg; Battery boxes & enclosures 	130 kg = 454 kg
	total excl batt cells
Copper – Cables, Busbars. Motors, Invertors	230 kg
Polyethylene – reservoirs/covers	70 kg
Polyurethane – wear plates/bushings	10 kg
ABS mouldings	15 kg
• Polypropylene – Covers 10 kg; Brushes (2 off) Disc 3.5 kg; Bristles (new) 3.2 kg; Bristles (worn – estimated)	1.2 kg
• Glass	40 kg
Rubber – (Tires, Hydraulic hoses)	70 kg
Fabrics – Seat, noise absorption matting	30 kg
Glass Reinforced Polyester	40 kg
• Gross Recyclables = 2,100 kg, kerb weight = 2,300 kg therefore recyclable % = 91% (75 kg removed for Operator wht.)	

