

# MaxPowa **V80 & V120**

Offering powerful performance in heavy duty applications.



## Bucher Municipal



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At Bucher Municipal, we innovate and engineer better cleaning and clearing solutions, helping our customers grow and maintain efficient and profitable businesses. Leveraging on the over 200 year-old heritage of Bucher, we are committed to helping you achieve more using less. Taking pride in being seen as a reliable partner, we work locally with you in realising the possibilities for a smarter, cleaner and more efficient tomorrow. Today.



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# MaxPowa V80 & 120

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The MaxPowa V80 and V120 have been designed to excel in public works applications whilst maintaining exceptional quality, efficiency and performance.

With modular construction and options the V series is ideally suited to road construction and maintenance, infrastructure projects and industrial cleaning.



# High **power**

The V80 and V120 are available with a range of drive options to suit operator preference and application.

## Twin Engine

A twin engine sweeper provides great flexibility as sweeping operations are totally independent from the chassis and therefore can offer the lowest fuel consumption on low revs or best possible suction performance on maximum revs.

All Bucher MaxPowa V series auxiliary engines from JCB fit within the powapack maintaining consistency of components across our TMS range.

### JCB 97 kW

Supplied as standard on the MaxPowa V80 and offered as an alternative engine option for the V120, the 97 kW is a heavy duty industrial engine.

To meet global territory requirements optional JCB 85 kW - Stage 3a, JCB 93 kW - Tier 4 Final and Cummins 101 kW - China 4 engines are also available.

### JCB 129 kW

A high power 129 kW auxiliary engine is standard provision on the MaxPowa V120 and is available for selection on the V80 for higher performance over the standard engine.

## Single Engine

### OMSI 600

The Vh series of hydrostatically driven machines provide some significant operational advantages for customers. For Vh sweepers on 18t + chassis, the transmission controlled OMSI 600 gearbox is used for a number of reasons.

Controllability – in hydrostatic mode the speed of the machine is infinitely variable giving the operator total control of the machine, from 0 - 30 kph to suit conditions.

Speed controlled cruise – the optional cruise control will remain at constant set speed even on steep gradients providing the operator with fine speed adjustment.

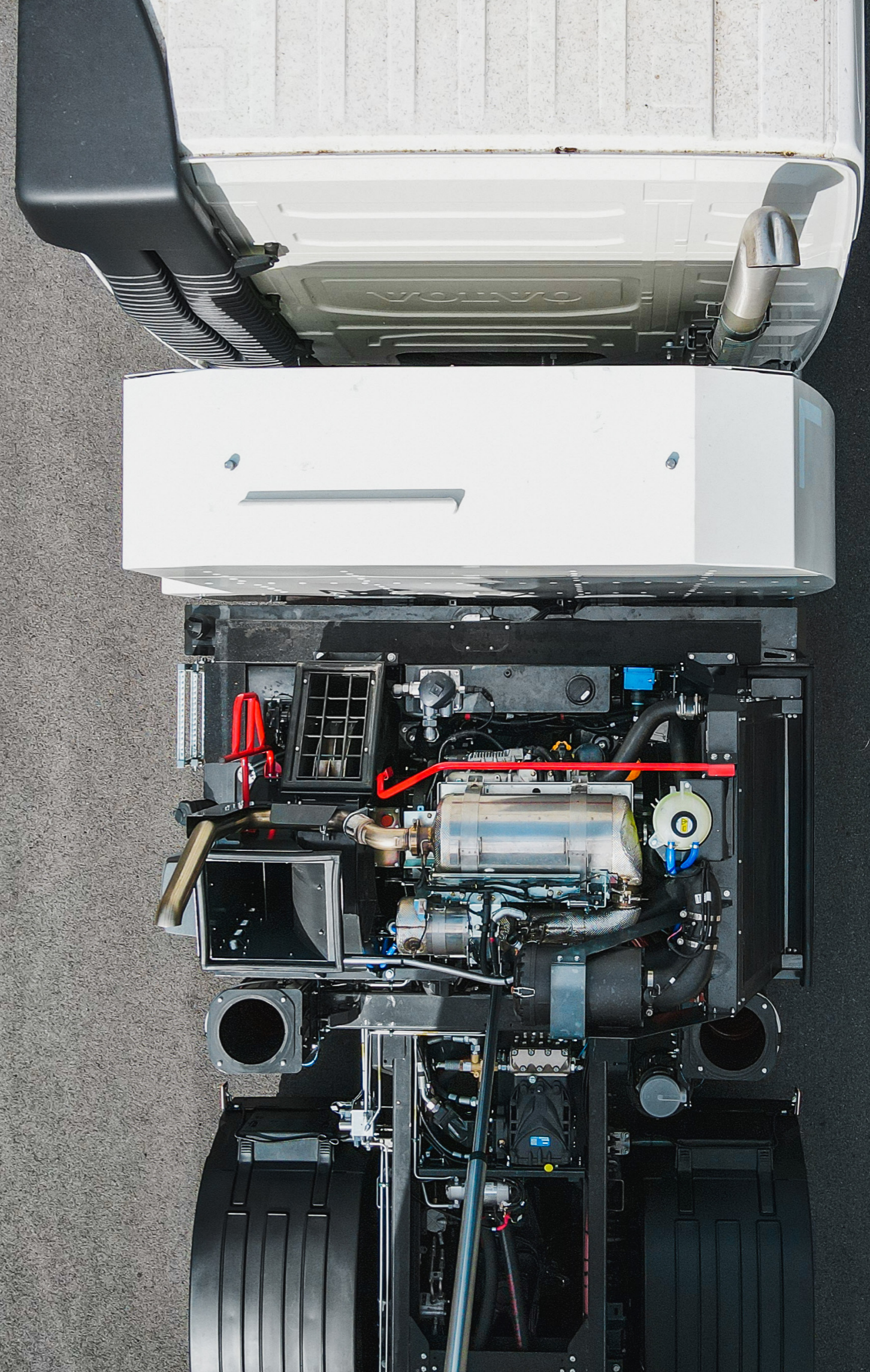
Reduced DPF regeneration – running the chassis engine at a higher load factor increases the time interval between chassis exhaust filter regeneration cycles.

The airflow and suction performance of the OMSI installed Vh sweeper is comparable with the equivalent high power twin engine machine making this the perfect solution for heavy duty sweeping operations.

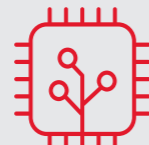
### Mekavac

A Mekavac drive option is also available for the MaxPowa V80. All sweeping functions are driven directly from the chassis engine PTO.

It has been designed to operate at maximum sweeper performance from just 850 chassis engine rpm. This helps to keep fuel consumption, noise and forward speed to a minimum.



500 hours between routine services on JCB engines



HVO compliant engines without modification or change in servicing requirements. Can also be mixed with any EN590 diesel.





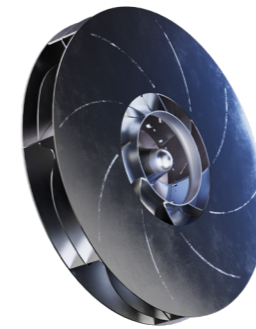
# High power

**Coolflow**  
Standard across the MaxPowa V80 and V120, the Coolflow system improves the efficiency of the cooling system. With enhanced airflow through the radiator and around the powapack, efficiency is enhanced aiding fuel economy.

**Smoothflow**  
All V series sweepers benefit from Smoothflow air technology further enhancing performance and efficiency. The patented design is designed to maximise air delivery and minimise losses in the machine improving suction performance at the nozzles, reducing fuel consumption and noise.

**Signature Design**  
A patented tri-plate fan design handles the enhanced power from the 129 kW engine for optimised airflow, which together with Coolflow and Smoothflow technology ensures outstanding suction performance.

The new Bucher 'Signature Design' applies to all models using the high performance Tri-Plate fan where heavy duty applications and specialised solutions demand the peak power performance offered. Our S Design sweepers provide high performance sweeping, cleaning and high pressure washing capabilities for heavy duty applications.



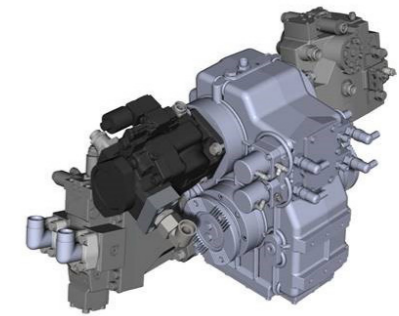
**Tri-Plate Fan**  
Dual intake eye Tri-plate fan for powerful performance.



**Signature Design**  
Designed for the industry's most demanding and specialist cleaning requirements.



**Coolflow**  
Latest design cooling system for V series sweepers providing maximum cooling efficiency.



**OMSI Gearbox**  
Suitable for chassis from ~250hp. Benefits from 'over-run' feature which allows the fan to speed up as the nozzle becomes full helping to avoid blockages.

## Technical data

	Fan Impellor	S Design	MaxPowa V80	MaxPowa V120
Vt - JCB 85 kW - Stage 3a	800 x 80 mm		x	
Vt - JCB 93 kW - Stage 3b / Tier 4	800 x 80 mm		x	x
Vt - JCB 97 kW - Stage 5	800 x 80 mm		Standard	x
Vt - Cummins 101 kW - China 4	800 x 80 mm		x	
Vt - JCB 129 kW - Stage 5	800 x 100 mm	<b>S Design</b>	x	Standard
Vh - OMSI 600	800 x 80 mm		x	x
Vh - OMSI 600	800 x 100 mm	<b>S Design</b>	x	x
Vm -Mekavac	800 x 80 mm		x	



Outstanding  
**performance** in  
demanding  
conditions





# High performance & efficiency

Maximising on-station time requires a balance of having enough water capacity to minimise refills, having enough hopper capacity to cope with large volumes of debris, and having a payload great enough to meet the demands of a workday. With either a 8m<sup>3</sup> or a maximum 12m<sup>3</sup> hopper both models offer a generous payload and high standard water capacity ensuring maximum on-station time.

The MaxPowa V series models have been designed to last and feature a 4 mm thick 1.4003 stainless steel hopper and 1.4301 integrated water tank. The powder paint process starts with shot blasting components prior to the application of zirconium based pre-treatment to create a clean and adhesive surface for a satin primer.

The resulting powder coat layer creates a highly effective barrier against corrosion increasing durability.

The MaxPowa V80 and V120 deliver great productivity with standard features and a wide range of options are available suited for public works, construction and heavy duty operational needs.



### Remote mesh lift

Allows the hopper meshes to be lowered and lifted into place remotely, without the need for the operator to stand in the dirty area.



### Rear mounted wanderhose

Heavy duty 200 mm dia hydraulically powered wanderhose, mounted to the rear door.



### Quad camera

Offside road view, providing additional vision for potential blind spots.



### Triple sweepgear worklights

LED worklights to illuminate the working area and kerb.



Large capacity hopper for optimised payload with optional 'Easyclean'

Large integral water tank for extended on-station time

Choice of powerful twin or single engine drive options

Coolflow cooling system for optimised efficiency

Smoothflow cowl for maximised pick-up performance

Wear plates direct material to aid correct loading and create cyclonic airflow within the body.

Wide nozzle and ducts for maximised suction performance

Modular design with common options

## Technical data

	MaxPowa V80	MaxPowa V120	
Hopper Capacity	8,0	12,0	m <sup>3</sup>
GVM	18	26	tonne
Minimum Wheelbase*	3200 - 3400	3900 - 4600	mm
Water Capacity	2300	5200	litres
Total possible Water Capacity	4000	6900	litres

\*nominal





**Rear suction nozzle option**  
Full width nozzles for high performance pick up ideally suited for deep cleaning and road construction.



**Rear nozzle operation**  
Touchscreen operation from the JVM with separate selection for low pressure water.



**Powawash option**  
High pressure water delivering 100 l/min @ 200 bar to a variety of spraybar options.



**Powawash keypad**  
Electronic water valves with in cab control for Powawash options.



**V-jet spraybar**  
16 High pressure v-jets to the rear nozzles as standard when rear suction and powawash are ordered together.



**1700 litre water tank**  
Large auxiliary stainless steel water tank with integral storage locker and high pressure hose reel and lance.



**Rotating jets**  
Optional rotating jets for high intensity cleaning in front of the rear nozzles.



**Storage locker**  
Optional storage locker added to the 1700 l water tank provides additional storage capacity when top mounted wanderhose options are not required.





**Broomvak sweepgear**  
For high speed pick-up. Also allows pick up at reduced fan power.



**200mm BroomVak side slide**  
Allows an additional 200mm side sliding of the nozzle and channel brush for extended swept width.



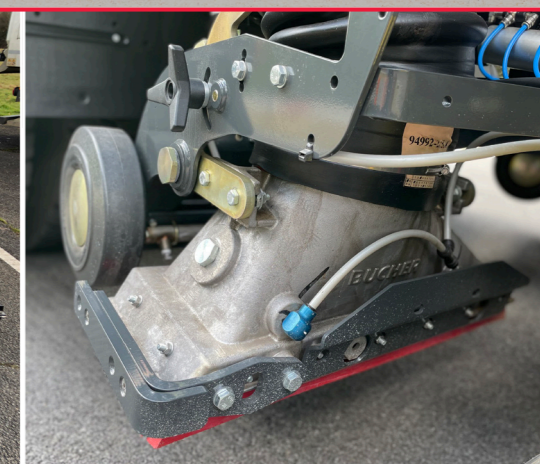
**Side slide brush**  
Optional brush behind the front wheel for increased swept width and effective weed removal without the use of chemicals.



**Disc coulters option**  
Provides the ability to cut back turf ingress on non-kerbed roads leaving a clean cut edge to verges.



**Front mounted magnet**  
Option for the collection and removal of ferrous material in airport and industrial cleansing applications.



**Heavy duty nozzle**  
For aggressive environments. Offers higher grade industrial wheels, bumper and nozzle brace.





# Low **environmental** impact

## Low noise

All our sweepers are equipped with a cowl featuring noise suppression which encapsulates the auxiliary engine and fan casing. Noise attenuation vanes are installed as standard in the air exhaust system, creating a safer operating environment for both the driver and pedestrians.

The engine can be set to lower revs for night sweeping which reduces the noise levels.

## High dust suppression

Debris is sucked in a direct route from the vacuum nozzle into the hopper, reducing wear and tear as well as maintenance. Once debris is in the hopper, the cyclonic airflow helps separate debris, and the clean air is released into the atmosphere.

## Low water usage

The MaxPowa V series uses yellow mist atomising jets as standard to reduce water usage by 20% or red nozzle jets, with higher flow are available for heavier applications. The optional Water Recirculation System can save up to 900 litres of water per day extending the on-station time and reducing the risk of dust carry over through the fan.

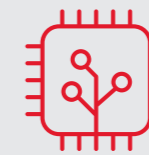
## Diesel free manufacturing process

At Bucher Municipal's truck-mounted factory in Dorking, our Integrated Management System certified to ISO 14001:2015 covers the Environmental management of our site and product range. In conjunction with our ISO 50001:2018 for Energy management we aim to prevent pollution, protect the environment and ensure energy

is used efficiently both in the manufacturing and use of our road sweepers. +++The production process is diesel free with all truck-mounted sweepers now being fuelled with HVO.



ISO 14001 certified



HVO compliant engines without modification or change in servicing requirements. Can also be mixed with any EN590 diesel.



Smoothflow air technology for reduced noise



Optional water recirculation





**Door Controller**

The door controller houses all sweep controls and allows integration of additional keypads for options such as Side Slide Brush. Usability is enhanced with a full LED halo surrounding each individual button which illuminates when active for ease of identification.

A heavy duty pause button allows the operator to lift all the sweepgear which allows the operator to change from sweeping to transit in a quick and easy way, and easily back again to sweeping. The MaxPowa V series remembers the last sweeping settings used each time.

**Automatic body prop**

A highly visible, self-engaging body prop provides the operator and service personnel with a safe working environment. As it is disengaged by the wireless pendant, there is no need for anyone to work under an unsecured body.

**Wireless Pendant**

The radio controlled wireless pendant allows the operator to walk completely around the sweeper without having wires to contend with. The operator can adjust the wide sweep brush easily and can check the surroundings before opening the hopper or tipping.

The engine bay access is via a wide folding ladder with three points of contact. Hand rails provide safer access to the engine bay area.

The MaxPowa V series is supplied with LED beacons as standard and a wide range of optional LED work + hazard lights are available to make sweeping safer and easier.

The high visibility brush plates makes it easier for the operator to see the brush position and alerts pedestrians, cyclists and other vehicles to the position of the brushes.

# Operator **Controls** & Safety

**JVM & Centre console**

The MaxPowa V series sweeper has been brought right up to date with a large 10" touch screen. With clear updated graphics ease of operation is guaranteed. Usability has been enhanced with clear and intuitive navigation, a shallow menu structure and accessible features.

The JVM has a wide range of settings that can be tailored to suit operational needs for efficient sweeping performance.

Provision has been made for up to six fully programmable buttons so the machine can activate your chosen sweep settings at the touch of a button.

Three optional Preference Plus packages are available for a range of additional settings to customise your sweepers functionality.

**Powa Pref+** Includes access to Boost mode where an additional power 'boost' may be required

**Protect Pref+** Protect your sweeper with preferences including pause or shut-off operations when needed.

**Eco Pref+** Save fuel & wear and tear with timers so your operator does not have to remember every time

The centre console can be adjusted to suit the drivers position and allows improved direct vision. With USB charging points and cup holders, the centre console also features a dedicated regulators for Powasave/thrust to easily add or reduce pressure to the channel brushes as needed.



**Door controller**

The ergonomic door controller can be used for all sweeping operations, brush position, pressure, speed, nozzle aperture, and water jet activation.



**Easiadjust nozzle**

Simple adjustment of the nozzle for reduced set up time.



**JVM screen**

10" display for sweeper information graphics and warning LEDs. Performance data with a host of preference settings to suit operational requirements.



**Wireless pendant**

Wireless pendant for hopper opening and tipping and wide sweep brush adjustments.