



# Sweeper Range

Worldwide



# About Johnston

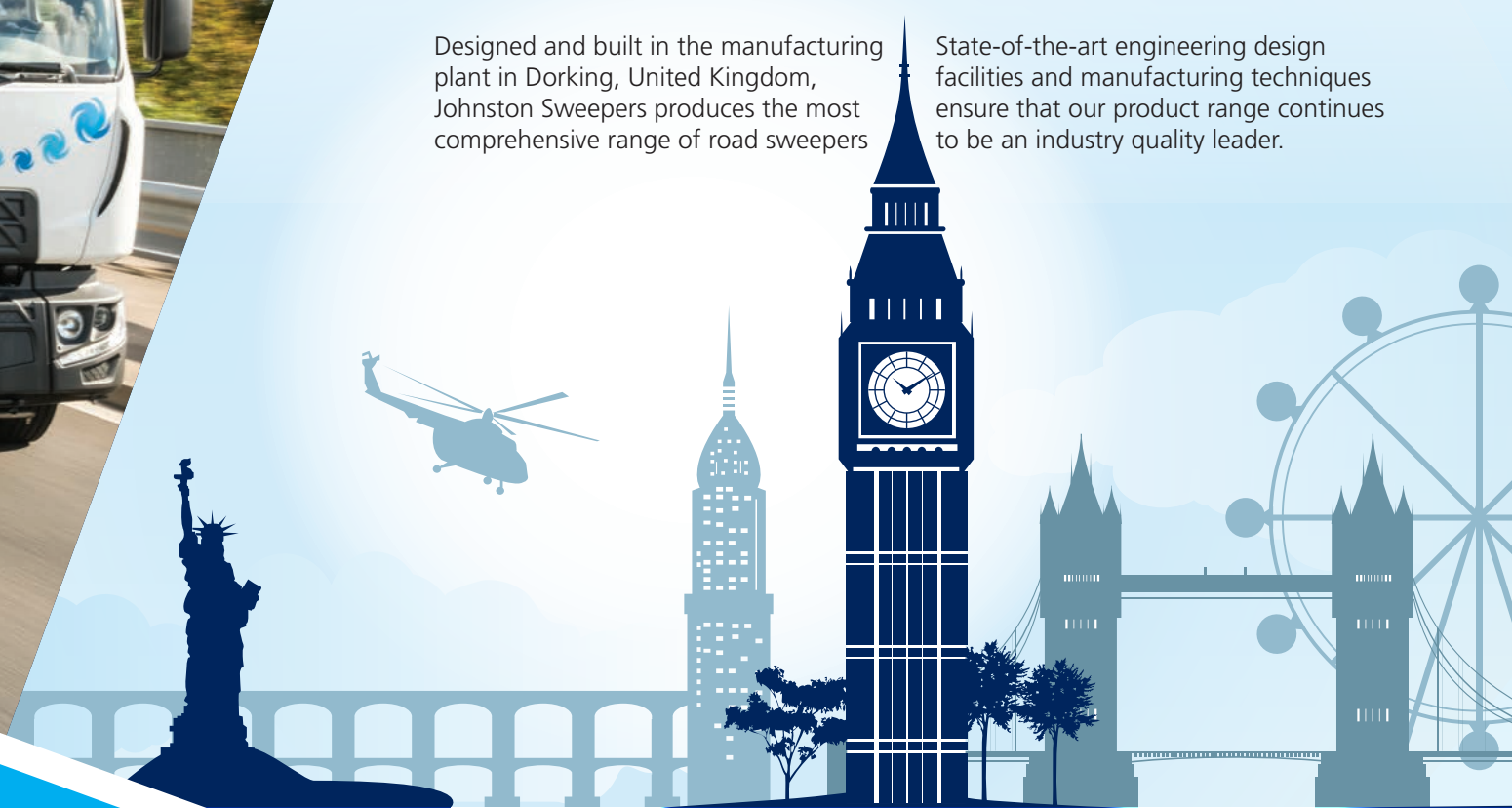
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Founded in 1904, Johnston Sweepers is one of the world leading manufacturers of outdoor surface cleansing equipment with machines operating in over 80 countries worldwide.

Designed and built in the manufacturing plant in Dorking, United Kingdom, Johnston Sweepers produces the most comprehensive range of road sweepers

and sweeping equipment for a diverse range of applications and the toughest cleansing challenges, designed for ease of use, outstanding performance and lowest cost of ownership.

State-of-the-art engineering design facilities and manufacturing techniques ensure that our product range continues to be an industry quality leader.



# Excellence & Accreditation

Johnston Sweeper is committed to producing equipment that incorporates all the very latest technological advances in performance, efficiency, running costs and impact on the environment, and which are highly regarded by our customers and the industry alike.

Reinforcing our commitment to ongoing excellence in quality, performance and sustainability, ISO accreditations to ISO 9001, ISO 14001, ISO 50001 and ISO

18001 put the company in a unique position within sweeper manufacturing by completing the full suite of internationally recognised standards.

Johnston's brand new world-class manufacturing plant in Surrey embodies our commitment to sustainable sweeper production in the UK, incorporating all the latest energy saving equipment, processes and technologies.



The C101, C201 and C401 are designed around three key objectives as required by our customers:

- High productivity
- Outstanding cost of ownership benefits
- Low environmental impact

C201



C101



C401



# C101

## Sub-compact sweeper

### The perfect solution when streets and budgets are tight

With all the performance of a large sweeper but in a compact one cubic metre single seat sweeper, the Johnston C101 is the sweeper of choice for busy shopping and pedestrian areas. In 4 wheel steer, it has a turning radius better than any machine in its class and is specifically designed for use in confined spaces with low ground pressure requirements.

# C201

## Compact sweeper

### Small and perfectly formed

The Johnston C201 compact sweeper is the latest evolution of Johnston's class leading compact design, developed for crowded city centres and narrow town streets. Ergonomically designed with powerful suction, 1.7ton payload and a four-wheel steer option with a class beating turning radius of 2010mm kerb-to-kerb, the C201 is ideal for cleansing in busy and crowded city environments.

# C401

## Mid-sized sweeper

### For power and manoeuvrability in demanding urban environments

Available at 10,500kg or 7,500kg GVM, the Johnston C401 mid-sized sweeper is an ideal sweeper for urban areas. Combining forward facing brushes for cleaning around parked vehicles and in hammer heads with truck mounted sweeper suction, the C401 benefits from the manoeuvrable dimensions of the compact range combined with the heavy-duty suction performance of a truck mounted sweeper.

Outline Specification	C101	C201	C401
Length	3792 mm	4270 mm	5500 mm (incl brushes)
Width	1050 mm	1315 mm	1800 mm
Height	1950 mm	1985 mm	2500 mm
Unladen Weight	1910 kg	up to 2800 kg (dependant on options)	5500 kg
Payload	600 kg (dependent on options)	up to 1700 kg (dependant on options)	5000 kg (standard machine) 4800 kg (high dump machine)
GVM	2400 kg	4000 kg, options 3500 kg & 4500 kg	10,500 kg (std/high dump machine)
Hopper Voided Volume	1.0 m <sup>3</sup>	1.8 m <sup>3</sup>	4.1m <sup>3</sup>
Maximum Transit Speed	25 km/h	50 km/h	50 km/h
Maximum Sweeping Speed	16 km/h	16 km/h	16 km/h
Optimum Swept Width	1800 mm	2300 mm	2650 mm
Maximum Reach	2200 mm	3120 mm	3430 mm
Gradeability	20% fully laden	30% fully laden	22% @ GVM 10,500 kg
Clean Water Tank Capacity	225 litres	152 litres (E6), 175 litres (3a & 3b)	825 litres
Recirculating Water System	100 litres	250 litres	-
Sweep Rate/Output	28,800 m <sup>2</sup> /hr (at 16km/h)	36,800 m <sup>2</sup> /hr (theoretical max)	42,400 m <sup>2</sup> /hr (theoretical max)
Engine	Stage 3a: Deutz D2011 L03i	Stage 3a: VM 58kW / Stage 3b: VM 55kW / Euro 6: VM 62kW	Euro6: FPT (Iveco) NEF 46 ENT VI Common rail direct injection turbocharged diesel
Kerb-to-kerb Turning Radius	<b>2WS</b> 3000 mm	2510 mm	-
Kerb-to-kerb Turning Radius	<b>4WS</b> 1950 mm	2010 mm	2950 mm
Number of Seats	1	2	2 standard, 3 optional



# The Johnston V Range

## Extraordinary results from our popular machines

Developed from over 50 years of evolution and continuous improvement to meet customer requirements, the Johnston V Range has established itself as Johnston's most reliable and dependable truck mounted sweeper, designed to meet the requirements of the most demanding municipal and contractor applications.

Outline Specification	VT501 / VS501 / VM501	VT651 / VS651 / VM651	VT801 / VS801 / VM801
<b>Payload capacity</b>	up to 4.5 tonnes nominal (depending on chassis selection)	up to 6.5 tonnes nominal (depending on chassis selection)	up to 7 tonnes nominal (depending on chassis selection)
<b>Clean water tank capacity</b>	1342 litres	1554 litres (Opt. 2000 litres)	2005 litres
<b>Additional water capacity recirculation option</b>	N/A	750 litres (approx.)	750 litres (approx.)
<b>Hopper Void</b>	5.1 m <sup>3</sup> nominal	6.5 m <sup>3</sup> nominal	8m <sup>3</sup> nominal
<b>Swept width:</b>	3400 mm (max)	3600 mm (max)	3600 mm (max)
<b>Chassis GVM</b>	9.5-12 tonnes	13-18 tonnes	15-18 tonnes
<b>Auxiliary fuel tank</b>	up to 190 litres	up to 190 litres	up to 190 litres

## Cost of Ownership

Johnston's V Range sweepers operate at the lowest costs, with a large 190 litre auxiliary fuel tank giving increased on-station time and both the chassis and auxiliary engines using a total of 6 l/hr at low rpm. Maintenance costs are significantly reduced on the Johnston gearbox and fluid coupling, as no belts or high wearing components are required. As suction sweeping requires fewer component parts, this results in less wear and tear and reduced maintenance costs.

Manufactured from 1.4003 stainless steel, the V Range hopper is designed for the toughest environments, shot blasted with aluminium oxide prior to the application of a high quality primer and a hard wearing top coat. In addition, all grey parts are shot blasted and electro-statically painted in a durable two part epoxy paint finish, ensuring the sweeper continues to look as good as it performs, retaining a high residual value or longer in-service life.

## Environmental Impact

Manufactured in a factory accredited to ISO 14001 for sustainability, Johnston is committed to providing the most environmentally sustainable equipment on the market for collecting debris and litter.

- Low fuel consumption with 4 litres per hour at 1200 rpm, a key attribute in reducing carbon footprints and CO<sub>2</sub> emissions (auxiliary engine, with mechanical drive systems running at maximum efficiency)
- Suppression of dust emission system achieves EUnited PM10 standards in Europe and SCAQMD Rule 1186 in the USA
- Water recirculation saves 900 litres of water per day over an 8 hour shift
- Equipped with noise suppression hoods, noise at the driver's ear is less than 75 dB(A) at maximum revs (chassis dependant), creating a safer operating environment for driver and pedestrians
- Robustly constructed from quality materials and designed to provide years of continuous performance and reliable service
- At end of life, the V Range sweeper is almost 100% recyclable

## Environmentally Friendly

Johnston's V Range provides low emissions, operating at low fuel consumption with both the chassis and auxiliary engines using a total of 6 l/hr at low rpm.



## The VT Range

The twin engine sweeper offers the best performance and flexibility for a truck mounted sweeper. Being independent of the truck chassis, the sweeper auxiliary engine powers the sweeping functions and vacuum system so both engine and chassis can be tailored to the application and customer preferences.

A wide range of chassis can be supplied with either manual, automatic or automated gearboxes providing a wide range of options to suit the operator. The auxiliary engines come in 55kW or 93kW to tier 4 final/stage3b standards or 85kW to stage 3a standard.

Once set to an operating performance, the twin engine sweeper system will perform at the same level regardless of gradient and travel speed. The sweeping operation can be paused or stopped easily and sweep gear lifted to allow the driver to transit from one location to another without having to disengage a separate drive.

The VT is supplied with its own fuel tank allowing tax free diesel to be used where applicable or/and carry additional fuel for longer on station time. In light duty applications both engines work at low revs, reducing fuel costs and reducing wear and tear on components.

Based on residual re-sale values, the use of tax free fuel when used and maintenance, the twin engine offers the lowest operating costs of truck mounted sweeper with up to 20% lower running costs.

The twin engine can be used in built up areas in conjunction with an automatic transmission for the best balance of control and functionality and where performance is most important in applications such as road construction.

## The VS Range

A Single engine hydrostatic sweeper provides the best control during the sweeping operation and allows the driver to have infinite travel speed from 0 to 40km/h. With the cruise control option the operator can set the ideal sweep speed and concentrate on sweeping.

The chassis is driven via the standard truck gearbox in transit mode and when the sweeper is required to sweep, the operator engages the hydrostatic drive system. Maintenance is only required on one engine but the single engine is working at high load more often.

Once in Hydrostatic drive the sweeper will have a transit speed of up to 40km/h allowing the operator to relocate without having to disengage the hydrostatic drive. To change from hydrostatic to standard drive, the operator has to stop the sweeping operation, come to a complete halt and apply the handbrake.

The Johnston HGB2 gearbox can handle high torque transmissions with engines up to 280hp. Operators wishing to use high power engines can sweep efficiently without overloading the gearbox.

The single engine sweeper uses the fuel tank from the chassis or the Johnston 190 litre fuel tank, allowing longer on station time.

The Hydrostatic drive system is lighter than the equivalent twin engine sweeper, allowing more payload. On a 12 ton chassis the payload on a VS501 will be approx. 300kg more than VT equivalent.

The Hydrostatic is ideal for built up areas such as towns and cities where sweeping speed and control are an advantage.



## The VM Range

The Mekavac sweeper range is a single engine sweeper with an engine chassis PTO (power take off) installed to drive the sweeper equipment.

The VM range offers the most economical sweeper capital cost and lowest fuel consumption of the drive systems available. Due to the PTO torque required, the VM is limited to a selection of chassis brands which may make the chassis more expensive to purchase over the twin engine or hydrostatic drive system.

As with the VS sweeper, the VM range transits from job to job using the standard chassis transmission and when required to sweep, the PTO system is engaged. The chassis revs are set between 1000 rpm to a maximum 1500 rpm to drive the sweeper fan, brush gear and water systems as well as the chassis speed.

The chassis can transit in the PTO drive but as the engine is limited to 1000 to 1500 rpm restricting the travel speed relative to the engine power. Typically a speed of 40 km/h is achievable.

The single engine sweeper uses the fuel tank from the chassis or the Johnston 190 litre fuel tank allowing longer on station time.

The un-laden weight of the VM sweeper is lowest providing a greater payload over VT and VS sweepers, the chassis however is generally heavier. Based on the same chassis the VM will allow approx. 500kg more than a twin engine and 200kg more than a hydrostatic sweeper.

The VM sweeper is most suited to municipal applications and contractor work where constant road speeds are achievable.

## Reliable Performance

Robustly constructed from quality materials and designed to provide years of continuous performance and reliable service.





# Johnston Plus

The Johnston Plus initiative provides a comprehensive range of best-in-class support functions, expert advice from Parts Centre and specialist technicians, throughout the working life of your sweeper.

## Parts – Providing 24/7 easy ordering and rapid delivery.

We only supply quality genuine parts in order to maintain peak performance and guarantee 'right fit, first time'. Our industry-leading parts supply system is designed for easy ordering and rapid delivery, and is supported with a no-hassle returns policy.

- ⊕ **E-Shop** – our interactive order management system enables easy online ordering, 24/7. Check spare parts availability and place orders for next day delivery to significantly minimise downtime. Also take advantage of the special offers on selected parts.
- ⊕ **Expert Parts Advisors** – our experts are on hand to assist and ensure that the correct part is ordered.
- ⊕ **Same-Day Order Despatch** – our £7 million stock holding, with fully barcoded inventory management system, enables all orders received before 3pm (export) to be despatched the same day.
- ⊕ **12-Month Warranty** – all genuine parts supplied by Johnston Sweepers automatically carry a 12-month manufacturer's warranty.
- ⊕ **One-Stop-Shop** – all of your parts needs in one convenient location.

## Warranty – Providing a range of warranty options for peace of mind.

Standard warranty is included on all new sweepers, but for increased peace of mind, we offer a range of enhanced warranty options. All options are designed to reduce expenditure and inconvenience, and safeguard against component failure costs.

Warranty Type	Cover
Standard Warranty	12 months or 2,000 hours (whichever is sooner)
Silver Warranty	24 months or 4,000 hours (whichever is sooner)
Gold Warranty	36 months or 6,000 hours (whichever is sooner)

## Technical – Enabling immediate access to our team of technical experts.

Our factory-based team of technical experts are on-hand to offer support via the Johnston website, email, telephone or directly at your site. Our experts are fully-trained to provide detailed and knowledgeable technical support on all sweeper models, along with advice on legislation compliance affecting sweepers.



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