Efficiency

The Merlin-XP is probably the most effective road sweeper available in the 7.5/8.0 tonne GHW range that is favoured by so many municipal and urban operators. With payload performance at a premium in this class, our Hydrostatic or Unidrive systems deliver a significant advantage over any auxiliary-engine powered sweeper on the same chassis and with room for a 900 litre water tank, the XP has exceptional on-task endurance.

Other extreme weight-saving measures are also unnecessary allowing the XP to share sweeping components with other models in the Scarab range.

Trailed widesweep brush is adjustment-free and designed to ensure parallel usage.

Trailed, robust steel suction nozzle for durability. Adjustable dust-supression jets.

Short suction hoses are an easy and low-cost replacement and are simple to clean.

Trailed channel brush mechanism with adjustable brush-pressure control option.

Simultaneous Dual Sweep and High-pressure Street Wash option.
A centrifugal impellor positioned to produce an efficient airflow path for high suction performance and reduced power consumption. Fan chamber is easily accessed for cleaning.

Particulate screening via a hinged, mesh filter, pleated to give maximum surface area and reduce blocking - swings down for ease of cleaning.

Discharge chute and three-point rear door clamping system, to ensure effective sealing. The hopper is completely manufactured from abrasion resisting stainless steel. The hydraulic system extensively incorporates steel piping to minimise use of flexible hoses.

**POWER & CONTROL**

**SIMPLE & RELIABLE**

**Single-engine Transmissions**

Scarab can justifiably claim to be the champion behind the modern-day success of the truck-mounted sweeper powered from a Single Engine

Operating the whole machine from the engine of the truck chassis provides many advantages, for example:

- Reduced fuel consumption
- Greater payload and weight distribution
- Reduced noise and engine emissions
- Less maintenance and downtime

**Scarab offers two solutions with these benefits**

**Hydrostatic**

A Scarab designed hydrostatic gearbox is installed in the chassis driveline to exactly suit any customers’ chassis and application. Hydrostatic drive, plus a simple joystick control for Forward and Reverse, allows single-pedal control reducing fatigue and enabling the driver to fully concentrate on sweeping.

**Unidrive**

The sweeping equipment is powered from a Power Take Off (PTO) fitted to the truck engine. The Merlin control system manages engine speed to ensure optimum sweeping performance. The sweeper is usually operated in a low gear for slow speed. An optional reduction gearbox is available where necessary.

**Powerful & Reliable Suction Performance**

**Command & Control**

Scarab’s CANbus control system has revolutionised the way sweepers are operated and maintained. Intuitive controls and a conveniently positioned colour monitor provide comprehensive levels of feedback to both operating and service personnel. A graphical display indicates the sweeping configuration and conditions of the vehicle systems including warnings and regular service reminders. Real-time monitoring and data-logging provides valuable assistance in resolving problems and achieving optimum machine performance. Scarab CANbus includes universal connectors for fitment of Global positioning System (GPS). The option of real-time data availability via telematic up-link.
The STANDARD
MERLIN-XP FEATURES

Customer-focused Support
We believe that first class product support is vital and our reputation for excellence in this field is no accident. Our commitment to the customer shines through at every level:
- International Distributor Network
- Fast-track Spare Parts Service
- Long-term Supply Guarantee
- Technical Training Courses
- Product Support Packages
- On-line Support Manuals
- Full Operator Instruction

WEIGHTS & DIMENSIONS
The Merlin-XP can be fitted to chassis in the 7.5 / 8.0 tonne category including those from DAF, Iveco and Mercedes. For details of these and other suitable chassis specifications, please contact our sales department

TYPICAL PAYLOAD POTENTIAL
HYDROSTATIC...........................................................................................................IVECO ML75 - 2325 kg / DAF LF45 - 2218 kg
UNIDRIVE................................................................................................................IVECO ML75 - 2400 kg / DAF LF45 - 2293 kg

TYPICAL DIMENSIONAL DATA ▲
LENGTH OVERALL ..................................................................................................5640 mm
WHEELBASE ........................................................................................................3150 mm
WIDTH OVERALL .................................................................................................2220 mm
OVERALL HEIGHT - HOPPER LOWERED/HOPPER RAISED ........................................2970/4090 mm

CAPACITIES
HOPPER VOLUME ......................................................... Gross 5.5 m³ - Nett (Payload) 4.7 m³
WATER TANK ▲ ........................................................................................................900 litres

SWEEPING WIDTHS

SINGLE SWEEP
A Suction Nozzle Only .................................................................................. 740 mm
B Nozzle & Side Brush ................................................................................. 1060 mm
C Nozzle, Side Brush & Widesweep ........................................................... 2000 mm
D Simultaneous Dual Sweep ....................................................................... 2850 mm

The ENHANCEMENTS
UPGRADE YOUR SPECIFICATION

WATER
High-pressure / High Volume Pump with hand lance and self-retracting hose reel.
Additional Dust Suppression for Suction Nozzles (A 4-jet water-boost bar in front of the nozzle).
Additional Dust Suppression for Suction Tubes (Four additional jets at the top of the suction tube).
Detergent Injection Kit for use with the Hand Lance on difficult cleaning operations.
Hydrant Standpipe, Key and 3 metres of 50 mm lay-flat hose for on-task replenishment of water.
Simultaneous Wash & Sweep Facility

BRUSHES
Dual Sweep (A second Channel Brush on opposite side of the sweeper + Swivelling Widesweep)
Simultaneous Dual Sweep (Both channel brushes and widesweep operate together)

MISCELLANEOUS
Reduction Gearbox in driveline for Unidrive variants
CCTV Camera to offside brush and/or rear of vehicle
Centralised Lubrication System (either manual or automatic)
Alternative or additional beacons (e.g. Xenon)
Fire Extinguisher

OTHER OPTIONS & OPERATOR SPECIFIC REQUIREMENTS ARE AVAILABLE UPON REQUEST
Data and Performance Information

<table>
<thead>
<tr>
<th>Engine Option Euro 6</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model</strong></td>
<td>Tare - std machine</td>
</tr>
<tr>
<td>FPT (Iveco) NEF 46 ENT VI Common rail direct injection turbocharged diesel</td>
<td>GVM - std machine</td>
</tr>
<tr>
<td><strong>Cubic capacity</strong></td>
<td>Payload - std machine</td>
</tr>
<tr>
<td>4.5 litres</td>
<td>Tare - high dump</td>
</tr>
<tr>
<td><strong>No. of cylinders</strong></td>
<td>GVM - high dump</td>
</tr>
<tr>
<td>4</td>
<td>Payload - high dump</td>
</tr>
<tr>
<td><strong>Gross rated power</strong></td>
<td>Hopper discharge angle</td>
</tr>
<tr>
<td>118 kW (158 bhp) @ 2500 rev./min.</td>
<td>Maximum speed</td>
</tr>
<tr>
<td><strong>Maximum torque</strong></td>
<td>Sweeping speed</td>
</tr>
<tr>
<td>580 Nm (428 lb.ft.) @ 1250-1940 rev./min.</td>
<td>Gradeability</td>
</tr>
<tr>
<td><strong>Legislation compliance</strong></td>
<td>Sweeping operational rpm</td>
</tr>
<tr>
<td>Regulation (EC) No 595/2009 and Regulation (EU) No 582/2011, as last amended by (EU) No: 64/2012</td>
<td>Transit operational rpm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Sweeping Equipment</strong></th>
<th><strong>Capacities</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Brush diameter</td>
<td>Hopper envelope volume</td>
</tr>
<tr>
<td>1000 mm</td>
<td>Hopper voided volume</td>
</tr>
<tr>
<td>Brush speed</td>
<td>Payload capacity</td>
</tr>
<tr>
<td>Variable up to 125 rev./min.</td>
<td>Fuel tank</td>
</tr>
<tr>
<td>Nozzle width</td>
<td>AdBlue tank</td>
</tr>
<tr>
<td>850 mm</td>
<td>Lost water tank</td>
</tr>
<tr>
<td>Sweep rate/output</td>
<td></td>
</tr>
<tr>
<td>42,400 m²/h (theoretical)</td>
<td></td>
</tr>
<tr>
<td>Hopper discharge height</td>
<td></td>
</tr>
<tr>
<td>940 mm</td>
<td></td>
</tr>
<tr>
<td>Hopper discharge height</td>
<td></td>
</tr>
<tr>
<td>High dump up to 1550 mm</td>
<td></td>
</tr>
</tbody>
</table>
Technical Specification

Transmission:
Full hydrostatic transmission with closed loop circuit and variable angle swash plate axial piston pump and motor. Maximum transit speed up to 80 km/h (50 mph) and maximum sweeping speed of 16 km/h (10 mph).

Engine Control:
Innovative Johnston transmission control system providing full automotive drive in transit mode, forward / reverse selection with workmode speed feature for sweeping applications complete with torque management system optimised for fuel consumption.

Electrics:
24 volt system with 90 amp alternator.

Suspension:
Front: Linkage system comprising V link and two reaction rods, plus axially mounted coil springs and bump stop with shock absorbers.
Rear: Two multi leaf springs with shock absorbers.

Steering:
4WS standard in workmode.
Turning radius 2950 mm kerb to kerb.

Tyre Size:
Front: 265/70 R19.5 Radial ply tyres.
Rear: 265/70 R19.5 Radial ply tyres.

Brakes:
Power assisted hydraulic disc brakes with a front-rear split coupled with a rear axle load apportioning valve.
Front: Twin four piston disc brakes fitted to each wheel.
Rear: Single four piston disc brakes fitted to each wheel.
Parking: Transmission disc brake on the drive motor shaft is operated by cab mounted handbrake.

Noise:
In cab: Noise between 70-74 dB(A), depending on operating conditions.
External: Maximum LWA of 109 dB(A) measured in accordance with directive 2000/14/EC, maximum LWA of 106 dB(A) measured in accordance with Directive 2000/14/EC with Optional Quiet Pack fitted.

Impeller:
High pressure centrifugal ø900 mm fan unit mounted to hopper roof provides powerful suction means for the pickup nozzle and duct conveying system. Driven by hydraulic motor with integral heavy duty support bearing. Dynamically balanced multivane low noise fan impeller with wear resistant blades.

Hopper:
All 1.4003 stainless steel welded construction combining the suction fan impeller, patented low noise exhaust air évasé, filter meshes and debris collection hopper

Nozzle:
The nozzle has an adjustable leaf flap as standard and slewed toward the side of sweeping.

Cab:
Heater: Recirculating air type with face and floor level vents with fresh air intake option.
Visibility: Fully glazed with tinted safety glass. Heated laminated windshield. Twin pantograph two speed electric windshield wipers with intermittent wipe and electric screen washer.
Seating: Fully adjustable air suspension cloth covered driver’s seat with adjustable back support and passenger seat with 3 point seat belts.
Controls: Ergonomically placed switches, clustered according to function. Adjustable arm rest incorporating sweeping controls. Overhead console incorporating lighting switches, radio/MP3 player & 7” full colour JVM screen.

Standard Machine Features:
Full diagnostic and driver alert system.
Key performance data capture, downloadable to USB.

Options:
Air conditioning - R134a refrigerant.
3rd seat - centre folding.
Automatic lubrication system.
Integrated reverse camera system.
High dump 1.55m discharge height - load discharge into skips etc.
Hydrant kit c/w hose, standpipe & key (UK).
Rear arrow sign board 600 mm diameter.
Spare wheel.
Supawash: High pressure washing system (28 litres @ 100 bar) c/w hand lance, reel, 10m hose.
Third brush unit - demountable, 4 Axis, dual rotation brush.
Rotatilt Side Brush Option.
Wanderhose: roof mounted with 4.5 metre, 270º working radius or Littasnatch: side mounted flexible duct for litter collection.
Water Recirculation.
Electronic battery isolator.

Full list of options available on price list.
Extraordinary results from our popular machines

The V Range has established itself as Johnston’s most reliable and dependable truck mounted sweeper. The Latest V Range sweepers have been developed from over 50 years of evolution and continuous improvement to meet customer requirements.

With sweepers tailored to operate in many specific environments, Johnston offers a wide choice of products and options, which ensures maximum performance is always achieved.
Operational Performance

The V Range is designed to fit a wide range of chassis models to suit specific operational requirements, confident that the Johnston V Range sweeper will provide the power and performance to complete the task.

- In-cab controls are ergonomically positioned to provide safe and easy operation whilst sweeping.
- The CANbus system monitors sweeper performance and provides daily checks. The display incorporates as standard an audible and visual raised hopper warning, fuel gauge, engine hour meter, tachometer and a water level gauge. In addition, operators can set their own user preference for ease of operation and download data via a USB, showing a range of information from fuel consumption to average sweeping times.
- Throttle control of the auxiliary engine is infinitely variable ensuring optimum operational and fuel efficiency without compromising performance. With a 1500 rev Eco-mode built into the V Range, fuel conservation is enhanced and noise levels are reduced.
- A full CANbus integrated door mounted control pad allows the operator to safely adjust all the sweep options.
- Pendant controls connected via a flexible cable allows the operator to safely tip the body and open the rear door from either side of the cab, at the same time maintaining a clear view of the tipping area.
- To extend brush life, the wide-sweep brush can also be adjusted using the pendant control.
- As standard, all Johnston V Range sweepers are fitted with a body prop which automatically engages when the hopper is raised, and has a choice of four tipping heights.
- The auxiliary engine and hydrostatic drive pumps are accessed via a wide lightweight service ladder giving constant three-points of contact for the user.
- All V Range models have equipment lockers on both sides of the hopper for storage of hydrant or Wanderhose extension tubes.
- All critical controls – including valves, solenoids and auxiliary equipment for pneumatic, hydraulic and water systems are contained in a purpose built locker on the right hand side of the vehicle. The ease of access to this equipment aids diagnostic checks and maintenance. Additionally, the V Range is also fitted with waterproof IP67 automotive electrical connectors for enhanced reliability.
- As standard, the V Range sweeper features a Pressadrain water purging system so that when freezing weather conditions are anticipated, water is easily and conveniently drained by operating a simple in-cab switch.
- Water jets in the nozzle boxes are self-cleaning which extends the life of the components.
Productivity

The V Range provides the ideal balance between performance, environmental impact and low cost of ownership, with applications to suit a full range of sweeping environments - benefits that make the Johnston V Range the sweeper of choice worldwide.

Two drive options (VT and VS) provide outstanding vacuum performance. On the VT Range, JCB auxiliary engines combined with the Johnston mechanical step-up gear box and fluid coupling, and the Johnston hydrostatic gear box drive on the VS model, provide the best efficiency ratios in the industry.

The versatile VT Range powerpack with a range of 1200 rpm – 2000 rpm, can operate efficiently in municipal environments at a lower rpm, or for one pass heavy duty resurfacing operations, the engine provides full power to ensure a clean path is all that is left behind.

There are a choice of three sweeping configurations, left hand or right hand sweeping which provides a swept width of up to 2400 mm, and simultaneous sweeping which gives a swept width of up to 3600 mm.

A stainless steel water tank is integrated into the floor of the hopper body, which provides ideal weight distribution between axles, and weight transfer during sweeping. For increased productivity, an optional water recirculation system can be installed on the V651 and V801, which can double on-station time before water refilling with the added advantage of reducing dust emissions.

Dust and debris are collected by pneumatically operated vacuum nozzles and wide diameter 250 mm nozzle trunking, maximising velocity and allowing larger debris to pass easily into the hopper.

Debris is sucked in a direct route from the vacuum nozzle into the hopper, reducing wear and tear as well as maintenance. Once in the hopper, the Johnston cyclonic airflow helps separate the debris, and clean air is then released into the atmosphere.
Johnston VT/VS Range comes with a choice of hopper options:

- The V501 truck mounted sweeper has a 5.1 m³ hopper volume and 1342 litres capacity water tank. The Johnston V501 is fitted to a shorter wheelbase chassis, but still has the same power train and many of the options as the V651. With a lighter body the V501 retains a 4,500 kg payload on a GVW 12T chassis.

- The popular Johnston V651 has a hopper volume of 6.5 m³ water tank capacity of 1544 litres. The V651 is compatible with GVW 13-18T chassis.

- A Johnston V801 truck mounted sweeper comes with a high powered engine as standard and a hopper volume of 8m³. The water tank capacity is increased to 2005 litres and is well matched to a GVW 15-18T chassis.

All Johnston V Range models are built with an angled hopper floor, enabling a total discharge angle of 53-56º (model dependent) to aid load discharge.
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 all types of debris and litter.

Low fuel consumption is a key attribute in reducing carbon footprint and CO$_2$ emissions. With the mechanical drive systems running at maximum efficiency, the fuel consumption of the auxiliary engine is the lowest in its class with 4 litres per hour at 1200 rpm.

The VT Range is now fitted with auxiliary engines supplied by JCB, whose engines meet the highest standards for emissions and environmental impact.

The Johnston system for suppression of dust emissions easily achieves EUnited PM10 standards in Europe and SCAQMD Rule 1186 in the USA.

Water recirculation not only provides extended sweeping shifts but can also save 900 litres of water per day over an 8 hour shift.

The V Range sweepers are equipped with noise suppression hoods, encapsulating the auxiliary engine and fan casing. Noise at the driver's ear is less than 75 dB(A) at maximum revs (chassis dependant), creating a safer operating environment for both driver and pedestrians. The fully variable engine can be set to lower revs for night sweeping which reduces noise levels by 50%.

The Johnston V Range is robustly constructed from quality materials and designed to provide years of continuous performance and reliable service. End of life disposal is enhanced by the V Range sweeper being almost 100% recyclable.
Hydrostatic Drive

The V Range hydrostatic sweeper model is powered by Johnston’s hydrostatic drive system. The gearbox is powered by the main truck chassis engine and enables infinitely variable forward speed control. Designed by Johnston specifically for road sweeping, the hydro-drive allows for automatic work mode when the nozzle is deployed, cruise control and travel speeds up to 40 kph in hydrostatic drive, reducing the need to de-select hydrostatic drive when travelling short distances.

Cost of Ownership

V Range sweepers operate at the lowest costs, with a large 190 litre auxiliary fuel tank giving increased on-station time. In addition, maintenance costs are significantly reduced on the Johnston gearbox and fluid coupling, as no belts or high wearing components are required.

Johnston’s VT Range provides the lowest emissions and running costs. The VT and VS models operate at low fuel consumption with both the chassis and auxiliary engines using a total of 6 l/hr at low rpm. In addition, suction sweeping requires fewer component parts, thus resulting in less wear and tear and reducing maintenance costs.

Designed to last in the toughest environments, the V Range hopper is manufactured from 4003 stainless steel, shot blasted with aluminium oxide prior to the application of a high quality primer followed by a hard wearing top coat. In addition, all grey parts such as the sweepgear, powerpack and subframe are shot blasted and electro-magnetically powder painted in a durable two part epoxy paint finish. This ensures the sweeper continues to look as good as it performs, retaining a high residual value or longer in-service life.
### Outline Specification V Range

<table>
<thead>
<tr>
<th>Model</th>
<th>Payload capacity</th>
<th>Clean water tank capacity</th>
<th>Hopper void</th>
<th>Swept width</th>
<th>Chassis GVM</th>
<th>Auxiliary fuel tank</th>
</tr>
</thead>
<tbody>
<tr>
<td>VT501 / VS501</td>
<td>up to 3-4.5 tonnes nominal</td>
<td>1342 litres</td>
<td>5.1 m³ nominal</td>
<td>3400 mm (Max)</td>
<td>9.5-12 tonnes</td>
<td>190 litres</td>
</tr>
<tr>
<td>VT651 / VS651</td>
<td>up to 6 tonnes nominal</td>
<td>1544 litres (Opt. 2000 litres)</td>
<td>6.5 m³ nominal</td>
<td>3600 mm (Max)</td>
<td>13-18 tonnes</td>
<td>190 litres</td>
</tr>
<tr>
<td>VT801 / VS801</td>
<td>up to 7 tonnes nominal</td>
<td>2005 litres</td>
<td>8 m³ nominal</td>
<td>3600 mm (Max)</td>
<td>15-18 tonnes</td>
<td>190 litres</td>
</tr>
</tbody>
</table>

**VT Range Powerpack**

1. Engine
2. Exhaust fan impeller
3. Step-up gearbox
4. Fluid flywheel coupling
5. Gear driven hydraulic pump

**Water Recirculation System**

**VS Range Hydro-drive**
Johnston provides a comprehensive choice of options all designed to maximise versatility and performance:

- **Supawash** – a high pressure water jet, enables the operator to clean street furniture and pavements using either a fan or pencil jet spray. The lance and hose stows away neatly when not in use. In addition, high pressure water jets on a spray bar are positioned on the front of the cab, and others placed behind the nozzle boxes to provide deep cleansing when sweeping.

- An optional Wanderhose mounted on the top of the hopper can be fitted to allow the emptying of drains along the sweeping route. If “Powaboom” is selected, controls are fitted to make movement and operation of the boom convenient, whilst the top-mounted position provides greater access to both sides of the sweeper and also shields the driver from oncoming traffic.

- **Combivac Nozzles** – for faster sweeping with an additional brush at the rear of the vacuum nozzle.

- Rear mounted Littasnatch, with a 5.5 m long lightweight suction tube for collection of debris on pavements and areas out of reach of the sweeper brushes.

- **Rotatilt** – controlled from inside the cab, this option allows the channel brush to tilt and sweep in cambered kerbs and gutters.

- **Weed Ripping Brush** – a heavy duty brush with thick metal tines that effectively clears vegetation that has become established in gutters.
Due to continuous product development Johnston Sweepers reserves the right to alter specifications without prior notice.

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www.johnstonsweepers.com
1998 - From Humble Beginnings
Stock Sweepers was founded in 1998. Our family business was created to recondition and remount used road sweeping equipment onto new chassis, specifically for our own operated hire fleet. Word about our work spread fast, and quickly the business grew into the UK’s premier company for remounting truck mounted sweepers.

2009 - Into a New Era
10 long years of dismantling and rebuilding worn sweeping equipment taught us many things about road sweepers. We learnt that there were common weaknesses found on many of the existing machines available on the market. We believed that one day we could overcome these weaknesses, and that we could build a better, longer-lasting machine with a much greater life span than the existing manufacturers.

In 2009, we launched two new robust sweepers: the S6400 and S8400. Utilising the latest British road sweeping technologies available to us, and remaining focused on maximum life span, we used top quality components to make sure our machines were designed to last up to 20 years with regular care and sensible maintenance.

Today
Our sweepers are now available in many different countries in North America, Asia, Australia, and Europe. We remain true to our vision, which is building quality machines that have the longest working life achievable and minimum down time for our customers. Our mission will never be to sell the most number of sweepers; it’s to build the best sweeper possible.
Our Road Sweepers Are Work Tools

Having operated our own fleet of road sweepers for years, we truly understand how important it is to have reliable machines. Maximum utilisation is at the heart of a Stock Sweeper; we make sure the operator can get the maximum work time possible from any of our machines. Robust, modern engineering ensures our customers are road sweeping for the maximum time possible.

Ease of Operation - Intelligent Sweep System (iSS)

We employ the simplest and most reliable operator-friendly controls to operate our machines. Technology is a fast-moving business, and we only utilise robust, well-tested systems to manage our sweepers.

CANbus Operating Control System - 5 Year Warranty

Our operating software is the heart of our machines. We are so confident in its ability, it comes with a five year warranty.

S6400 and S8400 Sweepers - 12 Month Warranty

All of our machines come with a comprehensive twelve month warranty. A copy of our terms and conditions is available on request.

Made in England

Our machines are designed and manufactured in England. We are proud to be a British-owned manufacturing company.
What You Need to Know

Truck Chassis: 15-18 tonnes GVW

Hopper: 6.5m³ with Twin-Discharge System (Electric and PTO Operation)

Sweep Format: Dual Side Sweep (Left and Right) with Wide Sweep ‘Belly’ Brush and Dual-Suction Nozzles. Single Side Sweep (Left or Right) Also Available.

Sweep Path: Max 3,650mm.

Sweep Speed: 2 to 16kph.


JCB Auxiliary Engine: A choice of 68kW or 93kW engines.

Auxiliary Fuel Tank: 160 Litres.

Clean Water Tank: 1600 Litres.

Low Pressure Dust Suppression Water System: 35 litres/min at 3.5 bar (50 PSI).

High Pressure Wash Water System: 30 litres/min at 150 bar (2200 PSI).

Service intervals: 500 hours.

Built to Last

The S6400 has been designed to last as long as possible. The mild and stainless steel components that we use are thicker than the road sweeper industry standard, to ensure the longest life span achievable. All equipment is precision fabricated, then powder-primed and coated, to give an extremely durable and high quality finish.

Dual-Sweep Recommended

*150mm Recommended

Dual-Side Sweep Recommended
6.5m³ Capacity
Standard twin-discharge system comes with every Stock Sweeper. Should the auxiliary engine PTO (power take-off) fail, our equipment has its own independent electrical discharge system for additional use, if needed.

Body, Cowl and Rear Door - Stainless Steel
The body, cowl, and rear door are fully built with corrosion and abrasion-resistant stainless steel.

1600L of Clean Water
1600L as standard, with optional 250L - 4000L additional water tanks available. *Chassis dependent

Double-Strength Subframe and Tipping Hinges
We know our sweepers have to be robust, and critical to the stability of the vehicle is its subframe and tipping hinges. Twice the typical steel is used, to ensure maximum stability on uneven ground.
### JCB 68kW

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Rating (Gross Intermittent)</td>
<td>68kW (91hp)</td>
</tr>
<tr>
<td>At Speed</td>
<td>2200 rpm</td>
</tr>
<tr>
<td>Peak Torque</td>
<td>433 Nm (319 lb-ft)</td>
</tr>
<tr>
<td>Peak Torque Speed</td>
<td>1500 rpm</td>
</tr>
<tr>
<td>Maximum No Load Governed Speed</td>
<td>2450 rpm</td>
</tr>
<tr>
<td>Nominal Idling Speed</td>
<td>850 rpm</td>
</tr>
<tr>
<td>Thermodynamic Cycle</td>
<td>Diesel 4 Stroke</td>
</tr>
<tr>
<td>Air Intake</td>
<td>TCA</td>
</tr>
<tr>
<td>Arrangement</td>
<td>4.4L</td>
</tr>
<tr>
<td>Nominal Bore</td>
<td>103mm (4.06&quot;)</td>
</tr>
<tr>
<td>Stroke</td>
<td>132mm (5.20&quot;)</td>
</tr>
</tbody>
</table>

### JCB 93kW

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Rating (Gross Intermittent)</td>
<td>93kW (125hp)</td>
</tr>
<tr>
<td>At Speed</td>
<td>2200 rpm</td>
</tr>
<tr>
<td>Peak Torque</td>
<td>525 Nm (387 lb-ft)</td>
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<tr>
<td>Peak Torque Speed</td>
<td>1300 rpm</td>
</tr>
<tr>
<td>Maximum No Load Governed Speed</td>
<td>2390 rpm</td>
</tr>
<tr>
<td>Nominal Idling Speed</td>
<td>800 rpm</td>
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<tr>
<td>Thermodynamic Cycle</td>
<td>Diesel 4 Stroke</td>
</tr>
<tr>
<td>Air Intake</td>
<td>TCA</td>
</tr>
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<td>Stroke</td>
<td>132mm (5.20&quot;)</td>
</tr>
</tbody>
</table>

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**S6400 AUXILIARY ENGINE**

- **S6400 Body**
  - **Capacity**: 6.5m³
  - **Standard twin-discharge system** comes with every Stock Sweeper. If the auxiliary engine PTO fails, our equipment has its own independent electrical discharge system for additional use, if needed.

- **Body, Cowl, and Rear Door** - Stainless Steel
  - The body, cowl, and rear door are fully built with corrosion and abrasion-resistant stainless steel.

- **1600L of Clean Water**
  - **1600L as standard**, with optional 250L - 4000L additional water tanks available.
  - *Chassis dependant*

- **Double-Strength Subframe and Tipping Hinges**
  - We know our sweepers have to be robust, and critical to the stability of the vehicle is its subframe and tipping hinges. Twice the typical steel is used to ensure maximum stability on uneven ground.
Side Brush
The side brush equipment is of a heavy-duty construction, and has brush speed control with ‘power-down’ ground pressure regulation fitted as standard. The ‘power-down’ feature enables the operator to scrub the road harder, to remove run-in and compacted dirt. The side brushes have fully adjustable sideways positioning and variable side brush rotation to ensure you sweep efficiently, even in awkward situations. The S6400 has an impressive overall sweep width of 3650mm and allows the S6400 to clean many roads in a single pass. At the push of a button, the curb-top sweep function can be utilised in tight or difficult situations.

Wide Sweep Brush
The 400mm-diameter by 1300mm-long wide sweep brush has a fully adjustable ground pressure regulation system. The system is set on four regulators (two for left-hand sweeping and two for right-hand sweeping). This enables the operator to switch from left to right-hand sweeping operations without the need to leave the cab of the vehicle and readjust the brush. Fitted with ‘power-down’ the wide sweep brushes performs efficiently on run-in and stubborn compacted dirt. The wide sweep brush canopy and guards are robustly constructed from 4mm powder-primed and powder-coated mild steel, ensuring maximum life expectancy.

Unique to our sweepers is our one-touch left-to-right sweep control system.
**Dust Suppression System**

The self-priming, low-pressure water dust suppression pump ensures dust-free collection of all swept material. Water can be injected directly into the suction box, towards the side brush, and across the front of the vehicle. The dust suppression system delivers 35 litres/min at 3.5 bar (50 psi).

**High Pressure Wash**

For more arduous cleaning the high pressure water system incorporates a hand lance with 15 metres of hose, suction box spray bars, and wide sweep brush spray bar all delivering water at up to 30 litres/min at 150 bar (2,200 psi) precisely where it’s needed.
Nozzle Suction
The suction boxes are constructed of cast aluminium with a 4mm moulded vulcanized wear-resistant rubber lining. Each of
the two boxes can be raised or lowered, and be tilted backwards at the flick of a switch, to make the pick-up of larger material
effortless.

Overhead Suction
The overhead wander hose has a 4.2 metre reach that can be used for many operations; from cleaning catch-pits and road
gullies, to picking litter and leaf collection. To ensure the wander hose does not become too heavy in operation, it is fitted with a
counter-balancing spring system. The overhead wander hose can also be hydraulically operated.

Screen Shakers ‘Healthy Airflow’
Rear mesh screen shakers are another standard fitment. They enable the operator to clean the rear screens every time the
rear door is opened, both screens are lowered automatically making thorough washing of the screens an easy task. This
is essential to maximise the sweepers suction and will minimise unnecessary engine and equipment wear. The screens can also
be operated with the rear door closed using the ‘quick clean’ function. This is done by unclipping the handle and pulling down
sharply on the rear cables, to shake the screens free from dirt and leaf build-up.
CANbus Operating System
The S6400’s equipment is activated via an operator’s electronic CANbus control panel, which has been designed and installed with operator ergonomics in mind. The easy-to-use panel allows the operator to set their preferred settings, which are then activated by one-touch operation on the iSweep system, mounted near the driver’s door.

iSweep
The touch sensitive control panel is conveniently mounted near the operator’s side window, helping to reduce the level of distraction to the operator to an absolute minimum. Full control simply rests at the operators finger tips.

Performance and Diagnostics
Our CANbus system monitors sweeping and auxiliary engine performance. It has full diagnostics to aid operators and technicians, perform routine checks, maintenance, and repairs.
TEMPEST LEAF BLOWER

Leaf Blowing System
Our patented leaf blowing system is the most effective method of removing leaves in rural/semi-rural conditions. It blows leaves off roads and footpaths into verges in one pass, by cleverly using the sweeper vacuum exhaust air, blowing it out from under the front of the chassis cab. Full electric control allows you to adjust the air jet angle to right where you need it. It reduces non-productive off-site time and has considerable fuel and environmental savings by eliminating needless journeys to landfill sites.

Leaf Blowing System - Wander Hose
The hand blowing wander hose attachment reaches into corners and difficult areas where leaves cannot be blown away. The handheld blower attachment enables the operator to blow them into the road, where they can be swept up conventionally by the sweeper.
What You Need to Know

Truck Chassis: 18 tonnes GVW

Hopper: 8.4m³ with Twin-Discharge System (Electric and PTO Operation)

Sweep Format:
- Dual Side Sweep (Left and Right) with Wide Sweep ‘Belly’ Brush and Dual-Suction Nozzles. *Dual-Sweep Recommended*
- Single Side Sweep (Left or Right) Also Available
- Overhead Wander Hose 4.2m Reach Available, 150mm and 200mm, Manual or Hydraulically-operated. *150mm Recommended*

Sweep Path: Max 3,650mm.

Sweep Speed: 2 to 16kph.


JCB Auxiliary Engine: A choice of 68kW or 93kW engines.

Auxiliary Fuel Tank: 160 Litres.

Clean Water Tank: 2100 Litres.

Low Pressure Dust Suppression Water System: 35 litres/min at 3.5 bar (50 PSI).

High Pressure Wash Water System: 30 litres/min at 150 bar (2200 PSI).

Service intervals: 500 hours.

Heavy-Duty and Built to Last

The S8400 has been designed to last as long as possible, with the advantage of extended operating hours - it works harder, for longer. The mild and stainless steel components that we use are thicker than the road sweeper industry standard, to ensure the longest life span achievable. All equipment is precision fabricated, then powder-primed and coated, to give an extremely durable and quality finish.
8.4m³ Capacity
Standard twin-discharge system comes with every Stock sweeper. Should the auxiliary engine P.T.O. fail, our equipment has its independent electrical discharge system for additional use, if needed.

Body, Cowl and Rear Door - Stainless Steel
The body, cowl, and rear door are fully built with corrosion and abrasion-resistant stainless steel.

2100L of Clean Water
2100L as standard, with optional 250L - 4000L additional water tanks available. [Chassis dependent]

Double-Strength Subframe and Tipping Hinges
We know our sweepers have to be robust, and critical to the stability of the vehicle is its subframe and tipping hinges. Twice the typical steel is used to ensure maximum stability on uneven ground.
S8400 BODY

8.4m

Capacity

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S8400 AUXILIARY ENGINE

JCB 68kW

Maximum Rating (Gross Intermittent) 68kW (91hp)

At Speed 2200 rpm

Peak Torque 433 Nm (319 lb-ft)

Peak Torque Speed 1500 rpm

Maximum No Load Governed Speed 2450 rpm

Nominal Idling Speed 850 rpm

Thermodynamic Cycle Diesel 4 Stroke

Air Intake TCA

Arrangement 4.4L

Nominal Bore 103mm (4.06”)

Stroke 132mm (5.20”)

JCB 93kW

Maximum Rating (Gross Intermittent) 93kW (125hp)

At Speed 2200 rpm

Peak Torque 525 Nm (387 lb-ft)

Peak Torque Speed 1300 rpm

Maximum No Load Governed Speed 2390 rpm

Nominal Idling Speed 800 rpm

Thermodynamic Cycle Diesel 4 Stroke

Air Intake TCA

Arrangement 4.4L

Nominal Bore 103mm (4.06”)

Stroke 132mm (5.20”)
Side Brush
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Wide Sweep Brush
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Opposed Sweep Function
With one-touch operation, the wide sweep brush can be switched to push material away from the suction nozzle. This simple innovation improved road planing productivity by up to 60%.
Dust Suppression System
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iSweep
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We understand and deliver what you need

We pride ourselves in understanding our customers' service requirements. Having owned and operated our own road sweeper hire fleet for many years, we know exactly what kind of support is essential to meet our customers' demands.

Our highly trained team will work with you to identify potential issues, offering fast and cost-effective solutions, to ensure that your equipment is running reliably and accurately for the maximum time possible.

For customer support, contact our Customer Support Centre on 0845 203 6400 or info@stocksweepers.com
Parts
We have a dedicated, fully-stocked parts warehouse based in the UK. 95% of our sweeper parts are kept in stock and can be delivered to you in the mainland UK the next working day.

Our parts department supplies parts for most brands of sweepers. We supply internationally, to over 20 countries around the world. For more information on parts for your specific machines, please get in touch today.

Contact our Parts Department on 0845 203 6400 or parts@stocksweepers.com

Every effort has been made to ensure that the information contained in this brochure is correct. Due to continuous product development, we reserve the right to make alterations/improvements without prior notice. E&OE.

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Contact our Parts Department on 0845 203 6400 or parts@stocksweepers.com

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