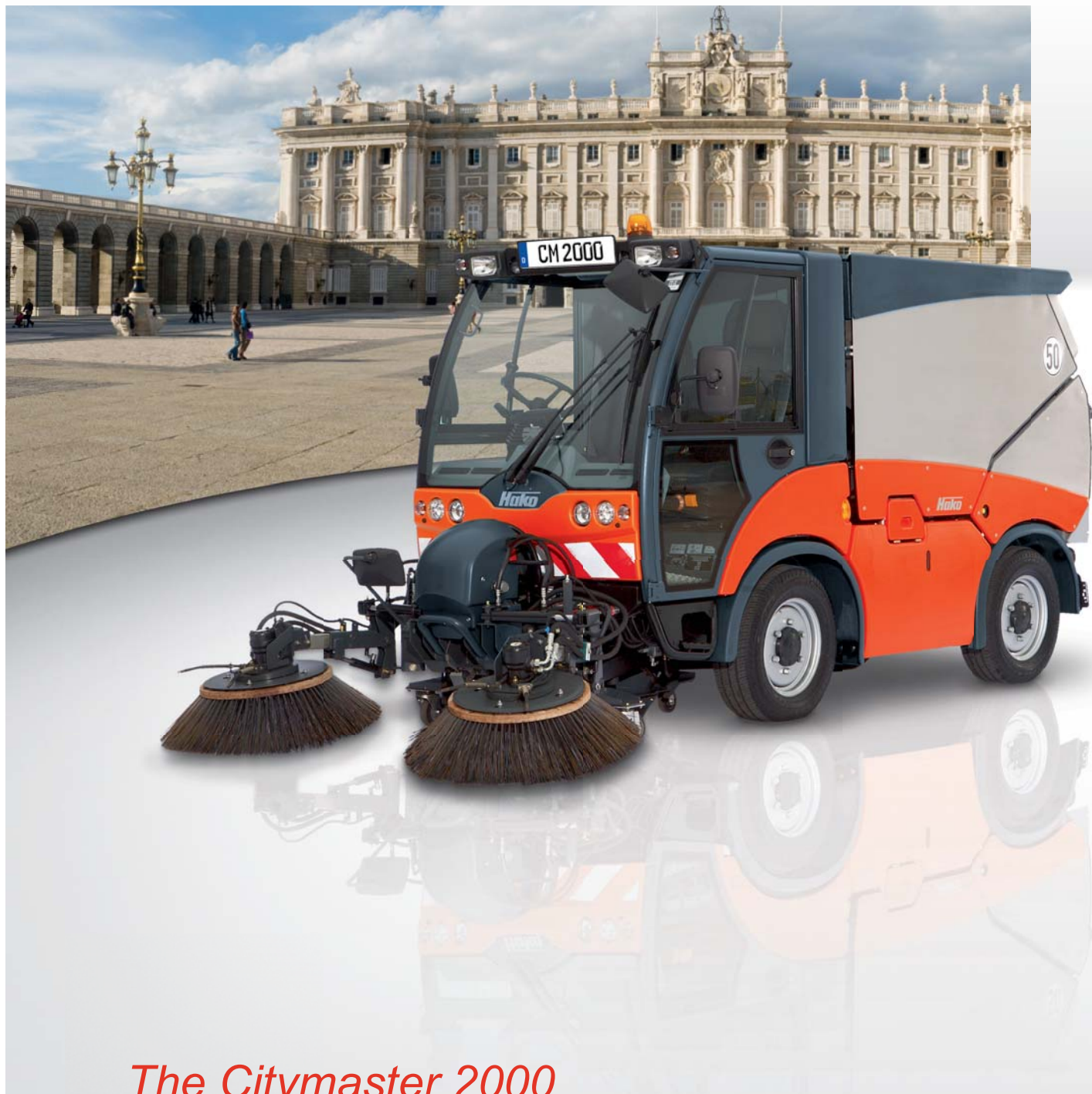


Cleaning Technology

Hako
Clean ahead



The Citymaster 2000

Urban cleaning with low service life costs

Robust, reliable and durable

The Citymaster 2000 – top quality for reliable sweeping

Proven utility vehicle design

The Hako-Citymaster 2000 is a high-end compact sweeping vehicle designed for commercial and industrial use with numerous additional uses for all-year deployment. Through the use of proven utility vehicle components, such as ladder-type chassis, axles and helical springs, the Citymaster 2000 sets standards in respect of sturdiness, reliability and efficiency.

Low operating costs

The new generation of powerful Volkswagen common-rail diesel engines consumes considerably less fuel than other engines in comparable sweeping vehicles and, therefore, also produces less pollutants. Long periods between changing service fluids and, on average, lower fill quantities contribute to further savings over the service life. The robust vehicle construction minimises the time spent in workshops and ensures the highest levels of availability.

Full flexibility in all-year deployment

You can choose from a 2-brush system (pushed brush), a 3-brush system (pulled basic brush with pre-sweep brush) and a scrubbing deck. The Citymaster 2000 doesn't need a break, even in winter. Its well-conceived construction enables it to be retrofitted quickly and easily for winter services with a minimum of effort, whereby its comparatively high load capacity for road grit reduces the number of empty trips.

Quality made in Germany

Hako develops and produces in Germany



COMFORT

Noise, vibration and thermal insulation in the 2-man panorama cab; standard features include a convenient heater, air conditioning unit, multi-stage fan, heatable windscreen.



FRAME

Classic, offset utility vehicle ladder-type chassis with optimal dead weight to load capacity ratio; optimum construction stability for its entire service life
No risks from weld seams.





BODY

Cathodic NFZ electrophoretic dip painting and full winter service preservation as anticorrosive. Trim parts and wings made of plastic – no painting costs in the event of light damage.



ENGINE

Economic common-rail diesel engine with turbocharger and direct injection from Volkswagen; maintenance-free particle filter for service life (EURO 5, EEV).



STEERING

Short rear overhang and all-wheel steering (ratio 1:1) to keep on track in work mode for the highest levels of flexibility even in confined spaces. Front steering in transport mode ensures safe driving on roads.



AXLES

Utility vehicle axles for high loads enabling higher load capacity; rear axle optionally with differential lock for optimal traction in

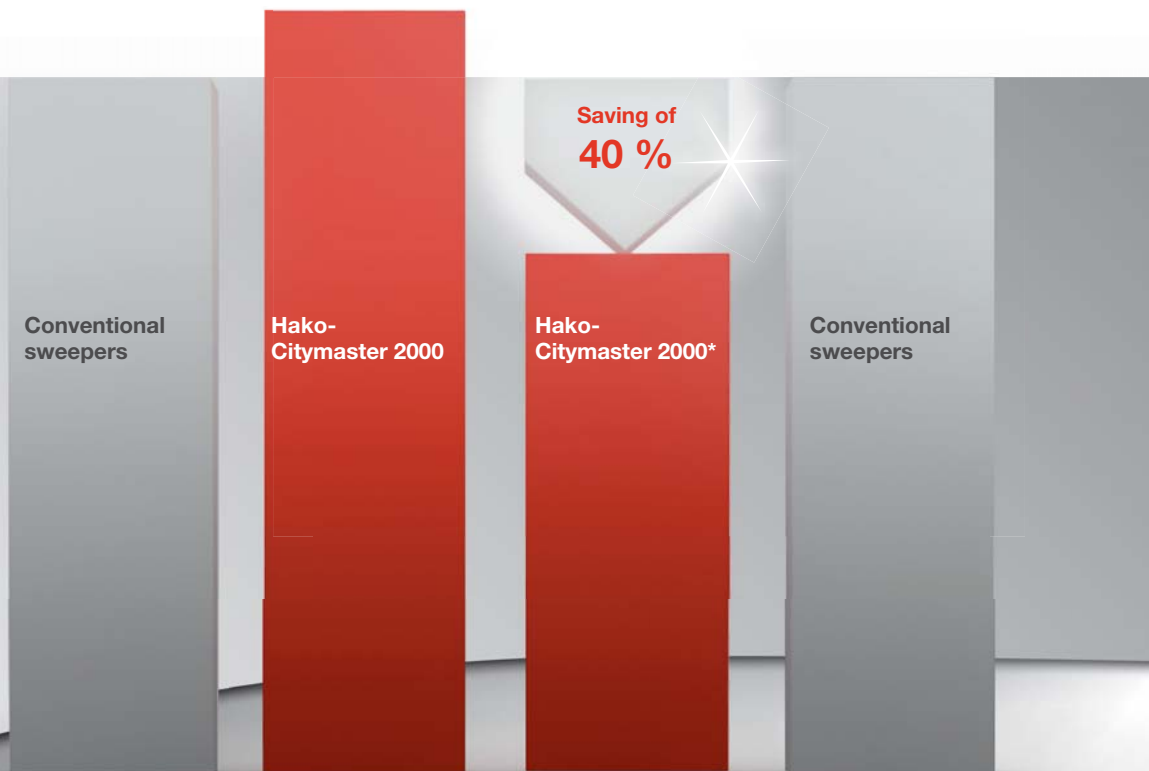


SAFETY

Dirt resistant drum brakes guarantee a high level of braking efficiency and operational safety, automatic brake force distribution with ALB regulator dependent on the load.



Low service life costs as a standard measure



Purchase costs

Hako added value

- Robust design
Made in Germany
- Driver comfort
- Safety
- Environmentally friendly
- Innovative technology

Service life costs

Driving is cheaper with Hako:

Hako is clearly a leader in respect of service fluid efficiency: based on approx. 8,000 operating hours, a saving of approx. € 31,000 is possible. You also profit from further advantages, such as

- the high level of availability through the robust utility vehicle construction and long periods between servicing
- the efficient method of operation with a higher load capacity

- the sound insulation package (option) for use in areas sensitive to noise
- the uncomplicated retrofitting options for all-year deployment
- and the low loss of value in the event of resale

* Calculated at an average of 4.1 l / hour fuel consumption (can vary according to working conditions) and full service performance

Environmental efficiency pays dividends

Lower consumption

- highly economic VW common-rail diesel engine with turbocharger and direct injection
- consumption of only 214.5 g / kWh
- according to customers, up to 3 litre per hour lower consumption compared to competitor machines.

Low emissions

- accurate fuel injection and regular combustion for high performance and reduction in emission of harmful substances (EEV, EURO 5)
- lower fine particulate matter emissions due to the triple dust control system with clean water on the brush, circulating water system and optional clean water feed in the suction channel

Quiet running

- sound insulated fan integrated in the hopper cover
- sound insulation packages, 99 d(B)A (Blue Angel eco-label) and 97 d(B)A for extremely low noise levels without loss of suction power

ECO mode as standard measure

- the ECO mode as a standard measure reduces fuel consumption and noise without losing any suction power

Hydraulics with load sensing

- contrary to gear pump systems, the load sensing controlled hydraulic system only feeds oil when it is actually required thereby also saving fuel and money!

Hako quality pays dividends in several ways

The Citymaster 2000 is a future-oriented financial investment. The high quality features with numerous extras fitted as standard, its robust construction with utility vehicle technology, its service-friendly design with long periods between maintenance and economic, low consumption common-rail diesel engine sets new standards in respect of service life costs – not only work is more fun but filling up, too.



Urban areas cleaned thoroughly with a 2 or 3-brush system

Perfect sweeping results every time



Top solutions for cleaning cities

The Citymaster 2000 simply makes urban areas thoroughly clean. You also profit from a wide range of advantages which optimise functions and costs even further.

Collision protection for less repairs

All the brush systems have several protection features. Collisions at the front and side are compensated for by intelligent, automatically triggered and resettable safety features. This prevents expensive collision damage and reduces repair costs.

Individual brush pressure adjustment

The brush pressure can be adjusted according to individual cleaning requirements, saving the brush material and lengthening the service life. In conjunction with the wide pivoting range of the brush to the vacuum nozzle, the bristle length can be optimally exploited without a loss of sweeping performance.

Stability for clearing weeds

Both brush systems can be supplied with extended brush controllers and more powerful hydraulic motors for effective weed clearance. The brush arms are configured for the load necessary for weed clearance on leaving the factory.

Maximum loading capacity

The smooth surfaced stainless-steel hopper with a nominal capacity of 2 m³ can be filled up to the hilt and can be cleaned especially quick and simple.

Vacuum nozzle and brushes with clever details

The vacuum nozzle runs on rollers – forwards and backwards. The 2-brush machine is also capable of sweep out of corners in reverse. Skids support the vacuum nozzle when adapting to the working location. The horizontally sucking vacuum nozzle also enables the cleaning of critical surfaces, such as natural stone pavements with sand-filled joints. It also prevents vacuuming up of joint material while the flat brush prevents it being scraped out. Larger pieces of debris can be cleared into the wide, larger material flap conveniently by the driver from the driver's cab at the press of a button.

Working efficiently

The sweeping functions are controlled by means of easily operated joysticks. Further functions are arranged directly in front of the driver for easy access. The disk brushes positioned far to the front and the low slung windscreen of the driver's cab provide an excellent view of the brushes for both the 2 and 3-brush units!



2-brush system

The 2-brush system has a working width of up to 2.50 m with full and individual brush control. Together with the all-wheel steering, it provides the highest levels of performance for all sweeping tasks on even and very uneven surfaces on one plane. It ensures a high degree of flexibility for precise cleaning where individual operation of the brushes is essential. Brush speed, control and pressing force can be adjusted individually for each brush for a longer service life. Simple sweeping of corners or cul-de-sacs using reverse sweeping at the touch of a button. Weed clearing option with extended positioning functions and more powerful hydraulic motor.

3-brush system

The 3-brush system enables the highest sweeping performance even on two planes. It is ideal for all applications in which the machine drives in one direction. The 3rd brush sweeps dirt from the side or a second plane to the basic brush and vacuum nozzle.

- Basic brush adjustments: working width (to 2.60 m) and speed, 3rd brush with larger diameter can be adapted completely regarding speed, position and pressing force
- 3rd brush for can be used with a height offset of up to 250 mm, e.g. to clean traffic islands.
- Weed clearing option with extended positioning function and more powerful hydraulic motor, spray guard



New: wet cleaning with scrubbing deck

The sweeping unit can simply be replaced by the scrubbing deck attachment and the Hako-Citymaster 2000 becomes a wet cleaning vehicle. The new scrubbing deck removes stubborn dirt, fine particle dust or oil smears thoroughly from all smooth and high quality surfaces where sweeping is simply not enough. A useful functional addition to increase utilisation of the basic machine and not investing in a special machine.

All-year deployment for winter service

Full deployment flexibility even with snow and ice



The Citymaster 2000 – cleans paths in winter too

The Citymaster 2000 was engineered for all-year deployment right from the start. As a result, it can provide safe, snow and ice-free paths and drives in winter. Fitted with comprehensive standard equipment it is perfectly prepared for the winter season:

- the heater with multi-stage fan and heatable windscreen mean it leaves the factory ready for winter service and they ensure comfortable temperatures in the driver's cab and a perfect view to complete work safely
- the standard differential lock on the rear axle provides the necessary traction and safety in snow and ice
- the Citymaster 2000 is preserved for winter service at the factory as a standard measure and is also protected from corrosion

A good option: the winter package

The coupling triangle on the front of the vehicle is designed so that it has the necessary strength to withstand the forces which occur when completing winter service work with the snow plough.

With regard to retrofitting for winter service, add-on spreaders for dry gritting and wet-salt gritting are available with a maximum volume of 800 l for gritting roads, paths and bicycle paths.

For fast winter service too

The Citymaster 2000 can also be supplied with an option enabling fast (light and heavy duty) winter service: up to 45 km/h working speed enables long roads and paths to be cleared and gritted even more efficiently!



Winter service with Hako – stone-cold savings in the cold season

The Citymaster 2000 can be equipped for winter service quickly, easily and without expensive downtime in the garage. Thus flexible, year-round deployment is possible which will lower your vehicle fleet costs. The high load capacity reduces transport runs and lost working hours because it enables large amounts of grit to be taken along. The „fast winter service“ option with up to 45 km/h working speed additionally reduces the number of clearing vehicles and drivers needed.



1) Minor winter service

Various sorts of grit are available for minor winter service.

2) Major winter service

Front sweeper and various spring flap clearing blades (working width up to 170 cm) enable sidewalks and bike paths, for instance, to be quickly cleared of snow and gritted.

Hako services – for a long service life

Cost transparency and operational safety

Even more security with Hako insurance cover

The Hako insurance cover extends the guarantee for your machine by 12 or 24 months following on from the legal warranty – for full security even in the event of unforeseen risks.

Would you like to learn more about our after-sales services?

We would be pleased to advise you.



The Hako-Citymaster 2000 stands for robust quality and low operating costs for its entire service life. By implementing our after-sales services, even maintenance costs become calculable: they make the Citymaster 2000 an unbeatable complete package by providing comprehensive machine cover and maximum availability at attractive conditions!

Hako Full Service – the comprehensive, all-round package

To ensure maintenance costs are calculable, it contains all the operating hour-related maintenance work, wearing parts, additional expenses and prescribed safety inspections – including immediate fault clearance!

Tailor-made: the Hako Service Contract

No rigid maintenance schedules but usage-dependent inspections: maintenance cycles are lengthened or shortened to ensure machine availability is fully reliable – and for an attractive service flat-rate!



Technical data

Technical data, Citymaster 2000 basic vehicle	
Engine and Transmission	
Engine	<ul style="list-style-type: none"> • Water-cooled, 4-cylinder Volkswagen diesel engine with 1,968 ccm • 75 kW output at 3,000 rpm, operating speed 1,600 (ECO) - 2,300 rpm • Direct fuel injection • 56 litre tank volume
Pollutant emissions/Approval	<ul style="list-style-type: none"> • Engine emissions below the limit values compliant with EURO 5, EEV status
Drive	<ul style="list-style-type: none"> • Type approval of basic vehicle as a work machine • Hydrostatic drive, work mode, transition mode, transport mode, rear axle drive • Drive control with automatic load regulation in transport and transition mode or specifying the engine speed (work mode) • Differential lock (option)
Device drives	<ul style="list-style-type: none"> • Load-sensing high pressure hydraulics with variable power distribution • Fan speed can generally be adjusted independent of the engine speed • Additional equipment for multipurpose deployment via winter service option
Driving and Work Characteristics	
Speed	<ul style="list-style-type: none"> • Driving speed, automotive 0–50 km/h, standard steering • Transition mode, automotive 0–25 km/h, all-wheel steering • Work mode, hydrostatic 0–15 km/h, all-wheel steering • Reversing, 0–10 (25) km/
Chassis and steering	<ul style="list-style-type: none"> • Utility vehicle ladder-type chassis with 2 steering axles • Helical springs with shock absorbers on all axles
Brakes	<ul style="list-style-type: none"> • Multiple safety brake system with hydrostatic brake via drive • Additional hydraulic service brake via foot pedal, load-dependent brake force distribution • Mechanical parking brake
Tyres	<ul style="list-style-type: none"> • 215/70 R 15C (series production), special tyres on request
Driver's cab	<ul style="list-style-type: none"> • 2-seat comfort cab with driver's seat adjustable to the driver's weight • Ergonomic arrangement of all operating controls • 2-fold adjustable steering column • Hot water heater with air-con system as standard feature • Framed doors with sliding windows • Hinged wing mirror, adjustable from inside
Load Values	
Permissible total weight	3,500/4,500/5,000 kg
Permissible axle load	2,700/2,700 kg (front/rear)
Dimensions	
H/W/L	Sweeper 2-brush: 1,999 mm (cab) x 1,300 mm (standard tyres) x 3,450 mm Sweeper 3-brush: 1,999 mm (cab) x 1,300 mm (standard tyres) x 4,860 mm
Wheelbase	1,900 mm
Gauge	1,033 mm

We reserve the right to make technical improvements to machines with regard to shape, colour and design without notice. Illustrations could contain optional equipment.



Hako: environmentally friendly from the start

We want to leave the earth clean. Therefore, treating resources, the environment and climate with consideration influences all our business activities. This has been confirmed to us by independent institutes. More on our commitment can be found at www.hako.com

Close to you wherever you are

Our unsurpassed, close knit sales and service network means we are always close by to provide help fast throughout Europe.

Cleanliness with safety

Our machines fulfil the highest demands. Reliability through quality "Made by Hako".

Sales, hire, leasing, rental

We can offer you a widerange of individual, attractive financing options.

We are there for you day and night

Round-the-clock service and express parts delivery ensure the highest levels of availability.



DIN EN ISO 9001
DIN EN ISO 14001

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