

Cleaning Technology  
Municipal Technology  
Waterjet Technology

**Hako**



## Citymaster 650

Designed to provide maximum flexibility

Multifunctional city cleaning machine in the 2-t class



# CITYMASTER 650

## More freedom

Compact, highly manoeuvrable, economical: for optimal results – even on footpaths and in confined areas.

## More comfort

Made for the operator: spacious and ergonomic workplace, easy-to-learn operating concept and a back-friendly quick-change system.

## More flexibility

365 working days a year: through multifunctionality and a wide range of attachments and superstructures for any kind of seasonal challenge.



## The professional machine for urban areas

### Citymaster 650

The basic version of the Citymaster 650, designed as a compact implement carrier, already sets new standards in the 2-t class: for example with articulated steering, permanent all-wheel drive with a fully electronic control system and extensive features providing increased comfort and safety at work. Thanks to its multifunctional design, the Citymaster 650 can be retooled quickly and easily, for example as a professional sweeper or an efficient snow-plough for winter service tasks, which makes this machine not only extremely versatile in use but also particularly economical as it provides multiple application options.



### Highlights:

- Narrow vehicle width, directionally stable articulated steering and a small turning radius
- Energy-saving drive control and three power settings for reduced consumption
- Efficient hydraulic drive for attachments
- Ergonomic workplace design
- Full LED lighting and LED work lights





### **Reduces fuel consumption and emissions**

The Citymaster 650 meets the emission limit requirements of the Stage V Exhaust Emission Standard. Clever details such as the energy-saving drive control system and three different performance levels reduce the machine's fuel consumption both in work mode and during road travel.



## **Freedom through flexibility**

Working in the city comes with a wide range of different demands posed on Municipal Technology equipment – and these demands change with the seasons. The Citymaster 650 meets all seasonal requirements with its small vehicle width, directionally stable steering and a small turning circle ensuring excellent manoeuvrability in confined areas. In addition, the vehicle's multifunctional design ensures economically efficient use all year round.



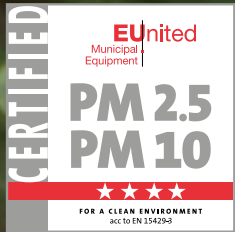
### **Quickly off to the next job site**

With its top speed of 25 km/h, the Citymaster 650 is fast enough to travel to the next nearby job site on its own axles – and compact enough to be transported on a trailer in order to cover larger distances.

### **Adapts perfectly to its surroundings**

Urban furniture, flower beds and narrow passages are obstacles we often see in public areas. With its small turning circle of only 139 cm and independently controlled sweeping units, the Citymaster 650 overcomes these obstacles easily. Even kerbs as high as 150 mm are no problem at all for this machine thanks to its permanent all-wheel drive with fully electronic control system. When working in ECO mode, a standard feature which is not only good for the environment but also for applications in noise-sensitive areas, the Citymaster 650 works at 85 % of its maximum performance capacity and saves up to 40 % of fuel. The extended sound insulation package, available as an option for the basic unit, reduces noise emissions even further.





Highest accolade for lowest fine particulate emission values.

### Ready for every job

Sweeping, suction, transport – or cutting, watering, sluicing: The list of possible jobs for the Citymaster 650 is long and includes solutions for all standard tasks and many special applications. A win-win for both your budget and the cityscape!



**Expert in the field of green area maintenance:**  
for example with a hedge trimmer or a sprinkler system to water flower beds, bushes and trees.

**Weed control without the use of chemicals:**  
with a weed broom providing fast and easy mechanical removal and collection of weeds.



## Brilliant performance for a clean city

Sweeping is one of the main tasks in the field of Municipal Technology. The Citymaster 650 carries out all sweeping tasks rapidly, reliably and efficiently: thanks to its hydraulically driven 2-broom sweeping unit, quick-change suction duct and Intelli-Flap® coarse dirt flap. The machine's patented circulation water system provides maximum dust control – and ensures clean exhaust air and lowest possible dust and fine particulate emissions.



### Safe roads and paths in autumn

Leaves and twigs can make roads and paths slippery and thus become a menace to road users. For municipal service providers, this means regular sweeping also in autumn. Equipped with a powerful and efficient sweeping/suction combi device, the Citymaster 650 reliably removes autumn leaves and dirt from public roads, paths and squares.

### One hopper for every purpose

The 600-litre universal hopper made of seawater-resistant aluminium alloy can be used for a wide range of different applications: e. g. for sweeping tasks or to collect grass and leaves – at maximum payload. Emptying the hopper is particularly easy thanks to the hydraulic tipper function which automatically opens the hopper lid.







## Four seasons – one Citymaster!

Each season comes with different challenges for Municipal Technology products. Hako masters each challenge with consistent multifunctionality. You only need one machine to carry out almost any task – 365 days a year. At Hako, we call it “One for All”. And our customers say: the right machine for every application.

With various mowers, grass collection systems or flail mowers, the machine forms a powerful team for green maintenance as a flail mower-vacuum combination.

## Multipurpose use through multifunctionality

The Citymaster 650 is a versatile implement carrier and professional sweeper all in one. Thanks to four attachment interfaces allowing the combined use of different attachments and superstructures, the machine can carry out a wide range of additional tasks: for example winter service, green area maintenance or wet cleaning tasks. You only need one machine instead of several special vehicles – which is both more efficient and economical.



### Winter pro

The Citymaster 650's great manoeuvrability, easy handling and high transport capacity show their full benefits in the cold season. Thanks to its flexible front attachment, the vehicle keeps roads and paths clear from ice and snow: with a front sweeper for reliable snow sweeping or snow ploughs and snow blowers for save snow clearance. The machine also performs well in combating black ice: with cylindrical spreaders for pavements, combination spreaders for larger areas or a brine spray system.



**Quickly ready for use:**  
Thanks to the quick-coupling triangle allowing easy and back-friendly changing of attachments without the need for tools.

				
Sweeping	Wet cleaning	Green area maintenance	Winter service	Transport
				
Sweeping 2 brooms	High pressure washer	Mowing + discharge	Snow blade	Tipper
				
Weed broom	Watering arm	Flail mower	Snow plough	Trailer
				
Dirt sweeper	Brine sprayer	Mowing + collecting	Snow sweeper	
				
Leaves collecting	Thermal weeding	Hedge trimmer	Snow blower	
				
	Sluicing		Spreader	





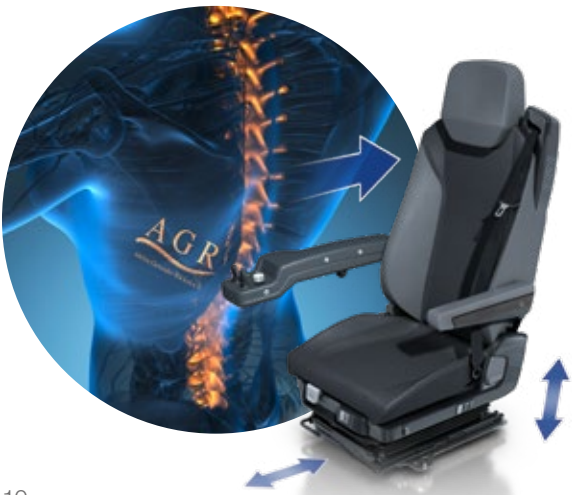
## Designed with the machine operator in mind

The intuitive operating concept of the Citymaster 650 facilitates easy handling – and thus ensures efficient working. All functions are comfortably controlled via the one-hand operating system integrated in the armrest. For complex tasks, the hydraulic system can carry out operating sequences fully automatically at the push of a button. The weed broom is coded via the operating system as well – there is no separate control unit. The clearly structured, high-resolution colour display with automatic brightness control shows all relevant operating information at a glance. And the service timer on the display automatically indicates when the next maintenance date is due.



## More comfort at the workplace

A spacious, ergonomic workplace facilitates long working days. In this respect, the Citymaster 650 sets a best-practice example: with extended and individually adjustable seat options as well as a comfort steering column adjustable in height and length. During road travel, the driver benefits from the machine's fully electronically controlled ground drive. In addition, both the cruise control and the directionally stable steering with articulated joint improve the vehicle's driving characteristics. And to ensure that work runs smoothly for the machine operator, a powerful heating system with optional air conditioning ensures pleasant temperatures in the cabin.



### Award-winning comfort

Our ergonomic machine concept comprising an adjustable comfort seat, our no-tools-needed quick-change system and a full-suspension chassis turns Citymaster and Multicar vehicles made by Hako into particularly back-friendly workplaces – certified and recommended by AGR (Aktion Gesunder Rücken e.V. [www.agr-ev.de](http://www.agr-ev.de)).

### Safety on the road

The large ROPS-tested comfort safety cabin with two doors and large windows ensures maximum visibility on all sides. In addition, a full LED lighting system and LED work lights are optionally available to give the driver a clear view onto his work environment at all times. A dual rear view camera provides additional safety. Both the windscreen wash/wiper system with interval switching and heated wing mirrors ensure a clear view even in wet conditions. The vehicle is equipped with an acoustic reversing signal to warn pedestrians, and an additional service brake provides even more safety on the road. And a USB charging socket for two mobile devices ensures that data communication is possible at all times.





## Hako-Fleet-ready!

Hako Municipal Technology thinks ahead – and is even smarter when you monitor its use with Hako-Fleet-Management. The data collection can not only serve as a basis for even more economical use, but also helps you to be one step closer to a solution in the event of a service call. Hako-Fleet-Management allows you to track the route of the Citymaster 650. If a fault causes the vehicle to come to a standstill, its location is sent to the Fleet Portal and shown on the map. Operational results and statistics are clearly displayed in the web portal.



### Hako-Fleet-Management: here's why!

- Recording of all important service data and operating states
- Clear presentation in the web portal, available 24/7
- Full cost transparency and control
- High machine availability
- Avoidance of machine damage
- Provision of performance records
- Compatible with machines from other manufacturers



## Service makes the difference



### Always quickly on site

Qualified service technicians with fully equipped service vehicles carry out service work promptly and efficiently directly on site.

### Professional service

Whether you need repairs, maintenance or safety inspections, your machine is in the best hands in the modern workshops of our subsidiaries, authorised dealers or service partners.

### Service via scan

Full access to all machine details and data as well as digital service requests – simply via QR code scan.

### For maximum availability

To ensure that our machines perform optimally at all times, we offer customised and scalable services along the entire product life cycle.

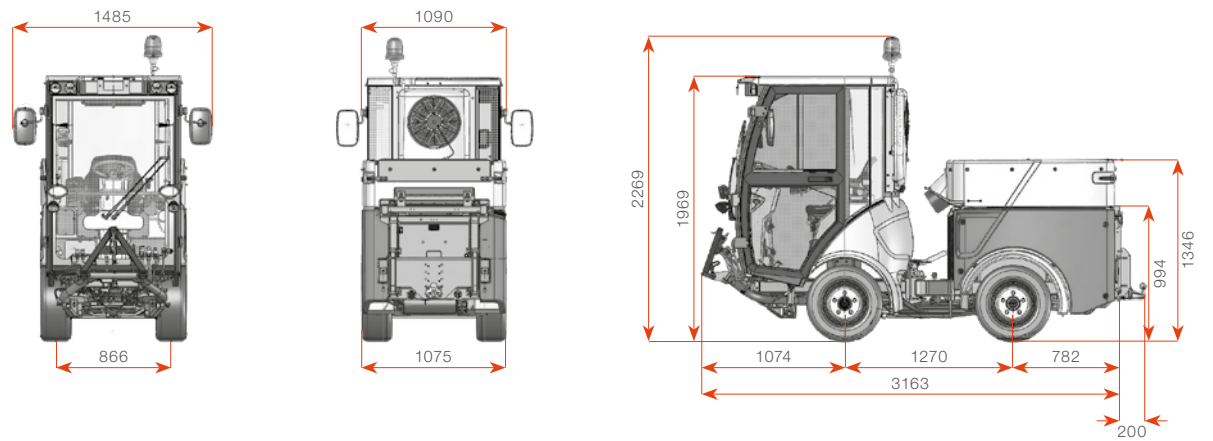
- Right from the start: with solution-oriented advice directly on site as well as attractive financing and rental options
- After purchasing: with smooth procurement and provision including user training
- During use: with individual service contracts and 24/7 support for fast and professional troubleshooting, high efficiency and permanent machine availability
- At the end of the product's life: with take-back and recycling as well as machine upgrades





# Technical data

Basic vehicle Citymaster 650		
Engine and drive	Engine	<ul style="list-style-type: none"><li>· Water-cooled 3-cylinder industrial Diesel engine with 1,642 cc</li><li>· DOC and DPF, output 25.5 kW at 2,630 rpm</li><li>· Common-rail direct fuel injection, tank capacity 41 litres</li><li>· Engine stays below the limit values according to the Emission Standard 2016/1628/EC Stage V</li></ul>
	Approval	<ul style="list-style-type: none"><li>· EU type approval for the basic unit as a tractor T2a (LoF) (agricultural and forestry machine)</li></ul>
	Ground drive	<ul style="list-style-type: none"><li>· Traction- and energy-efficiency-optimised hydrostatic ground drive with permanent all-wheel drive</li><li>· Drive control system with automatic load control in transport mode</li><li>· 3-stage fixed speed in work-travel mode (1,900 rpm [ECO] – 2,250 rpm [Standard] – 2,630 rpm [MAX])</li></ul>
	Hydraulics	<ul style="list-style-type: none"><li>· High pressure hydraulics with variable output distribution for rotary consumers</li><li>· Circuit 1 (front) 27/31/37 l/min @ 195 bar/Circuit 2 (rear) 21/25/29 l/min @ 195 bar</li><li>· 1 hydraulic circuit at the front, 1 hydraulic circuit at the rear</li></ul>
Driving and working characteristics	Speed	<ul style="list-style-type: none"><li>· Automotive driving speed 0–25 km/h</li><li>· Hydrostatic work-travel speed 0–25 km/h</li><li>· Reversing 0–12 km/h</li></ul>
	Steering and chassis	<ul style="list-style-type: none"><li>· Hydraulically steered, articulated 4-wheel chassis; steering angle 53°</li><li>· Robust articulated joint with integrated pendulum compensation and roll stability control system</li></ul>
	Brake	<ul style="list-style-type: none"><li>· Hydrostatic brake acting on all four wheels, service brake at the rear</li><li>· Mechanical parking brake acting on the rear wheels</li></ul>
	Tyres	<ul style="list-style-type: none"><li>· 270/50-12 comfort tyres</li><li>· 23 x 10.50-12 lawn tyres</li><li>· 23 x 8.50-12 standard tyres</li></ul>
	Cabin	<ul style="list-style-type: none"><li>· 1-seater comfort cabin with comfort driver's seat and operating panel integrated in the armrest</li><li>· Central display shows all machine functions, adjustable steering column</li><li>· Hot-water heating and optional air conditioning</li><li>· Frame doors with sliding windows</li><li>· Foldable wing mirrors, adjustable from inside the cabin</li></ul>
Load data	Empty weight	1,430 kg (implement carrier), 1,780 kg (sweeper)
	Permissible values	Total weight 2,200 kg, axle load 1,200/1,500 kg (front/rear)
Dimensions	H/W/L	Basic unit: see picture, Sweeper: 1,980 x 1,090 x 3,899 mm (standard tyres 2B)
	Wheelbase	1,270 mm
	Track width	866 mm
	Inner turning radius	1,390 mm
	Effective dirt hopper capacity	543 litres







## For a clean future

To ensure that our solutions meet the increasing demands for sustainability, we are constantly developing them further: in dialogue with our users, closely oriented to current trends, and by taking into account the requirements of the future. That is why we are constantly driving our research and development in the direction of efficiency-increasing and even more environmentally friendly measures as well as important future topics – for example, electromobile solutions in Municipal Technology or digitalised processes.

## Far ahead even today

Taking more responsibility for the environment: due to their low emission values and minimal noise levels, our vehicles can work also in environmental zones and other sensitive areas.



## We are also active in the field of Cleaning Technology and Waterjet Technology

The requirements for professional indoor and outdoor cleaning are just as extensive as the options we offer our customers: from sweepers and vacuum sweepers to scrubber-driers and combination machines to efficient waterjet technology for use in industry and commerce.

Hako GmbH  
Hamburger Str. 209-239  
23843 Bad Oldesloe  
Tel. +49 4531 806-0  
[info@hako.com](mailto:info@hako.com)  
[www.hako.com](http://www.hako.com)



Blue Competence is an initiative of VDMA ([www.vdma.org](http://www.vdma.org)). By engaging in this partnership, we are committed to comply with the twelve sustainability principles applied in the field of mechanical and system engineering ([www.bluecompetence.net/about](http://www.bluecompetence.net/about)).

For the sake of readability, Hako has opted for gender-neutral terminology throughout this document. This includes all people, regardless of their gender or identity.

About our products: We reserve the right to make changes to the shape, colour and design in the interest of technical development. Illustrations may contain optional extras. Services and products may vary from country to country.