

Cleaning Technology
Municipal Technology
Waterjet Technology

Hako



Citymaster 1650

More working comfort in all conditions

Multifunctional city cleaning machine in the 3.5-t class

CITYMASTER 1650

For the environment

Reduced fuel consumption and fewer emissions: intelligent drives, low-emission engine with a particle filter and EUnited-certified dust-control system.

For the operator

More driving- and operating comfort: AGR-certified for the machine's award-winning, ergonomic design of the driver's workplace and the back-friendly quick-change system.

For excellent results

Highest levels of flexibility and efficiency: multifunctional machine with a wide range of attachments and superstructures for every seasonal requirement.

The premium solution for highest demands

The Citymaster 1650

This compact, professional city cleaning machine with add-on benefits is setting new standards in the 3.5-t class: for example, with articulated steering, permanent all-wheel drive, hydraulic attachment drives, a full-suspension chassis and a multifunctional design. And on top of that, the vehicle offers extensive features for greater comfort, safety and efficiency – whether used as a sweeper or for year-round municipal applications.



Award-winningly quiet!

The Citymaster 1650 falls below the limits set by Blue Angel for the permissible noise levels of sweepers.

Highlights:

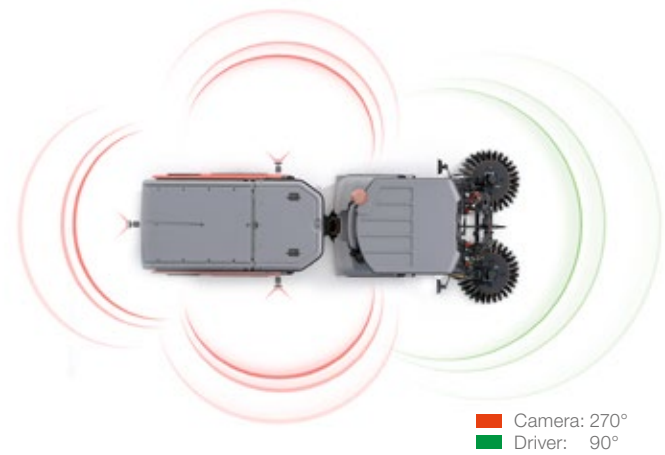
- Can be driven with a Class B driving licence
- Low fuel consumption and emissions
- Efficient hydraulic drives for attachments
- Spacious cab, greater ergonomics at the workplace
- Full LED lighting and LED work lights





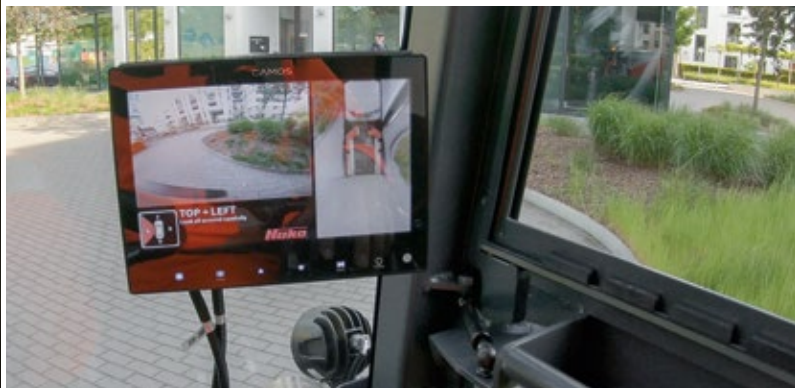
Environmentally friendly

The machine's particularly low fine-dust-, particle- and noise emissions allow working in both inner-city and residential areas – even early in the morning or late at night.



Everything at a glance

The fully glazed comfort cabin offers the driver an excellent view of his surroundings. The camera system extends the driver's field of vision by another 270° – and automatically provides a view to the side when turning.



Flexible, safe, future-oriented

Compact, manoeuvrable, high climbing ability: The Citymaster 1650 can work in all paved urban areas – without restrictions and at maximum payload. Thanks to the machine's slim design and high level of manoeuvrability, Hako's solution covers the performance range of a larger sweeper while allowing employment even in confined areas and on footpaths.

Ready for use in all conditions

The sophisticated, full-suspension chassis enables effortless kerb-climbing and driving on poor roads and paths – without compromising on either the driver's comfort or safety.



The Citymaster 1650 offers all the characteristics and benefits of a larger sweeper but can be driven by anyone holding a Class-B driving licence.

Keeping an eye on what's most important

Working in complex environments with heavy pedestrian traffic is a particularly challenging task for operators of Municipal Technology machines. Hako deals with this challenge by offering sophisticated safety concepts: for example camera assistance systems providing a 360° view even when the driver's field of vision is reduced by obstacles, or when reversing or turning. And thanks to the full LED lighting system, the driver always has a perfect view of his surroundings, even in poor light conditions – for safe working at any time and season.



Weed control without chemicals:
The weed broom provides mechanical
removal and collection of weeds.

Multifunctional working in all seasons

The Citymaster 1650 has been designed for all-season application to provide maximum flexibility and economic efficiency. In addition to being used as a professional sweeper, this machine can easily and effortlessly be re-tooled for a wide range of different applications – thanks to the quick-change system allowing back-friendly and tool-free changing of attachments and superstructures and docking to the machine’s four interfaces.























Highly flexible for green area maintenance
From lawns and roadside greenery to sports fields and parks: the Citymaster 1650 masters every maintenance task in the green sector. Its universal hopper can also collect grass and can therefore be used for mowing lawns – with central suction. Large-area rotary mowers and various flail mowers are available for use on large areas.



Safety in ice and snow
With a wide range of snow ploughs, snow blowers and universal front-mounted sweepers, the Citymaster 1650 keeps roads, paths and squares clear – also available are a loading bed and a rear-attachment spreader or a top-mounted silo spreader for combating black ice.

365 days. Countless tasks.
Only one machine!

Each season comes with its very own challenges for Municipal Technology equipment. Whether city cleaning, grounds maintenance or winter service – Hako meets every challenge by applying the principle of consistent multifunctionality: Thanks to the wide range of different attachments and superstructures available, you need only one machine to carry out a whole host of applications – 365 days a year; for efficient city cleaning, grounds maintenance or winter service tasks. We simply call it “One for all”. And our customers say: “The right machine for every application.”

 Sweeping	 Wet cleaning	 Green area maintenance	 Winter service	 Transport
 Sweeping 2 brooms	 Scrubbing	 Mowing + discharge	 Snow blade	 Tipper
 Sweeping 3 brooms	 Sluicing	 Mowing + collecting	 Snow plough	 Lattice box
 Weed broom	 High pressure washer	 Flail mower	 Snow sweeper	 Trailer
 Dirt sweeper	 Watering arm	 Thermal weeding	 Snow blower	
 Leaves collecting	 Reflector post washing	 Hedge trimmer	 Spreader	
 Leaves blowing			 Brine sprayer	



Sweeping, collecting, disposing

The tangential suction system with an energy-saving blower ensures that dirt and debris is reliably collected while the sweeping system goes easy on pavements and joints, and our efficient separation system provides maximum filling of the universal hopper – for extended emptying intervals and a higher payload.



Gets in almost every corner: The steering system with articulated joint ensures excellent manoeuvrability – even when sweeping in reverse gear.

A clean performance on town squares, roads and paths

As a professional sweeper equipped with a 2- or 3-broom comfort sweeping system, the Citymaster 1650 not only provides perfect cleaning results: Our patented circulating water system offers maximum dust control to ensure clean exhaust air and lowest possible particle and fine dust emissions, which is a clear benefit for both the operator's health and the immediate surroundings.



Gentle yet effective cleaning – when sweeping alone is not enough

Equipped with Hako's CityCleaner attachment scrub deck, the Citymaster 1650 is ideal for carrying out intensive wet cleaning tasks. Perfectly suited for almost all types of surfaces. Goes easy on pavements and joints. And the circulating water system with efficient filters ensures optimal cleaning results.



Even more thorough with a third broom: for use on two different levels, pavements or traffic islands.

For coarse debris: Large, bulky sweepings can be collected through the coarse dirt flap – in the same operation.

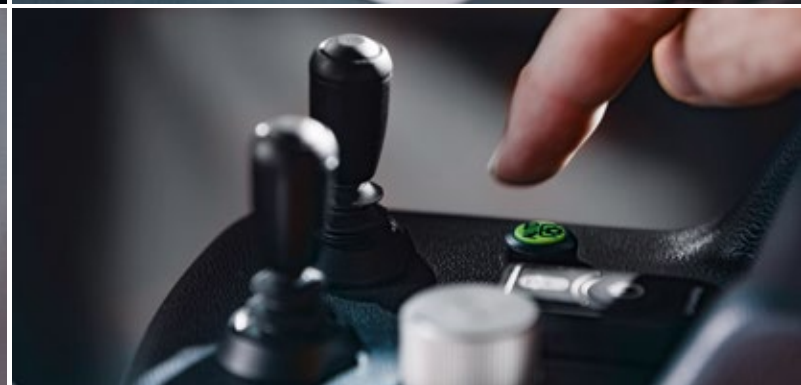
Perfect results on all levels

To ensure optimal cleaning results, the brooms with hydraulic broom-head-adjustment system can be adapted to different types of gutters. The pre-sweep broom can also be used for second-level cleaning of footpaths or even traffic islands. And what's particularly practical: Thanks to the double-joint broom arm, there is no need to adjust the unit when changing from sweeping one side of the road to the other.



Always a good feeling

On first entering the spacious cab, one thing becomes obvious at first glance: This workplace has been designed to benefit the machine operator. Both the steering wheel – adjustable for height and tilt – and the comfort seat allow individual adjustments.



Ergonomic in every detail

The Citymaster 1650 offers an extensive range of innovative features providing more working comfort, safety and efficiency – whether used exclusively as a compact road sweeper or as a versatile implement carrier for all-season municipal application. After all, even the best machine is only as good and efficient as its operator. The Citymaster 1650 has therefore been designed as an ergonomic, mobile workplace that protects the operator's health, makes his daily work routine easier – and thus increases his efficiency at work.

Superior, award-winning comfort

The ergonomic machine concept featuring an adjustable comfort seat, Hako's tool-free quick-change system and a full-suspension chassis makes the Citymaster 1650 a particularly comfortable workplace – tested and certified by AGR/Aktion Gesunder Rücken e. V. (www.agr-ev.de).



Designed to benefit the operator

The machine is controlled through the operating panel integrated in the armrest, including additional functional elements such as the one-button operating system providing automated functional processes for machines with complex configurations. The USB connection at the steering column allows the driver to keep his mobile phone charged, so that he can always be contacted in an emergency. Both the heating- and ventilation systems as well as the air conditioning ensure comfortable working in every season. And when the job is done, the cab can be exited on both sides.



ERP-based
fleet display



In addition to
view.X important
live machine data

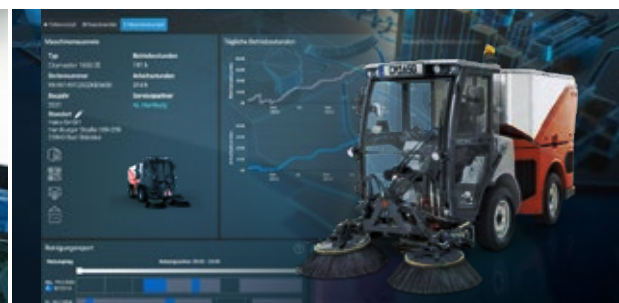


Optional
machine access
management
(for view.X.live)



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 1650. 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

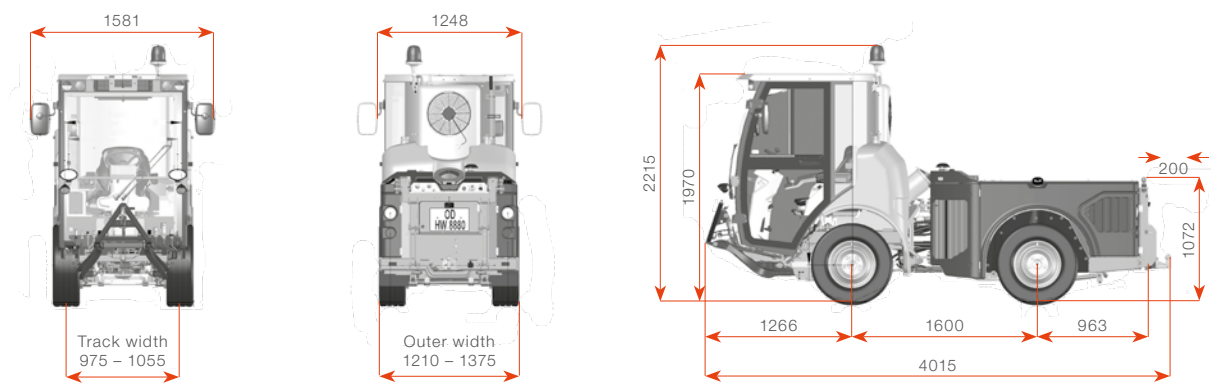
To ensure that our machines perform optimally at all times, we offer customised and scalable services along the entire product life cycle.

- 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 unit Citymaster 1650		
Engine and drive	Engine	<ul style="list-style-type: none"> water-cooled 4-cylinder industrial diesel engine with 1,952 ccm exhaust gas turbocharging + charge air cooling, particle filter, output 55 kW at 2,700 rpm common-rail direct fuel injection, tank capacity 50 l engine comes below the threshold value according to exhaust directive 2016/1628/EC Stage V
	Road approval	EU type approval basic unit as a tractor (LoF)
	Drive	<ul style="list-style-type: none"> traction- and energy-efficient optimized hydrostatic drive with permanent all-wheel drive drive control system with automatic load regulation in transport mode, 2-speed automatic transmission 3-level fixed rpm in work travel mode (1,600 rpm [ECO] – 2,000 rpm [Standard] – 2,400 rpm [MAX])
	Hydraulics	<ul style="list-style-type: none"> load-sensing high pressure hydraulics with variable power distribution for rotatory consumers circuit 1 (front) 0-50/0-70 l/min @ 255 bar circuit 2 (rear) 0-20/25/30 l/min @ 195 bar 2 hydraulic circuits at the front, 1 hydraulic circuit at the back
Driving and working characteristics	Speed	<ul style="list-style-type: none"> driving speed automotive 0 – 40 km/h work travel hydrostatic 0 – 24 km/h reverse 0 – 12 km/h
	Steering and chassis	<ul style="list-style-type: none"> hydraulic 4-wheel chassis with articulated steering, steering angle 45° robust articulated joint with maintenance-free PTFE-coated bearings trailing-arm-guided, suspended front and rear axles, coil springs and hydraulic shock absorbers stabilizer at the rear axle
	Brake system	<ul style="list-style-type: none"> hydrostatic brake acting on all four wheels, disc brake at the front with load-dependent support via drive control acting on both axles electrically activated multi-disc stop brake at the rear axle
	Tyres	<ul style="list-style-type: none"> 225/70 R15C (M+S road tyres standard) 255/65 R16C (M+S universal tyres § 35 StVO) 320/55-15 (lawn tyres)
	Cab	<ul style="list-style-type: none"> 1-seater comfort cabin with comfort driver's seat and operating panel integrated in the armrest central display showing all the machine's functions, adjustable steering column hot-water heating and optional air conditioning framed doors with sliding windows folding exterior mirrors, adjustable from the inside
Load data	Dead weights	2,035 kg (implement carrier), 2,550 kg (sweeper)
	Permissible values	total weight 3,500 kg, axle load 1,700/2,400 kg (front/rear)
Dimensions	H/W/L	basic unit: 1,970 mm x 1,210 x 3,830 mm (standard tyres, without tow bar) sweeper: 1,970 mm x 1,210 x 4,510/5,170 mm (standard tyres 2B/3B)
	Wheelbase	1,600 mm
	Track width	975–1,055 mm
	Inner turning radius	1,290 mm





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
www.hako.com



Blue Competence is an initiative of VDMA (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).

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.