



# Municipal Technology

Multifunctionality without compromise

For efficient all-season use.



## Our efficient all-rounders

Spring, summer, autumn and winter: Each season comes with its own particular challenges. We develop future-oriented vehicles that meet the changing requirements posed on municipalities, service providers and industrial clients with superior economic efficiency: Through providing excellent quality, absolute reliability and consistent multi-functionality. For you, this means that you need only one flexible machine that covers almost all applications. For lower investment costs and that decisive "plus" in terms of efficiency.











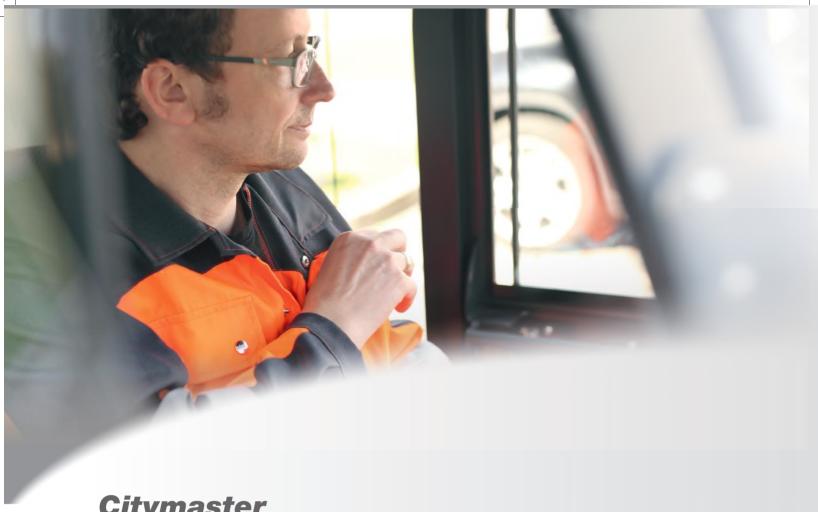
### Hako, that's why!

This is what you can expect from us: High-quality products, designed and made in Germany, that meet the highest demands in terms of material, technology and functionality. You can rely on our robust sweepers and load- and implement carriers – under all circumstances. This is what we stand for, backed by more than 80 years of experience, our own development department and large testing grounds, as well as our first-class service.

Hako offer you the maximum machine availa-bility over the entire life cycle. Complemented by the highest level of both safety and comfort, we turn high-quality products into state-of-the-art solutions. This is our commitment to ensure your success.

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# Citymaster

Implement carriers and sweepers with articulated joint and all-wheel steering



### Citymaster 600

2-t class implement carrier and sweeper with articulated joint, 24 kW, driving licence Class B or higher



### Citymaster 1650

3.5-t class implement carrier and sweeper with articulated joint, 55 kW, driving licence Class B or higher



#### Citymaster 1250plus

2.5-t class implement carrier and sweeper with articulated joint, 33 kW, driving licence Class B or higher



### Citymaster 2200

6-t class implement carrier and sweeper with articulated joint, 80 kW, driving licence Class C/C1/C1E or higher

### Safety first

Tested and approved – Citymaster with ROPS-tested safety cabin and Multicar with DEKRA-certified 2-person safety cabin. Both our Citymaster and Multicar vehicles comply with the high standards required to obtain EC type approval and a general operating licence.











Thanks to their low emission values and minimal noise level during operation, our vehicles can work even in environmental zones and other sensitive areas.

#### **Comfort first**

Multiple adjustable seats and steering columns, ease-ofuse as well as our sophisticated quick-change systems are only a few of many benefits that make our vehicles ergonomic and comfortable to use. This is confirmed by the AGR quality label, which has been awarded to our models Citymaster 1650 and 2200, and Multicar M29.

#### **Efficiency first**

The requirements posed on modern Municipal Technology could not be more diverse. So why specialise in just one application? Efficiency means that one machine can simply do more: as is the standard with vehicles made by Hako!



# Citymaster

Implement carriers and city sweepers with articulated or all-wheel steering

#### Technology at its best - for all-season use

If you can hardly see or hear it, it's municipal technology at its best. Because it means that the machines carry out their tasks in a clean, rapid and efficient manner. The key factors are, for example, that the machines are as compact, manoeuvrable and flexible as possible while offering a high payload at the same time. Moreover, they need to be safe on the road and provide low-noise operation as well as lowest possible emission and consumption values combined with best possible dust control during sweeping. Hako's Citymasters offer you just that!



# A strong basis for various applications

No matter what the season or the application or the subsurface, or whether the conditions change constantly or you need to consider specific regional circumstances: the machines of our Citymaster range master every task efficiently. And they are highly flexible. Because, in addition to carrying out professional sweeping tasks, they can be re-tooled and equipped with a wide range of different attachments and chassis-mounted equipment for any kind of seasonal application – 365 days a year, from efficient cleaning to green area maintenance or winter service. That's what we call "One for All". And our customers put it like this: the optimal machine for every application.

\* AGR quality label (Aktion Gesunder Rücken (AGR) e. V.): Tested and recommended by the German association Forum Gesunder Rücken – besser leben e. V. (German association promoting healthy backs) and Bundesverband deutscher Rückenschulen (BdR) e. V. (Federal Association of Back Training Facilities), for further information contact: AGR e. V., Stader Straße 6, 27432 Bremervörde, T: +49 (0) 4761-92 63 580 www.agr-ev.de







For even more efficient work results: driver's cabin with ergonomic comfort seats and one-hand operating system integrated in the armrest.

At a glance: the high-resolution colour display provides a good overview of the machine's current operating states and parameters. Fast, easy, no tools needed: thanks to the quick-change system, the Citymaster can be re-tooled for the next job in no time at all.











Green area maintenance



Transport





Professional sweeper: with large adjustable brooms, powerful suction fan and a universal 600-litre capacity dirt hopper.

### Narrow gauge, wide range of applications

The compact 2-t-class implement carrier Citymaster 600 with articulated steering is equipped with convincing features and clever details providing high levels of multi-functionality and efficiency: for example the universal hopper made of high-strength aluminium, which can be used for sweeping and mowing tasks or as a supplementary water tank – with maximum payload. Or the permanent all-wheel drive ensuring controlled performance across the entire speed range. The basic unit has been equipped to guarantee the full level of functionality when the machine is used as a professional sweeper – and retrofitting is possible at any time with minimal effort!

# Small, highly manoeuvrable, universal

The pro in the class of compact machines expertly fulfils the requirements of service providers or gardeners and landscapers: equipped with our innovative quick-change system and a wide range of optional attachments and accessories available to meet individual customer requirements, the Citymaster 600 is the perfect machine for all-season use. And the vehicle's small width combined with its superior directional stability ensures optimal manoeuvring even in the smallest of work areas.





Highly variable when it comes to green area maintenance: with different mowers, grass collecting system, flail mowers or hedge trimmers.

Flexible when it comes to winter service applications: with the capacity to transport 400 kg of gritting material to ensure long operating times and with a wide range of attachments and accessories available.

#### Compact on the outside, spacious on the inside

Both the comfortable seats and one-hand operating system make the Citymaster 600 an attractive workplace for the driver. The same goes for the large windows of the ROPS-tested safety cabin with ample headroom, which allow an excellent view onto the work area. Moreover, the Citymaster 600 provides added comfort for all-season use: thanks to the integrated heating system and optional air conditioning.



Quickly off to the next job site: on its own axles if the job is nearby, or transported on a trailer to cover larger distances.



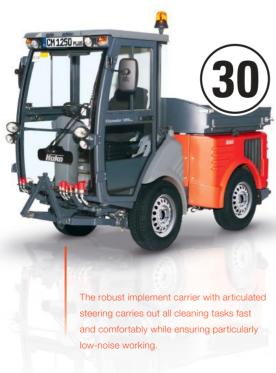
Easy to change – comfortable, back-friendly changing of the hopper and different attachments via quick-coupling system and trolley.

Technical data Citymaster 600		
Engine	Diesel, 24 kW	
Engine drive (type / formula / Vmax.)	Hydrostat / 4x4 / 25 km/h	
Exhaust emissions (standard)	97/68/EC, stage 3A	
Interfaces / attachment points	quick-change system / 3	
Hydraulics (work circuits / summation max. I/min / bar)	2 / 66 / 195	
Sweeper (dirt hopper / working width)	600 I / 1,850 mm	
Dimensions basic vehicle (L x W x H)	3,126 x 1,090 x 1,969 mm	
Weight basic vehicle (GVW / payload max.)	2,200 kg / 850 kg	
Driving licence	Class B	



The vehicle easily circumnavigates any obstacle: thanks to its compact dimensions, directionally stable steering and particularly small turning circle.





Well equipped for all cleaning tasks: with small brooms for narrow way-through widths or with large brooms providing maximum area performance.

#### 2.5 t - class!

For cleaner cities: the fully integrated sweeper
Citymaster 1250plus with 1-m³ dirt hopper capacity is
the ideal machine for municipal applications. Thanks
to the new sweeping unit with its two optional features
'individual-broom-adjustment' and 'broom-headadjustment' as well as different brooms available, the
vehicle can be flexibly adapted to meet the requirements of all kinds of different operating conditions.
Alternatively available with a CityCleaner scrub deck
or a sluicing system for intensive wet cleaning tasks.
And – being a typical Citymaster – it is a 'One for All'
machine, which can be used to perform winter service
tasks just as well as green area maintenance.

### A winner on all fronts

More comfort, more functionality, more efficiency:

The Citymaster 1250 plus offers options that provide a big plus in every aspect. The driver profits from both ease-of-use provided by the one-hand operating system and superior driving comfort as well as reduced noise levels in the cabin whilst the operating company can capitalise on improved work results and increased efficiency – for example through the sweeping unit offering various adjustment options, variable working widths and an extended choice of sweeping brooms.



For both intensive and basic cleaning of traffic areas – even after accidents involving oil spills: combined cleaning with the CityCleaner scrub deck.







Covers the full range of winter service tasks: from clearing snow to fighting black ice.

Easy cleaning of difficult-toaccess areas: with the flexible hand tool for all cleaning tasks around the machine.

#### More comfort - increased safety!

The combination of our optimised air-sprung driver's seat, smoothly rolling tyres and the operating panel integrated in the armrest ensures both comfortable working and pleasant transport journeys. These features not only make work easier for the driver, they also ensure increased safety: by providing fatigue-free working and allowing the driver to keep an eye on his work environment in any given situation.

Both the rubber-dampened cabin and optimised tyres ensure improved driving comfort and increased safety.

Technical data Citymaster 1250plus		
Engine	Diesel, 33 kW	
Engine drive (type / formula / Vmax.)	Hydrostat / 4x2 (4x4) / 30 km/h	
Exhaust emissions (standard)	97/68/EC, stage 3A	
Interfaces / attachment points	quick-change system / 3	
Hydraulics (work circuits / summation max. I/min / bar)	2 / 66 / 195	
Sweeper (dirt hopper / working width)	1,000 I / 2,250 mm	
Dimensions basic vehicle (L x W x H)	3,255 x 1,193 x 1,999 mm	
Weight basic vehicle (GVW / payload max.)	2,600 kg / 1,115 kg	
Driving licence	Class B	







Highly manoeuvrable: With the smallest turning circle in its class, the vehicle ensures excellent manoeuvrability.

Extremely compact: Thanks to its slim design, the Citymaster 1650 is ideal for working in confined spaces.

#### The benchmark in the 3.5-t class

The new Citymaster 1650 offers all the benefits and application options of a larger sweeper by taking full advantage of the Class B driving licence range – and the vehicle can also work on footpaths. Thanks to its directionally stable, articulated steering, the smallest turning circle in the 3.5-t class and permanent all-wheel drive, the vehicle

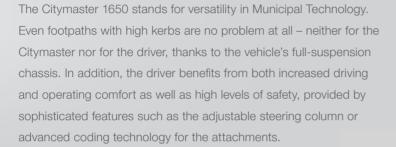
can access almost all areas. And what's more, a comprehensive range of new features provides increased working comfort, safety and efficiency – no matter whether the machine is used exclusively as a sweeper or as a versatile implement carrier for all-season municipal applications.



Safe: The camera system

widens the driver's viewing angle by 270°.

Improved ergonomics: Extended seat options, foot pedals with improved ergonomics, steering wheel with two adjustment options.



Working in the fast lane





Brighter: Full LED lighting system with a high luminous efficacy and LED work lights for the brooms, the suction duct and the rear end of the cabin.

#### Ergonomic, back-friendly, safe

The cabin of the Citymaster 1650 offers an excellent workplace for the driver - independently certified and recommended by AGR e. V.! In addition, coil springs, shock absorbers and stabilisers as well as the vehicle's intelligent drive control and disc brake systems provide high levels of safety.





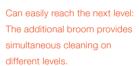






# Multifunctional - all the way

The Citymaster 1650 can do much more than carrying out professional sweeping tasks: Designed as a multifunctional implement carrier and equipped with a powerful and particularly efficient hydraulic attachment drive, there are virtually no limits to the vehicle's application options. It can be used, for example, to perform winter service tasks, which ensures efficient year-round capacity utilisation – for increased economic efficiency in Municipal Technology.





Quickly re-tooled: One person alone can change the attachments or superstructures – without the need for tools or a workshop and without any loose parts to be dealt with before or after. Back-friendly, easy and safe.







Comfortable weed control: Thanks to the weed broom in combination with subsequent sweeping.

Mowing-suction combi unit with universal hopper: Mows lawns, maintains road-side greenery and works close to kerbs and edges on either side. Powerful against ice and snow:
The wide range of attachments available allows flexible adaptation to different snow and weather conditions.

#### Always the perfect combination

Three attachment points allow different combinations of attachments and superstructures. For even more application options.

Sweeping
Weed control
Mowing
Wet cleaning
Snow clearing
Gritting



Gritting Towing





equipped with either two or three sweeping brooms, the Citymaster 2200 cleans even difficult-to-access areas without effort.





#### Top of the range in the 6-t class!

With its working width of up to 2.60 m and a genuine 2-m³ hopper capacity, the compact sweeper with all-wheel steering shows off its qualities when it comes to cleaning both large and small areas in a particularly time-efficient manner. Different sweeping systems,

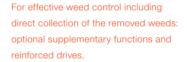
a CityCleaner scrub deck and a sluicing system are available to provide thorough, dust-free cleaning. With its top speed of 62 km/h, the Citymaster 2200 ensures fast arrival at the next job site – and can be driven on motorways and express roads.

# Always ready for the next job

Developed to provide maximum efficiency, safety and flexibility when it comes to cleaning public areas: equipped with either a 2 or 3-broom sweeping system and the largest dirt hopper in its class, the Citymaster 2200 meets all requirements imposed on modern municipal technology. The quick-change system ensures that the sweeping unit can be swiftly replaced by other attachments – for example wet cleaning or winter service devices. One for All.









Equipped with our professional broom control system as a standard – this is a great plus especially when working under difficult conditions. Comprehensive safety systems as well as the sweeping unit with integrated collision protection ensure low repair costs.





Nothing can be overlooked: optional camera systems allow the driver an additional 270° viewing angle – without having to avert his eyes from the task at hand.



Technical data Citymaster 2200		
Engine (type / exhaust gas cleaning system)	Diesel, 80 kW / DOC, DPF, SCR	
Engine drive (type / formula / Vmax.)	Hydrostat / 4x2 / 62 km/h	
Exhaust emissions (standard)	EURO VI, stage C, stage D (as of 10/2019)	
Interfaces / attachment points	ball-coupling system / 2	
Hydraulics (work circuit / summation max. I/min / bar)	1 / 100 / 225	
Sweeper (hopper / working width)	2,200 I / 2,600 mm	
Dimensions basic vehicle (L x W x H)	4,950 x 1,320 x 2,055 mm	
Weight basic vehicle (GVW / payload max.)	6,000 kg / 2,460 kg	
Driving licence	Class C/C1/C1E	



# Everything at a glance!

The larger the number of machines in your fleet, the more important it is to have a good overview of all relevant key data, as it is the only way to ensure both transparent and economically efficient operation of your fleet of machines. The online-based Hako-Fleet-Management system records your machines' operating-status data and compiles all information in a clearly structured manner for subsequent retrieval and visualisation on your web-based systems, such as your PC, smartphone or tablet. In real time, 24/7.

### Fleet.view.XX.live

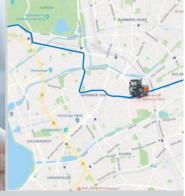
Always up to date: *view.XX.live* records your machines' operating data online, e.g. operating time and status as well as the current location including route tracking. This information can be used as a performance record for clients. The electronic vehicle-access-authorisation system, which is available as an option, enables identification of the operator and completes the system – this is what we call modern machine management.



Your smartphone becomes your

Operations Centre: Your machine data – available at any given time.







### Fleet.view.X

**view.X** compiles all important information in a compact manner: Machine and contract data, information regarding service and maintenance intervals, service history and job sites. Always up to date. **view.X** supports you in utilising your machines in the most economically efficient way. All evaluations are available online 24/7, and are very easy to retrieve thanks to our intuitive user interface.









Leasing options – customised to meet individual customer requirements.

Rental contract

ALL-IN-plus: financing,
maintenance and
insurance included!

Adapt your rental payments to your seasonal earnings.



Hire-purchase – customised monthly payments in line with your liquidity.



# We are here to help!

Our national coverage of our factory trained service technicians and our authorized service agents are coordinated centrally via our customers and support centre. Our same day parts and availability standards (average 90%) keeps machinery downtime to a minimum. We work hard to support our costumers.







We have a dedicated team of technical support personnel to help you with your technical needs

# Service you can rely on

Our sales and service organization is one of our biggest plus points. We are always in your close vicinity, offering qualified expert advice and reliable service. All around the clock.

To ensure trouble-free operation – and to give you a good feeling



Every day and all around the clock – our service technicians are available when needed.



#### Always clean ahead

We continuously develop our solutions further in order to ensure that they meet the requirements of tomorrow. We do so in close operation with users, always in line with current trends and by considering the demands of the future. This is why we drive the research and development activities we carry out in our own R & D facilities more and more towards both efficiency-enhancing and Ecofriendly measures as well as other important topics of the future, such as electromobile solutions or digitized processes



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

The demands placed on contract cleaners when it comes to the professional cleaning of buildings and outdoor facilities are just as extensive as the range of suitable products we offer our customers: from sweepers and vacuum sweepers to scrubber-driers and combi machines.

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