Cleaning Technology Municipal Technology Waterjet Technology





Multicar M29

The compact multi-talent

365 days, countless applications - one vehicle!



All seasons flexibly under control

The Multicar M29

Sweeping in the spring. Mowing in the summer. Leaf-blowing in autumn. Snow-ploughing in the winter. The application options of the Multicar M29 are virtually unlimited. Thanks to the modular concept, the narrow-gauge load and implement carrier is extremely flexible for a wide range of applications. Especially in situations where manoeuvrability and a compact design are called for. In the municipal sector as much as in gardening & landscaping and in waste management. A genuine all-rounder – characterised by one thing above all: economically efficient working. And with up to 62 km/h it always gets quickly to the next job site.

Highlights:

- Switch between job sites quickly at speeds of up to 62 km/h
- For confined job sites: only 1.32 m wide and a small turning circle
- Optimal working conditions for the user
- Modular concept for maximum flexibility and multifunctionality





Clear view

Generous window areas, the innovative exterior mirror concept and the optional camera system and Turning Assistant provide improved visibility of the working environment.





Safety standards of the highest level

Safety starts with the vehicle concept. When developing our products, we follow the same high standards that apply in the truck construction industry, which includes all-wheel drives as well as disc brakes and an integrated hydrostatic ABS. Full LED lighting as standard, large-area reflectors, brightly lit LED rotating beacon - all for the safety of the user. We attach a great deal of importance to the quality of our components in order to ensure both safety and durability. After extensive testing, we can guarantee the safety and durability of our machines.

For more safety on the road

Elaborately spring-mounted heavy-duty commercial vehicle axles 'made in Germany' provide the high payload of the Multicar M29 and ensure safe driving and operation. The heavy-duty frame, providing stable road-holding characteristics in all operating situations, is another aspect of the safety concept.





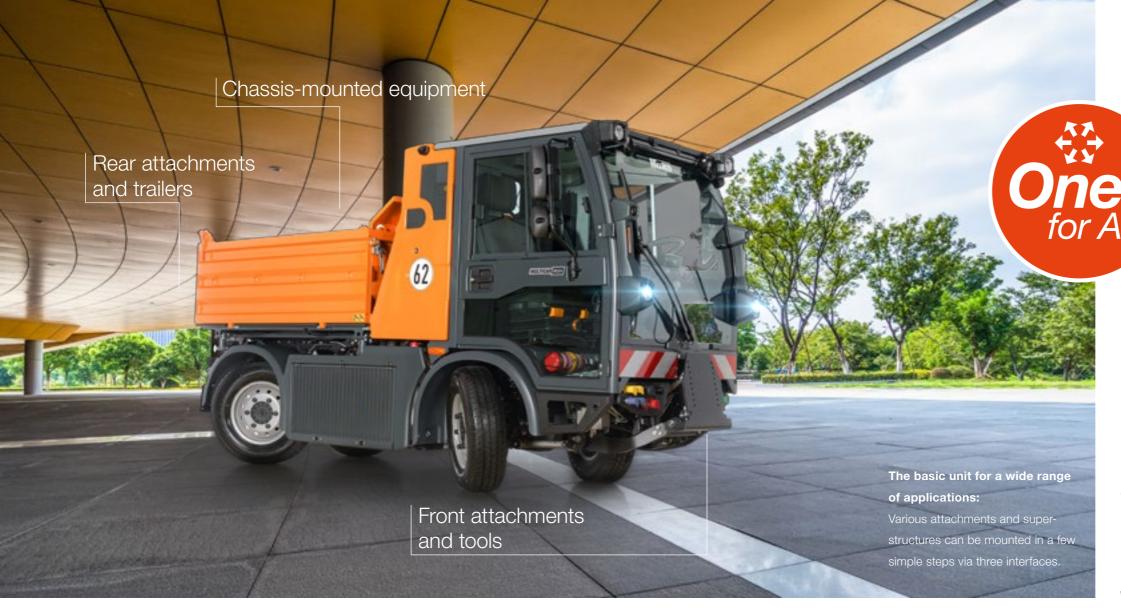
The standard full LED lighting illuminates the work area perfectly at any time of day.



The driver's safety is very important to us. This is why our driver's cabs are tested according to ECE-R29 (occupant protection).

Efficient and safe

The optional Turning Assistant system helps to minimise blind spots and protect vulnerable road users. The optional camera system provides a full panoramic view - particularly in situations with poor visibility. The safety concept is complemented by a powerful anti-lock braking system, which ensures stable braking performance even in adverse weather conditions.



Maximum adaptability

Front attachments and superstructures, rear attachments or trailers: The modular concept of the Multicar M29 has been designed for a large number of applications with a wide range of different attachments. This enables particularly economical operation in areas where different tasks arise – no matter whether its seasonal tasks spread over the year or different jobs that need to be carried out on the same working day.









Green area aintenance

Sweepin

Winter se

Wet cle









Vaste management

Transport

ort R

oad maintenance

Special application

Vaterjet technology

WITT

Everything is possible!

From top-mounted spreaders to aerial work platforms: The Multicar M29 can be quickly and easily equipped for almost any tasks with a large selection of attachments and superstructures. Whether in transport, agriculture, or municipal applications such as cleaning traffic areas and maintaining green areas or as an implement carrier for special hydraulic tools.



Loading. Tipping. Done.

Whether on construction sites, in winter service or for green cuttings: With its hydraulically tippable loading bed, high payload and robust design, the Multicar M29 reliably transports material to exactly where it is needed – ensuring a smooth workflow in daily operations.





Increased thrust power when the going gets tough.

The infinitely variable hydrostatic drive is additionally mechanically assisted – to help adapt the working speed to the tasks at hand and provide power reserves when working uphill.







Saves time: With its top speed of 62 km/h, the Multicar M29 can even use motorways and express roads – which reduces travel times from one job site to the next significantly.



Used as an implement carrier, the vehicle is the ideal basis for carrying out any kind of municipal cleaning or maintenance task. Given the wide range of components available, the Multicar M29 can carry out these tasks all year round: The range of equipment comprises everything from sweepers to snow ploughs so that the basic unit can be used efficiently on 365 days a year.



Where sweeping is not enough

Equipped with the CityCleaner, the Multicar M29 takes cleaning to a new level: thanks to rotating brushes, it cleans even heavily soiled surfaces efficiently and thoroughly.





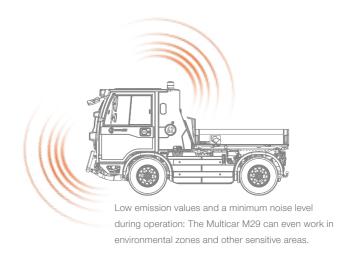
Low effort for a high payload: thanks to quick mounting of equipment directly onto the chassis.

Fully prepared

For all green jobs: leaf vacuuming, hedge trimming, weed removal and grass mowing. And when the first snow falls in autumn, the Multicar M29 can be quickly converted for light winter service. Heavy snowfall?

Of course, we have the right winter service equipment for that, too!









More space for performance!

The spacious, ECE-R29-tested cab offers maximum freedom of movement – and the greatest possible flexibility. Because the passenger area can be individually equipped and thus adapted to the driver's needs. Large glass surfaces, the optional roof and rear window and other well-thought-out options improve the view onto the working area - and thus also increase safety.



The workplace in the Multicar M29 is designed to be particularly back-friendly: from easy entry and exit to the ergonomic seat with individually adjustable seating options to the reduction of shocks and vibrations.





Awarded for the back-friendly overall machine concept comprising the workplace, the chassis and www.agr-ev.de



The easily accessible controls and intuitive operating logic increase user friendliness and working comfort.



Greater climate comfort: always the right temperature in the cab for efficient working in all weather conditions.

All functions quickly at your fingertips. Even during operation!

Clear and well organised: The vehicle's control functions are ergonomically designed to ensure that all elements are easy to use during operation. This also applies to changing attachments, of course!

10 11



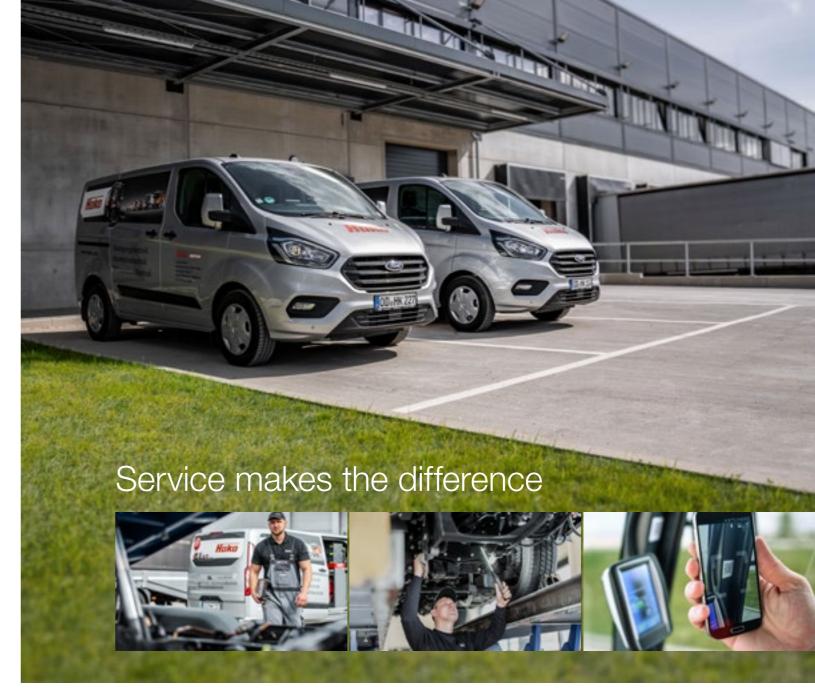
Hako Municipal Technology thinks ahead – and is even smarter when you monitor its use with Hako-Fleet-Management. The data collection can not only serve as a basis for even more economical use, but also helps you to be one step closer to a solution in the event of a service call. Hako-Fleet-Management allows you to track the route of the Multicar M29. 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



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

12

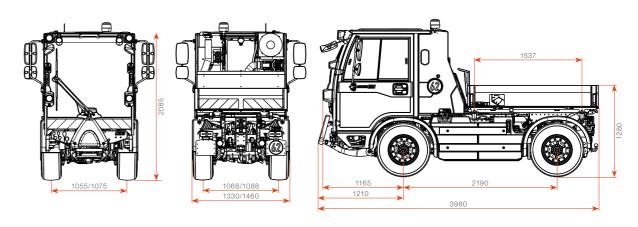


Technical data

		Multicar M29 C	Multicar M29 C HK
Engine and transmission	Engine	VM four-cylinder turbo diesel, according to Euro VI	
	Displacement/output	2,970 cm ³ / 80 kW (109 HP) at 2,600 rpm	
	Max. torque	420 Nm at 1,100 rpm	
Working characteristics	Working hydraulics	powerful standard hydraulics with 1 working circuit – front and rear – gear pump, 55 l/min, 200 bar lifting/swivelling function for front attachment	load-sensing hydraulics with 2 working circuits - 1 circuit each front and rear - axial piston variable displacement pump, 0 110 l/min front, 0 70 l/min rear, 200/300 bar - gear pump for control functions lifting/ swivelling function for front attachment
	Hydraulic options a.o.	2 working circuits - 1 circuit each front and rear - Tandem gear pump, 2 x 55 l/min, 200 bar Summation circuit (max. up to 110 l/min front or 70 l/min rear) path-dependent spreading via vehicle hydraulics, further control functions	path-dependent spreading via vehicle hydraulics, further control functions
	Implement mount front, optional	front lift with attachment triangle, attachment plate M29 or DIN F4 equipment plate	
	Implement mount rear	on tipper or tipper bearing, rear attachments	
Drive and control	Drive	continuously variable hydrostatic drive, electronically controlled, with two driving speeds that can be switched under load	
	Drive options	selectable all-wheel drive, rear differential lock, mechanical creeper gear	
	Speed in transport mode	0–62 km/h, infinitely variable	
	Speed in working mode	0–25 km/h, infinitely variable	
	Steering	front-wheel steering; optional four-wheel steering	
	Fuel tank capacity	67 litres	
	Brake	hydraulic 2-circuit brake system, disc brakes front/rear, hydrostatic ABS acting on all four wheels; mechanical parking brake acting on rear axle	
Load values	GVW	6.0 t	
	Empty weight*	from 2.85 t (implement carrier, depending on the equipment)	
	Payload**	from 3.15 t (implement carrier, depending on the equipment)	
Driving characteristics	Chassis	comfortable suspension with coil springs, hydraulic vibration dampers and additional rubber springs	
	Frame	welded ladder frame; cranked and inclined at the front for easy access; possibility of feeding through a suction hose (central suction, e.g. mower-suction combi)	
	Axles	rigid axles, guided at the front on trailing arms and Panhard rod, rear guided by triangular and longitudinal links, stabiliser at the rear	
	Front axle	steering axle, optional steering drive axle	
	Rear axle	drive axle, optional steering drive axle, optional with engageable differential lock	
	Tyres	225/75 R 16 C	
	Cab	space-frame full-comfort cab with high-strength special profiles and plastic panelling, optional heated windscreen	

Form, colour and design are subject to change in favour of further technical development. Pictures may show optional equipment. Dimensions according to VO (EU) No. 1230/2012, depending on equipment

- * *Without optional equipment or additional attachments/superstructures
- ** Optional equipment and attachments/superstructures reduce the payload





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.