

Cleaning Technology
Municipal Technology
Waterjet Technology

Hako



Multicar M31

Multifunctional load and implement carrier in the 6-t class

Multifunctional. Economical. Powerful.

MULTICAR M31

Save

As safe as a lorry: with impact-tested space-frame cab, all-wheel drive, disc brakes, daytime running lights and much more.

Sustainable

Saves emissions: with a powerful, fuel-efficient turbodiesel and exhaust emissions so low that it meets the strict limits of the Euro VI-E standard.

Comfortable

From a large, tinted windshield to power steering and armrest-integrated operation: The Multicar M31 makes everyday work easier with well thought-out details.

Multifunctional

Year-round, seasonal, stationary: Equipped with three attachment points for a wide variety of attachment combinations, the Multicar M31 is a true all-rounder for all situations.

Strongly conceived. Strongly built.

The Multicar M31

As a versatile implement carrier and powerful transporter, the Multicar M31 masters all tasks with ease – and sets new standards in terms of safety and comfort. Redefining sustainability and performance in the 6-t class, the vehicle is a genuine trendsetter. It fully complies with the Euro VI-E standard for lower exhaust emissions without sacrificing performance!



Highlights:

- Modular vehicle concept with four basic models
- High driving comfort thanks to independent suspension
- High working comfort for the driver
- Options for even more performance, comfort and safety
- Complies with the Euro VI E standard: with emissions reduced by over 90%



Simply see more:
large exterior mirrors,
optionally with additional
wide-angle mirrors.



Variable: with a short or
long wheelbase and 4x2
or selectable 4x4 drive.

Ready for all conditions

With a width of just 163 cm, a small turning circle and power steering as standard, the Multicar M31 can be manoeuvred easily and safely even in tight spaces. If necessary, all-wheel drive and creep speed can be engaged at the push of a button. And with a high transport speed of up to 90 km/h, the vehicle always gets to the next job site quickly.

Typical Multicar

Modularity is the great strength of the Multicar M31. Depending on individual requirements and areas of application, different, optimally matched equipment and fittings can be selected. Always on board: clever technical features that make the Multicar M31 efficient, economical and versatile.



Powerful: the ball head/pin
coupling with a drawbar load of
150 and 250 kg respectively.



Everything quickly under control

All operating and display elements
are centrally and clearly arranged.
For an optimum overview, the switches
are equipped with LED technology.



Strong: with a total towing
weight of up to 7.5 t, payload
of up to 3.1 t and braked
trailer load of up to 3.5 t.

Quickly ready for use: easy attachment pick-
up via a front-mounted quick-change system
with lifting, lowering or swivelling function.

Flexible: three-way tipper
with variable hydraulic
tipping directions.

Safe road holding:
thanks to independent wheel
suspension with coil springs
and progressive leaf springs
with telescopic dampers at
the rear.



All buckled up? A contact in the seat cushion checks seat occupancy, another in the seat belt buckle checks seat belt use. If the seat belt is not fastened, visual and audible warning signals are emitted.

Comfortable – and safe!

When it comes to comfort and safety for the user, our standards cannot be high enough. To increase productivity and counteract fatigue at work, we have ergonomically optimised the design of the cab. With unique, DEKRA-tested safety features and a workplace optimally adapted to the driver, work becomes a pleasure.



Protected against theft
After the ignition is switched off, the immobilizer is automatically activated. Only the remote-control key can deactivate it again when the ignition is switched on.



The optional turn-off assistant detects road users in the blind spot.

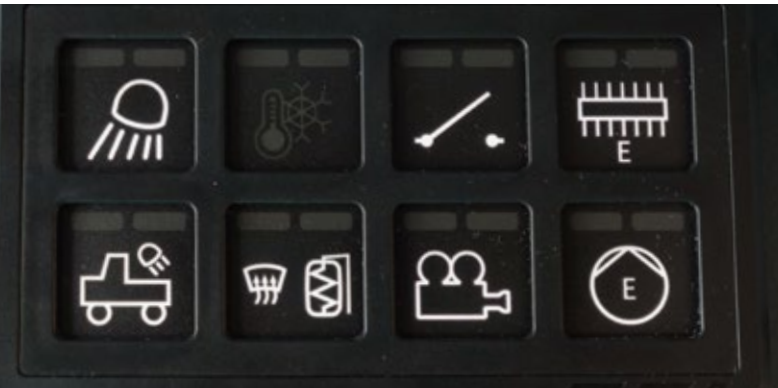


Complete all-round view:
With an optional camera system and rear-view cameras.

Optimal lighting with LEDs:
thanks to energy-efficient lighting systems with optimal beam angle.

Turn safely

The optional Turning Assistant reliably detects road users in the blind spot, thereby increasing safety when turning – especially in urban areas.



Control centre roof console

The keypad in the roof console allows you to quickly and easily select and adjust work options such as the front and rear headlights, windscreen and mirror heating, and the front camera.



Tested and approved for safety:
compliant with ECE-R 29 and even ECE-R 13 (Multicar M31 Hydrostat) for safety in all situations.

Further safety features:

- Standard daytime running lights and large-area reflectors
- Large exterior mirrors – optionally heated and electrically adjustable, as well as additional wide-angle mirrors
- Double-skinned doors with load-tested steel and plastic
- Impact-tested space frame cab
- Hydrostatic drive and hydrostatic ABS for extra safety and stability – complies with guideline ECE-R 13 (Multicar M31 Hydrostat)



Year-round application possibilities, e.g.:

- Transport work with a three-way tipper or skip body, also in combination with a loading crane or grapple
- Disposal tasks in pedestrian zones, parks and narrow areas
- Repair and maintenance work with aerial work platforms
- Cleaning of gullies and sewer cleaning

Seasonal application possibilities, e.g.:

- Winter service with snow ploughs or snow brushes
- Sweeping with front-mounted and suction sweepers
- Cleaning with water pressure or hand-held cleaning/watering equipment
- Mowing work, tree and woody plant care, tree pruning, shredding and removal of clippings



Always the right solution – whether for stationary or seasonal use.

Unbeatably versatile

Whether in the city, in landscaping, in the construction industry or in waste disposal: The multifunctional talent Multicar M31 convinces with a multitude of application possibilities and the greatest possible flexibility. With its wide range of attachments and superstructures, it is not only extremely adaptable to any task and condition, but also particularly user-friendly – both in terms of preparation and execution.

Green maintenance

Sweeping

Winter service

Wet cleaning

Weed control

Waste disposal

Transport

Road maintenance

Special operations

Waterjet technology

Technical benefits:

- Three attachment points for a wide variety of optimally adapted implements and a quick-change system for fast and tool-free changeover
- High hydraulic output of up to 110 l
- Large reserve when operating front attachments due to a high front axle load (up to 2.7 t)
- High functionality in implement operation due to additional front and rear swivelling functions
- Possible to use the swivelling functions as a continuous consumer
- With comfort functions for more user-friendliness, for example, in winter service



NEW: Focusing on sustainability:

Sustainable transport concepts and low-emission mobility are important starting points for combating climate change. We are making our contribution with the Multicar M31!



Protecting health:

To ensure that noise does not become a nuisance for the driver and those around them, we reduce noise emissions to the lowest possible level during operation.



Fewer emissions at the job site:

We ensure this through the use of exhaust gas purification systems, catalytic converters and diesel particulate filters.

For better air quality: Euro VI-E

With its high-performance exhaust gas purification system, the Multicar M31 meets the Euro VI-E standard – making municipal use even more sustainable and fit for the future. To comply with the strict limits, various exhaust gas purification systems such as a diesel oxidation catalyst and SCR-coated diesel particulate filter as well as a second SCR catalyst are integrated. With success:

- Exhaust gas aftertreatment is optimally ensured in all operating conditions
- Strong reduction of nitrogen oxide and particulate emissions
- Municipal use becomes even more sustainable and future-proof
- High hydraulic output of up to 110 l



Alternative ZE

The only solution more sustainable is all-electric. That is why we are continuously expanding our portfolio to include environmentally friendly drive solutions for municipal use. The Multicar M31 ZE is quiet, locally emission-free and ideal for sensitive areas of application – as part of our consistent development towards climate-friendly technologies.





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 2250. 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

		Multicar M31 T	Multicar M31 B	Multicar M31 C	Multicar M31 Hydrostat
Engine and transmisson	Engine	Large-series engine, FPT turbo diesel, displacement 2,988 cm³			
	Power ouput	110 kW (150 hp) at 3,500 rpm			108 kW (147 hp) at 3,000 rpm
	Max. tourque	320 Nm at 1,200 rpm			370 Nm at 1,320 rpm
	Pollutant emissions	Exhaust emissions according to EURO VI standard			
	Drive	5 forward gears and 1 reverse gear; with all-wheel drive incl. crawling gear: 10 forward gears and 2 reverse gears			Continuously variable hydrostatic transmission with two driving modes: transport and work, selectable crawl gear
Handling characteristics	Speed range N2	0–90 km/h			0–70 km/h
	Chassis	Flexible, modular-constructed and light-weight sheet-steel frame			
	Wheelbase	2,450 mm (short), alternatively 2,995 mm (long)			
	Axles, front suspension	Independent suspension with telescopic shock absorber and additional coil springs			
	Axles, rear suspension	Telescopic shock absorber with additional progressive flat springs			
	Tyres	225/75 R 16 C (standard), additional tyres optionally available			
	Driver's cab	Tilting space frame cab, safety cab, comlies with ECE-R 29			
Drive and control unit	Drive	4x2-, optional selectable 4x4 all-wheel drive		selectable 4x4 all-wheel drive (standard)	
	Clutch	Hydraulically acutated, asbestos-free			
	Steering	Power steering (hydraulic steering), height and tilt adjustable			
	Tank volume	90 litres, Ad Blue 25 litres			
	Brakes	4-wheel disc brakes (ventilated) with 4-channel ABS, complies with ECE-R 13			Additional hydrostatic brake slip control, complies with ECE-R 13
Load values	Maximum permissible weight	up to 5.6 t			up to 5.7 t
	Max. axial load front	2,4 t/2,7 t		2,7 t	
	Max. axial load rear	up to 3.67 t			up to 3.8 t
	Max. payload 4x2 drive*	up to 2.9 t	up to 3.1 t	-	
	Max. payload 4x4 drive*	up to 2.8 t	up to 3 t	up to 2.9 t	up to 2.9 t
	Permissible trailer weight	3.5 t (brake-assisted), 0.75 t (non break-assisted)			
	Gross combination weight rating	7.5 t			
	Hydraulics	Tipper hydraulics: max. 10 l/min max. working pressure 180 bar optional: preparation for light winter service (swiveling/ lifting/ lowering, front attachment – max. 5 l/min	Stationary hydraulics: 1-circuit hydraulics up to 55 l/min at 200 bar up to 40 l/min at 250 bar (depending on the variant)	Mobile hydraulics, available in 3 versions: 1. 1 working circuit, gear pump, 1 x 55 l, max. working pressure 200 bar 2. 2 working circuits, double gear pump, 2 x 55 l, max. working pressure 200/250 bar 3. 2 working circuits, high-pressure comfort hydraulics, axial piston pump and gear pump, 110 l, max. working pressure 200/300 bar, switchable	
	Chassis dimensions	4180 x 1630 x 2200 mm	4180 x 1630 x 2200 mm	4180 x 1630 x 2200 mm	

* Additional equipment reduces the payload

Four models for every challenge



Multicar M31 T

- With tipping hydraulics for three-way tipping body
- Payload of up to 2.9 t
- Trailer loads of up to 3.5 t



Multicar M31 B

- With robust chassis for a wide range of applications
- Stationary 1-circuit hydraulics
- Ideal for stationary superstructures



Multicar M31 C

- With powerful, continuously variable mobile hydraulics (3 versions)
- LS hydraulics for high drive power even at low speeds



Multicar M31 Hydrostat

- With hydrostatic drive (3 versions)
- No clutch, no wear
- With unique hydrostatic ABS



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.

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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.

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