

Cleaning Technology · *Municipal Technology*

multicar

*Compact implement carriers
& transport vehicles*



Function and Mobility – the FUMO

The high-performance implement carrier



Flexible deployment with the highest levels of comfort, convenience and efficiency

Provided with the three attachment points and fast conversion for over 100 possible implementations, the FUMO enables highly versatile deployment all year round. Equipped with a high performance, 107 kW (145 Hp) turbo diesel engine, it is powerful enough to shift heavy loads with ease and, thanks to compliance with Euro 5 and EEV, complete work even in environmental zones. At the same time, it is as comfortable and secure to drive as a car. Its low-consumption engine, long periods between service and long service life ensure the FUMO is also top in the field of efficiency. The FUMO – more than just an implement carrier!



FUMO carrier, with
4x4 drive and
three-way tipper
construction

Three attachment
points for individual
vehicle configuration

Independent suspension
with helical springs
at the front and
leaf springs at the rear

Climbing capacity on open
terrain with 4x4 all-wheel drive
up to 32 degrees

Total towing
capacity up to 7.5 t

Numerous small details serve to provide the highest performance

The FUMO: convenient technology for hard work

High level of flexibility

Equipped with three attachment points and with over one hundred implement options, the FUMO is a highly functional, all-round talent. It can be converted for the next job with just a few manual operations. Combined with its narrow width of just 162 m, the FUMO can be deployed 365 days a year, in both summer and winter, on roads, in pedestrian precincts or on open terrain.

Total towing capacity of
up to 7.5 t, load capacity
up to 2.7 t and braked
trailer load up to 3.5 t



Excellent efficiency

Your faith in the FUMO will be repaid in several ways: Use of high quality materials, ensuring first class workmanship and applying high grade anticorrosive, for example, mean it has a particularly long service life. The high-performance, common-rail diesel engine means low fuel consumption and, therefore, reduces operating costs. Even with regard to maintenance and service, the FUMO shines through the low costs!

Convenient from every aspect

The sophisticated vehicle concept of the FUMO ensures excellent handling and working characteristics. Change to crawling gear simply at the touch of a button – or accelerate quickly from 0 to 90 km/h or 110 km/h (Class N1). Implement and attachment devices work powerfully but are light and easy to control with extreme precision.

Quality made in Germany

Multicar has been developing and producing in Germany for over 50 years!



Balanced handling and secure
roadholding whether in a loaded
or unloaded state due to the
independent suspension with
helical springs at the front and
progressive leaf springs with
telescopic shock absorbers
at the rear

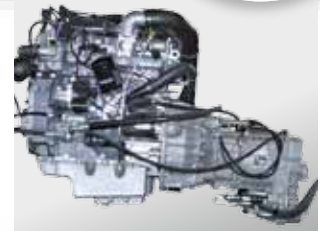




Modern, ergonomically designed space-frame cab with unimpeded view of the working equipment and surrounding area as well as a crew cab for transporting up to five persons



High performance and economic:
Low-noise, 3-litre turbodiesel engine from Iveco producing 107 kW (145 hp). Complies with EURO 5 and EEV standard for use in all low emission zones



Three different attachment points and front quick-change system with raising and lowering function for the simple attachment of a wide range of implements



Hydraulic connections provide powerful drives for implements, ranging from the 1-circuit to the 3-circuit universal hydraulics for 200 bar to the high pressure comfort hydraulics for up to 300 bar



1) Handles like a car

due to the optimally balanced vehicle configuration and 5-gear manual transmission

2) Hydrostat drive

for easy driving and working at very low speeds

3) 4x4 all-wheel drive

for optimal traction, the differential lock provides even more safety when at work

4) Power-assisted steering

with smooth, precise ball nut hydraulic steering for easy manoeuvring

5) Air-con unit

to enable concentrated, efficient and safe working in summer

6) Ergonomically designed comfort seats

can be adjusted forward and back, in height and with adjustable backrest





A glance at the
ergonomically
designed
workplace

Functionality and ergonomics: The FUMO makes your work easier

The well-conceived technology and functionality of the FUMO simplify work. The noise-insulated, ergonomically designed space-frame cab enables the greatest freedom of movement. The low extension of the windows ensures the best possible view of the working environment and working units. All the operating elements are clearly indicated and perfectly positioned for the driver. The functionality of the FUMO continues outside the cab: Fitted with the latest quick-change system, the working units in the implement carrier can be changed for a wide range of tasks incredibly easily and quickly!



2



3



4



5



6

The FUMO – always an excellent choice

The modular vehicle concept of the FUMO opens up a whole range of possibilities. You can decide now what equipment you need in order to make money. The FUMO can be retrofitted and converted with the latest technology easily and according to your needs. Depending on the basic model available, you can choose between a short and long wheelbase, between 4x2 and 4x4 drive with crawling gear, between a single and double cab and over a further 20 additional options.

Three-axle model
with dumper



FUMO Tipper

- The transporter under the implement carriers
- Special transporter with a large load capacity
- For use as a skip loader with short wheelbase and single-circuit hydraulics or as a three-way tipper with electro-hydraulic tipping systems with short or long wheelbase
- Excellent deployment flexibility due to load capacity up to 2.7 t, trailer load up to 3.5 t and permissible total weight up to 5.3 t

FUMO Body

- Versatile implement carrier with 1-circuit hydraulics
- Robust basic vehicle for numerous applications
- Its 1-circuit hydraulics (operating pressure up to 200 bar) makes it ideal to operate stationary equipment such as
 - skip loader
 - tipper
 - loading cranes
 - raised working platforms
 - refuse compactors
 - gully sluicing equipment
 - and lots more

FUMO Carrier

- Professional implement carrier with 3-circuit hydraulics
- Powerful hydraulics for driving several implements simultaneously and independently
- Operating up to three hydraulic circuits using the 3-circuit universal hydraulics (working pressure up to 200 bar)
- 3-circuit high pressure comfort hydraulics (working pressure up to 300 bar), the volume flow can be controlled with continuously variable adjustment conveniently from the centre console
- Ideal for work involving high demands

FUMO Carrier H

- The FUMO with hydrostat: Top of its class
- Two continuously variable adjustment speed ranges and 4x4 drive for accurate manoeuvring
- Road operation 0 – 70 km/h, in work mode with mechanical crawling gear 0 – 40 km/h (hydraulic up to 34 km/h)
- Combination of both crawling gears enables working speeds between 0 – 17 km/h
- Speed is controlled automatically using the accelerator pedal or proportionally using the drive lever or inching pedal with electronic working speed control



1) Compact and manoeuvrable

With its wheelbase of just 2.45 m, an overall length from 4.39 m (short model) and width of just 1.62 m, the FUMO moves elegantly through the narrowest of side-streets. The standard power-assisted steering and hydrostatic drive for low working speeds simplify manoeuvring.

2) Powerful and economic

High performance and maximum torque ensure work is completed efficiently. The low-consumption, 3 litre, common rail turbo diesel engine from IVECO produces 107 kW (145 Hp) and a maximum torque of 320 Nm at 3,500 rpm. Compliance with Euro 5 and EEV also enable working in environmental zones.

3) Off-road capable

The on-demand, 4x4 drive and differential lock, double synchronised manual transmission with ten forward and two reverse gears and high-grip off-road tyres means the FUMO is also very impressive off-road, e.g. on forest tracks, construction sites or open terrain, meadows and hillsides.

FUMO Carrier with
crew cab, watering
system and 1,800 litre
water tank

The FUMO: a reliable colleague for all situations

Wide range of deployment

Whether in the municipality, gardening and landscaping, building trade or waste disposal: The FUMO is ideal for use everywhere where compact, implement carrier services are required.

All-year-round deployment possibilities

- Transportation work with three-way tipper or skip loader functions, also in combination with loading crane or grab
- Waste disposal tasks in pedestrian precincts, parks and areas with narrow access roads
- Maintenance and repair work using aerial working platforms
- Cleaning drains with gully sluicing or vacuum-sluicing equipment and cleaning gullies with drain cover lifter

Seasonal deployment possibilities

- Winter service with snow ploughs or snow brushes, spreaders and snow blowers with FUMO Hydrostat
- Sweeping work with front attachment device and vacuum sweeper machines
- Cleaning using water pressure (e.g. front washing bar) or hand-operated cleaning and spraying devices
- Mowers with mowing bars, rotary mowers, flail mowers, mower extension arms and mower-vacuum combinations
- Tree and forest maintenance, cutting trees from aerial working platform up to 21 m, shredding and transporting waste foliage





Limitlessly functional

From municipality to orchard-
ing: The comprehensive range
of implements and accessories
has made the FUMO more
versatile than ever. Its modular
concept means that its use in
future is also guaranteed
through new implements and
accessories.



Our accessories make the FUMO even better

Special equipment

Use Multicar original accessories to adapt the FUMO even more closely to your specific requirements. Every extra is especially aligned to your FUMO. Therefore, you can be sure that everything fits and works – whether practical extensions for increasing the work output or providing convenient, specific solutions for you and your employees.



Crew cabs

for transporting up to five persons



4x4 all-wheel drive

for increased traction on and off road



Differential lock

for more safety in open terrain and at work



Three-axle model

gross total weight up to 7.49 t



Air-con unit

ensures concentrated work at high temperatures



Front windscreen heater

for excellent vision in cold weather



Auxiliary heater with engine preheating

warms up quicker in winter



Sprung comfort seat

for even more relaxed working



Electrical front windows

for convenient ventilation



Quick-change system

for quick conversion



Automatic shackle type coupling

and ball-type trailer hitch



Working lights and flashing beacon

for visibility and safety

Tyres

In series production, the FUMO is fitted with the proven 225/75 R 16 C summer tyres. To match the wide range of your individual working tasks, there is a wide range of other tyres available for selection:

- 225/75 R 16 C summer tyres (series production)
- 225/75 R 16 C all-season tyres (M&S)
- 225/75 R 16 C winter tires (M&S)
- 285/65 R 16 C all-season tyres (M&S)
- 315/55 R 16 off-road tyres (M&S)
- 325/60 R 15 wide base tyres, min. ground pressure



A combination of quality and long working life

Choosing Multicar means choosing top-quality aligned with sustainability. A highly modern cataphoretic dip painting system, the use of environmentally friendly, water

base paints, sealing of overlaps and additional underbody coatings ensure vehicles have a high quality surface coating, first class anticorrosive and a long service life.



Quick-change device SWV 500

with integrated raising feature for easy, one-man operation when changing devices

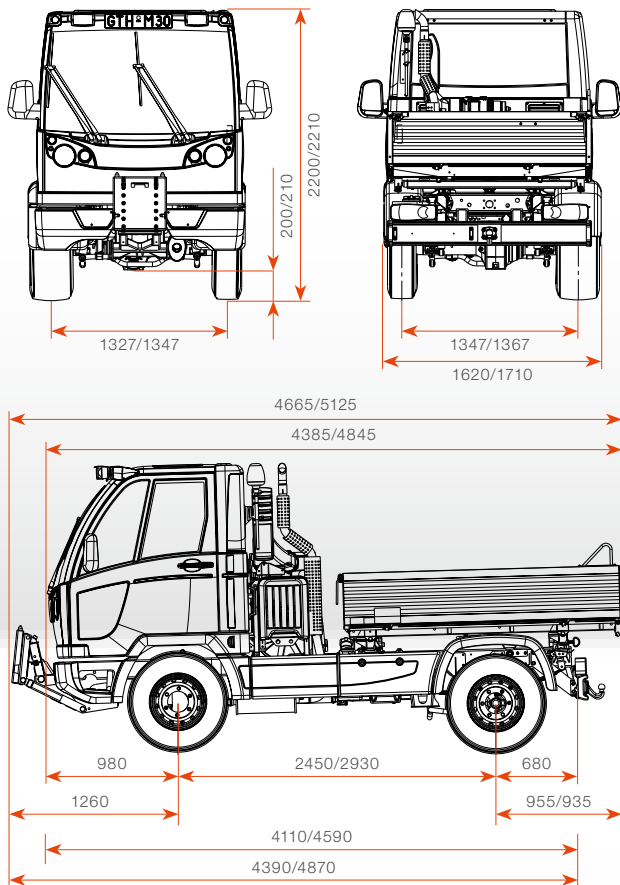


RAL colours

on request, we can paint your FUMO in the RAL colour of your choice.

Technical data

	FUMO Tipper	FUMO Body	FUMO Carrier	FUMO Carrier H
Engine and transmission				
Engine	IVECO F 1 C turbo diesel			
Capacity	2,998 cm³			
Power output	107 kW (145 Hp) at 3,500 rpm			90 kW (122 Hp) at 3.000 rpm
Max. torque	320 Nm at 1,400 rpm			310 Nm at 1,400 rpm
Pollutant emissions	Compliant with Euro 5 and EEV with particle filter in closed system			
Transmission	5 forward gears and 1 reverse gear; with all-wheel drive incl. crawling gear: 10 forward and 2 reverse gears			2-stage hydrostat
Handling characteristics				
Speed range Cl. N2	0–90 km/h			0–70 km/h
Speed range Cl. N1	0–110 km/h			0–70 km/h
Hydraulic drive mode	-			0–70 km/h
Hydraulic working mode	-			0–34 km/h
Crawling gear 1	0.6–16.5 km/h			0–40 km/h
Crawling gear 2	-			0–17 km/h
Chassis	Twistable profile frame of steel			
Wheelbase	2,450 mm (short), alternatively 2,930 mm (long)			
Axles/Suspension, front	Independent suspension with helical springs			
Axles/Suspension, rear	Rigid axle with progressive leaf spring			
Tyres	225/75 R 16 C (series production), other tyres available as special optional equipment			
Driver's cab	Tilting space-frame cab			
Drive and control unit				
Drive	4x2 drive, selectable 4x4-all-wheel drive option		selectable 4x4 all-wheel drive (series production)	
Clutch	Hydraulically actuated, asbestos-free			
Steering	Power-assisted steering (hydro steering)			
Tank volume	80 litres			
Brakes	4-wheel disc brakes (ventilated disc) with 4-channel ABS			



You can count on Multicar at all times

We provide expert advice prior to purchase and excellent financing and leasing options. After purchasing the high quality product, we provide experienced after-sales service 24 hours a day and are close by!

	FUMO Tipper	FUMO Body	FUMO Carrier	FUMO Carrier H
Load values				
Permissible total weight	Up to 5.3 t (manual transmission)			To 5.4 t (at 70 km/h)
Permissible front axle load	2.4t			
Permissible rear axle load	Up to 3.3 t			
Load capacity with 4x2 drive*	Up to 2.7 t (short wheelbase) Up to 2.4 t (long wheelbase)	Equipment and model dependent	-	-
Load capacity with 4x4 drive*	Up to 2.6 t (short wheelbase) Up to 2.4 t (long wheelbase)	Equipment and model dependent	Equipment and model dependent	Up to 2.45 t
Permissible trailer load	3.5 t (braked)			
Gross towing capacity	7.5 t			
Hydraulics				
Electrical tipping hydraulics	Max. 5l/min Max. working pressure 150 bar	-	-	-
1-circuit hydraulics	-	Max. 45l/min Max. working pressure 200 bar	-	-
3-circuit universal hydraulics	-	-	Max. 80l/min, Max. working pressure 200 bar	Max. 80l/min, Max. working pressure 200 bar
3-circuit high pressure comfort hydraulics	-	-	Max. 80l/min, Max. working pressure 300/200 bar	Max. 80l/min, Max. working pressure 300/200 bar
Option summation circuit	-	-	-	Max. 110l/min, Max. working pressure 300 bar

*Additional equipment reduces load capacity



**Compact implement carriers
& transport vehicles**



**Multicar: environmentally
friendly from the start**

We want to leave the earth clean. Therefore, treating resources, the environment and climate with consideration influences all our business activities. This has been confirmed to us by independent institutes. More on our commitment can be found at www.hako.com

**Close to you
wherever you are**

Our unsurpassed, close knit sales and service network means we are always close by to provide help fast throughout Europe.

Cleanliness with safety

Our vehicles fulfil the highest demands. Reliability through quality "Made by Multicar".

**Sales, hire,
leasing, rental**

We can offer you a wide range of individual, attractive financing options.

**We are there for you
day and night**

Round-the-clock service and express parts delivery ensure the highest levels of availability.



**DIN EN ISO 9001
DIN EN ISO 14001**

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