



MAMS

THE MOBILE ADSORBER
RENTAL SYSTEM

CARBOTECH AC GMBH

CarboTech is the leading provider of powdered, granulated and extruded activated carbons in Germany. At the heart of the Ruhr region, CarboTech operates integrated manufacturing plants for the production, refinement and formulation of activated carbons, activated cokes and carbon molecular sieves (CMS) made from hard coal, coconut shell coke, lignite and charcoal. CarboTech has its roots in the German coal industry. Today, CarboTech is a customer-oriented medium-sized company which, besides manufacturing activated carbons, provides a broad range of different adsorption technologies and services.

ENVIRONMENTAL PROTECTION

Growing awareness of the environment and stricter statutory environmental protection regulations in trade and industry demand that any contaminated gas and water streams that are generated must be purified before being discharged into the environment.



SOLUTIONS BY CARBOTECH

The Mobile Adsorber Rental Systems developed by CarboTech in the **MAMS W** series (for the water phase) and **MAMS G** series (for the gas phase) are practical, efficient solutions that can be used for a great variety of adsorption functions. CarboTech specialists take care of the system, the logistics and any matters concerning recycling or disposal of spent activated carbons. This reduces expenditure for the customer because he is merely responsible for operating the mobile adsorber. Reliable data on replacement intervals are available for many applications. This creates a dependable basis for cost calculations. The entire background knowledge is founded on our technicians' and engineers' wealth of experience. Combined with the constant high quality of the activated carbons used, this experience ensures the excellent technical and business parameters of CarboTech systems.

MAMS APPLICATIONS

The Mobile Adsorber Rental Systems from CarboTech have become indispensable for many applications. Some of the main fields of application in which they are used are:

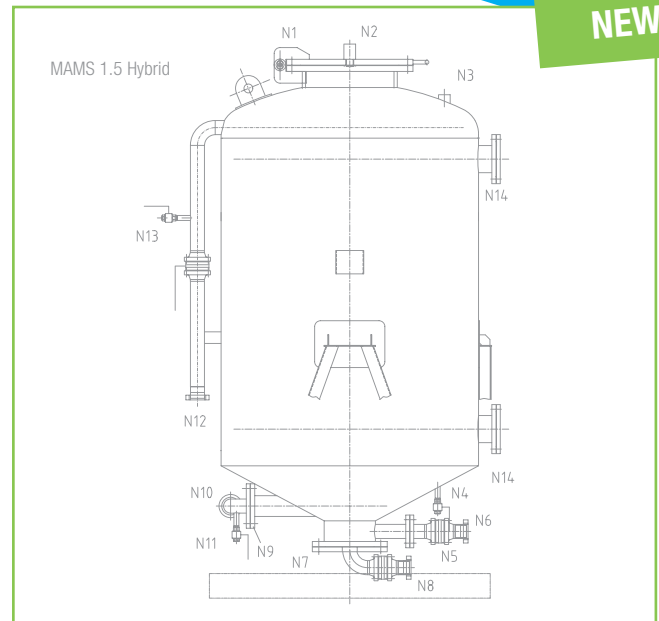
- › **MAMS W** for dewatering building sites, pumping tests and the redevelopment of hazardous waste sites, leachate purification, condensate purification, decolouration and purification of wastewater, ultra purification of spirits and end product refining in the chemical industry.
- › **MAMS G** for adsorbing solvents and removing mercury, for desulphurisation of exhaust gases, the purification of stripping air, deodorization, biogas purification (siloxan separation), zero-emission tank breathing and purification of waste air from tanks.



NEW!

CARBOTECH HYBRID-MAMS

In recent years the further development of the mobile rental adsorbers has been the focus of special attention. The proven **MAMS G** and **MAMS W** series have been extended by a hybrid version, which provides the customers with the advantage of short delivery and set up times. Furthermore, particularly the hybrid adsorbers make it possible to implement advantages in chemisorptive separation processes. Thus, with the hybrid version, we have been able to include another safe and reliable type of mobile adsorber for flexible applications in gas and liquid purification in our product range.



A WIDE VARIETY OF ADVANTAGES

Advantages of a CarboTech MAMS in terms of applications technology

- › Customised consulting and support
- › Uncompromising selection of materials for all types of MAMS
- › Long life-time even under extreme conditions
- › Compliance with maximum safety requirements
- › Options for connection in series or in parallel

Advantages of a CarboTech MAMS in terms of adsorption technology

- › Optimal separation performance thanks to the superb quality of the activated carbons and recycled activated carbons from CarboTech
- › Use of impregnated activated carbons for complex separation tasks (MAMS G)
- › Reactivation of spent activated carbons by processing in the unique CarboTech fluidized bed reactivation process or professional disposal

Advantages of a CarboTech MAMS in terms of operations

- › Simple and safe to handle
- › Can be put into service immediately thanks to pre-wetted activated carbon (MAMS W)
- › No dirt or dust formation during adsorber changeover
- › Simple sampling thanks to easily accessible removal nozzle
- › Trouble-free relocation thanks to dogs and transportation aids

Advantages of a CarboTech MAMS in terms of costs

- › No investment costs
- › Free examination of activated carbons
- › Daily pro rata billing



Net volume	Pressure range	Materials	Connections	Water flow rate range	MAMS W-Typ
1,5 m ³	0,1 MPa (abs), 0,6 MPa (abs)	coated steel, stainless steel	DIN, Storz C2, ...	0,25 – 8 m ³ /h	< MAMS W 1.5 (vertical)
1,5 m ³	0,1 MPa (abs), 0,6 MPa (abs)	coated steel, stainless steel	Storz C2; DN 100 blind flange	0,25 – 8 m ³ /h	< MAMS 1.5 Hybrid (vertical) NEW!
5 m ³	0,1 MPa (abs), 0,6 MPa (abs)	coated steel, stainless steel	DIN, Storz B3, ...	Up to 18 m ³ /h	< MAMS W 5 (vertical)
25 m ³	0,1 MPa (abs), 0,3 MPa (abs)	coated steel, stainless steel	DIN, Storz C2, DN100 blind flange	Up to 40 m ³ /h	< MAMS W 25 (vertical)

Net volume	Pressure range	Materials	Connections	Gas flow rate range	MAMS G-Typ
200 l	0,1 MPa (abs)	coated steel		Up to 250 Nm ³ /h	< Drum adsorber
1 m ³	0,1 to 0,6 MPa (abs)	coated steel, stainless steel	DIN, Storz C2, ...	100 – 1000 Nm ³ /h	< MAMS G 1 (vertical)
1,5 m ³	0,1 MPa to 0,6 MPa (abs)	coated steel, stainless steel	Storz C2; DN 100 blind flange	100 – 750 Nm ³ /h	< MAMS 1.5 Hybrid (vertical) NEW!
4,2 m ³	0,104 MPa (abs)	1.4571	DN 250	Up to 4.000 Nm ³ /h	< MAMS G 4 Light (vertical)
5 m ³	0,1 MPa to 0,3 MPa (abs)	coated steel, stainless steel	DIN, Storz B3, DN 200	Up to 2.500 Nm ³ /h	< MAMS G 5 (vertical)
25 m ³	pressureless	coated steel, stainless steel	DN 900	Up to 25.000 Nm ³ /h	< MAMS G 25 (vertical)

FOR FURTHER INFORMATION PLEASE CONTACT:

CarboTech AC GmbH

Elisenstraße 119
45139 Essen
Germany

T +49 201 24 89 900
F +49 201 24 89 800

info@carbotech.de
www.carbotech.de

Stamp field for partner,
licensee or distributor:

In numerous countries in Europe and beyond, we offer support through our local distributors, sales partners and licensees. This facilitates uncomplicated contact with our support team even across national borders.