

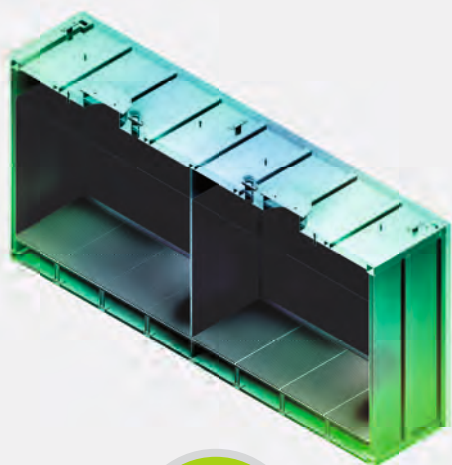
WE-SORB

Adsorption with Activated Carbon



WE-SORB: Adsorption with Activated Carbon

Adsorption systems are suitable for a wide range of applications for the removal of pollutants, solvents and odours, and are capable of cleaning large flow volumes of exhaust air and fumes. Our simple and robust exhaust air cleaning technology WE-SORB has a compact modular container construction (10', 20', 40'). This allows our customers to efficiently place the containers and easily expand capacity. Adsorption is efficient and economical, while also being sustainable through the reactivation and reuse of activated carbon. Together with our cooperation partner CarboTech, we offer an all-inclusive package. Wessel's multi-chamber solution ensures the maximum saturation of the activated carbon with pollutants and odours without risking non-compliance with legal targets.



Wessel Environmental Technologies

- » TURNKEY PLANT CONSTRUCTION:
 - ENGINEERING
 - MANUFACTURING & ASSEMBLY
 - COMMISSIONING
- » PROCEDURAL DEPENDABILITY TO ADHERE TO LEGAL TARGETS

Our principle: Everything from one source

wessel-umwelttechnik.de



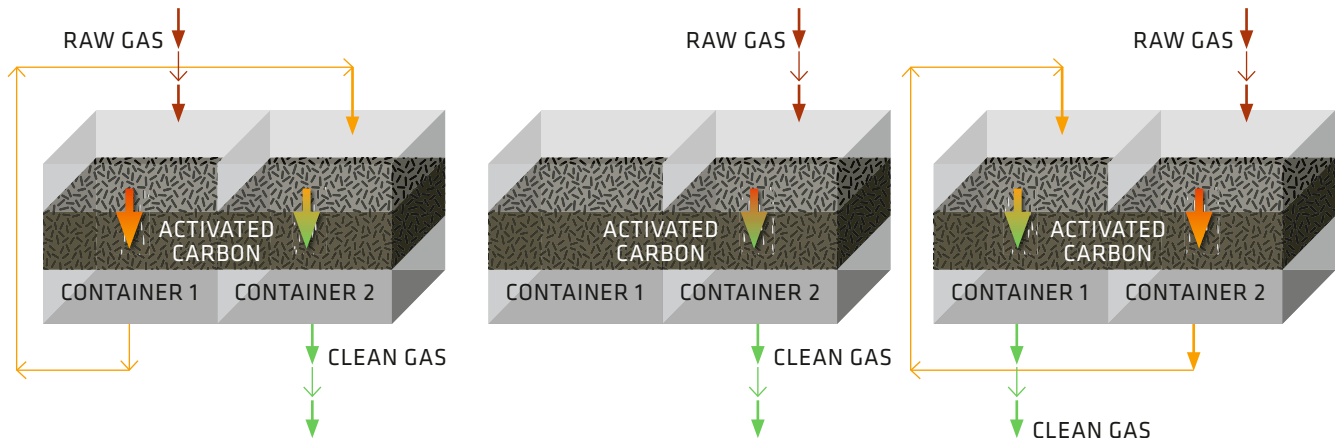
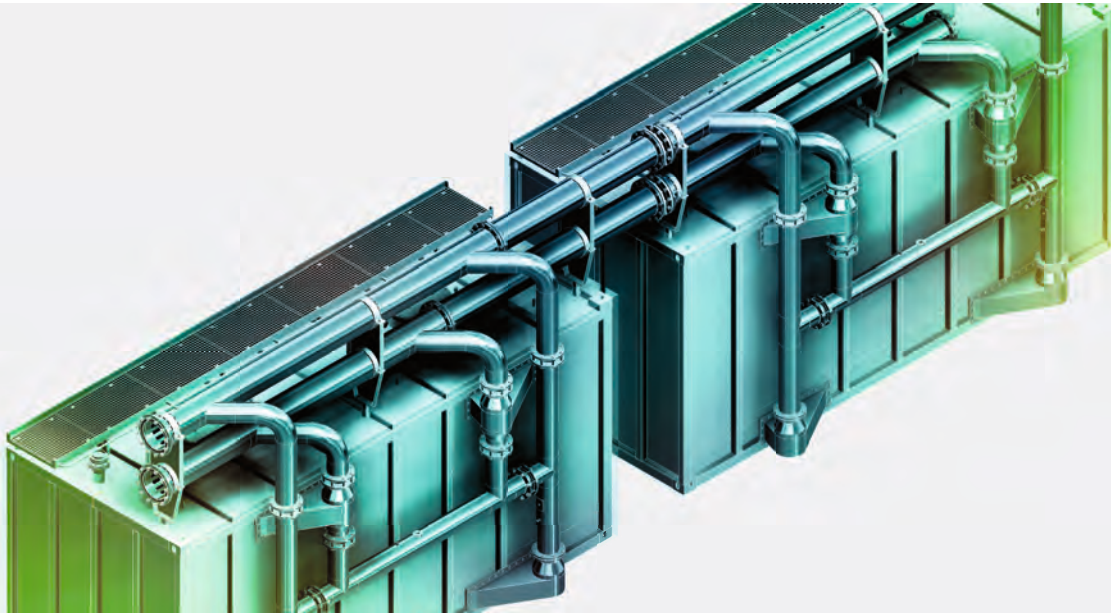
- » HIGH-QUALITY ACTIVATED CARBON THROUGH A UNIQUE FLUIDIZED BED PROCESS
- » COMPLETE SERVICE FOR THE EXCHANGE OF ACTIVATED CARBON:
 - ACTIVATION
 - IMPREGNATION
 - REACTVIATION
- » 360°-SERVICE PLUG & CLEAN

One container of reactivated activated carbon saves 93t CO₂ compared to the same amount of fresh charcoal.

CarboTech.de

WE-SORB TECHNOLOGY: Modular Construction

- » REMOVAL OF **ORGANIC** AND **INORGANIC** POLLUTANTS IN EXHAUST AIR THROUGH ADSORPTION
- » TWO UNITS (**CHAMBERS, CONTAINERS**) WITH ACTIVATED CARBON IN SERIES
- » DOWN-FLOW PRINCIPLE WITH MULTIWAY SWITCHING (**REDUCED RISK OF BLOCKAGE**)
- » MONITORING OF CONTAMINANT CONCENTRATIONS TO DETERMINE SATURATION (**MINIMIZE OPERATIONAL EXPENSES THROUGH MAX. LIFETIME OF THE ACTIVATED CARBON**)



Through-flow of the containers in order (1) – (2)

- » SATURATION IN CONTAINER (1)
- » DIVERSION OF THE GAS FLOW TO CONTAINER (2)
- » EXCHANGE OF ACTIVATED CARBON IN CONTAINER (1)
- » RE-CONNECTION OF CONTAINER (1)
- » THROUGH-FLOW OF THE CONTAINERS NOW IN THE ORDER (2) – (1)

WE-SORB: Your Advantages at a Glance

HIGH REMOVAL RATES, EVEN BY VARIABLE FLOW RATES
AND INDEPENDENT OF CONTAMINANT CONCENTRATIONS

LOW ENERGY COSTS

CONSIDERABLY LOWER OPERATIONAL COSTS THAN “RENT-TO-BUY” SYSTEMS

HIGH AVAILABILITY AND OPERATIONAL SAFETY,
NO DOWNTIME DURING EXCHANGE OF THE ACTIVATED CARBON

LOW MAINTENANCE AND OPERATIONAL EXPENDITURES

Industries:

- » AUTOMOTIVE AND SUPPLY
- » BATTERY PRODUCTION
- » CHEMICAL
- » SEMI-CONDUCTOR
- » WOOD-BASED PANELS
- » PAINTS AND VARNISH
- » FOOD AND BEVERAGE
- » PHARMACEUTICAL

Municipal Applications:

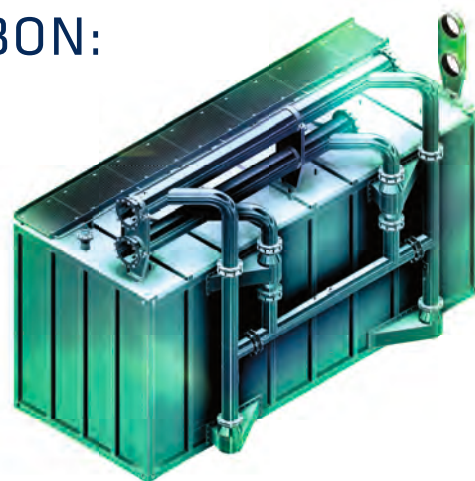
- » WASTE AND WASTEWATER TREATMENT
- » SLUDGE DRYING



LIFECYCLE OF ACTIVATED CARBON:

360° Service for Activated Carbon

WESSEL



01

PERFORMANCE REQUIREMENTS
FROM THE CUSTOMER



02

DEPLOYMENT OF THE
ADSORBERS AT THE CUSTOMER



360°



REACTIVATION OF THE
ACTIVATED CARBON

04



EXCHANGE OF SATURATED
ACTIVATED CARBON DURING
PLANT OPERATION

03

CARBOTECH



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Tailor-made Solutions from a Single Source



CONSULTING



PLANNING & ENGINEERING



MANUFACTURING & ASSEMBLY



COMMISSIONING



RESEARCH & DEVELOPMENT



MEASUREMENT & ANALYSES



Service



CarboTech
Professional. Solution. Service.

Your Partner in Activated Carbon

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