



FOR A
BRIGHT
TOMORROW.

EFFECTIVE
AIR AND
GAS
PURIFICATION
WITH ACTIVATED CARBON

Why

ACTIVATED CARBON?

Flexible solutions
with granulated,
powdered and
impregnated
activated carbons

More stringent regulations in emission control and for the quality of gases of all kinds require efficient processes and materials that can meet the constantly growing requirements.

With a variety of special properties that go beyond its prominent inner surface, activated carbon is therefore used in countless applications.

As the final or only necessary purification stage, it provides clean air and pure product gases.

Coarse-grained and extruded carbons are primarily used for this purpose. This way, maximum removal efficiency can be combined with the lowest possible pressure loss.

With the Alcarbon®, Desorex®, Supersorbon® and Oxorbon® product lines, Donau Carbon offers activated carbons designed specifically for your applications.

In the field of air and gas purification, it could be for example one of the following:

- » **Exhaust air:** Odour control, Reduction of total Carbon
- » **Exhaust gases:** Removal of solvents / VOCs, ammonia
- » **Biogas & sewage gas:** Fine cleaning (H₂S, NH₃, siloxanes)
- » **Natural gas:** Removal of BTEX, H₂S, mercaptans, odorants
- » **Industrial gases:** Purification of CO₂, H₂, syngas, process gases (BTEX, H₂S, COS)
- » **Solvent recovery:** Efficient materials for various solvents
- » **Flue gas treatment:** Removal of dioxins/furan, mercury, heavy metals
- » **Tank breathing:** Capturing fuels and solvents

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How do I fulfil SPECIFIC REQUIREMENTS?

Increasing quality and environmental standards can be reliably maintained with activated carbon.

Compliance with legal requirements has top priority: Donau Carbon's products offer a suitable solution for (almost) every task and challenge.

Exhaust air & waste gas treatment

Facilities that generate emissions and odours, such as waste sorting plants, paint shops or the chemical industry, require appropriate measures to comply with official limit values, e.g. in accordance with Directive (EU) 2016/2284 or Directive 2008/50/EC.

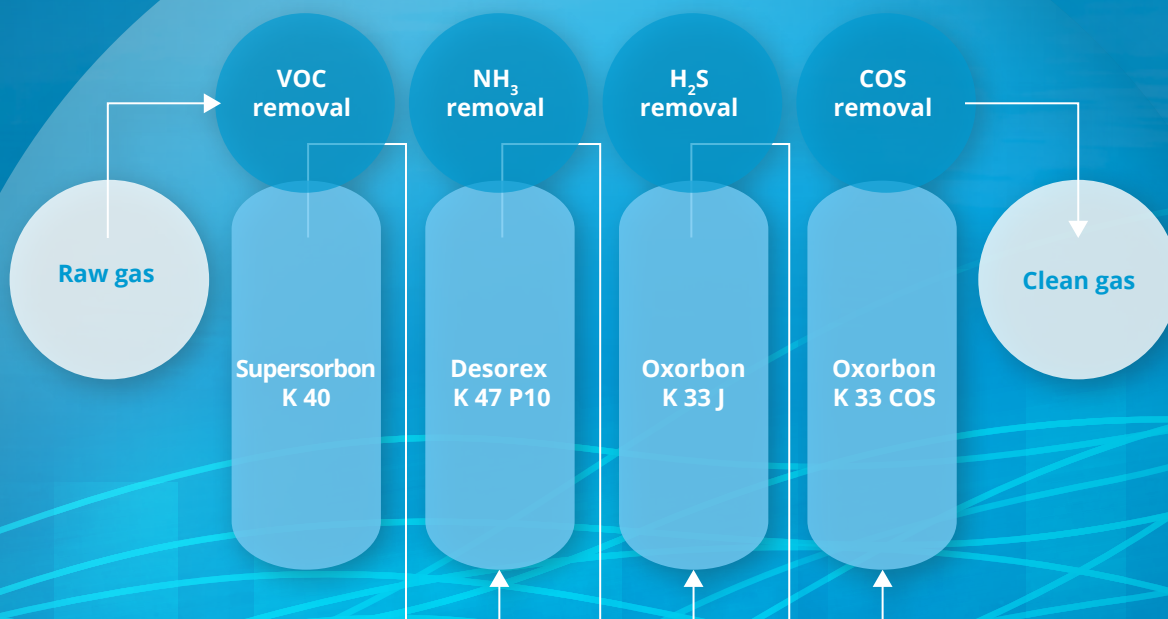
The use of activated carbon(s) often offers the most effective and at the same time most economical solution, for both temporary and permanent use.

Biogas

In order to achieve feed-in quality, a final polishing step is necessary for biomethane. Depending on the raw material / process, the present impurities (H_2S , NH_3 , siloxanes) can be removed reliably and cost-effectively using suitable activated carbon.

CO₂ purification

For carbon dioxide to be used e.g. in beverage industry, several purification steps are required to achieve the strict quality specifications, depending on the source of the gas. In addition to typical organic components, other gaseous impurities such as ammonia, hydrogen sulphide or carbonyl sulphide can be safely removed down to the lowest concentration ranges, using various impregnated activated carbons.



Quality ASSURANCE

In our in-house laboratories, activated carbons are evaluated and tested for the most important characteristics in air and gas purification, including

- » Grain size (mesh / mm)
- » Butane activity (BA) / CTC value
- » Benzene adsorption
- » Apparent density / Bulk density
- » Hardness (wt.%)

SUSTAINABLE, RENEWABLE

Activated carbon from coconut shells - Our focus on bio-based raw materials

Multi-talented coconut

- » Complete utilisation of the main and by-products
- » Pulp and coconut water for food and cosmetics
- » Fibres and wood for textile and horticultural materials, among other things
- » Coconut shells as a raw material for our activated carbon

Local production

- » Environmentally friendly manufacturing with short transport routes

Ideal properties

- » Outstanding adsorption performance
- » Superior hardness
- » Lowest ash content

Recycling via reactivation

- » Best suitability for environmentally friendly & cost-saving reactivation

Carbon footprint

- » 5 times lower CO₂ emissions compared to coal-based activated carbon

CERTIFICATES

Donau Carbon offers relevant certificates such as

- » ISO 9001:2015
- » ISO 14001:2015 for our production in the Philippines
- » Absence of substances of very high concern (SVHC)
- » Kosher & Halal conformity
- » Packaging - Declaration of suitability for food contact Regulation (EC) No 1935/2004

DID YOU KNOW ... GAC, PAC & KOMBISORB

Depending on the specific situation, granulated activated carbon (GAC), powdered activated carbon (PAC) or our Kombisorb® material serves your application in the best way.

Granulated activated carbon

- » Possibility of environmentally friendly & cost-saving reactivation
- » Equalisation of concentration fluctuations
- » Use as safety/police stage
- » Low analytical effort
- » Easy handling

Powdered activated carbon

- » Low investment costs
- » Temporary use possible
- » Impregnated PAC for special applications

Kombisorb®

- » Mixed materials for elevated safety requirements in the treatment of flue and exhaust gases

In Donau Carbon, you have a trustworthy partner at your side who takes care of your activated carbon and filter systems, so you can concentrate on your core business. Our experience and commitment to quality guarantee you first-class results.

Advantages for **OUR CUSTOMERS**

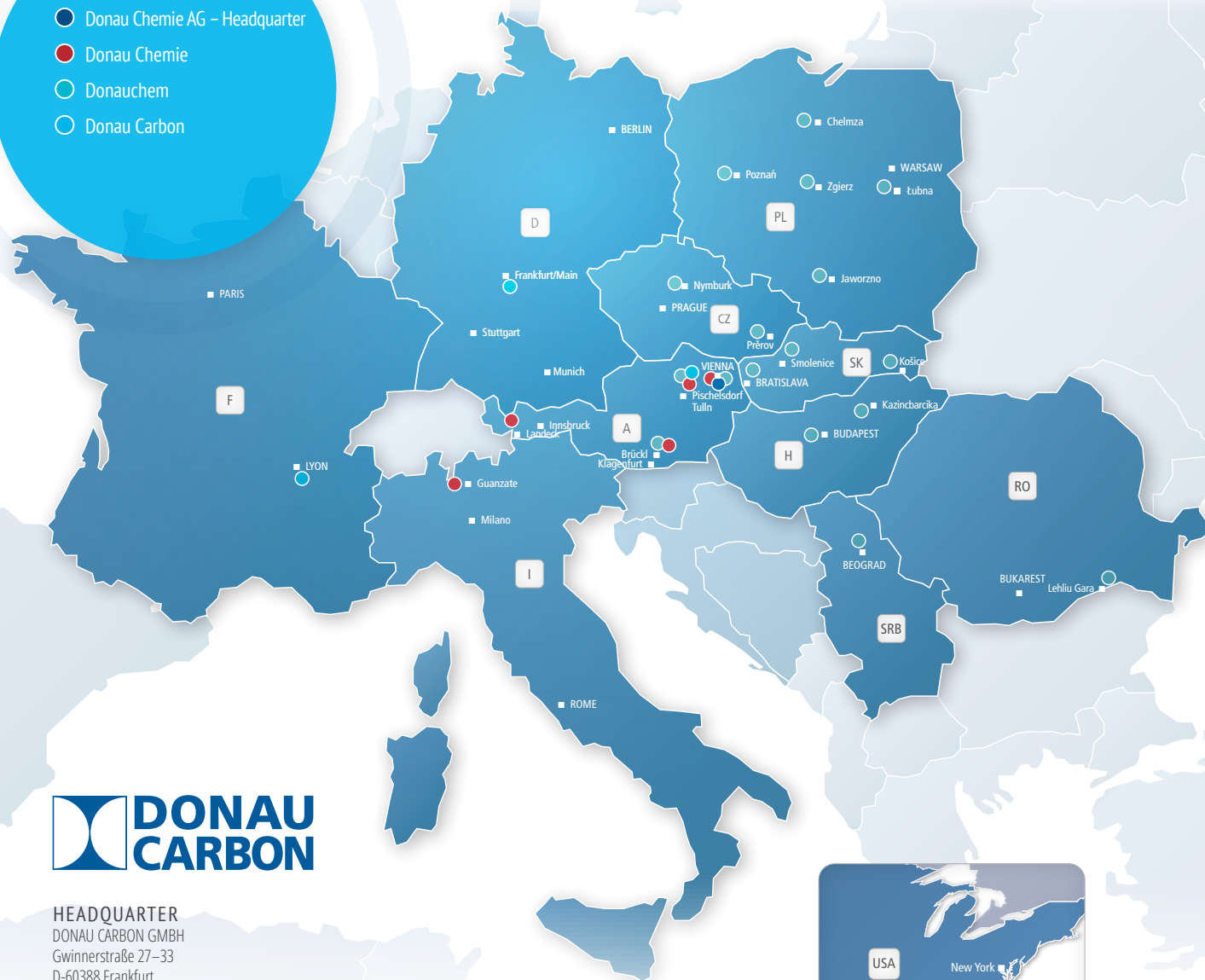
Donau Carbon offers comprehensive technical application support, that goes beyond the sales and commissioning of activated carbon.

- » Product developments and adaptations of activated carbon qualities according to customer requirements
- » Application-related brochures
- » Manuals for filling/emptying processes
- » Adsorption isotherms
- » Pressure loss diagrams
- » Dimensioning with customer-specific operating parameters
- » Recommendations e.g. for gas velocity, contact time
- » Service life estimations



We are CLOSE TO YOU

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