



*Protecting the
environment with activated carbon*

Donau Carbon develops, produces and supplies high-quality, customised activated carbon products and matching service concepts.

Range of services

Products and services of Donau Carbon GmbH.

Activated carbon and other adsorbents

- » Supplying virgin activated carbon and other adsorbents worldwide
- » Producing activated carbon based on coconut shells in our own production plant in the Philippines and powdered charcoal in our own facility in the US
- » Impregnating, finishing and producing special grades in European production facilities
- » Quality assurance in our own laboratories



Reactivation and recycling

- » Reactivating spent carbon in two dedicated plants
- » Recycling our reclaimed activated carbon in our plants and via certified specialist companies



Service

- » Rental and sale of mobile and stationary activated carbon filters for air/exhaust air cleaning and liquid treatment
- » Replacing activated carbon and sieving
- » Filter design
- » Creating logistics, operation and service concepts

Application technology

- » Consulting on application technology matters
- » Determining application and process parameters
- » R&D department

Activated carbon and other adsorbents

Our product division supplies over 150 different grades of activated carbon worldwide.

The activated carbon supply programme includes an extensive range of powdered, granular and shaped grades of all common activation processes such as:

- » Steam activation
- » Zinc chloride activation
- » Phosphoric acid activation

based on various raw materials as well as filter materials, and special mixed adsorbents (such as hard coal, lignite, wood and coconut shells).

For substances that are not bound to activated carbon adsorptively, we offer a range of impregnated activated carbons.

Production

Our subsidiary Donau Carbon Philippines Corp. produces high-quality activated carbons for selective filtration applications on the basis of coconut shells in the Philippines.

In Florida, US, our subsidiary Donau Carbon US LLC produces powdered charcoal for various applications.

At the Pischelsdorf site (A), we produce activated carbons for special applications in our own facilities.



Activated Carbon Applications

Our products are used in many different areas.

Air and gas purification:

- » for odour control
- » in processes for solvent recovery, flue gas cleaning and for removing sulphur / mercury from natural gases when treating landfill seepage and biogas.

Water treatment:

- » for treating drinking water
- » for treating wastewater and landfill leachate for soil remediation
- » for treating water used in swimming pools and aquaria
- » for cleaning process and service water

Liquid treatment:

- » for the food and beverage industry, the chemical and pharmaceutical industry

Special applications:

- » Cabin air filters and indoor air conditioning
- » Cigarette industry
- » Gold industry and Catalysis

Impregnation / finishing:

- » Special impregnation procedures for specific tasks (sulphur impregnation for gas purification; silver impregnation for water filters, etc.)
- » Production of special grades e.g. by sieving, mixing, grinding.



DID YOU KNOW....?

SMALL CARBON - BIG EFFECT

The inner surface of four grammes of activated carbon is the same size as a football pitch.

Donau Carbon supplies over 150 different grades of activated carbon worldwide.

Reactivation

Donau Carbon offers the reactivation of activated carbon to improve the carbon footprint.

Thermally reactivating spent activated carbon from various applications at two locations in Germany and Austria means we offer a way of reusing this material, thus offering an environmentally friendly and sustainable alternative.

Process control, which is adapted to the respective requirements and the different grades of activated carbon, ensures that the reactivated material has a high quality. It is normally possible

to fully restore the original adsorption capacity of the activated carbon. The quality of the reactivated material is monitored constantly during the process.

The pollutants released during the reactivation process are then incinerated at temperatures of up to 1,000°C and the flue gas is then cleaned. The facilities comply with all the relevant laws and regulations.



Application technology consulting

Our application technology department advises you in selecting the right activated carbon and assists you in sizing our activated carbon adsorption systems.

Special tasks relating to gas and water purification see test equipment being used to determine the optimum activated carbon qualities and operating conditions when sizing process equipment.

Examination of adsorbents:

- » Mechanical, chemical, physical properties
- » Adsorption equilibria
- » Decolorisation
- » Adsorption kinetics
- » Application and process parameters

Filters and service

We have in-depth expertise in application technology matters acquired over many years that enables us to find the right solution to many different gas and liquid cleaning challenges.

We support you with our expertise every step of the way, from the planning and construction phases to operating the facility itself. Our ever-growing pool of filters and components enables us to react with quick solutions.

Our portfolio covers:

- » Consulting on application technology and process engineering matters
- » Designing, planning, constructing and supplying filters, associated plant components and complete systems, as well as turnkey solutions
- » Modification, optimisation and renovation
- » Drawing up operation and service concepts
- » Operation, maintenance and service

Rental and sale...

... of adsorbents, mobile or stationary, for a wide range of applications and different throughputs.

Our filters in different sizes are designed as mobile replacement filters; for stationary filters, we have suitable equipment for replacing the spent activated carbon.

We are ready to offer logistics and replacement concepts tailored to your specific needs, reducing your personnel and operating costs. All adsorber types offered by us are available either for rental or sale.

Our standard filter vessels can usually be delivered within a few days, but we can also supply special vessels designed to customer specifications on request.

Quality assurance

A special quality assurance system defined by us is used on site in production and in our quality laboratories in Frankfurt and Austria,

and is complemented by quality control at Donau Carbon's laboratories. Our quality assurance system is ISO 9001-certified.

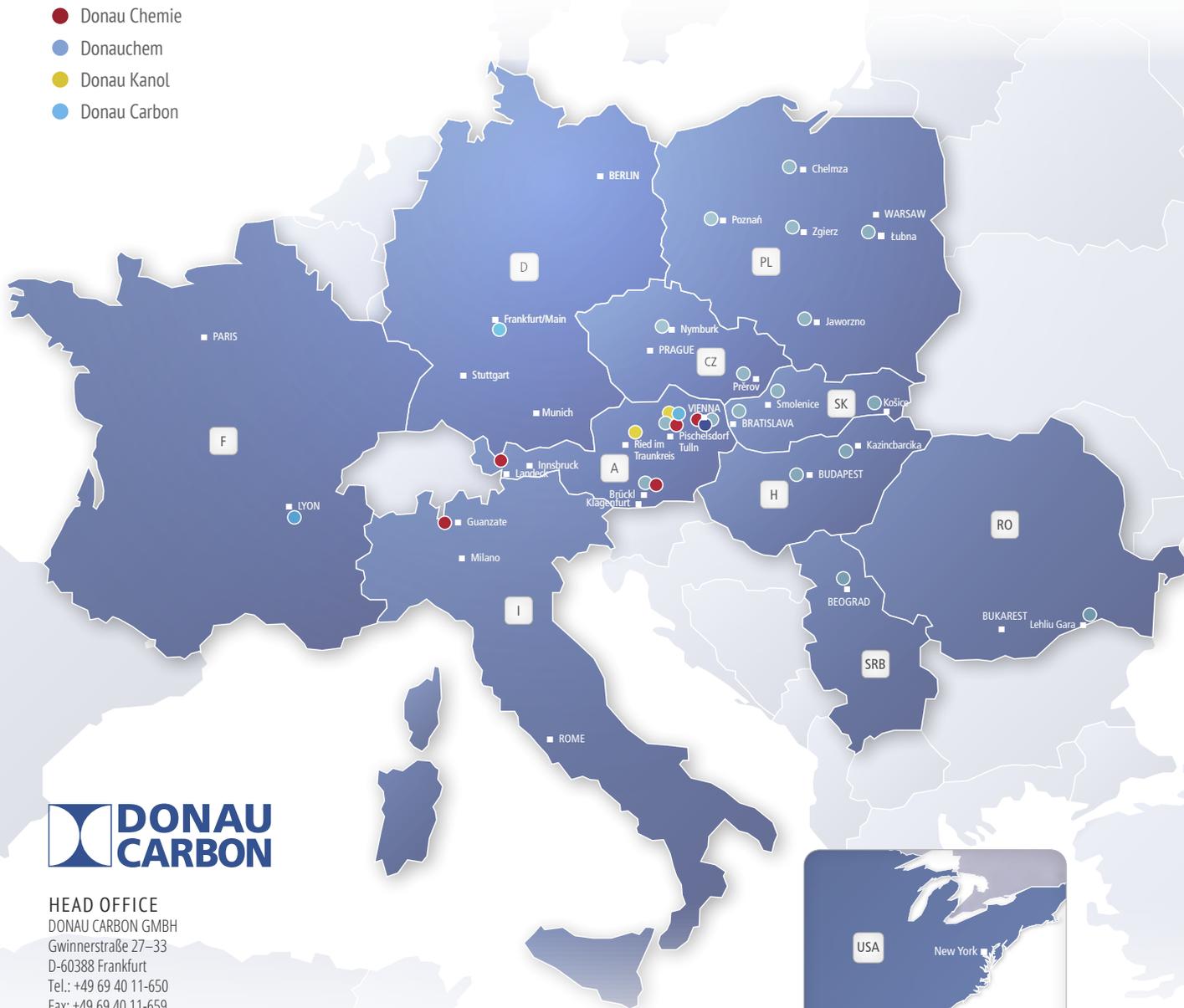
Availability and delivery

Warehouses situated throughout Germany and around the world ensure that our activated carbon is readily available. The goods are delivered in big bags, as bagged goods or in silo vehicles as standard; special packaging in drums or other containers may be arranged on request.



We are close to you.

- Donau Chemie AG – Head office
- Donau Chemie
- Donauchem
- Donau Kanol
- Donau Carbon



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