

Separation Technology





Separation Technology at its best

RHODIUS is leading in the gas/liquid and liquid/liquid separation technology. To our customers we offer a variety of innovative products and services.

Our product range – based on knitted wireand microfilter materials – enables our team to select and create the most efficient solution with refer to all tasks of the separation technology.

Technical Data

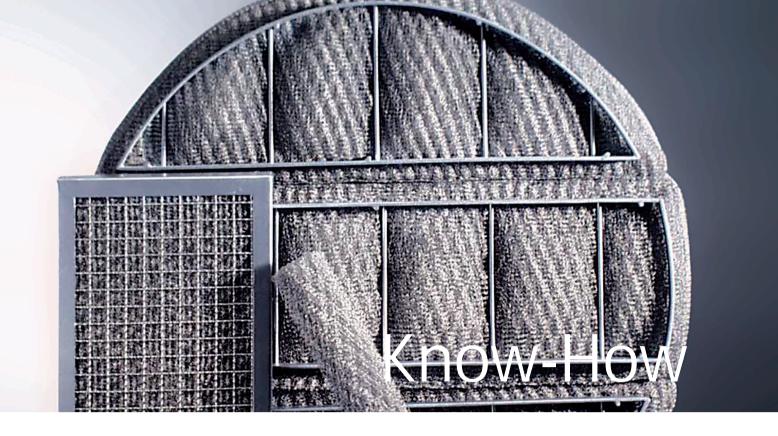
Materials

- Metals
 Rust and acid restistant steels,
 Monel, Nickel, Aluminium, Copper
- PlasticsPP, PE, ETFE, PVDF, PVC, PES, PFA
- · Fiber material Glass, PP-fiber, PES- and metalfibers

Wire specifications

- · Wire diameter from 0,03 mm to 1mm
- · Flat or round wire
- · Unifilar or multiwire
- · Combination of different materials





Engineering

Software "Separate"

Referring to gas/liquid separation, our software "Separate 2.1" is a very efficient means to perform tailor-made separators which exactly meet the requirements defined by our customers.

We will be pleased to offer you our software to realise best results!

CFD-Simulation

RHODIUS uses computational fluid dynamics (CFD) to simulate the performance of separator products.

This CFD-model generates a more detailed and greater understanding of the separation process, it helps to limit the need for operational trials and time-expensive prototypes. Costs for development and research will be reduced.

For decades RHODIUS has been developing new products in the field of separation technology. In our own laboratory and by means of our various testing devices we are able to gain and as a further step to evaluate the efficiency of the separation processes, pressure loss and lifetime.

In addition, our mobile testing equipment offers our customers the opportunity to find specific solutions for the definition of the separation efficiency on their own premises. The prototype construction at RHODIUS of-











Droplet Separation from Gases

Liquid droplets in gas streams are generated by dynamic processes, e.g. during the contact of gas with liquids in packed columns or by thermo-dynamic actions as it arises during the condensation.

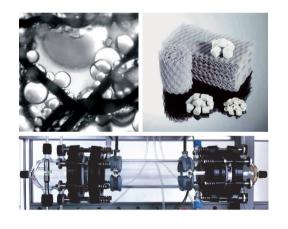
RHODIUS droplet separators guarantees under consideration of the used material the separation of droplets up to the submicron spectrum.

Application

- · Absorber and scrubbing systems
- $\cdot \ \text{Destillation and rectification plants}$
- · Evaporators
- · Knock-out drums
- · Vacuum- and compressed air plants
- · Sea water desalination plants
- · Oil- and emulsion mist separators









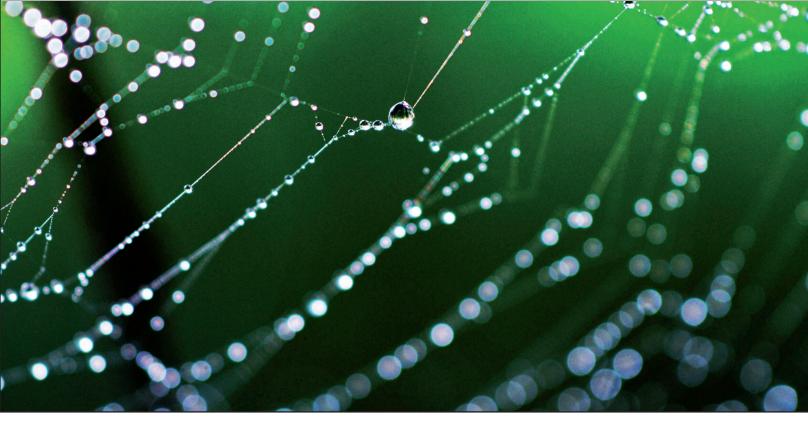
Droplet Separation from Liquids

RHODIUS develops and produces operating systems for the separation of droplets from liquids and vice versa. Referring to this technology we use the coalescence effect of the single droplets to stick to the wire-/ fiber surface. By usage of different wire-/ fiber diameters, different materials or surfaces we grant tailor-made solutions to our customers.

Application

- · Wastewater oil separation
- Washing processes during synthetic material production
- · Draining of silicone oils
- · Extraction columns
- · Glycerine / methyl ester
- · Manufacturing of bio diesel
- · Off Shore
- · Refineries





RHODIUS GmbH

Since 1925 RHODIUS has been manufacturing products for the automotive sector and the environmental, industrial and processing engineering industry.

Our head office which is located in Weissenburg/Germany is our R&D as well as our administration centre.

Further subsidiaries of Rhodius are situated in the North of Germany, Hungary and China, together with our worldwide acting representatives we can grant our customers a cost efficient and highly reliable support.

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