

# R. Scheuchl GmbH

process engineering | environmental protection | custom machinery



Exhaust air cleaning

Solvent recovery

Air dehumidifiers

Odor treatment

Special  
plant engineering

Rotary heat exchangers

Research &  
Development



Your one source  
process engineering partner

[www.scheuchl.de](http://www.scheuchl.de)

COMPREHENSIVE  
KNOW-HOW,  
EXPERIENCE  
OF MANY YEARS  
AND LATEST  
PRODUCTION  
METHODS

FOR HIGHEST  
PRODUCT QUALITY  
AND CUSTOMER  
SATISFACTION

R. Scheuchl GmbH



EXPERIENCE OF MORE  
THAN FIVE DECADES

As a small and medium sized enterprise we develop, plan and provide customized solutions for the foundry, the process and energy technology.

The corner stone for this was laid by Richard Scheuchl in the year 1962. A close symbiosis of engineering competence and production know-how has been built ever since.

We are your competent partner – from the individual consulting service over the phase of design up to the assembly at site and an intensive after-sales-service.

Our many years of experience, permanent enhancements and quality standards on top level guarantee highest customer satisfaction. Constant quality supervision of our products is self-evident.

Short and fast decision making, non-bureaucratic processing – the efficiency in realizing projects – all this inspires. The speed and flexibility with which we respond to different requirements of our customers persuades.

Check it out yourself.

RS

# EXHAUST AIR CLEANING



Combined unit out of concentrator and thermal oxidizer system

## DIFFERENT PROCESSES FOR THE CLEANING OF EXHAUST AIR

In order to clean exhaust air flows that are polluted with solvent mixtures, different methods are available. We are glad to provide advice in finding the best suitable process for you.

We choose the most economic and ecologic method depending on our customer's application. If necessary combined units are also possible:

- Solid separation
- Adsorptive process
- Concentration
- Thermal oxidation
- Catalytic oxidation
- Combined units



# SOLVENT RECOVERY



Condensation unit for solvent-containing exhaust air

## AN ECONOMICALLY INTERESTING SOLUTION

Certain industrial applications require recovery of materials from the exhaust air stream for example due to economic reasons. We, the R. Scheuchl GmbH, develop customized solutions which comply with legal requirements but which also follow the commercial interests of our customers. For new tasks testing facilities are available. Prior to working out a detailed quotation, these testing facilities enable to reassure the suitability of the chosen method. They also allow to determine the according design data.

The following processes can be implemented or combined according to the application:

- Adsorption
- Concentration
- Condensation
- Low-temperature condensation
- Combined units



# AIR DEHUMIDIFIERS



Process air unit for air conditioning right side: Air dehumidification cassettes

## A FORWARD LOOKING SYSTEM

The gentle drying becomes more and more important in the process engineering. Compared to conventional systems Scheuchl dehumidifiers guarantee a production with state of the art air conditions also at critical or changing outside air conditions.

The Scheuchl air dehumidifiers guarantee highest reliability of operation. They are used very successfully amongst others in the following branches:

- Packaging industry
- Automobile industry (paint booths)
- Pharmaceutical industry
- Chemical industry
- Ice rinks
- Food and beverage applications

For the dehumidification of air with high relative humidity an established condensation system is available. This system can also be combined with the dehumidifier as pre-dehumidifier.

## ODOR TREATMENT



Odor treatment units for exhaust air

## REDUCTION OF MALODORS

Complaints by neighbors of enterprises which emit odor loaded exhaust air are not uncommon.

The SKH GmbH, an associated institute of the University of Regensburg, has developed different anti-odor agents which minimize these disturbing odors. The according installation engineering which is necessary to bring the active substances in to the exhaust air is planned and carried out by the experienced staff of the R. Scheuchl GmbH.

In order to confirm the effectiveness of the SKH-anti odor agents for new tasks, testing and renting facilities are available. With these testing facilities partial currents of the exhaust air (for example 4,000 m<sup>3</sup>/h) can be treated in order to determine the efficiency together with the customer respectively the neighbors.



## SPECIAL PLANT ENGINEERING



Air conditioning unit, explosion proof dryer for pyrotechnical materials

**GO INNOVATIVE  
WAYS**

The R. Scheuchl GmbH has been manufacturing unique special plants, oriented towards special process requirements, for many years.

We develop complete solutions for different requirements of our customers by means of an experienced team, consisting of engineers and natural scientists.



right side: Acetone recovery



# ROTARY HEAT EXCHANGERS

R. Scheuchl GmbH

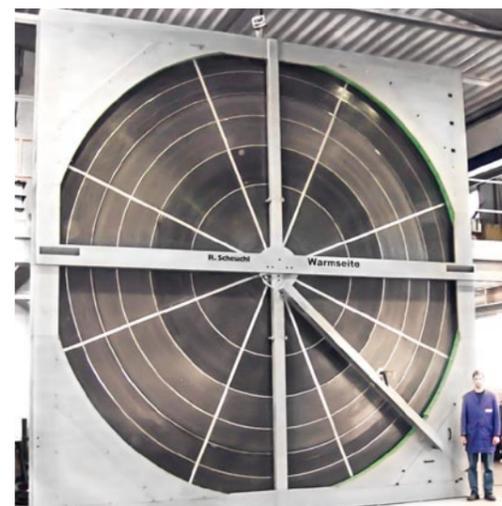
## ENVIRONMENTALLY FRIENDLY SOLUTIONS FOR HEAT RECOVERY

Scheuchl rotary heat exchangers are an effective system for heat recovery. With different diameters and flute heights of the rotor matrix, the performance data can be optimized for each application. You may choose between uncoated foils, a sorption coating for the transfer of sensible and latent heat or an epoxy coating in case of special requirements caused by a corrosive atmosphere.

Scheuchl rotary heat exchangers for process air applications are suitable for temperatures up to approximately 140°.

Especially in paint booths rotors are exposed to heavy soiling. By means of rotor cleaning systems also persistent or problematic soiling is removed from the rotor surface. This way, also under rough environmental conditions, an efficient heat recovery is possible.

Rotary heat exchanger for energy recovery in a paint booth



World's largest rotary heat exchanger (diameter: 6,200 mm)

Scheuchl rotary heat exchangers are characterized by:

- Stable heat exchanger matrix made of special aluminum foil
- Robust, wrap resistant casing selectively made of steel (galvanized/painted) or made of stainless steel
- Effective cleaning system
- Reliable drive technology with rotational speed control
- Efficient sealing system for avoidance of carry-over
- Rotor diameters from 600 mm to 6,200 mm
- Exhaust air flows from 1,000 m<sup>3</sup>/h to 250,000 m<sup>3</sup>/h

## THE FOLLOWING ALUMINIUM-BASED ROTOR MATERIALS ARE AVAILABLE:

### Uncoated:

- Best mechanical characteristics
- Good protection corrosion

### Sorption coating:

- Best mechanical characteristics
- Increased protection against corrosion
- Increased moisture efficiency

### Epoxy coating:

- Best protection against corrosion

# ROTORS FOR HIGH TEMPERATURE APPLICATIONS



Rotary heat exchanger for high exhaust air temperature

## SCHEUCHL HIGH-TEMPERATURE HEAT EXCHANGER CASSETTES ARE CHARACTERIZED BY:

- Optionally: hot-dip galvanized, powder coated or stainless steel welding construction
- Integrated high-pressure cleaning with water and/or compressed air
- Different sealing variations and -materials
- Channel separation horizontally or vertically
- Integrated condensation bowl

## CAPABILITIES FOR HIGH EXHAUST AIR TEMPERATURES

The Scheuchl rotary heat exchangers especially developed for high temperature applications up to 350°C guarantee highest operational reliability.

The application possibilities are manifold:

- Textile industry
- Brick and stone production
- Ceramic industry
- Printing plants / Paper coating
- Foil production
- Drying technology
- Chemical and pharmaceutical industry, etc.

In many processes pollution is extremely high. For these application cases the heat recovery systems are equipped with cleaning systems. Depending on the application, cleaning of the rotor can then be carried out during the operation, without any interruption.



## RESEARCH &amp; DEVELOPMENT



Recycling of aqueous cleaning liquids

## DEVELOPMENT: THE FIRST STEP FOR PROGRESS

Research and development are the basis for modern units and machines of tomorrow and so the best investment into the future. We are an extremely innovative company that succeeds in creating processes for serial production from our own research and development performances. By doing so, we invest into our future.

Besides our own team of developers, consisting of engineers and natural scientists, we have been keeping intensive contacts with research institutes and universities. This enables us full access to expert knowledge and the corresponding measuring methods.

A particular close cooperation exists with the SKH GmbH, an associated institute of the University of Regensburg. Besides research, the SKH GmbH has specialized in the development of new materials, products and processes.



Combined pilot unit for odor treatment

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**R. Scheuchl GmbH**  
**Koenigbacher Strasse 17**  
**94496 Ortenburg**  
**GERMANY**  
**phone +49 8542 165-0**  
**fax +49 8542 165-33**  
**mail [info@scheuchl.de](mailto:info@scheuchl.de)**

OFFICE Ingelheim  
Vorderer Boehl 39  
55218 Ingelheim  
GERMANY  
phone +49 6132 73088  
fax +49 6132 73370

OFFICE Perach  
Hauptstrasse 14  
84567 Perach  
GERMANY  
phone +49 8542 165-150

Scheuchl CHINA  
Scheuchl Equipment Technology  
(Shenyang) Co., Ltd.  
No. 37-1; Kaifa 23rd Road,  
Shenyang Economic and Technological  
Development Zone, Shenyang,  
Liaoning Province, CHINA  
phone +86 24 8953 6688  
mail [info@scheuchl.cn](mailto:info@scheuchl.cn)

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[www.scheuchl.de](http://www.scheuchl.de)

