

# Air Handling Systems for Industrial Processes

Ventilation technology. Separation technology. Filtration technology.



# More than just Clean Air

Reliable. Environmentally compatible. Efficient.

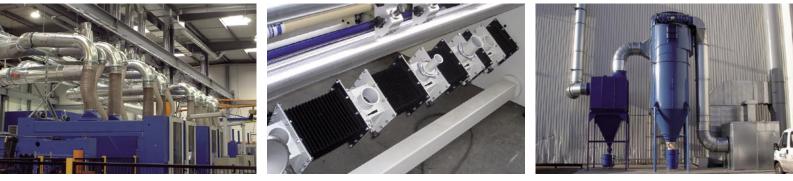
Industrial processes demand the highest standards of efficiency, precision and safety. During the course of any manufacturing process of semi or fully finished products, waste is produced which requires careful removal by industrial air handling systems. The demands on such process support technologies are high:

Reliability – without interruption of the operation.

Environmental protection - maintenance of clean air standards and noise levels.

Flexibility – adjustability according to the size and type of process.

Such technologies require a combination of competence and innovative thinking. The specialists of Schuh Anlagentechnik have extensive and demonstrable experience at their disposal, gathered from a wide variety of processes and materials. They are based upon the combination of proven, environmentally friendly technology, both for man and machine, as well as on a systematic improvement of plant efficiency.





# On the Safe Side

Competent. Versatile. Quality conscious.

One of the highest priority in complex industrial processes is the safety factor. Each technology, therefore, has to demonstrate its reliability during the operational process. Safety is enhanced by experience – and that, in turn, is reflected by a competent team of engineers and technicians.

Core competencies in industrial air handling systems from Schuh Anlagentechnik cover the complete spectrum from consulting and planning, engineering and manufacture to installation and service. Industrial systems, designed to fulfil the most stringent safety and quality standards. Complete industrial systems from a single source.



# **Custom-made Facilities**

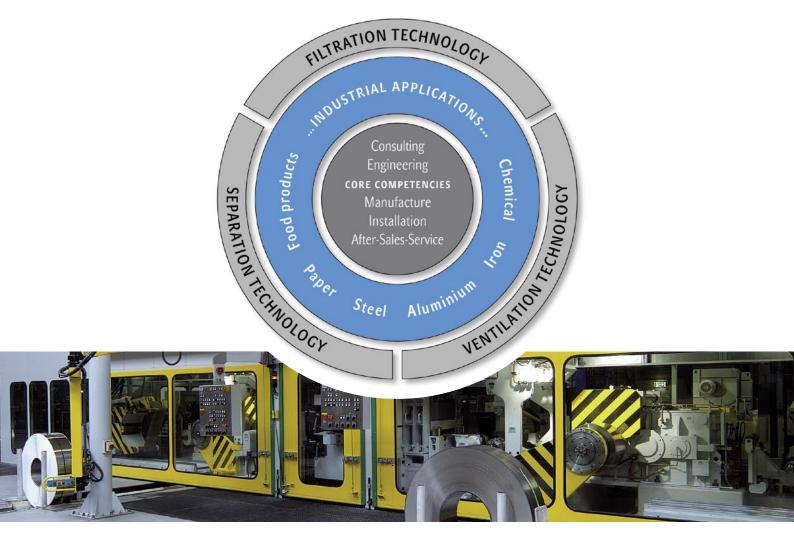
Precise. Compact. Modular.

No two production processes are ever identical and it is seldom that a standardised technology can be integrated into an existing manufacturing process. Precision and process know-how are the guarantee for the security of a correctly matched and reliable plant technology.

Schuh plants and components are always individually designed and manufactured. Thanks to their compact, modular design they can be integrated without problems into virtually any process. And they set standards for measurable performance. Depending on the application, they are laid out for volumetric flows of up to 500,000 m<sup>3</sup>/h and exhaust temperatures of more than 300°C. They achieve availabilities of nearly 100 %, accommodate rolling up speeds in excess of 2,500 m/min and cut materials of up to 800 µm.

## Summary of Products and Services

#### Industries. Plants. Core Competencies.



## **Requirements and Flexibility**

Industrial Applications.

Increasing requirements to the efficiency of industrial production processes are leading to higher demands on air handling system capacities. However, it is not only system capacity which has to be considered: Complex production processes and machine tools in continuous operation also harbour the risk of increased environmental pollution and require, therefore, an independent air supply.

## **Proven Technology**

Minimum maintenance costs.

Aluminium Non ferrous and precious metals Automobile Packing Paper and print Cardboard Cement Plastics Chemical Recycling and environmental technology Food and luxury products Steel and light alloys Sugar Foundry Iron Textiles and clothing

INDUSTRIES

Designed for complex industrial processes, Schuh Anlagentechnik ensures the highest standards in operational safety, availability and service requirements. The systems are technically mature and provide design flexibility and cost-saving maintenance.

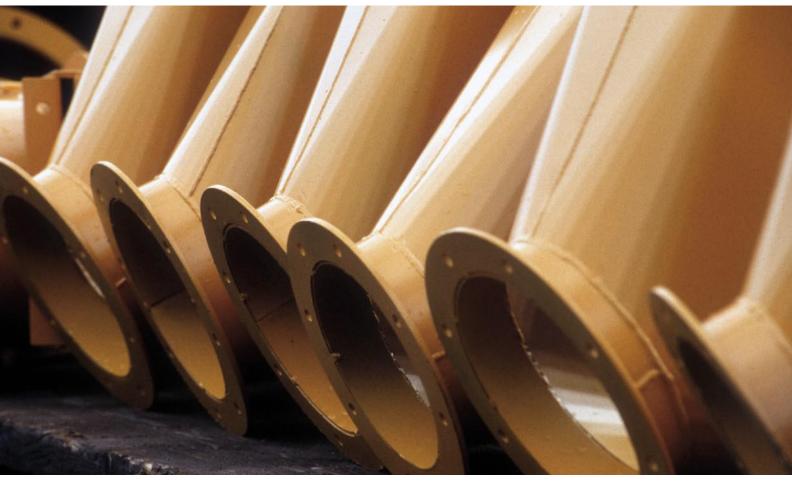


## **Process Strengths**

Ventilation technology. Separation technology. Filtration technology.

Know-how relative to various industrial operational conditions and detail knowledge of individual production processes form a sound basis for innovative development. This is particularly the case in the development of plants, systems and components which are designed and optimised for specific, individual processes.

Experience is the basis for ongoing further development. Schuh designs, manufactures and installs application oriented industrial air systems according to the specific requirements of customers from a wide range of industries, without the modification of existing, process oriented production methods.









### Collection - Filtration - Separation

Single source plant technology.

#### Collection

Schuh Anlagentechnik manufactures and installs customer specific systems for the collection of process associated and waste products, independent of the type of industrial process. The overall product spectrum ranges, for example, from swirl tubes via suction hood to suction hoods collectors for splitter winders.

#### Filtration

Filtration systems supplied by Schuh Anlagentechnik guarantee the highest levels of air purity and efficiency, even at high volume flows. They can be adapted for integration into new or existing structures without problems.

#### Separation

We supply complete systems for the separation of solid, liquid and gaseous components. These systems offer high levels of separation and energy efficiency.



The following is a selection of typical Schuh Anlagentechnik applications from various industrial segments:

#### Vapour extraction plants:

\_Multiple-stand cold rolling mills \_2 roll rolling mills \_4 roll rolling mills \_6 roll rolling mills \_20 roll rolling mills \_Inline rolling mills \_Grinding machines \_Slab cooling systems \_Hot rolling mills

#### Strip dedusting and conveying plants:

\_Slitter winders \_Coil winders \_Films Doppler \_Separators \_Cross cutters \_Rewinder \_Calendering \_Special cutting and winding machines \_Packaging machines \_Printing machines \_Bag machines \_Sleeve film machines \_Corrugated board machines \_Paper machines \_Extruder devices \_Cast film extrusion lines

- \_Mills
- \_Slitting lines

Dust removal systems: \_Roller cleaning devices

\_Brushing devices

\_Dryer

- \_Paper machines
- \_Crane runways
- \_Coating plants
- \_Grinding machines
- \_Polishing machines
- \_Milling machines
- \_Sawing machines
- \_Flame cutting machines

#### Shavings suction plants:

\_Milling machines

\_Planning machines

\_Circular saws

#### **Special applications:**

\_Ventilation and extraction plants for industrial facilities

\_Low-pressure plants at slitting lines

\_Paint vapour extraction plants

\_Pneumatic transportation facilities

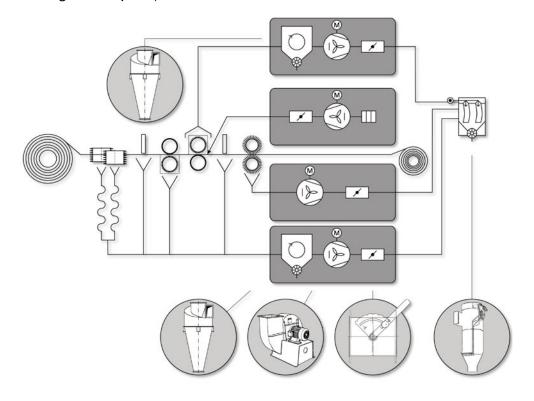
\_Cooling plants

\_Smoke extraction for industrial plants

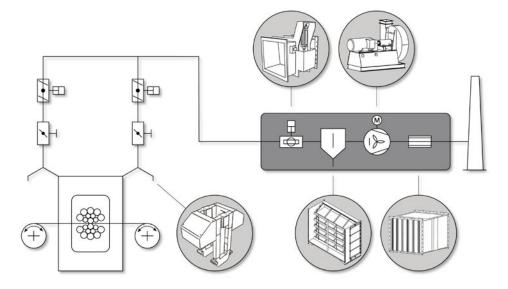
For each individual industrial process, we supply the client a tailor made system component, a complete system concept, or a complete turn-key facility, as may be required.



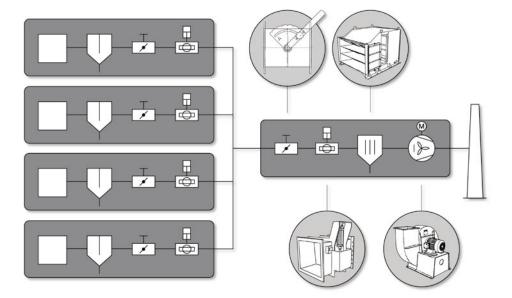
Shavings suction plant | Non ferrous and aluminium industries



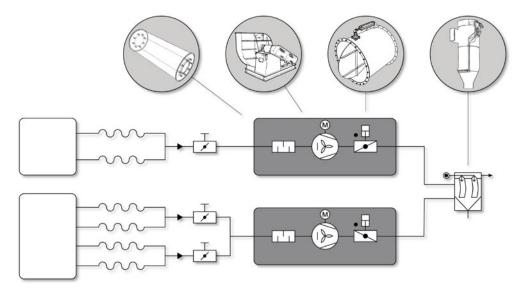
Oil mist exhaust system of a cold rolling mill | Iron, steel, non ferrous and precious metal industries



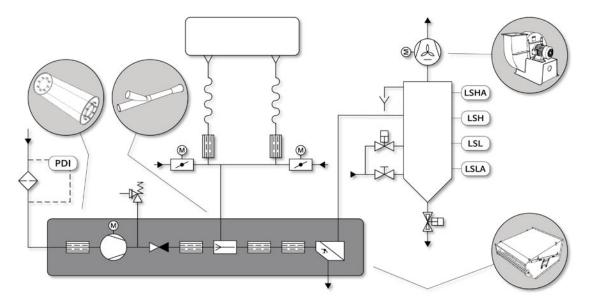
Vapour exhaust system for a grinding machine | Iron, steel, light and non ferrous metal industries



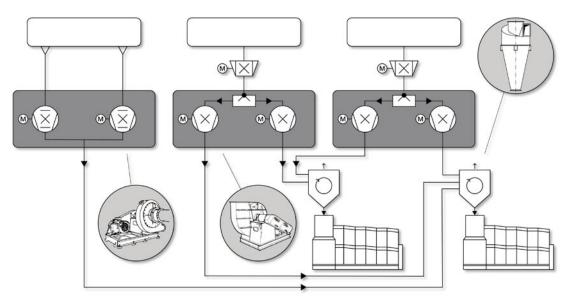
Dust removal system of brush and roller cleaning devices | Steel, light and non ferrous metal industries



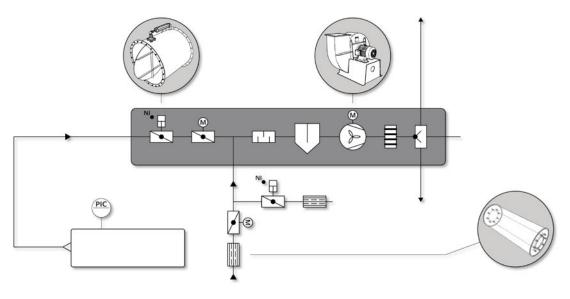
#### Strip conveying plant of a rewinder | Paper industry



Suction plant for cardboard and corrugated board | Paper industry



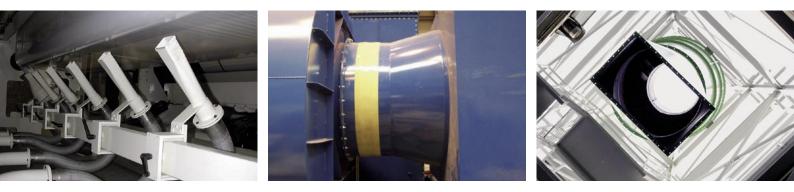
Vapour extraction unit | Aluminium, steel and paper industries



## Accuracy down to the Last Detail

The components.

Industrial air handling systems are not only supplied for new applications; existing systems are also modified to conform with changing operational conditions. In addition, they also require periodic service, operating life span extensions or updating of existing technology to the latest standards and norms.



Components from the Schuh production range are suitable for installation in almost any system. Thanks to their flexible design, they are highly suitable for optimizing all types of existing facilities. Component products range from separator and suction hoods to filters and ventilators and safety valves and injectors, all in various sizes and designs.

Upon request, client specific components and designs, as well as project specific systems, such as measuring, instrumentation and control technology, can also be supplied.

# Components

Range of applications.

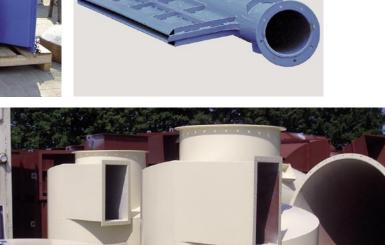


1 Rotor shaft of a shredding device
2 | Pulse jet filter
3 | Cutting fan
4 | Chimney assembly
5 | (Disc) Silencer
6 | Safety flap
7 | Dust collector
8 | Vapour separator
9 | Suction catcher
10 | Waste separator
11 | Cyclone
12 | Suction hood





11







9



# clean | safe | flexible



# The Value of Experience

Tested all over the world.

Technology is based on experience and innovation. Schuh Anlagentechnik offers not only a comprehensive, high quality range of products for ventilation, separation and filtration technology for the complete process chain. The company also offers extensive experience in plant construction under various conditions throughout the world.

Our close contacts with research institutions, industrial organizations and certification authorities ensure access to the very latest technologies. Interdisciplinary know-how and competence exchange programmes provide further added value for our customers.



# Schuh Anlagentechnik...

Your guarantee for long service life and a safe, environmentally compatible operation.



## Schuh Anlagentechnik GmbH

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