



A B S A U G W E R K

**CAPTURES
FOR EXTRACTION SYSTEMS**



The WERK

As a manufacturer of industrial extraction technology, we strive for a clean and healthy working environment. Our strength lies in the in-house development and production of customised extraction systems designed to protect employees, machines and workpieces.

From industrial dedusters and oil mist separators to complete hall extraction systems, we offer a comprehensive portfolio of solutions. We combine capture elements, extraction units and pipe systems into an integrated overall system that sets new standards in terms of energy efficiency and performance. In the field of explosion and fire protection, we are one of the few providers that fully meet all legal requirements and are able to ensure safe operation. With our many years of expertise, we develop special solutions for companies of all sizes and across all industries.

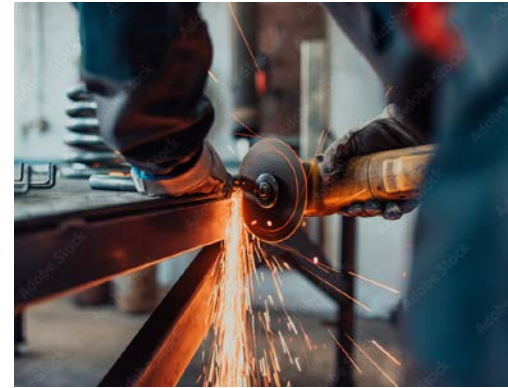
The production of our high-end systems takes place at our own WERK. Here, quality and precision are our top priorities. We support our customers throughout the entire service chain – from initial consultation through to installation and beyond. This ensures that their systems always operate at optimum performance.

Our network is particularly close to our hearts. Built on honesty and trust, we create long-term partnerships that lead to shared success.

»People, as customers, partners or employees, are always at the heart of our company.«

Michael Werz, Managing Director

Introduction	1
<hr style="border: 1px solid #008080;"/>	
Captures for extraction systems	3
Extraction arms	5
Extraction tables	7
Extraction hoods	9
Pipe systems	11
The ABSAUGWERK Principle	12
Custom Capture Systems	13
Sustainability	15
Reference	17
<hr style="border: 1px solid #008080;"/>	
All-round service	21
Quality	23
Training & partnership	25
Project process	26





Where Clean Air Begins.

PROBLEM

In many companies, the focus is primarily on the extraction system itself, but even the best technology can only operate efficiently if emissions are properly captured beforehand. Capture is therefore the first and most critical step of every extraction system: it determines how much fume, dust or vapour actually reaches the filtration system.

If a hood is undersized, positioned too far away or the air-flow is designed incorrectly, emissions escape uncontrollably into the room. The consequences are noticeable: pollutants spread throughout the hall, settle on machines and enter the breathing air of employees.

Particularly with changing working positions, large workpieces or mobile processes, rigid or unsuitable capture systems quickly reach their limits. However, even at permanently installed workstations, incorrect design often results in either too much or too little air being extracted. The result is inefficient extraction, increased energy costs, unnecessary maintenance intervals and, in the worst case, health risks or fire hazards.

Precise, process-oriented capture is therefore not a secondary function, but the foundation of effective air purification. Only when the capture system is perfectly matched to the working method, material and extraction system can the entire system operate safely, efficiently and sustainably.

CAPTURES FOR EXTRACTION SYSTEMS



Wet separator with Extraction table
Series WT

SYSTEM

At ABSAUGWERK, clean air always begins at the source. That is why we develop capture systems that are precisely matched to the workflow, material and workpiece. Whether extraction arms, hoods, tables or individually engineered custom solutions, every capture system is designed to collect emissions directly where they are generated.

Our systems feature a modular design and can be integrated into both centralised and decentralised extraction systems. This ensures consistently high suction performance, regardless of whether a single workstation or an entire production hall is being captured. With ergonomic design, easy handling and energy-efficient airflow management, our capture systems offer the ideal combination of performance, safety and user convenience.

Your benefits

Direct capture at the source

Consistently high extraction performance

Modular integration

Ergonomic design

Energy-efficient airflow management

Compliance with workplace regulations

Custom configuration & special solutions

Robust construction

Flexible positioning

Made in »Neu-Ulm«

Extraction arms

Extraction arms capture emissions directly at the source before fumes or dust can spread throughout the space. They move smoothly with the process and can be precisely positioned with just one hand. The flexible joints provide a large working range, while adjustable hoods reduce repositioning and make capture even more precise. Our modular extraction arms are available in different lengths, diameters, and versions. They can be easily mounted on tables, walls, ceilings, or used as mobile units and integrated into existing extraction and pipe systems. This allows them to adapt optimally to any process and material.

One-handed & easy to operate

Process-adapted capture

High suction performance & low pressure loss

Flow-optimized, no deposits

Various lengths, diameters & ATEX options

Easy installation on wall, ceiling, floor, duct

Compatible with all systems



Lightweight extraction arm with PVC hose and plastic hood with handle



Robust extraction arm with aluminum pipe and energy-saving throttle valve



Robust extraction arm with aluminum pipe in ATEX version



Flexibly extendable telescopic extraction arm for maximum reach in minimal space



Processes:

- Welding
- Grinding
- Polishing
- Sawing
- Cutting
- Milling
- Laser processing, etc.

Media:

- Dust
- Fumes
- Vapor
- Oil mist
- Emulsion
- Soldering fumes
- Aerosols

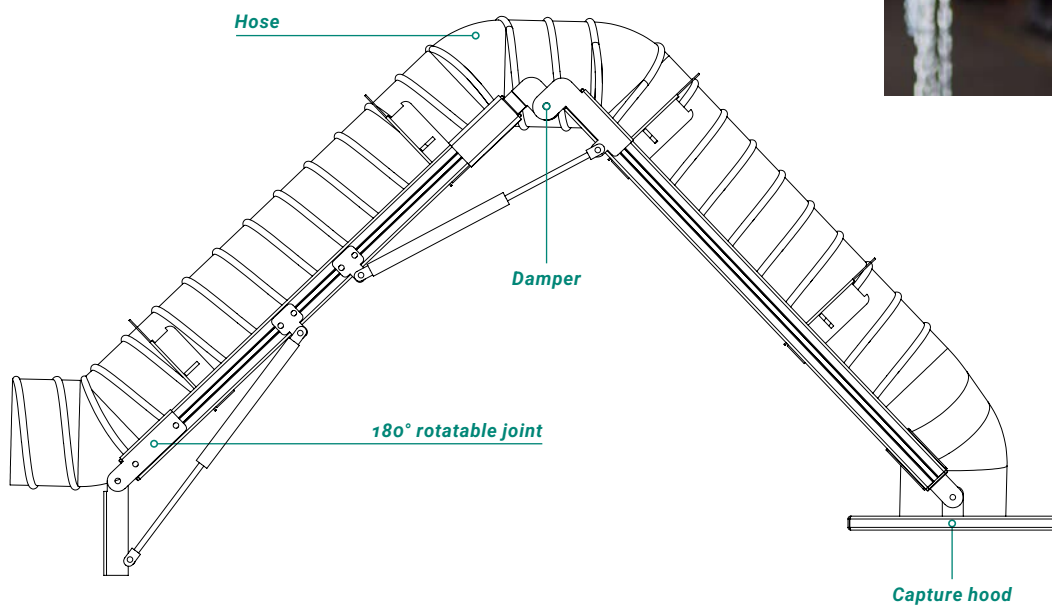
Industries:

- Metal construction
- Mechanical engineering
- Automotive
- Plastics processing
- Trades, etc

Use:

- Single workstation solution
- Multi-workstation solution
- In combination with hall extraction

The joints of the extraction arm enable ergonomic positioning. Inside, the flow-optimized design ensures constant suction performance with minimal pressure loss. This keeps capture consistent even during continuous operation and with changing workpieces or working positions. For applications with explosive dusts or gases, our extraction arms are also available in a fully electrically conductive ATEX version in accordance with Directive 2014/34/EU. All models are tested, delivered ready for installation, and are ready for immediate use.



Options:

- Start button
- LED lighting
- 360° working radius
- PU hose
- Solid pipe
- Explosion protection
- Various designs
- Various capture systems



Positioning note:

The extraction hood should be positioned at an angle approximately 30 cm above the work area. Since the arm does not automatically follow the process, it must be regularly readjusted during operation. Excessive distance or positioning directly above the head reduces extraction performance and poses a risk to health.

Extraction tables

Extraction tables of the WT series combine a stable work surface with integrated source capture. During grinding, sawing, or welding, emissions are continuously generated, rising upward and potentially contaminating the work area.

The extraction table captures the particles directly at the source and directs them downward or via the rear and side walls. This keeps the air at the workplace clean. Coarse chips and sparks are safely collected in the discharge container beneath the table surface, while fine dust is captured via integrated extraction zones and filtered in a connected extraction system. Even large or bulky workpieces can be handled with ease. The flexibly foldable side walls provide additional space without reducing capture efficiency.

Height-adjustable workbench

Ergonomic with ample legroom

Ideal for small series & special parts

Flexibly foldable side walls

Easy discharge & disposal

Individually configurable & expandable

Various work surfaces available

Quality »Made in Germany«



*Extraction tables of the WT series
in various sizes*

Processes:

- Welding
- Grinding
- Soldering
- Cutting
- Polishing
- Cutting
- Deburring, etc.

Media:

- Dust
- Fumes
- Vapor
- Chips

Industries:

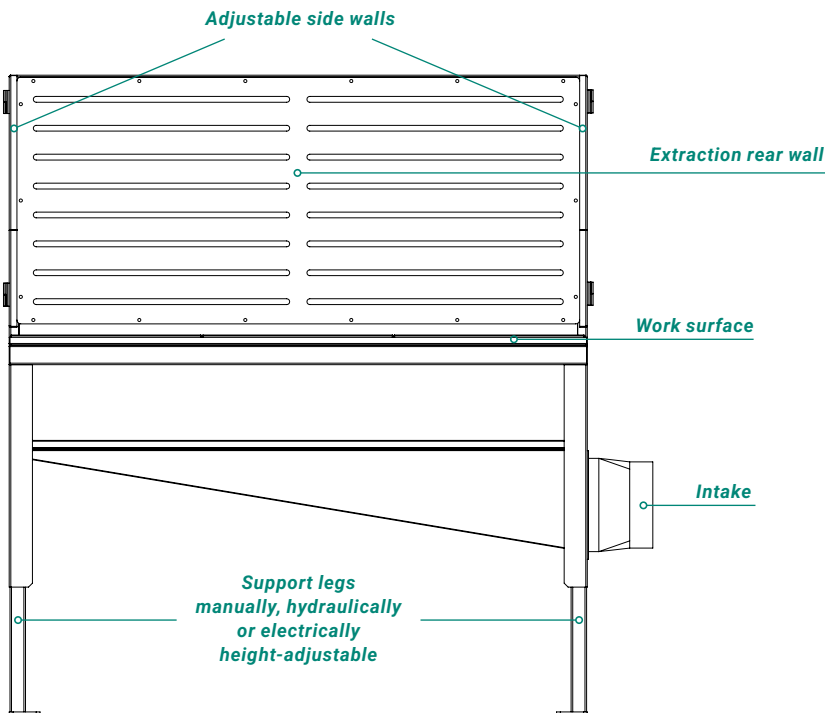
- Metal processing
- Mechanical engineering
- Plastics processing
- Wood/furniture industry
- Painting/coating
- Small-batch production, etc.

Use:

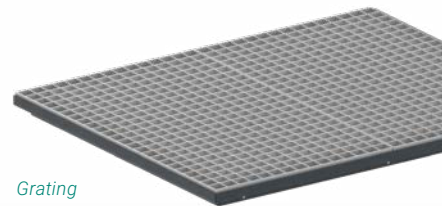
- Single workstation solution
- Multi-workstation solution
- In combination with hall extraction

Whether used as a welding, soldering, bonding, grinding, finishing, or painting table, our extraction tables are versatile and modularly configurable. As a manufacturer, we not only supply the suitable table but also the corresponding extraction system including pipe system for a technically coordinated overall solution.

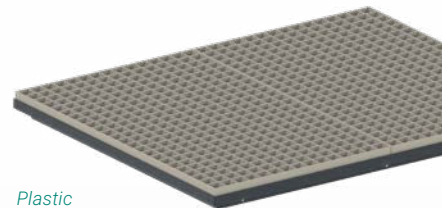
The extraction tables of the WT series are ergonomically designed and available in various sizes. Numerous options such as lighting, wheels, or different work surfaces allow precise adaptation to the respective process. Ample legroom and hydraulic height adjustment also ensure comfortable, clean, and efficient processing of your workpieces.



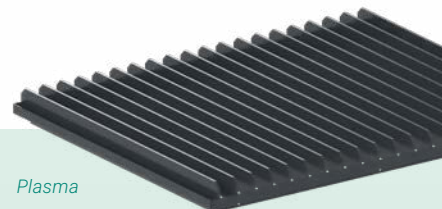
Our extraction tables are available with various surface options:



Grating



Plastic



Plasma



Wood

Options:

- Various work surfaces
- Mobile with wheels
- LED lighting
(also in ATEX version)
- Vise holder
- Hydraulic height adjustment
- Electric height adjustment
- Extraction via rear or side wall
- Tool holder
- Roo

Extraction hoods

Extraction hoods are used when the area where emissions are generated is spatially limited and does not need to be continuously adjusted. They operate in a stationary and wide-area manner and capture fumes, dust, or vapors directly as they rise, without manual readjustment. In repetitive processes or fixed workpiece positions, the capture area remains consistent. This minimizes false air, ensures efficient extraction, and significantly reduces the workload for employees. At the same time, the workplace remains clean and the process continues under consistent conditions.

Stationary capture without readjustment

Direct capture of emissions

Consistent capture in stationary processes

Less false air, higher efficiency

Consistent extraction performance

Low operating effort

Clean & controlled workflow



From top to bottom: upper hoods, under hoods, and side hoods

Processes:

- Welding
- Soldering
- Grinding
- Polishing
- Sawing & milling
- Painting
- Bonding, etc.

Use:

- Dust
- Fumes
- Vapor
- Aerosols
- Mist

Industries:

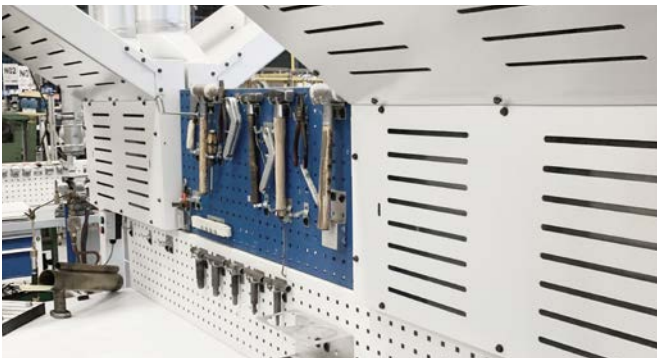
- Metal construction
- Mechanical engineering
- Automotive
- Plastics processing
- Chemical industry
- Trades, etc.

Use:

- Single workstation solution
- Multi-workstation solution
- In combination with hall extraction

Extraction hoods are used in different designs depending on the process. **Upper hoods** capture rising media such as fumes, vapors, or fine particles directly above the source. They are available in various sizes and can be equipped with lamellas, baffle plates, or spark pre-separators. **Under hoods** are used where chips or dust fall downward, for example at grinding, sawing, or milling machines, and reliably direct the material to the extraction system. **Side hoods**

capture emissions that escape laterally, for example during grinding or finishing processes. They are available in rectangular form and can be designed as open or equipped with protective and baffle plates to specifically guide the particle flow.



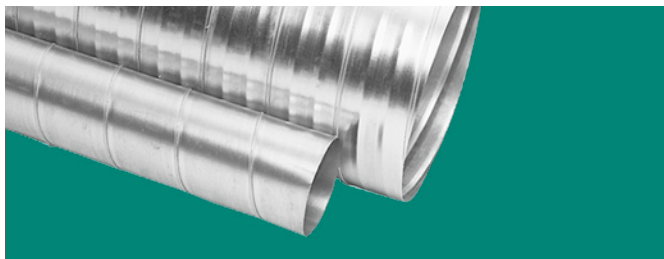
Options:

- Lamella curtain (*transparent or red*)
- Combination with push-pull system
- Version as upper, under, or side hoods
- Integration of a cross-jet system
- Individual process extraction hoods
- Customized mounting solutions

Pipe systems

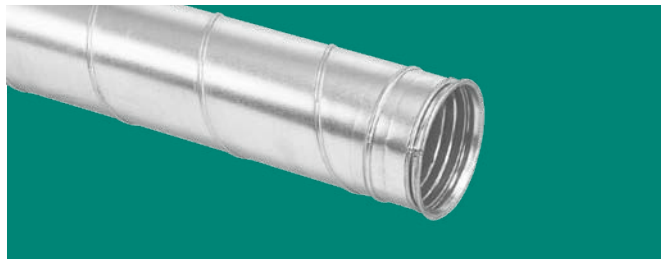
The pipe system plays a dual role in an efficient extraction solution: it not only transports the contaminated air to the filter unit but can also serve as a capture system itself. In hall extraction, for example, the pipe system is used as an air collector, slotted suction duct, or large-area capture line and captures emissions directly from the room volume. At the same time, a flow-optimized pipe system ensures uniform air guidance, low pressure losses, and prevents deposits inside. Proper pipe dimensioning, short duct routes, and smooth bends form the basis of stable and energy-efficient extraction technology for single workstations, multi-workstation solutions, and complete hall extraction systems.

This makes the pipe system a central component of every extraction solution: as a precise capture system or as a reliable connection between the workplace and the extraction system.



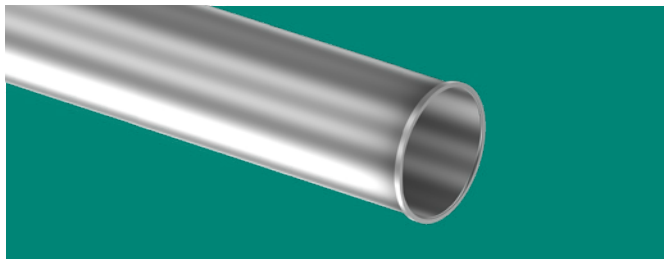
Spiral duct

Robust round pipe with good flow characteristics and low resistance. Temperature-resistant and available in galvanized or stainless steel version (V1.4301).



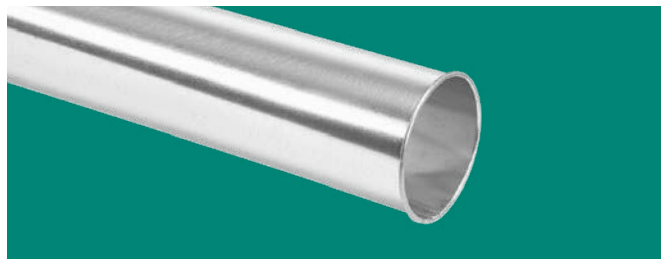
Flanged spiral duct

Spiral duct with flanged seam for particularly tight and stable pipe and fitting connections (*tightness class D*). Ideal for higher requirements in terms of stability and tightness.



Longitudinally seamed pipe system

Very robust design with smooth inner surface and precise transitions. Suitable for abrasive, chemical, or thermally demanding processes – connection via clamping rings.



Longitudinally welded pipe with rim

Smooth, joint-free inner surface for minimal deposits, low noise levels, and low energy consumption. Fast connection via clamping rings – without screws or rivets.

The ABSAUGWERK Principle

A high-performance and energy-efficient extraction system consists of several components that must work in perfect harmony. If elements such as capture systems or the pipe system reduce performance, this can not only impair functionality but also lead to deposits and dangerous fires. As every application is unique, we develop and manufacture customised extraction systems tailored precisely to our customers' requirements. For an optimal extraction solution, we also take care of pipe system design, installation and, optionally, maintenance and after-sales service.

Everything from a single source directly from our WERK.

Capture



+

Pipe system



+

Extraction system



+

Custom solution



Explosion (ATEX) + fire protection + noise protection

Special safety devices prevent fires and explosions proactively. In addition, noise protection measures minimise noise levels in working areas and create a pleasant working environment.

Where standard ends,
we begin!

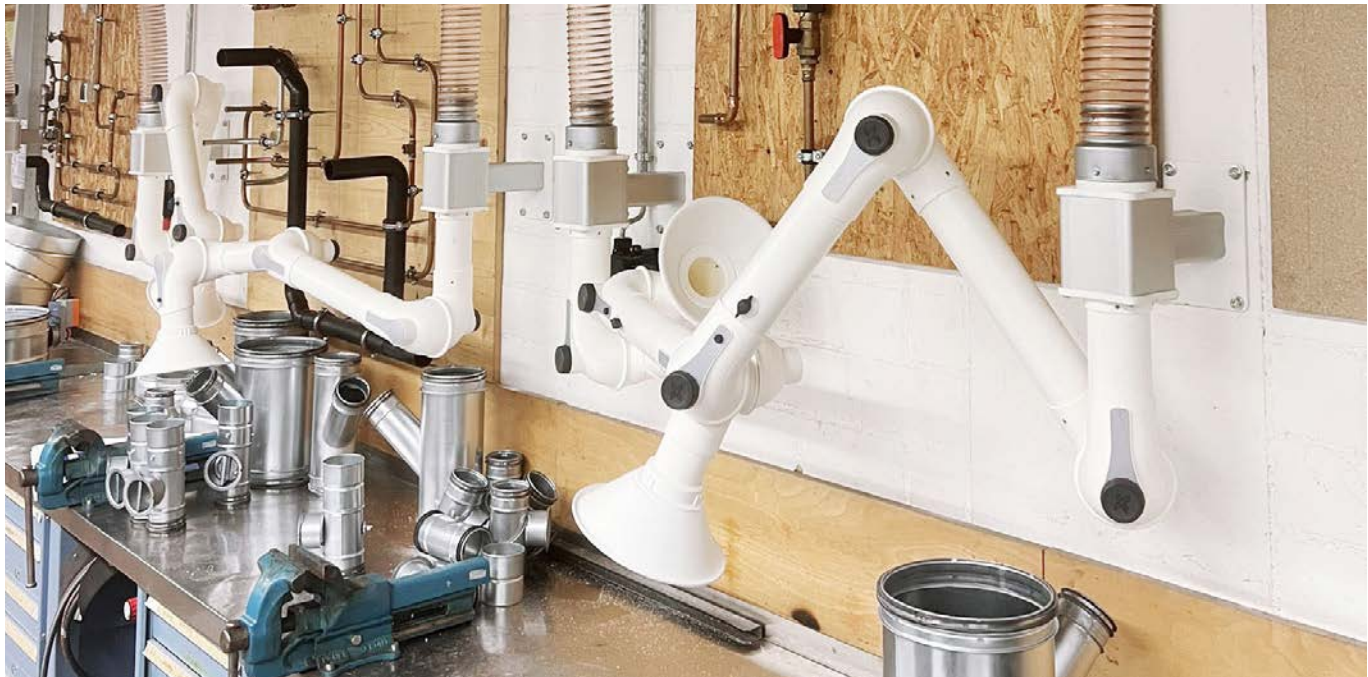
The result is a holistic extraction solution from start to finish. This allows us to increase performance and minimize operating costs in the long term with regard to maintenance and energy, while maintaining consistently high productivity. This makes it a sustainable and economical investment.



Custom Capture Systems

Large or complex components, automated processes or limited space conditions often require special capture concepts. That is why, at ABSAUGWERK, we develop custom solutions precisely tailored to the process, material and spatial requirements. These include custom-made top, side and bottom hoods, combined capture systems, adapted table or machine modules, as well as complete enclosures.

Thanks to the precise adaptation to the respective process, emissions can be captured reliably and [legal occupational exposure limits*](#) can be safely complied with – even where standard solutions reach their limits.



We strive to cover every requirement and, in addition to standard designs, also offer [cost-effective custom solutions.](#)



** Companies are responsible for ensuring that the legal occupational exposure limits in accordance with TRGS 611, TRGS 900, TRGS 910, etc. are complied with in order to minimize the risk to employees.*



real. sustainable.

SUSTAINABLE EXTRACTION SOLUTIONS

With their high separation efficiency, our dedusters are ideally suited for *recirculating air operation**, even in processes involving carcinogenic substances. A frequency inverter adjusts the extraction performance to actual demand, saving energy. From the very beginning of development, we focus on minimal flow resistance and efficient airflow design. The result: high-performance systems with very low energy consumption and an exceptionally durable, sustainable design. In this way, our dedusters make an important contribution to resource-efficient and energy-efficient production.

RESPONSIBILITY WITHIN THE COMPANY

All of our entrepreneurial activities are based on ecological, social and economic responsibility. Clean air in production halls protects the health of employees, helps prevent illness and makes workplaces safer. At the same time, machinery, tools and workpieces are protected, significantly extending their service life and increasing the economic efficiency of the entire operation.

Your benefits

High-quality & durable

Low energy & operating costs

Low maintenance & personnel-friendly

Cleanable permanent filters

Flexible system components

Winter/summer mode (*opt.*)

Frequency inverter (*opt.*)

Cross-flow heat exchanger (*opt.*)

Primary explosion protection



70% lower heating costs



** The cleaned air is so clean that it can be returned directly to the working environment. An integrated cross-flow heat exchanger uses the heat of the exhaust air for energy recovery, further reducing heating energy consumption.*



**greener.
healthier.
better.**



Reference

Eight Capture Columns in Operation for KAGERER in Augsburg

KAGERER Industriefachhandel GmbH from Augsburg is a trusted partner for welding technology, tools and occupational safety for the metalworking industry. For a customer in the automotive sector, an existing grinding booth in which aluminium and steel parts are processed daily was modernized. As explosive aluminium dusts are generated during grinding, high requirements for explosion protection and occupational safety had to be met. Together with ABSAUGWERK, a tailor-made solution was developed.

CHALLENGE

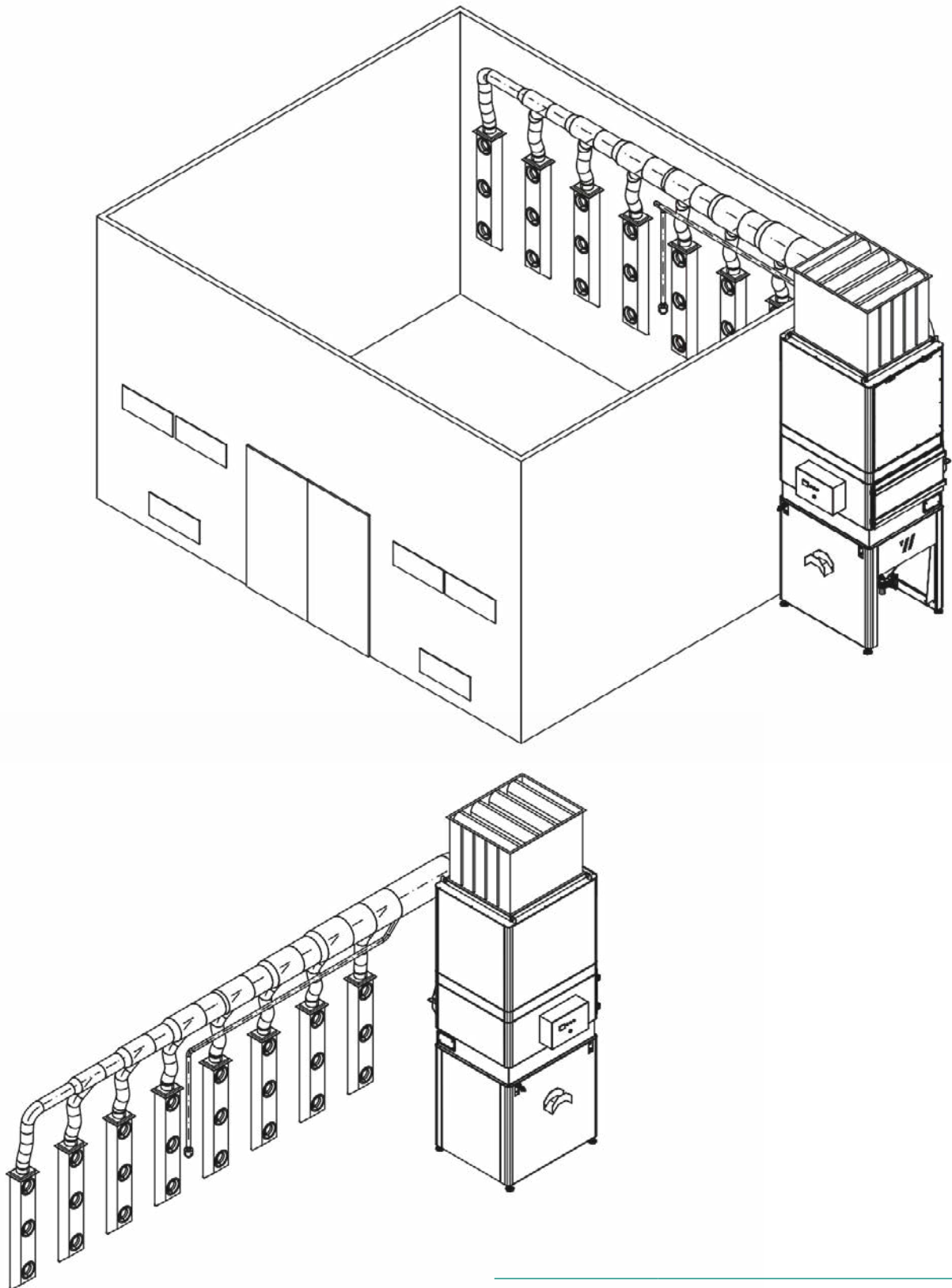
The modernization of the existing grinding booth involved several requirements: new capture systems, optimized ventilation and a suitable duct system. The combination of steel and aluminium required a safe, explosion-protected solution. In addition, an integrated cleaning system, a custom system design and low maintenance and operating costs were required.

SOLUTION

Together with KAGERER, the existing grinding booth was completely optimized. Four supply air nozzles, eight capture columns with a large-area effective zone and a new duct system now ensure reliable dust capture.

An ABSAUGWERK wet separator provides the safe separation of explosive aluminium dusts while meeting all legal ATEX requirements. Thanks to recirculation mode and silencers, the system operates energy-efficiently and with low noise levels. The custom paint finish with company logo completes the overall concept. The result: a safe, clean and efficient grinding process with significantly reduced maintenance requirements and a noticeably improved working environment.





The wet separator filters dust from the booth air via 8 capture columns. An additional high-vacuum cleaner enables easy cleaning of floors and surfaces inside the booth.

MEDIA

- Aluminium dust, steel dust

PROCESSES

- Grinding, polishing

PERFORMANCE

- Motor power: 15 kW
- Max. air volume: 18,000 m³/h

SERVICES

Personal consultation, technical design, duct system planning, production, installation, ducting, commissioning, maintenance and after-sales service.



»The air volume is so powerful that the fumes are cleanly extracted upwards.«

Marco Beyer,
Former Plant Manager Reisch Eliasbrunn GmbH



Fig. 1

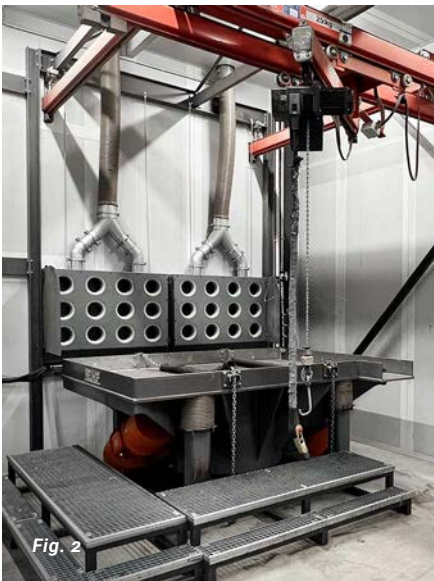


Fig. 2



Fig. 3



Fig. 4

Fig. 1
Extraction Arms

Process: Welding
Material: Mild steel
Medium: Dry fumes
System: Push-Pull-Plus hall ventilation with 10x extraction arms

Fig. 2
Side Hoods

Process: Decoring
Material: Quartz sand
Medium: Free-flowing dust
System: Decoring booth with 4x side hoods

Fig. 3
Push-Pull Top Hood

Process: Welding
Material: Mild steel
Medium: Dry fumes
System: Machine extraction with Push-Pull top hood

Fig. 4
Extraction Table

Process: Deburring
Material: Stainless steel, aluminium
Medium: Dust
System: 2x extraction tables for manual workstations

360° all-round service

Consulting

Free needs analysis and individual quotation by our sales team.

Marketing

Support in marketing through videos as well as customised design and branding.

Project planning

Personal support including an on-site inspection and the specification of technical parameters.

Training

Introduction to system components and performance of minor service and maintenance tasks.

We keep your WERK running!

Installation

Delivery and installation of the extraction system, including installation of the pipe system.

After-Sales

The full range: Spare and wear parts, cleaning, training, repairs and retrofitting.

Commissioning

Mechanical and electrical system briefing covering functionality, safety and control.

Maintenance

Comprehensive service for third-party and in-house systems to ensure smooth operation.

Your benefits

Everything from a single source

In-house & third-party maintenance

Free process analysis

Personal on-site appointment

Smooth & safe operation

Avoidance of downtime & follow-up costs

Worldwide support

Remote diagnostics & maintenance

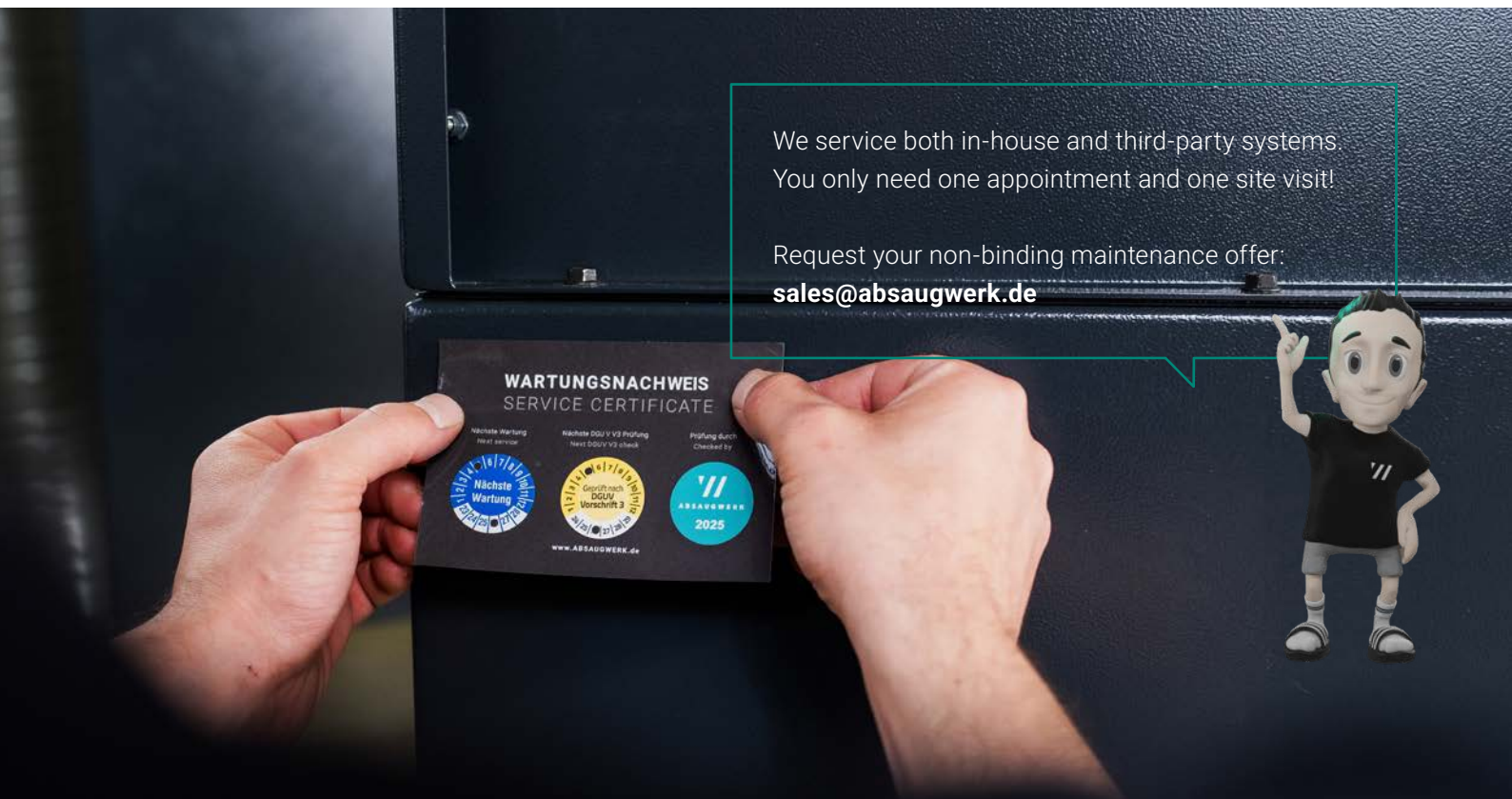
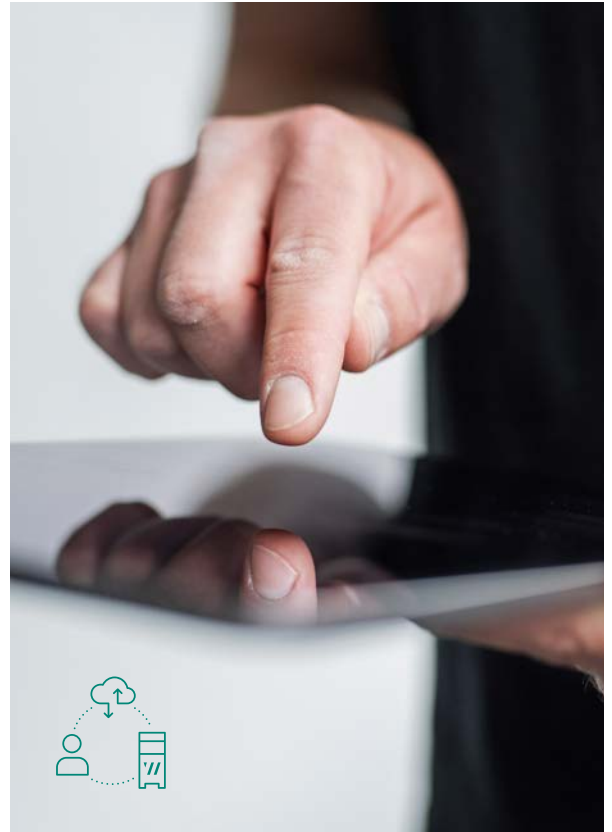
Maintenance

Unplanned system downtime can not only cause high costs, but also put employee safety at risk. To ensure that your extraction systems operate efficiently and reliably over the long term, ABSAUGWERK offers a comprehensive maintenance service.

Regular inspections allow technical deviations to be identified at an early stage, before they develop into costly or safety-critical issues. Our many years of expertise and a well-structured service organisation ensure short response times and rapid fault resolution.

REMOTE MAINTENANCE – WORLD WIDE WERK

In automated production environments, reliability is essential. Our remote maintenance systems monitor system parameters in real time and automatically notify us of critical deviations. This enables our service technicians to respond immediately, regardless of location. Intelligent monitoring, modern alarm functions and secure VPN encryption provide fast support, protect your data and offer maximum flexibility at the same time.



We service both in-house and third-party systems.
 You only need one appointment and one site visit!

Request your non-binding maintenance offer:
sales@absaugwerk.de





Quality from Neu-Ulm!

Our WERKER are professionals in their field and see themselves as part of the overall WERK. With more than 200 years of combined experience in extraction technology, we create durable and robust extraction systems handcrafted and »MADE IN NEU-ULM«! Every system undergoes strict quality and safety testing before it leaves our WERK.

We continuously invest in training and technology to keep moving the market forward. Our innovative strength has been recognised with the BSFZ seal – a mark of research-based development and publicly funded innovation. Our goal: better working conditions, sustainable environmental protection and your success with perfect workpieces.

We configure extraction systems individually and provide premium service directly from our WERK. That's what makes our solutions **real. better.**



Every WERKER considers themselves part of a responsible society and a healthy environment.



Learn what matters in extraction technology!

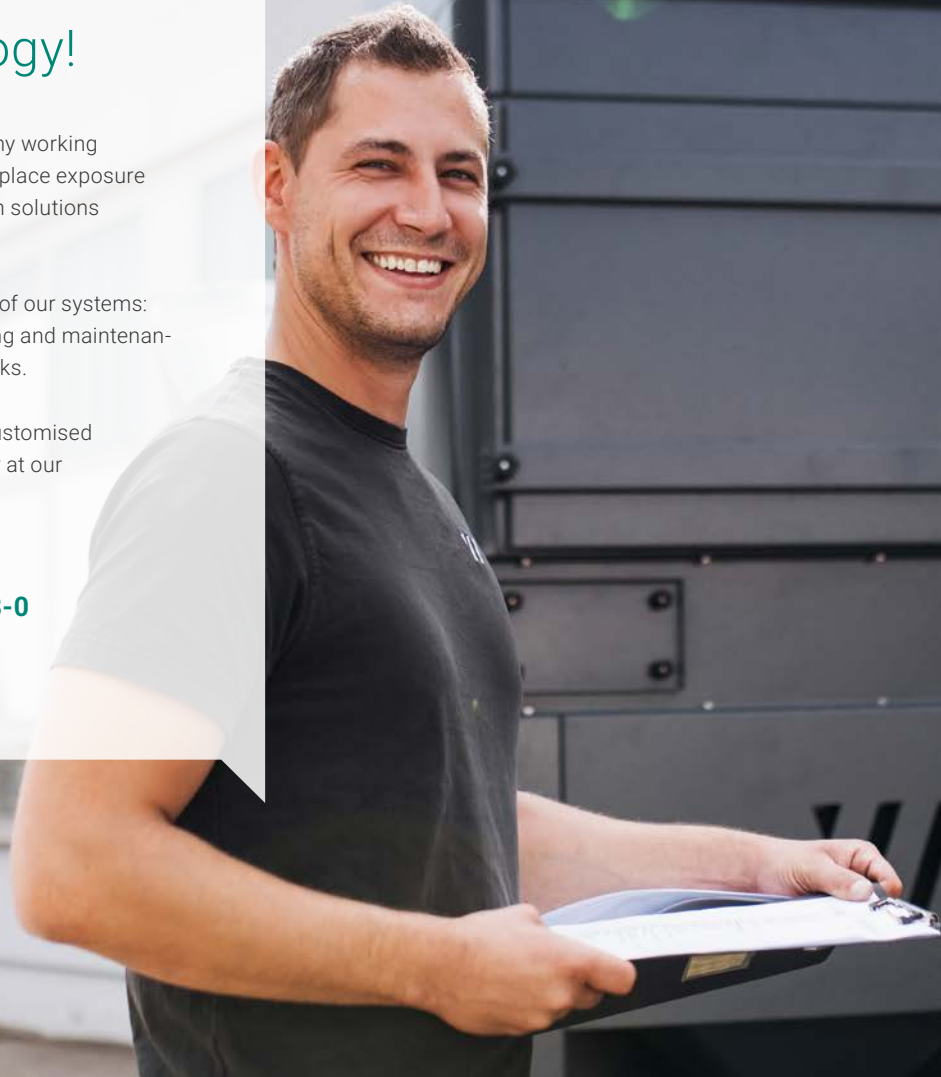
Effective extraction is essential for safe and healthy working environments. We inform you about relevant workplace exposure limits and legal requirements, and show you which solutions best suit your processes.

You will also get to know the various components of our systems: we explain what matters in system design, planning and maintenance, and provide practical tips for minor service tasks.

For our OEM and distribution partners, we offer customised training programmes, either directly at your site or at our WERK in Neu-Ulm.

Feel free to contact us:

info@absaugwerk.de | +49 731 141 108-0



real. personal.

ABSAUGWERK stands for lived values that go far beyond technology. Our employees share not only expertise, but also common values of teamwork, responsibility and trust. This culture forms the foundation of our success and our »feel-good philosophy«.

Within our network, we also focus on genuine partnerships: open, respectful and on equal footing. We believe in long-term relationships built on reliability and mutual appreciation, because only together can something be created that truly lasts.

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Project process

5 steps to your perfect extraction solution!

-  **01 Process analysis**

In the first step, your work processes are analysed, pollutant sources are identified and existing extraction systems are reviewed in order to determine the exact extraction requirements.
-  **02 Personal on-site visit**

Our experts assess the local conditions directly at your site and take precise measurements to plan the ideal solution for your operation.
-  **03 Individual quotation**

Based on the analysis and technical drawings, you will receive a customised quotation within a short time, offering the most economical solution for your needs.
-  **04 Production**

Once the technical drawings have been approved and the order placed, we immediately begin procurement, manufacturing and scheduling for installation.
-  **05 Installation**

Our installers set up the complete extraction system, including pipe system, and support you during commissioning. Performance and functionality are carefully tested and documented – ensuring a smooth start-up.



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real. better.