



A B S A U G W E R K

WET SEPARATOR
B SERIES

THE FACTORY

ABSAUGWERK stands for high-quality extraction solutions for the manufacturing industries. We are proud that with our systems, we make workplaces safer and cleaner. Hence, we not only actively contribute to the protection of employees, but also increase the service lives of machine parks and significantly reduce environmental impacts.

Our product portfolio ranges from industrial deduster, fume filter, oil mist separator and wet separator right up to complete production hall ventilation systems. Numerous capturing elements such as extraction arms, extraction tables, hoods and many more products complement our product range. We specially match the flexible components of our systems to the requirements of our customers and so deliver optimum solutions for virtually every process and every material. Our many years of experience in extraction technology is the foundation of our know-how and of our process and application knowledge.

In order to guarantee the quality of our high-end systems, we manufacture our units in our own factory and manage the entire service chain from the first consultation and planning right up to the installation of pipe systems and after-sales services such as maintenance or filter replacement.

The care of our network is a personal matter of concern to us and the basis for a trustful and longstanding partnership. The appreciation of our partners is the highest award for us and validates us in our daily activities.

»People are always our main focus, be it as customer, partner or employee.«



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WET SEPARATOR B SERIES

Wet separators have been specially designed for the separation of materials, which during processing produce flying sparks, are flammable or even explosive (ATEX).

The B series has a revolutionary flow technology with a 50 % higher suction power and maximum separation efficiency with low energy and water consumption. The interior of the system is easily accessible via several inspection openings. That saves valuable time in cleaning and maintenance. The innovative technology is also reflected in the design.

Wet separators of the B series are individually configurable due to their different sizes and variety of executions and thus can be optimally adapted to the respective process.

PROCESSES


- Grinding
- Polishing
- Separating
- Cutting
- Sawing
- Flexing
- Deburring

MEDIA

- Dust
- Chips

PERFORMANCE
1.1–15 kW
2,350–18,000 m³/h



 **- 2 dB**
 APPROX. QUIETER

+ 50%
 more
EXTRACTION POWER

- 30%
 less
ENERGY COSTS PER YEAR

+ 25%
 more
FILTER AREA

- 20%
 less
WATER USE PER YEAR

Compared to conventional extraction systems.

Highlights

REVOLUTIONARY TECHNOLOGY

OPTIMIZED OPERATING POINT

LOW RESISTANCE, HIGH EXTRACTION PERFORMANCE

ATEX-COMPLIANT CONSTRUCTION

MARKET-LEADING ENERGY EFFICIENCY

EASY CLEANING AND MAINTENANCE

LOW OPERATING AND SUBSEQUENT COSTS

DURABLE FILTER COMPONENTS

VERSATILE CONTROL FUNCTIONS

REMOTE MAINTENANCE AND ACCESS

EXCLUSIVE DESIGN

UNIT COMPONENTS

FILTER

- Cleanable stainless-steel metal mesh
- Multiple filter stages for maximum degree of separation
- Robust quality filters
- Long filter service lifetime

DISCHARGE

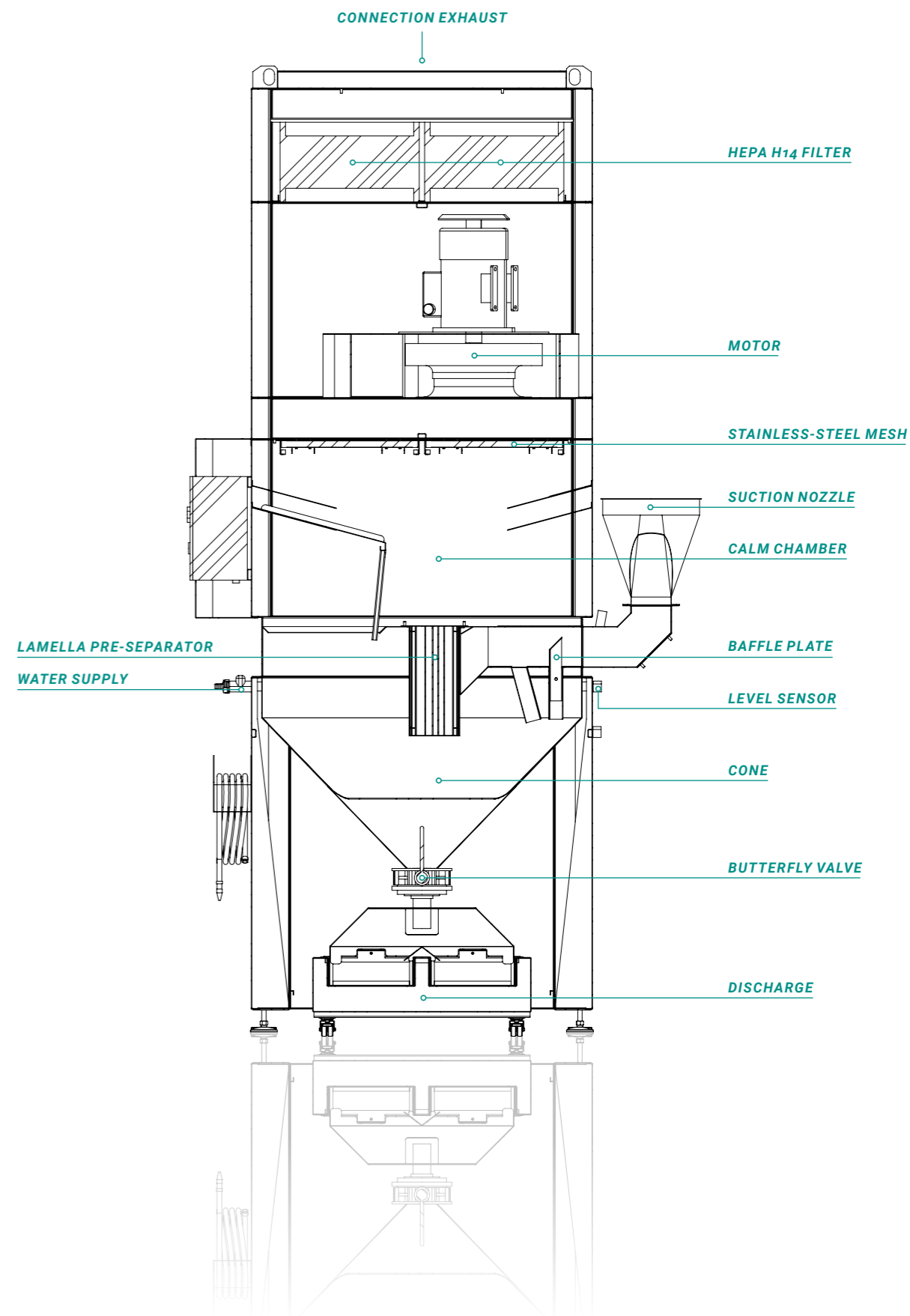
- Containers (different sizes)
- Pinch valve
- Ball valve
- Sludge container (different versions)
- Gate valve manual / electric / pneumatic
- Continuous discharge systems
- Individual discharge system

CAPTURING

- Extraction arm
- Extraction hood
- Extraction table
- Machine connection
- Individual capturing systems

OPTIONS & VARIATIONS

- HEPA H14 filters for carcinogenic substances in recirculation mode
- Carbon filter for gases and odors
- ATEX-/fire protection execution
- Effective noise protection
- Versatile smart controls
- Individual unit branding and color



EQUIPMENT

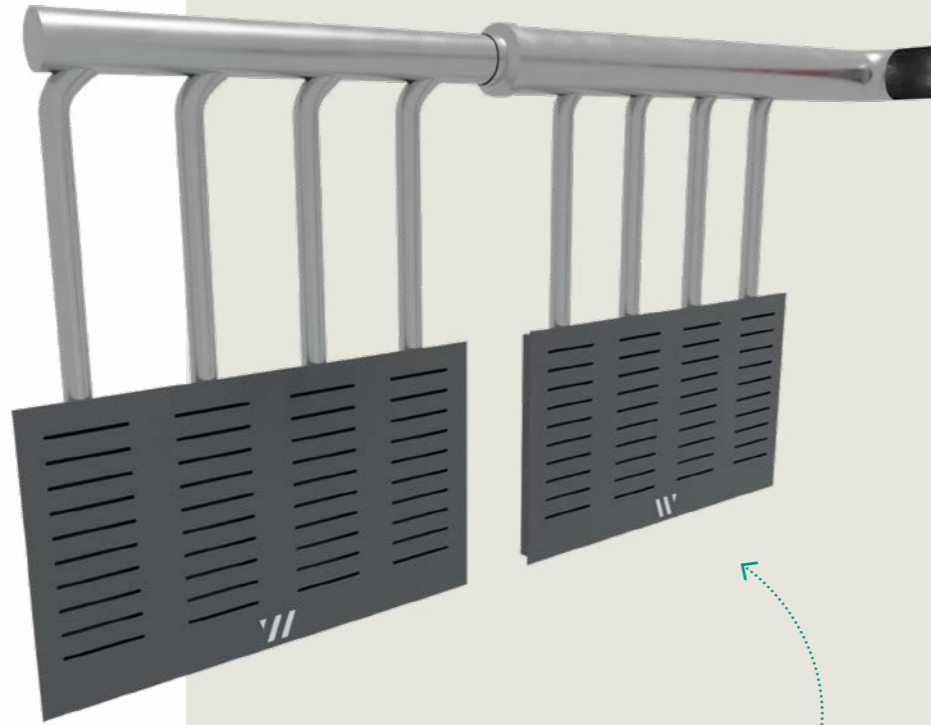
Extraction units from ABSAUGWERK are characterized by their precisely fitted and energy-saving construction. In order to provide the optimal extraction system for your application, our portfolio is supplemented by numerous components such as capturing elements, precoat units, pipe systems and other equipment.

Extraction arm

SELECTIVE EXTRACTION

Extraction arms are used for selective extraction in processes such as welding. They extract released media such as dust, smoke or fumes directly at the point of origin. The low resistance and the flow-optimized construction prevent any deposits and guarantee maximum efficiency without loss of extraction power.

The ergonomic design with a sturdy handle makes use comfortable. The easily guided joints ensure maximum flexibility and a large radius of action. The arms are available in various lengths and diameters.



Extraction hood

UNDER HOODS

Under hoods are used on grinding or sawing machines when material such as chips or dust falls down and needs to be extracted.

SIDE HOODS

Side hoods in the standard execution are available as rectangular hoods and can be delivered open or with various protective/deflector plates.

Our extraction hoods are available in numerous sizes and can be individually configurable.

Extraction table

DUST AND FUME FREE WORK

Extraction tables are used as workbenches for work such as grinding, sawing or welding and capture media such as dust, smoke or chips safely and efficiently. Coarse materials such as chips fall straight down into a discharge container. Fine particles such as dust and smoke are captured via the extraction walls and are filtered in an extraction system. Due to the flexible side walls, even large workpieces can be processed without any problems.

The tables of the WT Series are ergonomically designed and come in various sizes with numerous options such as lighting, wheels, overlays and much more. The extensive legroom and hydraulic height adjustment make them a comfortable workbench for clean processing of your workpiece.

OPTIONS

- Mobile with wheels
- LED lighting (also in ATEX execution)
- Vice holder
- Hydraulic height adjustment
- Extraction via the rear wall or side wall
- Tool holder
- Roof

OVERLAYS

- Grating¹
- Plastic²
- Plasma³
- Wood⁴

ERGONOMIC WORKBENCH (HEIGHT-ADJUSTABLE)

MAXIMUM WORK COMFORT AND EXTENSIVE LEG ROOM

IDEAL FOR SMALL BATCHES OR PARTS WITH SPECIAL DIMENSIONS

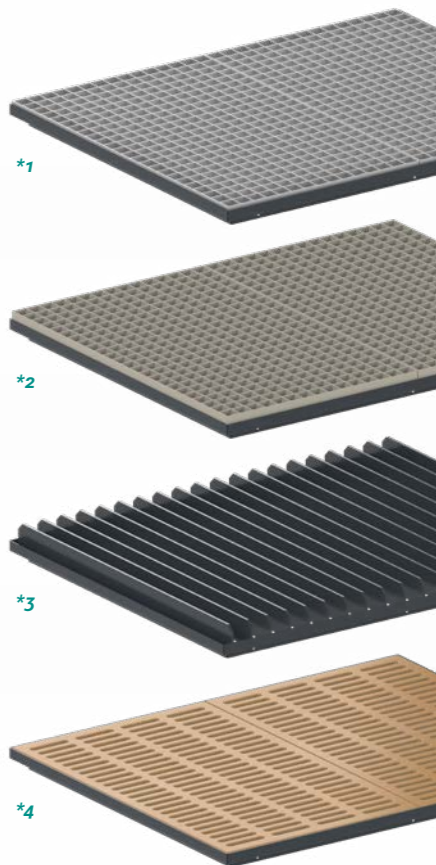
FLEXIBLE HINGED SIDE WALLS

EASY DISPOSAL OF DISCHARGE

INDIVIDUALLY CONFIGURABLE AND EXTENDABLE

VARIOUS OVERLAYS

QUALITY MADE IN GERMANY



Cleanbox

SAFE CLEANING OF FILTERS

Stainless-steel mesh filters are filters that are used in wet separators to separate the swirled-up water droplets and mist. This keeps water consumption and humidity in the production facility as low as possible.

Regular cleaning with a conventional high-pressure cleaner can significantly increase the service life of our metal mesh filters and reduce operating costs. Our Cleanbox offers a convenient solution to wash the filter safely and free it of dust and chips. The filters are clamped in using lockable latches, cleaned and can be conveniently dried on grids. The removable back and side walls prevent any water from splashing during cleaning and keep employees and production facilities clean and dry.

TECHNICAL SPECIFICATIONS

- 1,420 x 800 x 450 mm (WxHxD)
- Suitable for all metal mesh filters up to 1,200 x 500 mm
- 25 L water capacity
- All parts in contact with water are made of stainless-steel
- Water drainage connection DN20
- Can be completely dismantled to 1,500 x 300 x 500 mm (WxHxD)



SPLASH PROTECTION FOR EMPLOYEES AND PRODUCTION

SAFE DISPOSAL OF BOUND SUBSTANCES

SUITABLE FOR METAL MESH FILTERS FROM ALL MANUFACTURERS

LOCKABLE TENSION LATCHES FOR OPTIMAL HOLD

REMOVABLE REAR SIDE PANELS

MOBILE & COMPACT

CAN BE COMPLETELY DISMANTLED

PIPE SYSTEMS

In addition to an effective extraction system, the properties of the pipe system also have a high influence on air performance, operational safety and subsequent costs. If dust or chips are deposited in the pipe, the performance is significantly reduced, and the risk of fire increases considerably.

When designing your pipe system, we therefore take numerous parameters into account and offer you the most economical option.

SYSTEMS

- Spiral duct
- Flanged spiral ducts
- Flanged straight-seam pipes
- Straight-weld (steel) pipes with rim

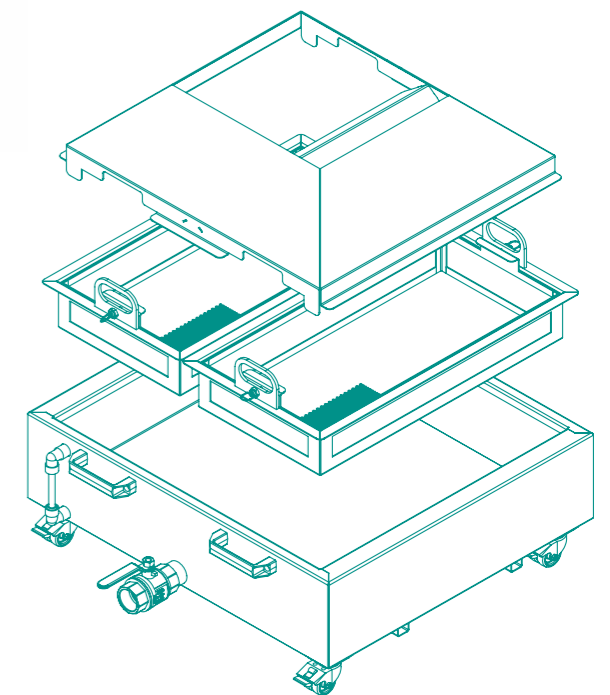


Discharge

WATER RECOVERY

Depending on the production process and material, different amounts of filtered discharge are produced. The innovative design of our tanks separates the water from the sludge and returns it to the wet separator. This reduces water and disposal costs many times over and protects the environment.

Our sludge tanks are available in various sizes and designs – mobile and stationary.



DIFFERENT SIZES S, M, L, XL

UP TO 220 L WATER CAPACITY

UP TO 55 L CAPACITY OF THE INSERTION SIEVE

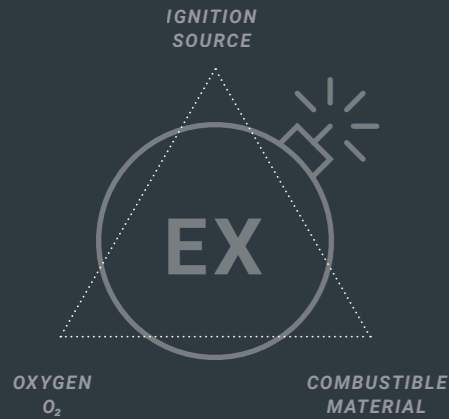
EXPLOSION PROTECTION DUE TO DIFFUSIVE COVER

WATER SAVING UP TO 7,200 L / YEAR

EXPLOSION PROTECTION

In many companies, flammable and explosive media such as gases, vapors, mists or dusts are released during production processes. In combination with oxygen and an ignition source, these substances can cause large fires and explosions.

Our systems are designed to prevent the formation of explosive atmospheres (primary explosion protection). This is achieved through a maximum degree of separation with constant extraction power, high air speeds in the system and ATEX compliant components.



STATUTORY REGULATIONS

Within the European Union, all matters and special features regarding explosion protection are specified in the so-called ATEX Directives. The Directives distinguish between manufacturers and operating companies and must be complied with by both parties in order to ensure safe operation and to satisfy occupational health and safety requirements. When designing our extraction systems, we include all the relevant parameters, evaluate them in accordance with the statutory regulations and so manufacture ATEX-conforming systems for every specific application.

EC DIRECTIVE	RESPONSIBILITY	IMPLEMENTATION DE
2014/34/EU (Atex 114)	Manufacturer	Explosion Protection Ordinance <i>ExVo</i>
1999/92/EG (ATEX 137)	Operator	Hazardous Substances Ordinance <i>GefStoffV</i> , Occupational Health and Safety Regulation <i>BetrSichV</i>

COST SAVINGS UP TO 50%

LOW OPERATING & CONSEQUENTIAL COSTS

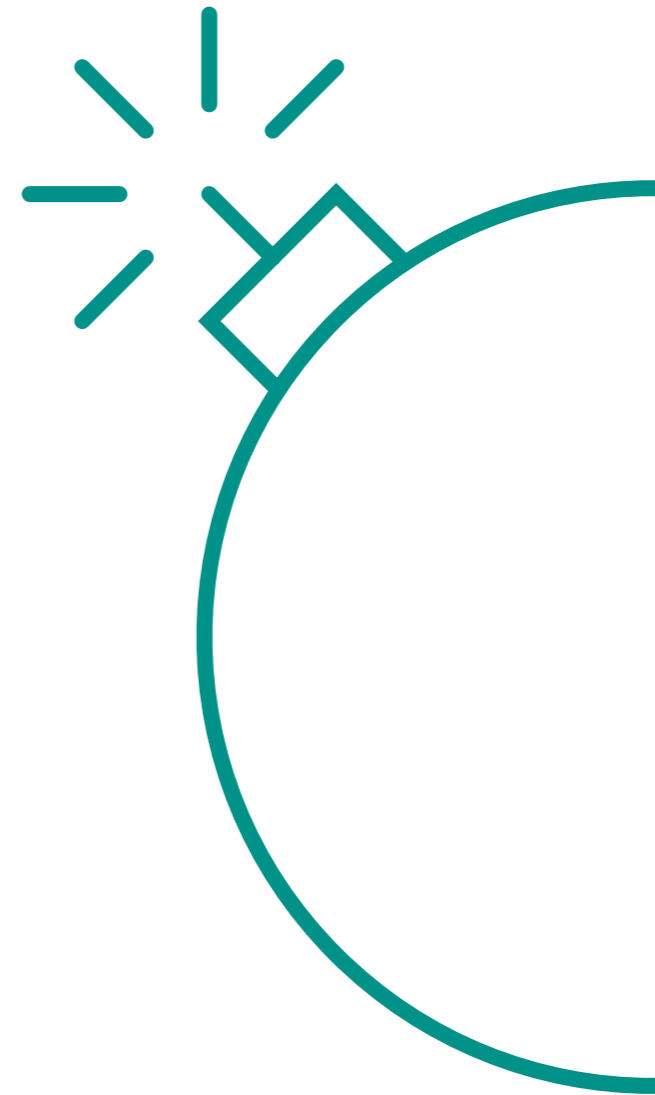
MAXIMUM SUCTION PERFORMANCE

MAXIMUM SEPARATION RATE

SAFE OPERATION

HIGHEST QUALITY STANDARDS

INDOOR INSTALLATION POSSIBLE



ATEX COMPONENTS

With various ATEX components and an innovative design, we ensure the safe operation of our systems.

- Air speed in the pipe at minimum > 20 m/s
- Negative pressure and volumetric flow monitoring
- Motor ATEX Zone 2
- Construction ignition source-free and conductive
- No ex-zones during operation
- All electrical components installed ATEX-compliant
- Electrical cabinet outside the system



FIRE PROTECTION

Deposits in the pipe system or in the system itself can create dangerous smoldering nests, which do not immediately form high columns of smoke and can go unnoticed for a long period of time. For this reason, preventative fire protection measures as well as effective monitoring and extinguishing systems, as guaranteed by our special fire protection components, are absolutely necessary.

COMBUSTION BEHAVIOUR OF SUBSTANCES

The combustion behaviour is specified as a combustion factor (CF) from one to six and allows a rough estimate of how dust deposits can ignite and behave after ignition.

- CF 1: No burning (table salt)
- CF 2: Brief burning and quick extinction (tartaric acid)
- CF 3: Local burning or smouldering without spreading (lactose)
- CF 4: Spreading of a smouldering fire (tobacco)
- CF 5: Spreading of an open fire (sulphur)
- CF 6: Deflagration-type burning (black powder)

STATUTORY REGULATIONS

Within the scope of production and occupational health and safety, the responsibility for fire protection measures rests solely with the operating company as there are no clear regulations here. In this respect, we would be pleased to offer you individual advice and recommend the use of an effective extraction system.

REGULATION	DESCRIPTION	RESPONSIBILITY
DIN EN ISO 19353:2019-06	Safety of Machinery – Fire protection	Operator
VDI 2263 Sheet 6	Fire and explosion protection in dedusting systems	Operator
VDS 3445	Fire protection in dedusting systems	Operator
TRGS 800	Fire protection measures	Operator

COST SAVINGS UP TO 50%

LOW OPERATING & CONSEQUENTIAL COSTS

MAXIMUM SUCTION PERFORMANCE

MAXIMUM SEPARATION RATE

SAFE OPERATION

HIGHEST QUALITY STANDARDS

SUITABLE FOR LARGE AMOUNTS OF DUST



FIRE PROTECTION COMPONENTS

- Air speed in the pipe at minimum > 20 m/s
- Automatic switching off
- Negative pressure and volumetric flow monitoring
- Construction ignition source-free and conductive



Fire protection checklist

- Hazard assessment by an accredited fire and explosion protection expert body
- Provision of fire protection regulations
- Operation of the systems by trained personnel only
- Regular fire drills
- Keeping an extinguishing bottle ready
- Annual servicing and cleaning of the system
- Regular emptying of the discharge

NOISE PROTECTION

In order to protect your employees from harm to their health and to ensure smooth operation, our extraction systems are designed to have low-noise levels and can be supplemented with various soundproofing components. Thereby we achieve a noise exposure that is well below the allowed limits.

THRESHOLD VALUES & ACTIONS

A daily noise exposure level LEX, 8h from **80 dB(A)** or a peak sound pressure level LpCpeak from **135 dB(C)** requires:

- Information for the employees (on reaching the action value)
- The provision of hearing protection (on exceeding the action value)
- The provision of occupational medical preventive care (on exceeding the action value)

A daily noise exposure level LEX, 8h from **85 dB(A)** or a peak sound pressure level LpCpeak from **137 dB(C)** requires:

- Compulsory wearing of hearing protection (on reaching the action value)
- Provision of occupational medical preventive care (obligatory provision on reaching the action value)
- Identification of noisy areas (on exceeding the action value)
- Establishment of a noise reduction programme (on exceeding the action value)

STATUTORY REGULATIONS

Workplaces Ordinance
ArbStättV

Noise and Vibration Health & Safety Regulation
LärmVibrationsArbSchV

Technical Rules for the Noise and
Vibration Health & Safety Regulation
TRLV Lärm

OPTIMIZED FLOW GEOMETRY IN THE COMPRESSOR

COMPRESSOR WITH MAXIMUM QUIET RUNNING

MAXIMUM SUCTION POWER WITH LOW ENERGY CONSUMPTION

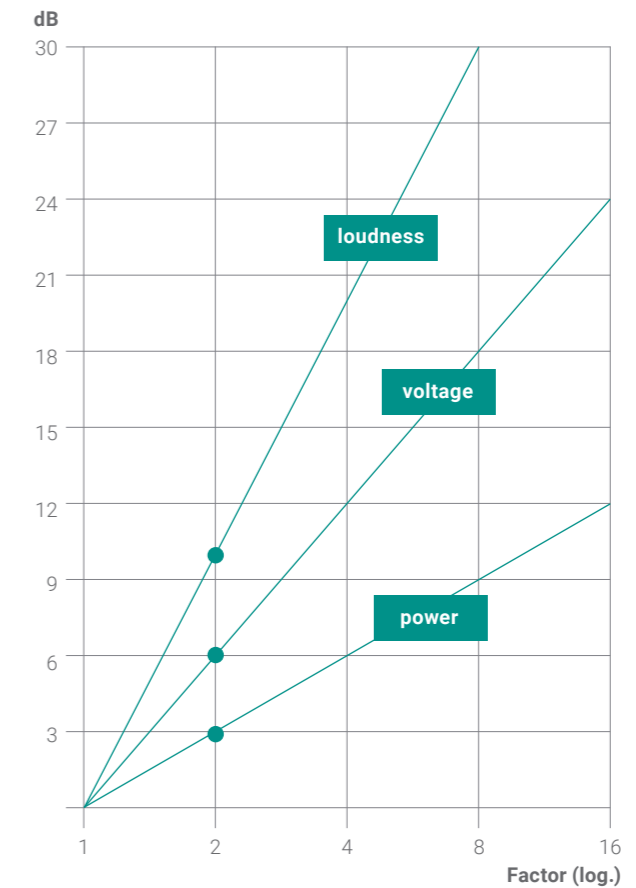
NOISE EXPOSURE BELOW 80 DB(A)



SOUND INSULATIONS COMPONENTS

- Splitter silencers
- Duct silencers
- Machine housing
- Sound insulation cabins

Just a noise level increase of 3 dB has an impact of factor 2 and will be perceived as approx. 10 dB louder.



Double loudness =
Factor 2 is about
a 10 db higher per-
ceived loudness level
(psychoacoustics)

Double voltage =
Factor 2 is 6 db
higher measured
voltage level (sound
pressure level)

Double power =
Factor 2 is 3 db
higher calculated
power level (sound
intensity level)

SERVICE & DISTRIBUTION

With our comprehensive range of services, our competent service team will support you during initial commissioning, carry out regular maintenance and measurements, and offer you suitable spare and wear parts if required. Thanks to our many years of experience in extraction technology, we also have the expertise to convert and retrofit existing systems. If you would like to train your employees in the use of our systems, we also offer training courses.

»360° service – we support you from the initial consultation all the way to the after-sales service!«

IMPLEMENTATION

We ensure smooth mechanical and electrical commissioning of our own as well as third-party systems. We are also happy to provide you with instructions on the functions, safety precautions and control of the system.



AFTER-SALES SERVICE

We offer a comprehensive after-sales service: From the sale of spare and wear parts to the cleaning of pipelines to residual dust and air quality measurements. Even at a later date, plant instructions (detailed functions, new instruction of additional operators) can be provided. Furthermore, we support you with repairs, retrofits and overhauls of all makes.



MAINTENANCE

System failures cannot be planned and can cause high downtime costs as well as endanger the safety of your employees. To maintain the efficiency of your extraction systems, we offer various maintenance packages. This way, any defects can be detected in time and subsequent costs can be avoided. Our years of experience and an effectively structured service organization guarantee a short response time and rapid troubleshooting.

We keep your facility running!

We maintain both third-party and our own systems. Request a no-obligation maintenance quote at info@absaugwerk.de



AVOIDANCE OF FOLLOW-UP COSTS

AVOIDANCE OF DOWNTIME AND STANDSTILL COSTS

LOWER MAINTENANCE COSTS

INCREASE IN PRODUCTIVITY

REMOTE DIAGNOSIS, REMOTE ACCESS & REMOTE MAINTENANCE

CONDITION ANALYSIS AND MAINTENANCE OF ALL MAKES



WORLDWIDE SUPPORT FROM OUR SERVICE TEAM

EARLY WARNING SYSTEM REDUCES BREAKDOWNS AND MACHINE FAILURES

CONSERVATION OF INTERNAL AND ECOLOGICAL RESOURCES

EXTENSIVE VISUALIZATION ALSO FOR TABLETS AND SMARTPHONES

INTEGRATED FIREWALL AND SECURE ACCESS VIA VPN TUNNEL

RETROFITTABLE ALSO FOR ALREADY RUNNING EXTRACTION SYSTEMS

REMOTE MAINTENANCE

In fully automated production processes with professional extraction systems, the most important thing is that everything runs smoothly and functions without interruptions.

Remote maintenance systems monitor relevant parameters such as machine condition, filter saturation, maintenance intervals, operating hours, sensor technology and many other indicators in real time and send automatic alarm messages if necessary. Thus, malfunctions can be remedied at an early stage and consequential damage and machine downtimes can be avoided.

MONITORING & ALERTS

Thanks to the extensive monitoring and alarm functions, our service technicians remain connected to every extraction system, despite the fact that the machines are used all over the world.

SECURITY

Data is securely encrypted via VPN, clearly visualized and can also be accessed on mobile devices. The flexible user and client management makes the administration of projects and responsible service staff an effective and resource-saving solution for your process.



The extraction systems are equipped with an industrial router and can be accessed and can transfer data worldwide via a secure VPN access.

TECHNICAL SPECIFICATIONS

- Integrated 3-port /4-port LAN-switch
- WAN, 3G/4G or Wi-Fi
- Secure OpenVPN remote



Trouble-free and safe working

QUALITY

WE START WHERE THE STANDARD ENDS

Each of our employees is a professional in his or her field and they see themselves as part of the complete ABSAUGWERK. Together, our team has more than 200 years of experience in extraction technology. The high quality of the individual contributions shows itself in our efficient, long-lived and robust extraction systems. The individual components are carefully chosen and only leave our WERK after a strict testing procedure.

PERFECT WORKPIECES

We are proud of the quality of our handcrafted products »MADE IN GERMANY« and assume full responsibility for their performance and efficiency. Through continuous further training and optimization of our systems, we make use of the latest technologies and steadily forge ahead in the markets. We have great respect for our customers' end products and with our systems can contribute to a perfect workpiece. The satisfaction and trust of our customers are our greatest assets and can only survive through quality products and a healthy partnership.

»Every employee sees himself or herself as a part of a caring society and a healthy environment.«



MADE IN GERMANY

Powerful & sustainable

HIGH QUALITY WORKMANSHIP FOR A LONG SERVICE LIFE

LOW ENERGY AND OPERATING COSTS

LOW LABOR COSTS AND REQUIREMENTS FOR MAINTENANCE AND CLEANING

CLEANABLE, HIGH QUALITY PERMANENT FILTER

FLEXIBLE SYSTEM COMPONENTS FOR OPTIMAL UTILIZATION

WINTER/SUMMER CIRCUITS THROUGH INTELLIGENT CONTROL TECHNOLOGY (OPT.)

POWER ADJUSTMENT TO ACTUAL DEMAND VIA FREQUENCY CONVERTER (OPT.)

REDUCTION OF HEATING COSTS THROUGH CROSS HEAT EXCHANGERS (OPT.)

PRIMARY EXPLOSION PROTECTION AVOIDS EXPENSIVE EXPLOSION PROTECTION COMPONENTS

SUSTAINABILITY

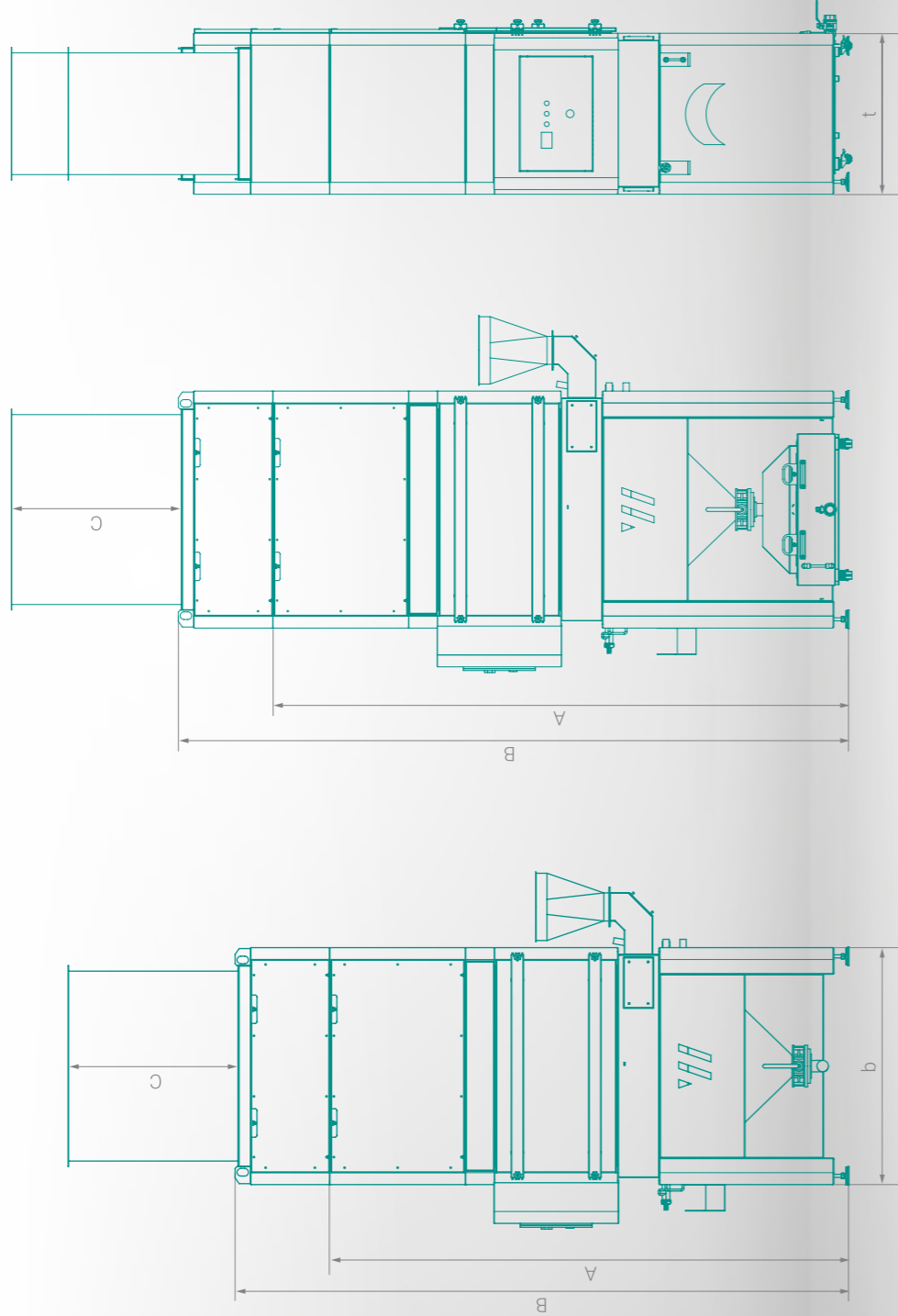
FOR US AND OUR ENVIRONMENT

As a manufacturing company for the most varied industrial sectors, we bear a special responsibility for the quality of our products and processes as well as for the preservation of our environment and resources.

Our business activities are based on ecological, social and economic responsibility. Clean air in production halls promotes the health of employees, prevents illnesses and makes the workplace safer. In addition, the machine park, the tool and the workpiece are preserved and their service lives are significantly extended.

The flexible components of our systems enable us to configure custom-made extraction systems for almost every individual application and so ensure a positive energy balance. As opposed to standard systems, extraction systems from ABSAUGWERK consume only the amounts of energy, air and water that are actually required. In addition, the cleaned, still warm air can be returned to the production hall via the recirculating air operation. Especially in winter, this saves enormous energy costs.

B SERIES 1000-4000



WET SEPARATOR SERIES	B 1000	B 2000	B 2000	B 2000	B 3000	B 3000	B 3000	B 4000	B 4000	B 4000
Connection voltage	V	400								
Frequency	Hz	50								
Type of current	Ph	3								
Engine power	kW	1.1	2.2	3	4	4	5.5	7.5	11	15
Backup fuse	A	16	16	16	20	20	25	32	50	50
Fan power max.	m³/h	2,350	3,400	4,200	6,200	6,200	6,900	11,000	14,800	18,000
Vacuum max.	Pa	1,950	2,500	3,100	3,800	3,800	4,000	4,000	4,400	5,100
Connection diameter	mm	125	200	224	250	250	315	355	400	450
Width (b)	mm	550	850	850	850	1,250	1,250	1,250	1,250	1,250
Depth (t)	mm	650	850	850	850	850	850	850	1,500	1,500
Höhe A (Cone)	mm	2,000	2,700	2,800	2,800	2,800	3,020	3,120	3,520	3,520
Height B (Cone + H14)	mm	2,215	2,915	3,015	3,015	3,135	3,235	3,235	3,635	3,635
Height A (Cone with elevation)	mm	-	3,000	3,100	3,100	3,220	3,320	3,420	3,820	3,820
Height B (Cone with elevation + H14)	mm	-	3,215	3,315	3,315	3,535	3,535	3,535	3,935	3,935
Height C (Splitter silencer)	mm	(+800)	(+1,000)	(+1,000)	(+1,000)	(+1,000)	(+1,000)	(+1,000)	(+1,000)	(+1,000)
Opening radius door	mm	450	750	750	750	1,200	1,200	1,200	1,200	1,200
Weight empty (approx.)	kg	300	400	420	450	600	650	700	950	1,000
Weight with water (approx.)	kg	650	750	770	800	950	1,000	1,050	1,300	1,350
Sound pressure level (approx.)	dB(A)	75	75	75	75	75	75	75	78	79
Exhaust air connection DN	mm	250	355	355	355	560	560	560	710	710
Incoming air ambient temp.	°C	5-40								
Incoming air humidity	%	70								
Water connection DN	mm	25								
Operating point water pressure	bar	1-6								

TECHNICAL SPECIFICATIONS as of 04.04.2022 | subject to changes



LEARN WHAT MATTERS IN EXTRACTION TECHNOLOGY!

During processes such as welding, sawing or cutting, various media are released that must be safely extracted to protect people and machines. We inform you about the relevant occupational limit values and legal requirements that you must consider in your company and guarantee to find the optimal solution for your process!

Also get to know our various system components. We will show you what is important in design and planning and how you can carry out small service and maintenance tasks yourself.

We are happy to offer individual training programs at our competence center in Neu-Ulm or at your site.

Please contact us at
info@absaugwerk.de | +49 731 141 108-0

**RESPECT.
RELIABILITY.
PERSONALITY.**

PARTNERSHIP WITH ABSAUGWERK

ABSAUGWERK reflects the personal values of its employees and unites them with common ideas of teamwork, corporate management and goals. Our culture forms the basis of our success and our »feel good philosophy«.

This also applies to our network. We have no fear of commitment! We maintain our partnerships continuously and on a personal level, because we sell and buy from people. Mutual respect and reliability are indispensable for us.

Become a partner in our network!

Follow us on social media:



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real. better.

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Let us network!



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