ISI Air Filtration Systems

We stand for clean air at the workplace!



FBARON







www.isi-luftfilter.de



ISI Group – we stand for clean air at the workplace!

The ISI Group develops, produces and sells industrial air filters for industrial air purification.

The medium sized, family run company with its head office in Buchholz, in the Cologne/Bonn area of Germany, has been for over the last 50 years and with more than 70,000 air filtration devices sold, one of the leading manufacturers in this field in Germany. ISI air filtration devices are used for the extraction of oil and emulsion mist generated during machining, as well as smoke and dust. They thus make a significant contribution to keeping air clean in the industrial workplace. Clean air is our most important commodity, and thus industrial air pollution control plays a decisive role. Therefore, over the last 50 years we have been committed to the environmental and health protection of your employees.

A strong team for strong products

Strong brands need consistency! We at ISI know this and that is why we rely on a longstanding and trusting partnership within our team.

We value the development potential of each and every employee and promote their skills. In this way we achieve maximum creativity and generate a working environment







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in which ideas can grow and innovations can be produced. In order to be able to offer high product quality and and a comprehensive service, the ISI Group is made up of three areas of competence:

Service, Development & Production as well as Sales & Marketing.

Sales & Marketing department ISI-Vertriebs GmbH



Service department ISI Service GmbH

COMPANY

With **EC fans, energy savings of up to 60%** are realistically achievable.





Simply ISI – The ISI range of filter devices

All ISI devices are characterised by high quality manufacturing and field tested technologies. We place a great deal of value on tried and tested functionality and digitalised control technology.

Thanks to air filter devices with ISI-TRONIC, industrial air pollution control has never been as transparent, plannable and economical.

Almost all of our filter unit series are available as standard with our digital filter unit control ISI-TRONIC. With ISI-TRONIC you can monitor and evaluate all processes in the filter unit centrally via your company network, with a laptop or with your smartphone directly via the machine or with our accessory ISI-TRONIC CONTROL.

In addition, all of our filter devices work with a highly efficient EC fan. Through the consistent use of EC fans, energy savings of up to 60% compared to conventional three-phase fans are realistically achievable.



Service ISI Service GmbH

On request we can assemble, service, clean and repair your ISI air filter devices.

Highest energy efficiency maximum sustainability



Characteristics

Extraction capacity of filter unit at spigot*: 600/720* m³/h Total power consumption*: 0.42 kW Operating voltage: 230 V, 50/60 Hz,1PH+N+PE Noise level*: 67 db(A) Dimensions L/W/H in mm: approx. L 800 / W 493 / H 415 Colour (light grey): RAL 7035** Weight: 53 kg

* Depending on the filter equipment

** Special voltage or special colour on request





Special features of the Product variants

TEBARON EH1-EC, without ISI Tronic TEBARON EH1-TR, with ISI-Tronic

The **TEBARON** – Air filter system

Compact, mechanical air filter unit for separating emulsion mist

Our **TEBARON** series offers you a compact air filtration device, designed to meet today's diverse possibilities of processing and the resulting pollutant profiles.

TEBARON is designed as a compact air filter device for small to medium sized machine working areas in order to separate emulsion mist. Our main development objectives were to design a device with compact dimensions, maximum energy efficiency and economical operation via low costs and maximum sustainability. To achieve these in the TEBARON series, we use highly efficient, controllable EC fans.

Application **Emulsion mist**



For the extraction of emulsion mist for small to medium-sized machine working areas. Air flow rate: 600/720 m³/h*

* Depending on filter equipment



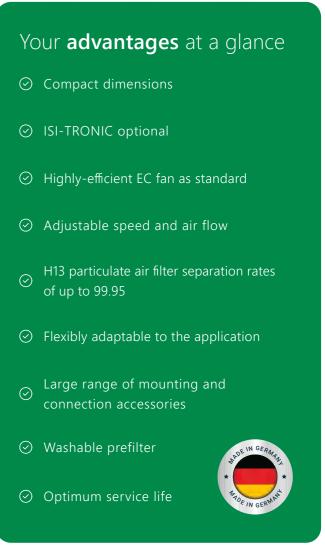
As an option, your **TEBARON** filter device can also be equipped with our digital filter control **ISI-TRONIC**.





The standard, integrated pre-filter package consists of three parts and is completely washable. It is highly effective against solid and liquid aerosols with large and medium sized particle diameters, in order to protect the main filter and maximise its service life. The main filter can be adapted to the individual application. In the standard version we use an H13 HEPA filter to achieve separation of 99.95% against particles of 0.3 μ .

Let our experts advise you! We will be happy to configure the perfect filter unit for the application in question. All TEBARON devices are supplied as standard with an adjustable EC ventilator for maximum energy efficiency. As an option, you can also equip the filter unit with our digital control system ISI-TRONIC.



Active air improvement Long service intervals



Device types COBARON	СОВ 11Tr 12Tr 13Tr	СОВ 16Tr 17Tr	СОВ 21Tr 22Tr 23Tr	СОВ 26Tr 27Tr	СОВ 31Tr 32Tr 33Tr	СОВ 36Tr 37Tr
Extraction rate Filter unit (m³/h) at spigot*	980	980	2050	2050	2420	2420
Total power consumption (kW)*	0,71	0,71	1,04	1,01	1,84	1,80
Operating voltage (special voltage on request)	400 V, 50 60 Hz, 3PH+PE	400 V, 50 60 Hz, 3PH+PE	400 V, 50 60 Hz, 3PH+PE	400 V, 50 60 Hz, 3PH+PE	400 V, 50 60 Hz, 3PH+PE	400 V, 50 60 Hz, 3PH+PE
Noise level (db(A))*	68	68	69	69	72	72
Dimensions L W H (mm)	1290 345 595	1450 345 595	1290 588 595	1450 588 595	1290 588 595	1450 588 595
Weight (kg)	74 74 79	105	106 106 113	135	111 111 118	140
Colour (light grey) (special colour on request)	RAL 7035	RAL 7035	RAL 7035	RAL 7035	RAL 7035	RAL 7035

THE COBARON - Air filter system

Mechanical combination air filter unit for the separation of emulsion mist

With our **COBARON series** we offer a high-performance mechanical air filter device, which can also be combined with an electrostatic filter cell.

The purely mechanical variant of the COBARON series emulsion mist separator, consists of a high-performance pre-filter package and a main filter of the filter class ISO ePM1 60%, ePM1 80% (ISO 16980) or H13 (DIN EN 1822). This combination ensures the highest of separation efficiencies and a long service life. Especially in the area of optimised metal working, where large feeds, high speeds and high cooling lubricant (KSS) pressures take place, it is important to use a highly effective COBARON

Application **Emulsion mist**



For the extraction of emulsion mist for medium to very large machine workrooms

- Air flow rate 980 to 2,420 m³/h*
- * Depending on the filter equipment



Electrostatic filter cells and many of our filter media are washable and reusable.



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air filter device. You increase work safety, protect the health of your employees and contribute to active improvement of the air.

In a further device variant an electrostatic filter cell can be installed in your device to offer you a reliable and economical solution in otherwise critical cases, such as those that can arise in cast metal working or in heavy machine working with smoke development.

Let our experts advise you! We will be happy to configure the perfect filter device for your application. All COBARON combination air filters are supplied as standard with the digital filter unit control ISI-TRONIC and an integrated, controllable EC fan for maximum energy efficiency.

Your **advantages** at a glance ⊘ Flexibly adaptable to the application ⊘ ISI-TRONIC as standard ⊘ Electronically controlled EC fan as standard ⊘ Adjustable speed and air output \bigcirc Available with a wide range of filters

- \bigcirc High-quality filter media in the pre- and main filter area
- ⊘ Separation efficiencies of up to 99.95% (with particulate air filter)
- ⊘ Large range of assembly and connection accessories
- \odot 15 variants available.
- ⊘ Optimum service intervals



Protection from premature soiling





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Device types (also available in mirror image version)	RON5 SoGk D1oGk D2oGk	RON10 SoGk D1oGk D2oGk	RON15 SoGk D1oGk D2oGk	RON20 SoGk D1oGk D2oGk	RON25 SoGk D1oGk D2oGk
Max. air flow rate m ³ /h)	5.000	10.000	15.000	20.000	25.000
Total power consumption (kW)*	SH=0,2 DH=0,4	SH=2x0,2 DH=2x0,4	SH=3x0,2 DH=3x0,4	SH=4x0,2 DH=4x0,4	SH=5x0,2 DH=5x0,4
Operating voltage	230 V 50 Hz, 1PH+N+PE	230 V 50 Hz, 1PH+N+PE	230 V 50 Hz, 1PH+N+PE	230 V 50 Hz, 1PH+N+PE	230 V 50 Hz, 1PH+N+PE
Dimensions L W H (mm)	700 1020 595	700 1020 1350	701 1020 1945	702 1020 2540	703 1020 3140
Weight (kg)	max. 150	max. 310	max. 445	max. 585	max. 730
Colour (light grey)	RAL 7035	RAL 7035	RAL 7035	RAL 7035	RAL 7035

The **ELBARON**® - Air duct filter

Electrostatic air filter system without fans for air technology in plant engineering

The ELBARON® duct air filter series was developed for central air filtration in production halls. Based on our filter technology, which has been tried and tested for years, this filter device can be used as a central air system in ventilation ducts.

ELBARON ® technology reliably filters aerosols, oil and emulsion mist and smoke from the air. In this way, the air in your production hall is effortlessly cleaned. Our air filter can also be integrated into central extraction

Application

Smoke, Oil & Emulsion mist and other aerosols



For the filtration of aerosols, oil & emulsion mist and smoke in industrial ventilation systems – air flow rate 5,000 to $25,000 \text{ m}^3/\text{h}^*$ without fan

* Depending on the filter equipment



Our friendly and competent employees in the office and in the field, look forward to your call. **Phone no.:+49 (0) 26 83 97 94 0**

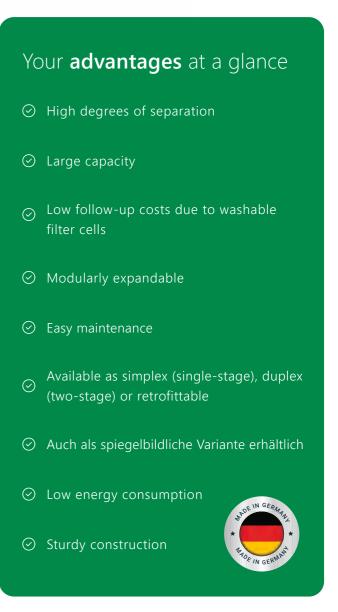




systems for machines. With our **ELBARON**® **filter units** heat exchangers or air-conditioning units are protected from premature soiling. ELBARON® filter technology is based on environmentally friendly electrostatic particle ionisation.

This means that our filter units are the best choice due to their separation efficiencies, their large capacity and their simple servicing. Hence, they are the ideal solution for large factories with central extractions systems.

Let our experts advise you! We will be happy to configure the perfect filter unit for your extraction system.



Active air improvement Long service intervals



ELBARON®	RON 60 STR	RON 60 D1TR D2TR	RON 100 STR	RON 100 D1TR D2TR	RON 2 STR	RON 2 D1TR D2TR
Extraction capacity Filter unit (m ³ /h) at spigot	350	350	730	730		e 1650 (ø150 1130) 1420 ø250 1550)
Total power consumption (kW)*	0,09	0,105	0,11	0,14	0,57	0,57
Operating voltage (special voltage on request)	230 V, 50 60 Hz, 1PH+N+PE					
Noise level (db(A))*	52	52	54	54	73	73
Dimensions L W H (mm)	329 374 510	329 374 703	353 542 540	353 542 726	755 345 595	940 345 595
Weight (kg)	25	30 35	45	54 63	60	65 74
Colour (light grey) (Sonderfarbe auf Anfrage)	RAL 7035					

The **ELBARON** ® - Air filter system

Electrostatic air filter unit for the separation of oil and emulsion mist and smoke

As a specialist for electrostatic filter solutions, the ELBARON® filter series was developed by us for the metal working industry in order to separate oil mist, emulsion mist and smoke.

The high-quality **ELBARON**® **devices** used with tooling machines **have been impressing customers for over 40 years** with their high filtration performance, effectiveness, durability and energy efficiency.

Modern tooling machines in particular often work at high operating speeds, with internally cooled tools and with high fluid pressures. Machining in these applications is carried out with pure oil or with a cooling lubricant with high oil content. Due to high metal cutting performance





rates, smoke is often produced in addition to mist. In this case, only an electrostatic filter system can be effectively and at the same time economically implemented.

Our precisely designed electrostatic filter cells are coordinated with the rest of the technology, so that they guarantee the best possible filter efficiency, service life times and functional reliability. This makes the ELBARON® series one of the most powerful and and popular filter devices on the market.

Depending on the application in question, you have the choice between a device with one or two filter cells, that is as a simplex or duplex variant. Let our experts advise you! We will be happy to configure the perfect filter device for you in terms of size, performance and the choice of filter components. The ELBARON® filter series comes as standard with our digital filter unit control ISI-TRONIC.

One of the most powerful & **solid** filter units on the market





ELBARON ®	RON 3 STR	RON 3 D1TR D2TR	RON 4 STR	RON 4 D1TR D2TR	RON 5 STR	RON 5 D1TR D2TR
Extraction capacity Filter unit (m ³ /h) at spigot) 1060 ø200 1520 0 1770 ø300 1920)		0 1230 ø200 1700 0 1960 ø300 2160)	free	e 3550 (ø350 3200)
Total power consumption (kW)*	0,69	0,69	0,7	0,7	0,88 1,14	0,88 1,14
Operating voltage (special voltage on request)	400 V, 50 60 Hz, 3Ph+PE	400 V, 50 60 Hz, 3Ph+PE	400 V, 50 60 Hz, 3Ph+PE	400 V, 50 60 Hz, 3Ph+PE	400 V, 50 60 Hz, 3Ph+PE	400 V, 50 60 Hz, 3Ph+PE
Noise level (db(A))*	71	71	72	72	73	73
Dimensions L W H (mm)	855 508 595	1040 508 595	855 508 595	1040 508 595	1283 1020 595	1283 1020 595
Weight (kg)	74	80 92	78	86 98	170	171 195
Colour (light grey) (special colour on request)	RAL 7035	RAL 7035	RAL 7035	RAL 7035	RAL 7035	RAL 7035



Application Smoke, oil mist & emulsion mist



For extraction of oil mist & emulsion mist with high oil content and smoke, for small to very large machine working areas – Air flow rate: 350 up to 3550 m³/h*

* Depending on the filter equipment



IONIC BOOSTER CELL. It's also retrofittable!

Your **advantages** at a glance

- \odot 18 variants available
- ⊘ ISI-TRONIC as standard
- \bigotimes Low follow-up costs due to washable filter cells
- ⊘ Adjustable speed and air performance
- Wide range of air performance variants available
- Electronically controlled EC fan as standard
- Simplex (single stage) or Duplex (two stage) available
- Adaptable to pollutant load and air output requirements
- ⊘ Large range of mounting & connection accessories



Energy efficiency & Economic efficiency play a central role



Technology that convinces

The permanent communication between our sales and our technical department, therefore between the market and the manufacturer, ensures that changing market requirements are incorporated into new technical developments.

When further developing our technology, we always have the benefits and added value of our customers in mind, in order to be able to place our products sustainably on the market. Topics such as energy efficiency and economic efficiency are fundamental issues that play a central

role in the further development of our technology. As well as working on completely new product developments and improvements to our existing devices, we aspire to constantly perfect our quality assurance.

All filter devices are subjected to a comprehensive functional and quality test before dispatch, the resulting data is logged and permanently archived. Thus, the functionally reliable operation of our filter devices is guaranteed



Reduction of operating costs

Thanks to our modern ISI-Tronic control technology, only energy is used that is required in the filter process. This economical mode of operation of our range of devices is made possible by continuous high energy-efficient EC fans. This guarantees sustainable and economical operation.



Our filter devices collect the pollutants at their point of origin and release the cleaned air as outgoing air into the environment (separation efficiency 99.95% with mechanical filters containing HEPA filters). Without a filtration concept, these pollutants are released into the environment and can pose health risks to your employees.







Reduce cleaning costs

Machine controls react sensitively to contamination by oil mist and fine dust. This consequently results in higher cleaning and repair costs and also applies to other electronic or mechanical equipment. Filter devices from ISI prevent this problem from arising in the first place and and ensure a clean working environment.

Long service life

Due to our high-quality materials and manufacturing processes, our our air filter units can be put into operation achieving long service lives. Filter media can be easily replaced or cleaned and are therefore not only more cost-effective in the long term, but also a plus for your own eco-balance.

Increase environmental & health protection

Reduction of additional costs

Due to high, continuous separation rates, our filter units can be operated can be operated in air circulation mode. The air extracted from the machines does not have to be transported outside, but remains cleaned in the production hall. This improves your energy and heating cost budget.

Convenient & easily controllable via smartphone, laptop & ISI-Control



ISI-TRONIC – We're not just talking about digitalisation!

For several years, ISI-TRONIC has been the digital filter control for all our devices. It is available in several options. Connect yourself conveniently with ISI-TRONIC via your laptop, or your Android smartphone. Optionally, the filter status can be visually displayed via **ISI-CONTROL** (accessory article).

Control your **ISI air filter** device effortlessly and keep an eye on all the important data at a glance. No matter whether you want to check the degree of soiling of the filter media on the understandable traffic light system

with percentage display, or set the air flow rate or control reserve yourself. ISI-TRONIC makes it all possible.

Via the interaction of ISI-TRONIC with our EC fans which are fitted as standard, the air flow rate adapts to the degree of contamination of the filter media. The EC fan is continuously variable. In this way, the set suction power of the filter device is automatically kept constant over a maximum possible period of time, with the lowest possible energy consumption.

Your **adavantages** at a glance

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Filter monitoring

With ISI-TRONIC, you can monitor all processes in the filter device and in the event of malfunctions or an impending filter change react quickly.

Configure settings

Air capacity and control reserves can be set using the digital interface (via laptop For example) and can be adjusted to your needs at any time, even if your even if the production process changes.

Network compatible

Filter devices with ISI-TRONIC are network compatible and can be integrated centrally into the company network.

Error diagnosis

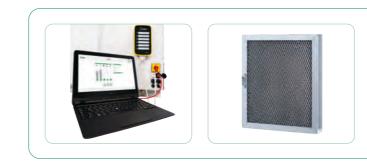
Error messages can be downloaded from a log and sent as a diagnostic file to ISI for further technical support.

Proactive maintenance

Due to the soiling indicator and the operating hours counter of the individual filter media, as well as the total operating hours, the optimal service intervals becomes visible and can be planned precisely. Costs due to early or late maintenance are hence.

Targeted spare parts sourcing

The ISI-TRONIC interface shows when filter media need to be replaced. This means that they can be ordered in plenty of time.







ISI-SERVICE - Professional service from a single source

ISI Service GmbH offers customised solutions for all aspects of assembly, maintenance and repair.



Maintenance & Cleaning

Your filter devices and filter media are cleaned and serviced in a proven, environmentally friendly cleaning process according to the latest state of the art technology and manufacturer's specifications. The coordinated cleaning procedure preserves your filter technology, because professional cleaning is a central building block for reliable and smooth running of the filter device. Benefit from our individual maintenance contracts.

The choice is yours! We can gladly carry out cleaning at your premises. Our service vehicles are equipped with professional, mobile cleaning and maintenance equipment, so that even repairs can be carried out on site by our service technicians.

However, you can also conveniently send us your filter media or your device after consultation. Take advantage of our filter cell service. Our service staff will be happy to advise you and work out a service plan with you straightforwardly.

Special price for exchangeable filter cells*

Stay flexible and don't lose time. The purchase of an interchangeable filter set enables you to use your filter device continuously during maintenance, cleaning and repair. Professionally cleaned and maintained filter cells prolong the service life and ensure a constantly good degree of separation of your air filter units. Ask for a personal offer without any obligation!

*Special price only valid when ordering service at the same time.

50 years of assembly Benefit from our many years of experience!



Device Installation

50 years of installing air filter units speak for themselves. We will gladly take over the professional installation of your new air filter unit. Already during the appointment made with our technical advisor and the subsequent quotation phase, we draw up an initial installation plan.

In the case of more complex installation projects, a further inspection of the planned installation situation will be carried out by one of our installation professionals. We leave nothing to chance. Benefit from our experience.



Repair & Maintenance

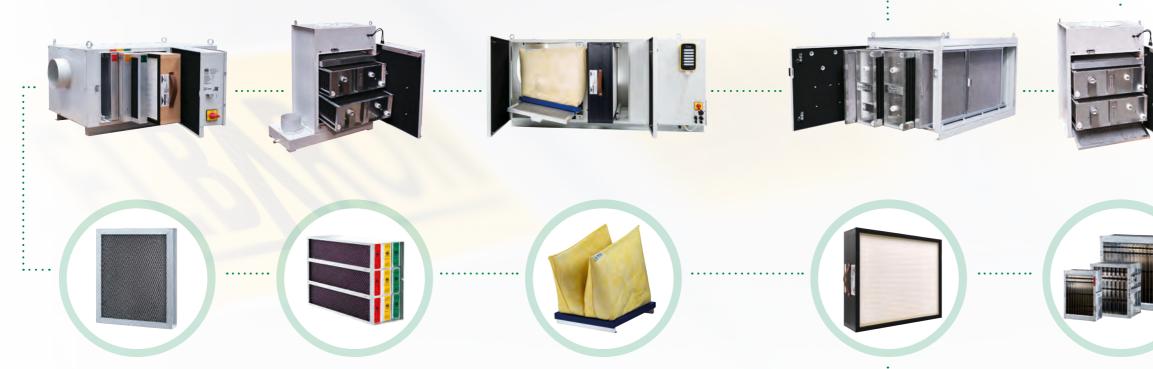
If your unit or your filter cells are faulty, we will discuss the situation with you and work out a short-term solution, to keep downtimes as low as possible.

If you can do without your device for a while, we can also repair it professionally at ISI headquarters. On request, we can also dismantle and install filter devices on site.

Durable, reliable **resource saving &** of high quality







Original ISI spare parts – quality and service is our aspiration!

The long life of our filter devices is something which is known worldwide. All filter devices made by ISI are manufactured in several work processes, exclusively by our qualified and specially trained personnel, mounted and tested by hand. We also apply the same quality standards to the selection of our spare parts, because original ISI spare parts are characterised by absolute reliability and functional safety.

Together with our long standing suppliers, we attach great importance to high quality services and products,

as well as to the careful use of resources services and products, as well as to the careful use of resources. As a responsible company, we strive to keep pace, we strive to keep pace with the ever advancing technological progress. Thus we engage in development cooperation in order to ensure technological continuity in the long term.

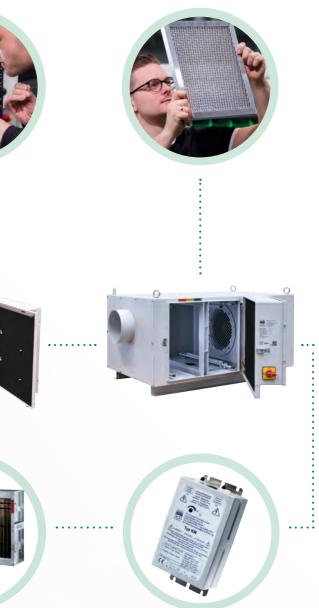
Our qualified employees from our spare parts department will be happy to advise you on the selection of the right parts, so that you can continue to enjoy the advantages of your ISI filter device.



Service: Sourcing of spare parts

Our service technicians will gladly take care of the procurement of spare parts for your air filter unit. We keep appropriate replacement filter media in stock. We can also source standard filter media and spare parts for numerous filter devices, independent of the manufacturer.

We will be happy at hand.



We will be happy to advise you. Please have your serial number

ISI stands for quality solution oriented, exacting & solid product



ISI stands for Quality & Consistency

One word runs through the company's 50 year history - QUALITY

Since the founding of ISI, it has been our aim to offer our customers absolutely solution-oriented, solid and exacting products. To ensure professional and highquality manufacturing of our products, all our parts and components are produced in Germany.

We want to be sure that we always offer our customers the best possible solution.



Development

Product development is a decisive factor at ISI. Our development engineers are constantly working on new and better solutions. Our technical department is in permanent exchange with the sales department, which brings your needs directly into the development process, possible from practical experience. New developments are then tested in the ISI development laboratory.

Consulting

Configuration of the right filter unit requires in process technology, because the right size of unit is decisive for optimal filter results. Your ISI sales representative can advise you on site and inspects your production process together with you. In this way, you can be sure that your ISI filter unit is optimally configurated. Of course, our sales representative is always there to help you with any other questions you may have. A true partnership.

Production

All filter units from ISI are manufactured in several steps, assembled and tested by hand by our qualified and specially trained personnel.

Quality assurance

Each ISI unit undergoes a thorough final inspection. All functions are checked, tested and documented. We have developed our own test stand for final inspection and adapted it to our needs. Here, not only are mechanical or electrotechnical tests carried out, but also our ISI-TRONIC undergoes an exact functional check. We leave nothing to chance. The quality of device components we buy in is ensured by long standing partnerships with high qualitive and reliable suppliers.









Three competences one common path



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Development & Production ISI Industrieprodukte GmbH

All our air filter devices are developed and produced at our headquarters in Buchholz near Cologne to the highest quality standards. For 50 years we have stood for innovative technology, customer satisfaction and sustainability.



Distribution ISI-Vertriebs GmbH

Throughout Europe our employees at ISI-Vertriebs GmbH are at your service and can advise you on all questions concerning industrial air purification. Our sales concept always aims to present you with the optimum solution for your individual application.



Service

on request.

What distinguishes us

- ⊘ High quality and reliable air filtration systems
- ⊘ All products manufactured by us are "Made in Germany"
- O Competent and professional advice
- ⊘ Many years of experience and knowledge of the industry
- Sustainability: Long service life and easy replacement of filter media
- ⊘ Operational environmental and health protection



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- Maintenance & Cleaning of your filter devices
- Repairing your filter devices
 - Original spare parts service from ISI

- Planning & Measuring your filter devices



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ISI Service GmbH

ISI Service GmbH focuses on the entire manufacturer service and is responsible for ongoing maintenance, cleaning, repairs and installation of ISI air filtration systems as well as third party equipment

COMPANY

Clean air is our most important asset









Industriepark Nord 16 53567 Buchholz (Westerwald) Germany Tel.-Nr. +49 (0) 2683 | 97 940 E-Mail: kontakt@isi-luftfilter.de ISI Industrieprodukte GmbH ISI-Vertriebs GmbH ISI Service GmbH



www.isi-luftfilter.de