

Air in Metion.
Wolter Fans.









## We move air.

Owing to the diligence and conscientiousness of its people, the south-western region of Germany, and especially the Black Forest, has developed into a centre of fine-mechanical manufacturing and industrial engineering and production over the past few centuries. As a family enterprise, we feel compelled to these values and traditions of our home.

Since 1971, Wolter GmbH Maschinen- und Apparatebau KG has been engaged in the design and manufacturing of ventilation fans and related equipment for the international markets.

Both, the continuous improvement of existing product ranges and manufacturing processes, as well as the innovative development of new productlines has allowed us to expand our business

into new markets. Today, we have established a significant market position not only in the buildingservices sector, but in other industries as well. One of our main growth drivers, for example, are smoke-extraction and car-park ventilationsystems, where we are among the leadingsuppliers in Europe.

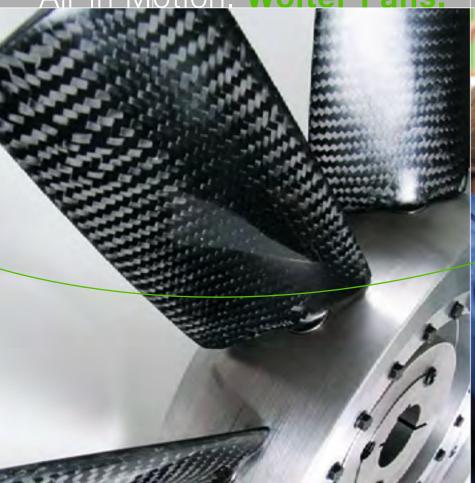
On the following pages, we would like to provide you with an insight into the scope of our experience and the comprehensiveness of our product range. However, these impressions can not replace the personal encounter. We would like to be your partner for ventilation solutions. Approach us with your requirements – we look forward to meeting you.

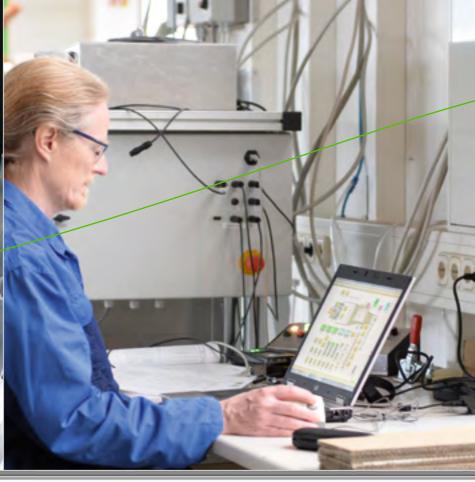
Martin Kresse Managing Director Michael Kresse Managing Director

hem



Air in Motion, **Wolter Fans**,





## We engineer.

The technological, ecological and economic frameworkof industrial manufacturing is becoming increasingly complex. The demand for more energy-efficient products and a responsible use of natural resources, combined with the need for a flexible and cost-effective manufacturing process, determine today's competition.

The development of our products incorporates aerodynamics, drive and control technology as well as acoustics and vibration engineering. The highly complex interrelation between these factors poses an engineering challenge that we meet in each new project by using innovative design tools such as Computational Fluid Dynamics simulations.

## We innovate.

When designing new products, or when optimisingexisting ones, we are prepared to defy conventions. WOLTER is the first manufacturer to introduce Carbon Fiber axial impellers in serial production fans, thus significantly enhancing all crucial performance parameters to an extent that can not be achieved by traditional metallic materials.

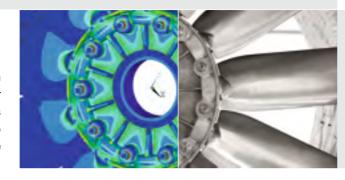
## **Carbon Fiber Composite Axial Impellers**

Fiber Composites push the boundaries of axial fan performance.

- High tensile strength at low weight: Carbon ) Significantly higher circumferential speeds extend the performance range
  - Minimised start-up and reverse times, reduced starting currents
  - ) Smaller fan diameters at comparable performance
  - ) Lower impeller weight relieves stress on the motor bearings and reduces structure-borne noise

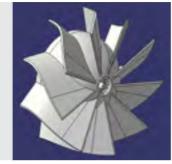
## **Continuous Optimisation**

Re-engineering the proven AXV range: the aerodynamic and structural re-design of our axial fan impellers resulted in enhanced performance at significantly lower weight. For example, the weight of an impeller of diameter 1000mm with 10 blades was reduced by as much as 26%. A new pitch angle setting system allows to adjust blades without a measuring tool and serves as an anti-twist device at the same time.



## **Mixed Flow Inline Fans**

Our newly introduced range of RFE Mixed Flow Inline Fans combine the characteristics of axial and centrifugal fans. The Mixed Flow Impeller allows for an axial airstream at higher pressure compared of an axial fan of the same diameter.



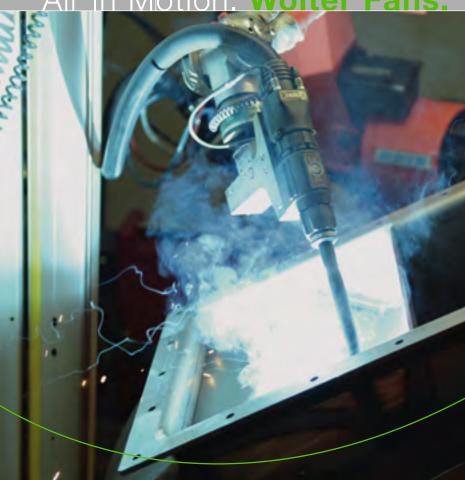
Design and simulation

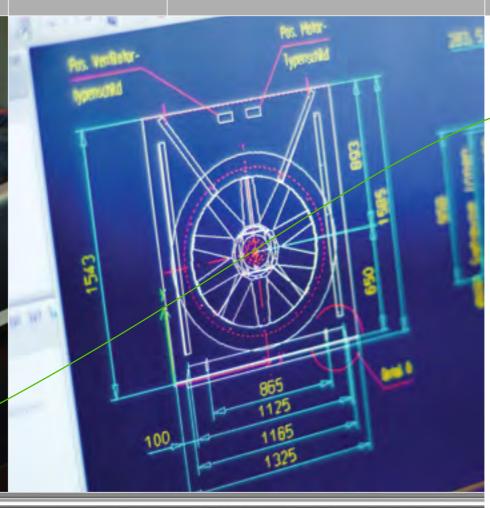


Verification by prototypingSerial production



Air in Motion. Wolter Fans.





## We manufacture.

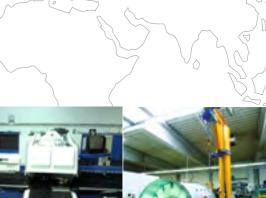
WOLTER maintains two production facilities in Germany. A wide range of modern machinery allows for a high degree of vertical integration and a constant high level of quality. Our toolmaking capacity for injection-mould parts is also used by other manufacturers, for whom we serve as a supplier of components. It is understood that our quality management system is certified in accordance with DIN EN ISO 9001:2015.

For research and development, quality assurance and factory acceptance tests, amply dimensioned in-house testing facilities according to European and American standards (AMCA) are at our disposal.

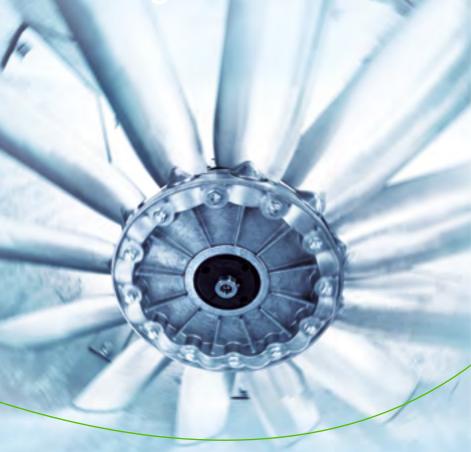
All development, sales and commercial departments are centrally located in our head office in Malsch-Völkersbach. Our sales staff is supported by a wide network of agents and sales representatives. Our local partners will assist you during all stages of your project, from design to after-sales service.

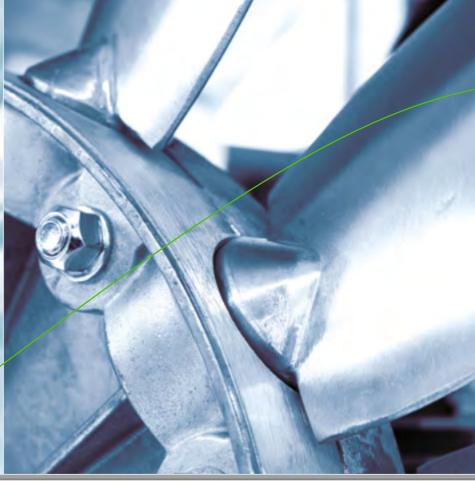






**Building Services** 





## We move air.

Our products are well-proven in virtually all general ventilation and air-conditioning applications and meet the demand for a higher level of climate quality of residential, commercial and public buildings. Modern EC drive and control technology enhances efficiency ) Axial Fans and therefore sustainably lowers a building's operating expenses; a decisive factor when planning new projects or redeveloping existing ones. Aerodynamically optimised impellers and casings lower noise emissions to a minimum.

Our standard product range for building services is comprehensive and can be supplied from stock within very short lead times:

- Centrifugal Fans
- Duct Fans
- Tube Fans
- Mixed Flow Fans
- Roof Fans
- Slim Air-supply Units
- ) Kitchen-extract Fans
- Standard Components and Accessories
- Plug Fan Units
- Cooling Tower Fans
- ) Control Equipment



## **Vertical Jet Fans.**

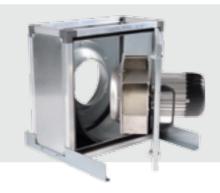
149 vertical WOLTER Jet Fans are in operation at the Esplanade car park of the Munich soccer stadium Allianz-Arena. Here, for the first time, the impulse ventilation principle has been applied in a vertical arrangement.









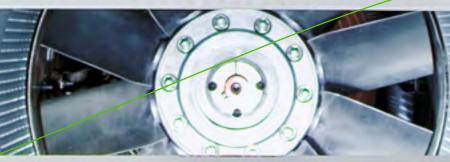




Smoke-extract Fans: Life Saving Technology









## **Jet Fans**

Axial and centrifugal Jet Impulse Fans for car park ventilation 300°C/120min and 400°C/120min, respectively, certified in accordance with DIN EN 12101-3



## **Smoke-extract Axial Fans**

400°C/120min and 300°C/120min certified in accordance with DIN EN 12101-3



## We protect.

Safety aspects are paramount when designing new buildings new or when refurbishing existing ones. Smoke exhaust fans play a vital role in this respect: smoke gases developing during a fire are extracted quickly and safely, keeping escape routes smoke-free. Affected persons are protected from toxic fume gases while a good visibility along the escape routes can be maintained, minimising evacuation times. Damage to the building due to smoke and heat exposure is significantly reduced.

For the combined CO-ventilation and smoke removal in underground or enclosed car parks, WOLTER offers innovative custom-tailored ventilation concepts. Here, Jet Fans, supply and exhaust fans, sensors and controls interact depending on situational ventilation requirements in standard operation as well as in smokeremoval mode.

Intelligent controls and pre-programmed smokeexhaust scenarios prevent a spreading of fume gases to adjacent smoke sections, often rendering physical fire walls and even sprinkler systems obsolete. Not only does such an intelligent ventilation system improve the user safety of the car park, it also allows for a brighter, more open floor plan. Installation, operation and maintenance cost is usually considerably below that of conventional ducted ventilation systems. Besides their important safety function in case of a fire, WOLTER smoke-extract fans of course also fulfill the requirements of regular CO-ventilation. WOLTER axial and jet smoke-extract fans are tested and certified by an independent third-party institute according to the regulations of DIN EN 12101-3

As a supplier of turnkey systems, we support you from the design stage up to commissioning.

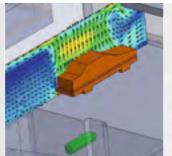


**Portable Smoke-freeing Fans** 

) Standard equipment of many fire brigades worldwide

## **Smoke-extract Roof Fans**

NVHT 355-710 400°C/120min certified in accordance with DIN EN 12101-3





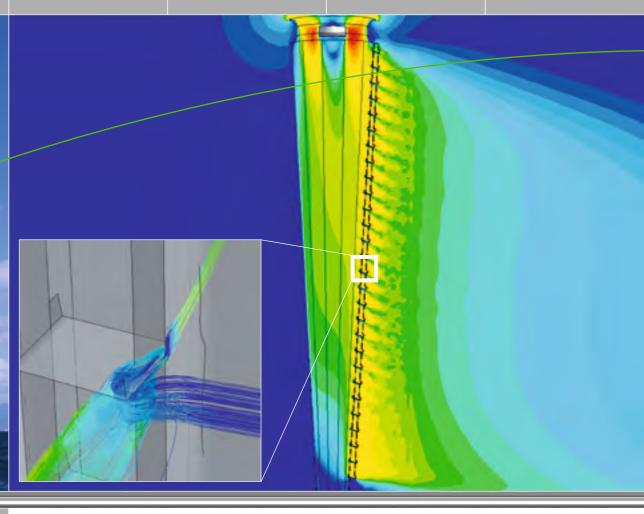
10











## **Wind Power Plants**

WOLTER fans cool the generators of many windmills.



## Fresh Air

WOLTER axial, centrifugal, duct and tube fans are installed on board Gorch Fock, the sailing drill ship of the German Navy.



Fans and Air-handling Units for the marine and off-shore industries

## **Industry-specific Solutions**

In close co-operation with our OEM customers we optimise the interaction of the fan and the system, exemplified here in a drying system for building materials.

## We develop.

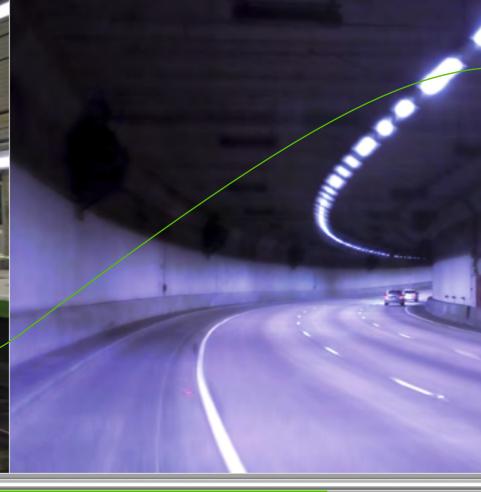
WOLTER products are used in a wide variety of industrial applications. The close co-operation with our OEM customers often results in highly specific solutions. Diligent design, accurate production and thorough quality control form the basis of many long-term business partnerships.

Our range of chemical-resistant centrifugal fans are suitable to convey contaminated or corrosive industrial process air. Many of our products are available in explosion-proof executions for use in hazardous areas.

Our main industrial markets are the marine industry, thermal management, as well as different drying applications, for example in the food processing or building materials industries.

Tunnel and Metro Ventilation





## We create.

With the rapidly growing amount of traffic worldwide, especially in urban areas and city centres, road tunnels are increasingly becoming a high-risk bottleneck of urban infrastructure. As a result, the ventilation and smoke exhaust systems as a vital component of the safety concept of such tunnels, are becoming a matter of public concern.

The relevant design factors for each individual tunnel vary in a wide range, depending on the traffic type and load, the geometrical properties of the tunnel cross section, as well as the geographical and meteorological conditions of the environment. The immissions of noise and polluted exhaust air into the surrounding area should be kept to a minimum. The scenarios for ventilation and smoke exhaust operation must be individually adapted to these parameters. We can offer support for design and optimisation.

## We advise.

WOLTER offers specifically adpated fans for longitudinal and transverse ventilation concepts, which are certified up to temperature class F400. Stainless steels of different grades are commonly used, which withstand even highly corrosive tunnel atmospheres and abrasive particles in the airflow and guarantee the reliable function of the fan in standard and emergency operation.

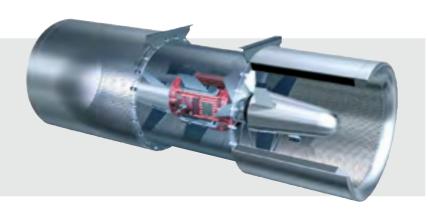
## **Axial Fans**

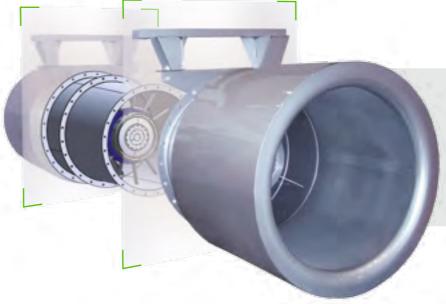
> Tunnel Portal Fans up to size 2800



## **Tunnel Jet Fans**

Certified up to 400°C/120min according to DIN EN 12101-3, for unidirectional or reversible operation







## **Agents and Distributors.**

#### Inland

Ing. Günther Rößler D-07619 Schkölen T +49 (0) 36 694 / 22 359 F +49 (0) 36 694 / 22 357 guenther.roessler@wolter.eu

Mattias Industrievertretungen D-16259 Bad Freienwalde T +49 (0) 33 44 / 30 19 94 F +49 (0) 33 44 / 30 19 96 thomas.mattias@wolter.eu

### **Europe**

### Danmark:

Aircon Teknik A/S DK-8200 Aarhus N T +45 (0) 86 / 34 51 11 F +45 (0) 86 / 34 58 10 salg@airconteknik.dk

#### Netherlands:

AirFan B. V. NL-7442 CX Nijverdal T +31 (0) 548 / 36 63 66 F +31 (0) 548 / 36 53 20 ventilatie@airfan.nl

#### Russia:

Daichi LLC RU-123022 Moscow T +7 (0) 495 / 73 73 733 F +7 (0) 495 / 73 73 732 info@daichi ru

### Sweden:

Nordisk Ventilator AB S-123 22 Farsta T+46 (0) 8 / 72 70 250 se@nordiskventilator.se

### Switzerland:

Anson AG Zürich CH-8055 Zürich T +41 (0) 44 / 46 11 111 F +41 (0) 44 / 46 13 111 info@anson.ch

## Turkey:

Air Trade Centre Ltd Sti Türkiye, TR-34418 Seyrantepe / Istanbul T +90 (0) 212 / 28 34 510 F +90 (0) 212 / 27 83 964 atc.turkey@airtradecentre.com

## United Kingdom:

Wolter UK Ltd GB-LE65 1AL Ashby-de-la-Zouch T +44 (0) 15 30 / 41 24 73 F +44 (0) 15 30 / 41 24 73 info@wolteruk.com

#### Middle East

#### Iran:

Darvaze Melal Jahan Co. IRN-1511933645 Tehran T +98 (0) 912 / 37 55 982 F +98 (0) 21 / 86 08 01 06 info@dmj.co.ir

#### UAE, Qatar, Lebanon, Jordan, Saudi Arabia:

Energy International Co. UAE-Sharjah T +971 (0) 6 / 53 43 477 F +971 (0) 6 / 53 43 756 fsalibi@energyind.ae

## **Asia and Australia**

#### China:

Dongguan Wolter Chemco Ventilation Ltd CHN-Dongguan City, Guangdong T +86 (0) 769 / 86 55 72 98 F +86 (0) 769 / 86 55 72 78 info@wolter.com.hk

Taizhou Wolter Ventilation Co., Ltd CHN-Taizhou City, Luqiao District, Zhejiang T +86 (0) 576 / 26 22 666 F +86 (0) 576 / 26 56 830 info@wolter.cn

### Hong Kong, Macau:

Wolter Asia Ltd Tokwawan, Kowloon, Hong Kong T +852 (0) 24 / 56 01 98 F +852 (0) 24 / 56 02 90 info@wolter.com.hk

### India:

Wolter Ventilators India Pvt. Ltd IND-122009 Sushant Lok-I, Gurgaon (HR) T+91 (0) 124 / 25 77 797 F+91 (0) 124 / 25 77 798 sales@wolterindia.in

### Singapore:

Wolter Pte. Ltd SG-569738 Singapore T +65 (0) 63 / 52 95 48 F +65 (0) 63 / 52 95 47 info@wolterfans.com.sg

#### Malaysia:

Vibran Engineering (M) Sdn Bhd MY-47200 Petaling Jaya, Selangor Darul Ehsan T +603 (0) 78 47 / 35 00 F +603 (0) 78 47 / 33 80 sales@vibranengineering.com

#### Thailand:

Wolter Ventilation Co., Ltd TH-74130 Samutsakorn T +66 (0) 2 / 81 38 484 F +66 (0) 2 / 81 10 808 info@wolterventilation.com

#### Australia:

The Sydney Fan Company Pty Ltd AUS-2147 Seven Hills, NSW T +61 (0) 2 / 96 24 40 00 F +61 (0) 2 / 96 24 41 00 nsw@thesydneyfancompany.com

Wolter GmbH Maschinen- und Apparatebau KG

Am Wasen 11 D-76316 Malsch T +49 (0) 72 04 / 92 01 0 F +49 (0) 72 04 / 92 01 11 www.wolter.eu info@wolter.eu

