



Ventilation solutions for Transport and traffic

Maximum safety – Customized ventilation systems

Your strong partner for safe travel – worldwide

Billions of people are on the move, meeting at train stations, airports, and even on passenger ships. The atmosphere in these hubs of global travel contains both harmful and corrosive particles. Exhaust fumes and fine dust from transport vehicles, combined with high foot traffic, burden indoor air quality. Nevertheless, passengers and staff must have access to hygienically clean air around the clock—regardless of outdoor air quality and the number of people in a given space. After all, these hubs for globetrotters, business travellers, and commuters should not become hotspots for infections from around the world.

When it comes to climate control, fail-safe operation, air quality, and energy efficiency play a critical role. While pollutants from diesel locomotives must be removed in covered train stations, airports place greater emphasis on fail-safe technology combined with fire protection. Passenger hubs feature complex infrastructures: waiting areas, terminals, departure halls, restaurants, retail spaces, administrative offices, data centres, technical rooms, control centres, and monitoring stations—all planned according to different standards and regulations.

Airports are currently required to invest in technologies and measures that significantly reduce CO₂ emissions. The declared goal is to achieve substantial reductions or climate neutrality between 2030 and 2045. Therefore, HVAC systems with extremely high efficiency and correspondingly low CO₂ emissions are in high demand.

Passenger ships face additional challenges: limited space and humid, corrosive sea air. Moist sea air must not only be dehumidified but also desalinated.



Comfort and efficiency at every terminal

WOLF ventilation technology meets the heightened safety and health awareness of air travellers more than ever before. Airports equipped with WOLF systems offer a consistently pleasant and well-tempered atmosphere in all areas, around the clock. This applies not only to temperature but also to relative humidity—regardless of occupancy levels.

Properly designed WOLF airport ventilation systems are virtually invisible and inaudible, operating quietly and efficiently with draft-free air distribution. To purify outdoor air polluted by exhaust gases around airports, multi-stage HEPA and activated carbon filters are used, removing not only pollutants but also germs. Smoke extraction fans keep rooms smoke-free in case of fire.

In terms of energy efficiency, WOLF offers solutions for airports that meet the standards of “Green Buildings.” In addition to inherently optimized designs, intelligent systems use sensors to detect occupancy levels, dynamically adjusting heating, cooling, and ventilation

functions as needed. This demand-driven operation saves significant energy and operating costs.

Efficient heat recovery systems can reclaim up to 85% of indoor heat by transferring the temperature of exhaust air to supply air. This means less heating in winter and less cooling in summer.

WOLF airport ventilation systems integrate seamlessly into building management technology (BMS) and can be controlled smartly and precisely from there. Redundant installations increase resilience and ensure fail-safe, uninterrupted operation.



Safety and comfort on board

All ventilation functions realized in the smallest possible space—that's what WOLF modular ship ventilation units deliver. In addition to their flexible geometry, they offer maximum durability, performance, and reliability—essential qualities at sea. Components are low-maintenance, dependable, and exceptionally long-lasting. Special coatings for heat exchangers and housings protect units against corrosion. By dehumidifying supply air, WOLF ship ventilation units prevent damage in engine rooms and cargo holds. Redundancy is added in critical areas to enhance fail-safe operation.

Compact units are custom-built for space-saving installation early in the shipyard construction phase. Since these units can both heat and cool, there is no need for a separate heating system or fuel storage, saving valuable cargo space.

Precisely sensor-controlled WOLF air handling units use the most efficient and whisper-quiet fan technology while recovering heat from exhaust air to temper fresh supply air. High-performance heat exchangers reclaim around 85% of heat, reducing heating and cooling costs.

These units are also comparatively lightweight, reducing propulsion energy requirements, and use small duct cross-sections. WOLF ship ventilation technology ensures hygienically clean and conditioned air wherever needed—and always exactly as much as required—in all areas of the ship. Thanks to efficient filtration, exhaust gases, VOCs, particles, and pathogens are effectively removed, while fresh air is supplied draft-free at the desired temperature. Another advantage: WOLF ship ventilation units are extremely easy to operate, making them intuitive even for untrained personnel.



Clean air for every journey

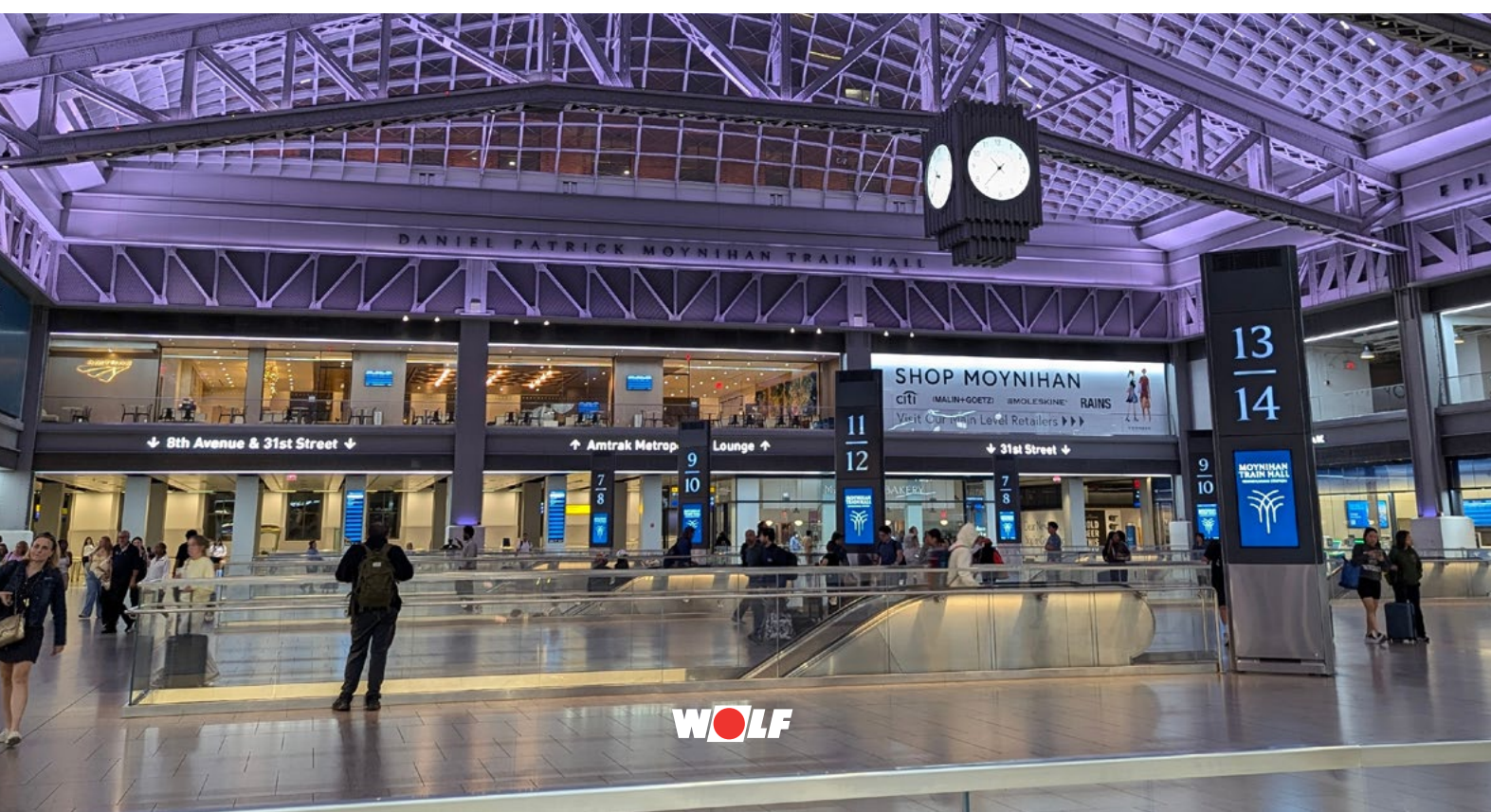
What applies to airport ventilation largely aligns with the requirements for major train stations: providing a safe and healthy indoor climate for travellers and staff across extensive infrastructure. However, train stations often face additional challenges such as heritage protection requirements and complex layouts with above-ground tracks and underground tunnels.

WOLF station ventilation solutions are custom designed for each area in compliance with DIN EN 50155 and DIN EN 45545, ensuring reliable climate control. WOLF systems create a pleasant atmosphere for both travellers and staff. Thanks to flexible designs and individual customization, WOLF ventilation systems can be seamlessly integrated into heritage-protected station buildings—without compromising performance or safety.

Maintenance-friendly construction with highly efficient components and intelligent control ensures uninterrupted operation even under high load and changing climatic conditions. For fire protection, the HVAC units include smoke extraction functionality. High-performance exhaust systems reduce emissions in covered

track areas as well as bus bays and taxi ranks. At the same time, WOLF station ventilation units filter fine dust, soot particles, and other pollutants from supply air in compliance with ISO 16890 for platforms, concourses, and retail spaces. Humidity and temperature are also conditioned to prevent condensation, corrosion, and biofilm formation.

In temperature-controlled areas such as retail spaces, restaurants, and waiting rooms, efficient heat recovery reduces operating costs by reclaiming up to 85% of heat. WOLF station ventilation solutions can also be seamlessly integrated into modern energy management systems and offer remote monitoring capabilities.



Comfort and sustainability in good hands

Passenger hubs and cruise ships equipped with reliable WOLF ventilation technology are prepared for a safe and energy-responsible future. WOLF HVAC units combine safety and health considerations with top-tier energy efficiency standards. It's no coincidence that WOLF technology is also used in Green Buildings. This not only enhances comfort but also reduces sick days caused by airborne pathogens.

Carefully engineered hygiene ventilation units and their control systems are factory-prepared for quick installation. They can be delivered just-in-time to technical rooms—either in modules or fully assembled on a base frame for crane or helicopter transport. Delivered fully wired, a unit can be connected to pre-installed piping and building management systems within hours, minimizing operational downtime on the day of delivery.

WOLF ventilation technology ensures minimal operating costs through demand-driven operation, contributing to municipal climate targets and corporate environmental and sustainability goals.

With WOLF, you have a single point of contact for everything: expert consulting, planning support, a well-thought-out product portfolio, commissioning, and maintenance—all from one source.



WOLF is one of the leading international suppliers of innovative solutions for indoor climate control. Here's what matters most to our customers:



German know-how

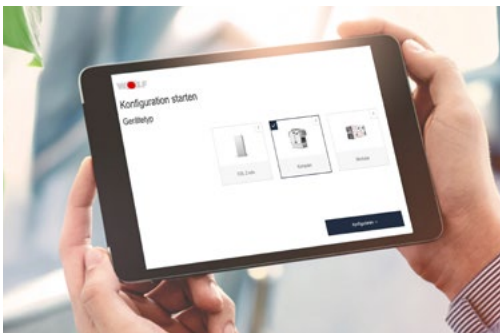
We develop our products at our headquarters in Mainburg, Bavaria. We manufacture them with the highest precision and vertical integration. WOLF Campus training programme offers you in-depth expert knowledge on professional installation, maintenance, etc. with seminars and in-house training courses.



Partnership at eye level

A nationwide and international network of personal contacts at our locations ensures fast and uncomplicated support. The WOLF Service Team provides you with expert advice and support during commissioning and maintenance.

A network of wholesale partners facilitates the procurement of spare parts.



Simply powerful solutions

WOLF ventilation systems combine efficiency, durability and ease of operation.

The wide-ranging air handling product portfolio is complemented by digital services that save time, money and CO₂.



For an intact environment and diversity

We consciously prioritise durability and sustainability in our design and choice of materials. At WOLF, different generations and nations work hand in hand and benefit from each other.

WOLF Air handling

A suitable solution for every demand



Hotel and accommodation



Professional kitchen



Production and industrial buildings



Offices



Agriculture



Experience, culture and sports buildings



Pools and spa



Logistics and warehouses



Retail stores



Healthcare



Educational institutions



Data centers

Get in touch for more details

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