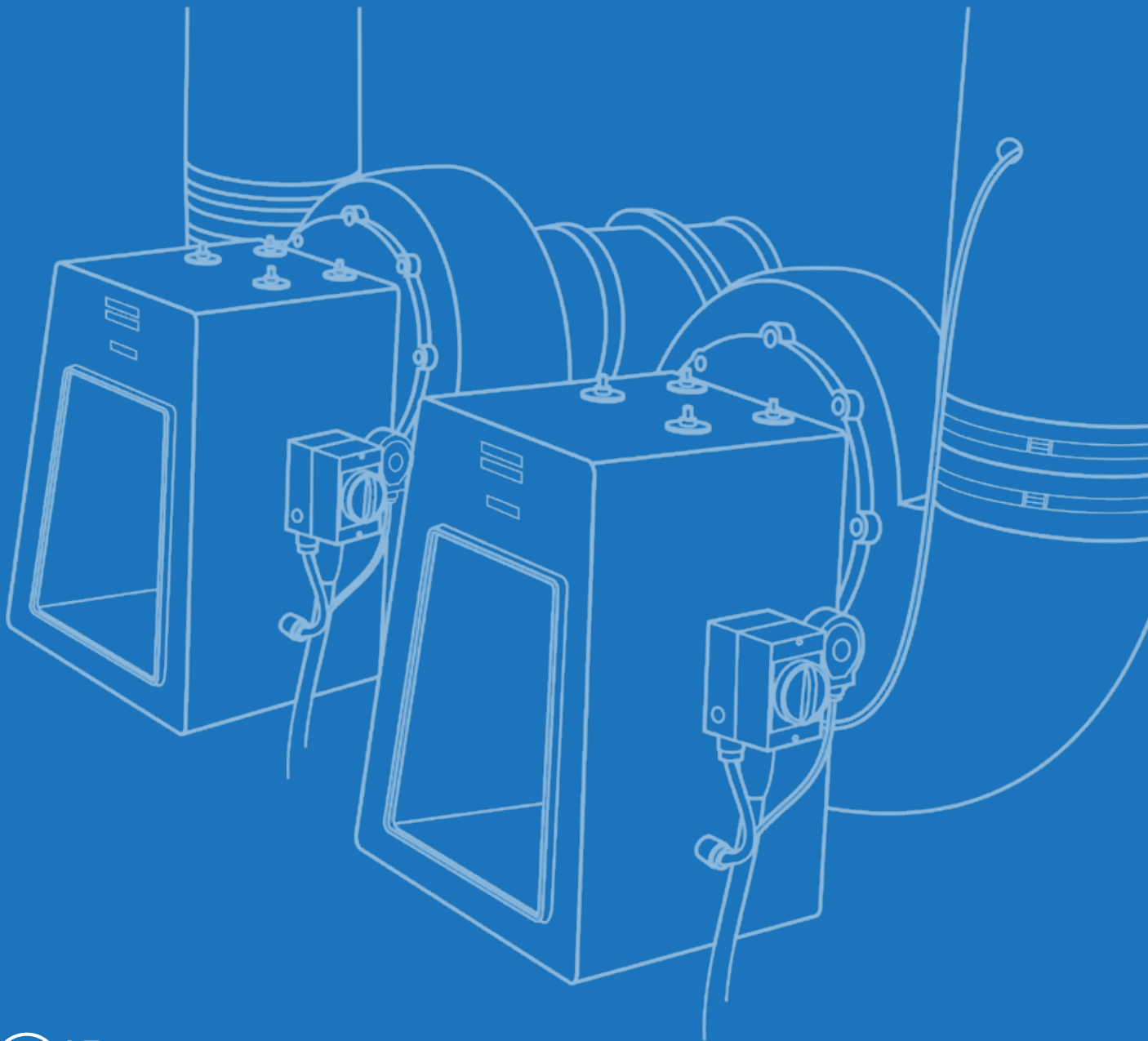


Corrosion Resistant Fans for Chemical Storage Ventilation

Polypropylene fans designed to extract and resist the widest range of corrosive and hazardous fumes in chemical and industrial extraction from the UKs leading independent fan integration specialists.



Who Are Axair Fans?

We're UK industrial fan suppliers with a solid goal: To help you.

Revolutionary fan selection and technical integration advice that revolves around you and your system. We've over 30 years experience in the UK fan market, we revolutionise the way our customers do business, that's why we're fast becoming the independent fan supplier of choice in the UK market.

Industrial Applications

Chemical Storage Ventilation where ammonia, hydrogen and other corrosive fumes are present.

Fume Cupboards whether in laboratory, educational settings, extract arms, dust or fume extraction.

Environmental Fume Extraction for anaerobic and aerobic digestion plants and other toxic environments.

Biomass, Biofuel & Renewables for combustion, material handling, drying, explosion protection and corrosion management.

Sewage & Waste Water Treatment for sludge drying, toxic fume removals and eliminating hazardous gases.

Mortuary & Autopsy where formaldehyde is present and corrosive gas ventilation is required.

ATEX Applications to prevent explosions in potentially hazardous Zone 1, 2 gas or 21 & 22 dust applications. ATEX fans are certified in line with the ATEX Directive 2014/34/EU.

SEAT Ventilation

SEAT is the leading EU manufacturer of plastic fume extraction fans and has more than 35 years experience in their field.

As the exclusive UK distributor for SEAT, Axair are proud to work closely with the fan manufacturer to deliver superior corrosive fume, chemical, ATEX and specially designed fan components to the UK market.

Certifications & Groups

Axair are a carbon zero ISO 9001 approved company. We are proud active members of the fan manufacturers and smoke control associations. Download a copy of our policies at www.axair-fans.co.uk.

We're Revolting!

You heard us right, we're revolting - we're changing the rules of the industrial fan game, breaking the mould Response times that take some companies days, take us minutes. Pre-sales advice and after sales support is built around you, because our job is to empower you to make the right fan selection for your fume application.



Michael Hambleton

Head of Qualifications

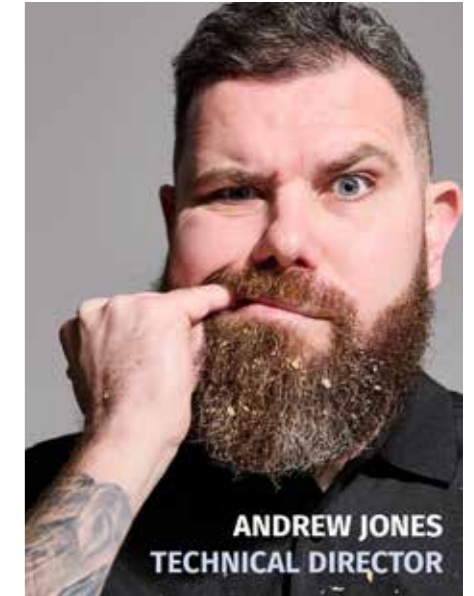
When your enquiry comes into Axair you'll speak to Michael and his team of qualification engineers. They'll work with you to figure out what would be best for your application. From here they'll pass you to our product engineers for fan selections.



Georgia Rawlins

Industrial Product Engineer

Following your enquiry qualification, our departmental product engineers will produce a detailed quotation and provide datasheets for you to sign off. Each engineer has a specialist niche, Georgia for example, is extensively DSEAR and ATEX trained.



Andrew Jones

Technical Director

Sometimes your enquiry needs a little more technical TLC, that's where our heavy technical guys step in. AJ leads from the front on all ATEX, net zero, hydrogen and emerging technologies, and helps our customers with the tricky side of fan integration.



“Our team have a thorough knowledge of corrosive and ATEX explosive atmospheres.”

Chemical Storage Ventilation

“**Corrosive fumes such as ammonia, sulphuric or hydrochloric acids will erode the surface of fan components if not constructed in a fit for purpose material.**”



Flammable substances and liquids are used in most laboratory and industrial environments, but storage of these materials improperly can pose a great risk to personnel, the public and property. The need for ventilation and more specifically the type of fan required is determined by the hazardous nature of each chemical component.

Corrosive fumes, when in large volumes and over long periods will damage or destroy materials that they come into contact with. Substances containing corrosive bases such as ammonia, those found in sulphuric or hydrochloric acids, will erode the surface of fan components if not manufactured in a material fit for purpose.

The extraction of corrosive fumes should be done with chemical corrosion resistant fans, where polypropylene is the standard material due to its ability to withstand the nature of the chemical gases that pass through the scroll and the impellers. In this instance the motor should be kept out of the air stream to ensure a long lifespan and also to prevent the overheating of the motorised components.

Whatever your position in specifying a suitable fan for any form of chemical store or fume extraction project, we understand your application and we're here for you when you need us.

Contact our industrial team on 01782 349 430 or email sales@axair-fans.co.uk.

Fan Specification in Chemical Stores

Corrosion mainly occurs in metals when they react with their environments; their refined form turns into stable form, for example, oxides and sulphides. Put simply, corrosion is the slow death of metals. For ventilation systems, this can mean components become damaged and need to be replaced regularly, costing time, often system downtime, and money. Furthermore, the chemical vapours that cause corrosion can also result in life-changing illnesses and physical conditions in environments where HVAC systems are critical and not just for comfort.

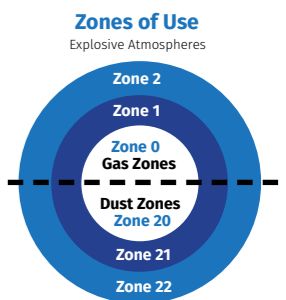
Our polypropylene, thermal plastic fans, are corrosion, chemical, UV and humidity resistant, ideal for spaces such as indoor pools, hot tubs, chlorine rooms, hospital chemical rooms, chemical stores, laboratories, dosing areas, water treatment plants, manufacturing process areas, acid baths, offshore, waste recycling plants and landfill sites where chemical and corrosive fumes may collect.

In order to accurately specify a fan for chemical storage ventilation, there are two key pieces of information required; the airflow rate and the system resistance.

Airflow rate is based on the number of air changes per hour needed in the storage area. This figure is usually specified by a consultant. From the airflow rate, the size of the ductwork is determined and so the system resistance is calculated. There may be a requirement to control the fan with a sensor to switch the fan on and off. This can be achieved with the use

ATEX Note:

If there is a possibility the installation needs to be ATEX rated, then an expert needs to determine the ATEX gas and dust zone classification for the area. The information they provide will cover the size of the zoned area and the standard of equipment to be used in the zone.



“**Our polypropylene fans are corrosion, chemical, UV and humidity resistant. Ideal for spaces where chemical fumes may collect.**”

Chemical incompatibility

The right storage method for chemicals begins with the knowledge on the properties of chemicals, their compatibility and incompatibility with other chemicals. Incompatible chemicals should be stored segregating them based on the hazard class they belong to avoid violent reactions.

	Flammable Liquids	Inorganic acids	Organic acids	Alkalis & bases	Oxidising chemicals
Flammable liquids		X		X	X
Inorganic acids	X		X	X	
Organic acids		X		X	X
Alkalis & bases	X	X	X		
Oxidising chemicals	X		X		

Corrosion Resistant Polypropylene Fume Extraction Fans

We're experts in our field, working hard to revolutionise your chemical extraction system with industrial fume extractions fans designed to handle corrosive air without risk to operation.

Corrosion protected against a wide range of industry chemicals and gases, this high density range of polypropylene fans impress with their longevity and mechanical build flexibility, allowing our customers to specify bespoke electrical and mechanical configurations to suit each project.

Range Features

IP55 Single inlet corrosion resistant UV treated polypropylene scrolls with forward curved impellers and a direct drive polypropylene turbine that is balanced dynamically and electronically. Scrolls are available in 2 directions of rotation according to the positioning of the suction and discharged (LG/RD), with the exception of S35 which is available in LG handling only. Scrolls and motors can be mounted onto a metal pedestal or an outdoor weatherproof pedestal for additional motor ingress protection (IP).

Energy Efficiency in Fume Extraction

As the market demands more energy efficient systems, the EC range of fume extraction fans allow fume and chemical extraction systems to reduce their fan energy consumption without affecting performance. Ideal in laboratories that are looking to meet environmental goals or gain contributory BREEAM credits.

Minimum power consumption and better efficiency, the IE5 motor reduces consumption by up to 20% more than the previous type.

We assemble fans to order from stock components and create the perfect mechanical and electrical solution for your fume extraction installation.

Mechanical Options

- Choice of handing
- Choice of metal or weather proof pedestal
- Anti-Vibration mounts
- Flexible connectors
- Flange pairs
- Manual dampers
- Drain hose connectors
- ATEX carbon polypropylene fans

Electrical Options

- 230V 1~ motor
- 230/400V 3~ DOL or inverter supplied motor
- 400/690V 3~ motor in larger sizes
- Pre-wired electrical isolators
- Motor starters
- Inverter drives
- Fume cupboard alarms
- ATEX motors



ATEX Zone 2 Fans



Our ATEX fume extraction fans are manufactured using carbon loaded polypropylene to prevent static discharges. Available in category 3G zone 2 in accordance with ATEX Directive 94/9/CE and can be supplied with EEx nA (non-incendive) or EEx d (explosion proof) motors to order. ATEX declaration of conformity available on request.



Polypropylene Fans

We offer two ranges of standard polypropylene fans; S range for medium airflow applications, and the ST range for high pressure applications. The range consists of 10 basic sizes with a single piece molded high density polypropylene casing and feature a compact design, industry standard round spigots, easy assembly and direct drive motors.



EC Energy Efficient Fans



Our impressive range of energy efficient corrosion resistant fume extraction fans with IE5 B34 type EC motors reduce fan energy consumption by up to 20% without affecting performance in fume extraction systems. Available in single or three phase.



School Fume Fan Packs

An easy solution for schools that require new or refurbished fume cupboard systems. The pack contains the fume extraction fan suited to your duty in addition to all other necessary components for a simple build that is more cost effective than buying the fan and components separately; fan, controller, isolator, AV mounts, flexi connectors and scroll drain.

Recent Projects

We've been working with corrosive air applications for over 30 years. We understand the key ventilation issues in industrial fume extraction and we're here to support you when you need us.

Our project portfolio shows how our products are designed specifically for fume extraction applications.



We understand the key ventilation issues in industrial fume extraction and we're here to support you when you need us."



Roof Top Installation

S25 & Silencers

Seven of our S25 polypropylene fans were situated on the roof top of the building to form part of a large fume extraction system, exhausting chemical fumes and vapours from several indoor areas.

Silencers have been fitted to the fans as an optional extra. This is to prevent noise pollution and eliminates any potential disruption during operation.



Outdoor Installation

S25 & Outdoor Pedestal

Corrosive applications situated outdoors may require a higher ingress protection rating than standard IP rated motors.

Our S25 polypropylene fume extraction fans can be seen in this outdoor installation correctly using the weatherproof pedestal which offers a more enclosed casing for outdoor installations. The box pedestal covers the fan motor providing increased IP protection.



ATEX Application

ST ATEX Polypropylene

Applications where there are flammable or combustible gases or dusts present in the air stream require an explosion proof ATEX fan.

Our range of ST ATEX polypropylene fans are the perfect solution for exhausting aggressive corrosive fumes such as ammonia and hydrogen from chemical storage facilities.



View more case studies at:

www.axair-fans.co.uk

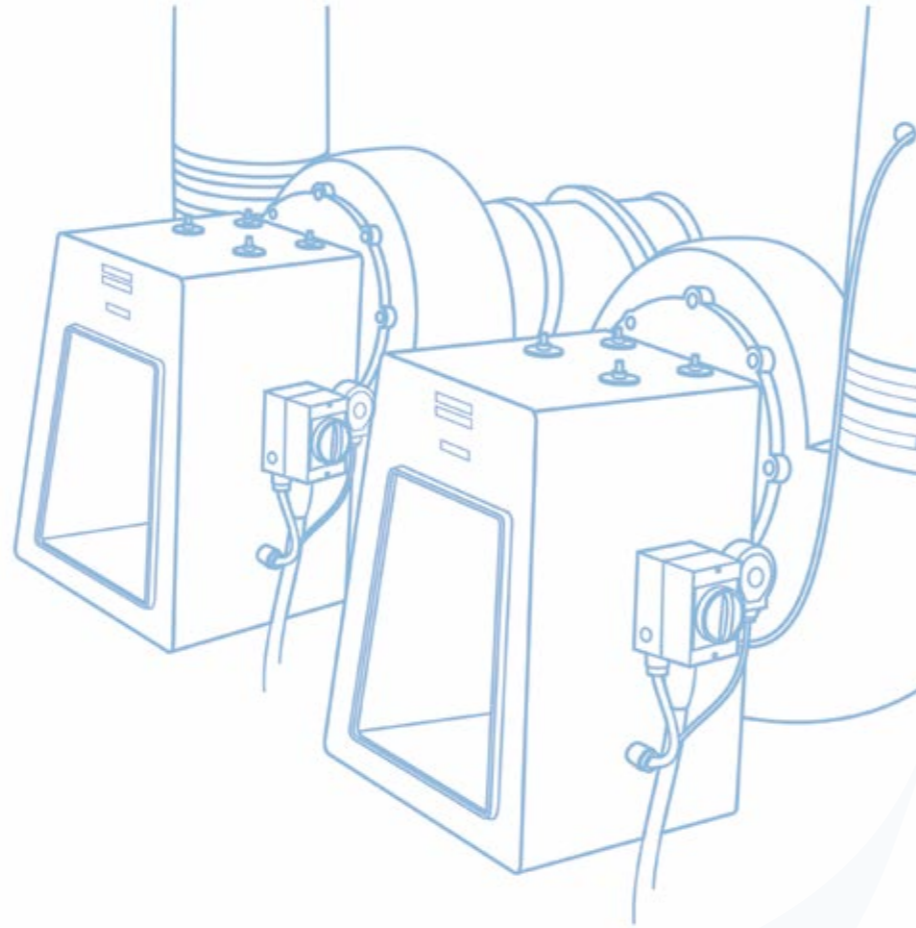
Our Stock Policy

In 2020 we extended our warehouse to enable us to increase our stock holding of our most popular industrial fans for the corrosive fume market.

This means we now carry stock of all of our single and three phase polypropylene fans with standard AC motors, energy efficient EC motors or ATEX configurations to enable us to service our UK customers.

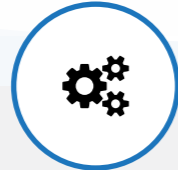
Our customers benefit from short lead times and unrivalled stock availability on an extensive range of fume fans.

We're confident that our stock and logistics policy enables us to maintain a position that will provide continuity of business and a cost effective solution to industrial corrosion resistant fan procurement for our ever growing customer base.



Technical Understanding

We understand key influencing factors affecting the fume extraction and corrosive air market including fan energy consumption and calculating system resistance. We ensure we meet the total specification of your project.



Stocked Lines

We stock a wide range of single and three phase polypropylene fan variants in addition to an extensive range of other industrial fans for key UK market sectors. We pledge to ensure our stock levels are maintained for our customers.



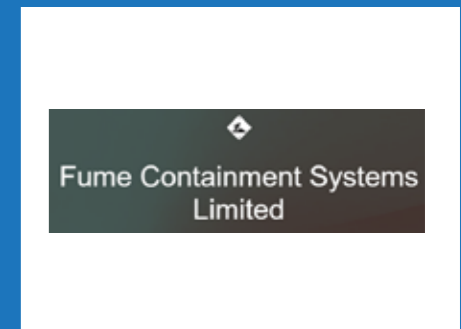
Short Lead Times

With stock available for immediate despatch we can ensure short lead times on popular lines. Those with scheduled orders continue to rely on Axair to manage their delivery schedules. On non stocked lines our lead times are competitive.

Our Customers

We support a wide range of customers working in varied market sectors and job roles including dust and fume extraction, original equipment manufacturers, contractors, consultants, specifiers and distributors.

Some of Our Valued Customers





Contact Us

Whatever your issue, concern or question, contact our industrial team using the below contact details. Alternatively, visit our website and open a live chat to start discussions.

01782 349 430

sales@axair-fans.co.uk

www.axair-fans.co.uk