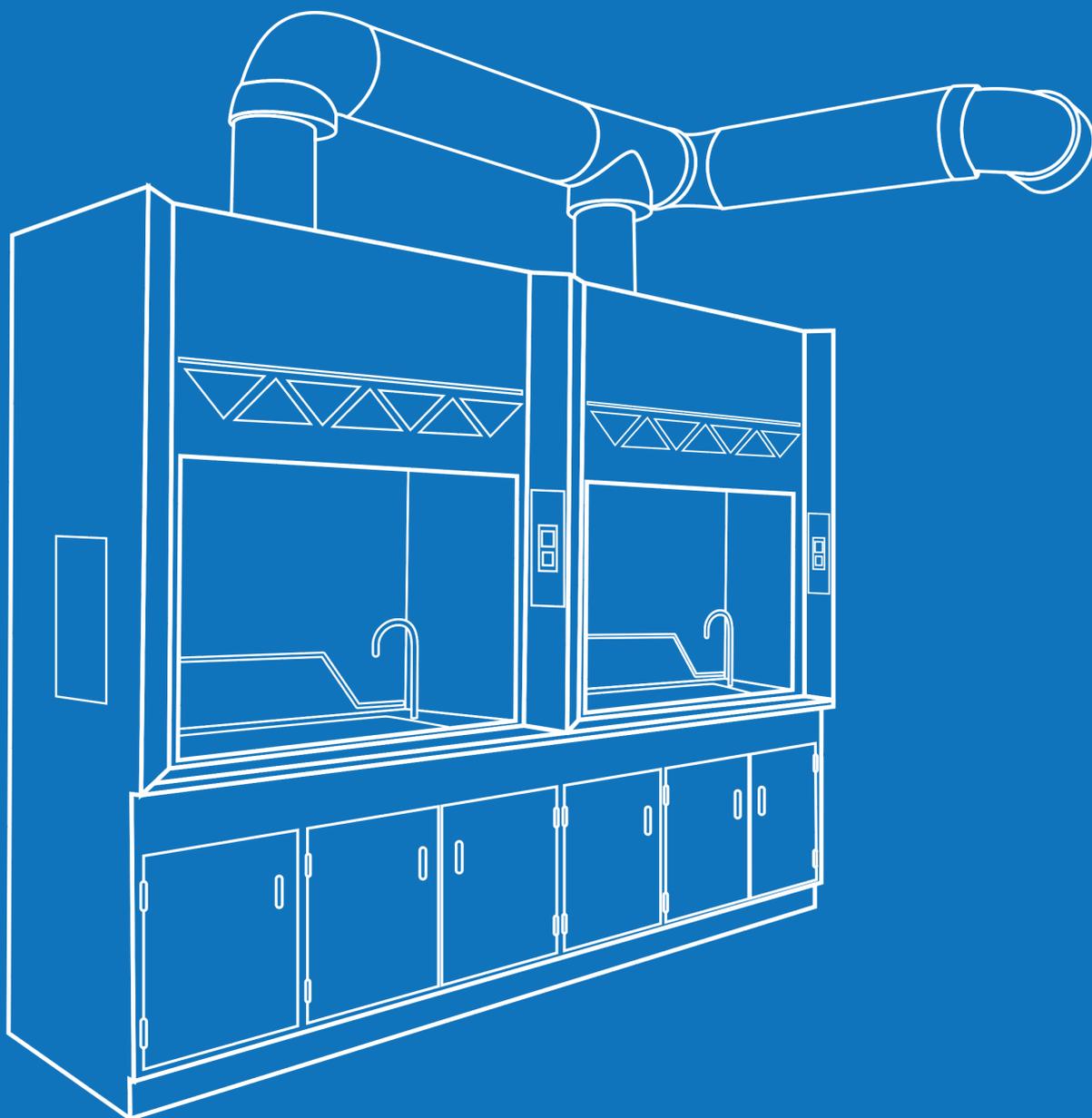


# Corrosion Resistant Fans for Industrial Fume Extraction

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



# About Us

*Axair are an independent UK distributor of industrial fans. In addition to supply, we pride ourselves on our fan integration specialisms that ensure we provide a full service solution to our wide customer base across varied market sectors.*

## Our 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 in down draught benches.

**ATEX Applications** to prevent explosions in potentially hazardous Zone 1, 2 or 0 applications.

## SEAT Ventilation

SEAT is the leading EU manufacturer of plastic 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 certifications at [www.axair-fans.co.uk](http://www.axair-fans.co.uk).



# Our Industrial Team

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*Our industrial team combine over 25 years of experience in air movement, construction and fan engineering to deliver exceptional product knowledge, fan integration expertise and a thorough knowledge of corrosive and explosive ATEX environments.*



**Faye Brophy**  
Head of Industrial

With a background in construction and engineering, Faye heads our industrial division with exceptional customer service and organisation.



**Andrew Jones**  
Sales Director

As director of our well established business, Andrew leads technical projects and continues to provide support to our wide customer base.

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

# Industrial Fume Extraction



**Our EC polypropylene fans allow fume cupboard manufacturers to reduce their fan energy consumption by up to 20% without affecting performance.”**

*With over 25 years of experience working with SEAT Ventilation, Axair supports a large network of UK fume cupboard manufacturers and those within the environmental corrosive fume market with our range of industrial fans. Corrosion resistant fans are supplied with metal or outdoor polypropylene pedestals and are specified to match the exact requirements of the applications operating and performance duty.*

As the market demands more energy efficient systems, the introduction of the EC range of fans that complement our extensive AC range, allow fume cupboard manufacturers to reduce their fan energy consumption by up to 20% without affecting performance, ultimately enhancing the energy efficiency of the entire fume extraction system.

System designers are now keen to look at all options to reduce energy consumption within laboratories. Reducing the amount of energy used by the extraction fan itself is a good starting point

Whatever your position in specifying a suitable fan for any form of 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](mailto:sales@axair-fans.co.uk).

**Faye Brophy**  
Head of Industrial

A handwritten signature in black ink, appearing to read 'Faye Brophy', written in a cursive style.

# Extracting Corrosive Air in fume cupboards

During school science experiments and demonstrations, it is commonplace to use fume cupboards. School fume cupboards are designed to capture and remove air-borne hazardous substances generated during laboratory experiments to reduce the risk of exposure to a safe level. These include harmful gases, vapours, aerosols and particulates.

Fume cupboards prevent potentially dangerous vapours being released into the classroom in two main ways; through ducting or through filtered, recirculated air. Ducted fume cupboards draw air through the sash opening over the working area and through ducting to the outside of the building, most often the roof. This method is widely used as it is suitable for extracting more toxic vapours than recirculating filtered fume cupboards. The latter is more suited to experiments using much less hazardous substances.

Additionally, school fume cupboards act as a physical barrier between reactions and the classroom or laboratory. This provides a degree of protection against inhalation exposure, chemical spills and fires.

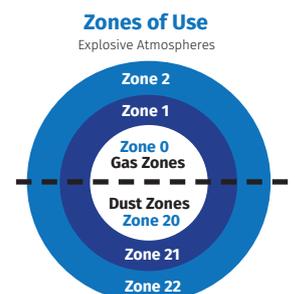
The fans for the fume cupboard extraction system need to be able to handle the corrosive air without risk to its operation. Therefore, Axair offer specifically designed polypropylene fans for school fume cupboard applications as the material properties allow the fan to operate in the corrosive air stream.

We have been supplying fans to schools and fume cupboard manufacturers many years. Fans for school applications tend to be the smaller fans in our range as schools usually service one cupboard per fan. For laboratories where there are multiple fume cupboards per fan, Axair have market leading solutions to suit.

**“ Fans for fume cupboard extraction systems need to handle corrosive air without risk to their operation.”**

## **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.



# Corrosion Resistant Polypropylene Fans

*We offer a comprehensive range of fans specifically designed to offer the maximum protection against chemicals and corrosion. Constructed from polypropylene, a thermal plastic, to provide corrosion, chlorine, UV & humidity resistance.*

## Corrosion Resistant Polypropylene

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 handing 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 introduction of our EC range of fans in Autumn 2021 allows fume and chemical extraction systems to reduce their fan energy consumption without affecting performance.

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 SA and STA range are molded carbon loaded polypropylene to prevent static discharges. Available in category 3G zone 2 applications 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.



## EC Energy Efficient Fans

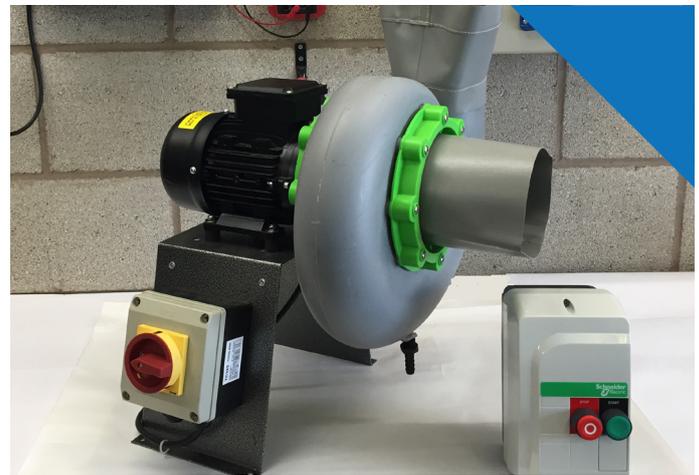


Our impressive range of energy efficient corrosion resistant fans with IE5 B34 type EC motors reduce fan energy consumption by up to 20% without affecting performance in fume extraction systems. Available in single or three phase. View datasheets by scanning the QR code opposite.



## 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.



## School Fume Fan Packs

The school fume fan pack is 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 25 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.*

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



## Dust & Fume Extraction

S25 Polypropylene

Local exhaust ventilation is a common application that uses corrosion resistant fans. Our polypropylene S25 fans are shown here connected to the flexible dust and fume extraction arms above two work benches used for industrial processes.

To ensure personnel safety the fans when used alongside the extract arms maximise removal of dust and fume generated in the working environment.

All fumes are safely extracted and expelled into the atmosphere.



## Fume Extraction

S50 Polypropylene

Requiring the safe control of pollutants from twelve fume cupboards within the building, we needed a fan that could deliver the duty required when all were in use in addition to being suitable when not to full capacity.

The S50, available in LG hanging options, removes the air along the duct and through a carbon filtering system which removes a wide spectrum of atmospheric pollutants and acid gases. This is then vented out as required. Coupled with an inverter to facilitate enhanced speed control and an easy stop/start function as well as its energy efficiency benefits.



## Rooftop Fume Extraction

S25 & Outdoor Pedestal

Outdoor corrosive fume applications may require a higher ingress protection rating for standard IP rated motors.

Our S25 Polypropylene fans can be seen in this outdoor installation correctly using the outdoor pedestal to protect the fan motor from the elements, increasing its IP Rating to IP55.



**view our complete projects at:**

Direct link:  
[www.axair-fans.co.uk](http://www.axair-fans.co.uk)

or you can  
scan this  
barcode



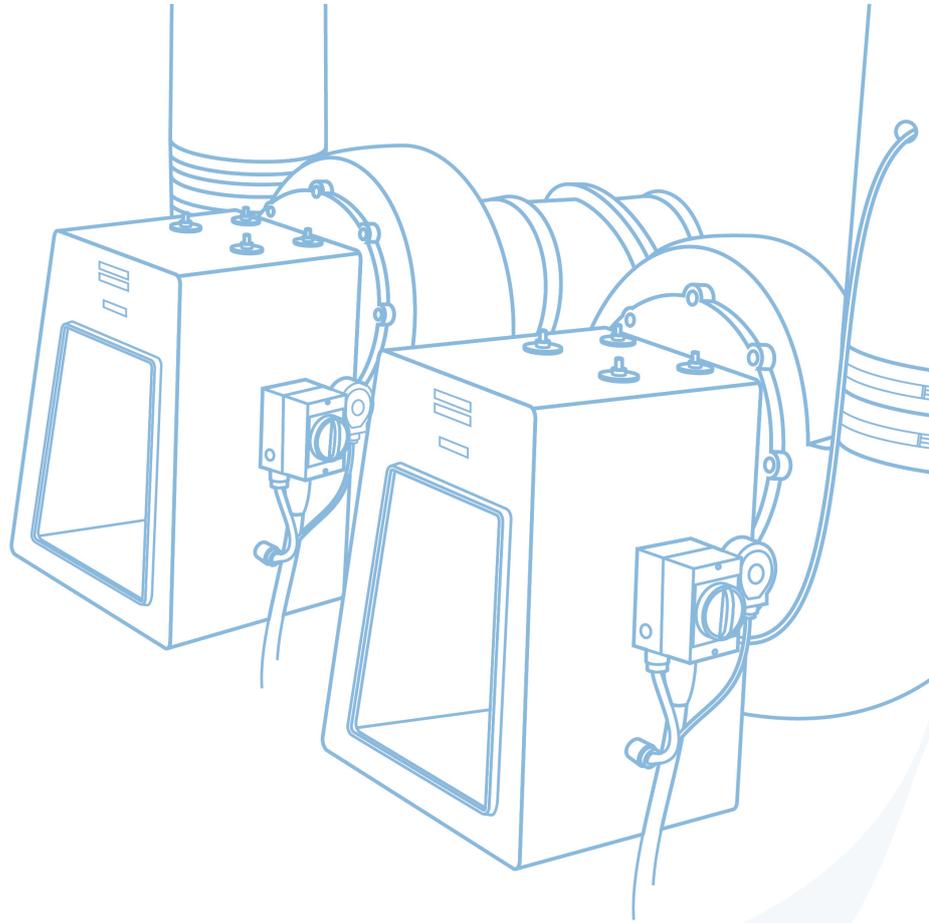
## Our Stock Policy

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

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*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



FumeCupboardDoctor



**Nederman**





## Contact Us

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*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](mailto:sales@axair-fans.co.uk)**