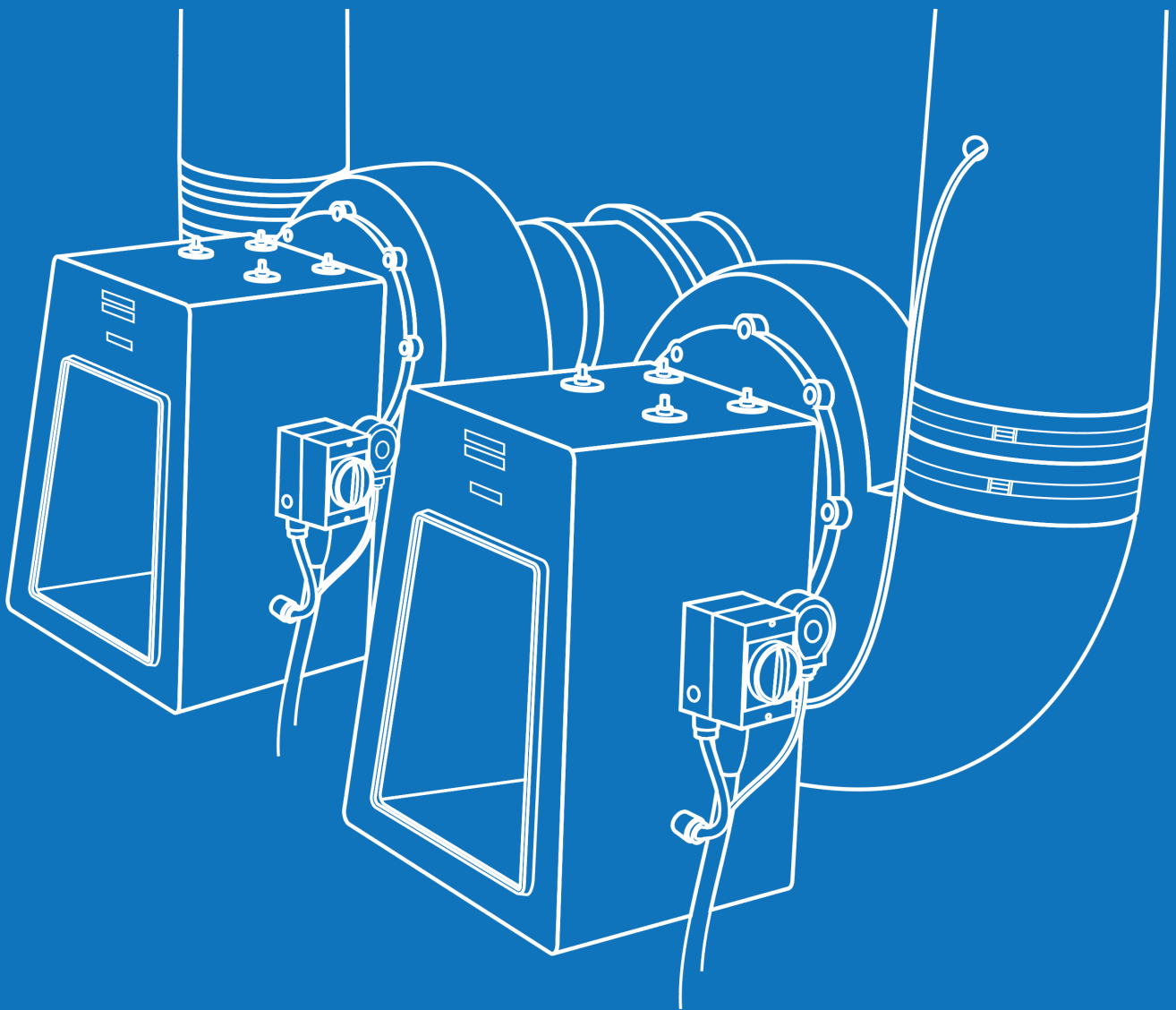


# Corrosion Resistant Fans for Water Treatment Ventilation

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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, grain drying and distribution of air.

**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 or 2 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

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.

# Water Treatment Ventilation

“At half the weight of metal fans and half the cost of fibreglass or stainless steel alternatives, polypropylene fans are a cost effective and efficient solution to corrosive fume ventilation.”

Water treatment companies in the UK face daily challenges in delivering water that is safe and reliable while protecting those working within the sector from hazardous gases, corrosive air and high temperatures. Polypropylene fans ensure safety and the extraction of gases, vapours and fumes in toxic and corrosive environments.

The waste water treatment industry require the installation of plastic fans to ventilate corrosive and chemical fumes. This includes exhausting hydrogen sulfide, ammonia, chlorine gas and other compounds associated with waste water treatment, pumping stations and odour control.

The polypropylene in our fan scrolls is thermoplastic and treated with HALS, hindered amine light stabiliser, a UV protection that makes them last. At half the weight of metal fans and half the cost of fibreglass or stainless steel alternatives, polypropylene fans are the cost effective and most efficient form of ventilation in water treatment applications.

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

Faye Brophy  
Head of Industrial



# Why Polypropylene is the preferred material

The corrosive nature of the air to be extracted in waste water and sewage plants means that standard metal fans would be adversely affected and not withstand the environment for long, therefore, fans made from polypropylene are the preferred solution in this application.

To ventilate wastewater treatment plants, engineers have a choice of materials for industrial fans and their ventilation systems. Typically, these materials are stainless steel, glass reinforced plastic or polypropylene. The range of corrosive gases present in the plants is so vast that it is essential to select ventilation equipment that is resistant to the largest array of chemicals possible.

Stainless steel alternatives are heavier, more costly and often require special grade powder coatings to meet the specification of the corrosive environment while glass reinforced plastic fans are subject to fibre shedding, affecting their longevity and often incur additional costs to achieve the corrosive protection needed.

The corrosion resistance achieved with GRP is often not as effective as stainless steel or polypropylene according to the HVAC and Chemical Resistance Handbook for the Engineer and Architect:

“GRP equipment resisted only 29% of 109 chemicals in a satisfactory manner, thus affecting its durability. That same rating was higher for stainless steel (52%), and even higher for Polypropylene (79%).”

The SEAT Storm range of polypropylene fans available exclusively from Axair are best suited to this application as they are designed to perform in the corrosive air, providing a relatively low air flow rate against elevated system pressures while being up to 30% less expensive than other materials.

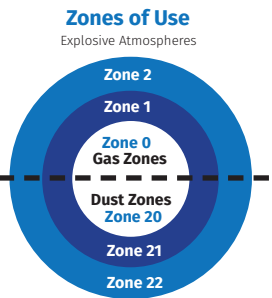


GRP equipment resisted only 29% of 109 chemicals, that same rating was 52% for stainless steel and even higher for polypropylene at 72%.”



## 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 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 introduction of our EC range of fans in 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
- EC energy efficient 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.



## Polypropylene Fans

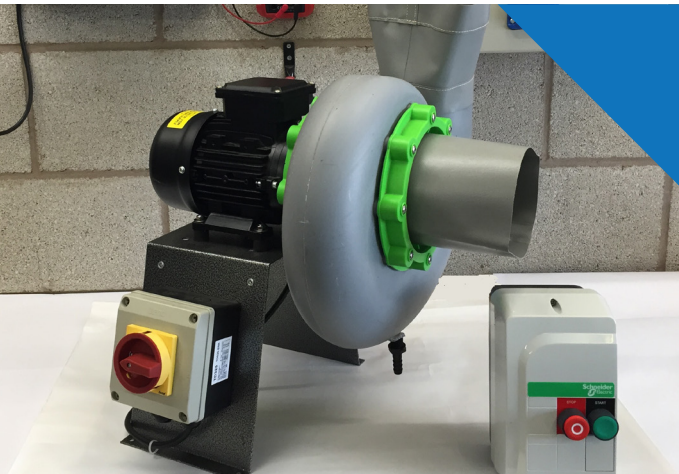
We offer two ranges of standard polypropylene fans; S range for medium airflow applications and the ST range for high pressure applications. The range consists of 10 basic sizes with a single piece molded high density polypropylene casing and feature a compact design, industry standard round spigots,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



## EC Energy Efficient Fans



Our impressive range of energy efficient corrosion resistant 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.**



## 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 drill.



# 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.*

“

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



## Outdoor Application

S25 & S20 with Motor Cowl Protection

Situated in this outdoor application is our S20 and S25 polypropylene extraction fans exhausting toxic fumes. Where there is a requirement to exhaust air from several areas in an application the fans supplied will need to meet the demands of each location within the sytem to ensure maximum efficiency.

The use motor cowls in this application increases the IP protection against adverse weather conditions. This maximises efficiency and prolongs the life of the installation.

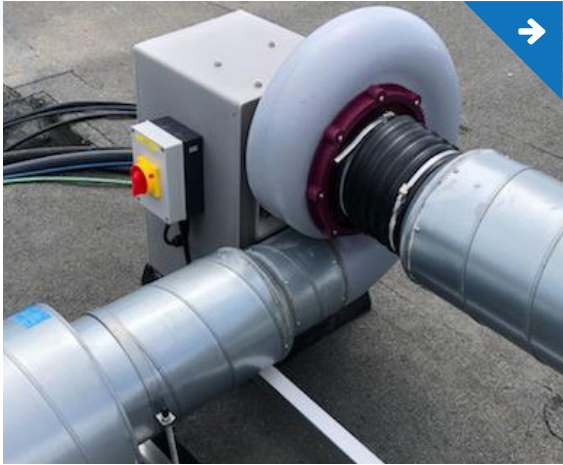


## Water Treatment Ventilation

S30 & Metal Pedestal

In this fume extraction system both the ducting and our S30 fume extract fan are made up of polypropylene plastic which offers several additional benefits over GRP and stainless steel.

Polypropylene fans are ideally suited to the wastewater treatment environment due to the lightweight, durable and affordable, corrosion resistant properties. The motor is fitted to our metal pedestal which offers greater rigidity, stability and durability.



## Outdoor Application

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 weather pedestal to protect the fan motor from the elements. The pedestal offers a more enclosed casing and covers the fan motor beyond the standard IP protection.



view our complete projects at:

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

or you can  
scan this  
barcode



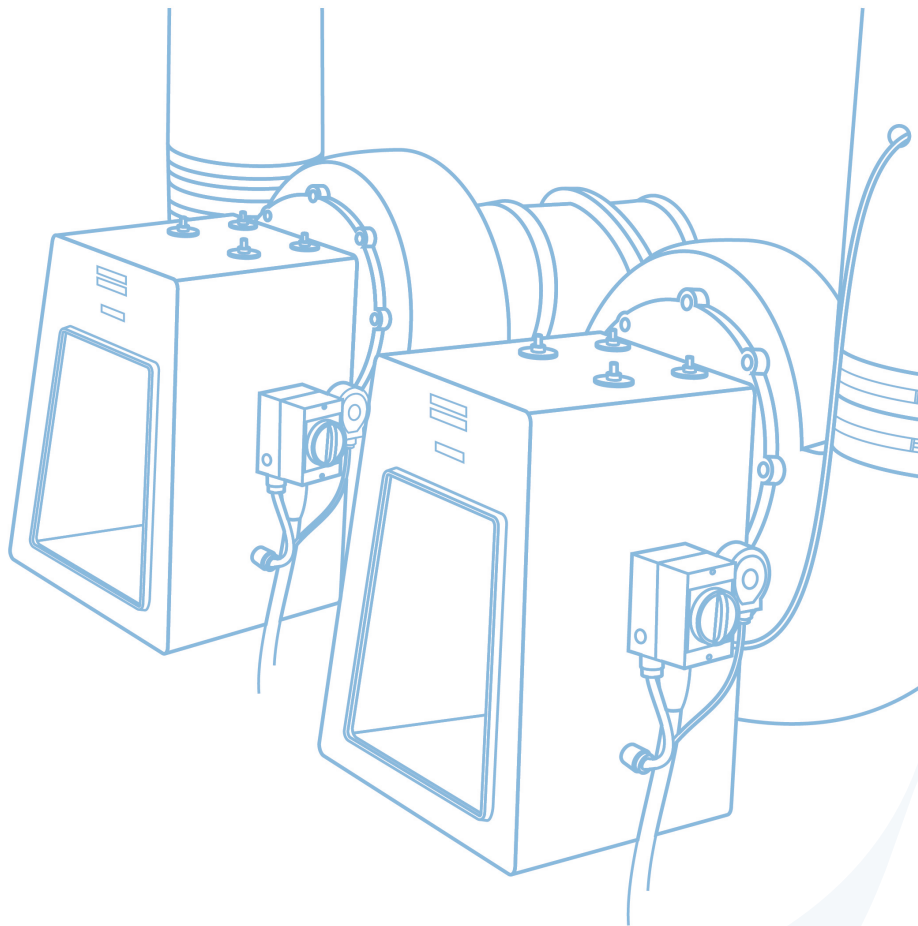
## Our Stock Policy

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 the all of our single and three phase polypropylene fans in 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

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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)**