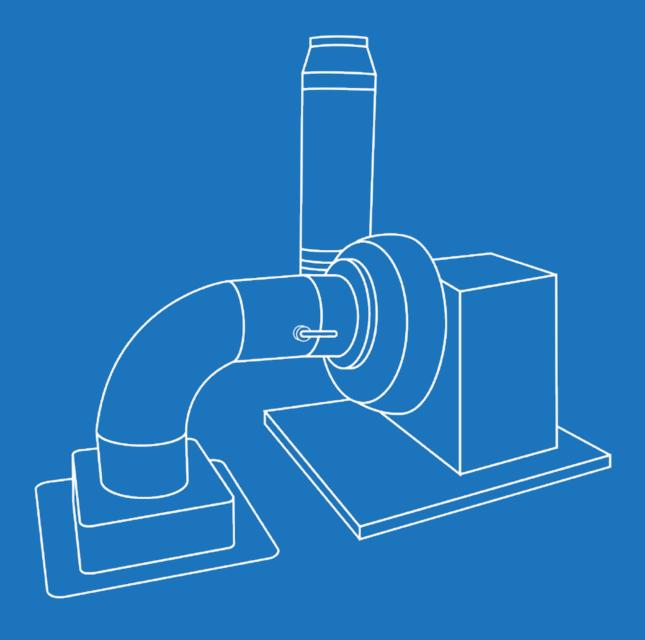
## Corrosion Resistant Fans for Mortuary & Autopsy Room Ventilation

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.





## **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 sompany. 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.

## **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.











# **Mortuary Room Ventilation**

Chemically resistant polypropylene fans are the preferred material in mortuary ventilation, withstanding harsh processing chemicals."

Mortuary and autopsy rooms require fume extraction fans to exhaust hazardous substances and odours out of the room via a downdraught ducting system. Corrosion resistant fans manufactured from chemically resistant polypropylene are the preferred material, withstanding the harsh processing chemicals used in post mortem, autopsy and inquest procedures.

According to NHS Wales the minimum recommended total fresh air supply rate to a post mortem room is 10 air changes per hour. In high risk cases a minimum of 12 air changes per hour is advised along with maintaining a negative pressure, HEPA filtration and downdraught ventilation system. However, the number of air changes is dependent on the individual specification of the room and factors such as room size, the chemicals produced and the type of equipment used should all be considered.

As stated by the Department of Health the ventilation system of a mortuary should be designed to minimise the spread of odours and airborne pathogens by being isolated from other ventilation systems such as air handling units, where possible.

Contact our industrial team on 01782 349 430 or email sales@axair-fans.co.uk along with the key information about your mortuary, autopsy or post mortem set up and required operatiung duties and our team will work with you to select the right corrosion resistant fans for your extraction system.

Faye Brophy Head of Industrial

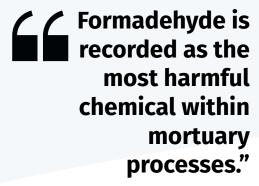


## **Effective Ventilation of Formaldehyde Fumes**

Formaldehyde, xylene and hot paraffin wax fumes are all chemicals used within mortuaries as a method of preserving and embalming the body. Toxic chemicals such as these pose a serious health risk to mortuary staff who face long term exposure. Having the correct fume extraction systems and equipment in place is vital to protect the health and safety of staff and visitors. There are many reports of the toxic effects of exposure to these chemicals but very little documentation on the importance of efficient fume extraction systems for their removal.

Polypropylene fume extraction fans with spark proof ATEX motors are essential when exhausting chemicals such as Xylene due to the presence of potentially explosive gases. Formaldehyde is recorded as the most harmful chemical within mortuary processes and is a colourless, flammable and strong-smelling chemical that is also used in building materials, household products and as an industrial disinfectant. However, moderate amounts found in other items are not the main cause of concern. It is most dangerous in occupational settings where there is risk of it being inhaled or absorbed through the skin in liquid form. If formaldehyde is present in the air and reaches levels higher than 0.1 parts per million (ppm), some people could have health effects.

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



## **Reducing Toxic Exposure**

Downdraught ventilation tables control the levels of formaldehyde exposure by extracting the fumes downwards through a ducting system which forces the fumes out to atmosphere.

It is crucial that the fan in the system powers the required airflow to effectively vacuum the toxic fumes away.



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, formaldehyde & 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 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 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**



## **EC Energy Efficient 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 (nonincendive) or EEx d (explosion proof) motors to order. ATEX declaration of conformity available on request.

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 seperately; fan, controller, isolator, AV mounts, flexi connectors and scroll drail.

## **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."



#### **Rooftop Ventilation**

S25 & Metal Pedestal

This outdoor roof top installation features our S25 polypropylene fan on a metal pedestal which offers greater rigidity, stability and durability.

The corrosion resistant fan exhausts toxic fumes and safely disperses them to atmosphere.

The fan and ducting must be safely positioned to avoid any toxic air re-entering the building through other inlets and casuing a health risk.



### **Effective Mortuary Ventilation**

S25

Our S25 polypropylene fans were integrated into a large down draught ducting system in a mortuary. The fans will enable the system to vacuum any toxic particles through the ductwork and exhaust them safely.

Corrosion resistant fans manufactured from chemically resistant polypropylene are the preferred material, withstanding the harsh processing chemicals used in post mortem, autopsy and inquest procedures. They can withstand harsh chemicals without rusting or corroding.





#### **Hospital Mortuary Ventilation**

S35 & Outdoor Pedestal

Highly toxic chemicals including formaldehyde are commonly used in mortuaries to preserve and embalm bodies.

Our S35 polypropylene fan is situated on the roof of the hospital mortuary exhausting the fumes out of the room via the large ducting system. The motor is protected by and outdoor pedestal.

#### view our complete projects at:

Direct link:

www.axair-fans.co.uk

or you can scan this barcode



## **Our Stock Policy**

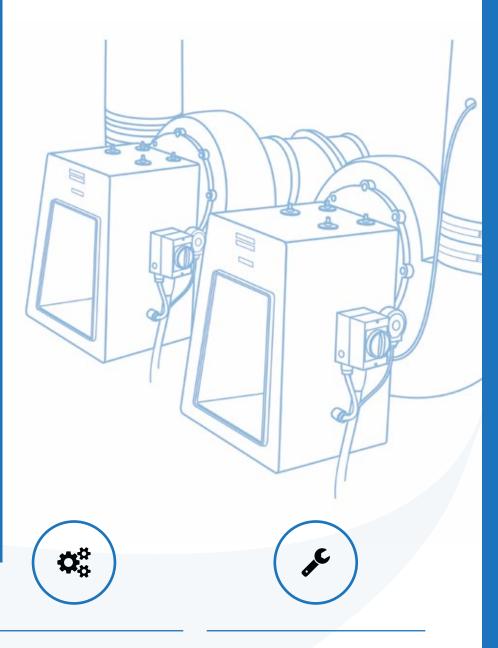
In 2020 we extended our warehouse to enable us to increase our stock holding of our most popular industrial fans for the corrosive fume market.

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**

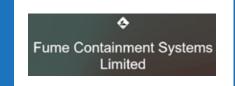




















## **Contact Us**

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