

WELDING FUME EXTRACTION SYSTEMS FOR WORKPLACES



PLYMOVENT'S WELDING AND CUTTING FUME EXTRACTION SYSTEMS HELP CREATE A CLEANER, SAFER AND HEALTHIER WORKING ENVIRONMENT.

PLYMOVENT[®]
clean air at work

Supported &
Distributed by...



FANTECH
Industrial Ventilation

NEW WELDING FUME EXPOSURE STANDARDS DEMAND DEPLOYMENT OF STRINGENT FUME MITIGATION STRATEGIES

The International Agency for Research on Cancer (IARC) initially classified welding fumes as “possibly carcinogenic to humans.” However, after further research, the agency has now reclassified welding fumes as a Group 1 carcinogen. This means the health of welders and your colleagues are at risk if they are not adequately protected from welding fumes in the workplace. It is the responsibility of businesses to take the necessary actions and implement suitable fume extraction systems to ensure their workers are safe.

Are you taking the necessary precautions to reduce welding fume exposure to as low as reasonably practicable for your personnel?

The Solution:

Fortunately, welders do not need to be exposed to the dangers of welding fumes. The best way to protect the workplace and workers is by capturing welding fumes at the source using local exhaust ventilation. There are various types of fume extractors available, including those suitable for light, moderate, or heavy-duty welding applications. When extraction arms are positioned correctly, according to the specific requirements of the workplace, welding fumes and airborne particles are captured before they spread throughout the facility.

Protect your staff and meet WHS requirements with Plymovent’s source capture fume extraction solutions.



Extraction Arms
Page 3



Diluter Systems
Page 8



Stationary Filters
Page 9



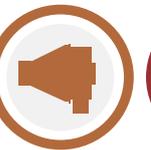
Mobile Units
Page 12



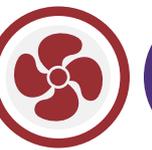
Downdraft Benches
Page 14



Modular Extraction Hood
Page 16



Fire Safety Solutions
Page 17



Fans
Page 18



Control Equipment
Page 20





KUA Extraction Arm

The KUA extraction arm is made of aluminium tube and is ideal for small and medium sized workplaces. It is specially designed to extract fume, gases and oil mist contaminants.

The external easy-to-adjust elbow joint and spring-assisted joint supported in double ball bearing make manoeuvring this arm a simple, one-movement operation.

Features:

- Universal mounting bracket with ball-bearing mechanism and friction pad allows for 360-degree rotation, ease of manoeuvring, and ensures maximum lifespan
- Support mechanism ensures stability, smooth operation, and minimum restriction
- 360-degree ring handle allows ease of reach and access from any position
- Smooth aluminium tubing allows maximum airflow and reduces the overall weight and noise level
- Tube diameter: 160 or 200mm
- Available in 2, 3, or 4m in length with a maximum reach of 8.5m in combination with an extension crane



KUA – COMPATIBILITY

 EXTENSION CRANE Page 6	 STATIONARY FILTERS Page 9	 MOBILE UNITS Page 12	 FIRE SAFETY SOLUTIONS Page 17	 FANS Page 18
FlexMax Extension Crane	MonoGo	MobilePro	SparkShield	FUA
WallPro 2.0				



MiniMan

The MiniMan is a metal tube extraction arm and is recommended for spot welding, laboratory applications and mist collection. It is totally free from internal mechanisms, yet easily operated and fully flexible. The uninterrupted airflow means maximum extraction efficiency and lowest possible pressure drop.

Features:

- Clear-thru design allows maximum air velocity, low pressure drop, low noise level, and low energy cost
- Reach above mounting height offers maximum reach
- Exterior joints allow for ease of adjustment, smooth operation, and ease of service
- 360-degree rotation
- Available in 1 to 2.1m in length

Available in 2 models: Miniman-100 and Miniman-75

Miniman-75

The MiniMan-75 has a 75mm diameter arm and is ideal for all types of smaller dust and fume applications. Soldering fumes, vapours and solvents are effectively extracted at low air volumes. Available in hanging or standing configurations.

Miniman-100

The MiniMan-100 has a 100mm diameter arm and is ideal for high-dusting operations. Available in hanging configuration.



Miniman hanging model



Miniman standing model



MINIMAN – COMPATIBILITY



FIRE SAFETY SOLUTIONS
Page 17

SparkShield



FANS
Page 18

FUA



MultiSmart Arm

The MultiSmart extraction arm offers a unique, clear-thru design which provides completely uninterrupted airflow, resulting in very low pressure loss.

The safety-encased arm mechanism produces “one touch” smooth movement combined with outstanding stability. The MultiSmart is versatile, lightweight and provides easily accessible controls.

Features:

- Parallelogram arm ensures one touch smoothness and stays firmly in place
- External arm chassis provides strong support and outstanding stability
- Aluminium tube makes the arm light and robust
- Available in 125, 160, and 200mm diameters
- Reach of 3m to 4m with a maximum reach of 7m when combined with an extension crane



MULTISMART – COMPATIBILITY



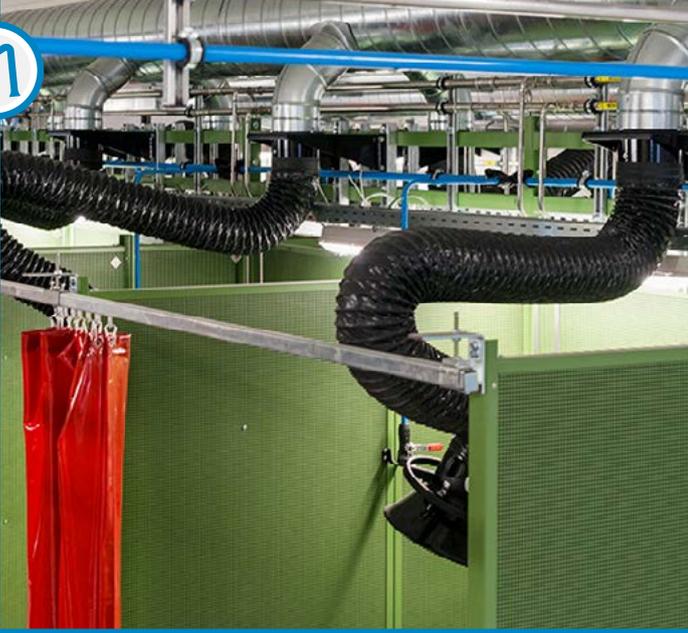
FIRE SAFETY SOLUTIONS
Page 17

SparkShield



FANS
Page 18

FUA



EconomyArm

The EconomyArm is a hose tube extraction arm with all support mechanisms integrated inside the arm itself. It includes both the spring-balanced support mechanism and friction brake that guarantees smooth operation inside the entire working radius.

This entry level extraction arm is suitable for light industrial use and can also be used in applications with low ceiling heights.

Features

- Universal mounting bracket with ball-bearing mechanism and friction pad allows 360-degree rotation and ease of manoeuvring, ensuring maximum lifespan
- Support mechanism ensures stability, smooth operation, and minimum restriction
- 360-degree ring handle allows easy access from any position
- Tube diameter: 160mm
- Available in 2, 3, and 4m lengths with a maximum reach of 8.5m when combined with an extension crane



FlexMax Extension Crane

The perfect extension to the KUA and EconomyArm extraction arms to help cover larger working areas. Combined with an extraction arm, it has a radius of approximately 8.5m. It can reach high or low positions and locations far from the mounting position of the arm.

Features:

- Maximum extra reach of 4.5m
- Universal mounting bracket with ball-bearing mechanism and friction pad allows 360-degree rotation, ease of manoeuvring, and ensures maximum lifespan
- Support mechanism ensures stability, smooth operation, and minimum restriction
- Inner arm can carry tools and accessories up to 50kg

ECONOMYARM – COMPATIBILITY

 EXTENSION CRANE Page 6	 STATIONARY FILTERS Page 9	 MOBILE UNITS Page 12	 FIRE SAFETY SOLUTIONS Page 17	 FANS Page 18
FlexMax Extension Crane	MonoGo	MobilePro	SparkShield	FUA

FLEXMAX EXTENSION CRANE – COMPATIBILITY

 EXTRACTION ARMS Page 3
KUA
EconomyArm



Traversing-KUA

The Traversing-KUA is an extraction arm mounted on a rail. It is ideal for broad working areas that require a wide reach or where no fixed work areas exist. The Traversing-KUA is used to extract fume, gases and oil mist contaminants.

It is made out of smooth aluminium tubing, maximising airflow and reducing the overall weight and noise level.

Features:

- Large reach radius of 4m either side of the rail
- Universal mounting bracket with ball-bearing mechanism and friction pad allows for 360-degree rotation, ease of manoeuvring, and ensures maximum lifespan
- 360-degree ring handle allows for ease of reach and access from any position
- Provides 360-degree swivel of entire length



TRAVERSING-KUA – COMPATIBILITY



FIRE SAFETY SOLUTIONS
Page 17

SparkShield



FANS
Page 18

FUA



SCS-Diluter

The SCS-Diluter is a stand-alone general filtration system, developed to control welding fumes in large facilities where source extraction and hoods are not an option. By reducing the concentration of fumes to lower levels, it provides a cleaner working environment.

This solution can be used with various welding processes, changing activities, crane transportation and locations where ductwork is difficult to install.

The SCS-Diluter re-circulates the cleaned air into the workshop through six multidirectional outlet nozzles.

Features:

- Low installation cost as ductwork is not needed
- Flexible solution for facilities with various welding processes and changing locations
- Efficient filtration system
- Nozzles can be rotated and controlled individually to optimise air distribution

Available in two models:
SDS Diluter GO and SDS Diluter Pro

SCS-Diluter GO

The SCS-Diluter GO is fitted with the ControlGo controller and comes with fixed factory settings for customers who want basic control over their system. The SCS-Diluter GO uses simple push button controls and indicator lights to operate the unit.



SCS-Diluter GO with ControlGo

SCS-Diluter PRO

The SCS-Diluter PRO is fitted with the ControlPro controller that includes an intuitive touchscreen interface that shows what the system is doing now and will do next, how the system is performing and how to keep it in shape.

The ControlPro uses ethernet communication for a wide variety of connectivity options to meet the full needs of the professional user.



SCS-Diluter PRO with ControlPro



Multidust Bank (MDB)

The MDB is a modular dust collector with filter system that is easy to tailor to the requirements of your application. Its efficient design and range of technical features delivers a filter system that is easy to operate and cost-effective to maintain.

Features:

- Efficient filtration of dust and fumes
- Modular design for any size solution
- Expandable as your business grows
- Flexible positioning of inlet and outlet
- Dustbin level sensor optional

**There are two models available:
MDB GO and MDB PRO**

MDB GO

The MDB GO is a filter unit connected to the ControlGo control panel. It is ideal for workplaces that prefer basic control over their filter system. With an external signal from a welding robot or timer, the MDB GO can start/stop automatically.

In addition to manual cleaning, the MDB GO offers automatic advanced progressive filter cleaning.



Multidust Bank with ControlGo

MDB PRO

The MDB PRO is a filter system that is combined with the intelligent ControlPro platform. The MDB PRO offers an extensive feature package to monitor and control the filter cleaning system based on adjustable threshold values, the type of extraction fan, the required airflow and the corresponding fan speed.



Multidust Bank with ControlPro

By means of the user-friendly HMI, all parameter settings of the system are configurable through a clear and easy accessible menu structure. It allows for remote access via a network connection for setting adjustments via a mobile device, online support or software updates. When there are multiple MDB filter systems, they can be controlled by one single MDB PRO.

MULTIDUST BANK - COMPATIBILITY

MULTIDUST BANK - COMPATIBILITY	
 FIRE SAFETY SOLUTIONS Page 17	 FANS Page 18
SparkShield	FUA
	TEV
	SAF



MonoGo

The MonoGo is a single arm, wall mounted welding fume extractor that is ideal for fixed workstations. It provides effective protection against welding fume exposure and has a reach from 2m to 4m. For enhanced safety, these units feature an acoustic alarm and an integrated spark deflection plate.

Features:

- Effective protection against fume exposure
- Two-stage filter for longer filter life
- Enhanced safety with integrated spark deflection plate
- W3 marking, making it suitable for steel and stainless-steel applications

Available in two models: MonoGo and MonoGoPlus

MonoGo

The MonoGo is combined with the EconomyArm which is available in 2m, 3m and 4m lengths. It is a cost effective model and recommended for occasional welding activities.

It has a filter capacity of 15m². Recommended when the welding consumes 1 coil of solid welding wire or 7.5kg of welding electrodes per month. When TIG welding takes place, the use is unrestricted due to the low fume emissions.



MonoGo^{Plus}

The MonoGo^{Plus} is combined with the KUA extraction arm which is available in 2m, 3m and 4m lengths. It is suitable for light and regular welding applications.

The filter capacity of the MonoGo^{Plus} is 26m² and is recommended when the welding consumes 2 coils of solid welding wire or 15kg of welding electrodes per month.





WallPro 2.0

The WallPro 2.0 is a self-cleaning welding fume extraction system with compact housing and a large filter (20m²). It has low operating costs, a fully automatic filter cleaning system and can be used with one or two extraction arms. To minimise exposure during general maintenance activities, the WallPro 2.0 is built with a unique dust-free maintenance concept thanks to the valve between the filter and the dust container.

Features:

- Unique dust-free maintenance concept
- Safe working environment due to a high-efficiency filter cartridge
- Compliant with welding fume class W3
- Low operating costs and long filter life
- Self-cleaning filter, with additional offline filter cleaning function
- Choose from 3 power levels, according to your specific needs
- Can be fitted with an additional HEPA filter module (filter classification H14)

Available in three models: Standard model, Power model and PowerPlus model

Standard

The Standard model is suitable for regular welding activities where an extraction capacity of 1000m³/h per arm is sufficient. It is available with one or two KUA extraction arms, with lengths of 3m or 4m and a diameter of 160mm.

Power

The Power model is available with one or two KUA extraction arms of 3m or 4m in length and a diameter of 200mm. Suitable for welding applications where an extraction capacity of 1450m³/h per arm is required.

PowerPlus

The PowerPlus model has an extraction capacity of 1800m³/h and is suitable for applications with very high welding fume production such as automatic welding, high amperage welding and flux-cored arc welding. It comes with the most powerful fan and one KUA extraction arm with a diameter of 200mm and 3m or 4m in length.



MOBILEGO

The MobileGo is a compact and powerful entry level mobile welding fume extractor. This unit can easily be moved around the workshop to extract the fumes where needed. The extractor has an acoustic 'filter full' alarm and an integrated spark deflection plate for enhanced safety.

Includes a service indicator that shows when the filter needs to be replaced.

Features:

- Effective protection against exposure to welding fumes
- Easy to manoeuvre due to compact design
- Two-stage filter for longer filter life
- Enhanced safety with integrated spark deflection plate
- Suitable for steel or stainless-steel welding

Available in two models: MobileGo and MobileGo^{Plus}

MobileGo

The MobileGo is an entry level extractor which has a filter capacity of 15m². It is combined with the EconomyArm extraction arm.

MobileGo is recommended when you use 1 coil of solid welding wire or 7.5kg of welding electrodes per month.



MobileGo^{Plus}

The MobileGo^{Plus} is combined with a KUA extraction arm with a filter capacity of 26m².

The MobileGo^{Plus} is recommended when you use 2 coils of solid welding wire or 15kg of welding electrodes per month.





MobilePro

The MobilePro is a compact mobile welding fume extractor with a self-cleaning filter. It is used to remove welding fumes on-site in confined spaces that are difficult to reach by fixed extraction systems.

This unit is easy to use and ensures easy movement around the workspace. Both Plymovent's KUA (available in 2m, 3m and 4m) and EconomyArm (available in 3m and 4m) extraction arms are compatible with this extractor. Recommended when using 1 coil of welding wire or 7.5kg of welding electrodes per week.

Features:

- Includes 2 swivel castors for easy movement
- Ergonomic handlebar/toolholder
- SilentFlow™ sound absorbing box
- Self-cleaning Ram-Air™ pulse amplifier
- Suitable for many welding applications such as MIG, MAG, TIG, GMAW, FCAW and stick electrode welding



MOBILEPRO - COMPATIBILITY



EXTRACTION ARMS
Page 3

KUA

EconomyArm



DraftMax Eco

The DraftMax Eco is a downdraft workbench designed to connect seamlessly to an external extraction/filtration system. Approximately 80% of the air is extracted through the backdraft panel, with the remaining 20% drawn through the work grid.

The DraftMax Eco can also be fitted with optional spark arresters, which mount directly into the backdraft panel. This unit is ideal for ductwork applications, as it requires connection to an external fan and filtration system, such as Plymovent's MDB filtration unit.

Features:

- Suited for ductwork
- Efficient fume extraction by down and backdraft
- The working height of the table is adjustable
- Includes a dust collection tray for two optional dust containers
- The extraction system easily connects to the air outlet positioned on top of the backdraft panel



DRAFTMAX ECO - COMPATIBILITY



FIRE SAFETY SOLUTIONS
Page 17

SparkShield



DraftMax for Plasma Cutting

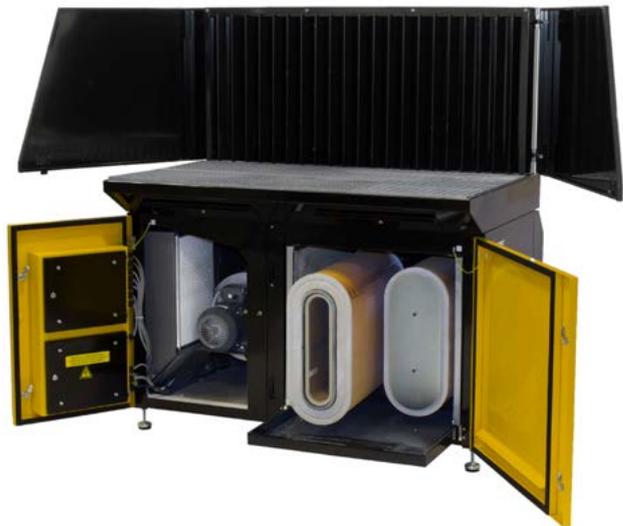
The DraftMax for plasma cutting is a downdraft table fitted with a disposable or self-cleaning filter. The effective cleaning system ensures constant and high filter efficiency.

The DraftMax workbench provides extraction and filtration for welding and grinding applications. It features a specially constructed work grid which consists of two frames with 13 bars each and two additional spark arresters.

The additional spark arresters protect the existing spark arresters against melting steel.

Features:

- Integrated filter
- Maintenance-friendly
- Dust trays can be easily emptied and filters replaced from the front of the unit
- Large filter surface provides a long filter life
- HEPA kit available, making the product compliant with W-3 certification





FLEXHOOD

The FlexHood is a modular extraction hood designed to improve air quality by capturing fumes, fine dust, small particles, mist, and aerosols in industrial workshops. It is ideal for various processes, including manual and robotic welding, grinding, and cutting. The FlexHood is an effective way to extract welding fumes near the actual process.

Installed over the working area, the FlexHood connects to an external extraction or filtration system. Its bottom roof panels function as deflection plates, guiding airflow toward the outer edges of the hood or its compartments for efficient extraction. The extracted air exits through one or two connection flanges located on top. Welding strips protect people working nearby from the welding light, and equipment against sparks and spatter. For easy installation, the FlexHood comes in easy-to-handle modular parts and can easily be put together on site.



Features:

- Modular Concept
- Efficient fume extraction
- Easy to install and maintain
- Integrated suspension eyes for ceiling mounting or hanging
- Can be tailored to your needs. Suitable for welding areas from 1.5m² to 30m².

FLEXHOOD - COMPATIBILITY



FIRE SAFETY SOLUTIONS
Page 17

SparkShield



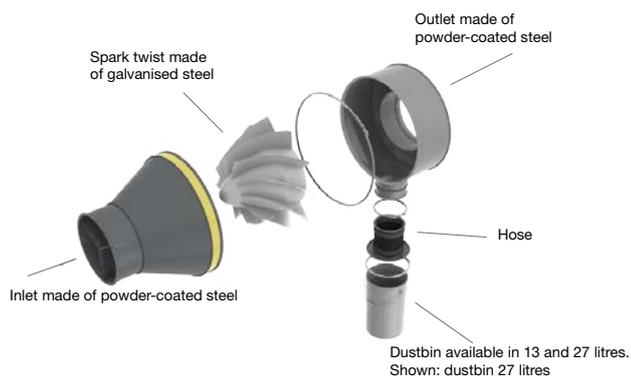
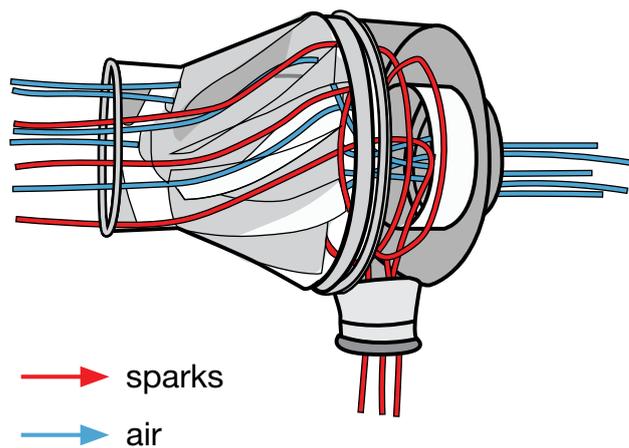
SPARKSHIELD

The cyclone spark arrester, SparkShield, is a fire safety product, developed to reduce the risk of fire and to increase the filter's lifespan. SparkShield prevents sparks and spatters from entering the ductwork in welding fume extraction systems and reaching the combustible filter cartridge.

A dustbin collects all remaining sparks at a safe distance from the main filter. There are four models available, suitable for 250mm, 400mm 500mm and 630mm duct sizes.

Features:

- Suitable for welding and cutting applications
- Easy install even in existing extraction systems
- Compact in-line design
- Duct clamp connections for easy installation, service and dismantling
- Body designed for easy maintenance





FUA

The FUA fan range can be used as a direct mount fan for metal and hose tube extraction arms, or as a central fan in small extraction systems.

These fans are equipped with lightweight aluminium impellers, suitable for extracting exhaust gases, volatile fumes and dust.

IP55 rated; sufficient protection against dust, and can withstand high pressure water cleaning.

Features:

- Rotational outlet
- Casing made from durable powder coated galvanised steel
- Mounting bracket available
- Available in 5 models from 0.55kW to 2.2kW
- Can be mounted outdoor

TEV

The TEV series ventilation fans are designed for use as central fans in larger systems with multiple extraction points.

These fans are equipped with lightweight aluminium impellers, suited to exhaust gases, volatile fumes and dust. Matched inlet and outlet, together with optimised impellers ensure even air flow, high capacity and low noise levels.

Features:

- Available in 4 models from .75kW to 7.5kW
- Energy efficient
- Easy to mount housing
- Controllable by frequency inverter
- IP55 rated, can withstand high pressure water cleaning

FUA - COMPATIBILITY



FIRE SAFETY SOLUTIONS
Page 17

SparkShield

TEV - COMPATIBILITY



FIRE SAFETY SOLUTIONS
Page 17

SparkShield



SAF (Sound Absorbing Fans)

The SAF range combines a Plymovent TEV fan and a robust sound absorbing case, recommended for spaces where noise pollution must be controlled.

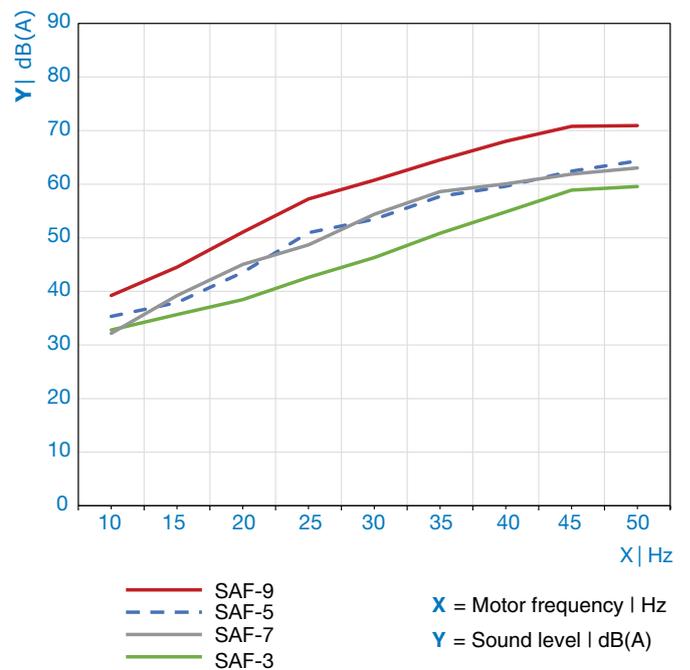
They minimise noise output and are suitable for both indoor or outdoor installation. Combined with the recommended duct silencer, SAF fans are more than 10dB quieter than a standard TEV fan.

Features:

- Strong load bearing top plate
- Available in 4 sizes ranging from 0.75 to 7.5kW
- Suitable for both indoor and outdoor use
- Neatly finished for a professional and sleek appearance
- Can reduce noise output by more than 10dB when combined with the recommended duct silencer

Noise Level SAF

(with additional duct silencer)



SAF - COMPATIBILITY



FIRE SAFETY SOLUTIONS
Page 17

SparkShield



Scan code to view full specifications



Scan code to watch how the AeroGuard works



AeroGuard

AeroGuard gives you real-time transparency and assurance of the quality of your indoor air. It has a wide range of sensors, monitoring eleven pollutants and climate factors. The LED ring enables you to focus on the contaminant most important to you.

Features:

- Real-time monitoring with historical data display
- Seven calibration settings including custom calibration of dust sensor
- Mobile app included for real-time information
- Powerful dedicated web portal with intelligent features
- Customisable factory mapping with air monitor alerts



Stricter welding regulations require improved ventilation measures in workplaces. **DON'T RISK IT** – contact your Fantech Industrial Ventilation expert to ensure you have a safe and compliant working environment.

Take the next step towards a cleaner and safer workshop today. For sales enquiries please contact:

Ash Gandhi - Business Development Manager
Industrial Ventilation (Dust & Fume)
Mob: 0400 777 346
Email: agandhi@fantech.com.au



FANTECH
 Industrial Ventilation

As part of our ongoing program of product development and improvement, Fantech reserves the right to make changes in design or specification to products without notice or obligation and to change or discontinue models.
 The entire contents of this catalogue are protected by copyright.