

Extractability™



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V2 2019/20

Fume Extraction Equipment



Class W3 Approved

Buyers Guide







Complete extraction solutions for dust, fume and vapours

Extractability is a division of Weldability Sif, a UK based “one stop source” for all welding fume extraction solutions. Extractability cover everything from the design stage through to installation, commissioning and servicing.

As a provider of approved DGUV/IFA (Institute of Occupational Health Standards) fume control solutions, we are committed to playing a vital role for sustainable and efficient industrial production.

All our products combine care for the environment and for employee health by improving work efficiency and production economy. We hope this catalogue will act as a practical reference document and an inspiring guide to improving workplaces and reducing environmental impact. Extractability are proud to provide products and services that contribute to reducing the environmental impacts from industrial production and help to create safe and clean working environments.

Extractability are specialists in solving problems related to fumes, gas, dust, recycling, working conditions and an efficient production environment. Services cover everything from project planning to installation, commissioning and service. You can find information on our products, solutions and contact details on the Extractability website www.extractability.co.uk.

Why do we need fume extraction?



Welders and personnel in the work area can be exposed to welding fumes, grinding dust and oil mist. It is essential to create healthy and safe working conditions by reducing these risks to health.

Following the latest HSE safety alert, all welding activities now require effective controls for fume, which have been shown to cause lung cancer. This includes mild steel welding, which has been reclassified as a human carcinogen. Suitable fume control will also limit exposure to manganese, present in mild steel welding fume, as this can cause neurological effects similar to Parkinson's disease.

Effective immediately, there is a strengthening of the HSE's enforcement expectation for all welding fume. General ventilation will not be deemed acceptable as it does not achieve the necessary control. The HSE will also no longer accept any welding undertaken without suitable exposure control, no matter the duration of the activity.

HEALTH RISKS WHEN INHALING WELDING FUME AND GASES

Fume/Dust	Possible immediate effects	Possible long-term effects
Welding fume (general)	Sore throats, eye irritation, metal fever	Carcinogenic
Chromium (in welding fumes from stainless steel welding)		Carcinogenic
Nickel (in welding fumes from stainless steel welding)	Metal fever	Carcinogenic
Aluminium	Irritation of respiratory organs, metal fever	
Manganese	Pneumonia	Damage to nervous system
Zinc	Metal fever	
Copper	Metal fever	
Magnesium	Irritation of respiratory organs, metal fever	
Lead	Changes of blood and kidneys	Nerve & brain damage/infertility.
Gases	Possible immediate effects	Possible long-term effects
Nitrogen Oxide	Irritation of bronchial tubes and eyes	Bronchitis
Carbon Monoxide	Difficulty in breathing, unconsciousness	Neurological problems
Ozone	Irritation of bronchial tubes and eyes	

The effect of dust fumes

WHAT IS DUST/FUME?

The definition of dust/fume applied in this context describes the amount of dispersed, firm particles in the air, which are produced during thermal processes such as welding.

In welding technology dust/ fume and other hazardous substances are produced due to the use of:

- Base materials
- Filler materials
- Impurities
- Ambient air

During processes such as:

- Evaporation
- Condensation
- Oxidation
- Decomposition
- Pyrolysis
- Combustion

WHY IS DUST/FUME DANGEROUS?

In general, every kind of dust/fume can lead to respiratory diseases (bronchitis, obstructive bronchitis) resulting from the inhaling of dust in a high concentration and for a longer period.

Dust/fume is particularly dangerous if it contains hazardous substances.

WHAT ARE THE FUME AND GASES FROM WELDING AND CUTTING?

The fume given off by welding and hot cutting processes are a varying mixture of airborne gases and very fine particles

which if inhaled can cause ill health. Gases that may be present in welding and cutting fume are:

- Nitrous oxide (NO₂),
- Carbon dioxide (CO₂),
- Carbon monoxide (CO)
- Shielding gas (eg Argon, helium) and Ozone (O₃)

The visible part of the fume cloud is mainly particles of metal, metal oxide and flux (if used).

The exact level of risk from the fume will depend on three factors:

How toxic the fume is

How concentrated the fume is

How long you are breathing the fume

For arc welding, the visible fume comes mostly from the filler wire when it's exposed

to the electric arc. The amount of hazardous substances in the filler wire should be

included in the product information

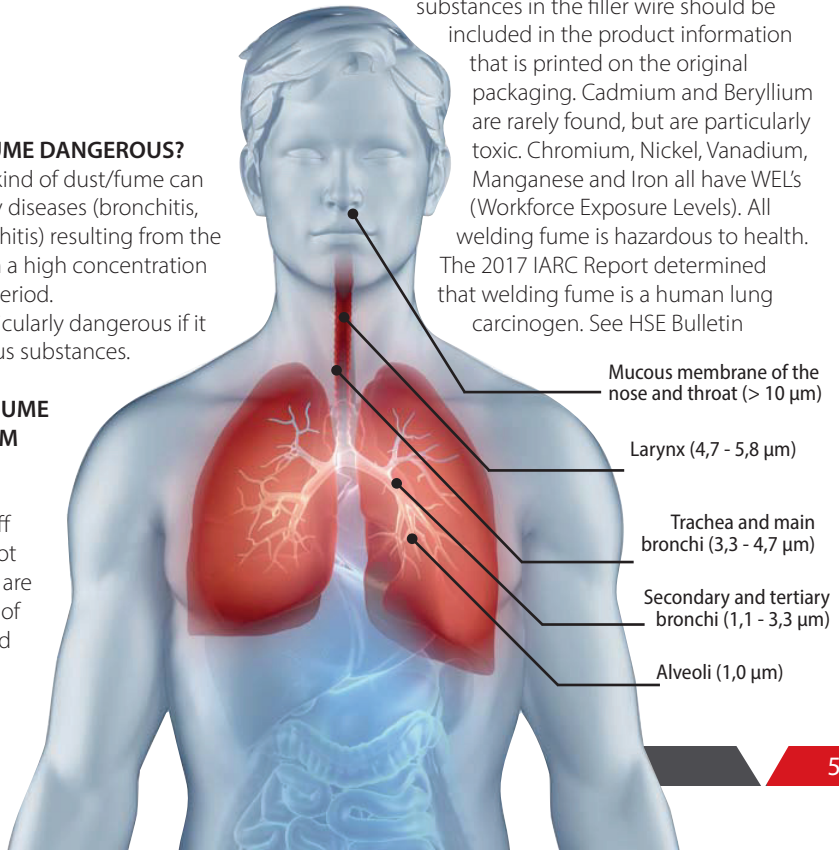
that is printed on the original

packaging. Cadmium and Beryllium are rarely found, but are particularly toxic. Chromium, Nickel, Vanadium,

Manganese and Iron all have WEL's (Workforce Exposure Levels). All

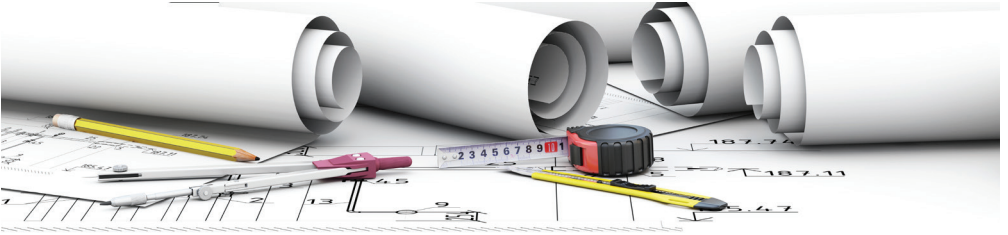
welding fume is hazardous to health.

The 2017 IARC Report determined that welding fume is a human lung carcinogen. See HSE Bulletin



A lifetime partner

How we can help



With years of experience working with air treatment solutions, Extractability has developed a reliable approach to ensure clean air in your working environment with a cost effective and easily operated system. The process involves 7 phases, from analysis and design to supply, installation, commissioning and service, all included in a value for money package.



INVESTIGATE

We recognise that each customer has specific requirements. To be able to meet these, it is vital to conduct a thorough investigation, answering numerous questions about the welding process, number of welders and reach within work places, facility layout, filtration needs, local legislation and need of system control. Are there plans for future expansion? Finalising this phase gives an answer to what is required.

PLANNING

Once all the information has been received from the initial investigation phase, we start to create a formula for achieving the best possible solution for your work environment. We choose products from our extensive product range, to customise a system, which provides a durable and optimal solution for ensuring ease of operation and a healthy work environment.

DESIGN

In the design phase we fine-tune the products chosen in the planning phase by calculating pressure drops, filter sizes, fan size etc. The modularity of our products enables us to optimise your system in regard to flexibility, safety, economy and operation. The result will be a system design which fits to your requirements today and for future expansions.

INSTALLATION

When the design phase is finished, we have the ability to install your customised system. We have vast experience of delivering turn-key solutions which will operate perfectly, enabling you to focus on your core business.

COMMISSIONING

Once we have completed installation, we commission the system ensuring all parameters are set correctly. Our constant drive for perfection creates an air cleaning system which is a reliable investment today and for years to come.

TRAINING

We are happy to share our professional knowledge and technology. We have the ability to give you on-site hands-on training to get the most out of our systems as well as offer time sparing courses designed to make you fully aware of the hazards of welding fumes .

SERVICE AND MAINTENANCE

We understand the importance of operational safety in production lines and that it is essential to ensure high productivity. We therefore offer ongoing service agreements. Our maintenance engineers will make sure your extraction system is in perfect condition and in optimal operation.



**Providing you with the latest
and most effective solutions**



Weldability[®]

ProtectoAutoclenz

Mobile fume extraction units for industry

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The hazards of exposure to welding fumes, dust, and vapours in the workplace is a serious health risk, and with ever changing workplaces, the need to reduce energy costs and meet environmental issues is key.

Extractability mobile filtration units can assist in meeting these matters. Mobile fume extractors provide increased flexibility. It makes extraction at various workplaces and locations possible.

ProtectoVac Max 110/230v

1
Phase

Single
Phase

Portable, single-motor fume extractor

The ProtectoVac MAX is a high quality, low-cost, highly portable extraction unit. It is an ideal modular unit that can be modified or purpose-built for specific applications to support the extraction of fumes and dust directly at the source.

Designed specifically to extract the filter metal particulate fumes created in the welding processes, the ProtectoVac MAX is suitable for use in the workshop, demonstration, training bay, garage and on-site.

The 'Dust Stop' semi-automatic cleaning system allows the operator to clean the filter with ease, by simply lifting the flap on the chamber. It operates from a 110v/230v mains input supply.

Features

- Single phase by-pass motor
- 180m³/h maximum airflow
- 2500mmH₂O maximum depression
- Cartridge filter
- Metal pre-filter to stop sparks
- Automatic start/stop
- Dust stop filter cleaning system 15Ltr detachable dust collection chamber with handle
- Castor for easy manoeuvrability
- Package includes: Unit, 2.5m hose and a nozzle with magnetic base
- W3 compliant

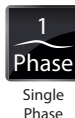


Ordering information

	110V	230V
Package 1 - Single motor head with 15ltr body	EXT1VACMAX110	EXT1VACMAX230
HD Vacuum Brush Kit	EXTSVAC01	
Cartridge Filter	EXTSVAC03	
Spare Hose	EXTSVAC10	
Fishtail Nozzle 45mm	EXT96317	
Slit Nozzle 45mm	EXT96318	

ProtectoTwin 230v

Twin-port mobile fume extractor



ProtectoTwin is a twin high-pressure turbine with infinitely adjustable speed control specifically designed to extract and filter metal particulate fumes created in welding processes. The ProtectoTwin is supplied with a 2.5m hose and magnetic foot welding nozzle. ProtectoTwin is fitted with a BIA M filter cartridge that filters hazardous substances to an extent of more than 99 per cent.

Dual Port facilitating local extraction via hood and torch extraction from a single unit. The filter can be cleaned manually or with compressed air, providing a long filter life. The particles are collected in a dust collection drawer and can be easily removed from the unit. The ProtectoTwin is highly portable weighing only 25kg and is supplied on swivel castors.



Features

- Speed control
- 2 suction ports Ø 50 mm
- 1 temporary cover for an inlet port
- Optical filter control
- Automatic dedusting
- 5 metre mains cable
- 2.5 metre suction hose
- Nozzle with magnetic foot

Ordering information

ProtectoTwin twin port extractor 230v	EXT1TWI230
ProtectoTwin filter	EXT9870003
Fishtail Nozzle 45mm with magnetic base	EXT96317
Round Nozzle 45mm with magnetic base	EXT963171
Slit Nozzle 45mm with magnetic base	EXT96318
Suction hose 45mm 2.5m with couplings	EXT9631925
Suction hose 45mm 5m with couplings	EXT9631950
Suction hose 45mm 10m with couplings	EXT9631910
ProtectoTwin Carbon Brushes	EXT9870004

ProtectoCart 110/230v

Compact vacuum extraction system



Single
Phase

ProtectoCart is a compact and affordable high-vacuum mobile cartridge filter that can be manually cleaned with compressed air. Its space-saving design and impressive negative pressure make it a viable light duty option for evacuating and filtering the fumes and particles produced by a variety of welding applications.

A maintenance free turbine draws the fumes/dust through a GORE-TEX filter cartridge with up to two suction ports. A digital interface gives easy control of the turbine speed and filter monitoring. The system is configured to enable manual cartridge cleaning using compressed air. A specially sized polyethylene bag can be fitted into the collection bin to make waste removal easier.



Features

- Automatic speed control
- High quality GORE-TEX filter cartridge
- 2 suction ports \varnothing 50 mm
- 1 port cover for suction nozzle
- Service-friendly maintenance door
- Dust collecting tray
- Operating hours meter.
- Optical filter monitoring
- 5 metre mains cable

Ordering information

ProtectoCart Twin Port Extractor 230v PKG	EXT1CAR230
ProtectoCart Twin Port Extractor 110v PKG	EXT1CAR110
ProtectoCart replacement filter	EXT100281
Fishtail Nozzle 45mm with magnetic base	EXT9637
Round Nozzle 45mm with magnetic base	EXT963171
Slit Nozzle 45mm with magnetic base	EXT96318
Suction hose 45mm 2.5m with couplings	EXT9631925
Suction hose 45mm 5m with couplings	EXT9631950
Suction hose 45mm 10m with couplings	EXT9631910

ProtectoXtract 110/230v

Portable, high-efficiency extraction system

1
Phase

Single
Phase

ProtectoXtract is a BGI approved mobile extraction system for filtration of particulate fumes, dusts and some gases. The ProtectoXtract uses a 5-stage filtration system, with replaceable filters and is quiet in operation (<68dB[A]).

The ProtectoXtract is supplied with a 3 metre extraction arm, hose with internal joints and provides air movement of 1300 m³/h. The ProtectoSpark Grinding Filter comes already installed for use in grinding applications. Compliant with DIN EN ISO 15012-1, so is suitable for category W3 stainless welding fumes (>30% Ni+Cr). The ProtectoXtract is a mobile unit, weighing only 80kg and is supplied on swivel casters for manoeuvrability.



Class W3

ProtectoTop See page 60



Wall mounting kit



Now available



ProtectoBench See page 61

Features

- Washable aluminium filter
- Gross filter with a large surface area
- Prefilter
- Activated carbon filter
- Main filter with separation efficiency of $\geq 99\%$
- Electronic filter monitoring
- Operating hours meter
- 5 metre mains cable
- ProtectoSpark grinding filter (fitted as standard)
- Side extraction available on request

Ordering information

ProtectoXtract Mobile Extractor 110v Welding & Grinding Pkg	EXT1MOB110WG
ProtectoXtract Mobile Extractor 230v Welding & Grinding Pkg	EXT1MOB230WG
Replacement Activated Carbon Filter	EXT978006
Replacement Gross Filter	EXT978003
Replacement Pre-Filter	EXT978004
Replacement Main Filter	EXT978005
Replacement Hose (10m)	EXTPV150
Wall Mounting Kit	EXT201700036

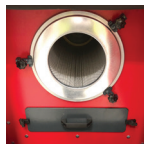
ProtectoXtra 110/230v

Portable, high-efficiency extraction system



ProtectoXtra mobile extraction system for filtration of particulate fumes and dust. The ProtectoXtra incorporates a cleanable, reusable PTFE cartridge filter for improved economic operations.

The ProtectoXtra is supplied with a 3 metre extraction arm, hose with external joints and provides air movement of 2200 m³/h. The PTFE cartridge filter comes already installed. The ProtectoXtra is a mobile unit, weighing 170kg and is supplied on swivel casters for manoeuvrability.



Reusable, cleanable
filter cartridge

Features

- PTFE cartridge 10m²
- Pressure switch alarm
- Filter separation efficiency of $\geq 99\%$ @ 0,2 - 2 μ
- Electronic filter monitoring
- Operating hours meter
- 10 metre mains cable
- Non-woven polyester filter (fitted as standard)
- Filter class H13/14
- W3 compliant

Ordering information

ProtectoXtra Mobile Extractor 110v/230v	EXT1LEV
Cartridge	EXTLEVCART
Replacement Hose (10m)	EXTPVC160
Replacement Hood	EXTLEVHOOD

ProtectoXtract Twin 415v

Portable, high-efficiency extraction system



Three
Phase

ProtectoXtract Twin is a FDA approved mobile high-vacuum extraction system for filtration of particulate fumes, dusts and some gases. The ProtectoXtract Twin uses a two stage filtration system, with replaceable filters and is quiet in operation (<72dB[A]).

The ProtectoXtract Twin is supplied with 2x 2m, 3m or 4m extraction arms, hose with internal joints, and provides air movement of 3500 m³/h. When used with processes that produce spatter, the optional Aluminium Spark Arrestor Filter must be used. Compliant with DIN EN ISO 15012-1, so is suitable for category W3 stainless welding fumes (>30% Ni+Cr). The ProtectoXtract Twin is a mobile unit, weighing only 130kg and is supplied on swivel castors for manoeuvrability. Operates from a 415v mains input supply.



Features

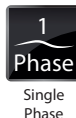
- Audio and visible filter monitor
- 2 stage filter system
- Intergrated hour meter
- 2x 2m, 3m or 4m extraction arms, available

Ordering information

ProtectoXtract Twin Mobile 415v 2M	EXT3MOB2415T
ProtectoXtract Twin Mobile 415v 3M	EXT3MOB3415T
ProtectoXtract Twin Mobile 415v 4M	EXT3MOB4415T
Optional Aluminium Spark Arrestor Filter	EXT100008
Replacement Pre Filter Mats (x10)	EXT10032
Replacement Main Filter	EXT10029
Optional Spark Latch 160mm	EXT95014901601

ProtectoAirFill 110/230v

Portable fume extractor



ProtectoAir Fill is a BGIA approved mobile fume filter type UPF-BIA class W3 incorporating a separator. Featuring a durable large surface area reusable filter cartridge with PTFE laminate, complete with audible and visible filter monitor, rotational direction indicator and hour meter.

The unit is capable of handling up to 1300 m³/hr and is available with a 2, 3 or 4 metre 150mm dia hose type arm with internal support structure. The unit has a 1.1 kW fanset and is supplied with a 5m mains input cable and plug. The filter cartridge can be cleaned quickly and easily with compressed air. This mobile unit weighs only 130 kg and is supplied on swivel castors for manoeuvrability.



Features

- NANO manual cleanable filter 20m²
- Optical and acoustic filter monitoring
- Operating hours meter
- Operation control lamp
- 2m, 3m, 4m hose type arm with internal support structure
- 5m mains input cable and plug
- Unit only weighs 130kg
- Optional self cleaning system

Ordering information

ProtectoAir Mobile Extractor 2m 110v	EXT1AIR2110
ProtectoAir Mobile Extractor 2m 230v	EXT1AIR2230
ProtectoAir Mobile Extractor 3m 110v	EXT1AIR3110
ProtectoAir Mobile Extractor 3m 230v	EXT1AIR3230
ProtectoAir Mobile Extractor 4m 110v	EXT1AIR4110
ProtectoAir Mobile Extractor 4m 230v	EXT1AIR4230
Auto cleaning set for ProtectoAir	EXT20170042
Replacement Hose 10m	EXTPVC150
Optional Spark Latch 160mm	EXT95014901601

ProtectoReclenz Twin 415v

Twin portable fume extractor



ProtectoReclenz Twin is a BGIA IFA certified class W3 approved mobile welding fume filter incorporating a separator. Features two durable large surface area filter cartridges with PTFE laminate, complete with audible and visible filter monitor, rotational direction indicator and hour meter.

The unit is capable of handling up to 3500 m³/hr and is available with 2x 2, 3 or 4 metre 150mm diameter hose type arm with internal support structure. The unit has a 2.2 KW fanset and is supplied with a 5m mains input cable and plug. The unit comes with two filter cartridges that can be cleaned quickly and easily with compressed air. This mobile unit weighs only 150 kg and is supplied on swivel castors for manoeuvrability.



Features

- Two durable large surface area filter cartridges
- Audible and visible filter monitor
- Rotational direction indicator
- Hour meter
- 2m, 3m, 4m hose type arms with internal support structure
- 5m mains input cable and plug
- Unit only weighs 150g

Ordering information

ProtectoReclenz Twin Mobile 2m 415v	EXT3REC2415T
ProtectoReclenz Twin Mobile 3m 415v	EXT3REC3415T
ProtectoReclenz Twin Mobile 4m 415v	EXT3REC4415T
Filter Cartridge 10m2 BIA M 327 x 600mm	EXT10025
Pre-coat for filter cartridges, 100g	EXT9510050001
Optional Spark Latch 160mm	EXT95014901601

ProtectoAutoclenz Twin 415v



Portable fume extractor

ProtectoAutoclenz Twin is a self cleaning mobile fume filter type PF incorporating a separator, a durable large surface area filter cartridge, complete with a filter monitor, post-cleaning function and hour meter. The unit is capable of handling up to 3500 m³/hr and is complete with 2x 2, 3 or 4metre 150mm diameter hose type arm with internal support structure.

The unit has a 2.2 kW fan set and is supplied with a 5m mains input cable. ProtectoAutoclenzTwin weighs 190kg and is supplied on swivel castors for manoeuvrability.



Features

- Cleaner Work Environment: Reduces fumes and particulate in the operator and surrounding work areas.
- Two long lasting, durable filter cartridge.
- Optical and acoustic filter monitoring
- Operating hours meter
- 5m mains cable

Ordering information

ProtectoAutoclenz Twin Mobile 2m 415v	EXT3AUT2415T
ProtectoAutoclenz Twin Mobile 3m 415v	EXT3AUT3415T
ProtectoAutoclenz Twin Mobile 4m 415v	EXT3AUT4415T
Filter Cartridge 10m2 BIA M 327 x 600mm	EXT10025
Pre-coat for filter cartridges, 100g	EXT9510050001
Optional Spark Latch 160mm	EXT95014901601

ProtectoSmart 110/230v

Industrial vacuum extraction system



ProtectoSmart is best suited to extracting and filtering fume gases, as well as absorbing solvent fumes and odours. For this purpose, the unit can be equipped with one flexible extractor arm or application-specific fittings.

The polluted air is sucked into the extractor hood and transported through the extractor arm to the filter unit. Here, the coarse dust particles are collected in the pre-filter mat. Subsequently, the air is lead through the additional filtering mats to the particle filter which traps extremely fine dust particles with an efficiency of more than 99%. Then the filtered air passes through the activated carbon cassette as a last filter stage where the gases and odours will be refined. Then the air is sucked in by the ventilator and recycled to the air in the workshop through the exhaust grid at the back of the unit.



Features

- The unit has a 1.1 kW 230v no sparking fanset
- Suitable for absorbing overspray, solvents, isocyanate fumes and odours emerging from spraying, painting and works with solvent materials
- 14.5kg of Carbon
- Capable of handling up to 3000 m/hr
- 5 metre mains cable

Ordering information

ProtectoSmart 230v 2m 150mm PKG	EXT1SMA2230
ProtectoSmart 230v 3m 150mm PKG	EXT1SMA3230
ProtectoSmart 230v 4m 150mm PKG	EXT1SMA4230
Optional Spark Latch 160mm	EXT95014901601



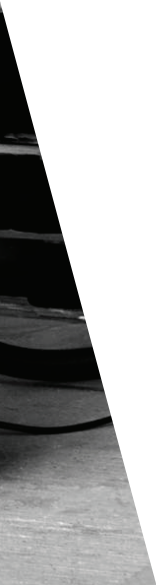
On-Torch fume extraction

Extraction at source

SifGun Evolution fume extraction torch	22-23
SifVac industrial high-vacuum system	24-27

Extraction at source is the most effective and efficient method of capturing and removing welding fumes. This minimises the risk of the welder being subjected to hazardous fumes.

The SifGun Evolution fume extraction torch is designed for use in applications which generate a large amount of fume, but the location of the weld joints makes it difficult to access with general extraction equipment. The fume nozzle is optimised to ensure maximum extraction efficiency at source.



SifGun Evolution extraction torch

MIG welding torch with integrated extraction

The SifGun Evolution fume extraction torch is an innovative MIG welding torch with integrated extraction at the welding nozzle. The extraction is close to the weld pool, so the fumes coming from the welding process are extracted immediately. As a result, the user's exposure to welding fumes is reduced by up to 95%. Unlike other models of on-torch extraction, the SifGun Evolution fume extraction torch features a bespoke, optimised nozzle, which balances pressures to prevent disruption of the shielding gases. You can therefore use the same shielding gas flow rates as with a standard MIG torch.

The welding torch is delivered 'ready to use'. It only has to be connected to a welding machine and extraction unit. The SifGun Evolution fume extraction torch is available in air-cooled and water-cooled versions.

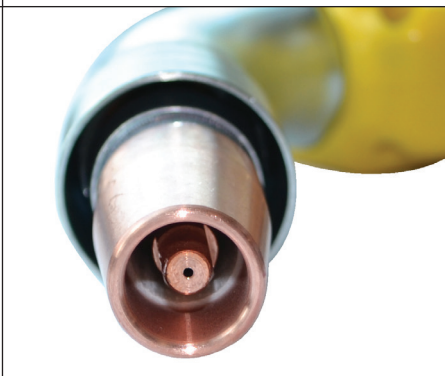
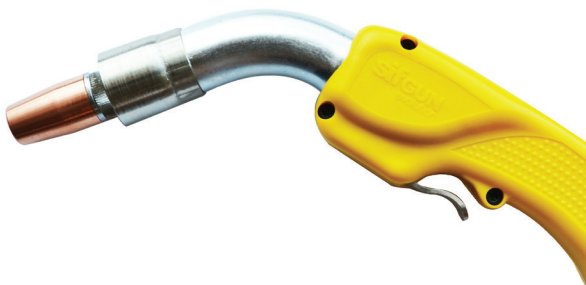
The SifGun Evolution fume extraction torch is available in 150amp, 250amp and 350amp air-cooled hand-held versions and a 500amp water-cooled version. All with 4 metre cable lengths as standard, 5 and 6 metre length cables available upon request. Conforming to EN60974-4.

A robotic version is available in 380A for automated applications.



Features

- Lightweight design
- Comfortable to use
- No disruption to shielding gas
- 95% fume reduction
- For MIG/MAG and FCAW
- Euro connection
- Standard BZL type contact tips



Ordering information

SifGun Evolution Air-Cooled 150A 4m torch

EXTEVOMT1504

SifGun Evolution Air-Cooled 250A 4m torch

EXTEVOMT2504

SifGun Evolution Air-Cooled 350A 4m torch

EXTEVOMT3504

SifGun Evolution Water-Cooled 500A 4m torch

EXTEVOMT5004

SifGun Evolution Auto/Robotic 380A Water-Cooled 2m torch

EXTEVOMT4002R

45-60mm Diameter Connector

EXTEVO4560

SifVac 110/230v

Industrial high-vacuum system



The SifVac industrial high-vacuum system is an ideal modular unit that can be modified or purpose-built for specific applications to support the extraction of fumes and dust directly at the source.

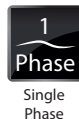
When used in combination with the SifGun fume extraction torch, the extraction of welding fumes and the filtration of particles not only allows you to maintain a clean working environment, but also guarantees the safety of the operator by eliminating fumes before they enter the breathing zone.

The SifVac industrial high-vacuum system features a solid steel frame and is equipped with either a double Ametek Lamb single-phase motor, or a brushless turbine motor providing a continuous rated and maintenance free solution. Inside the filter chamber is a large M-class filter with high filtration efficiency. The Dustop semi-automatic cleaning system filter allows the operator to clean the filter with ease by lifting the flap on the chamber. This simple operation allows the user to maintain the maximum filtering capacity and the best performance of the SifVac system.



Main Features

- 110 or 230v availability
- Suction powered by a powerful single phase motor
- Multiple configurations available including a twin motor unit and brushless motor
- Metal Pre-filter stops sparks
- Integrated filter cleaning system
- Automatic Stop/Start available
- Choice of 15 or 20 litre detachable dust collection container
- M-class filter for high filtration efficiency
- Castors for easy manoeuvrability
- Optional brush kit
- W3 compliant



Packages

PACKAGE 1 – TWIN MOTOR HEAD WITH 15LTR BODY

Features

- Two single phase by-pass motors
- 360m³/h maximum airflow
- 2500 mmH₂O maximum depression
- Cartridge filter
- Metal pre-filter to stop sparks
- Automatic start / stop
- Dustop filter cleaning system
- 15ltr detachable container with handle
- Castors for easy manoeuvrability

(Optional 20ltr container for both machines)

PACKAGE – BRUSHLESS TURBINE MOTOR HEAD WITH 20LTR BODY

Features

- Single phase brushless turbine motor head
- 250 m³/h maximum airflow
- 2300 mmH₂O maximum depression
- Cartridge filter
- Metal pre-filter to stop sparks
- Dustop filter cleaning system
- 15ltr detachable container with handle
- Castors for easy manoeuvrability

ADDITIONAL OPTIONS & SPARES

HD Brush Kit	EXTSVAC01
Branch Connector + Airflow Reg	EXTSVAC02
Cartridge Filter	EXTSVAC03
Replacement Seal	EXTSVAC04
Washable Spark Filter	EXTSVAC05
110v 1000W Bypass Motor	EXTSVAC07
110v 750W Bypass Motor	EXTSVAC08
230v 1000W Bypass Motor	EXTSVAC09
Fishtail Nozzle 45mm	EXT96317
Slit Nozzle 45mm	EXT96318
Round Nozzle 45mm	EXT963171



Package Ordering information

	110V	230V
Package 1 – Twin motor head with 15ltr body	EXTSVAC110T15	EXTSVAC230T15
Package 2 – Brushless turbine motor head with 15ltr body	EXTSVAC110CI5	EXTSVAC230CI5

sifVAC™ Configurations

110/230v

1
Phase
Single
Phase

*Two single phase
by-pass motors*

*Single phase
brushless turbine
motor head*

**3 head
options**



**2 detachable container
size options**

**M-class cartridge
filter**



**15ltr detachable
container.**

**20ltr detachable
container.**

SifVac POD 70/75/125/185v

Centralised industrial high-vacuum system



The SifVac POD high-vacuum industrial systems can deliver multiple points for on-torch extraction. It is an ideal modular concept that can be modified or purpose-built for specific applications to support the extraction of fumes and dust directly from the point of origin. When used in combination with the SifGun Fume Extraction MIG Torch, the extraction of MIG welding fumes and filtration of particles maximises the safety of the operator by eliminating fumes at source and before they enter the breathing zone.

Able to extract and filter metal particulate fumes created during the welding process as well as dust and fumes created in the construction industry. The SifVac POD is suitable for use in workshops, large fabrication areas and for a multi-operator central torch extraction system.



ADDITIONAL INFORMATION

	70	75	125	185
Maximum air flow m ³ /h	550	750	1100	1350
Tangential suction inlet with integrated separation cyclone	✓	✓	✓	✓
Extractable collection container with optional use of disposable bags		✓	✓	✓
Complete steel construction	✓		✓	✓
High filtration efficiency	✓		✓	
Lowest noise level		✓		
Side channel blower motor, powerful and silent, totally maintenance free	✓	✓	✓	✓
Star-triangle switchboard for progressive motor start		✓	✓	✓
Integrated automatic filter cleaning system		✓		✓
Filter-shaking cleaning system with compressor for self clean	✓	✓	✓	✓
Pressure relief valve for motor protection		✓	✓	✓
Vacuum gauge to detect filter clogging	✓		✓	✓
Fork lift intakes included		✓		
Simultaneous suction of solid, dust and liquid material				✓
Largest Surface Filter in its category		✓		
Torch extraction points	4	6	8	10

Ordering information

	70V	75V	125V	185V
Machine Part Number	EXT3SVAC70	EXT3SVAC75	EXT3SVAC125	EXT3SVAC185

Extractability
Protection
EDI



Weldability
ProtectoAnchleaz

Weldability
ProtectoNtract

Environment monitoring

for the industrial workplace

ProtectoScan EDI

30-31

The ProtectoScan EDI is an Environmental Detection Instrument (EDI) that provides intelligent, data-driven protection and interaction (optional) in the industrial workplace. It measures and records real-time data for dust/fume particulate, noise, temperature and humidity.



ProtectoScan EDI

Environment monitoring

The ProtectoScan EDI is an Environmental Detection Instrument (EDI) that provides intelligent, data-driven protection and interaction (optional) in the industrial workplace. An indoor atmosphere monitoring instrument that measures and records real-time data for dust/fume particulate, noise, temperature and humidity, EDI catches the eye with an LED traffic light display, alerting users to any notable issues, giving users instant feedback and a visual representation of what is going on in their workshop.

Users will also benefit from EDI email alerts when exposure limits are surpassed. All live data sits at the users' fingertips via WiFi on the dedicated WebApp, turning the EDI into the perfect cloud-based solution, monitoring and recording exposure levels for every second of the day, 365 days a year.

It's easy to see why the ProtectoScan EDI is independently certified. The continuous monitoring of air quality in the workplace can contribute significantly to protecting the health of employees by enabling employers to take appropriate measures and set up automatic integration of fans or similar devices.

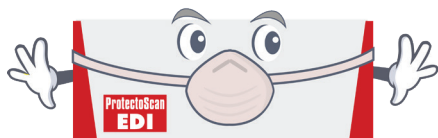
Just as essential for the employer duty of care is the Extractability service and provision of a full report and certificate of calibration for competent risk assessment.



Main features

Features

- LED bar with traffic light function
- WiFi Antenna
- Ethernet connection
- Measures particle density, temperature, air humidity and volume
- Records real-time data, 24/7, 365 days a year
- Display and reading of the measurement data via dedicated cloud-based WebApp
- Remote and manual switching on/off via WebApp
- Three potential-free switching relays to activate equipment/accessories



EDI will measure down to PM 2.5 particle size fume and dust and advise when exposure levels have been breached.



EDI will measure the noise level at any time and advise if levels are infrequent or consistent.



EDI will measure the working area temperature at all times of the year and records throughout.



EDI will measure the humidity levels applicable within the workplace.



EDI will store data and provide a calibrated annual report on all areas measured. It will also provide immediate notification by traffic lights and email.

Ordering Information

Description	Part Number
ProtectoScan EDI Unit	EXT201701402111
AirController for EDI	EXT201701502111
FilterMonitor for EDI	EXT201701522111
Replacement Sensor Array for EDI	EXT017014030



Fixed fume extraction units

for industry

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The hazards of exposure to welding fumes, dust, and vapours in the workplace is a serious health risk, and with ever changing workplaces, the need to reduce energy costs and meet environmental issues is key.

Extractability fixed filtration units can assist in meeting these matters. Fixed filtration units for fumes, dust, and vapours can save valuable work space and can be located inside or outside the factory/workshop.

ProtectoXtract Wall 415v

Wall mounted filter



ProtectoXtract Wall is a FDA approved wall mounted welding fume extraction system for filtration of particulate fumes, dusts and some gases. The ProtectoXtract Wall unit uses a two stage filtration system, with replaceable filters and is quiet in operation (<70dB[A]). The ProtectoXtract Wall is supplied with a 2m, 3m or 4m extraction arm, hose with internal joints, and provides air movement of 2500 m³/h. When used with processes that produce spatter the optional Aluminium Spark Arrestor Filter must be used.

Compliant with DIN EN ISO 15012-1, so is suitable for category W3 stainless welding fumes (>30% Ni+Cr). The ProtectoXtract Wall unit weighs only 122kg and operates from a 415v mains input supply.



Features

- 2 stage filtration system with replaceable filters
- Extensive prefilter mat
- 2m, 3m or 4m extraction arm, hose with internal joints , and provides air movement of 2500 m³/h.
- Optical filter monitoring
- Tightly fitting lifting device
- Operating hours meter

Ordering information

ProtectoXtract Wall 2M	EXT3MOB2415W
ProtectoXtract Wall 3M	EXT3MOB3415W
ProtectoXtract Wall 4M	EXT3MOB4415W
Replacement Hose 10m	EXTPVC150
Aluminium Spark Arrestor Filter	EXT100008
Replacement Pre Filter	EXT10032
Replacement Main Filter	EXT10029
Optional Spark Latch 160mm	EXT95014901601

ProtectoXtract Wall Twin 415v

Twin wall mounted filter



ProtectoXtract Wall Twin is a FDA approved wall mounted welding fume extraction system for filtration of particulate fumes, dusts and some gases. The ProtectoXtract wall unit uses a 2 stage filtration system, with replaceable filters and is quiet in operation (<72dB[A]).

The ProtectoXtract Wall Twin is supplied with 2x 2m, 3m or 4m extraction arms, hose with internal joints, and provides air movement of 3500 m³/h. When used with processes that produce spatter, the optional Aluminium Spark Arrestor Filter must be used.

Compliant with DIN EN ISO 15012-1, so is suitable for category W3 stainless welding fumes (>30% Ni+Cr). The ProtectoXtract Wall Twin arm unit weighs only 142kg and operates from a 415v mains input supply.

Features



- Cleaner Work Environment: filters particulate fumes, dusts and some gases
- Extensive filter mat
- 4 stage filtration system
- Quiet operating system
- Optical filtering monitoring
- Tightly fitting lifting device
- Operating hours meter

Ordering information

ProtectoXtract Wall Twin 2M	EXT3MOB2415WT
ProtectoXtract Wall Twin 3M	EXT3MOB3415WT
ProtectoXtract Wall Twin 4M	EXT3MOB4415WT
Replacement Hose 10m	EXTPVC150
Aluminium Spark Arrestor Filter	EXT100008
Replacement Pre Filter	EXT10032
Replacement Main Filter	EXT10029
Optional Spark Latch 160mm	EXT95014901601 x2 Required

ProtectoAutoclenz Wall 415v



Wall mounted filter

ProtectoAutoclenz Wall unit is a self cleaning wall mounted welding fume filter incorporating a separator, one durable large surface area filter cartridge, and complete with a filter monitor, post-cleaning function and hour meter. The separation efficiency is > 99%

The unit is capable of handling up to 2500 m³/hr and is available with 2x 2, 3 or 4m 150mm diameter hose type arm with internal support structure.

The unit has a 1.5kW fanset and is supplied with a 5m mains input cable. ProtectoAutoclenz Wall unit weighs 165kg.



Class W3



Features

- Cartridge filter unit with one filter cartridge
- External control unit with monitoring elements
- Silencer
- Dust container
- Optical filter monitoring
- Operating hours meter

Ordering information

ProtectoAutoclenz Wall 2M	EXT3AUT2415W
ProtectoAutoclenzWall 3M	EXT3AUT3415W
ProtectoAutoclenzWall 4M	EXT3AUT4415W
Replacement Hose 10m	EXTPVC150
Filter Cartridge 10m ² BIA M 327 x 600mm	EXT10025
Pre-coat for filter cartridges, 100g	EXT9510050001
Optional Spark Latch 160mm	EXT95014901601

ProtectoAutoclenz Wall Twin

415v Twin wall mounted filter



Three
Phase

ProtectoAutoclenz Wall Twin unit is a self cleaning wall mounted welding fume filter incorporating a separator, two durable large surface area filter cartridges, and complete with a filter monitor, post-cleaning function and hour meter.

The unit is capable of handling up to 3500 m³/hr and is available with 2x 2, 3 or 4m 150mm diameter hose type arms with internal support structure.

The unit has a 2.2kW fanset and is supplied with a 5m mains input cable. ProtectoAutoclenz Wall Twin unit weighs 165kg.



Features

- Fully automatic cleaning via Power-Spray-System
- Two long lasting filter cartridges
- Dust container
- Compressed air container
- Wall bracket
- The unit has a 2.2kW fanset and is supplied with a 5m mains input cable
- Post-cleaning function
- Hour meter

Ordering information

ProtectoAutoclenz Wall Twin 2M	EXT3AUT2415WT
ProtectoAutoclenz Wall Twin 3M	EXT3AUT3415WT
ProtectoAutoclenz Wall Twin 4M	EXT3AUT4415WT
Replacement Hose 10m	EXTPVC150
Filter Cartridge 10m ² BIA M 327 x 600mm	EXT10025
Pre-coat for filter cartridges, 100g	EXT9510050001
Optional Spark Latch 160mm	EXT95014901601 x2 Required

Protecto EcoCube 415v



Fixed filter

Protecto EcoCube is a filter unit equipped with filter cartridges applicable for nearly every task in the area of fume and dust filtration. The polluted air is extracted by means of the ventilator and guided towards the filtering section. The toxic particles are deposited on the surface of the filter cartridges. The cartridges are cleaned automatically by compressed air. The particles deposited on the cartridge are detached by the compressed air blast and reach a dust collecting tank. The cleaned air is recycled back into the working space without any heat loss.

The main parts of the Protecto EcoCube are the fan, pneumatic housing, filter section including cartridges, sparklatch and dust collecting section as well as the control unit for filter cleaning.



Features

- Pneumatic housing
- Integrated spark pre-separator
- Quiet operation
- Optical filter monitoring
- Operating hours meter
- Maintenance door
- Airflow from 4500-10,000 m³/h
- Four cartridges 80m² area
- Collection bin
- Built in fan and filter control

Ordering information

EcoCube 400v 5.5kw 3ph	4 - 5 Arms	EXT3CUB55
EcoCube 400v 7.5kw 3ph	6 - 7 Arms	EXT3CUB75
EcoCube 400v 11kw 3ph	8 - 10 Arms	EXT3CUB11

ProtectoCube 2N-2H 415v



Fixed filter

ProtectoCube 2N-2H is suitable for various suction problems at several working places at the same time for work involving unalloyed and precious metals, galvanized material and aluminium. The unit is IFA certified for welding fume class W3.

The released fumes and dusts are extracted via appropriate suction elements and guided into the filter unit. A baffle plate with a large surface serves as pre-separator and distributes the particles on the whole filter surface. All filter units are fitted with hanging filter cartridges enabling heavy particles to fall down directly into the dust container.

The filter cartridges are precoated and work with a special filter medium. This considerably increases their lifetime compared to standard cartridges.



Class W3

Features

- Fully automatic cleaning via Power-Spray system
- Low wear and gentle for the cartridges due to the process only needing 4 bar
- Fan with soundproof housing
- Maintenance door
- Control unit for fan
- Integrated compressed air container
- Two cartridges 40m²

Ordering information

ProtectoCube 2N 1.5Kw Unit 415V	EXT3CUB2N15	Optional Spark Latch 250mm	EXT95014902501
ProtectoCube 2N 2.2Kw Unit 415V	EXT3CUB2N22	Optional Spark Latch 250mm	EXT95014902501
ProtectoCube 2N 3Kw Unit 415V	EXT3CUB2N3	Optional Spark Latch 250mm	EXT95014902501
ProtectoCube 2N 4Kw Unit 415V	EXT3CUB2N4	Optional Spark Latch 315mm	EXT950149031505
ProtectoCube 2H 3Kw Unit 415V	EXT3CUB2H3	Optional Spark Latch 315mm	EXT950149031505
ProtectoCube 2H 4Kw Unit 415V	EXT3CUB2H4	Optional Spark Latch 315mm	EXT950149031505

ProtectoCube 4N - 4H 415V



Fixed filter

ProtectoCube 4N - 4H is suitable for various suction problems at several working places at the same time for work involving unalloyed and precious metals, galvanized material and aluminium. The unit is IFA certified for welding fume class W3.

The released fumes and dusts are extracted via appropriate suction elements and guided into the filter unit. A baffle plate with a large surface serves as a pre-separator and distributes the particles on the whole filter surface. All filter units are fitted with hanging filter cartridges enabling heavy particles to fall down directly into the dust container.

The filter cartridges are precoated and work with a special filter medium. This considerably increases their lifetime compared to standard cartridges.



Class W3

Features

- Fully automatic cleaning via Power-Spray system
- Display control unit
- Dust container with snap fasteners
- Fan with control unit
- Maintenance door
- All filter units fitted with hanging filter Cartridges
- Particle sensor
- Four cartridges 80m²

Ordering information

ProtectoCube 4N 2.2Kw Unit 415V	EXT3CUB4N22	Optional Spark Latch 250mm	EXT95014902501
ProtectoCube 4N 3Kw Unit 415V	EXT3CUB4N3	Optional Spark Latch 250mm	EXT95014902501
ProtectoCube 4N 4Kw Unit 415V	EXT3CUB4N4	Optional Spark Latch 250mm	EXT95014902501
ProtectoCube 4N 5.5Kw Unit 415V	EXT3CUB4N55	Optional Spark Latch 315mm	EXT950149031505
ProtectoCube 4N 7.5Kw Unit 415V	EXT3CUB4N75	Optional Spark Latch 315mm	EXT950149031505
ProtectoCube 4N 11Kw Unit 415V	EXT3CUB4N110	Optional Spark Latch 315mm	EXT950149031505

Protecto ZPF 6H 415v

Central suction and filter unit



Three
Phase

Suitable for various extraction tasks at several working places at the same time. Especially suitable for large amounts of air. The central, self cleaning cartridge filter system cleans the polluted air that is guided by an extraction element suitable for practical application through a specially designed ducting system. A baffle plate with a large surface made of copper serves as a preseparator and disperses the particles on the whole filter surface. A suitable sized extraction fan is required.



Class W3



Features

- Fully automatic cleaning via POWER SPRAY-SYSTEM
- Display control unit
- 6 extensive filter cartridges with 25 m² filter surface each
- Dust collecting tray with snap fasteners
- Integrated compressed air container
- Maintenance doors
- Filter required
- PE bag for the dust collecting tray

Ordering information

Protecto ZPF 6H - 500 5.5kw

EXTZPF6H55

Protecto ZPF 6H - 600 7.5kw

EXTZPF6H75

Protecto ZPF 6H - 800 11kw

EXTZPF6H11

Protecto ZPF 9H-IFA 415v

3
Phase

Three
Phase

Central suction and filter unit

Suitable for various extraction tasks at several working places at the same time using unalloyed and precious metals, galvanized material and aluminium. Especially suitable for large amounts of air. This unit is IFA certified for welding fume class W3.

The central, self cleaning cartridge filter system cleans the polluted air that is guided by a suction element suitable for practical application through a specially designed ducting system. The advantages are the optimal self cleaning performance (high lifetime of the cartridges, high suction performance) and the user-friendliness with low maintenance. The filter cartridges are precoated Ex-works. This procedure considerably increases the lifetime compared to standard filter cartridges. A suitable sized extraction fan is required.



Features

- Housing made of stable steel plate with powder coating from inside and outside
- Low wear and maintenance dedusting via POWER SPRAY-SYSTEM
- Dust collecting tray
- Precoated filter cartridges of the category BIA M (separation efficiency $\geq 99\%$)
- Display control unit
- Filter medium (Precoat)
- PE bag for the dust collecting tray
- 9 extensive filter cartridges with 25m² filter surface area

Ordering information

Protecto ZPF 9H 7.5kw	EXTZPF9H75
Protecto ZPF 9H 11kw	EXTZPF9H11
Protecto ZPF 9H 15kw	EXTZPF9H15

CV Filter

Retrofit in-line filter for ducted extraction arms

The filter is designed to handle welding fumes from one work station, but several filters can be used in parallel and connected to serve several work stations in the same system. To be used in conjunction with VTA systems as an in-line filter for returning clean air back into the workplace.

The filter cartridge has a surface area of 22m². As a protection against larger particles a pre-filter c/w mesh is included inside the unit. The filter cartridge and steel casing is mounted between two gables on an anodised aluminium profile.



Features

- Powered coated steel/paperboard filter casing
- Powered coated steel brackets
- Maximum temperature processed air 60°C
- Filter cartridge type CFD 220
- Filter efficiency to EN-60335-2-69 99%
- Dust class M(BIA)
- Filter area 22m²
- Pre-filter mesh
- Ideal for converting existing non-filtering systems

Ordering information

CV Filter	EXTCVD
Replacement Filter	EXTCFD220

ProtectoSpark Latch

Accessories

ProtectoSpark Latch consists of a separate housing with integrated copper plates. The assembly of the copper plates guarantees a multiple air scoop. Sparks bump into the baffle plates and emit their energy. The Spark Latch can be screwed to the filter unit or integrated into the suction ducting. Equipped with a maintenance tray for cleaning as required.



Features

- Pre-separation of hot sparks prior to ductwork connection to filter systems.
- Reduces the risk of filter media catching fire.
- Baffle plates
- Maintenance door

Ordering information

Spark Latch 160mm diameter mobile	EXT95014901601
Spark Latch 160mm diameter	EXT9501490160
Spark Latch 200mm diameter	EXT950149020005
Spark Latch 224mm diameter	EXT950149224
Spark Latch 250mm diameter	EXT95014902501
Spark Latch 280mm diameter	EXT9501490280
Spark Latch 315mm diameter	EXT950149031505
Spark Latch 355mm diameter	EXT95014935510
Spark Latch 400mm diameter	EXT95014940010

ProtectoSpark Pre-Separator

Accessories

The ProtectoSpark Pre-Separator separates hot sparks via the inside baffle plates, causing the residual hot sparks to fall into the water trough. The air then passes into the main duct work system or filter.



Features

- Level control
- Housing made of stainless steel
- Inspection glass for monitoring the water level
- Control and maintenance door with snap-fasteners
- Collecting container
- Water connection
- Transition piece for ducting
- Shut-off valve

Ordering information

ProtectoSpark Pre-Separator 3000	EXT201010205
ProtectoSpark Pre-Separator 6000	EXT201040205
ProtectoSpark Pre-Separator 12000	EXT201080205

Airtech 415v

Central ambient fume suction and filter unit for room ventilation

3
Phase
Three
Phase

Airtech is a stand alone system. It is mainly used for industry and welding companies where a suction solution right at the source can not be installed or where the Airtech unit is used for additional cleaning of the production hall.

The polluted air is sucked into the extraction channels attached on either side of the unit at a height of about 3m and then led into the filter section where the particles stick to the surface of the filter cartridges.

The filter cartridges are automatically air cleaned at preset intervals. The particles are loosened from the surface of the filter and fall into the dust collecting container. The cleaned air is recycled back into the room by individually adjustable high reach jet nozzles. That way the polluted air is also moved into the direction of the suction canals.

As a safety device the unit is equipped with a particle sensor on the clean air side. This way the system is constantly monitored to protect it from filter breakdowns. If an error occurs, the fan is automatically shut off and simultaneously emits an optical and acoustic warning signal.



Part numbers on request

Technical data

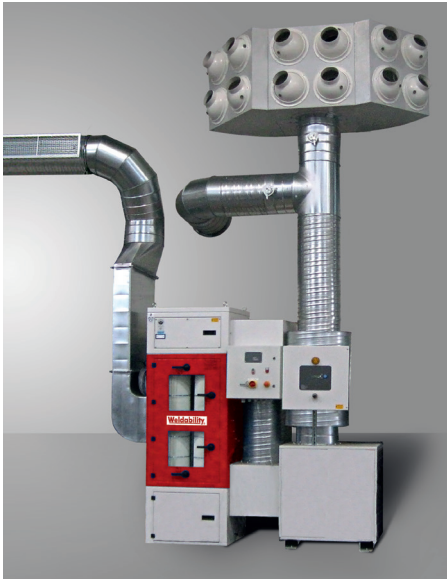
Max. volumetric flow of the fan	10,000-30,000 m ³ /h
Motor performance	11kw, 15kw, 22kw
Separation efficiency	≥ 99 %
Dimensions	1880 x 3510 x 6810 mm (Width incl. canals 4 500 mm, depth incl. jets 1455 mm)

BlowTec 415v



Central ambient fume suction and filter unit for room ventilation

BlowTec is a central suction and filter unit that is a perfect solution for every kind of work that requires more than extraction right at the source. The biggest advantage is the efficient use of energy and reduction of cost. During heating times the energy costs are considerably reduced by recirculating the cleaned, warm air back into the working environment. Alternatively it can be vented to atmosphere. The modular setup of the BlowTec is perfectly adaptable to the architecture of the room. The ducting that extracts the air and guides it to the movable jets can vary in height and length. Standard dimensions guarantee fast delivery times and quick assembly.



Part numbers on request

Features

- Housing made of stable steel plate (powder coating inside and outside)
- Fully automatic cleaning via POWER SPRAY-SYSTEM
- Fan with soundproof housing
- Filter cartridges, category BIA M
- Particle sensor
- Filter unit
- Control (filter/motor)
- Nozzle head
- Silencer
- Connection between filter unit, fan unit and nozzle head
- Filter medium (precoat)
- PE bag for the dust collecting tray

Technical data

Max. volumetric flow of the fan	7 500 – 10 000 m ³ /h
Motor performance	7,5 – 11,0 kW
Separation efficiency	≥ 99 %

Wet Dust Collector 415v

3
Phase

Three
Phase

Fixed filter

Wet Dust Collector unit is simple and trouble-free during operation. The air is cleaned by swirling the dust with water. The particles in the air flow are enclosed by water and bonded. The extracted dust particles settle in the lower water tank and can then be discharged by the ball valve, which is installed at the lowest point of the unit and can then be removed through a maintenance flap. The fan is suitable for continuous operation and is included with the unit as standard. The engine of the wet cyclone separator requires very low maintenance.



Part numbers on request

Features

- Self induced spray wet collector ranging from 0.2m³/s to 4.5m³/s
- Efficiency levels of up to 98%
- Integrated fan
- Easily maintainable
- Suitable for use with aluminium dust

Technical data

Max. volumetric flow of the fan	1500 – 9000 m ³ /h
Max pressure	1400 - 2700pa
Motor Performance	1.5 - 11kw

OilCube

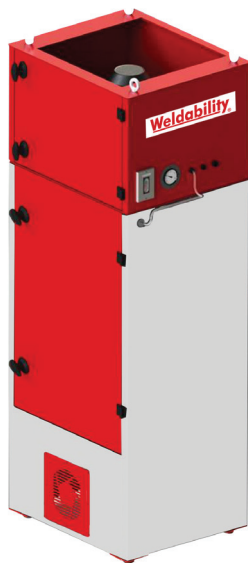
Central suction and filter unit for oil mists



OilCube is designed to remove hazardous oil mist that is created by heat treatment processes such as CNC milling/ profiling machines. Inhalation of such mist can cause severe breathing difficulties as well as irritation to the eyes, nose and throat.

The OilCube is a compact design and is a plug & play device that contains all its own accessories. It will also decrease you time and labour expenses due to its custom engineered filters and oil drainage system. OilCube is extremely quiet thanks to its insulated ventilation cabin.

The OilCube takes dirty oil mist and collects it in the OilCube metal filters. It then drains into the mesh filters before being filtered by the pre-coalescer filters, which are there to extend the expensive coalescer filter life. This is the final stage before releasing oil-free air back in to the atmosphere.



Features

- Fan protection with control lamp
- Oil recycling filter
- Collecting tank
- Low noise
- Six stage filtration process
- User-friendly access doors for easy maintenance

Call Extractability for assistance in selecting the appropriate OilCube model to suit the chamber volume of your CNC and air changes required.

Ordering information

OilCube 1000m ³ HEPA	EXT3OIL1000H
OilCube 1500m ³ HEPA	EXT3OIL1500H
OilCube 2000m ³ HEPA	EXT3OIL2000H
OilCube 3000m ³ HEPA	EXT3OIL3000H
OilCube 4000m ³ HEPA	EXT3OIL4000H

PASSED ✓
LET COSMIX TEST
EQUIPMENT IS SAFE TO USE

TEST DATE: **16-3-15**

EXPIRES: **16-3-16**

Extractability

TESTED BY: *[Signature]*

TESTED AT: **EXTRACTABILITY**

FOR MORE INFORMATION VISIT www.extractability.co.uk

Vent to atmosphere systems for industry

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Extractability fans are efficiently applicable for the ventilation of working places and halls. Polluted air can be extracted by means of a hose or a pipe fitting with an extraction element at the suction nozzle and can afterwards be guided outside by means of the outlet nozzle and the connected ducting.

Optionally, the air can be guided from outside to inside in order to provide working places or spaces with fresh air. Our high-quality fans are made of steel plate or silumin castings, allowing stable and suitable continuous operation.

Extractability offers a wide range of suction and collecting elements for various solutions. Our suction arms range from small diameters of 50 mm for laboratories and up to large diameters for the extraction of high amounts of welding fume. Additionally, the Extractability product portfolio consists of suction arms, cranes and hoses optimised for a variety of applications such as aluminium arms that are chemically resistant or anti-static.



Vent to Atmosphere

Packages



TELESCOPIC SUCTION ARMS

Suitable for connection to central units and individual fans. Ideal to extract pollutants produced by fixed welding benches, e.g. in welding booths

1.2m to 2.06m self supporting telescopic arm, 0.75kw 1ph fan, wall bracket, and fan to duct adaptor

EXT1VTA1

1.2m to 2.06m self supporting telescopic arm, 0.75kw 3ph fan, wall bracket, and fan to duct adaptor

EXT3VTA1



SUCTION ARMS

Suitable for welding fume extraction - The arms can either be connected to individual fans or to central suction and filter systems

2m self supporting articulated arm, 0.75kw 1ph fan, wall bracket, and fan to duct adaptor **EXT1VTA2**

2m self supporting articulated arm, 0.75kw 3ph fan, wall bracket, and fan to duct adaptor **EXT3VTA2**

3m self supporting articulated arm, 0.75kw 1ph fan, wall bracket, and fan to duct adaptor **EXT1VTA3**

3m self supporting articulated arm, 0.75kw 3ph fan, wall bracket, and fan to duct adaptor **EXT3VTA3**

4m self supporting articulated arm, 0.75kw 1ph fan, wall bracket, and fan to duct adaptor **EXT1VTA4**

4m self supporting articulated arm, 0.75kw 3ph fan, wall bracket, and fan to duct adaptor **EXT3VTA4**

LONG REACH SUCTION ARMS

Suitable for welding fume extraction - The arms can either be connected to individual fans or to central suction and filter systems. Designed for use in large workshops and factories

5m self supporting articulated arm, 1.1kw 1ph fan, wall bracket, and fan to duct adaptor **EXT1VTA5**

5m self supporting articulated arm, 1.1kw 3ph fan, wall bracket, and fan to duct adaptor **EXT3VTA5**

6m self supporting articulated arm, 1.1kw 1ph fan, wall bracket, and fan to duct adaptor **EXT1VTA6**

6m self supporting articulated arm, 1.1kw 3ph fan, wall bracket, and fan to duct adaptor **EXT3VTA6**

7m self supporting articulated arm, 1.5kw 1ph fan, wall bracket, and fan to duct adaptor **EXT1VTA7**

7m self supporting articulated arm, 1.5kw 3ph fan, wall bracket, and fan to duct adaptor **EXT3VTA7**

8m self supporting articulated arm, 1.5kw 1ph fan, wall bracket, and fan to duct adaptor **EXT1VTA8**

8m self supporting articulated arm, 1.5kw 3ph fan, wall bracket, and fan to duct adaptor **EXT3VTA8**

ProtectoFan 230v/415v



High efficiency extraction fans that are manufactured from steel plate or silumin casting, they are stable and able to be used on a continuous basis. Additionally very smooth operation is achieved by the use of static and dynamic balancing.

These fans are normally fitted to an extraction arm, central filter system or at the end of a main ductwork system. The fans can be used to remove hazardous fumes and dust. The fans are available in different versions and performances.



Features

- Up to 3000 m³/h made of silumin casting (with snap fastener)
- From 3500 m³/h and made of steel plate (with vibration absorber)
- Static and dynamic balanced impellers (guarantees smooth operation)
- Low maintenance motor

Ordering information

Motor Power	Air Flow	Connection Nozzle (Dia)	Input Voltage	Part number
0.75kw	2000 m ³ /h	160mm	230v	EXT9610123
1.10kw	2500 m ³ /h	160mm	230v	EXT9610223
1.50kw	3000 m ³ /h	160mm	230v	EXT9610323
0.75kw	2000 m ³ /h	250mm	415v	EXT961014
1.10kw	2500 m ³ /h	250mm	415v	EXT961024
1.50kw	3000 m ³ /h	250mm	415v	EXT961034
Fan connector				EXT96301

ProtectoFan 415v

3
Phase

Three
Phase



Ordering information

Motor Power	Air Flow	Connection Nozzle (Dia)	Input Voltage	Part number
2.2kw	3500 m ³ /h	250mm	415v	EXT961044
3.00kw	4000 m ³ /h	250mm	415v	EXT961054
4.00kw	5000 m ³ /h	315mm	415v	EXT961064
5.5kw	6000 m ³ /h	355mm	415v	EXT961074
7.5kw	7500 m ³ /h	400mm	415v	EXT961084
11kw	10000 m ³ /h	450mm	415v	EXT961094

Articulated Extraction Arm

The Extractability range of Wall mounting Vent to Atmosphere Fume Extraction packages feature a range of arm lengths from 2 - 4 metres. Available in 230v (1ph) or 415v (3ph). The arms can either be connected to individual fans or to central suction and filter systems.

Due to the spring-support, all arms are easily positioned and are self-supporting when adjusted into place. The volumetric flow can be individually be regulated via the throttle valve integrated in the suction hood.



Features

- Oval suction hood made of plastic (315 mm) with throttle valve
- Available lengths 2m, 3m, 4m with an additional wall bracket
- Stable wall bracket made of powder-coated sheet steel
- Connection nozzle
- Optional wall brackets for connecting to Extractability fans
- 3 joints with spring support
- Flexible suction hose (PVC) with welded steel wire spiral (temperature-resistant up to +120°C)

Ordering information

2m Articulated Extraction Arm PKG	EXT97601
3m Articulated Extraction Arm PKG	EXT97602
4m Articulated Extraction Arm PKG	EXT97603
10m Spare Hose	EXT101925
Floor Stanchion	EXT80012111

Articulated Extraction Arm

Long reach

Long reach extraction arms are available in different versions and lengths. Extraction arms are available with a 5 - 8 metre self supporting articulated arm.

The arms can either be connected to individual fans or to central suction and filter systems. Ideal for use in large workshops and factories.

Features

- Oval suction hood made of plastic (315 mm) with throttle valve
- Available lengths up to 8m with an additional wall bracket
- Connection nozzle
- Optional wall bracket for connection to Extractability fans.
- 3 joints with spring support
- Flexible suction hose (PVC) with welded steel wire spiral (temperature-resistant up to +120°C)



Ordering information

5m Articulated Extraction Arm PKG	EXT976022
6m Articulated Extraction Arm PKG	EXT976032
7m Articulated Extraction Arm PKG	EXT976024
8m Articulated Extraction Arm PKG	EXT976034
10m Spare Hose	EXTPVC150

Telescopic Extraction Arm

The Extractability range of Telescopic Extraction Arms are available in different versions. This is the ideal extraction arm in limited space applications, especially low headroom situations.

Suitable for connection to central units and individual fans. Ideal for extracting pollutants produced by fixed welding benches, e.g. in welding booths. Available in 100, 150 and 200mm diameter. The Telescopic Extraction Arm comes complete with a wall mounting bracket, low wear telescopic tube, hose and a suction hood with an integrated damper.



Features

- Available in 100, 150 & 200mm diameter.
- Complete with wall mounting bracket.
- Low wear telescopic tube and hose.
- Metal suction hood with integrated damper.



Ordering information

1.2M - 2.06M Extraction Arm 100mmØ	EXT976161002111
1.2M - 2.06M Extraction Arm 150mmØ	EXT976162111
2m Spare Hose 150mm	EXT101925
Replacement Hose 10m 100mm dia	EXTPVC100
Replacement Hose 10m 150mm dia	EXTPVC150
Replacement Hose 10m 200mm dia	EXTPVC200
Floor Stanchion	EXT80012111



Bench extraction

for industry

ProtectoXtracTop	60
ProtectoBench	61
ProtectoBench Advanced	62
Grinding Table and Welding Table	63

Downdraft tables and benches offer a highly effective fume removal solution where arms and hoods would not offer a viable solution. They remove the hazardous fumes and dusts generated by sanding, grinding, polishing and welding operations.

Fume is drawn away from the operators breathing zone as they are drawn back and down into the table bed. Downdraft tables and benches can be configured to suit any application.



ProtectoXtracTop

Fixed filter

The ProtectoXtracTop is a retro-fit-able filter unit designed specifically to extract and filter metal particulate fumes created during welding processes and enables the ProtectoXtract to be used for grinding applications. Extraction of particles takes place through a perforated plate within the supporting surface.

The ProtectoXtracTop is suitable for use in the workshop, demonstration / training bay, garage and on-site. This unit must only be used in combination with the ProtectoSpark (EXT978013).



Features

- Rear and side panels
- Perforated plate (Surface approx 1100 x 700mm)
- External dimensions 1150mm x 750mm
- Handle to lift up the work surface to gain access to internal filter

Ordering information

ProtectoXtracTop 110v PKG	EXT1MOB110TOP
ProtectoXtracTop 230v PKG	EXT1MOB230TOP
ProtectoXtracTop	EXT978016
ProtectoSpark Retro-Fit Kit	EXT978013

ProtectoBench

1000/1500/2000/2500

ProtectoBench 1000/1500/2000/2500 is a downdraft extraction bench with optional back wall extraction. The extraction bench removes hazardous fume and dust at source.

Fumes and dust are extracted downwards and also to the back wall if this option is fitted. 90% of the extracted particles are pre-separated within the bottom section of the bench which can then be disposed by means of emptying the dust tray. ProtectoBench requires a fan and filter system to be connected. It is suitable for welding and grinding alloyed and unalloyed steels, precious metals and galvanised material.



Features

- (Optional) rear wall extraction.
- (Optional) Lamella curtain folding sides.

Ordering information

1m Wide	EXTBENCH1000
1.5m Wide	EXTBENCH1500
2m Wide	EXTBENCH2000
2.5m Wide	EXTBENCH2500
1m Wide Back Wall Extraction	EXTBENCH1000E
1.5m Wide Back Wall Extraction	EXTBENCH1500E
2m Wide Back Wall Extraction	EXTBENCH2000E
2.5m Wide Back Wall Extraction	EXTBENCH2500E
Lamella Sides	EXT999200005

ProtectoBench Advanced



Three
Phase

ProtectoBench Advanced is a downdraft and back wall extraction bench with two durable large surface area filter cartridges, with manual cleaning function.

The extraction bench removes hazardous welding fume and dust at source and is an extraction and filter system in one. It is suitable for welding and grinding alloyed, unalloyed steels, precious metals and galvanised material. **Not to be used on explosive dusts.**

Optional automatic cleaning when required with compressed air. Filtered air is re-directed back into the workplace, saving on heating costs.



Features

- Hepa 13 filter area of 40m²
- Hinged side panels
- Removable bottom grills for easy access
- 2.000m³/h fan capacity
- Collection bin
- Optional PTFE cartridge HEPA 13/14

Ordering information

ProtectoBench Advanced H13	EXT562110140
Lighting Kit	EXT5621101403
ProtectoBench Advanced PTFE H13/H14	EXT562110140P
Cartridge Filter PTFE H13/H14	EXT562110140P2

Grinding Table

With its high efficiency, our Grinding Tables are made of ST-37 material and designed for the factories where grinding happens in fixed areas. Due to its special structure it captures dust which occurs during grinding, providing an efficient and healthy working area.



Features

- Underside suction grills
- Removal bottom grills
- A selection of sizes available on request
- Movable side panels to enable a flexible working zone.
- 1280 x 965 x 1520 (LxWxH)

Ordering information

Grinding Table	EXT56190120
Grinding Table Lighting Kit	EXT561901202

Welding Table

The Welding Tables are made of ST-37 material and designed for the factories where welding takes place at fixed areas. Due to its special structure it captures welding fume and provides a healthy working area.



Features

- Hood and upper side suction
- Removal bottom grills for easy access
- Side panels can be opened to give an optional flexible working space
- A selection of sizes available on request
- Movable side panels to enable a flexible working zone.
- 1310 x 985 x 1480 (LxWxH)

Ordering information

Welding Table Table	EXT56090120
Welding Table Lighting Kit	EXT560901202

Services

COSHH / LEV TESTING

Local Exhaust Ventilation systems (LEV) requires testing every 14 months under the current Control Of Substances Hazardous to Health Regulations (COSHH).

Extractability provides a comprehensive LEV Testing service to ensure your company is meeting these requirements as laid out by Regulation 9 of COSHH and the HSG258 guidance notice.

Regulation 9 of the Control of Substances Hazardous to Health 2002 Act states that "every employer who provides any control measure to prevent exposure of an employee to a substance hazardous to health, shall ensure that it is maintained in an efficient state. In efficient working order and in good repair" in addition, where engineering controls are provided, the employer shall ensure that thorough examinations and tests are carried out and a suitable record of these be kept and made available for at least five years.

In the case of local exhaust ventilation systems (LEV) the examinations and tests must be performed at least once every 14 months. (In certain circumstances this period is reduced to every 6 months e.g. where metallic dust is being controlled).

We are able to provide a complete service to test, maintain and where required, install complete fume extraction systems. This is a vital service due to increasing pressure on companies to watch their environmental footprint and to avoid health complaints from employees.



AIR QUALITY MONITORING

We offer monitoring and/or sampling of employees' exposure and background levels of hazardous dusts, vapours and fumes against health and safety executives (HSE) workplace exposure limits and in compliance with Control of Substances Hazardous to Health Regulations (COSHH)

Local and international health and safety legislation (such as COSHH, NIOSHH, OSHA etc) states that it is the employer's responsibility to protect the health, welfare and safety of their employees. Failure to do so can result in expensive legal action, potential fines and poor employee relations.

Extractability employ a dedicated team of experienced, highly-skilled engineers who operate our quality monitoring services across the UK. Contact Extractability with any questions you may have - our friendly sales department are always on hand to help.





NOISE ASSESSMENT

Excessive noise at work is a significant yet preventable problem affecting thousands of UK workplaces. Now is the time to address noise in your workplace, as the recent Control of Noise at Work Regulations lower legally acceptable noise levels.

Extractability provide a fully competent noise assessor, who will visit your premises to determine noise exposures using appropriate instrumentation, calibration, measurement and analysis techniques.

The noise assessor will identify noise hazards and establish whether the lower and upper exposure action values are being exceeded. The noise assessor will also estimate the personal daily noise exposure of employees and identify measures required to eliminate or reduce risk, control exposure and protect employees. Results are analysed and presented to incorporate immediate and future actions. Our member of staff will also make recommendations on the selection of appropriate engineering controls, hearing protection programmes, health surveillance and PPE.

DESIGN AND INSTALLATION

Extractability offers professional design and installation of extraction packages, tailored appropriately to each individual project. As with our welding fume extraction systems, we provide a complete package from design right through to installation and servicing.

In keeping with our design criteria, all aspects



of the installation are kept to the highest possible standard. This includes the ducting systems that are often overlooked. Fume and dust extraction is intrinsically linked to the extraction system. Poorly designed or installed duct runs not only look messy, they are also inefficient and can be dangerous.

We understand air movement and air flow is paramount for designing effective extraction systems. We ensure that the correct amount of air volume is moved, with zero noise disturbances. By providing a quieter and better environment for students or employees to work in, we find the levels of learning and output are significantly increased.

Input is as important as extract. This ensures that our extraction systems operate to optimum levels whilst creating a safe working environment. We design all our energy saving systems with adequately, balanced air input, keeping noise levels down.

Buildings vary greatly, so it is essential that systems are installed by experienced teams that have a comprehensive understanding of air flow technology. Our experienced installation teams will ensure solutions are completed on-time, with installation being planned with you to ensure minimum disruption to your day-to-day business operations or any new build schedule. All work is carried out in a safe and professionally managed way.

Installations are fully tested and commissioned to check they meet the original agreed specification and all necessary legal requirements.

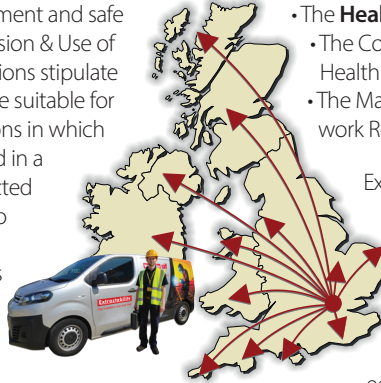


CP7 Compressed Gas Equipment Testing

Various dangers are associated with compressed gases, depending on the type of gas and the conditions it is used in. Extractability provide a complete nationwide CP7 gas equipment testing service by our own qualified technicians.

Businesses have a **duty of care** to their staff and the general public to provide a safe place of work, safe equipment and safe system of work. The Provision & Use of Work Equipment Regulations stipulate that equipment should be suitable for the purpose and conditions in which it will be used, maintained in a safe condition and inspected by a competent person to ensure it continues to be **safe to use** - with records kept to demonstrate regular inspections and maintenance.

Many insurance companies adopt a similar 'duty of care' principle, placing the burden of **responsibility on the business** to minimise the possibility of an incident with an obligation to check the safety and suitability of the equipment regularly.



Those responsible for the purchase and use of gas **welding and cutting equipment** should be aware of the current legislation, ensure all equipment is maintained and used to an acceptable standard and **tested annually**.

Inspections ensure your equipment complies with:

- The Pressure Systems Safety Regulation 2000.
- The **Health and Safety at Work Act** 1974.
- The Control of Substances Hazardous to Health Regulations 1999
- The Management of Health and Safety at work Regulations 1999.

Extractability's qualified gas equipment inspection technicians are trained to:

- Test equipment for functionality and safety compliance
- Identify and replace non-compliant equipment
- Diagnose and help prevent equipment problems
- Manage a 'Tagging' process for annual audit record keeping

Ensure that you are meeting your obligations by enlisting the services of our competent field service technicians today.

OUR ON-SITE TECHNICIANS ARE AVAILABLE IN YOUR AREA. BOOK NOW!

Welding Machine Validation

For quality control and repeatable welding performance to qualified procedures, it is vital that the calibration of your welding equipment meters is validated annually.

For your peace of mind, our nationwide team of field service technicians provide an on-site welding machine validation service, to EN 60974-14, resulting in a detailed report for

each unit, for your compliance audit records.

Each machine is inspected, vacuumed, electronically checked, weld-tested and

validated at a range of output settings. The pass or failure status, together with results and observations, are reported and/or certified, and documentation is provided within 1 week.



Welding Fume Hazard Control course

Level 1

Improve your team's awareness of fume risks and control measures

Weldability-Sif provide a complete training and certification service, which is intended to provide fundamental knowledge of hazards associated with welding and cutting and how to demonstrate good working practices to reduce exposure to fumes and gases. The higher risk activities within this unit require safeguarding at all times.

DURATION

Two days with locations at South-East, Central and North-West UK.

SUITABLE FOR

This course and qualification is suitable for welders, managers, supervisors, inspectors and other professionals within the industry sector, wishing to understand metal particulate fume creation, risk and control.

ENTRY REQUIREMENTS

There are no minimum requirements for this course although an awareness of welding environments and applications would be beneficial.

COURSE CONTENT

Learners will be provided with the fundamental knowledge associated with the generation and control of welding fume. The learner will learn how to eliminate or reduce the risks associated with exposure to welding fume and gases. Underpinning knowledge will be provided to ensure a good understanding of legislation is in place and methods are available to protect people and the environment.

OBJECTIVES

- Identify a range of welding fume hazards
- Identify how to reduce exposure to fume
- Assess risks involved with fume exposure
- Demonstrate good working practices
- Be aware of engineering solutions available.

ADDITIONAL INFORMATION

Course bookings can be made via the offline or online course booking form. The course location is at the Learn to Weld technical training centre close to London. We also offer this course on-site, subject to class size.

CERTIFICATION/AWARDING BODY

Training certificates are awarded by EAL.

COURSE REFERENCE CODE

When booking please use: WBQLEV2D.

FOR MORE INFORMATION

Web: www.learn-to-weld.com
Tel: +44(0)845 310 3355
Email: training@weldability-sif.com

Conversion tables

DUCT TRANSPORT VELOCITIES

5m/s>	Vapour, Gases, Smoke	All vapours, gases and smokes
7.5m/s>	Fumes	Paint and varnish fumes
10m/s>	Very light dust	Dry wood sander dust
12.5m/s>	Dry dust and powders	Fine rubberdust, very light shavings
15m/s>	Dry dust and powders	Light dust, metal fumes, welding fume
17.5m/s>	Industrial dusts	Grain and flour, dry sawdust
20m/s>	Industrial dusts	Grinding, shot and sand blasting, stone cutting
22.5m/s>	Heavy and moist industrial dusts	Wood chips and shavings

CONVERSION TABLE

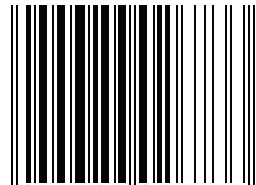
1 Cu M	=	35,3 Cu ft	1 ft WG is equivalent to 0,43 lb/sq in
1Cu M	=	220 gall	1 in WG is equivalent to 250 Pa
1 Cu ft	=	6,24 gall	1 lb/sq in is equivalent to 27,6 in WG
1 Litre/sec	=	13,2 gall/min	1 lb/sq ft is equivalent to 0,016 ft WG
1 Cu M/hr	=	3,67 gall/min	1 Cu M water weighs 1000 Kg
1 Cu M/sec	=	2120 Cu ft/min	1 Cu ft water weighs 62,4 lb
1 M/sec	=	197 ft/min	1 Cu M air weighs 1,22 Kg at NTP
1 Cu ft/min	=	1,7 Cu M/hr	1 Cu ft air weighs 0,076 lb at NTP
1 Pa	=	1 N/sq M	1 Cu M steel weighs 7,85 Tonne
1 Bar	=	1000,000 Pa	1 Cu M aluminium weighs 2,71 Tonne
1 Bar	=	14,7 lb/sq in	Specific Heats of:-
1 lb/sq in	=	6800 Pa	Air at const pressure = 0,238
1 N/sq M	=	0,000147 lb/sq in	Mild steel = 0,116
1 KW	=	1,33 hp	Aluminium = 0,214
1 KW hr	=	3400 Btu	Coefficients of Thermal Expansion:-
1 KW	=	1000 Joules/sec	Mild steel = 0,0114 mm/M/°C
1 Pa is equivalent to 0,004 in WG			Stainless steel = 0,016 mm/M/°C
1 M WG is equivalent to 0,1 Bar			Aluminium = 0,023 mm/M/ °C





Weldability sif

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