Rev. 1 - July 2022



Dust and Fume Extraction

SSR2000 SLIDING SASH FILTRATION FUME CUPBOARD



DESCRIPTION

The fully mobile SSR2000 Sliding Sash Recirculation fume cupboard is easy to manoeuvre. It passes comfortably through a standard door opening, immediately adding fume cupboard capacity to a lab. Glass panels to all four sides make it ideal for demonstrations.

HIGH LEVEL CONTROL PANEL MEMBRANE

- Airflow fail/safe indicators
- Airflow fail mute buzzer
- Light on/off switches/indicators
- Fan on/off switches/indicators

SERVICES INCLUDED

- 1x control panel as above
- 1x light fitting
- 1x double rcd socket outlet
- 1x gas fitting
- 1x cold water fitting
- 1x dripcup
- 1x pre-wired with 3-pin plug
- 1x pre-plumbed with quick release connectors
- 1x restraining cable

STANDARD FEATURES

- Toughened glass sides, back and sliding sash for 360° visibility.
- Quick-release connections for fast installation and easy relocation.
- Flush membrane control panel with visual & audible low airflow alarm.
- Excellent containment levels.
- GRP moulded worktop to contain spillages.
- RCD protected double socket.
- Low energy consumption, long life LED flat panel lighting.
- Cold water and gas valves, located outside the chamber for ease of operation.
- Polypropylene circular drip cup, bottle trap and flexible waste hose.
- External carcass constructed from powder coated aluminium.
- Built-in storage cupboard.
- Integral 18 kg carbon filter with protective pre-filter.
- Sash stop device at 400 mm for operator safety.
- Lockable castors.
- 12 month free warranty.

DOCKING STATION

- Compact, lockable housing for mains supplies.
- · Easy to install.
- Powder coated white textured finish to match the fume cupboard.
- Either a bench mounted or wall mounted model.
- Gas and water quick-release couplings plus electrical socket.
- Bench mounted model includes flexible waste connection.
- Tough 18swg Zintec steel construction.
- Stainless steel restraining cable to safeguard service connections.



Bench Mounted Docking Station



Wall Mounted Docking Station

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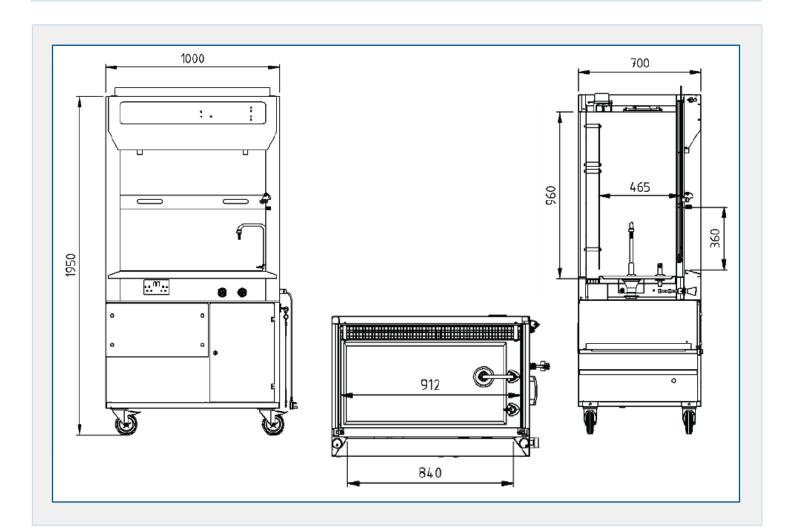


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TECHNICAL SPECIFICATION

External Dimensions	1000mm wide x 700mm deep x 1950mm high
Internal Dimensions	912mm wide x 465mm deep (baffle to sash) x 960mm high (worktop to soffit)
Sash Opening	840mm wide x 610mm high (max)
Volume	0.4m/s face velocity with an operating sash height of 400mm = 0.135m3/s
Containment	Protection Factor Robustness of Containment PFr 336,000
Service Connections	Mains supplies via docking station
Power Consumption	300W - fan, light & alarm (excluding socket)
Weight of Unit	150kg



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GENERAL

The SSR2000 is manufactured from 2mm thick aluminium to reduce the overall weight for ease of movement and is polyester powder coated white RAL 9003 to a textured finish. The unit is fitted on castors with the front two wheels being lockable and has a black polypropylene "D" Pull handle to manoeuvre the unit. The fume cupboard is supplied with a restraining cable for connection to the restraining point located on the docking station. When connected the cable will prevent the gas hose, water hose, flexible waste hose and power cable being strained or broken if the Fume Cupboard is inadvertently moved prior to disconnection.

PERFORMANCE

The unit is designed to achieve a face velocity of 0.4m/s at a sash height of 400mm. The sash fingergrip promotes the streamlined inflow of air into the working chamber. The back baffle ensures the purging of fumes and a purge-gap beneath the lower airfoil promotes "scavenging" across the work surface.

ALL ROUND VISION PANELS AND BAFFLES

The SSR2000 has full height 6mm toughened glass vision panels to the sides and rear for demonstration viewing purposes. All internal joints are sealed. To the rear of the internal chamber are two clear polycarbonate full width baffles to allow high, low and intermediate level extraction and minimise the variation of face velocity.

VERTICALLY RISING SASH

The sash is 6mm thick clear toughened glass counter balanced with fail safe pulley and weight system utilising stainless steel cables and ball race pulleys. Guide channels provide smooth rise and fall sash action with reduction in lateral movement achieving overall directional stability. Quick release sash locks are a standard safety precaution at 400mm. On lock release the sash can be raised to give a maximum clear opening of 610mm for cleaning and maintenance purposes and also for setting up apparatus. However on lowering the sash below 400mm the sash locks automatically reset. The full width sash finger-grip is manufactured from aluminium and polyester powder coated Red RAL 3020, with two "D" Pull handles in black polypropylene.

WORKSURFACE

Grey GRP with deep spillage lip to the perimeter of the worktop. The water outlet, gas outlet and circular dripcup are located to the right hand side, with the service outlets mounted off the working area to avoid corrosion from any spillages.

FAN UNIT & CARBON FILTRATION SYSTEM

The SSR2000 incorporates a main activated carbon filter designed for removal of chemical fumes which occur within the current education curriculum up to A-Level chemistry as approved by CLEAPSS. It is complete with a high quality, low noise centrifugal fan and pre-filter.

MECHANICAL SERVICES

The FAR Water & Gas services are pre-plumbed with flexible hoses complete with quick release fittings for connection to the mains supplies located in the Docking Stations. The gas and water control valves are located on the service panel outside the chamber to prevent any hazards to the operator. A flexible waste is also supplied for connection to the docking station or mains waste connection (38mm Vulcathene).

ELECTRICAL SERVICES

An RCD protected double electric socket is supplied to the lower service panel. The light fitting is situated outside the chamber and is sealed from all vapours by a 6mm clear panel. The light and fan switch are at high level on the control panel membrane. The Fume Cupboard is supplied with a 1700mm long cable for connection to the standard 240V socket located in the Docking Station.

DOCKING STATIONS

The SSR2000 Docking Stations are a tamper proof, polyester powder coated lockable housing and are available as bench or wall mounted units. At least one Docking Station is required to allow connection of the services. Additional Docking Stations can be fitted to allow flexibility of relocation to other areas.

Bench Mounted Docking Stations

Within the housing is a water quick release fitting, gas quick release fitting and threaded Vulcathene waste connection. A single switched socket outlet and restraining cable bracket are mounted on the outside of the housing.

Wall Mounted Docking Stations

Within the housing is a water quick release fitting, gas quick release fitting, single switched socket outlet and restraining cable bracket. We will supply a Vulcathene threaded waste adaptor which should be fitted to mains waste pipework by others at low level below the docking station.

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SSR2000 DOCKING STATIONS

INTRODUCTION

The docking stations allow the SSR2000 Mobile Fume Cupboard to be used in multiple locations. The units are compact, lockable and easy to install ensuring optimum safety when the SSR2000 Fume Cupboard is not being used.

They are manufactured from 1.2mm thick zinc coated mild steel sheet which is polyester powder coated white RAL9003 to a smooth finish, matching the SSR2000 Fume Cupboard carcass.

Gas and water quick release couplings plus the screw on waste connection allow the Fume Cupboard to be set up or disconnected in just a few minutes. The docking stations are available as either a bench mounted or wall mounted model.

BENCH MOUNTED DOCKING STATIONS

The Bench Mounted docking stations allow the SSR2000 Mobile Fume Cupboard to be located at the side of the teacher's desk or suitable benching within the classroom. The unit incorporates gas, water, waste, power socket and restraining cable bracket. Mains connections are made to the docking station from the rear of the unit within the mounting bench.

This docking station should be fitted at a maximum of 300mm from floor level to allow an adequate drop for the waste to drain away.

WALL MOUNTED DOCKING STATIONS

The Wall Mounted docking stations allow the SSR2000 Mobile Fume Cupboard to be connected to mains services when there is insufficient space/ access to locate a docking station within a bench. The unit incorporates gas, water, power socket and restraining cable bracket. Mains connections are made to the docking station from the bottom of the unit with a threaded waste connection to be supplied separately at low level.

This docking station should be fitted at approximately 500mm from floor level to allow adequate connection of mains services.

TYPE ED ACTIVATED CARBON FILTER

The Type ED Activated Charcoal Filter in the Educational Recirculation Fume Cupboards will absorb substances used in current educational curriculum experiments up to A-Level chemistry as approved by CLEAPSS which would typically include:-

TYPE ED ACTIVATED CARBON FILTER

INORGANIC

aluminium chloride & bromide

ammonia

ammonium chloride fumes

bromine

chlorine

chromium (vI) dichloride dioxide

(chromyl chloride)

hydrogen acid vapour

hydrogen sulphide

iodine

iodine chlorides

lead fumes

lead bromide fumes

mercury and its compound

nitric acid vapour

nitrogen oxides (acidic)

phospine

phosphorous chlorides & bromides

phosphorous oxides

silicon tetrachloride

sulphur chloride

sulphur dioxide thionyl chloride

tin (iv) chloride

titanium tetrachloride

zinc chloride fumes

ORGANIC

acid amides

acid anhydrides

acid chlorides

acid nitrogen oxide

alcohols

aldehvdes

aliphatic amines & their salts

aliphatic hydrocarbons

aromatic amines & aromatic hydrocarbons

aromatic nitro compounds

carboxylic acids

esters

ethers

ketones

nitriles

organo halogens

phenols

pyridine

DUST ETC

fine particles

aerosols

mists

limited smoke

dust