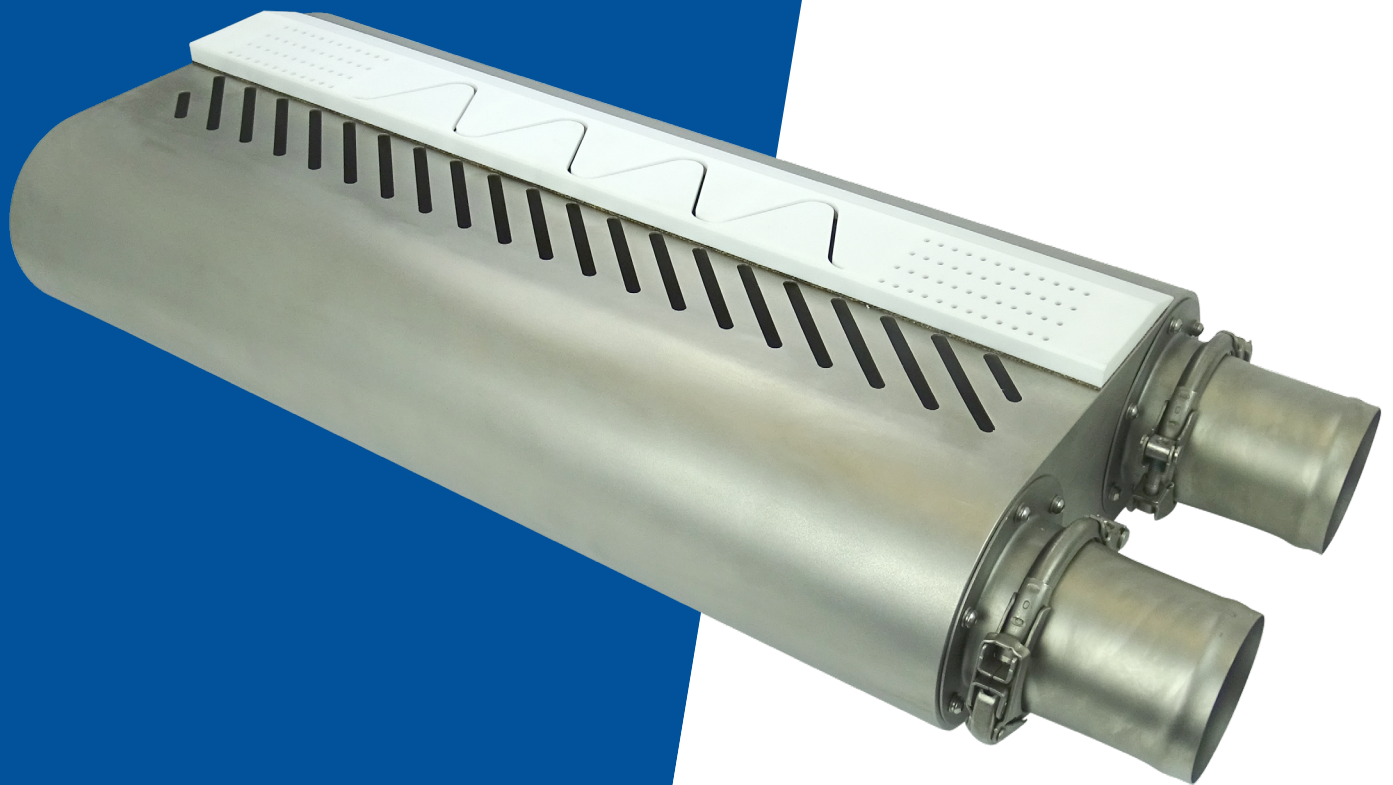


Operating Manual



IonRinse™
Air Rinsing Cleaning System

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Note: Installation/testing of the system should only be completed by those suitably qualified.

Meech IonRinse™ Ionising Air Rinsing System

Section 1: System Details

Extent of Supply

Head Unit

IonRinse™ Manifold

Effective Teflon Air Distributor

1-off Model A924IPS Ionising bar (fitted internally) with Meech switchmode A900IPS-SM2MS

Air Handling Unit v3 (AHUv3)

1-off 6.6KW AHUv3

1-off F8 Grade Filter Bag fitted inside the unit

1-off H14 Grade HEPA filter fitted inside the unit

Note: Ducting for use between the AHUv3 6.6kW and the IonRinse manifold.

Ducting is not included as standard in the List Price for the IonRinse System, but is an additional extra.

- 200mm diameter flexible ducting (ASYS-FLEXDUCT200)
- 100mm diameter flexible ducting (ASYS-FLEXDUCT100)
- 200mm to 100mm diameter reducer (ASYS-REDUCE200-100)
- 200mm diameter Jubilee Clip (ASYS-JUBCLIP200)
- 100mm diameter Jubilee Clip (ASYS-JUBCLIP100)

Section 2: System Description

IonRinse™ Head Unit

The IonRinse head unit includes:

- 1-off Meech Model 924IPS 24V ionising bar. An additional A924IPS ionising bar is included as a spare.
- 1-off Teflon Air Distributor; fabricated to suit the dimensions of the container, the air distributor is fitted to the blow side of the unit and is shaped to distribute the air in the optimal direction for rinsing a bottle passing above.
- 1-off Removable access panel; secured with quarter turn stainless steel sealed latches. The panel is removed using a triangular key (1 off supplied with the system).

The head unit has a 100mm diameter inlet and outlet connection at one end, which can be swapped over with the blanking plates at the other end to enable installation either way round to best suit requirements

Air Handling Unit

Each system includes the following Air Handling Unit:

- 1-off Air Handling Unit (AHUv3); fabricated in stainless steel. The AHU has the following electrical supply:
- 3-Phase with Neutral and Earth 50/60Hz (dual frequency)

The voltage supply can either be 0-235V or 235V-440v 3-Phase and it is critical that the unit is running at the voltage that it has been set to. Please refer to the specific AHUv3 operating manual and wiring diagram for further details on voltage requirements and setup.

Ionisation

The ionisation element of the system consists of a 24V 924IPS bar fitted internally in the IonRinse head unit. Please refer to the 924IPS specific operating manual included for further details.

Section 3: System Installation

Required Documentation

The following documentation should be generated before installation commences and amended if necessary.

- Risk assessment/s.
- Method statement/s. Permits specific to site, i.e. working at height, hot work etc.

General Policy

The following guidelines should be adhered to at all times.

- Appropriate PPE must be worn at all times (see risk assessment).
- All site health and safety rules must be adhered to.
- Only competent/qualified electricians are to complete electrical works.
- All work should be completed in pairs (2 people) at all times. Never put anything inside the compact extraction or vacuum fan unit.

Suggested Order of Installation

For ease of installation, it is recommended that the system components be installed in the following order:

Position and mount the head units – the center of the bottle opening runs along the center of the head unit above both the Teflon Air Distributor and Vacuum Slot. Position and mount the AHUv3's (in free air to avoid overheating and considering the available ducting lengths).

Make all the electrical connections. Connect all ducting.

Mounting Points

Mounting holes on the head unit are installation specific and are not included on the Head unit as standard.

Air Handling Unit

The AHUv3 should be positioned in free air to avoid overheating and as close to the head unit as possible.

For further details on the AHUv3, auto stop/start and filter condition signals please refer to the AHUv3 specific manual.

Section 4: Inspection, Spare Parts and Maintenance

Inspection

The system will perform without serious deterioration, giving many years of service, providing the following visual inspection is made weekly and that a quarterly system inspection is carried out.

This section highlights the checks that should be made on the IonRinse system and also more in-depth details regarding each component.

Weekly Visual Inspection

Head Unit

Check for any external damage and alignment. Wipe over to remove any contamination present. Inspect that the cables from the ionising bars to the ionising power supply are secure and free from damage and that they do not have any tight bends in them.

Air Handling Unit

Listen for any sounds that are not 'normal' i.e, grinding or scraping. Check that all bolts are fastened and secure.

Filtration

Check for any external damage to the filter media, i.e. rips. Check to make sure the filter bag is not blocked.

Ducting

Visually inspect the ductwork look for any loose sections or holes. Check to make sure the ducting is not blocked.

Quarterly System Inspection

For all IonRinse customers Meech offers a quarterly inspection service. The inspection includes an evaluation of the performance of the IonRinse system, including:

1. Air Pressure within the head unit
2. Electrical test of the ionising bars and ionisation power supplies
3. Overall visual inspection of the system

Following the inspection visit a full report is provided for each area concerned. For pricing of this service please contact Meech.

Spare Parts

Meech suggests that the following spare parts are held in stock and are able to provide a quotation if required:

IonRinse™ Head Unit

- 1-off Teflon Air Distributor
- 1-off 924IPS Ionising Bar
- 1-off Suitable Switchmode Power Adaptor (i.e. Meech A900IPS-SM2MS)

Air Handling Unit

- 1-off F8 Grade Filter Bag
- 1-off HEPA Filter
- 1-off Pump
- 1-off Screen

Maintenance

All parts of the IonRinse system must be well maintained in order to achieve consistent performance results.

Air Handling Unit Maintenance

User maintenance is limited to cleaning the unit and replacing the filters with new. Only Meech International trained maintenance technicians are authorised to carry out component testing and replacement.

Unauthorised work or the use of unauthorised replacement filters may result in damage to the extractor unit, and will invalidate the manufacturer's warranty.

The cooling inlets and outlets should be cleaned once a year to prevent buildup of dust and overheating of unit

Filter Maintenance

The filter package needs attention when the filter blocked signal is alarmed.

A log of filter changes should be maintained by the user.

It is recommended that a spare set of filters are kept on site to avoid prolonged unit unavailability.

The filter should be monitored for contamination build up that will have a negative effect on the overall system performance.

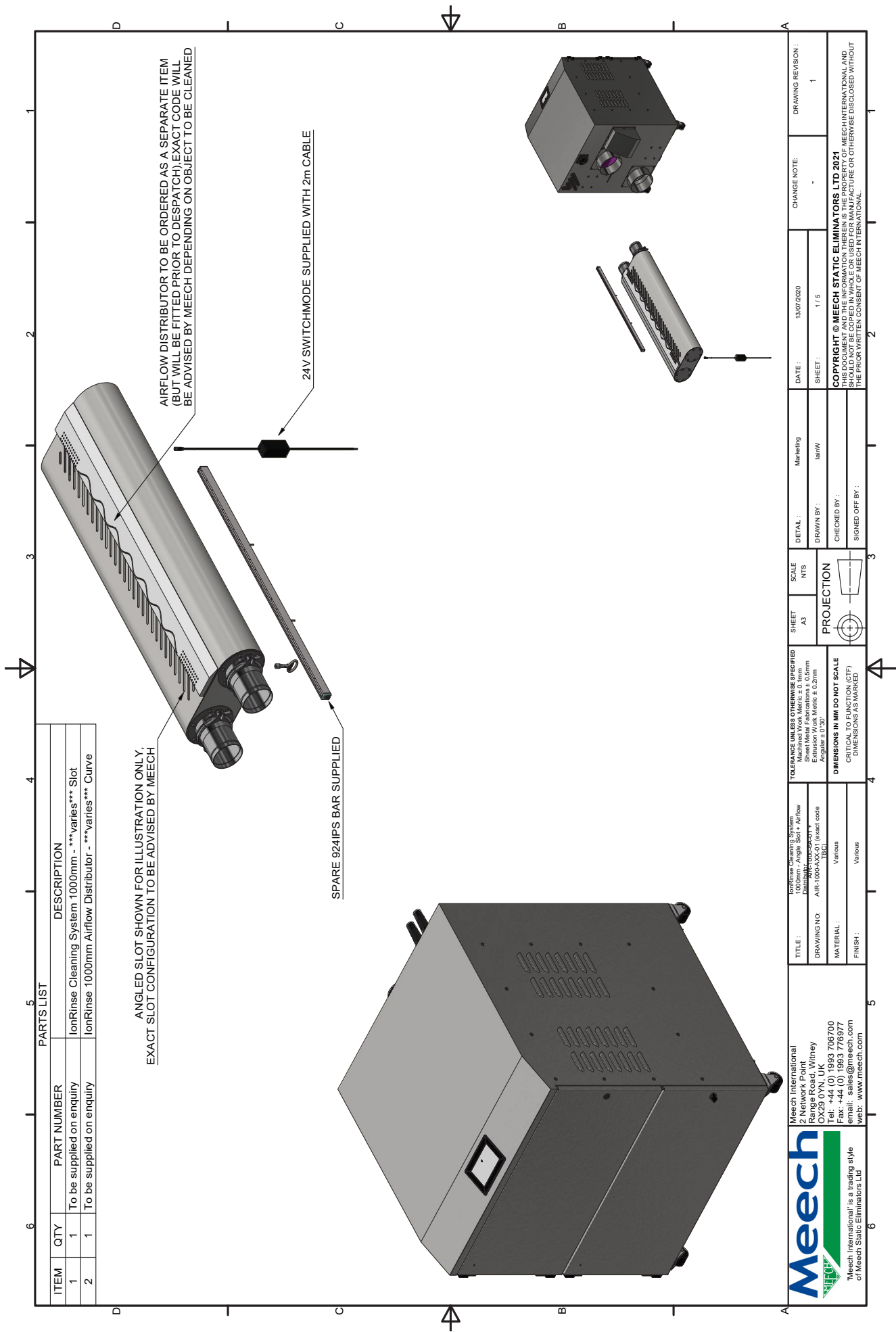
It is recommended that checking the filter is added to an existing maintenance check procedure and occurs at least weekly.

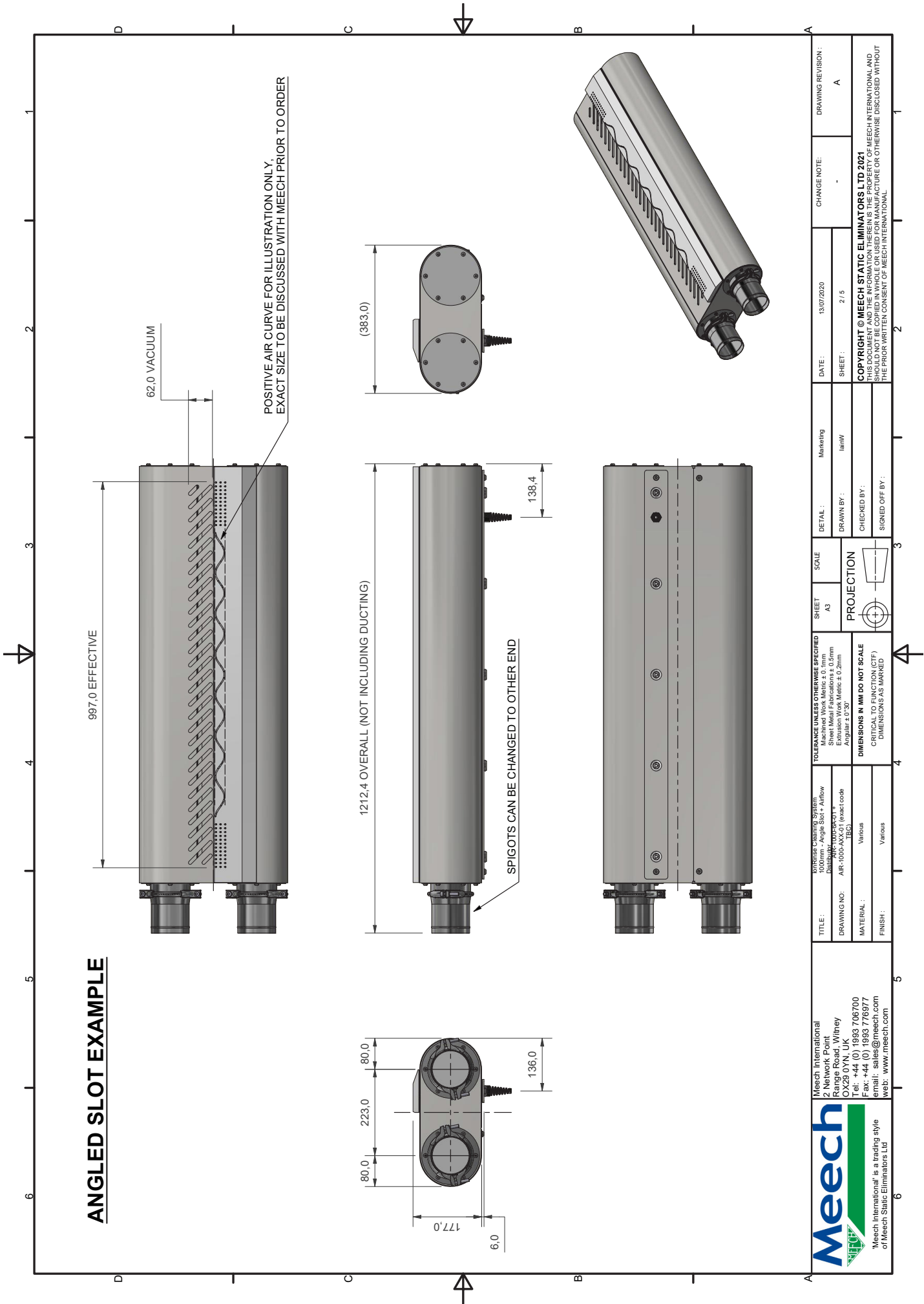
When changing the filter bag the AHUv3 must be switched off. To prevent overheating, units should not be run with a blocked filter condition.

Ionisation Equipment Maintenance

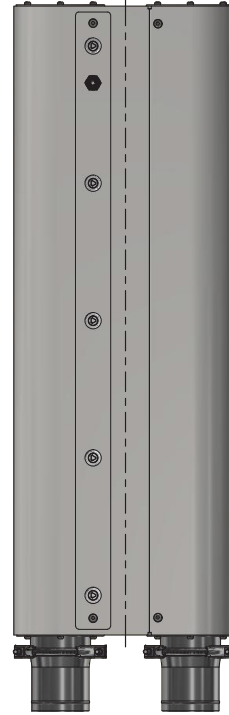
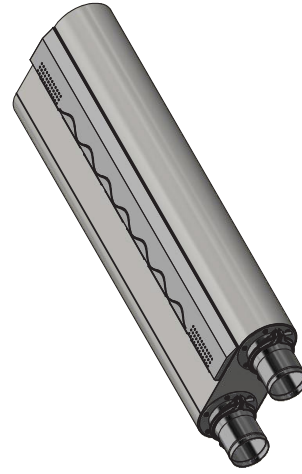
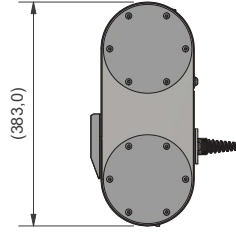
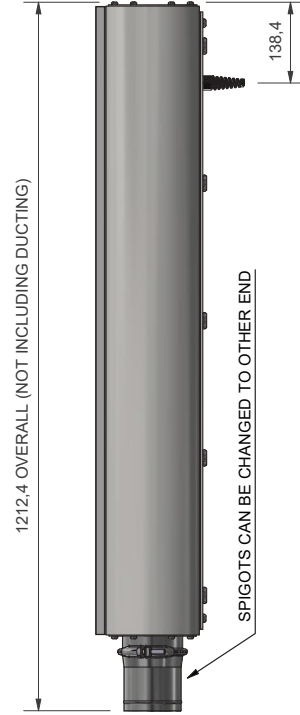
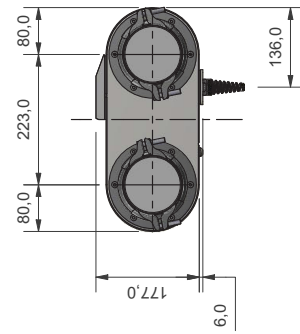
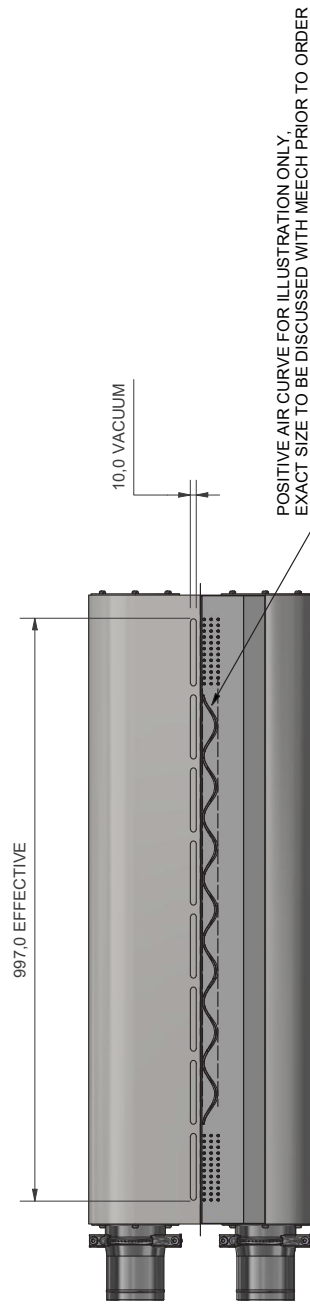
Maintenance instructions can be found in the relevant Operation and Maintenance guide for each unit that is included within the overall system manual.

Section 5: Technical Drawings



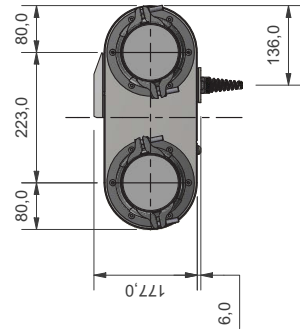
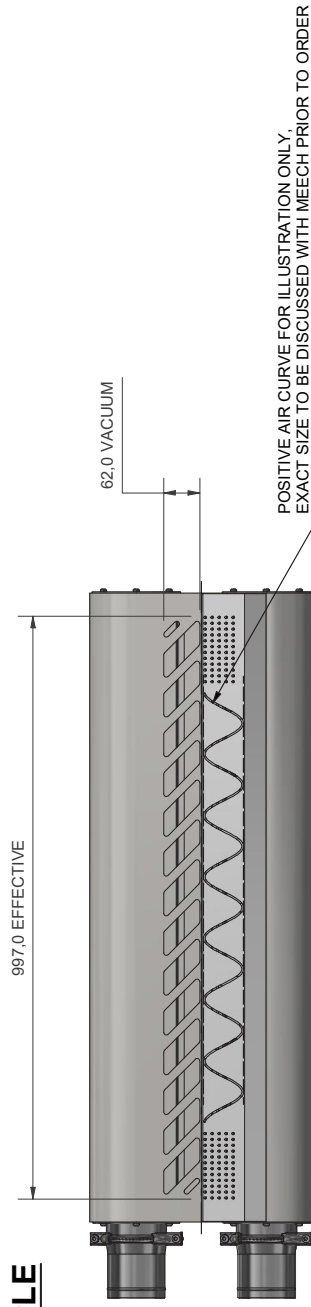


STRAIGHT SLOT EXAMPLE

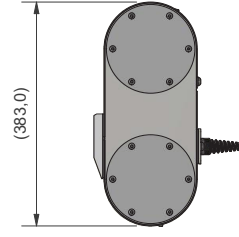


 Meech International Network Point Rugby Road, Witney Ox29 0YN, UK Tel: +44 (0) 1983 706700 Fax: +44 (0) 1983 776977 email: sales@meech.com web: www.meech.com Meech International is a trading style of Meech Static Eliminators Ltd	TITLE: 1000mm - Straight Slot + Drawing NO: AIR-1000-XX-01 (exact code)		TECHNICAL UNLESS OTHERWISE SPECIFIED 1000mm - Straight Slot + Straight Metal Fabrications ± 0.1mm Straight Metal Fabrications ± 0.5mm Straight Metal Fabrications ± 0.2mm As per AS 1330		SHEET A3		SCALE		DETAIL: Marketing		DATE: 13/07/2020		CHANGE NOTE: -		DRAWING REVISION: A	
	MATERIAL: Various		DIMENSIONS IN MM DO NOT SCALE		PROJECTION		CHECKED BY:		DRAWN BY: Ian W		SHEET: 3 / 5		COPYRIGHT © MEECH STATIC ELIMINATORS LTD 2021 ALL RIGHTS RESERVED. NO PART OF THIS PUBLICATION MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE PRIOR WRITTEN CONSENT OF MEECH INTERNATIONAL.			
	FINISH: Various		CRITICAL TO FUNCTION (CTF)		CHECKED BY:		DRAWN BY:		SHEET:							

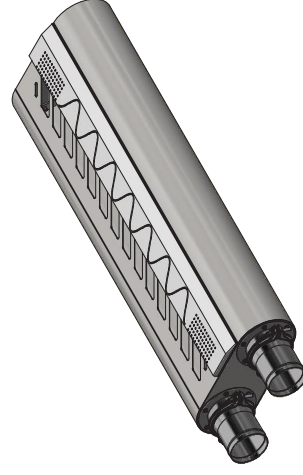
WIDE ANGLE SLOT EXAMPLE



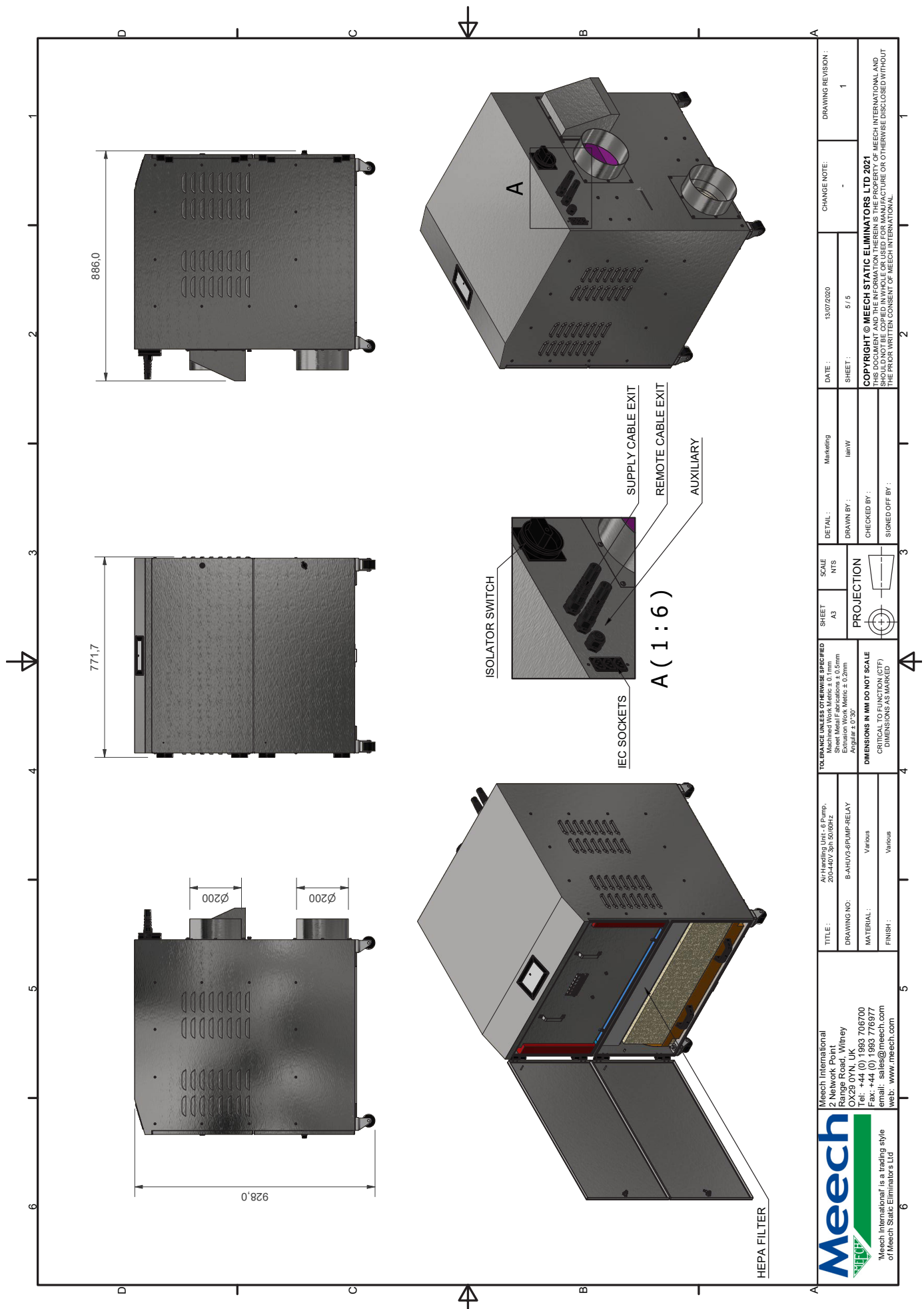
1212,4 OVERALL (NOT INCLUDING DUCTING)



SPIGOTS CAN BE CHANGED TO OTHER END



 Meech 'Meech International' is a trading style of Meech Static Eliminators Ltd	Meech International Network Point Riverside Way Ox28 0YN, UK Tel: +44 (0) 1993 706700 Fax: +44 (0) 1993 776977 email: sales@meech.com web: www.meech.com		TITLE: Wide Angle Slot DRAWING NO: AIR-1000-XX-01 (exact code) MATERIAL: Various FINISH: Various		TOLERANCE UNLESS OTHERWISE SPECIFIED Machined Work Metric $\pm 0,1\text{mm}$ Sheet Metal Fabrications $\pm 0,5\text{mm}$ Extrusion Work Metric $\pm 0,2\text{mm}$ Angles $\pm 0,30$		PROJECTION 		SHEET: A3 SCALE: 1:1		DETAIL: Marketing DRAWN BY: Ian W CHECKED BY: - SIGNED OFF BY: -		DATE: 13/07/2020 SHEET: 4 / 5		CHANGE NOTE: -		DRAWING REVISION: A	
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