

5 EQUIPMENT DESCRIPTION

5.1 SCOPE OF SUPPLY

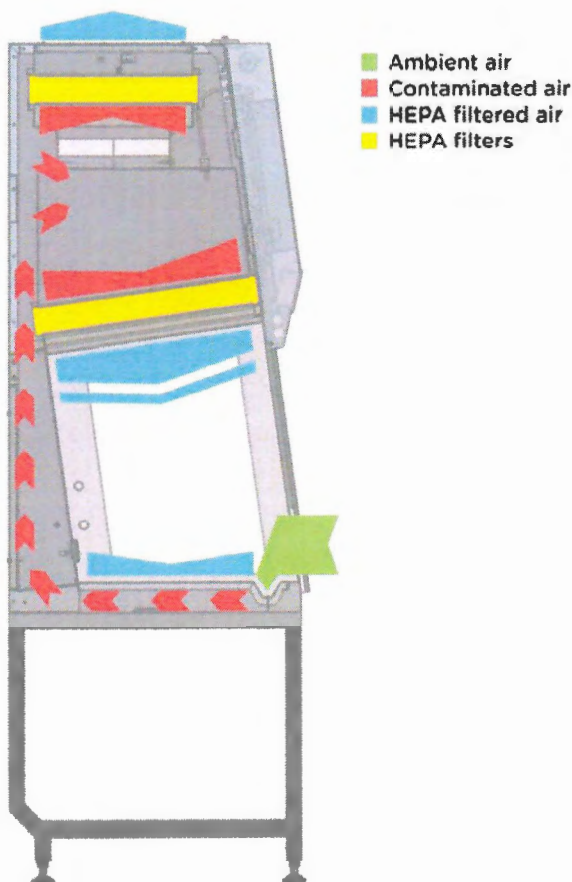
Based on this document, two identical devices will be supplied, each with its own unique serial number and with its own user documentation.

5.2 PURPOSE AND FUNCTION OF THE EQUIPMENT

Microbiological safety enclosure - Class II, is applied in laboratories, manipulating chemical and biological substances and in areas and it provides maximum protection of the operator, the surrounding and the working product.

5.3 FUNCTIONAL DESCRIPTION OF SAFETY CABINET

The cabinet takes a part of the air from the surrounding and returns it to the surrounding after being cleaned through an absolute exhaust filter (can be connected to the exhaust duct – OPTION), the rest of the air is circulating inside the cabinet.



The air is entering the safety cabinet from the lower front side through front aperture and further through cuttings in the working-desk segments. Under the working-desk segments, the entering and the recirculated air are mixing together. Then the air travels through the return flow channel to the upper casing and enters the overpressure hood. A ventilator is pressing a part of the air (ca. 30%) through a H14 (EN 1822) quality exhaust filter to the surrounding (or is connected to exhaust duct - OPTION), the rest of the air (ca. 70%) is being pressed inside the working area through a H14 (EN 1822) quality filter above the working area and through a distribution net. The rates of exhaust respectively entering and recirculating air are ensured by the proportions of the surfaces of the exhaust filter and the filter above the working area.

The distribution net provides a laminar air arrangement above the working area and directs the air vertically to the working surface of the cabinet. The laminar air flow is carrying away the particles, which are generated by the manipulation of the material.

In the front area of the cabinet between the operator and the location of dusting is an air curtain, separating the working area of the cabinet from the surrounding.

Device consist of the following major components:



1 Exhaust, protective cover	7 Levelling feet for anchoring
2 Electrical connection: Power plug Type 23 (Switzerland standard), 3m cable	8 Support structure
3 Technical area	9 Standard work segments
4 Operating panel	10 Power sockets (2x + 2x)
5 Protective front glass	11 Electrical cable passages (1x + 1x)
6 Working area without connections	12 Ethernet connection (2x)
	13 Connectors (3x) – for output signals, input enable signal and VAV control

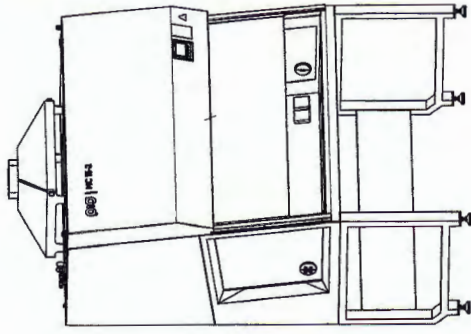
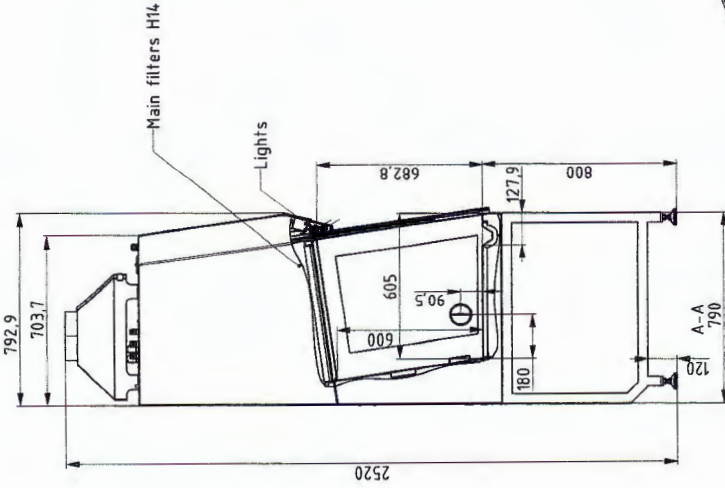
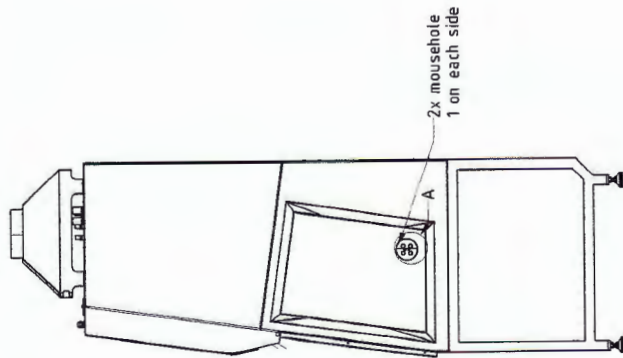
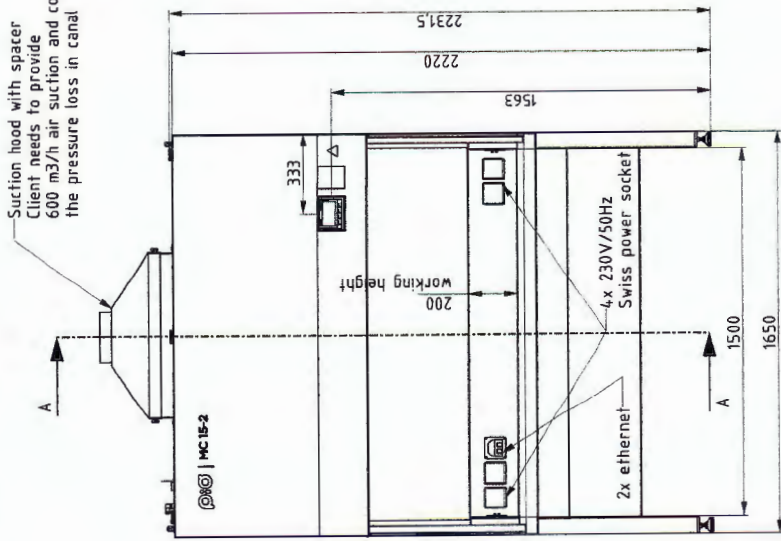


5.4 MATERIAL

Material used:

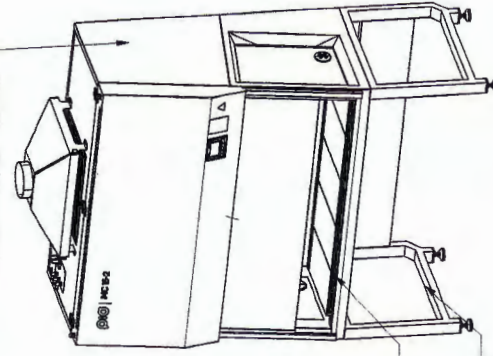
- All exterior surfaces are made mild steel sheet metal, stainless steel AISI 304/EN 1.4301, surfaces brushed – $Ra < 1,6\mu\text{m}$
- All surfaces in working area made of stainless steel AISI 316/EN 1.4404, surfaces brushed – $Ra < 0,8\mu\text{m}$
- Working area segments are made of brushed stainless steel AISI 316L/EN 1.4404; $Ra \leq 0,8\mu\text{m}$. Sheet metal thickness: 1,5mm
- Support structure made of mild steel tubing and sheet metal, stainless steel AISI 304/EN 1.4301, surfaces brushed – $Ra < 1,6\mu\text{m}$

Suction hood with spacer
Client needs to provide
600 m³/h air suction and cover
the pressure loss in canal



1:20

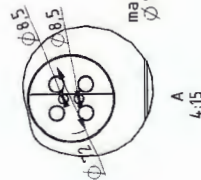
Camber made out of
1.4301 stainless steel
outer surfaces brushed



1:20

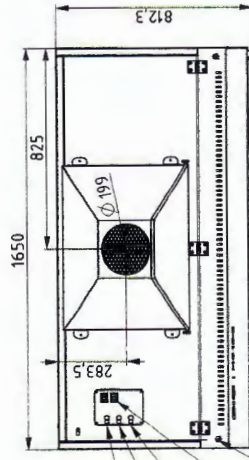
Working area made out of brushed 1.4301 stainless steel,
working segments out of brushed 1.4404 stainless steel.

Support made out of 1.4301 brushed
stainless steel



max connector size
∅ 70 mm

4:15



- Connector for input interlock signal
- Connector for VAV control
- Connector for 2 digital outputs
- 2x RJ-45 Cat6 ethernet connector
- Electric connection, 3m cable swiss connector

Drawn by	Teri Tava	Surface Finishing	Material	Mass (kg)	355,587
Date	12.10.2022				
Client					
Project					
Drawing number	101089831				
Scale	1:15				
Page	A2				
Project name	AssemblyDrawing MC 15-2 S				
Client name	Clean VISIONS.				
Client address	101089831				
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Client email	AZ.10				
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Client contact person	AZ				
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Client contact email	AZ				
Client contact website	AZ				

ES - Izjava o skladnosti EC - Declaration of conformity

Podjetje/The Company:

Iskra PIO d.o.o., Trubarjeva cesta 5, 8310 ŠENTJERNEJ, SLOVENIJA

s polno odgovornostjo in skladno s Pravilnikom o varnosti strojev (Uradni list RS, št. 75/08, 66/10, 17/11, 74/11), Priloga IIA, ki v celoti povzema Direktivo 2006/42/EU, Priloga IIA, izjavlja, da je proizvod: / Declares with full responsibility and according to Directive 2006/42/EU, Annex IIA, that the product:

ZAŠČITNA MIKROBIOLOŠKA KOMORA / MICROBIOLOGICAL SAFETY CABINET

Tip/Type: **MC 15-2 S**
Serijska št./Serial no.: **230119_x0**
Leto izdelave/Year of manufacture: **2023**

skladen z zahtevami naslednjih direktiv in naslednjih harmoniziranih standardov: /

is in conformity with the requirements of next directives and with the requirements of next harmonized standards:

- 1) **Varnost strojev / Machinery: 2006/42/ES**
 - ISO 12100:2010
- 2) **LVD 2014/35/EU**
 - EN 61010-1:2010
- 3) **EMC 2014/30/EU**

Zaščitni razred / Protection class

II – EN 12469:2000, DIN 12980:2005

Ime in naslov osebe, pooblaščenca za sestavljanje tehnične dokumentacije/Name and address of the person authorised to compile the technical file: **Lojze Hosta, Trubarjeva cesta 5, 8310 Šentjernej, Slovenia**

Kraj in datum/
Place and date:
Šentjernej, 22.03.2023

Žig/Stamp



Iskra PIO d.o.o.

General Manager
Andraž Rumpret, univ. dipl. inž.

