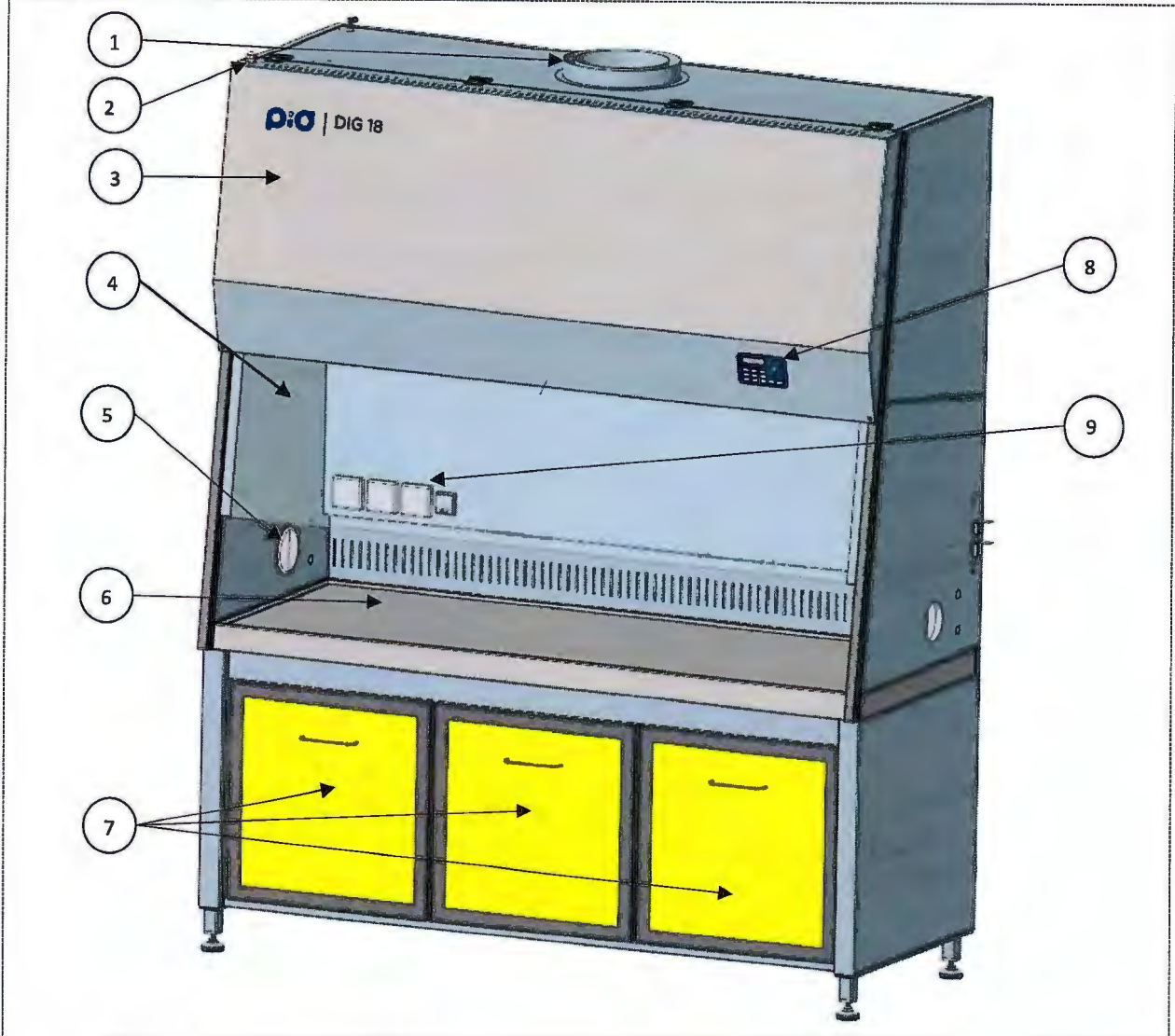


### 3 EQUIPMENT DESCRIPTION

#### 3.1 BASICS FOR DESIGN



|  |   |
|--|---|
| <p>1 Exhaust connection DN 250 for connection to exhaust duct</p> <p>2 Power supply cable gland</p> <p>3 Front mask with electrical cabinet behind</p> <p>4 Front safety glass</p> <p>5 Passage for cable (mouse hole)</p> | <p>6 Working bench</p> <p>7 Under bench safety storage cabinet</p> <p>8 Control panel</p> <p>9 Electrical sockets 230V Swiss T23 and communication sockets (ethernet)</p> |
|--|---|



### **3.2 THE PURPOSE AND FUNCTION OF THE EQUIPMENT**

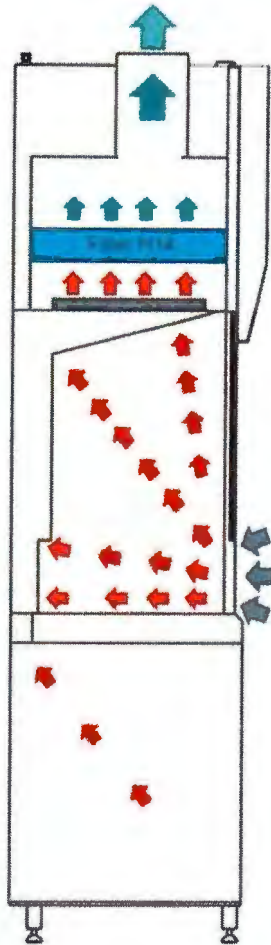
Device is designed to work with hazardous and volatile substances where the operator and environment protection is required. The system sucks the air from the surroundings through the front working aperture (it creates a protective air curtain at the opening), into the workplace where harmful or toxic emissions are sucked out, thus protecting the operator. In addition to extracting air through the workplace, the safety cabinets under the workbench are also ventilated; air is extracted out of the cabinet which ensures safe storage of hazardous chemicals. Thus, increased safety is also provided in the cabinet in the case of the storage of volatile substances.

### **3.3 ATEX REGULATION**

Device is not suitable for use in ATEX atmosphere!

Device is located in room where is no ATEX zone.

### 3.4 SPECIFICATIONS – MECHANICAL



#### 1. Airflow:

A certain quantity of air enters through the front working opening into the workplace and sucks out dangerous substances, that can occur when manipulating the substances within the workplace. At the inlet of the air in the system - at the working opening, a protective air curtain with the required air velocity is provided, which prevents dangerous substances from exiting the workplace into the environment and thus protects the operator.

The air then travels through the suction channel through the HEPA filter into the client exhaust pipe on which the suction chamber must be fixed airtight and is connected to the customer's exhaust system.

The connection of the chamber to the exhaust duct system must be carried out as follows:

- fixed and airtight,
- the customer's exhaust duct system must be appropriately dimensioned.

#### 2. Dimensions:

All dimensions can be seen on Assembly drawing.

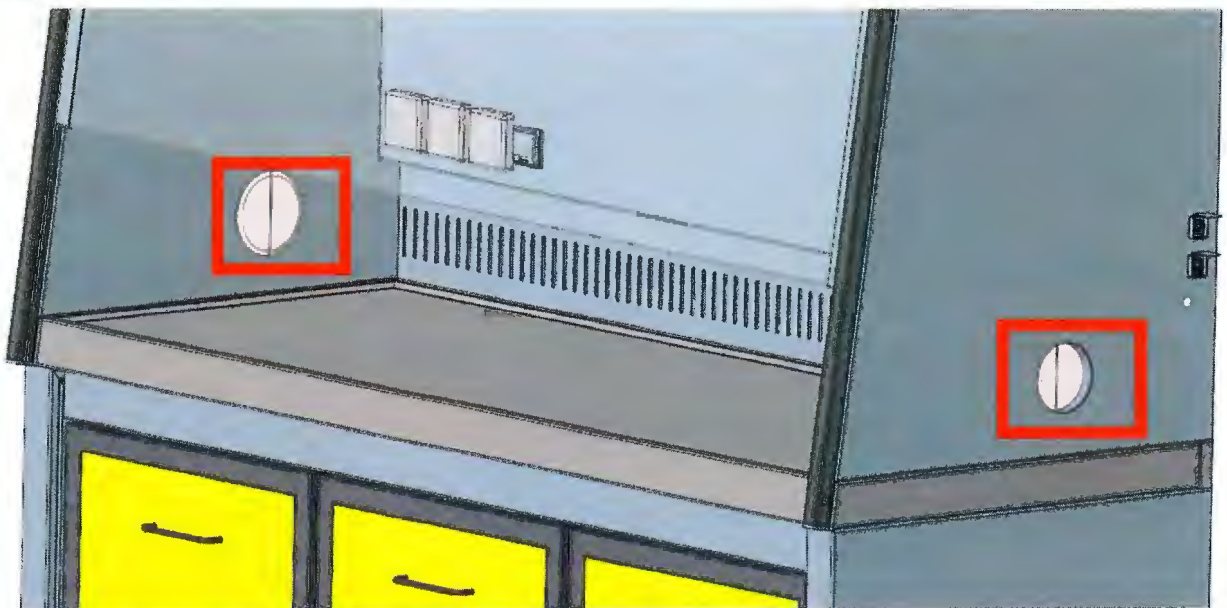
#### 3. Mechanical connections:

|                 |                                     |
|-----------------|-------------------------------------|
| Exhaust air     | Outer diameter <b><u>Ø250mm</u></b> |
| Grounding point | <b><u>M8x20</u></b>                 |

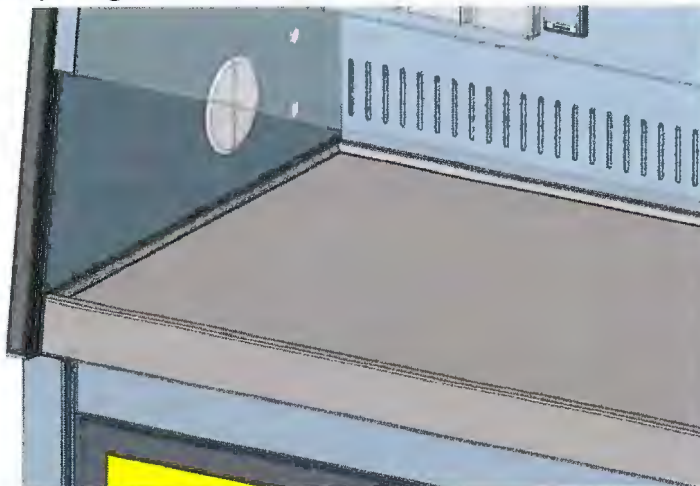
The device is extracting maximal **1600 m<sup>3</sup>/h** of air from the room in working regime (connecting to customer HVAC system). The minimum guaranteed pressure is **-500 Pa (underpressure)** - at the connection point). Device does not have additional fan for exhaust air.

4. All air is exchanged (air does not recirculate inside chamber);
5. Front safety glass is motorised and working position is determined with position switch.
6. Surfaces:
  - a. Whole device is made of stainless steel 1.4301 (AISI 304) brushed to  $Ra < 1,6\mu m$ ,
  - b. Working surface made of stainless steel 1.4404 (AISI 316L), brushed to  $Ra < 0,8\mu m$

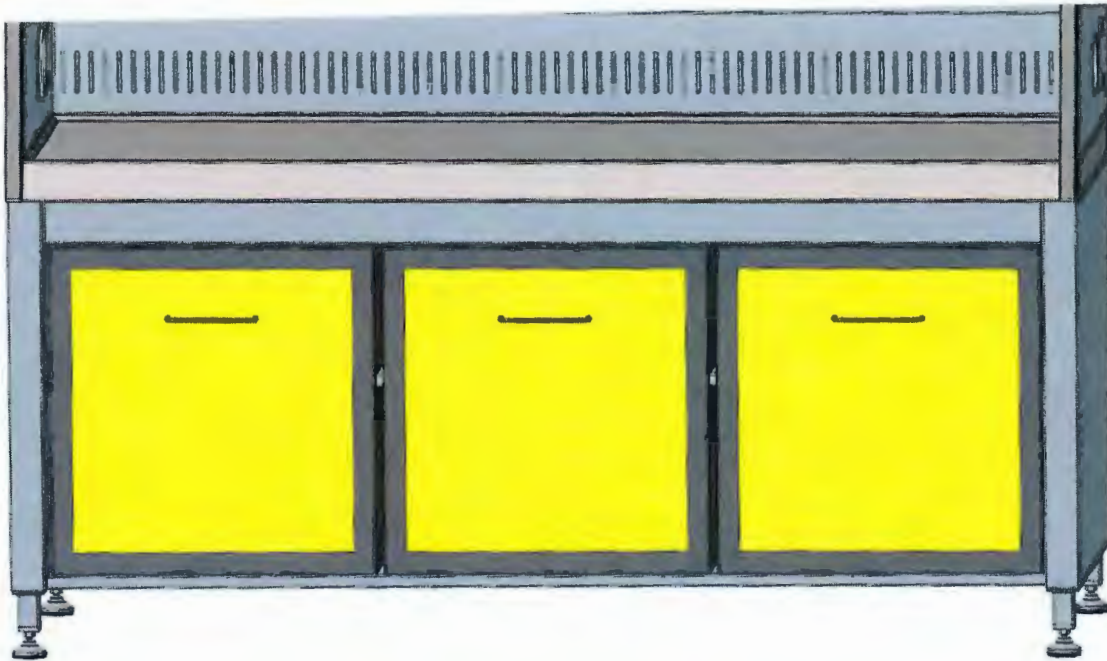
7. On right and left side passage for cable, mouse hole max connector size  $\varnothing$  105 mm, cable diameter size to be defined.



8. Work top with anti-spill edge.

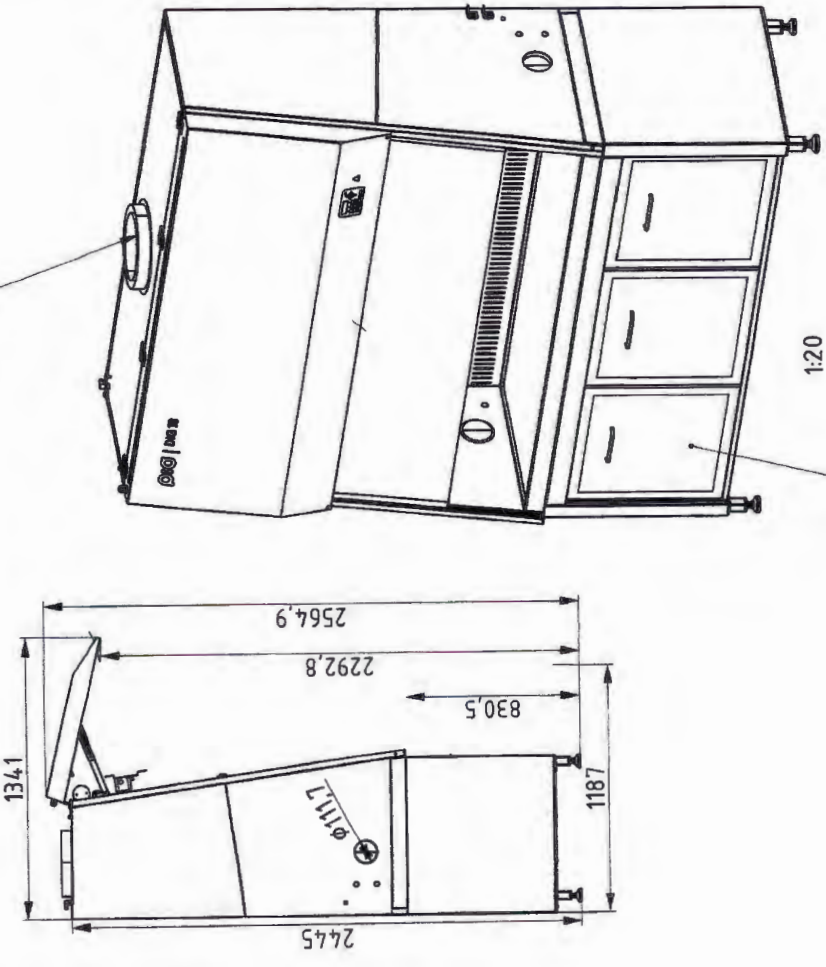


9. Safety storage cabinet (3x), Labor security system type AC 600/50 CMD

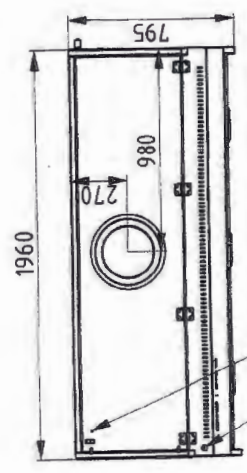
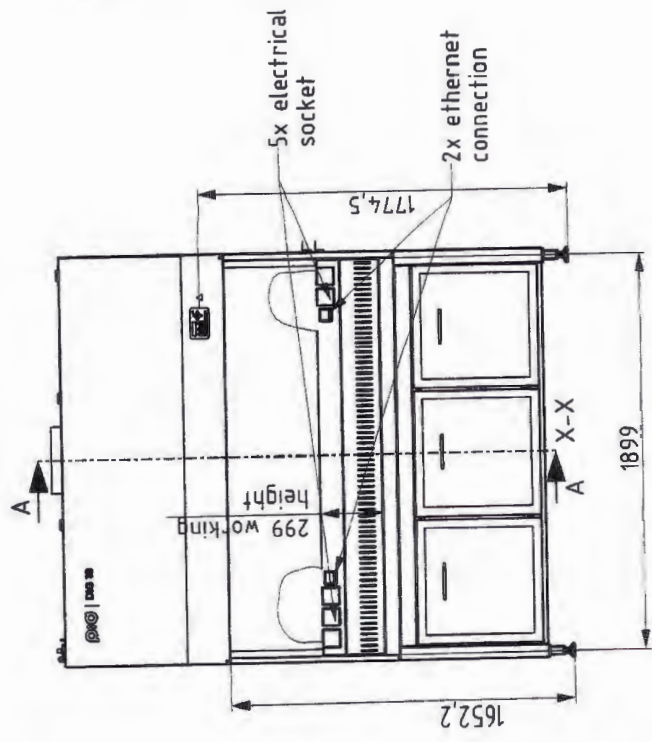
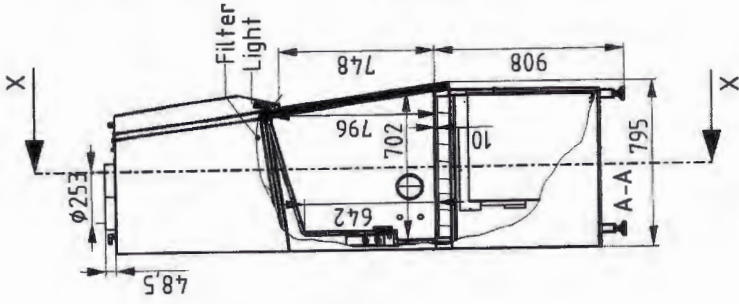


- Cabinet in compliance with EN 14470-1:
- External dimensions: 595x510x600 mm (WxDxH)
- Completely produced by sheet steel, painted with powder coat.
- Built with double cases, completely isolated by a special fire insulation
- Safety catch "Ignis.lock" that keep the doors closed in case of fire
- Earthing system for each unit
- "No smoking" and "Fire" warning decals on the doors
- User manual
- Thermic device which automatically closes the doors when temperature reaches over 50°C.
- Not electric
- Minimal exhaust air quantity at 10 exchanges: 3m<sup>3</sup>/h
  - Connected with flexible tube DN 100 to suction channel in back of device

Exhaust connection  
1600 m3/h air suction



Safety cabinet according to standard EN 14470 with drawer. 3 separated cabinets, each cabinet is made of steel and powder coated, dimensions 595x510x600 mm



grounding point M8x20  
Swiss, J-type connector 3m cable

Notes:

- Whole device is made of stainless steel 1.4301 (AISI 304)
- Working surface made of stainless steel 1.4404 (AISI 316L)
- Visible surfaces made out of brushed stainless steel

|   |                        |                                   |   |                                  |                          |
|---|------------------------|-----------------------------------|---|----------------------------------|--------------------------|
| Drawn by:   | Tom Zura<br>20.09.2022 | Surface Finishing:                | Material:   | Mass (kg):                       | 631,66                   |
| Heat treatment:   | Surface Protection:    | <b>AssemblyDrawing DIG 18 S</b>   |   |                                  |                          |
| <p>Clean visions.</p> <p>All data and all information received by you from us shall be held confidential and shall not be disclosed by you to any third party except with prior written consent of Iskra PID d.o.o.</p> |                        |                                   |   |                                  |                          |
| <small>Dimensions without tolerance:<br/>ISO 7253<br/>ISO 7254<br/>ISO 7255</small>   |                        | <small>Model</small><br>101126470 | <small>Drawing number:</small><br>230107_00_220_DRW | <small>Ver. DRW</small><br>A.100 | <small>Page: 1/1</small> |

## 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:

### ODSESOVALNA KOMORA / SUCTION WORK-BENCH

Tip/Type: **DIG 18 S**  
Serijska št./Serial no.: **230107\_00**  
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, pooblaščne 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, 20.04.2023

Žig/Stamp  
 **Iskra PIO d.o.o.**  
Trubarjeva cesta 5  
SI - 8310 Šentjernej

Iskra PIO d.o.o.  
General Manager  
Andraž Rumpret, univ. dipl. inž.

