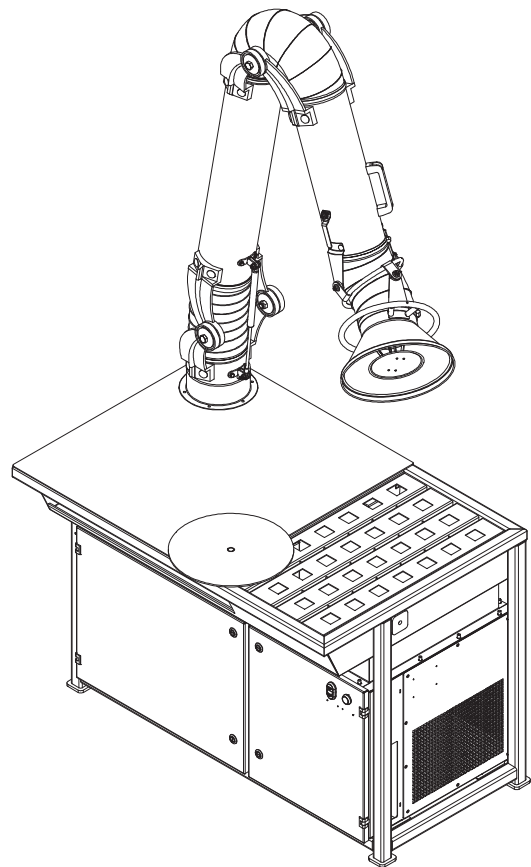
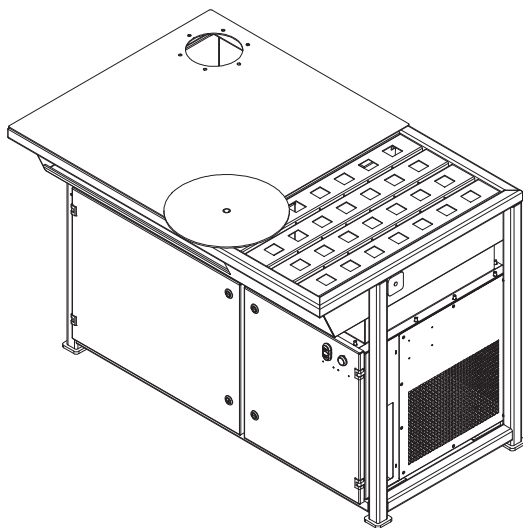


# SF-1000

Workbench

USER'S MANUAL



## GRAPHIC SYMBOLS



important information



3D file or preview available



you will need tools, sub parts, accessories



keep away from source of high temperature



warnings, important notes



use respiratory protective equipment



protect from noise or eye damage



switch off before proceeding

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## 1. Purpose of this instruction

This instruction manual contains SF-1000 workbench - welding table use and maintenance information. SF-1000 user should become acquainted with contents of this publication to learn about unit construction, principles of operation and means of its safe use. Manufacturer is not responsible for any consequences arising from the use of the unit against its intended purpose. Manufacturer reserves the right to make changes to improve performance and operational qualities of the product in the future without prior notice.

## 2. Equipment arrival

Upon arrival the user needs to thoroughly inspect the equipment and make sure there was no damage caused by the shipping carrier. If there is damage, the user needs to immediately contact their dealer. Transport of the device on a pallet can be done with a manually lifted forklift or a self-propelled lift truck.

The user should make sure that the items listed below were included with the SF-1000 device set:

- metal mesh filter Coarse 30% (G2)
- two main filter cartridges (dust class M)

In the case of lack of any listed items, please contact the dealer.



If the package or device is damaged upon delivery the user needs to immediately contact the dealer and draw up a protocol with a representative of the shipping company (many shipping companies consider acceptance of the shipment to be sufficient to avoid liability for damage caused during shipping).

## 3. Safety

### 3.1 General informations

The device has been designed on the basis of the applicable technical knowledge and safety rules contained in the relevant standards harmonized with the Machinery Directive. Use appropriate personal protective equipment according to general health and safety rules. All electrical work must be carried out by qualified personnel. The machine equipped with the accessories complies with the required stability conditions. The device should be installed on flat, properly hardened surfaces.

### 3.2 Remaining risk

The SF-1000 unit is not intended to protect the user against toxic or cancerous substances. If it's used for this additional PPE will be required. It's the users responsibility to assess the risk in such cases. SF-1000 will not function unless the hood is well positioned and the filter is replaced at regular interval. Make sure that the filtering cartridges are not damage and the device is working.

### 3.3 Fire risk

Do not extract burning or glowing material (including cigarettes). Do not mix combustible material such as wood dust and rags with weld fume or grinding dust. Remove excess oil or grease from the steel before welding.

### 3.4 Emergency situations

In case of discovering unusual phenomena such as increased noise, vibrations or smoke you should:

- disconnect the device from the power source
- disconnect the compressed air line
- try to suppress the possible flame source by using a powder extinguisher
- notify relevant services at the workplace

## 4. Product intended use and reservations

SF-1000 filter unit can be operated without restriction in the technical areas intended for permanent human habitation. SF-1000 is designed for extraction and purification of air from the dry dust with particular emphasis on the processes of welding, grinding, polishing, pouring, dispensing, cutting metals and plastics. The filter unit requires connection to a local compressed air supply.



Manufacturer does not recommend use of the unit for:

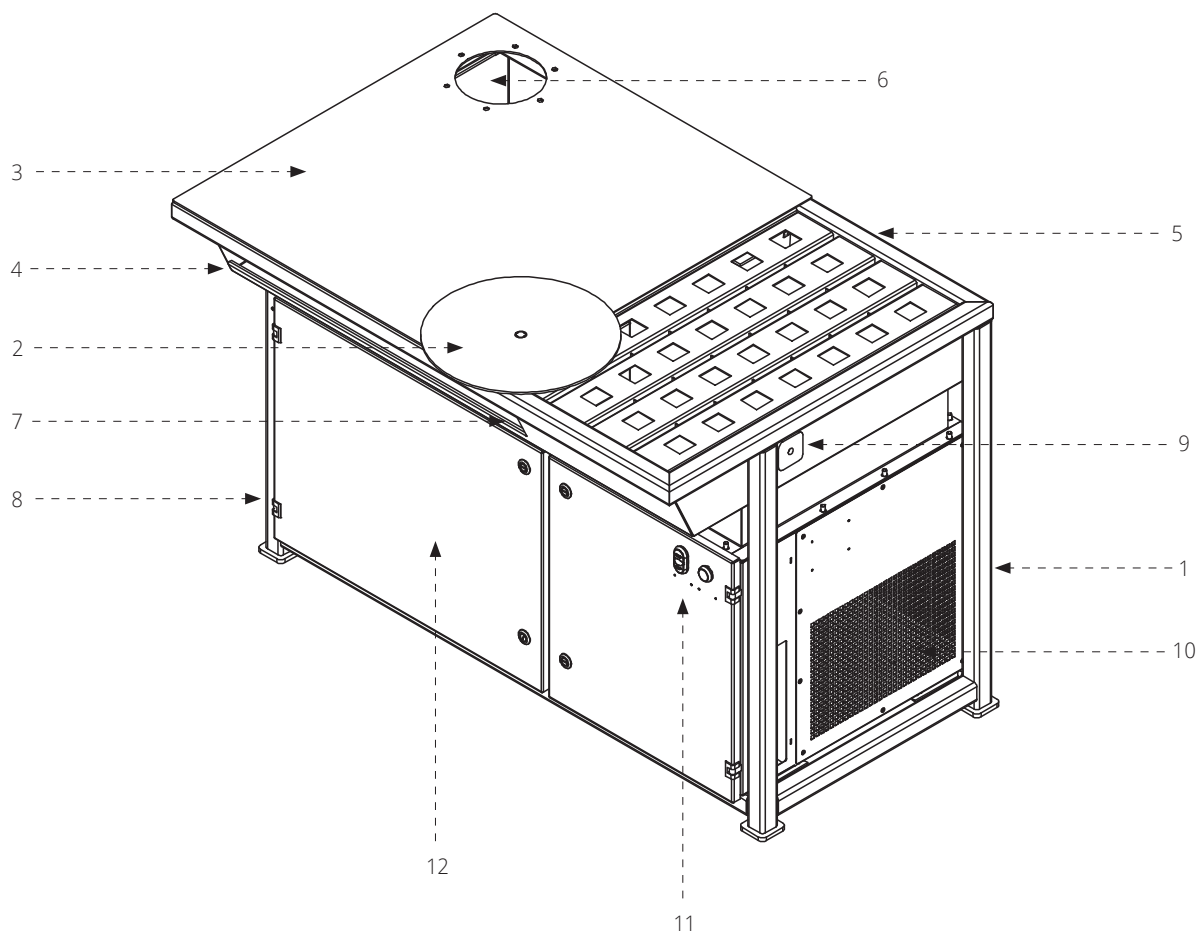
- arc-air gouging
- aluminum laser cutting
- oil mist and heavy oil mist in welding fume
- extraction of aggressive fumes and gases (e.g. from acids, from alkaline, from soldering paste containing lithium)
- welding processes using anti-spater in aerosols
- extraction of hot gases (more than 45°C/113°F continuously)
- grinding aluminum and magnesium
- thermal spraying
- extraction of cement, saw dust, wood dust etc.
- sucking cigarettes, oiled tissues and other burning particles or objects.
- explosive environments or explosive substances/gases
- cleaning air from dusts containing asbestos, cadmium, beryllium



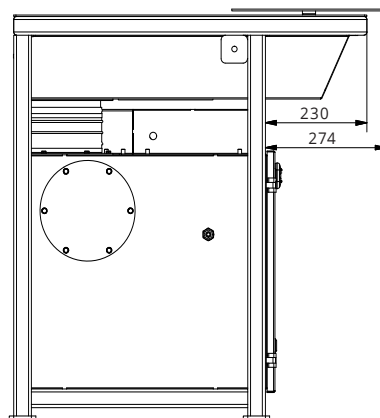
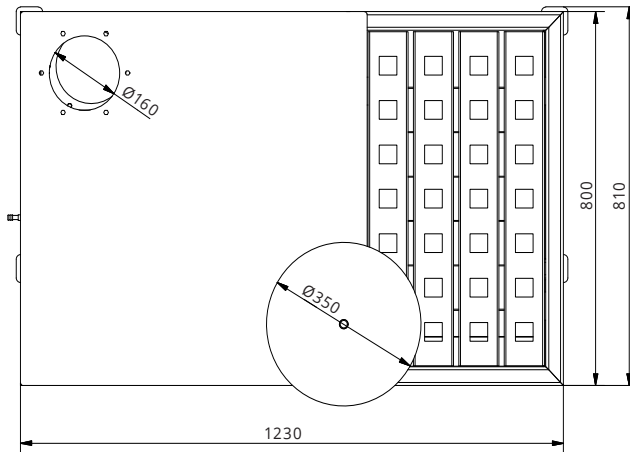
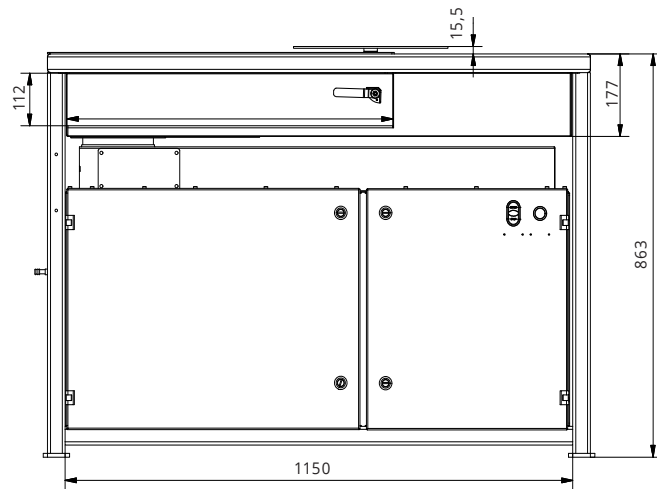
Store in dry and airy rooms. Protect against possibility of shifting during transport. For purifying air from wet dust (please contact an authorized manufacturer's representative). Do not direct sparks generated by grinding directly into the filtration device inlet.

## 5. Construction

1. S-1000 frame
2. Revolving table (option)
3. Welding deck
4. Carrier shelf
5. Lower exhaust grate
6. Arm mounting place
7. Damper
8. Crawlair filter unit
9. Ground cable connection
10. Outlet chamber
11. Controls
12. Filter tray door



## 6. Dimensions



All dimensions are given in [mm].

## 7. Technical data

Air volume [m <sup>3</sup> /h]	1000	Compressed air supply required [bar]	5 - 5,5
Noise rating at 1m [dB(A)]	73	Compressed air connection - the quick socket DN7,2 + plug	
Power supply [V]/[Hz]	3x400/50	Drawer for waste [l]	10
Motor power[kW]	1,1	Sparktrap - metal mesh	1 pcs
Motor rpm [1/min]	2800	Polyester filter cartridges	2 pcs
Compressed air tank capacity [l]	10	Weight without arm [kg]	205

\* The noise level may change depending on the degree of the filter clogging



SF-1000 is equipped with three stages of dust filtration:

- metal mesh prefilter Coarse 30% (G2)
- two main filter cartridges (dust class M)

## 8. Work environment

SF-1000 filtration unit can be operated without restriction in the technical areas intended for permanent human presence.

## 9. Transport and storage

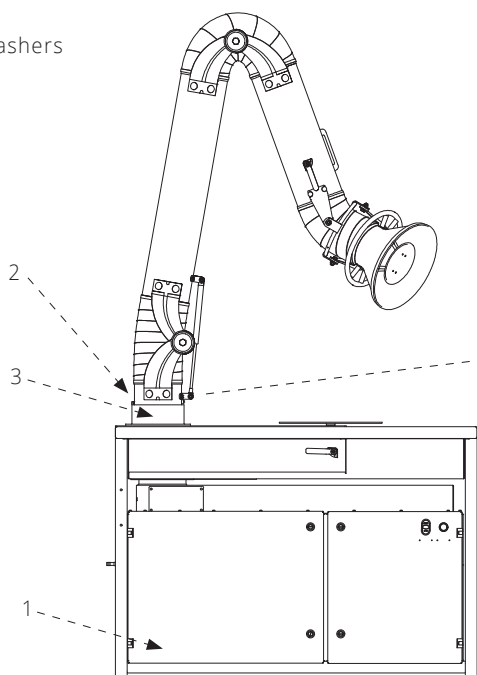
Transport of the device on a pallet can be done with a manually lifted forklift or a self-propelled lift truck. Store in dry and airy rooms.

## 10. Assembly

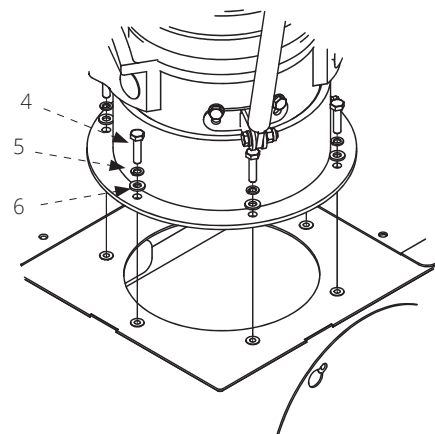
The machine equipped with the accessories complies with the required stability conditions. The device should be installed on flat, properly hardened surfaces.

### 10.1 Oskar arm installation

1. SF-1000
2. Turning limit
3. Arm socket
4. Bolts
5. Spring washers
6. Washer

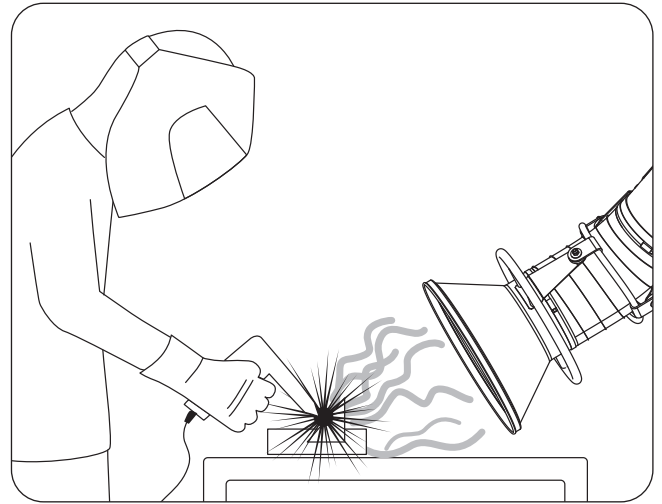
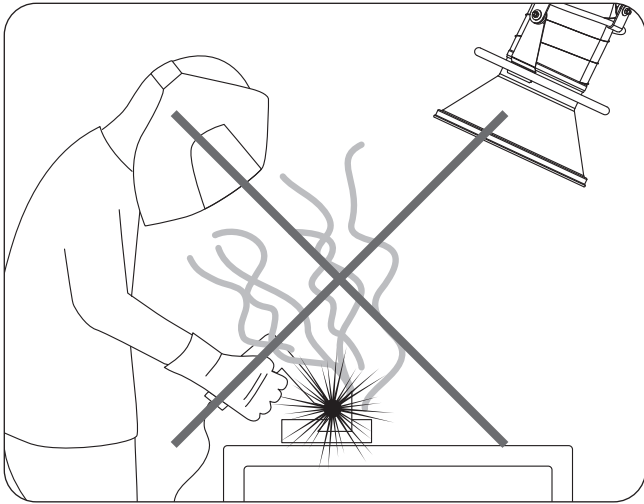


Mount the arm with bolts M6x25 and spring washers:



## 10.2 Positioning the hood

Due to the limited range of effective operation of the hood (rapid decrease in speed of catching with a change in the distance) is required to set the inlet in the immediate area of smoke emission.



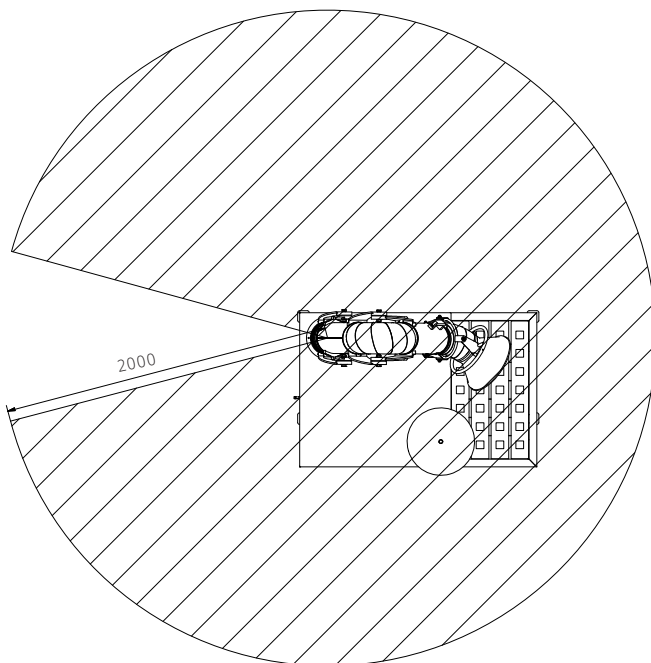
The best effect is obtained when the suction nozzle is positioned at a distance of about 20 cm from the source of emission.



Many industrial applications involve extremely high pollution loads that can settle inside the extraction arm.

## 10.3 Working range with fume arm

Range of the field with arm Oskar1620P



All dimensions are given in [mm]



Fume arms working with SF-1000:

- Oskar 1620P, reach 2 m, hood inlet Ø315 mm
- Oskar 1630P, reach 3 m, hood inlet Ø315 mm
- Econ 1620P, reach 2 m, hood inlet Ø315 mm
- Econ 1630P, reach 3 m, hood inlet Ø315 mm



## 11. Use

Read the safety section before using the machine. Set the extraction hood as described in 10.2 positioning chapter.

### 11.1 Start-up

Before starting the unit:

- mount self-supporting arm on the connection plate
- connect compressed air supply
- plug the unit to power supply using the cable ended with the plug
- check all connections status
- start filter unit with main switch

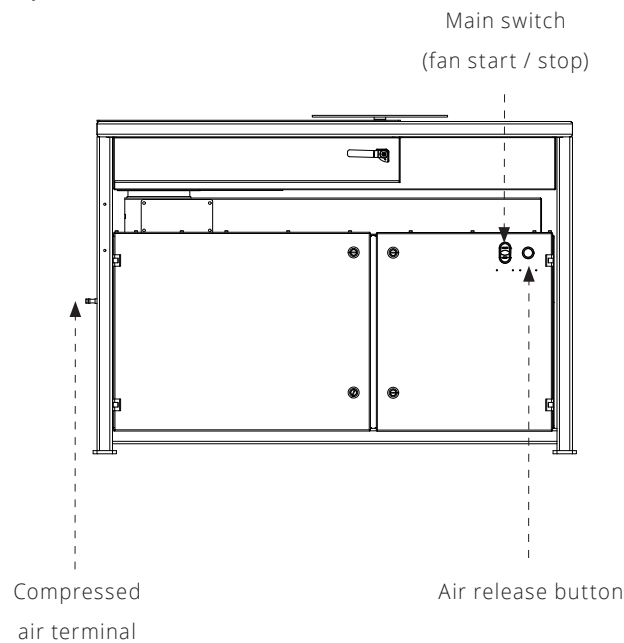


This unit features a three phase motor. The incorrect sequence of phase cables in the power socket will cause improper rotation of the fan impeller and its efficiency.



Use appropriate personal protective equipment according to general health and safety rules. All electrical work must be carried out by qualified personnel. The machine equipped with the accessories complies with the required stability conditions. The device should be installed on flat, properly hardened surfaces.

### 11.2 Motor control (basic setup)



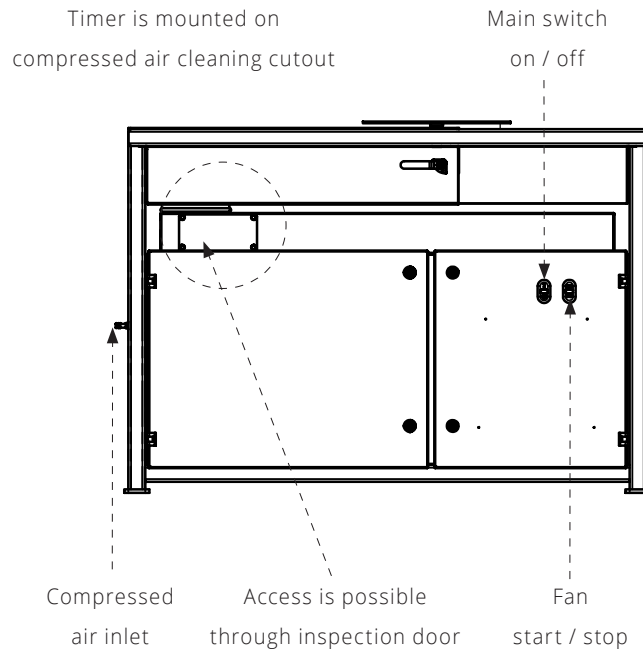
### 11.3 Compressed air cleaning system (basic setup)

Cartridge cleaning is activated with compressed air release button (see the drawing). A pulse of compressed air cleans the cartridges blowing off dust cake built up between cartridge pleats. Before next compressed air release wait about 10 seconds or until the tank is filled back with compressed air. Cartridges cleaning is recommended to be performed every time at startup and shutdown and during the work (not less than every 4 hours). Each time when the airflow is significantly low compressed air cleaning is advised.



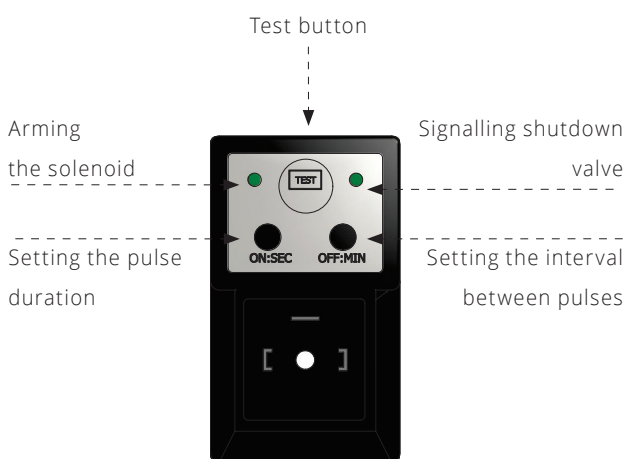
The compressed air must be free from oil and water

### 11.4 Motor control (optional version)



### 11.5 Compressed air cleaning timer (optional version)

The compressed air cleaning timer controls duration and frequency of the cartridge cleaning impuls. The factory setting is 0,5s impulse duration every 10 minutes.



**i** The compressed air must be free from oil and water.

**⚠** Remember! All electrical work must be carried out by qualified personnel. Before opening the device, disconnect the power and compressed air supply. Do not start the device when it is open.

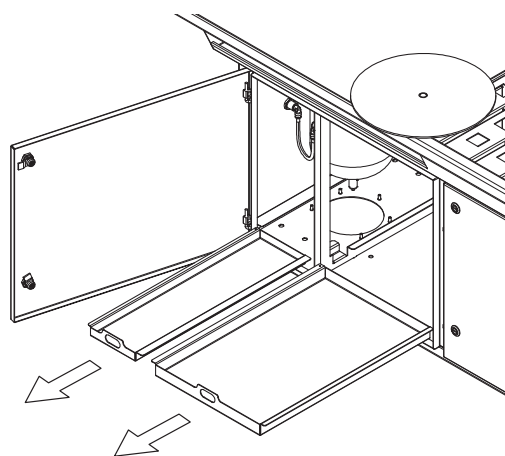
## 12. Maintenance

The lifetime of filter cartridges depends on the amount and type of dust captured by the unit. As filter contamination increases, their resistance can increase and airflow decrease. In case of significant operating parameters deterioration the filters should be replaced with new ones.

### 12.1 Emptying the dust drawer



Before emptying the dust drawer, switch of the unit and disconnect it from the power and air source.



- open the door of the filter chamber
- pull out the drawer
- empty the drawer
- slide in the drawer
- close the door of the filter chamber



The drawer collects dust from the filtration process. The amount of the collected dust depends on the pollution type. It is important to control the dust level in the drawer and empty it regularly.



Dust on the internal parts of the device can get into the respiratory tract and lead to skin irritation. Appropriate health and safety protection should be applied.

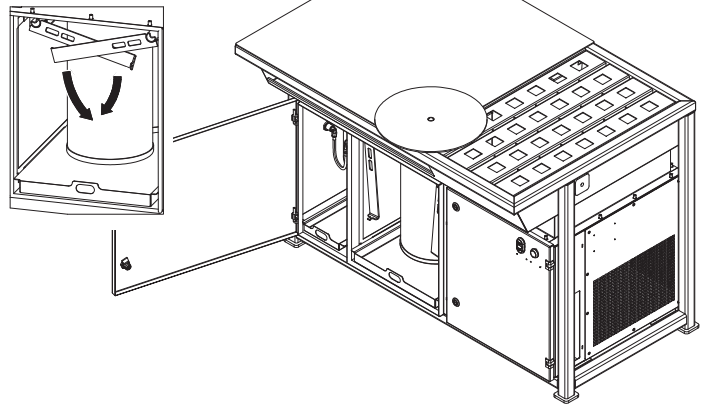
## 12.2 Filter replacement



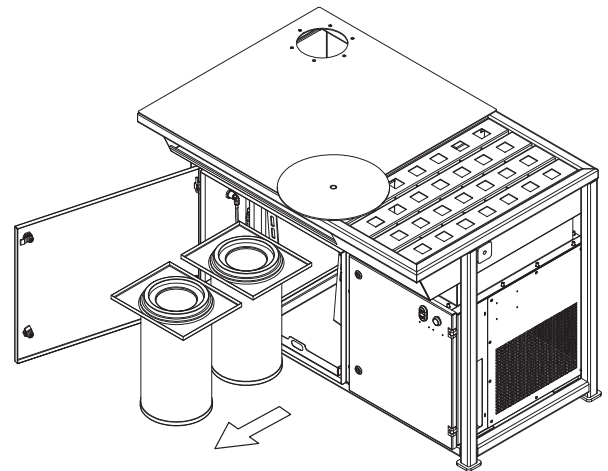
Before replacing the filters switch off the unit and disconnect it from the power source

- open the door of filter chamber
- release filter mounting levers
- remove cartridges
- insert new filter cartridges
- close back filter mounting levers
- make sure that cartridges are in position
- close the door of filter chamber

filter  
mounting levers



Pack cartridge with-in foil bag before pulling it out from the filter unit



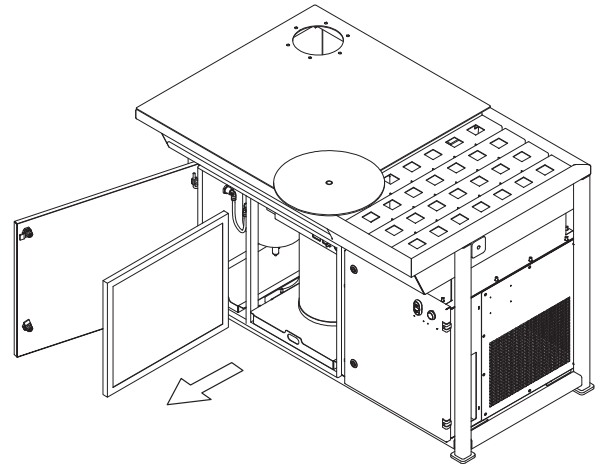
Dust on the internal parts of the device can get into the respiratory tract and lead to skin irritation. Appropriate health and safety protection should be applied.

### 12.3 Prefilter replacement



Before replacing the filters switch off the unit and disconnect it from the power source

- open the door of filter chamber
- slide out the metal mesh filter
- insert new mesh filter
- close the door of filter chamber



Pack cartridge with-in foil bag before pulling it out from the filter unit



Dust on the internal parts of the device can get into the respiratory tract and lead to skin irritation. Appropriate health and safety protection should be applied.

### 12.4 Service

DAILY	MONTHLY	YEARLY
<p>Overall control for connection tightness, including the state of chamber door seals and flexible hoses</p> <p>Pulse cleaning of dirty filter</p> <p>Cleaning of waste drawer</p>	<p>Visual inspection for signs of corrosion</p> <p>Electrical system and wire insulation control</p>	<p>Recommended replacement of the main filter cartridges</p> <p>Inspection of metal mesh filter</p> <p>Control of the wire condition and ground connection</p>

## 12.5 Spare parts

In order to determine the type of spare parts, contact an authorized distributor or the Menegon company. Prepare the data from the nameplate: device name, serial number and part number. Use only original parts supplied by Menegon.

## 13. Troubleshooting

SYMPTOMS	POSSIBLE REASONS	PROCEDURE
Low air flow	Wrong direction of motor rotation	Change direction of the motor by changing the phases in power supply socket
	Filter cartridge is clogged	Connect compressed air to the filter, perform the cleaning cycle several times. If this proves ineffective remove the cartridge, wash it with clean water and detergent
	Compressed air with wrong parameters has being used. Cartridges blocked by moisture or oil	Take cartridge out. Clean and dry . If it doesn't help change to a new one
Dust coming out of the filter	Wrong sealed or mechanically damaged filter cartridge	Properly tighten the filter gasket. Replace filter cartridge for a new one
Can not start the device	No power supply	Check the connection of the device, check the power supply



Room capacity, partition walls material, architecture of the interior, installation place of the device and other installed machines may increase the total sound pressure level at workplace.

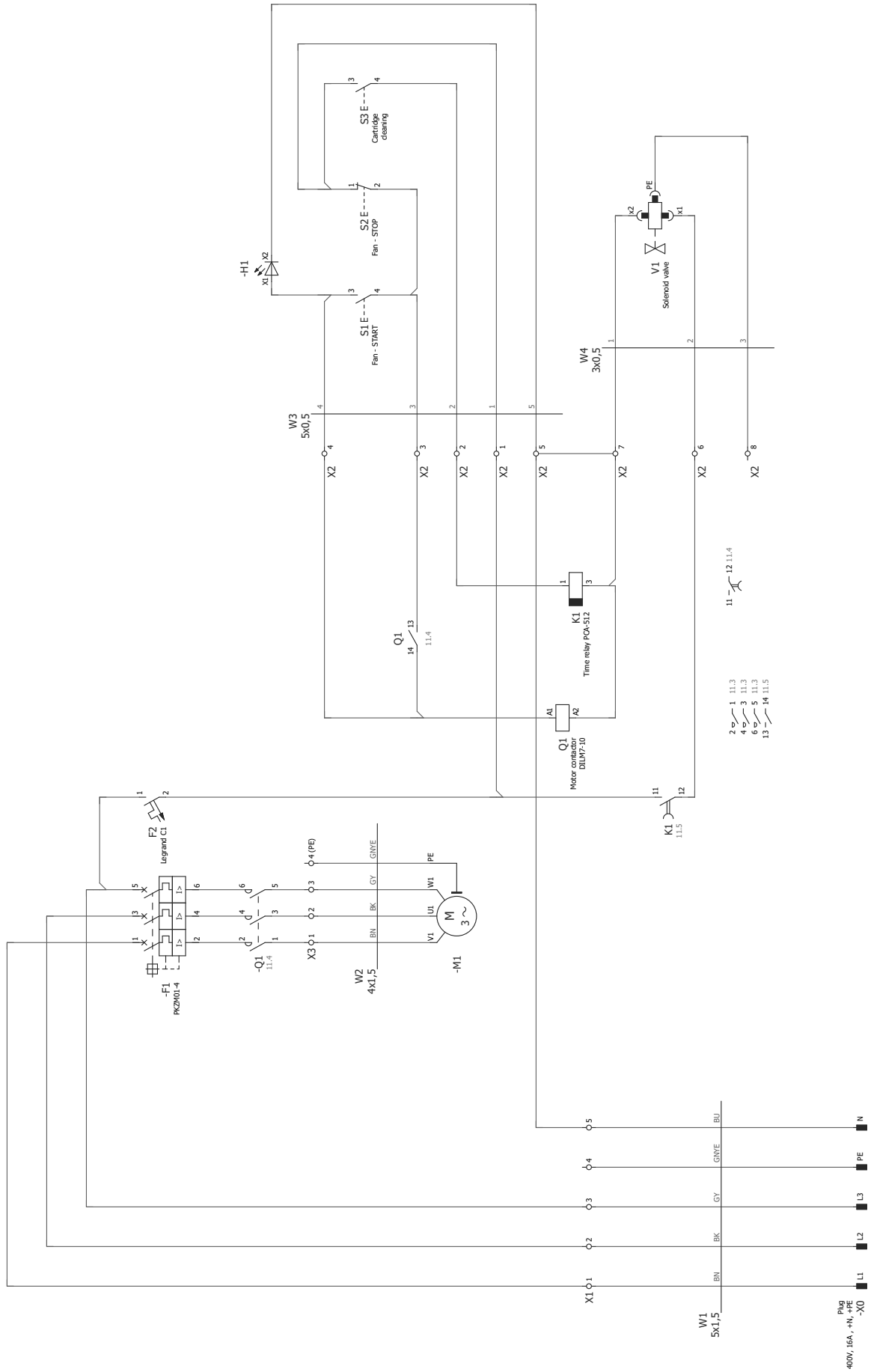
## 14. Disposal

Before dismantling, the machine must be disconnected from the power source. The area of work should be properly separated and marked. Plastics and metals must be sorted as far as possible. Disposal must be carried out in accordance with local legal requirements. The machine filters should be disposed of in compliance to relevant local regulations.

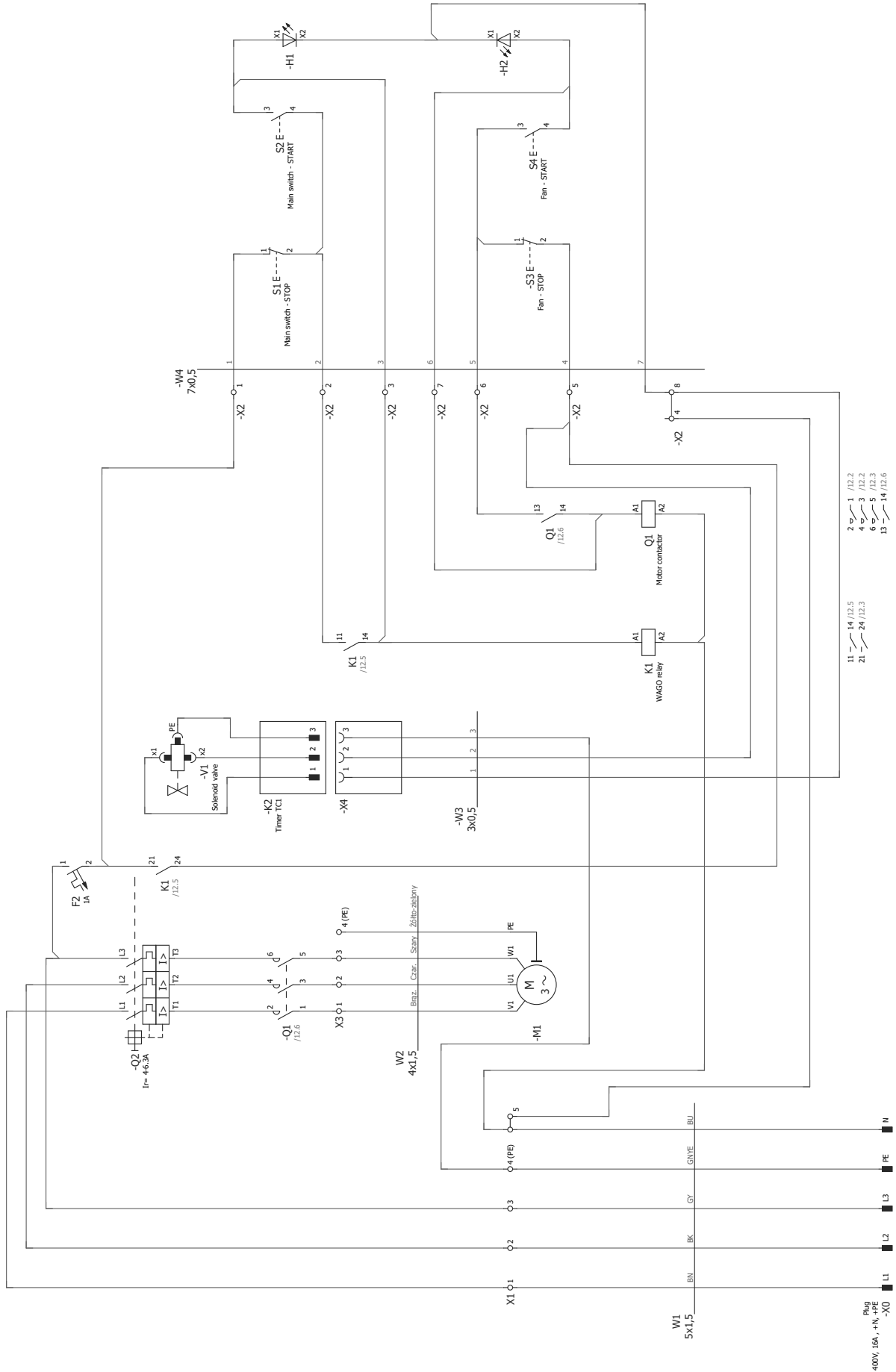


Dust on the internal parts of the device can get into the respiratory tract and lead to skin irritation. Appropriate health and safety protection must be taken during disposal work.

15. Electrical diagram (basic setup)



16. Electrical diagram (optional version)





## 17. General terms and conditions of warranty

1. The present warranty is granted by Menegon Spółka z o.o. with its registered office in Mokry Dwór (postcode 83-021) at Mokry Dwór 6c, Tax ID No. (NIP): 583-27-65-135, National Business Registry No. (REGON): 192622385, entered into the Register of Entrepreneurs of the National Court Register at the District Court for Gdańsk-Północ in Gdańsk, , 7th Commercial Division of the National Court Register, under No. KRS 0000072042, hereinafter referred to as the "Manufacturer" or "Warrantor".
2. The provisions hereof shall apply only to purchasers who are entrepreneurs understood as natural persons, legal persons or organisational units referred to in Article 33(1) §1 of the Civil Code, pursuing business activity on their own account.
3. The Manufacturer shall grant warranty for the period of 12 months as of the date of purchase, however not longer than 18 months of the date of manufacture (for possible extension of the warranty period please contact the authorised sales representative).
4. The warranty shall include defects caused by the fault of the manufacturer, i.e. physical defects of the Manufacturer's Products arising from reasons inherent in the product and resulting from the use of defective materials, caused by structural errors, or defective workmanship, provided that operation and maintenance of the device was performed always in accordance with the appended Operation and Maintenance Documentation and that the other conditions specified herein have been met.
5. The warranty shall not include parts of devices subject to normal wear, consumable materials (filters, gaskets, bulbs, fuses, etc.).
6. A warranty repair shall take place by means of replacement of the damaged components with others - the replaced components become the property of the Warrantor. If it is impossible to determine the cause of damage, the Warrantor shall repair the product within 14 business days of the date of reporting the defect at the latest, unless there is a need to import untypical or not easily available parts.
7. The warranty shall not include: mechanical damage or damage resulting from improper operation, improper exploitation, natural wear of materials, partial or as a whole, random events or abnormal atmospheric phenomena (force majeure events), improper transport, storage or use, improper installation or installation performed by an entity which is not authorised by the Manufacturer, modifications or structural changes made by the user or third parties without the consent of the Manufacturer.
8. Loss of warranty shall take place in case of: independent repair and modifications without a written notification and consent of the Manufacturer, breaking the seals placed by the Manufacturer, using other consumable components that those indicated and recommended by the Manufacturer.
9. The Warrantor shall be liable for physical defects only up to the standard value of components. The standard value of components shall be understood as their value according to the prices applied by the Manufacturer on the date of warranty repair.
10. The warranty shall not include losses caused by downtime while awaiting for warranty repair and property damage, i.e. indirect and direct losses and costs connected with the need of disassembly and reassembly of the device. The Warrantor shall not be liable for any lost profits.
11. This warranty shall only be valid if the invoice for purchase of the products was paid and if the maintenance inspections are performed each year (in case of extension of the warranty period).
12. The Warrantor shall reserve the right to charge the costs of inspection to the claimant if the claimed product proved to be functional and if the defects to be repaired or the components to be replaced are not subject to warranty or the terms and conditions of the warranty exclude the liability of the Warrantor.
13. A defect shall be reported within 14 days after its discovery. Failure to comply with the above deadline shall result in expiration of the warranty entitlements.
14. The Warrantee shall report a failure, defect or fault only in writing by sending a complaint by e-mail or letter to the address of the manufacturer. The complaint shall contain an accurate description of the defect and indicate the date on which it occurred.
15. The Warrantor shall handle the complaint within 14 days of delivery of the defective goods to the Warrantor or verification at the location where the goods are installed, subject to a possibility of extension of the above period if it is necessary to perform detailed technical tests, of which fact the Warrantor shall immediately inform the Warrantee.
16. The Warrantor shall inform the Warrantee on handling the complaint in writing, by phone, fax or e-mail.
17. If the guarantee claim is accepted, the Warrantor shall decide each time on the repair of the defective product, its replacement with a product free of defects, reduction of its price or replacement with a product of the same intended use and similar technical parameters if the product subject to claim was withdrawn from the offer.
18. The defective product shall be repaired within 30 business days of the date of handling the complaint. If there is a need to import spare parts from abroad, perform additional laboratory testing, etc., the deadline for repair may be extended until the time of performance of necessary actions, however not more than up to 90 business days of the date of handling the complaint. The deadlines specified in the preceding sentences shall apply also to replacement of the product with a product free of defects, reduction of its price and replacement of a defective product with a product of the same intended use and similar technical parameters respectively.
19. In connection with the granted warranty the parties hereby exclude application of the provisions of the Civil Code regarding warranty for defects, therefore the Customer shall not be entitled to any other claims resulting from defects of the delivered product apart from those referred to above.
20. Any disputable matters arising in connection with the granted warranty shall be settled by the court competent for the registered office of the Manufacturer.
21. This warranty shall be governed by the Polish law.

## 18. EC declaration of conformity

# menegon

The manufacturer:

Menegon Sp. z o.o., Mokry Dwór 6c, 83-021 Mokry Dwór, Poland

Confirms the following products:

## SF-1000 workbench

Meets the requirements of the following European directives:

- Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006. on machinery and amending Directive 95/16/EC (recast).
- Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014. on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits (recast).

and the following standards:

- EN 60204-1:2010 Safety of machinery - Electrical equipment of machines - Part 1 General Requirements.
- EN 12100:2012 Safety of machinery - General principles for design - Risk assessment and risk reduction.
- EN 13857:2010 Safety of machinery - Safety distances to prevent reaching the upper and lower limbs to hazardous areas.
- EN 60034-1:2011 Rotating electrical machines - Part 1 Rating and performance.

Confirmed in: PL-Mokry Dwór  
Confirmed on: 2019-11-22



Michał Menegon  
  
President/CEO





[www.menegon.com.pl](http://www.menegon.com.pl)

Authorized representative