



Application

In general, UFO-A filtering units are meant for cleaning the dust-laden air from contamination, formed during production processes. It is irreplaceable for capturing the dry dust particles emitted during welding, grinding of non-sparking materials, gas- or plasma cutting of metals or other dust emitting processes, in chemical industry, pharmaceuticals, food production, plastic processing and others. Maximum temperature of the forwarded air should not exceed +60°C. The appliance is equipped with cartridge filters, capturing the dust particles on the outer filter surface. The deposited dust is cyclically struck down by impulses of compressed air.

Structure

The system consists of one filtration chamber (UFO-A-10000), or two filtration chambers (UFO-A-20000) and a fan chamber with silencer located on the top. The filtration chamber is located on a four-leg base with hopper chamber and waste container.

UFO-A-10000 consists of one filtration chamber and fan chamber of rated flow 10 000 m³/h.

UFO-A-20000 consists of two filtration chambers and fan chamber of rated flow 20 000 m³/h.

Each filtration chamber is divided with vertical wall into two parts:

- chamber of filters – containing 4 self-cleaning cartridge filters – polyester fabric class H13,
- chamber of regenerators – with 4 Venturi orifice, to clean the filters from the deposited dust, (by means of compressed air impulses). Filter cleaning proceeds automatically.

Outside the filtration chamber is located a compressed air tank with electro-valves, connected to the external installation of compressed air of pressure 6–8 bars.

UFO-A is equipped with subsequent connections:

- inlet – Ø500 mm in each filtration chamber – as standard is located on the right device side (when viewing at the filtration chamber side). It is possible to swap the side walls, so the inlet will be located on the left side of the device.
- outlet of the silencer:
 - Ø500 for UFO-A-10000,
 - Ø710 for UFO-A-20000.

Additionally, to the device is connected the automation set, to supply the fan and control the pneumatic filters regeneration system.

Operational use

UFO-A appliance can be placed both, inside the process room and outside the building.

Before the start-up, screw up firmly the legs to the floor. The filtering units are designed for:

- cooperation with a system of local exhausts, i.e. extraction arms connected to the main collecting ductwork, joining them with the inlets,
- general ventilation combined with air filtration, for example in the „push-pull“ system.

After start-up, the automation set provides continuous work of the fan and automatic filter cleaning by cyclical compressed air impulses. The cartridge filters must be replaced after a period of use (approx. 1–2 years).

NOTE:

1. On Customer's request the device can be equipped with active carbon spunbond impregnated filters – for filtration of gaseous contaminations arising during the welding processes.
2. On Customer's request the filtering unit can be fitted with a fire-extinguishing system.



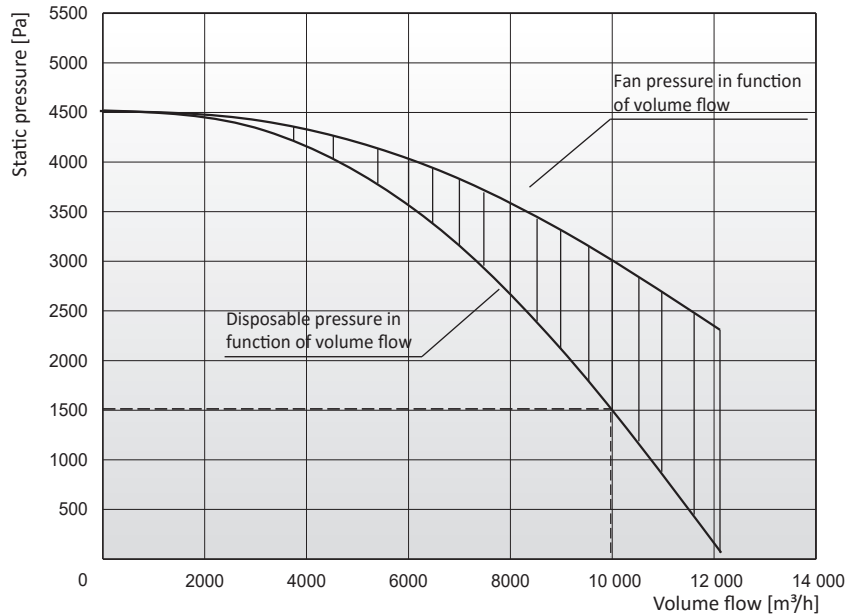
Technical data

Type	UFO-A-10000	UFO-A-20000
Part no.	804U18	804U13
Maximum volume flow [m³/h]	12 000	22 000
Maximum vacuum [Pa]	4500	4800
Motor rate [kW]	11	22
Supply voltage [V]	3x400	3x400
Acoustic pressure level [dB(A)]*	76	79
Weight [kg]	700	900
Diameter of inlet [mm]	500	2x500
Diameter of outlet [mm]	500	710
Required compressed air pressure [MPa]	0,6	0,6
Quantity of cartridge filters	4	8
Capacity of waste container [dm³]	72	72
Consumption compressed air [Nm³/h]	5,6	10,2

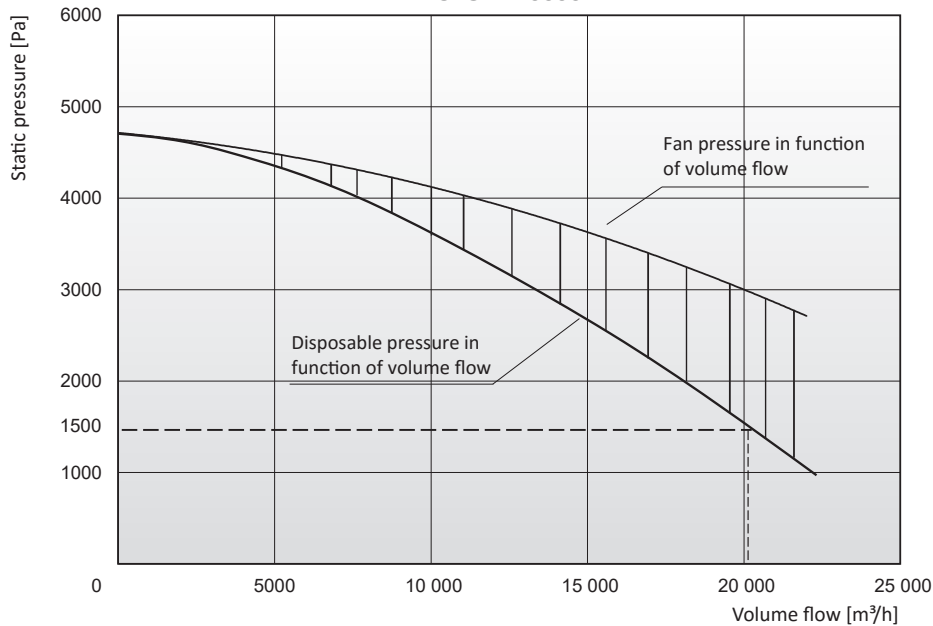
* Acoustic pressure level has been measured at distance of 1 m.

Flow charts

UFO-A-10000



UFO-A-20000



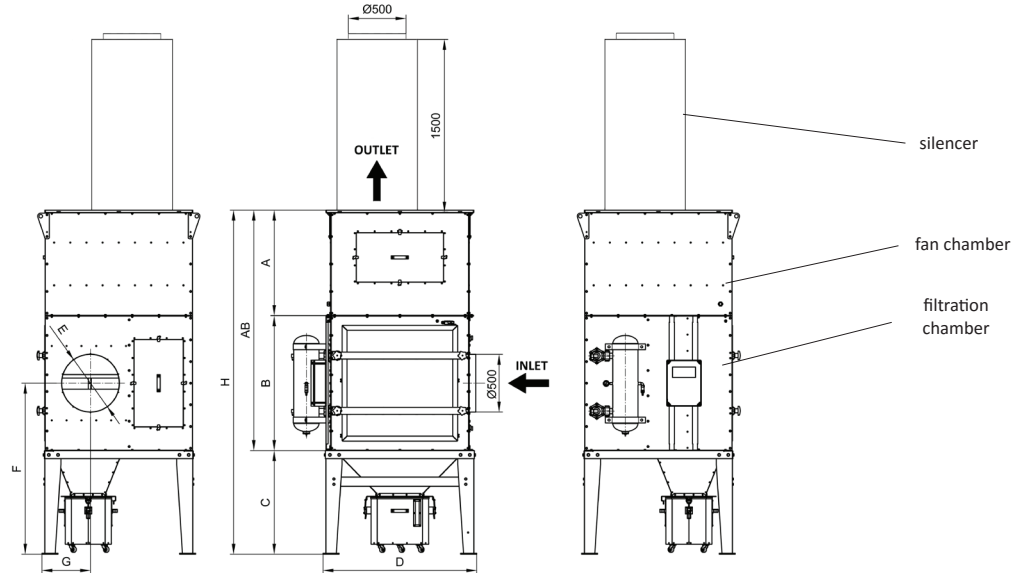
NOTE: Flow charts have been carried out for cartridge filters slightly polluted with dusts after welding out 1500 electrodes ER24.



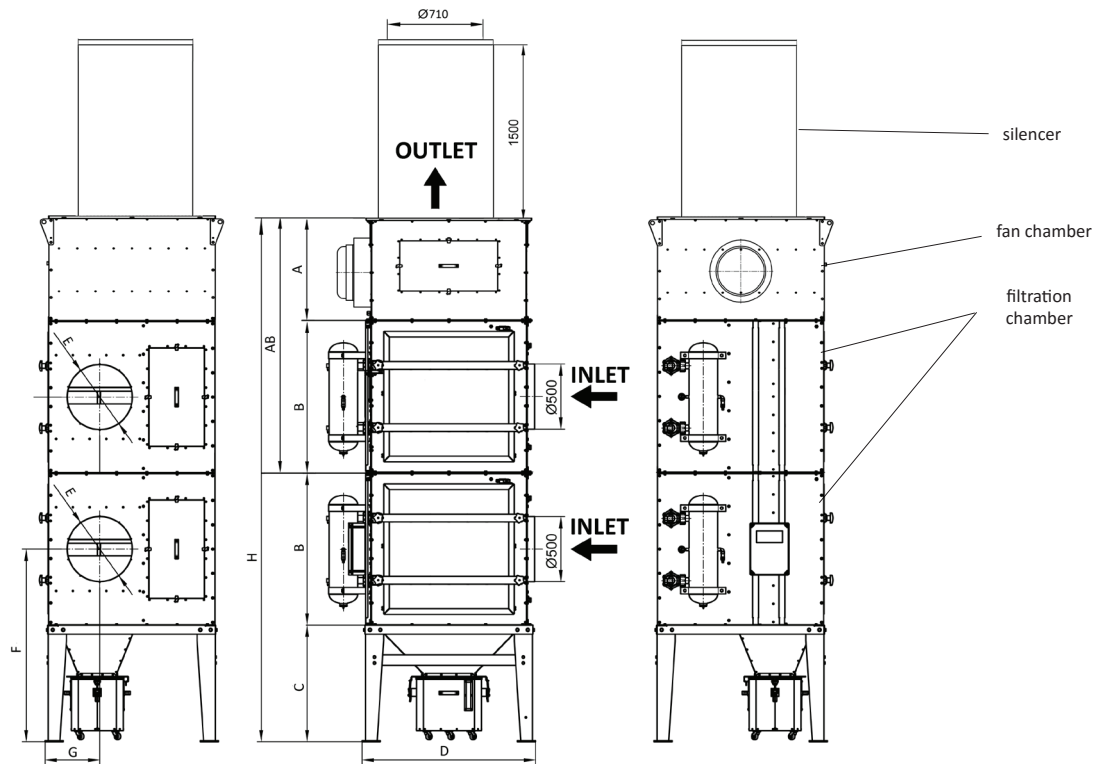
UFO-A

filtering units for welding dust
and other fine dust

UFO-A-10000



UFO-A-20000



Dimensions

Type	A [mm]	B [mm]	AB [mm]	C [mm]	D [mm]	F [mm]	G [mm]	H [mm]
UFO-A-10000	915	1170	2085	900	1336x1336	1485	425	2990
UFO-A-20000	1178	1170	2348	900	1336x1336	1485	425	4418

Replaceable parts

Cartridge filter

Type	Part no.	Weight [kg]	Class	Filtration efficiency [%]
PN166638U	800F04	4,2	H13	99,95