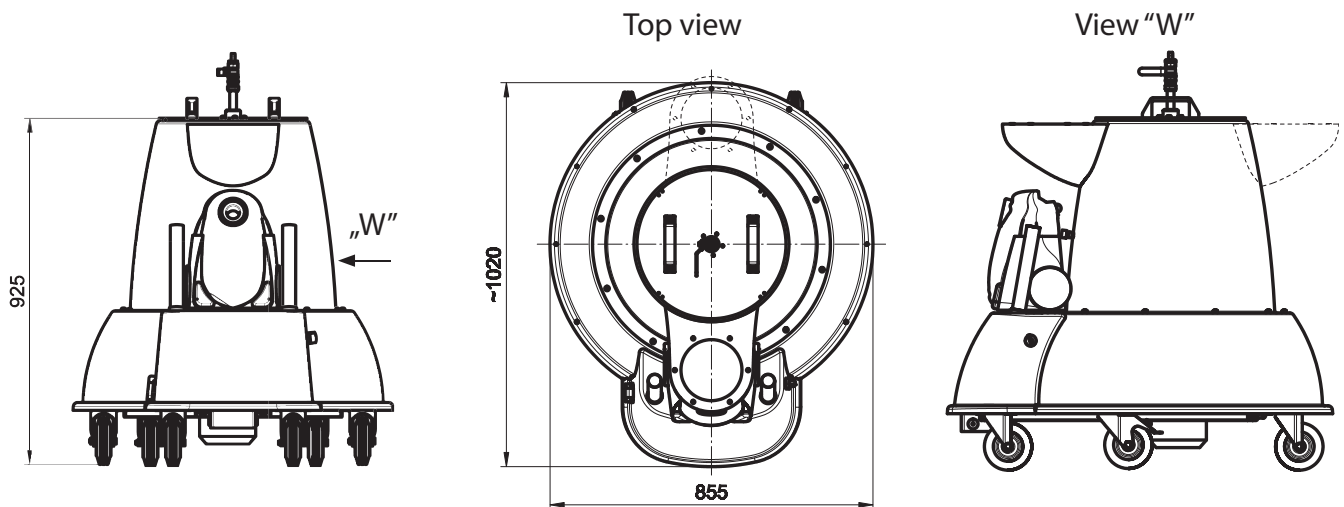


Application

MATRIX-1000 is applied for cleaning the air from dry welding dust arising at the mobile or stationary workplaces. Additionally, it can be used for capturing other dusts of not significant emission of contamination (up to 10 dm³ a day). Due to the applied cartridge filter with a teflon membrane, fine dusts (even particles smaller than 0,4µm) are captured. MATRIX-1000 units are adapted for installing the extraction arms of diameter 160 mm and 2 metres workrange. MATRIX-1000-1 works with one extraction arm, whereas MATRIX-1000-2 is adapted for connection of two extraction arms. In the second case, MATRIX should be applied for use at workplaces of small emission, as the volume flow distributed to one extraction arm is double reduced.



Structure

The MATRIX-1000 consists of following elements:

- housing of polyester-glass composite,
- radial fan – zinc-coated steel sheets,
- cartridge filter – polyester, teflon coated membrane,
- rotary jets for – cartridge filter regeneration,
- support – to install the extraction arm (MATRIX-1000-2 two supports),
- control unit (version with automatic or manual control),
- six castors' assembly – to displace the device,
- vacuum cleaner – to remove the contamination from the filter chamber.

Options

MATRIX-1000 is manufactured in two versions of control. In the standard version the fan is operated manually. Whereas in the automatic version, after the fan is manually switched on, first the electromagnetic valve opens automatically (supplying the compressed air to the rotary jets), subsequently – after several seconds the fan is starting automatically.

Operational use

It is important to connect the MATRIX-1000 to the external compressed air installation of pressure not lower than 0,6 MPa. The pressure hose should have a diameter 16 mm. A five-metre-long supply cable with a plug is used for energizing the unit with 230V current. In the course of filter regeneration the dust (accumulated on the outer filter surface) has to be periodically struck off by the rotary jets. In standard version (MATRIX-1-S and MATRIX-2-S) – in case of the efficiency decrease, open the ball valve of the compressed air and slide upwards and downwards the lance with a rotary jet (the lance is placed in the filter cover). In automatic version (MATRIX-1-A and MATRIX-2-A) – in case of the efficiency decrease, switch off the device and in two seconds start it again. The filter regeneration proceeds automatically. The struck off dust is accumulating in the lower part of the filtration chamber of volume approx. 10 dm³. The dust has to be removed periodically by means of a vacuum cleaner that is enclosed to each device. Before doing so, clasp-off the cover and withdraw the cartridge filter. The vacuum cleaning hose along with accessories is placed in a container underneath the vacuum cleaner.

Technical data

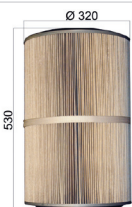
Device type	Part No.	Filter regeneration	Volume flow [m ³ /h]	Motor rate [kW]	Supply voltage [V]	Noise level [dB(A)]	Quantity of the connections for ERGO arms	Weight [kg]
MATRIX-1000-1-S	800028	Manual	1000	0,75	230	66	1	85
MATRIX-1000-1-A	800029	Automatic	1000	0,75	230	66	1	85
MATRIX-1000-2-S	800030	Manual	1100	0,75	230	67	2	88
MATRIX-1000-2-A	800031	Automatic	1100	0,75	230	67	2	88

Caution:

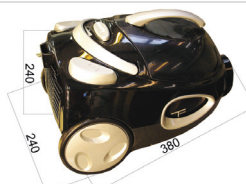

- Weight of the device with the extraction arms:
MATRIX-1000-1 – 90 kg
MATRIX-1000-2 – 110 kg
- Volume flow has been measured at the clean filters.

Replaceable parts

Cartridge filter

	Type	Part.No	Weight [kg]	Class	Filtering efficiency [%]	Remarks
	PTM 085032R	452F82	4,2	H13	99,5	Replacement frequency – 1 - 2 years

Vacuum cleaner

	Type	Part.No	Weight [kg]	Remarks
	vacuum cleaner Pitbull-1	857023	4,2	The vacuum cleaner serves for removal of the dusts that accumulated in the container and for cleaning the workplace
	WJ-1	451002	0,1	a single-use waste bag