

Purpose

TENDER VAC 200 belongs to the high-vacuum filtering unit group. The appliance is designed for air filtration from dry dustand gas impurities. It removes efficiently any contamination directly at the emission site. The device is irreplaceable for laser cutting of rubber, plywood, plexi, acryl and other materials as well as during various processes accompanied with unpleasant smell, i.e. in chemical- and pharmaceutical laboratories. It is a perfect solution for capturing the pollutants directly from the hoods of tools for cutting or grinding the rubber and other materials where unpleasant smell is arising. The filtering unit is designed for filtration the dry impurities. The basic equipment of the appliance is a high-vacuum suction turbine and filters of 99,95% efficiency.

Due to 1000 hours of turbine longevity, it is not recommended to use the device for continuous work.

Structure

TENDER VAC 200 consists of following elements:

- cylindrical steel housing,
- high-vacuum suction turbine,
- polyester cartridge filter filtration efficiency 99,9%,
- rotary jet for cartridge filter regeneration,
- high-efficiency filter type FA, class H14,
- absorber with granulated active carbon gas fractions absorption,
- socket equipped with a loose Ø44 fitting piece to connect the extraction hose,
- compressed air valve (manual or electromagnetic depending on the version),
- control unit (version with manual or automatic control),
- two pressure controls activating the acoustic signalling upon excessive resistances of the filters,
- waste container with assembly of castors providing easy displacement of the device.

Options

TENDER VAC 200 is manufactured in two versions – varying in the control mode. In the standard version the device is started manually, whereby, it is important to open the compressed air valve for several seconds (supplying the filter regenerating rotary jet), before the turbine is operated. In the automatic control version – after the turbine is switched on, first the electromagnetic valve of the compressed air opens automatically, then (after several seconds) the turbine is automatically operated.

Operational use

TENDER VAC 200 requires connection to the external compressed air installation of pressure at least 0,6 MPa. The device is energised through a five-metre-long supply cable with a plug. The appliance ought to be connected with a local exhaust by means of a Ø44 mm hose. Depending on the process, it can be a technological device, suction housing or ERGO-MINI extraction arms, to be served. The dust impurities are captured by the cartridge and absolute filter, whereas the active carbon layer is absorbing the majority of noxious chemical substances as: styrene, toluene, alcohols, phenol, petrol and many others. At the moment when any of the dust filters reach the extreme pollution rate, pressure controls automatically switch on acoustic signalling devices that are subordinated to the subsequent filters. The cartridge filter has to be regenerated by opening the compressed air valve, whereas the absolute filter should be replaced for a new.

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Technical data

Type of the device	Part no.	Filter regeneration	Volume flow [m³/h]	Motor rate [kW]	Supply voltage [V]	Acoustic pressure level [dB(A)]	Capacity of the waste container	Weight [kg]
TENDER VAC-200-S	802007	manual	225	1,6	230	72	15	55
TENDER VAC-200-A	802008	automatic	225	1,6	230	72	15	55

1. Maximum vacuum for all sizes is 30 000 Pa. 2. Filtration efficiency amounts 99,9%.

Replaceable elements

Cartridge filter

	Туре	Part no.	Weight [kg]	Filtration efficiency [%]	Remarks
300	PN032032U	800F01	4,2	99,9	Replacement frequency – 1 up to 2 years.

Absolute filter HEPA

	Туре	Part no.	Weight [kg]	Filtration efficiency [%]	Remarks	
500 	FA-13/50	851F15	4,2	99,9	Filtration material – glass fibre formed into a conglomerate in mini-pleat technology. Replacement – after the final resistance of 500 Pa is reached.	

Granulated active carbon						
	Туре	Part no.	Weight [kg/m³]	Remarks		
	ORGANOSORB 10CO 4x8	874W04	500	Active carbon weight in the device – 15 kg. Replacement frequency of the layer has to be evaluated organoleptically. In average, the longevity of the carbon layer is 200 operating hours.		

Suction turbine				
	Туре	Part no.	Weight [kg]	Remarks
ST 0140	AS 309,5	810T07	1,4	Replacement frequency – after approx. 1000 hours of use.

Additional equipment

Dust collecting nozzle						
	Туре	Part no.	Weight [kg]			
370	SC-50	856S05	1			

Pipe			
1000	Туре	Part no.	Weight [kg]
	S-50	801Z02	1,2

Connection fitting piece							
	Туре	Part no.	Weight [kg]				
SS 44 44 55 54 54 54 54 54 54 54	Z50/44	832Z00	0,11				

Hose				
	Туре	Part no.	Weight [kg/m]	Remarks
Contraction of the	PCV FLEX-44	821P29	0,36	Flexible extraction hose. Standard purchase length 15 m. For technical data see section VENTILATION ACCESSORIES.