Fume eliminator unit of recirculation type DEU-M for welding and soldering fume

The dust eliminator unit of recirculation type DEU-M is used for catching finely dispersed aerosols (for example welding and soldering fume) at some not great concentration in the cleaning air. The unit is intended at soldering, point welding and other technological processes. The DEU-M can be used in case of a periodical manual regeneration of a prefilter (filter for the first step of cleaning)

CHARACTERISTICS	
Characteristics	Parameter
Nominal Air flow, m ³ /h	1000-1300
Reserve of static (free) pressure, Pa:	
- at the connection	400
Inlet socket internal diameter, mm	160
Power of engine, kW	1,5
Weight, kg	160
Dimensions, mm:	
Length	762
Width	630
Height	1580

CHARACTERISTICS



Fig. 1. DEU-M

GENERAL DEVICE

The unit is equipped by the two-stepped system of air cleaning. For the 1-st step of cleaning a pocket filter PF for pre-cleaning is used with filter medium, able to manual regeneration or single-time disposal, for the 2-nd step - a filter of CPF, HEF type of F7-H13 class. The class of filters is choosen according to the type of dust and clearance of the refined recyrculation air, required by specialists of our enterprise.

By request DEU-M can be equipped by a special carbon filter for the additional cleaning of air from gaseous containants.

The unit consists of the following parts: body of filter; centrifugal ventilator; pocket filter; compact filter.

On one of the sides DEU-M has a removable door for filters installing. Filters are placed in the body on the supporting angles and are pressed to them by means of special devices. Against the hermetic rubber seal the door is fixed to the body on screw join.

The unit is equipped with 4 wheels and a handle, they permit to move the unit easily along the works and install in a place, suitable for servicing some technological equipment. Two wheels are equipped with break gears.

The unit can be performed for stationary usage as well, herewith instead of wheels the unit is equipped by special supporting handholds with the regulation.

The unit is equipped with pilot lamps, which signalize when the filters of I and II step of cleaning reach the final resistance. Upon this the pocket filter $\Phi_{\pi}K$ of I step subjects to change or manual regenerations, and the filter of II step subjects to change only.

While the unit is mainteined, it can be equipped with different cantilever-turning devices or connected by air ducts with sucker.

For the nominal efficiency saving, the pressure drop of the nominal efficiency saving the pressure drop of additional air duct system or of sucker should not be more than the reserve of static ("free") pressure, specified in the table.

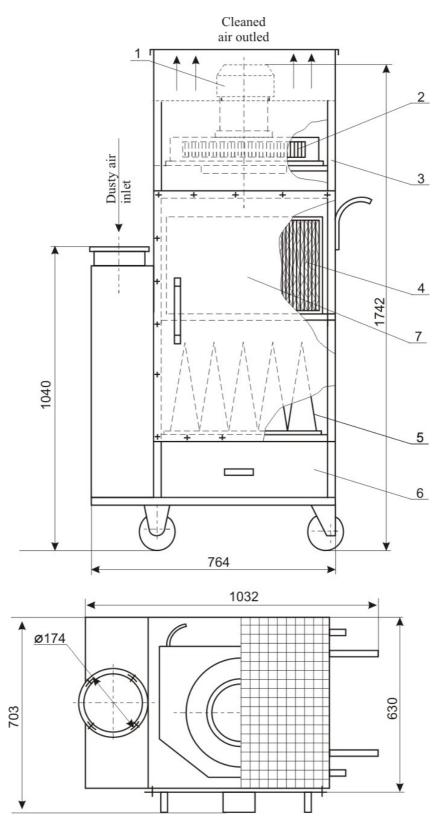


Fig. 2. Scheme of DEU-M unit 1 - motor; 2 - wheel of ventilator; 3 - body of ventilator; 4 – pleated filter; 5 - pocket filter; 6 - box for the collection of dust; 7 - door

