

Extraction device WSA-20LR for soldering fumes, 4 Extraction nozzles, 180 m³/h at 2,700 Pa



The WSA-20LR extraction unit for solder fumes has 4 extraction ports with an outer diameter of 50 mm (top), 4 adjustable blow-out gills (both sides, bottom), an optical filter indicator and a volume flow controller including a constant negative pressure control.

How does the WSA-20LR extraction unit works: An EC blower with a high pressure reserve generates a volumetric flow suitable for the application on the cleangas side of the filter. The volumetric flow can be controlled individually and steplessly. In this way, the pollutant-laden raw gas is extracted in a reliable manner. When soldering work is performed, soldering smoke forms out of vaporizing flux, small quantities of solder and gas-emitting substances from working circuit boards and components. This is comprised of a mixture of adhesive aerosols, particles and gases that must be removed from the raw gas.

The filter set-up used is specially designed for this purpose. An upstream filter mat

combination retains cooled, sticky aerosols in the suction line and prevents premature clogging of the subsequent H13 main filter element. Regularly changing the filter mat combination M5/F7 at shorter intervals significantly extends the functionality of the main filter. The particles contained in the soldering smoke are precipitated in a multi-stage storage filter system. Thanks to their depth penetration, the filter mats used are particularly suitable for the precipitation of soldering smokes. A majority of the particles contained in the soldering smoke are trapped at this stage. Extremely fine suspended substances are held back by the High Efficiency Particulate Air filter H13 in the combined filter cassette H13A. This guarantees a particle precipitation rate of 99.95%. The precipitation (adsorption) of gaseous and vaporous air contaminations takes place in the activated carbon bed of the combined filter cassette H13A. The filter effect of the activated carbon is based on adsorption, i.e. on the depositing of (gaseous) substances on the surface of the activated carbon.

In general, no chemical changes of the adsorbed substance take place in physical adsorption. The nominal volumetric flow of the devices is based on the filter construction, the contact period is oriented to a medium adsorption response. Thanks to the high degree of cleaning, the filtered clean gas can then be returned to the working area (recirculated-air operation). This avoids any loss of heat. Recirculated air operation is not permitted for the suctioning and filtration of carcinogenic, mutagenic or reprotoxic substances.

- 4 Intake connection DN50
- Air outlet: blades, both sides, adjustable
- Colour RAL 7035
- Equipment: blower, maintenance-free EC drive, particle filter occupancy indicator, constant vacuum control

item number	WL37326
model	WSA-20LR
manufacturer	WEIDINGER
manufacturer item number	WEID 0160.1-MD.13.20.6022
length	400 mm
width	350 mm
height	500 mm
order unit	1 piece
content unit	1 piece
motor rating	0.55 kW
nominal volume flow	180 m ³ /h at 2.700 Pa
frequency	50/60 Hz

nominal current	4.8 A
voltage	230 V
vacuum max	7500 Pa
noise level	59 – 61 dBA
volume flow max	250 m ³ /h

