



Ersa Easy Arm 1 and 2 – highly efficient solder fume extraction units

Ersa solder fume extraction – essential for good health!

Ersa solder fume extraction units ensure a healthy climate at the workplace. Harmful particles and gases such as those

developed during soldering are extracted and filtered, protecting employee health long-term.

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Depending on the solder wire and flux used, significant quantities of solder fumes develop during repairs or manual soldering. In addition to fine dusts, this contains microparticles and gases which can get into the lungs and are harmful when inhaled over a longer period. The Berufsgenossenschaft der Feinmechanik und Elektrotechnik (BGFE) (German occupation cooperative for precision mechanics and electrical engineering) investigated the effect of solder fume extraction as long ago as 2004 and came to the conclusion that workstation extraction units together with suitable filter systems achieve the best protection and lowest pollutant concentration at the workstation.

Unlike simple table-top fans which only „distribute“ the solder fumes but do not filter them, or high-maintenance tip extraction units, where the thin tubes very quickly become clogged with flux residue, decentralised workstation extraction units are the current system of choice. These devices stand out on account of the matched, effective filter system, very quiet running and great flexibility. In companies with cellular production in particular, the devices are always used wherever manual soldering is required. Such devices are also very popular for laboratory use in electronics development, on the test floor or during rework.

EASY ARM 1 AND 2 – COMPACT, MODULAR AND QUIETER THAN EVER BEFORE!

With the solder fume extraction units EA 1 and EA 2, Ersa supplies two highly effective extraction and filter systems which are also extremely energy-saving (power ratings: 40 W resp. 80 W).

Using a standardised range of nozzle and extraction arms, the solder fumes are captured directly where they develop and cleaned in a three-stage filter. Dusts, microparticles and gases are filtered out of the solder fumes



*One filter and one blower
each per extraction arm –
sound-insulated casing*

during this. A prefilter (class F7) traps dusts and fine fibres from the ambient air and thus prevents the downstream combined filter (class H 13) from becoming saturated too quickly. This filter traps particles which are smaller than 1 µm and absorbs gas molecules such as those which develop during soldering in an activated carbon layer. During manual soldering, the filter system can be operated for up to 1,500 h before the combined filter has to be replaced, depending on the intensity of use. The cleaned air is returned gently to the ambient air. Thanks to the large blowing openings on the sides of the devices, there is no undesirable dust swirling or interfering air flows.

There is a filter system and a powerful fan (130 m³/h, 1800 Pa) assigned to each extraction arm. The blowers are installed encapsulated and sound-insulated, resulting in very quiet running (50 dB) of the devices. Each extraction arm can be switched and controlled separately, and actuated by an Ersa i-CON solder station with interface synchronously to standby operation. This means extraction only takes place when soldering is being carried out. Alternatively, an external standby switch can be connected. This cuts filter costs and reduces both energy consumption and the noise level of the already very quiet devices even further. Solder fume extraction units are essential for good health! With its Easy Arm systems, Ersa supplies modern, decentralised solutions to protect users from harmful solder fumes. ■

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