Are you gambling with your health?



FILTRATION

Weller®

10 important things you need to know

4	Occupational asthma is a major issue in electronics manufacturing because when a person develops occupational asthma he / she has to be moved from that working area.
3	At least 20 % of the employees in the soldering area indicate clinical symptoms of asthma [*] . *Results from a study made in US & Europe.
	*HSE Health & Safety Executive in Great Britain
2	Thousands of workers all over the world contract occupational lung and other diseases, including cancer, each year. They develop those because they breathe in too much dust, fumes or other airborne contaminants at work*.
1	Long term exposure to airborne particles and gases can cause permanent damage to human beings.

Breathing with occupational asthma feels like breathing through a straw.





... if you work with hazardous gases and particles!

Once a person develops asthma, the symptoms are permanent and irreversible.
Almost everyone who works in an industrial environment comes in contact with chemicals which contain a solvent.

- 8 Most of dangerous gases are invisible to the eye.
- For people with heart diseases, short term exposure to hazardous airborne particles, can be linked to heart attacks and abnormal heart rhythms.
- **10** The combination of being exposed to both gases and airborne particles is more dangerous than only being exposed to gases.



Health problems

A lot of today's dust and fumes are hazardous to health when inhaled. Overexposure can lead to serious and long term medical problems such as occupational asthma or other effects like:



Soldering



Lead free soldering produces up to 250 % more particles in the breathing zone than leaded solder. As much as 700 million small particles per cubic meter are produced, which can be transported into the alveoli.



Fumes from gluing can cause skin irritation, skin drying, allergic contact eczema, inhalation and asthmatic problems.

Solvents



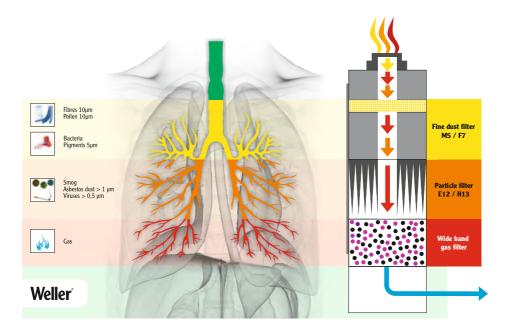
Fumes from organic solvents can cause damage to the nervous system, with symptoms of reduced sensibility, restless legs and arms.



Occupational health risks

90 minutes soldering with leadfree solder wire

Fine dust accumulation in the human body



before

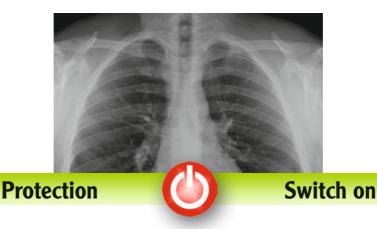


Why fume extraction? See the movie at **www.youtube.com/wellersoldering**



We only work with soldering, solvents and /or gluing 30 minutes per day, do we really need to protect ourselves?

It's about you health ... protect yourself!



- > 30 minutes exposure to airborne particles and gases per day is enough to cause health problems.
- > 30 minutes exposure per day means approximately 110 h / year or 14 workdays with continuous exposure to hazardous gases and particles.
- > Weller made a soldering test with a net mounted in the nozzle.90 minutes later the net was completely clogged (see pictures below).





The test was made with a lead free solder wire with 3 % flux.



How do I get the best protection?

Weller filter systems

- > Weller filter systems offer the best possible protection to the operator by extracting dangerous fumes and capturing airborne particles at highest levels.
- > The filter systems are mobile, and can be moved around the workplace.
- > The systems are easy to install and have low service requirements.
- > The noise levels of the filter systems are very low, additionally protecting the operator from excessive noise pollution in manufacturing areas.
- The product range consists of various products that can be used for different applications.
- > The filters have a long life time.

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7

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