



# EXTENSIVE REPLACEMENT FILTER RANGE AND EXPERT ADVICE FOR ENHANCED OCCUPATIONAL SAFETY: "FILTER.SHOP BY KEMPER"


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Fume extraction is a critical aspect of safeguarding the health of employees in metalworking industries. Filters in welding fume extraction systems play a significant role as they remove harmful particles from welding fumes. Thus, they are an essential component of workplace safety in welding. To provide customers and dealers with an even broader range of high-quality replacement filters, KEMPER's subsidiary, [Filter.Shop GmbH](#), has launched a new online store for replacement filters.

[High-quality filters in welding fume extraction devices are of paramount importance for occupational safety.](#) Various welding processes generate health-hazardous smoke and pollutant particles that can have serious health consequences without adequate protection. Filters serve as a crucial barrier to ensure that these particles do not enter welders' breathing air.

The filtration process in filter cartridges works as follows: During the welding process, contaminated air flows through the filters in the extraction device. These filters are made of materials such as nano-fiber composite nonwoven or polyester nonwoven with an ePTFE membrane. As the air flows through the filter, pollutant particles adhere to the outside of the filter. The purified air exits the device and is returned to the environment.

 Photo von [Aman Jakhar](#) von Pexels [Pexels](#) Filter plates or filter cartridges in welding fume extraction devices are usually automatically or manually cleaned. Filter cassettes, HEPA filters, or round filters, on the other hand, are typically called storage filters or disposable filters that need to be replaced at regular intervals. In cases of high dust levels, devices and systems equipped with automatically cleanable filters should be used.

## Filter Protection Classes: Guidance for Welders

To protect welders from hazardous substances in welding fumes, filters must meet certain requirements. In the case of welding fume filters, there is a general distinction between coarse dust filters, medium and fine dust filters, and particulate filters. Coarse dust particles have a diameter of more than 10 µm. Air contaminants with dust particles under 10 µm are referred to as fine dust.

According to official studies by the Employers' Liability Insurance Association for the Wood and Metal Industry, 98.9% of welding fume particles are smaller than 0.4 µm. These include health-endangering alveolar and ultrafine particles, posing a significant health risk to welders.


## KEMPER Filter.Shop: A New Destination for High-Quality Filters

["filter.shop by KEMPER"](#) offers an exceptionally wide range of replacement filters for various applications, from dry dust extraction to welding fumes with ultrafine hazardous particles. For instance, the online shop carries [filter cassettes with the E12 filter class](#). These belong to the EPA filters (efficient particular air filters) and can capture lung-entry welding fume particles at over 99.5%. [Products with the H13 filter class](#) are also

available in "filter.shop by KEMPER." H13 designates them as HEPA filters (high-efficiency particulate air filters) with an efficiency rate of over 99.95%. They are used not only in welding but also in cleanrooms and sterile environments.

[In addition to KEMPER's original filters, the shop also offers compatible products for devices and systems from other manufacturers.](#) Both KEMPER filters and KEMPER-quality replicas for devices and systems from other manufacturers are always in stock in the online shop, ensuring prompt availability. "filter.shop by KEMPER" provides high-quality replacement filters as replicas for filter systems from manufacturers such as DONALDSON, ESTA, NEDERMAN, TEKA, TRUMPF.

## Maintaining IFA W3 Certification

In line with the proven KEMPER quality, "filter.shop by KEMPER" also features certifications like the W3  certification. This certification, granted by the Institute for Occupational Safety of the German Social Accident Insurance (IFA), is a crucial quality indicator for welding fume extraction devices. W3 is an evaluation not only for the filter but for the entire device. The certificate confirms that the separation efficiency of welding fume extraction using high-alloy steel has been tested, and the filter system filters out 99% of pollutants from the air.

This certification is globally recognized as an essential element of occupational safety. The "W3" classification pertains to welding fume. Welding fume extraction devices and filters with the W3 welding fume class are suitable for welding high-alloy steels with nickel and chromium content exceeding 30%. This is especially crucial as carcinogenic hazardous substances are produced when welding these metals.

[Original replacement filters for KEMPER devices with IFA W3 certification are marked in "filter.shop by KEMPER."](#) It is emphasized that the maintenance of the certification is only guaranteed when using suitable original KEMPER filters.

## Filters and Expert Guidance Under One Roof

"filter.shop by KEMPER" offers not only attractive prices but also expert guidance. KEMPER follows a hybrid sales model: The filter shop serves as a resource for both dealers and metalworkers. It is not just an e-commerce store. The filter shop also acts as a platform to connect with metalworkers and dealers, as expert guidance can enhance occupational safety.

