

To EWF

Dear Rute Ferraz ,
Dear Italo Fernandes,

Object : comments on EWF/IIW Subjects that deals with Health and Safety. Guideline IAB-252 – Personnel with Qualification for Welding Coordination

Following our various exchanges, we come back to you with the main remarks concerning the safety part of the training programs

Following the IARC (International Agency for Research on Cancer) report published in 2018, which unambiguously indicates that welding fumes and ultraviolet radiation can be carcinogenic, our association wishes to be strongly involved in improving the protection of welders and well of course this goes through the training of welders and the training of their management

The documents, you have given us, have been studied by the 4 technical committees of EWA

- The technical committee for welding and brazing consumables
- The technical committee for electric arc welding equipment
- The technical committee for flame welding equipment
- The technical committee for equipment for the protection and safety of welders (in which the manufacturers of fume extraction equipment are strongly represented)

The KEYS remarks from EWA technical committees are the following :

- The number of hours for the training on Health and safety for welders **is very insufficient**
- To explain the responsibility of the management of welders (welding engineer or technicians) and employers to implement health and safety actions and equipment
- The risks must be better, more directly and **clearly explained** (welding fumes, CR6, Mn, Ultraviolet radiations, infrared radiations EMF, electric hazards ..)
- To achieve this, the question of training and raising the awareness is essential on:
 - **Fumes** : To present the different welding processes ,equipment, electric parameters , welding consumables and gases **which reduce the level of fumes**
 - **Fumes extraction systems** must be explained in detail with theory and examples, taking in consideration the welders and other employees who are close to the welders



European Welding Association

- Personal Protective equipment (PPE) : training on the different type of PPE must be reinforced for all (Welders , technicians and engineers) and the obligation **to use them , to check that they are effectively used , to change them as often as necessary**
- Training of **critical case analysis methodology**: All situations with risks (for the safety and health) must be analyzed as quasi accident , and solutions implemented .
Attention for topics like **"Risk Inventory and Evaluation" (RIE), "Job Safety Analysis" (JSA) and "Last Minute Risk Analysis" (LMRA).**
- Education on **Safety Data Sheets (SDS)** has to be done
- Knowing **the national labor legislation** concerning welding (and welding fumes) and the rules and control to be respected
- **For the flame process** : a complete training has to be done on the safe use of the process (handling of cylinders ,use and control of flashback arrestors , maintenance , risks with the use of oxygen and acetylene, fumes ..)

We remain at your disposal to comment on our proposals, and I would take the initiative of a new video conference in september (or on a date that suits you)

All the producers who are in our association also remain attentive to all your requests that will preserve the health of welders

This document have been agreed by the EWA management team and have been circulated to all EWA members (<https://european-welding.org/about-ewa/members/>) . It reflects the position of the European Welding Association regarding the training of welders, welding technician and welding engineer

Very best regards

2022 June

Emil Schubert
EWA President

Guy Missiaen
EWA General Manager

Annexes Page 3-5

Annexes

IARC has re-classified carcinogenicity / 2018

After evaluating:

- > 20 case control studies
- > 20 industry + 6 population based cohort studies

Conclusion :

- Welding fumes are carcinogenic to humans (Group 1).
- UV radiation from welding is carcinogenic to humans (Group 1).

These risks impact worldwide estimated

- 11 miowelders
- 110 mioworkers who may incur welding related exposures

June 2022 update | Exemplary reactions in Europe since IARC reclassified welding fumes and UV radiation from welding arcs in 2018

2019

- UK: HSE Safety Alert, imposing additional fume extraction and PPE
- Austria: National AUVA adds rare eye melanoma from welding arc UV radiation to list of occupational cancers

2020 /Germany

- German welding Society DVS announces the start of a new initiative to reduce exposures to welding fumes "REarc welding"
- kick-off for 8 expert groups and workshops addressing GMA-welding fumes

2021 / Germany

- Multilateral cooperation agreement targeting reduction of welding fume exposures signed by occupational insurances DGUV/BGHM andDVS
- 7 industrial associations, welding and OSH R&D institutes joined collaborative framework

2021 / EU

- June: EC publishes the "EU strategic framework on health and safety at work 2021-2027", including plans to work on welding fumes under CMD*
- July: ECHA opens "Call for Evidence on welding fumes +"
- September: EWA, DVS, DGUV and others submit position papers as answer to ECHA call

2022 / Sweden

- January , Group of scientists from Karolinska Institutet request publicly a reduction of current OELs for welding fumes, based on evaluation of new studies

2022, France

- April , Expert group recommends ANSES to add "work involving exposure to welding fumes" to the ministerial order which lists carcinogenic processes

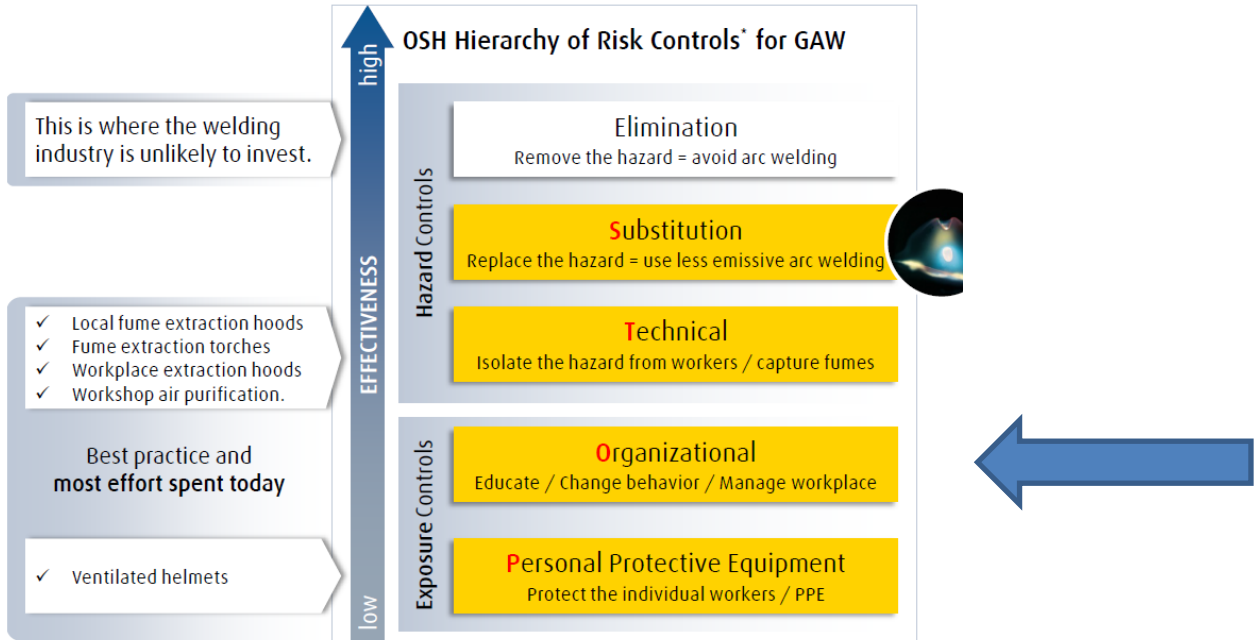
COUNCIL DIRECTIVE on the introduction of measures to encourage improvements in the safety and health of workers at work (89/391/EEC)

Article 6 -General obligations on employers

The employer shall implement the measures (..) on the basis of the following general principles of prevention:

- avoiding risks;
- evaluating the risks which cannot be avoided;
- combating the risks at source;
- adapting the work to the individual, especially as regards the design of work places, the choice of work equipment and the choice of working and production methods, with a view, in particular, to alleviating monotonous work and work at a predetermined work-rate and to reducing their effect on health.
- adapting to technical progress
- replacing the dangerous by the non-dangerous or the less dangerous;
- developing a coherent overall prevention policy which covers technology, organization of work, working conditions, social relationships and the influence of factors related to the working environment;
- giving collective protective measures priority over individual protective measures;
- giving appropriate instructions to the workers.

Abstract from DVS process to reduce risks of welding fumes



* Hierarchy of risk controls is a regulatory Occupational Safety and Health (OSH) logic implemented internationally, by authorities, with small national adaptations. Graphic here is adapted by Linde for Gas-Arc-Welding (GAW).

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