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Dear Reader,

Welcome to our Easy Guide Blast. In a few words we would like to introduce our **WELDING EXPOSURE CONTROL GUIDE for Beryllium-containing materials**. This is the ninth and last guide on specific processes provided by the Be Responsible Programme.

CONTEXT OF THE BE RESPONSIBLE PROGRAMME



The **Be Responsible Programme**, launched by the Beryllium Industry, aims to advance the science of beryllium health and safety as well as protect beryllium workers and their close entourage.

The Beryllium Science and Technology Association (BeST), representative association of the beryllium industry, and its members stress that substantial uncontrolled workplace exposure to beryllium airborne particles can present a potential health and safety risk to employees.

What to achieve

The inhalation of beryllium-containing dust, mist or fume can cause a serious lung condition in some individuals. The use of engineering and work practice controls are the preferred methods of controlling exposure to beryllium-containing particulate reliably below the national occupational exposure limit (OEL) applicable in your country for airborne beryllium.

Exposure during the WELDING process

The welding of beryllium-containing alloys, base materials or fillers indoors, outdoors, or in confined spaces should be done using local exhaust ventilation and pressure-demand airline respirators unless atmospheric tests under the most adverse conditions have established that the workers' exposure is within the acceptable concentrations.

Important to know

In all cases, workers in the immediate vicinity of the welding or cutting operations should be protected as necessary by local exhaust ventilation or airline respirators.

Local Exhaust ventilation (LEV): During welding operations, LEV is required to prevent airborne exposure to beryllium-containing fume and slag particulate. A back-draft ventilation welding enclosure used to weld other metals can often control beryllium exposures while welding.

Abrasive cleaning: If the welded parts are abrasively cleaned, ventilation must be provided to prevent airborne generation of beryllium-containing particulate during the cleaning operations.

IMPORTANT: Ventilation equipment must be inspected regularly to ensure it is functioning properly. Provide training on the use, operation and maintenance of ventilation systems to all users.

Good to know: Resistance spot welding involving beryllium- containing alloys typically require no extra ventilation since the weld nugget is small and does not generate exposure for welders. Where utilised, exhaust inlets to the ventilation system are generally positioned as close as possible to the source of generated airborne particulate. The type and capacity of the LEV will depend on the material being welded and the welding process.

Notes

GOLDEN RULES

Golden rule 1

As always, personal protective equipment, maintenance, housekeeping, local exhaust ventilation and workplace exposure characterisation must be implemented.

Golden rule 2

BeST recommends that quantitative and qualitative exposure assessments be conducted by a qualified industrial hygienist or occupational health professional.

Golden rule 3

In case of doubt, always reach out to your supplier for additional guidance.

Check out the full WELDING exposure control guide [here](#).

Notes

WANT TO KNOW MORE?

Check out our dedicated website www.berylliumsafety.eu in all European languages or get in contact with us at info@beryllium.eu