

GOOD PRACTICES FOR DRY GRINDING OF CONCRETE AND OTHER MATERIALS USING ELECTRIC CONCRETE SURFACE GRINDERS

This sheet provides guidance for dry grinding of materials containing crystalline silica by electric concrete surface grinders.



ACCESS

Restrict access to the work area to authorised personnel only.



DESIGN AND EQUIPMENT

- Choose the right system of tool and dust extraction unit for your job.
- The dust extraction unit may be a separate unit or an integrated one.
- Work only with a connected dust extraction unit. Ensure that your extraction unit always works correctly.
- The dust extraction unit has to fulfil at least the requirements of dust-class M according to EN 60335-2-69.
NOTE: For more information about the suitability of dust-class M for minerals dust see: gisbau.de/service/sonstiges/staub/staub.htm
- Ensure that all settings of the dust collection equipment are made in accordance with the instruction manuals of the tool and extraction unit.



MAINTENANCE

- Maintain the equipment in accordance with the instruction manuals, to keep them in efficient working order and good repair.



GUIDANCE FOR EMPLOYERS ON CONTROLLING EXPOSURE TO RCS IN THE WORKPLACE

EXAMINATION AND TESTING

- Visually check of the tool and extraction unit for signs of damage before every use.
- Make sure that the system of tool and dust extraction unit operates correct.
- Keep records of inspections for a suitable period of time which complies with national laws (minimum five years).
- Put in place measures to control the risk of bacterial growth within water sources used across site, focusing most on systems where water droplets will be generated.

CLEANING AND HOUSEKEEPING

- Clean the equipment regularly according to the recommendations of the manufacturer.
- Use vacuum or wet cleaning methods.
- **DO NOT clean the work area with a dry brush or using compressed air.**

TRAINING

- Give your employees information on the health effects associated with respirable crystalline silica dust.
- Provide employees with training on: dust exposure prevention; checking controls are working and using them; when and how to use any respiratory protective equipment provided and what to do if something goes wrong. Refer to task guidance sheet **2.3.4** and part 1 of the Good Practice Guide.

SUPERVISION

- Have a system to check that control measures are in place and that they are being followed. Refer to task guidance sheet **2.3.3**.
- Employers should make sure that employees have all the means to perform the checklist given below.

PERSONAL PROTECTIVE EQUIPMENT

- Refer to task guidance sheet **2.1.15** dedicated to Personal Protective Equipment.
- Indicate areas where personal protective equipment must be worn.
- Provide storage facilities to keep personal protective equipment clean when not in use.
- Replace respiratory protective equipment at intervals recommended by its suppliers.
- Risk assessment could be carried out to determine whether existing controls are appropriate.

EMPLOYEE CHECKLIST

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| <input type="checkbox"/> Make sure the room is well ventilated and any dust extraction system is switched on and is working. | <input type="checkbox"/> If you think there is a problem with your dust control equipment, ensure additional control measures are taken to reduce exposure to respirable crystalline silica dust while the problem persists. | <input type="checkbox"/> Do not interface with ventilation systems – they are provided to protect your working environment. | <input type="checkbox"/> Check and implement measures to control the risk of bacterial growth within water sources used across site, focusing most on systems where water droplets will be generated. |
| <input type="checkbox"/> Look for signs of damage, wear or poor operation of any equipment used. If you find any problems, tell your supervisor. | | <input type="checkbox"/> Clean up using vacuum or wet cleaning methods. | |
| | | <input type="checkbox"/> Use, maintain and store any respiratory protective equipment provided in accordance with instructions. | |

This guidance sheet is aimed at employers to help them comply with the requirements of workplace health and safety legislation, by controlling exposure to respirable crystalline silica. Specifically, this sheet provides good practice guidance for dry grinding of concrete using electric concrete surface grinders.

Following the key points of this task guidance sheet will help reduce exposure.

Depending on the specific circumstances of each case, it may not be necessary to

apply all of the control measures identified in this sheet in order to reduce exposure. This document should also be made available to persons who may be exposed to respirable crystalline silica in the workplace, in order that they may make the best use of the control measures which are implemented.

This sheet forms part of the Good Practices Guide on silica dust prevention, which is aimed specifically at the control of personal exposure to respirable crystalline.