

GOOD PRACTICES FOR BATCH CHARGING INTO THE PROCESS - GLASS

This activity relates to the charging of the humid batch by special charging machines from the furnace hopper into the melting furnace, which due to its operating conditions (high temperatures combined with positive pressure) generates a certain amount of dust.

ACCESS

Restrict access to the work area to authorised personnel only.

DESIGN AND EQUIPMENT

- Ensure that charging equipment is fit for purpose and well maintained.
- Adjust the sand seal system in accordance to supplier recommendations.
- Enclose the charging area as far as technically feasible.
- Assure the batch is charged at the appropriate humidity factor into the furnace.
- Furnace hoppers for the wet batch material should have an opening as small as practicable.
- Furnace hopper to be equipped with high level detection linked to alarming system to avoid overfilling.
- Ensure proper ventilation in the charging area.

MAINTENANCE

- Ensure that the equipment is maintained as advised by the supplier in efficient working conditions.
- Check sand seal system on a daily base and adjust if necessary in accordance to supplier recommendations.

EXAMINATION AND TESTING

- Visually check the equipment for signs of damage at least once per week or, if it is in constant use, check it more frequently. If used infrequently, then check it before each use.
- 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

- In order to prevent dust accumulation, clean the workplace on a regular basis.
- Deal immediately with spills. When dealing with bulk spillages of fine, dry, dusty materials, ensure that cleaning work is undertaken following a written safe working procedure and using the information in this sheet.
- Use vacuum or wet cleaning methods.
- **DO NOT clean up 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.
- If necessary, respiratory protective equipment should be provided and 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"/> Verify proper function of sand seal. If you notice any anomaly, inform your supervisor. | <input type="checkbox"/> Immediately cleaning up bulk spillages of fine, dry dusty materials by using vacuum or wet cleaning methods. Ensure that you work in accordance with your Company's written safe working instruction. | <input type="checkbox"/> Use, maintain and store any person protective equipment provided in accordance with instructions. | <input type="checkbox"/> Check and implement the measures of controlling the risk of bacterial growth within water sources used across site, focusing most on systems where water droplets will be generated. |
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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 advice on the charging of the humid batch by special charging machines from the furnace hopper into the melting furnace.

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 minimise exposure to respirable crystalline silica. i.e. to apply appropriate protection and prevention measures. 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 silica dust in the workplace.