

Worker struck by moving machine parts

On 11 February 2022, a worker was fatally injured when he reached into an automated machine through an open inspection window while it was in operation. The machine was equipped with a safeguard to stop operation once the window was opened, but the safeguard did not function at the time of the incident. The worker's head was struck by the machine's moving parts before his body fell into the machine. The worker was pronounced dead at the scene.

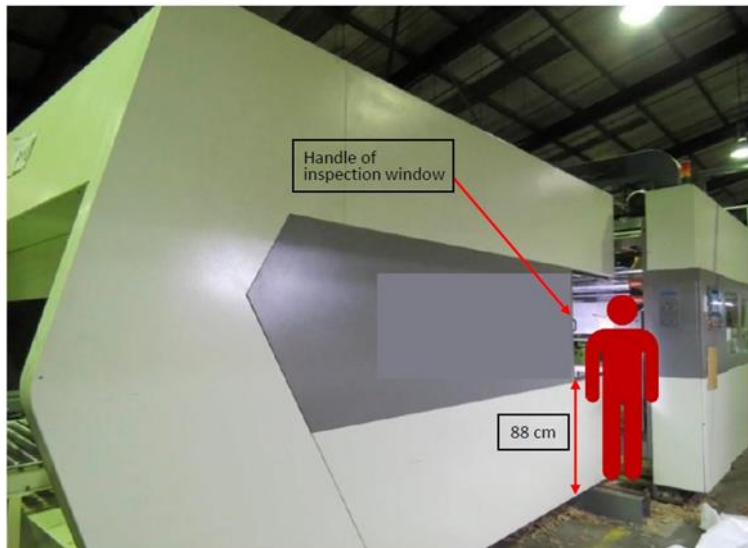


Figure 1: Position of the worker just before he reached into the machine.

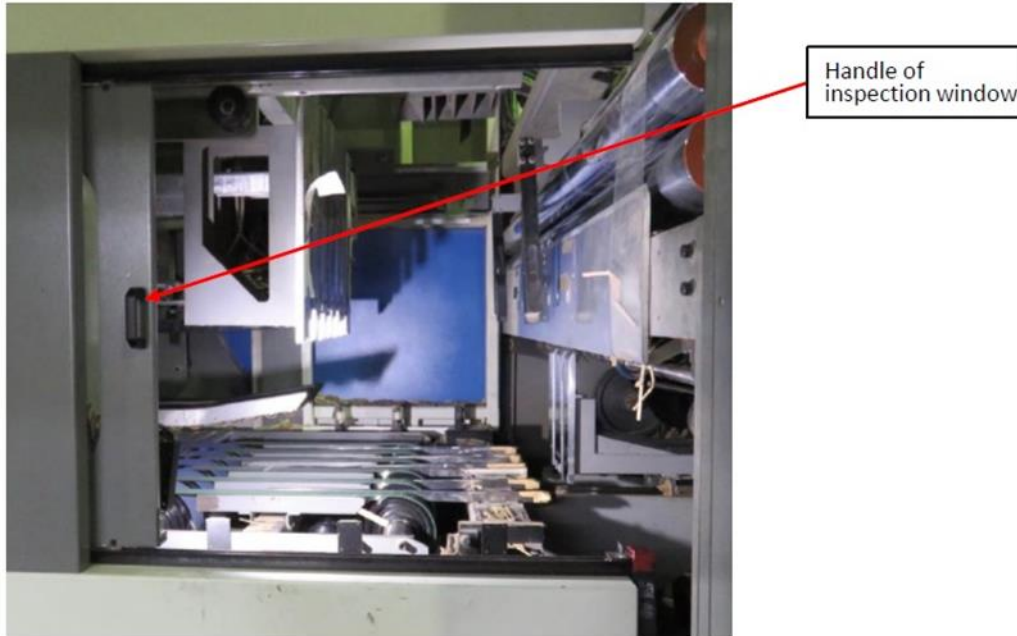


Figure 2: View of the machine internals from where the worker was standing.

Recommendations

Any machine with exposed moving machine parts is a danger to workers. To prevent similar accidents, consider the following measures:

- **Machine guarding:** Wherever possible, install machine guards to protect workers from contact with exposed moving machine parts.
- **Safety devices:** Install safety devices such as presence sensors at machine hazard zones and safety interlocks at all machine access points (e.g. doors and windows). Programme these devices to automatically shut down the machine once presence is detected or if any machine door or window is opened while it is in operation. Never bypass these safety interlocks.
- **Safety device inspection and maintenance:** Check and maintain machine safety devices regularly to ensure they are in good working condition. Instruct workers to report any defects found to their supervisors.
- **Worker training and awareness:** Allow only trained and competent workers to operate a machine. Conduct toolbox briefings to remind workers of machine hazards and the risk controls in place. Explain the importance of safety devices and why they should never be bypassed.
- **Energy lock-out tag-out (LOTO):** Include in the safe work procedure the need for the LOTO procedure to be applied before entering or accessing the internals of a machine. LOTO serves to ensure all hazardous energy sources are safely isolated, disconnected or discharged.
- **Warning devices:** Install audio-visual warning devices (e.g. siren with flashing lights) on machines to indicate a hazardous situation (e.g. once a machine door or window is opened).

For more information, please refer to SS 537: 2008 Code of Practice for Safe Use of Machinery - Part 1: General requirements and [WSH Guidelines on the Safe Use of Machinery](#).

* Information on the accident is based on preliminary investigations by the Ministry of Manpower as at 16 February 2022. This may be subject to change as investigations are still on-going. Please also note that the recommendations provided here are not exhaustive and they are meant to enhance workplace safety and health so that a recurrence may be prevented. The information and recommendations provided are not to be construed as implying liability on any party nor should it be taken to encapsulate all the responsibilities and obligations under the law.

We regret that we are unable to reply to emails at this email address. For enquiries or feedback, please email us at contact@wshc.sg.

Visit the WSH Council's [website](#) now for updates on WSH-related matters, information and events.



This WSH Bulletin is available free of charge, may be printed or downloaded onto electronic, optical or similar storage media provided that such activities are for private research, study, or in-house use only. If such material is to be copied or reproduced, users are asked to ensure that the material is reproduced accurately and not in a misleading context, that the status of the material is identified and to acknowledge Workplace Safety & Health Council, Singapore as the source of the material.