



## Work Safety Alert Crushed by the Robotic Arm of a Palletizer

1. **Date of Accident :** May 2022
2. **Place of Accident :** A Food Factory
3. **Summary :**

While a worker was conducting pre-production inspection and cleaning work for a palletizer, the robotic arm of the machine suddenly moved which hit and crushed him to death.

### 4. **Work Safety Alert for Proprietors/ Employers :**

To prevent any workers/ employees from being endangered by any dangerous/ moving parts of machinery, such as a robotic arm, during operation, inspection, maintenance, repair or cleaning, the proprietors/ employers should provide and maintain a safe system of work which should include, but not limited to, the following:

- appointing a competent person to conduct task-specific risk assessments to identify all potential hazards associated with the work, taking into account the work environment, the nature of work, and where robotic arm or similar device is installed, its configuration, location and operation;
- formulating safe work methods and procedures for the operation, inspection, maintenance, repair or cleaning work of the machinery with due regard to the results of risk assessments, and following the requirements of safety legislation and relevant guidelines;
- providing effective guarding to all dangerous parts and/or fencing off danger zones where moving parts such as a robotic arm is exposed with suitable physical barriers and effective interlock gate/ sensing devices in order to avoid any persons being endangered by any dangerous/ moving



parts of the machinery;

- where a danger zone is demarcated, exercising strict access control and displaying suitable warning notices at prominent positions to restrict unauthorised access into the danger zone;
- where temporary removal of the guarding/ barriers from the dangerous parts/ exposed moving parts is required or access to the danger zone cannot be avoided during inspection, maintenance, repair or cleaning of the machinery, implementing a permit-to-work system to ensure that access to the dangerous/ exposed moving parts or danger zone would only be permitted after appropriate safety measures have been adopted, including switching off the power supply of the machinery and locking it with suitable warning notices displayed;
- ensuring that the operation, inspection, maintenance, repair or cleaning of the machinery are carried out by persons who are competent by virtue of training and practical experience;
- taking all necessary steps to ensure effective communication among all persons involved in the operation, inspection, maintenance, repair or cleaning work;
- providing all workers/ employees concerned with necessary safety information, instruction and training and ensuring that they are familiar with the safe work procedures, safety measures and emergency response plan; and
- establishing and implementing an effective monitoring and control system to ensure all safety measures are strictly followed.



## 5. Reference :

- [Safe Systems of Work<sup>1</sup>](#)
- [Five Steps to Risk Assessment<sup>1</sup>](#)
- [Five Steps to Information, Instruction and Training<sup>1</sup>](#)
- [Handbook on Guarding and Operation of Machinery<sup>1</sup>](#)

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### DISCLAIMER

This Work Safety Alert (“the Alert”) is issued at the earliest possible opportunity after a serious accident with a view to drawing the attention of interested parties to the general safety precautionary measures necessary to protect people engaging in similar work activities. The material contained in the Alert constitutes general guidance only. It does not reduce, limit, or replace, any legal obligations upon any person to comply with any statutory duties under relevant legislation. Users such as Managers and Supervisors should make their own evaluation of the information contained in the Alert to determine if it can be applied to their own situations and practices. The Labour Department does NOT accept any responsibilities for any loss or damage resulting from the use of or failure to use of the information on the Alert.

Note: The material contained in the Alert is not exhaustive, and will be supplemented/ adjusted where necessary if more relevant information comes to light.

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<sup>1</sup> Click to view document