

4 RISK IDENTIFICATION

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The risk identification is in the first row table 2 in Risk Assessment and are to be used with chapter 5.4 in EN ISO 12100 in order to provide effective outcome of the risk identification

The information in Hazard shall be explain so it is easy to understand how the hazard occurs.

More information is provided in ISO /TR 14121-2

Table 4 in EN ISO 12100 might provide openings to write hazards.

CAUSE = What is the origin of the hazards

HARM = What effect does the occurrence have on the human body

1.6.4 Operator intervention		
1. Are interventions that can be dangerous avoided?		
2. If no to question 1, must they be carried out?		
3. If yes to question 2, can they be done safely?		
   Hazard	Cause	Harm
Unexpected re-start of blocked movements or goods.	Need to remove/adjust goods blocking the chain movement.	Pinching, crushing, bruises

5.4 Hazard identification

After determination of the limits of the machinery, the essential step in any risk assessment of the machinery is the systematic identification of reasonably foreseeable hazards (permanent hazards and those which can appear unexpectedly), hazardous situations and/or hazardous events during all phases of the machine life cycle, i.e.:

- transport, assembly and installation;
- commissioning;
- use;
- dismantling, disabling and scrapping.

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SS-EN ISO 12100:2010 (E)

Only when hazards have been identified can steps be taken to eliminate them or to reduce risks. To accomplish this hazard identification, it is necessary to identify the operations to be performed by the machinery and the tasks to be performed by persons who interact with it, taking into account the different parts, mechanisms or functions of the machine, the materials to be processed, if any, and the environment in which the machine can be used.

The designer shall identify hazards taking into account the following.

a) Human interaction during the whole life cycle of the machine

Task identification should consider all tasks associated with every phase of the machine life cycle as given above. Task identification should also take into account, but not be limited to, the following task categories:

- setting;
- testing;
- teaching/programming;

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5.3.4 Example of a tool for hazard identification

5.3.4.1 Hazard identification by application of forms

5.3.4.1.1 General

The aim of this subclause is to show a method for hazard identification (see ISO 12100:2010, 5.4) using as the main tool the checklists given in ISO 12100:2010, B.2 to B.4.

These checklists should be used as the starting point for identifying relevant hazards. Then, in order to ensure a more complete hazard identification, other sources such as regulations, standards and engineering knowledge should be taken into account.

This method can be complemented with other methods based on, for example, brainstorming, comparison with similar machinery, review of data about accidents and/or incidents of similar machinery.

This method will be more effective the more complete and detailed are the available information for risk assessment (see ISO 12100:2010, 5.2) and the determination of the limits of the machinery (see 5.2 and ISO 12100:2010, 5.3).

The method is applicable to any phase of the machine life cycle.

