ISO 12100:2010 (6.3.2) and AS/NZS 4024.1601:2014 Annex A
Guidelines to assist in the selection of guards against hazards generated by moving parts.

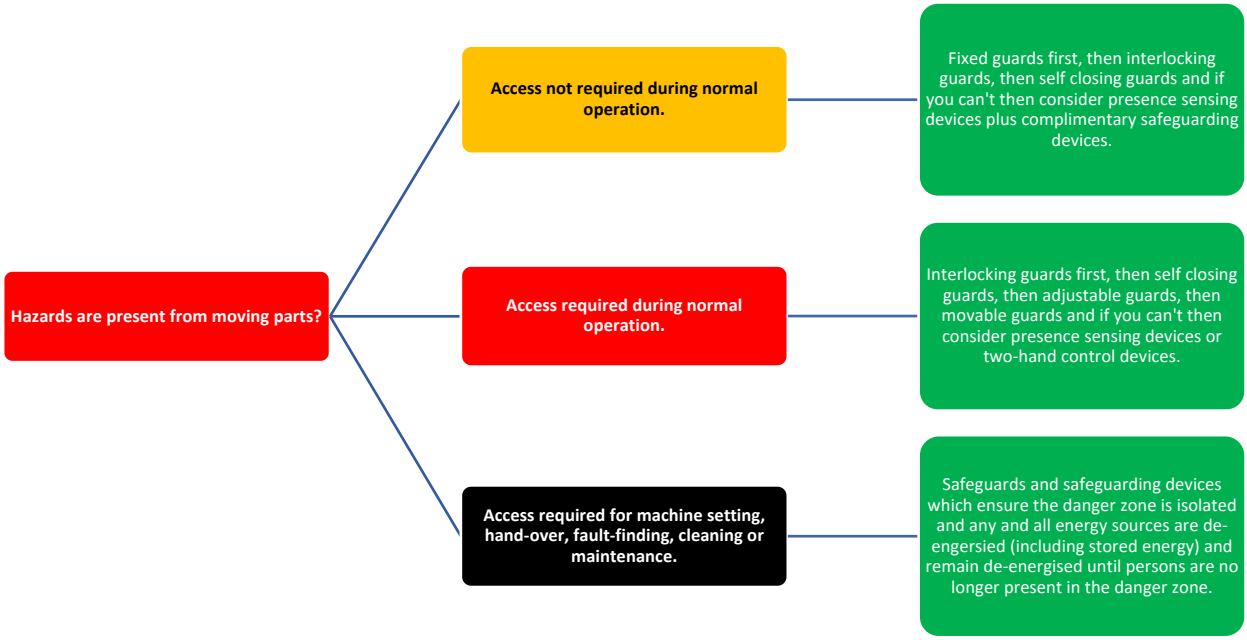


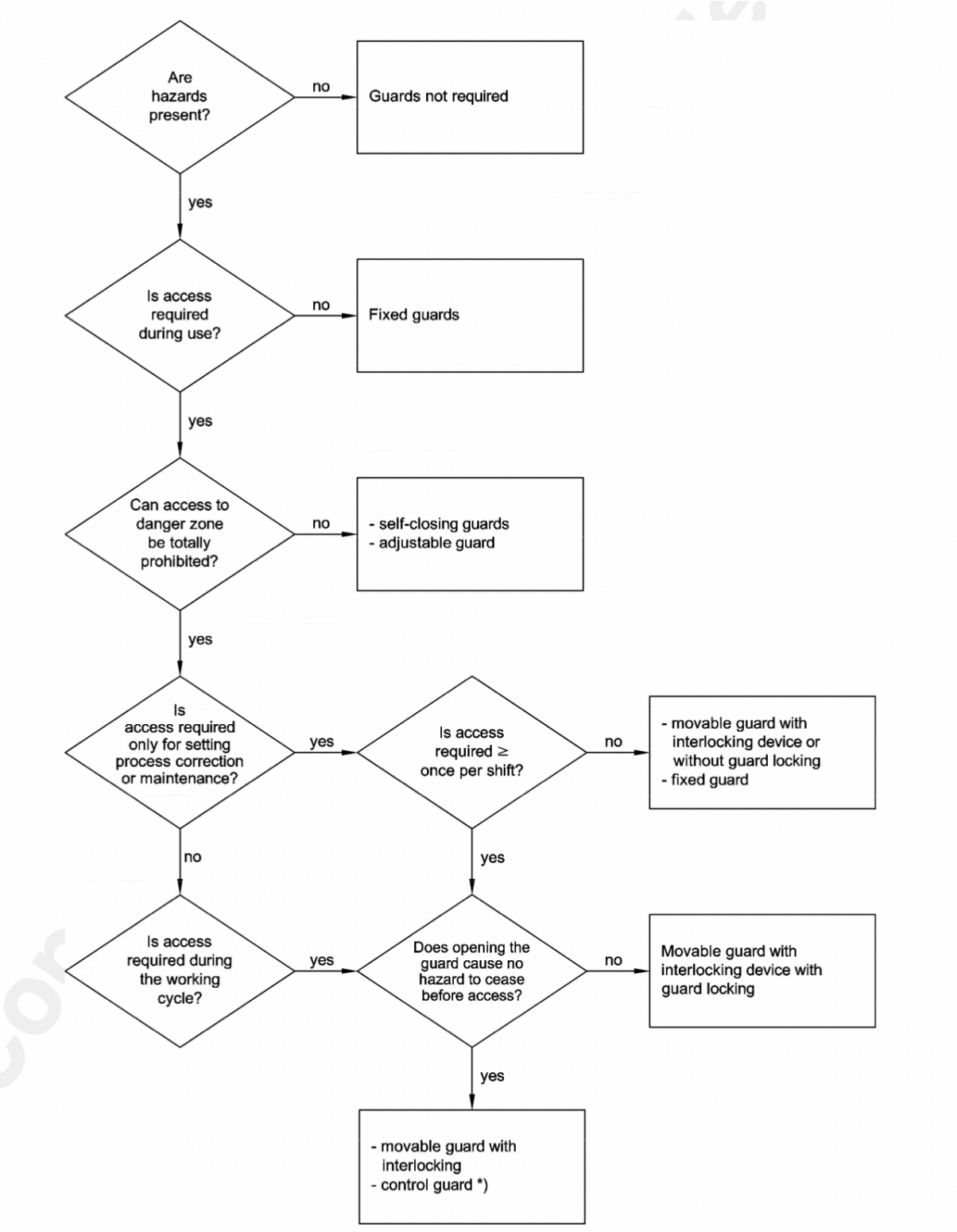
Figure 1: Plain English explanation of guidelines

Cautionary note:

The hazards of the machine may make the use of safeguards and safeguarding devices unsuitable, such as;

- Ejection of materials or machine parts
- Machine stopping time
- Machine stopping part-way through a cycle
- Ability to guard against noise, dust, fumes, vapours
- Stored energy release (e.g. kinetic, electrical, pneumatic and hydraulic)

ISO 12100:2010 (6.3.2) and AS/NZS 4024.1601:2014 Annex A
Guidelines to assist in the selection of guards against hazards generated by moving parts.



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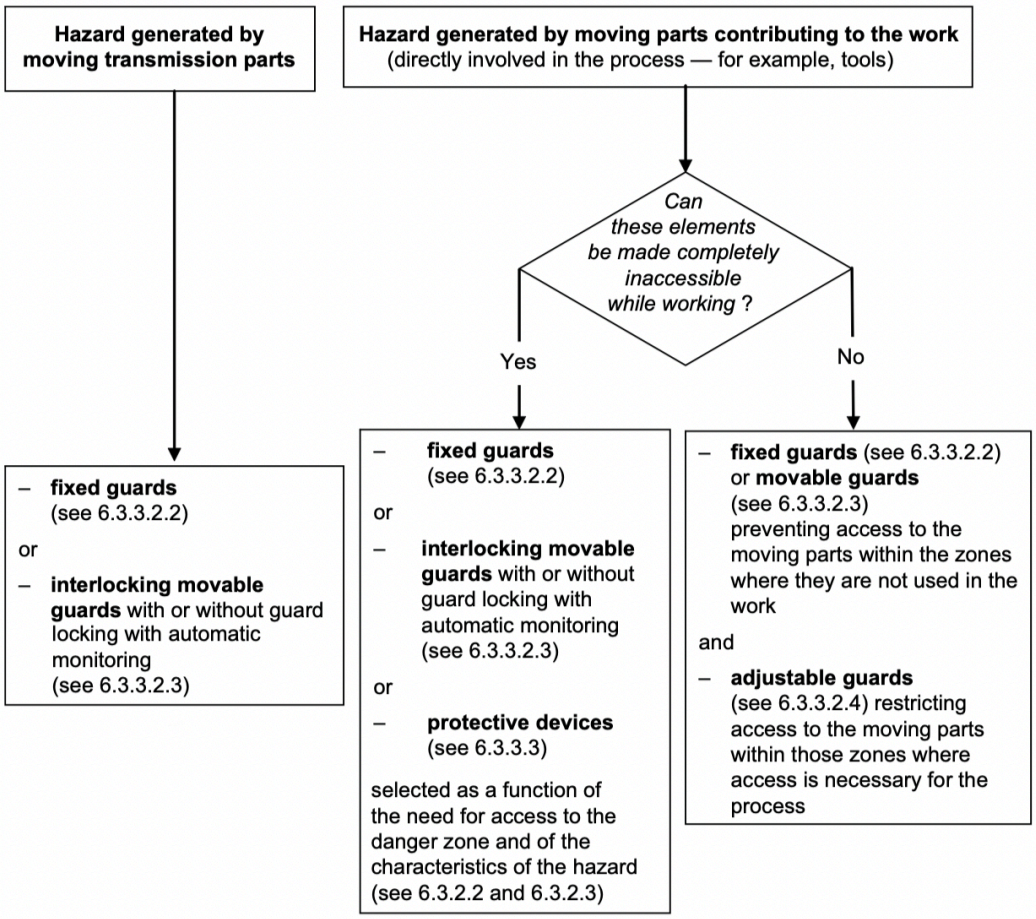

Figure 4 — Guidelines for choosing safeguards against hazards generated by moving parts

6.3.2.2 Where access to the hazard zone is not required during normal operation

Where access to the hazard zone is not required during normal operation of the machinery, safeguards should be selected from the following:

a) fixed guards (see also ISO 14120);

b) interlocking guards with or without guard locking (see also 6.3.3.2.3, ISO 14119 and ISO 14120);

c) self-closing guards (see ISO 14120:2002, 3.3.2);

d) sensitive protective equipment, such as electrosensitive protective equipment (see IEC 61496) or pressure-sensitive protective devices (see ISO 13856).

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Guidelines to assist in the selection of guards against hazards generated by moving parts.

6.3.2.3 Where access to the hazard zone is required during normal operation

Where access to the hazard zone is required during normal operation of the machinery, safeguards should be selected from the following:

a) interlocking guards with or without guard locking (see also ISO 14119, ISO 14120 and 6.3.3.2.3 of this document);

b) sensitive protective equipment, such as electrosensitive protective equipment (see IEC 61496);

c) adjustable guards;

d) self-closing guards (see ISO 14120:2002, 3.3.2);

e) two-hand control devices (see ISO 13851);

f) interlocking guards with a start function (control guard) (see 6.3.3.2.5).

6.3.2.4 Where access to the hazard zone is required for machine setting, teaching, process changeover, fault-finding, cleaning or maintenance

As far as possible, machines shall be designed so that the safeguards provided for the protection of the production operator also ensure the protection of personnel carrying out setting, teaching, process changeover, fault-finding, cleaning or maintenance, without hindering them in the performance of their task. Such tasks shall be identified and considered in the risk assessment as parts of the use of the machine (see 5.2).

NOTE Isolation and energy dissipation for machine shut-down (see 6.3.5.4, and also ISO 14118:2000, 4.1 and Clause 5) ensure the highest level of safety when carrying out tasks (especially maintenance and repair tasks) that do not require the machine to remain connected to its power supply.

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