Safeguards for plant and machinery – important harmonised standards according to the Machinery Directive

A standard: Basic safety standard

- A-Type standards specify fundamental concepts, terminology and principles for design that are applicable for all machinery categories. The application of such standards in itself is not sufficient to guarantee compliance with the relevant fundamental safety and health protection requirements of the Directive, although they constitute an important framework for the correct application of the Machinery Directive; application therefore does not give rise to any blanket presumption of conformity.

- B-Type standards deal with certain machinery safety issues or certain types of safeguards that can be used across a wide range of machinery categories. Application gives rise to a presumption of conformity with the fundamental requirements of the Machinery Directive that are thus covered.

- C-Type standards provide specifications for a given category of machinery.

B standard: Safety issues and safeguards

Guards and protective devices

- Guards and protective devices
- Safety bolt PSENbolt
- PSENsgate
- PSENcode

Other and complementary protective measures

- Other and complementary protective measures
- E-STOP pushbuttons, rope pull switches, pressure sensitive mats, rails, plates, rods, bumpers

Solutions

- Solutions
- Packaging machines
- Machine tools
- Robot systems
- Guard
- Moving: Flaps, flaps, doors, gates
- Fixed: Flaps, flaps, doors, gates

Protective device

- Protective device
- Light curtains PSENopt, PSENopt Advanced, PSENvip 2
- Pressure-sensitive safety mat PSENmat
- Laser scanner PSENscan
- Camera system SafetyEYE
- Camera-based protection systems PSENvip

Emergency stop

- Emergency stop
- Designed with integrated safety card PMCprotego S
- Non-remote-hold emergency stop
- Remote-held emergency stop

Remote-hold

- Remote-hold
- Non-remote-held control devices
- Two-hand control devices

Two-hand control devices

- Two-hand control devices
- Two-hand monitoring with PNOZsigma, PNOZ X, PNOZelog
- Safe two-hand monitoring with PNOZmulti

Other complementary protective measures

- Other complementary protective measures
- Safe small controllers PNOZmulti
- Safe two-hand monitoring with PNOZsigma, PNOZ X, PNOZelog
- Safety-related parts of control systems – Functional safety of safety-related electrical, electronic and programmable electronic control systems
- EN ISO 13849-1/-2

B-STOPs, barriers, optical switches, indicators

C standard: Examples of machinery standards

Packaging machines

- Packaging machines
- E.g. EN 692

Machine tools

- Machine tools
- E.g. EN 61496-1

Robot systems

- Robot systems
- E.g. EN ISO 11161

The various machine types that belong to the category covered by a C-type standard have a similar intended use and present similar hazards.

Online information at www.pilz.com