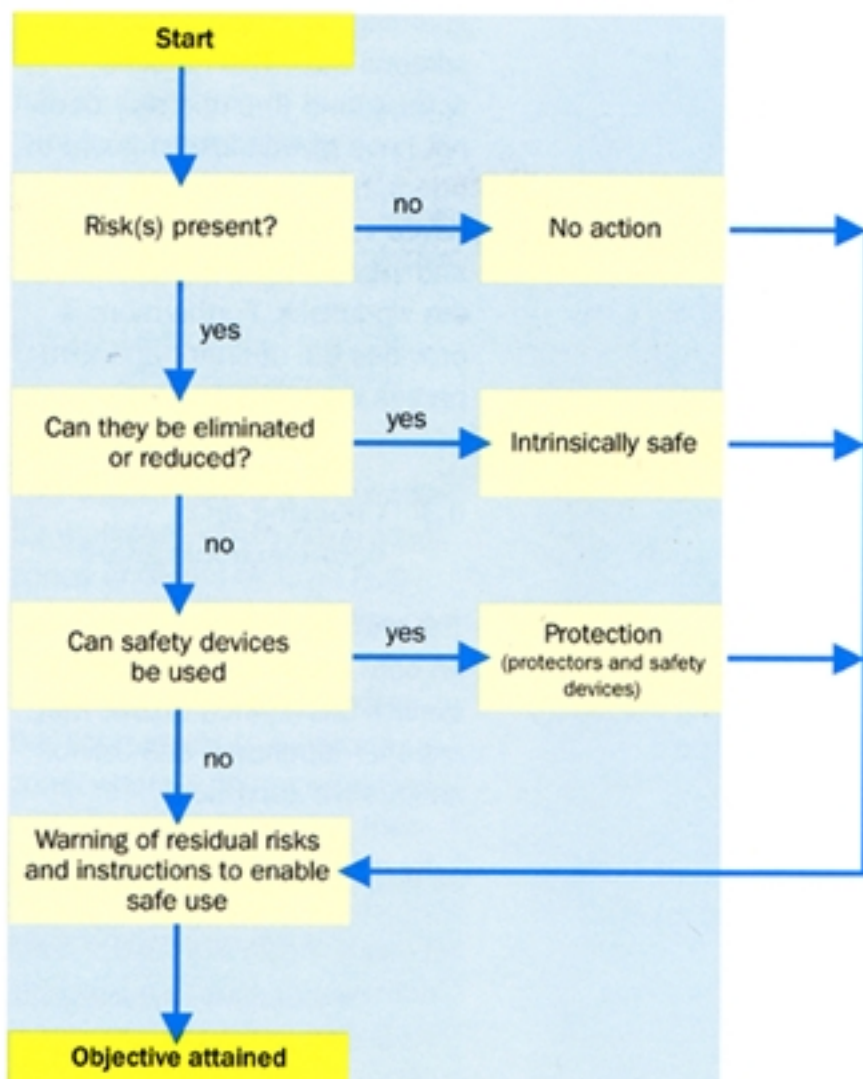


# Opto-electronic protection

## II.1 General

When designing a machine, the potential risks must be analysed and where necessary, additional protection must be incorporated so as to protect operators from residual hazards (crushing, shearing, cutting, snatching, clamping, trapping, friction or abrasion, perforation or puncturing, risk of shock etc.) cf. EN 292 and pr EN 1050.



The above flowchart quickly tells us whether the use of a protective device is advisable.

The remainder of this chapter is based on the hypothesis that some risks cannot be eliminated, and that it is necessary to use a protective device.