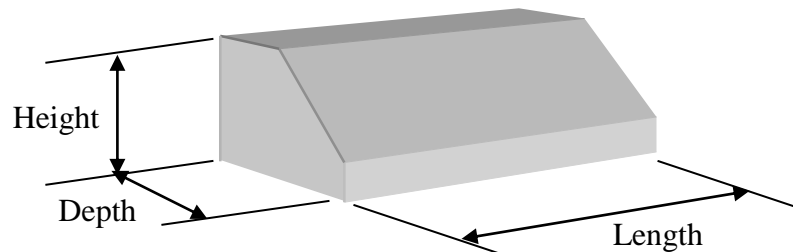


How to dimension Safety sensitive Bumper Gamma System



1) Depth of the bumper

In order to calculate the dimensions, you need first to know the stop space of the machine. The stop space is the required for the machine to stop after a stop signal order. (This distance depend on the brake device of the machine, speed of the machine...)

This stop space can be measured or calculated (when the machine is at design stage only).

Basing on our experience as a bumper manufacturer,

The stop space should be equal to 50% of the bumper's depth.

Example:

For a machine having a 250 mm stop space S_v ,

$$S_v = \frac{50}{100} \times D \text{ so } D = S_v \times \frac{100}{50} = 250 \times \frac{100}{50} = 500$$

As a consequence the depth of the bumper must be 500 mm

2) Height of the bumper

The height of the bumper is determined taking into account the depth previously calculated in order to avoid benching problem.

The best way is to be in correspondence with the dimensions of our 3 standard bumpers.

3) Length of the bumper

Depend on the machine to cover (to protect). The maximum bumper length is 3 m. For major length, more bumpers can be linked in series.