Proactive and Reactive

Q. What's the difference between proactive and reactive inhibit functions and when should I use them?

A. Inhibit functions should be used any time someone could be undetected or unobservable inside a safeguarded space. Proactive inhibit functions give a person control to stop a machine being reset while they're inside the safeguarded space, reactive inhibit functions allow them to escape or stop a reset that has been initiated.

In whole body access applications, any situation where a person can be completely inside a safeguarded space, it is important to make sure that the hazard can not be reset while a person is still inside the space. This can be achieved by putting a manual reset device in a location with a full view of the entire safeguarded space or by using presence sensing devices to detect people in unobservable locations. These options are not always possible or practical due to the size, layout or environment of the safeguarded space.

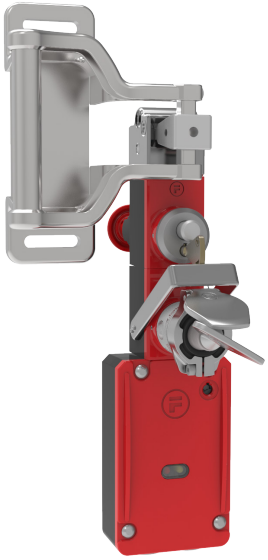
E.g. this location is very dark so a person is not observable, presence sensing devices will not be practical due to the dusty environment in paper manufacturing.

In these situations, and if required by the risk assessment, an inhibit function(s) should be provided. These are split into two types, either proactively stopping the hazard from being able to be reset while personnel are inside the space, or reactively allowing them to escape and stopping the hazard if they become trapped.

Proactive Inhibit Functions
Proactive inhibit functions provide an individual with personal control, the door cannot be locked behind them and the hazard can not be reset or restarted while they are in the safeguarded space – even if they are hidden from view.

Examples include:

Safety keys – each person takes a safety key from the door interlock into the space, while that key is with the person the door cannot be relocked and the machine cannot be reset.



Fortress offers several different options including forced extraction, retrofittable purely mechanical and RFID coded safety keys, all serve the same function to give personal control to give peace of mind to personnel entering a safeguarded space.

Interlock blocking – each person entering the space attaches a personal padlock onto the interlock or its actuator to stop it being closed, ensuring the machine cannot be reset until every person has left and removed their personal padlock.

Reactive Inhibit Functions
Reactive inhibit functions, in conjunction with an initiation warning system, give the ability for a person to escape if they have become trapped inside a safeguarded space. The most common example is an escape release function.

This must be easily openable from within the safeguarded space in all modes of operation, even if the power has failed. Opening the interlock with an escape release function must initiate a stop command.