

RASWIN Module SRS Creating Safety Function

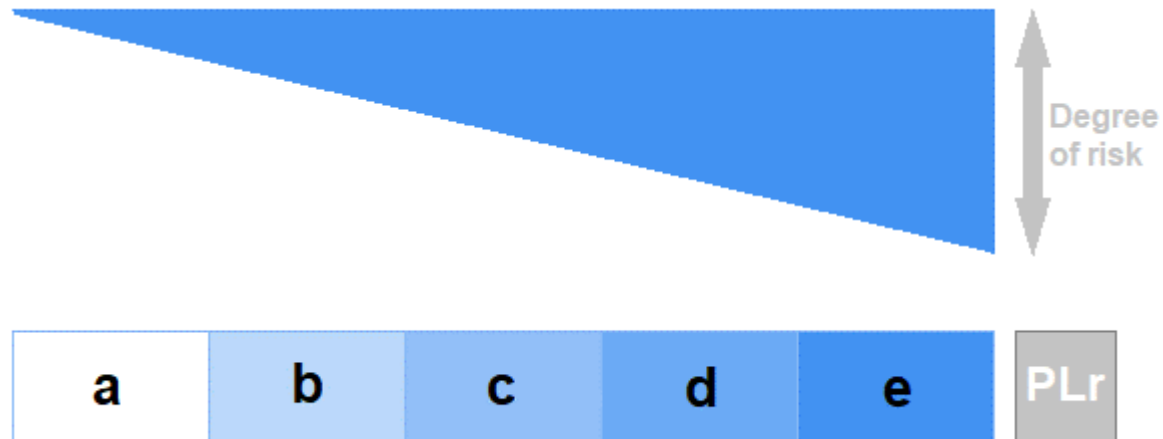
Performance Level?

PL Gfx Module

PL is a measure of the reliability of a safety function. This value depends on different parameters as Probability of failure or Mean time to failure.

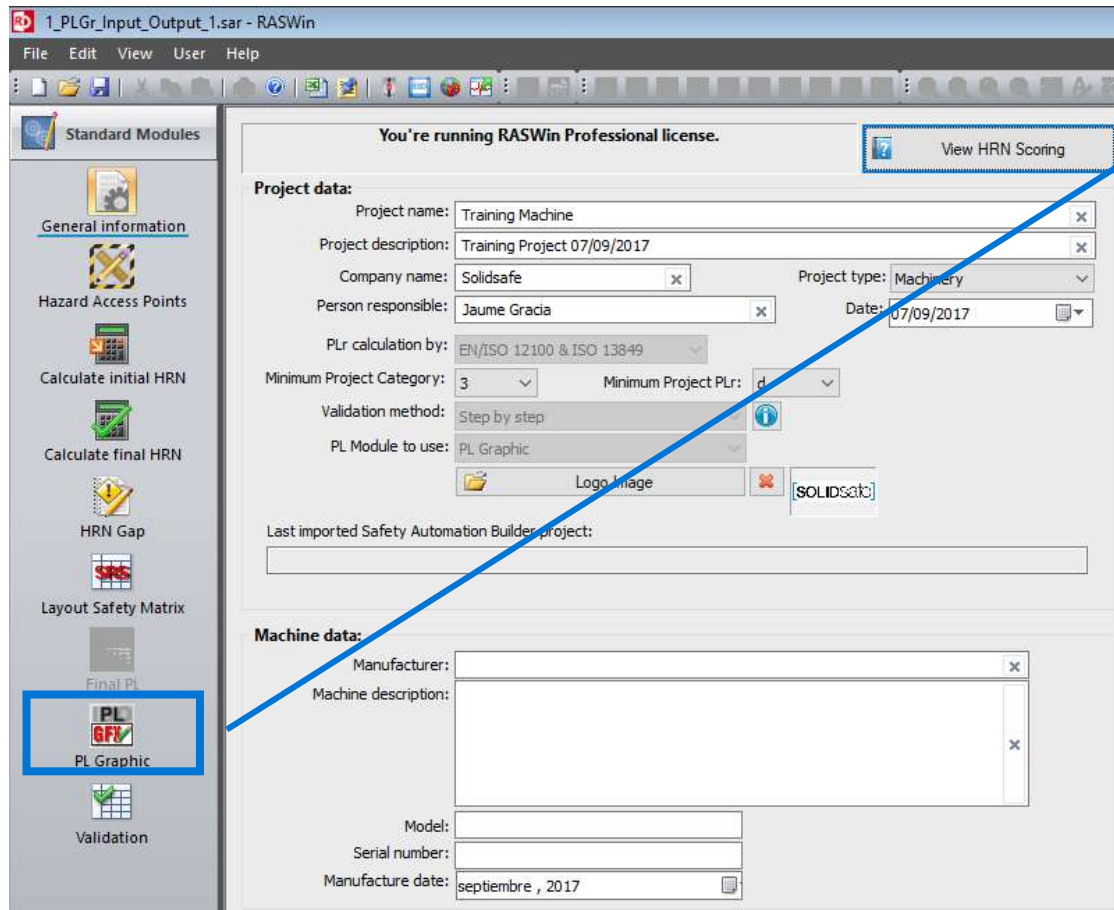
PL is divided into five levels (a-e).

PL e gives the best reliability and is equivalent to the required at the highest level of risk



How to calculate the PL in RASWin?

PL Gfx Module



1. Click on PL Gfx Module icon.

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PL Gfx Module

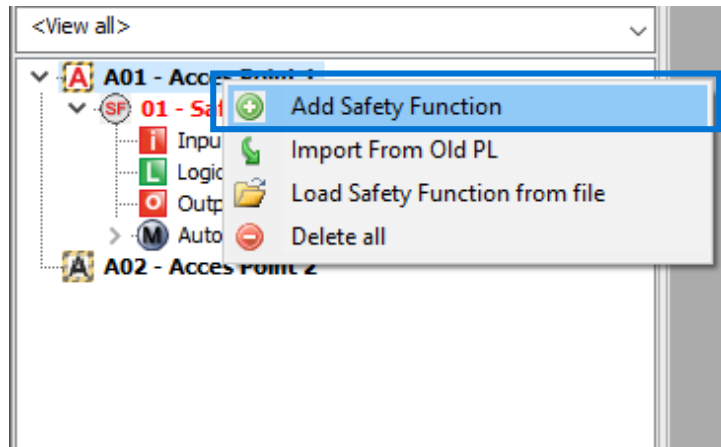


If the Risk Assessment have been done with Raswin, all the Safety Functions described on the Risk Assessment will appear on the left column, organized by Access Points.

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Option 2: Creating Safety Function (Automatic)



1. Select the Access point where the Safety Function is.
2. Right click.
3. Select Add Safety Function

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Safety Functions - A01 - Acces Point 1

SF Information | **PLr determination**

Access point: A01 - Acces Point 1

Safety function name: Safety_Function_2

Safety function type: Emergency stop

Trip cause event: Emergency Stop Push Button has been pressed

Reaction: Stop movements

Safety state: Stopped and without energy.

Documentation: Manufacturer manuals

Process requirements: No specific process requirements

Safety function requirements: No logic expressions

Success conditions (SF): Manual Reset

Load file ...

Number of operations per Year (nop): 365

Required PL: -

Cancel Ok

1. Complete the following information:

- Safety Function name
- Safety Function Type
- Trip cause event
- Reaction
- Safety State
- Documentation
- Process requirements
- Safety function requirements
- Success conditions:

2. Load a image to describe the Safety Function.

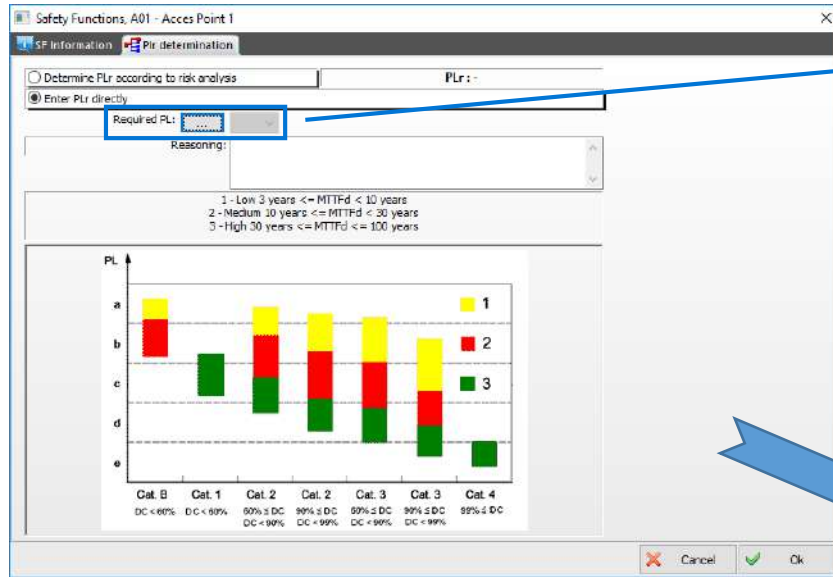
3. Calculate the Number of Operation (per year) of the safety function.

4. Click on PLr determination

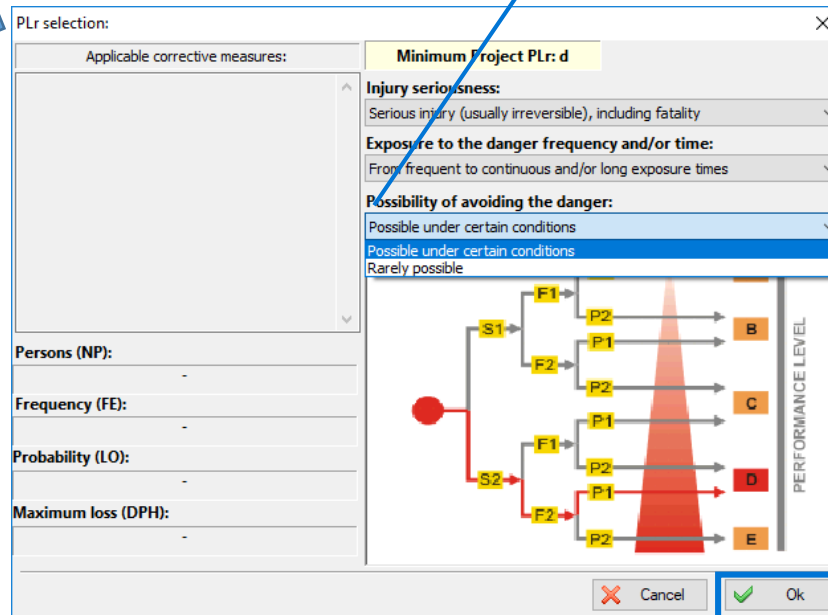
Step 2: Enter the information and requirements of Safety Function

How to create a Safety Matrix in RASWin?

PL Gfx Module



1. Click on "Required PLr:"
2. Select the Injury Seriousness.
3. Select the Exposure of the danger frequency.
4. Select the possibility of avoiding the danger.
5. Press "Ok".



Step 3: Assign a PLr to new Safety Function