

Inspection Certificate

Safety Software Robot Limits



Description

As indicated in standard **EN ISO 10218-2** on robot systems and integration, the robot's movement must be restricted in order to limit the space or restrict access areas to workers.

Today many robot manufacturers have space limitation systems and safety software axes.

Restriction zones must be inspected and documented in order to be able to prove their conformity.

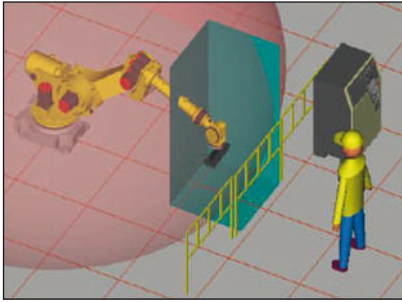
Specifications

The inspections are based on the following standards:

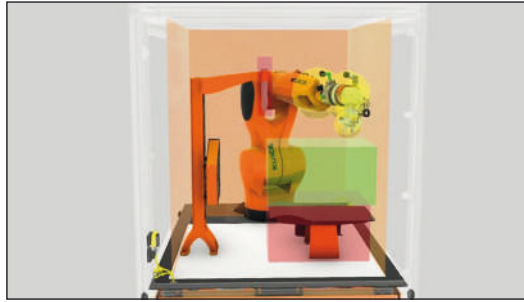
- **EN ISO 10218-2** *Robots and robotic devices. Safety requirements for industrial robots. Part 2: Robot systems and integration.*
- **EN ISO 13857** *Safety distances to prevent hazard zones being reached by upper and lower limbs.*

Examples

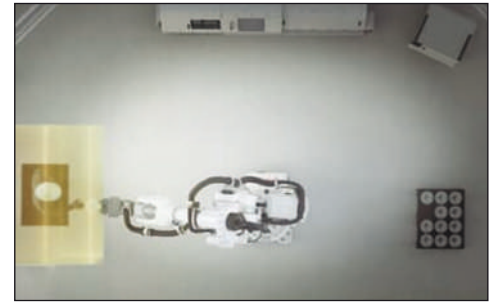
Examples of safety software-based robot limitation systems are shown below:



FANUC Dual Check Safety



KUKA Safe Operation



SafeMove ABB

Scope of the inspection

The inspection consists of the following parts:

- Several identical measurements are taken of the hazardous element of the robot with the maximum working speed and in the same direction.
- Finally, the distance is verified to be correct according to the standard tables EN ISO 13857.

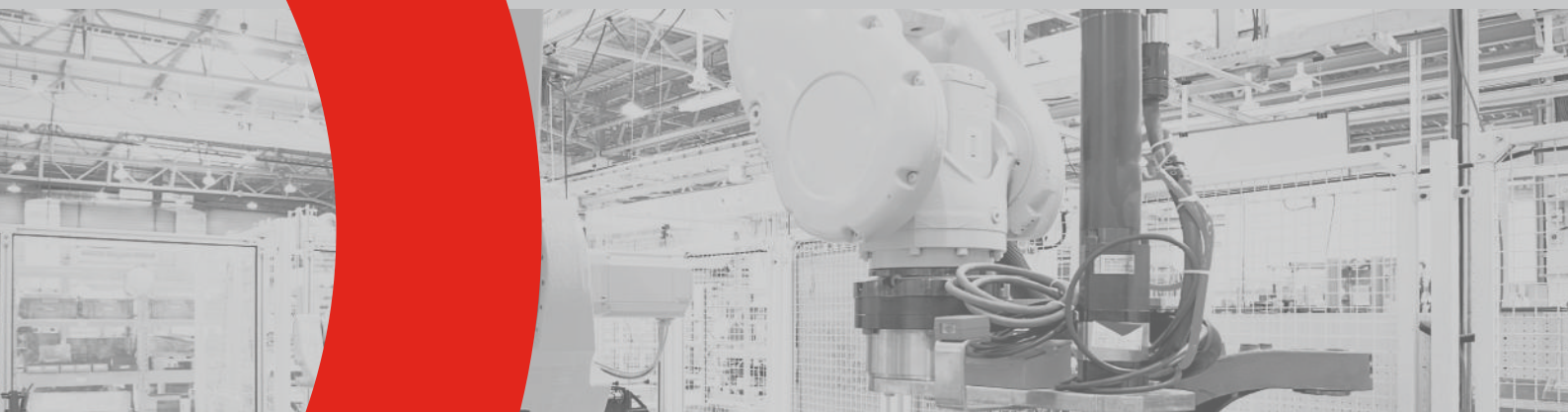
Documentation

The following is delivered with each certificate:

- A PDF format inspection certificate.
 - A list of possible Non-Conformities found.
- (In Spanish. Other languages on demand.)



Inspection Seal



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