Inspection Certificate

Measuring Hazardous Movement Stopping Times

Description

As indicated in standard **EN ISO 13855** Positioning of safeguards with respect to the approach speeds of parts of the human body, it is necessary to know the exact time that hazardous elements take to stop. Using this information and the formula given in the standard, the minimum distance that the ESPE must be from the hazardous movement can be determined.

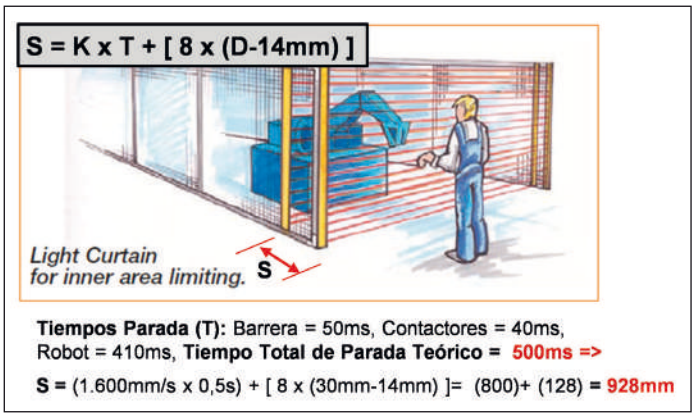
Specifications

The inspections are based on the following standards or recommendations:

- **EN 349+A1** *Minimum gaps to avoid crushing of parts of the human body.*
- **EN ISO 13855** *Positioning of safeguards with respect to the approach speeds of parts of the human body.*

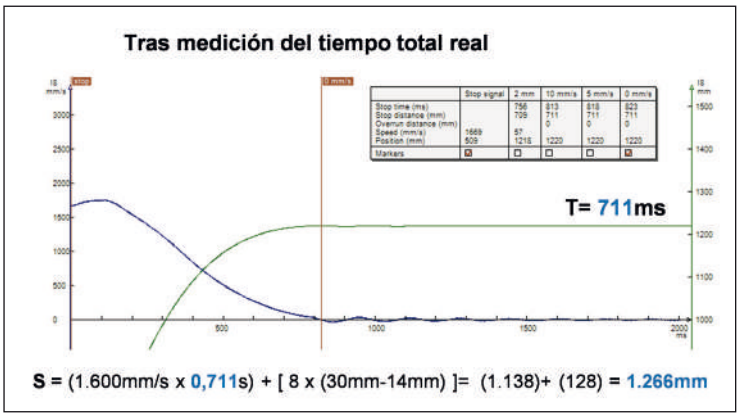
Examples

There follows an example of a safety distance with the assembly of the vertical ESPE:



Tiempos Parada (T): Barrera = 50ms, Contactores = 40ms, Robot = 410ms, **Tiempo Total de Parada Teórico =** 500ms =>

S = (1.600mm/s x 0,5s) + [8 x (30mm-14mm)]= (800)+ (128) = 928mm



S = (1.600mm/s x 0,711s) + [8 x (30mm-14mm)]= (1.138)+ (128) = 1.266mm

Scope of the inspection

The inspection consists of the following parts:

- Test using certified and calibrated measuring equipment.
- Several identical measurements are taken of the hazardous element of the machine with the maximum working speed and in the same direction.
- After several measurements, the worst value is taken to calculate the distance using the formula.
- Finally, it is checked if the distance from the ESPE installation matches the distance obtained in the formula.

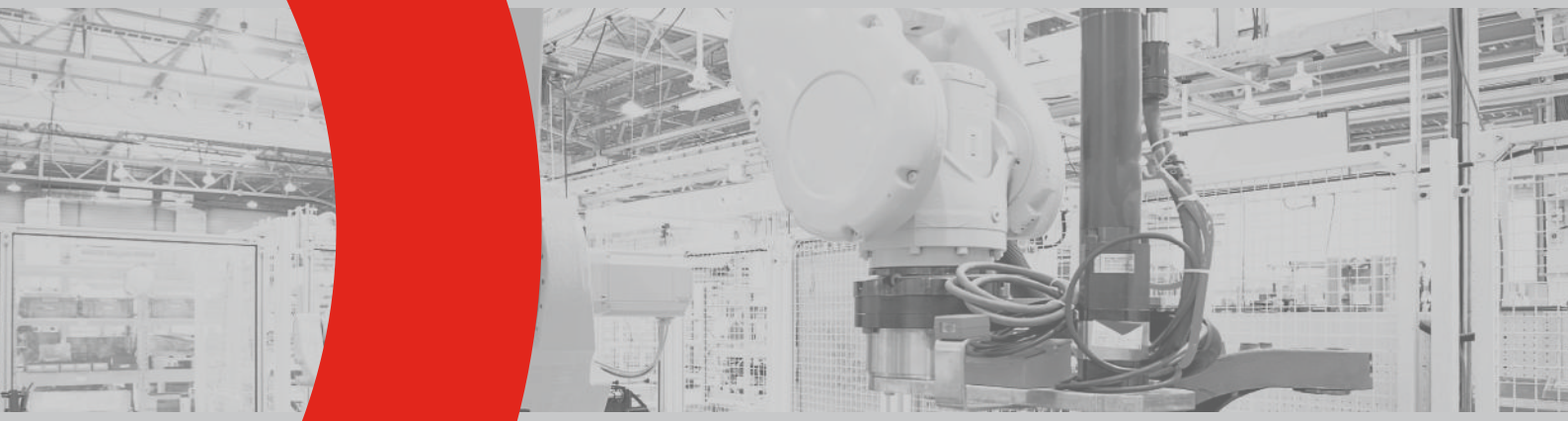
Documentation

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

i9s, S.A. | Calle Béjar 91, 1º, 1ª | (08014) | Barcelona | (Spain) (+34) 93.113.26.05 | i9s@i9s.es | www.i9s.es



i9s, S.A.

Calle Béjar 91, 1º, 1ª.
(08014) | Barcelona | (Spain)

(+34) 93.113.26.05
i9s@i9s.es
www.i9s.es