Inspection Certificate

Force and Pressure Testing of Impact / Crushing in Cobots



Description

In machinery with Cobots working in collaborative mode, it must be ensured that any risks of operators being impacted or crushed must be below the thresholds indicated by the standard in force and pressure terms.

Therefore these impacts and/or crushing must be measured with real tests.

Before carrying out these tests, a biomechanical study of the possible impacts and/or crushing is required to indicate which parts of the human body are likely to be impacted or crushed.

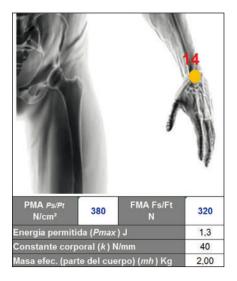
Specifications

The tests are based on the following standard:

- ISO/TS 15066 Robots and robotic devices -- Collaborative Robots (Cobots).

Examples

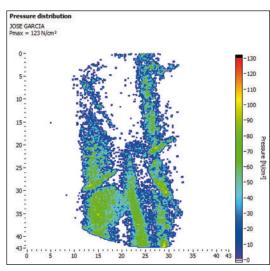
Examples of the measuring equipment and of the inspection report are shown below:



Example of maximum force and pressure threshold



Cobot crushing measurement



Graph displaying pressure measurement results

Scope of the inspection

The tests can be the following:

- Force test in N (maximum 500N).
- Pressure Test in N/N/cm².

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.)



