

# THE SAFETY OF COLLABORATIVE ROBOTICS - A REVIEW

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## ABSTRACT

There is a growing demand for humans and machines to collaborate. Many examples can be found of this in our daily lives; simple devices in our household or semi-automatic machines in factories where some level of collaboration has been realized. The field of robotics also has a chance to make workplaces safer, more collaborative, and more productive for the operators. One of these forms of this collaboration is, when a human and a robot are able to work together without any physical barriers. The aim of this review is to collect the available and applicable technology in the field of collaborative robotics safety based on “Collaborative robots - ISO/TS 15066:2016” standard. The safety aspects of collaboration by comparing the implications of standards with the direction in which researches are conducted in science. In this review the requirements are compared starting from the risk assessment through the theoretical methods to the implemented case studies. Finally, the paper provides insights to the possible directions in field of human machine collaboration.

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