
**Robotics — Safety design for
industrial robot systems —**

**Part 1:
End-effectors**

*Robotique — Conception de sécurité pour les systèmes de robots
industriels —*

Partie 1: Organe terminal effecteur

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Foreword

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This document was prepared by Technical Committee ISO/TC 299, *Robotics*.

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Introduction

This document applies to industrial robot systems as described in ISO 10218-2:2011 and ISO/TS 15066:2016.

This document provides guidance for end-effectors in robot systems, including collaborative applications where a robot system and operators share the same workspace. In such collaborative applications, the end-effector design is of major importance, particularly characteristics such as shapes, surfaces and application function (e.g. clamping forces, residual material generation, temperature).

A comprehensive risk assessment is required by ISO 10218-2:2011. This document provides additional guidance specific to end-effectors that can be helpful when performing the risk assessment in accordance with ISO 10218-2:2011.

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