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Mobile robots — Vocabulary

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Foreword

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Introduction

With the increase of mobile robots in both industrial and non-industrial applications, there is a growing need to define terms relating to mobile robots. ISO 8373 defines fundamental terms relating to robotics, but it does not define terms relating to mobile robots fully. This document defines terms for mobile platforms and mobile robots based on the definitions in ISO 8373:2012.

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Mobile robots — Vocabulary

1 Scope

This document defines terms relating to mobile robots that travel on a solid surface and that operate in both industrial robot and service robot applications. It defines terms used for describing mobility, locomotion and other topics relating to the navigation of mobile robots.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at http://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1 General terms related to mobile robots

3.1.1
mobile robot
robot able to travel under its own control

Note 1 to entry: A mobile robot can be a *mobile platform* (3.1.2) with or without manipulators.

[SOURCE: ISO 8373:2012, 2.13]

3.1.2
mobile platform
assembly of all components of the *mobile robot* (3.1.1) which enables *locomotion* (3.1.10)

Note 1 to entry: A mobile platform can include a chassis which can be used to support a load.

Note 2 to entry: Because of possible confusion with the term “base”, it is advisable not to use the term “mobile base” to describe a mobile platform.

[SOURCE: ISO 8373:2012, 3.18]

3.1.3
mobility
ability of the *mobile platform* (3.1.2) to travel within its environment

Note 1 to entry: Mobility can be used as a measure, e.g. an *omni-directional mobile mechanism* (3.3.6) usually has higher mobility than a *differential drive* (3.3.7) wheeled mechanism.

3.1.4
steering
control of the direction of travel of the *mobile platform* (3.1.2)

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