Singapore Standards Council

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(ICS 25.040.30)

**SINGAPORE STANDARD**

# Robotics — Performance criteria and related test methods for service robots

## – Part 1: Locomotion for wheeled robots

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Enterprise Singapore

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– Part 1: Locomotion for wheeled robots

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The Working Group on Service Robots, appointed by the Technical Committee to assist in the preparation of this standard, comprises the following experts who contribute in their *individual capacity*:

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The organisations in which the experts of the Working Group are involved are:

*ABB Pte Ltd*
*Ministry of Manpower*
*National University of Singapore*
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## National Foreword

This Singapore Standard was prepared by the Working Group on Service Robots appointed by the Technical Committee on Automation, Robotics and Precision Engineering which is under the direction of the Manufacturing Standards Committee.

This standard is identical with ISO 18646-1:2016, published by the International Organization for Standardization.

The comma has been used throughout as a decimal marker whereas in Singapore Standards, it is a practice to use a full point on the baseline as the decimal marker.

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# Foreword

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The committee responsible for this document is Technical Committee ISO/TC 299, *Robotics*.

A list of all the parts in the ISO 18646 series can be found on the ISO website.



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# Introduction

This document is intended to facilitate understanding of performance of wheeled robots between users and manufacturers. It defines the important performance characteristics, describes how they are specified and recommends how to test them.

The characteristics for which test methods are given in this document are those considered to affect robot performance significantly. Users of this document are intended to select the performance characteristics to be tested, in accordance with the specific requirements.

The performance criteria specified in this document are not intended to be interpreted as the verification or validation of safety requirements. This document deals with indoor environments only.



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# Robotics — Performance criteria and related test methods for service robots — Part 1: Locomotion for wheeled robots

## 1 Scope

This document describes methods for specifying and evaluating the locomotion performance of wheeled robots in indoor environments.

## 2 Normative references

There are no normative references in this document.



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