

# JIS

JAPANESE  
INDUSTRIAL  
STANDARD

Translated and Published by  
Japanese Standards Association

---

---

JIS T 9201 : 2016

## Manually propelled wheelchairs

---

ICS 11.180.10

Reference number : JIS T 9201 : 2016 (E)

T 9201 : 2016

Date of Establishment: 1971-02-01

Date of Revision: 2016-10-20

Date of Public Notice in Official Gazette: 2016-10-20

Investigated by: Japanese Industrial Standards Committee  
Standards Board for ISO area  
Technical Committee on Assistive Technology

---

JIS T 9201:2016, First English edition published in 2017-11

Translated and published by: Japanese Standards Association  
Mita MT Building, 3-13-12, Mita, Minato-ku, Tokyo, 108-0073 JAPAN

---

In the event of any doubts arising as to the contents,  
the original JIS is to be the final authority.

© JSA 2017

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

Printed in Japan

HT/AT

PROTECTED BY COPYRIGHT

## Contents

	Page
Introduction .....	1
1 Scope .....	1
2 Normative references .....	1
3 Terms and definitions .....	2
4 Types of wheelchair, classification of types, and names of parts and components .....	4
4.1 Types of wheelchair .....	4
4.2 Type classification .....	4
4.3 Names of parts .....	5
4.4 Names of components .....	5
5 Performance .....	5
6 Construction and materials .....	7
6.1 Construction of body support system .....	7
6.2 Construction of frame .....	7
6.3 Construction and material of driving system .....	8
6.4 Construction of wheels .....	8
6.5 Construction of screws .....	9
6.6 Construction of accessories .....	9
7 Shape and dimensions .....	9
7.1 Definitions of wheelchair dimensions .....	9
7.2 Dimensions of wheelchair .....	12
8 Appearance .....	14
9 Test conditions .....	14
10 Test methods .....	15
10.1 Tests for verification of function .....	15
10.2 Tests for verification of strength .....	20
10.3 Tests for verification of shock resistance .....	28
10.4 Tests for verification of endurance .....	32
11 Inspection .....	36
12 Designation of products .....	37
13 Marking .....	37
14 Instruction manual .....	37
Annex A (normative) Test dummies .....	38

Annex B (normative)	Loading pads and pendulums for test.....	46
Annex C (normative)	Composition of test machine .....	49
Annex D (normative)	Requirements for wheelchair evaluation .....	50
Annex E (normative)	Test block .....	51
Annex JA (normative)	Classification of wheelchair types .....	53
Annex JB (normative)	Name of parts and classification .....	56
Annex JC (normative)	Securement of test dummy to a wheelchair .....	65
Annex JD (informative)	Comparison table between JIS and corresponding International Standards .....	68

## Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry, through deliberations at the Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law. Consequently **JIS T 9201:2006** is replaced with this Standard.

However, **JIS T 9201:2006** may be applied in the **JIS** mark certification based on the relevant provisions of Article 19 Clause 1, etc. of the Industrial Standardization Law until October 19, 2017.

This **JIS** document is protected by the Copyright Law.

Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, applications for a patent after opening to the public or utility model rights. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying any of such patent rights, applications for a patent after opening to the public or utility model rights.

# Manually propelled wheelchairs

## Introduction

This Japanese Industrial Standard has been prepared based on **ISO 7176-1:2014** (Edition 3), **ISO 7176-3:2012** (Edition 3), **ISO 7176-8:2014** (Edition 2), **ISO 7176-11:2012** (Edition 2), **ISO 7176-13:1989** (Edition 1), **ISO 7176-15:1996** (Edition 1), **ISO 7176-22:2014** (Edition 2), and **ISO 7176-26:2007** (Edition 1), with some modifications made in the technical contents in order to reflect considerations for the average body type of Japanese users, as well as local needs and situations in Japan.

The vertical lines on both sides and dotted underlines indicate changes from the corresponding International Standard. A list of modifications with the explanations is given in Annex JD.

## 1 Scope

This Standard specifies manually propelled wheelchairs of self-propelled standard type, self-propelled posture adjustable type, assistant-propelled standard type and assistant-propelled posture-adjustable type (hereafter referred to as wheelchairs). Self-propelled posture adjustable type wheelchairs do not include those having a height adjustment mechanism, a slewing mechanism or a stand-up mechanism.

NOTE : The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows.

ISO 7176-1:2014 *Wheelchairs—Part 1: Determination of static stability*

ISO 7176-3:2012 *Wheelchairs—Part 3: Determination of effectiveness of brakes*

ISO 7176-8:2014 *Wheelchairs—Part 8: Requirements and test methods for static, impact and fatigue strengths*

ISO 7176-11:2012 *Wheelchairs—Part 11: Test dummies*

ISO 7176-13:1989 *Wheelchairs—Part 13: Determination of coefficient of friction of test surfaces*

ISO 7176-15:1996 *Wheelchairs—Part 15: Requirements for information disclosure, documentation and labelling*

ISO 7176-22:2014 *Wheelchairs—Part 22: Set-up procedures*

ISO 7176-26:2007 *Wheelchairs—Part 26: Vocabulary* (Overall evaluation: MOD)

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standard and **JIS** are IDT (identical), MOD (modified), and NEQ (not equivalent) according to **ISO/IEC Guide 21-1**.

## 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.