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Wheelchairs — Specifications of test dummies

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In the event of any doubts arising as to the contents,
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Foreword

This Japanese Industrial Standard has been established by the Minister of Economy, Trade and Industry, through deliberations at the Japanese Industrial Standards Committee in accordance with the Industrial Standardization Act.

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Wheelchairs — Specifications of test dummies

Introduction

This Japanese Industrial Standard has been prepared based on **ISO 7176-11 : 2012**, Edition 2, with some modifications to adapt the technical contents to the actual business practices in Japan.

Annex JA is unique to **JIS** and not given in the corresponding International Standard. 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 JB.

1 Scope

This Standard specifies requirements for test dummies of any mass greater than or equal to 25 kg, to be used in the evaluation of wheelchairs. This Standard provides formulae that specify the location of the overall centre of mass of test dummies, the masses of the segments that comprise the test dummies and the locations of pivots that connect the segments. It also specifies the characteristics of loading pads that support the segments.

The specified location for the centre of mass is approximately the same as that of a human being of the corresponding mass when seated in a wheelchair. This Standard does not attempt to represent the mass distribution of a person with limb atrophy or amputation. This Standard is intended to enable the construction of test dummies that will produce comparable results for stability, performance and durability testing of manual wheelchairs and electrically powered wheelchairs, including scooters.

This Standard also includes informative tables of mass and locations of centre of mass, which are derived from the formulae, corresponding to example test dummy masses up to 300 kg in 25 kg increments.

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

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

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