
**Implants for surgery — Wear of total
knee-joint prostheses —**

**Part 1:
Loading and displacement parameters
for wear-testing machines with
load control and corresponding
environmental conditions for test**

AMENDMENT 1

ISO 14243-1:2009/Amd 1:2020

<https://standards.iteh.ai/en/standards/implants-chirurgicaux-usure-des-protheses-totales-de-l-articulation-du-genou-14243-1-2009-amd-1-2020>

*Partie 1: Paramètres de charge et de déplacement pour
machines d'essai d'usure avec contrôle de la charge et conditions
environnementales correspondantes d'essai*

AMENDEMENT 1



iTeh STANDARD PREVIEW
(standards.iteh.ai)

<https://standards.iteh.ai/catalog/standards/sist/6f770d6b-25c9-4e40-9b5f-9ed0485879f8/iso-14243-1-2009-amd-1-2020>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2020

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 150, *Implants for surgery*, Subcommittee SC 4, *Bone and joint replacements*. [ISO 14243-1:2009/Amd 1:2020](https://standards.iteh.ai/catalog/standards/sist/6f770d6b-25c9-4e40-9b15-9c1f4d587986/iso-14243-1-2009/iso-14243-1-2009/iso-14243-1-2020)

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[ISO 14243-1:2009/Amd 1:2020](https://standards.iteh.ai/catalog/standards/sist/6f770d6b-25c9-4e40-9bf5-9ed0485879f8/iso-14243-1-2009-amd-1-2020)

<https://standards.iteh.ai/catalog/standards/sist/6f770d6b-25c9-4e40-9bf5-9ed0485879f8/iso-14243-1-2009-amd-1-2020>

Implants for surgery — Wear of total knee-joint prostheses —

Part 1:

Loading and displacement parameters for wear-testing machines with load control and corresponding environmental conditions for test

AMENDMENT 1

Clause 3

Replace the term and definition 3.3 with the following:

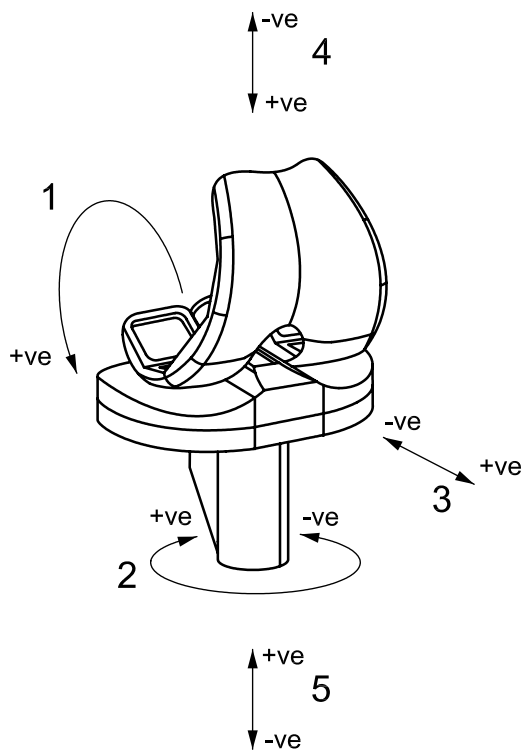
3.3

axial force

force applied to either the tibial component or the femoral component of the knee-joint prosthesis in a direction perpendicular to the transverse plane

Note 1 to entry When applied to the tibial component, the axial force is considered positive when it acts in an inferior-to-superior direction (See Figures 1 and 2); when applied to the femoral component, the axial force is considered positive when it acts in a superior-to-inferior direction.

Replace [Figure 1](#) and key with the following:



Key

- 1 flexion (of femoral component)
- 2 tibial rotation
- 3 AP displacement by the tibial component
- 4 polarity of axial force when applied to the femoral component
- 5 polarity of axial force when applied to the tibial component

iTech STANDARD PREVIEW
(standards.iteh.ai)

**Figure 1 — Sign convention for the forces and motions,
shown for a left total knee replacement system**

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[ISO 14243-1:2009/Amd 1:2020](https://standards.iteh.ai/catalog/standards/sist/6f770d6b-25c9-4e40-9bf5-9ed0485879f8/iso-14243-1-2009-amd-1-2020)

<https://standards.iteh.ai/catalog/standards/sist/6f770d6b-25c9-4e40-9bf5-9ed0485879f8/iso-14243-1-2009-amd-1-2020>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 14243-1:2009/Amd 1:2020
<https://standards.iteh.ai/catalog/standards/sist/6f770d6b-25c9-4e40-9bf5-9ed0485879f8/iso-14243-1-2009-amd-1-2020>