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Second edition
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Implants for surgery — Partial and total hip joint prostheses —

Part 6:

Endurance properties testing and performance requirements of neck region of stemmed femoral components

Implants chirurgicaux — Prothèses partielles et totales de l'articulation de la hanche —

Partie 6: Exigences de performance et essais des propriétés d'endurance de la région du col des tiges fémorales



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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. www.iso.org/directives

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The committee responsible for this document is ISO/TC 150, *Implants for surgery*, Subcommittee SC 4, *Bone and joint replacements*.

This second edition cancels and replaces the first edition (ISO 7206-6:1992), of which it constitutes a minor revision.

ISO 7206 consists of the following parts, under the general title *Implants for surgery — Partial and total hip joint prostheses*:

- *Part 1: Classification and designation of dimensions*
- *Part 2: Articulating surfaces made of metallic, ceramic and plastics materials*
- *Part 4: Determination of endurance properties and performance of stemmed femoral components*
- *Part 6: Endurance properties testing and performance requirements of neck region of stemmed femoral components*
- *Part 10: Determination of resistance to static load of modular femoral heads*

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Introduction

The test method described in this part of ISO 7206 is intended for the verification of the endurance properties of the neck region of stemmed femoral components of hip joint prostheses. This method is based extensively on that given in ISO 7206-4, which verifies the endurance properties of the complete femoral component under loading conditions that include a torsional component. The test conditions in ISO 7206-4, especially the height of the specimen embedding, are intended to represent the clinical situation where the prosthesis has become loosened in the femur, whereas the test conditions in this part of ISO 7206 are intended to represent a correctly and firmly fixed prosthesis. Therefore, it should be noted that the tests in this part of ISO 7206 may not be representative of the most unfavourable clinical conditions.