# INTERNATIONAL STANDARD

ISO 7207-1

Third edition 2007-02-01

## Implants for surgery — Components for partial and total knee joint prostheses —

Part 1:

## Classification, definitions and designation of dimensions

Implants chirurgicaux — Éléments de prothèses partielle et totale de l'articulation du genou —

Partie 1: Classification, définitions et désignation des dimensions



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## **Foreword**

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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.

ISO 7207-1 was prepared by Technica Committee ISO/TC 150, *Implants for surgery*, Subcommittee SC 4, *Bone and joint replacements*.

This third edition cancels and replaces the second edition (ISO 7207-1:1994) which has been technically revised.

ISO 7207 consists of the following parts, under the general title *Implants for surgery* — Components for partial and total knee joint prostheses:

- Part 1: Classification, definitions and designation of dimensions
- Part 2: Articulating surfaces made of metal, ceramic antiquestics materials

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## Introduction

Partial and total knee joint prostheses are designed to transmit loads and allow movement under high stress conditions. They are intended to replace anatomical structures and provide structure and function to provide as closely as possible the attributes of the normal natural joint. The structure and functions required in a specific implant depend on the amount of anatomical structure or function which is attenuated or absent, and a system of classification of the attributes of various types of implant is presented.

specific implant depend of the attributes of various types of implant is presented.

Many different designs of the period of the most common knee joint prostheses in accordance with this detailed classification system, definition of components and the designation of dimensions. These classifications assist the surgeon in selection of the appropriate implant for a specific case.

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## Implants for surgery — Components for partial and total knee joint prostheses —

## Part 1:

## Classification, definitions and designation of dimensions

## 1 Scope

This part of ISO 7207 classifies femoral, tibial and patellar components for knee joint prostheses in which the bearing surfaces of one or more compartments of the knee are replaced. It also gives definitions of components and the designation of dimensions.

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 21534, Non-active surgical implants — Joint replacement implants — Particular requirements

ISO 21536, Non-active surgical implants — Joint replacement implants — Specific requirements for knee-joint replacement implants

## 3 Terms and definitions and symbols

For the purposes of this document, the terms and definitions given in ISO 21534 and ISO 21536 and the following apply.

## 3.1 Types of knee joint prosthesis

## 3.1.1

### total knee joint prosthesis

bi-compartmental or tri-compartmental knee joint prosthesis

NOTE A bi-compartmental total knee joint prosthesis is shown in Figure 1. A tri-compartmental total knee joint prosthesis is shown in Figure 7c).

### 3.1.2

### uni-compartmental knee joint prosthesis

set of implant components used to replace the femoral and tibial articulating surfaces in either the medial or the lateral compartment of a knee joint

NOTE A uni-compartmental knee joint prosthesis is shown in Figure 2.