
**Implants for surgery — Orthopaedic
joint prosthesis —**

**Part 1:
Procedure for producing parametric
3D bone models from CT data of the
knee**

*Implants chirurgicaux — Prothèses articulaires orthopédiques —
Partie 1: Mode opératoire de production de modèles paramétriques
d'os en 3D à partir de données de CT du genou*

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Foreword

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Introduction

In accordance with its widespread use of medical X-ray computed tomography apparatus, three-dimensional (3D) bone models reconstructed from digital tomographic images have been widely used for various applications such as preoperative planning, surgical navigation, robotic surgeries, patient matched instruments and personalized total knee joint prosthesis. However, the conditions of taking tomographic images are different among hospitals and not internationally unified. To measure bones accurately, precise 3D bone models reconstructed from tomographic images should be used. On the other hand, since conditions of this reconstruction process are left up to operators' and/or medical institutions' discretion, this document provides a standard way of reconstructing 3D bone models.

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