

BUREAU OF INDIAN STANDARDS

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भारतीय मानक मसौदा

**सर्जरी के लिए प्रत्यारोपण – संपूर्ण कूल्हे के जोड़ के कृत्रिम अंग
का घिसाव**

**भाग 4: कूल्हे के कृत्रिम अंग के घटकों की स्थिति में भिन्नता के तहत परीक्षण
जिसके परिणामस्वरूप सीधे किनारे पर भार पड़ता है**

Draft Indian Standard

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

**Part 4: Testing hip prostheses under variations in
component positioning which results in direct edge loading**

ICS 11.040.40

Orthopaedic Instruments, Implants and
Accessories Sectional Committee, MHD 02

Last date for comments: **19 July 2024**

NATIONAL FOREWORD

(Adoption clause will be added later)

The text of ISO Standard has been approved as suitable for publication as an Indian Standard without deviations. Certain terminologies and conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- Wherever the words ‘International Standard’ appear referring to this standard, they should be read as ‘Indian Standard’.
- Comma (,) has been used as a decimal marker, while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to certain International Standards for which Indian

Doc: MHD02(25896)WC
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Standards also exist. The corresponding Indian Standards, which are to be substituted in their places, are listed below along with their degree of equivalence for the editions indicated:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
ISO 14242-1, Implants for surgery — Wear of total hip-joint prostheses — Part 1: Loading and displacement parameters for wear-testing machines and corresponding environmental conditions for test	MHD02(25893), Implants for surgery — Wear of total hip-joint prostheses — Part 1: Loading and displacement parameters for wear-testing machines and corresponding environmental conditions for test	Identical
ISO 14242-2 Implants for surgery — Wear of total hip-joint prostheses — Part 2: Methods of measurement	MHD02(25894), Implants for surgery — Wear of total hip-joint prostheses — Part 2: Methods of measurement	Identical
ISO 14242-3, Implants for surgery — Wear of total hip-joint prostheses — Part 3: Loading and displacement parameters for orbital bearing type wear testing machines and corresponding environmental conditions for test	MHD02(25895), Implants for surgery — Wear of total hip-joint prostheses — Part 3: Loading and displacement parameters for orbital bearing type wear testing machines and corresponding environmental conditions for test	Identical

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated expressing the result of a test or analysis, shall be rounded off in accordance with IS 2: 2022 ‘Rules for rounding off numerical values (Second Revision).’

Note: The technical content of the document has not been included as it is identical with the corresponding ISO standard. For details, please refer to ISO 14242-4: 2018 or kindly contact:

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SCOPE

This document specifies the test conditions to simulate edge loading in hip prostheses due to steep acetabular cup inclination angle and dynamic separation conditions.

This document is used in conjunction with ISO 14242-1 or ISO 14242-3.