TECHNICAL ISO/TR

First edition
2016-05-01

Dentistry — Screw loosening test using cyclic torsional loading for implant body/implant abutment connection of endosseous dental implants

Medecine bucco-dentaire — Essai de dévissage d'une vis utilisant une charge de torsion cyclique pour le corps d'implant/pilier implantaire des implants dentaires endo-osseux

Reference number
ISO/TR 18130:2016(E)

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Foreword

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The committee responsible for this document is ISO/TC 106, *Dentistry*, Subcommittee SC 8, *Dental implants*.

Introduction

Most endosseous dental implants currently marketed employ a dental implant body that is inserted within the jaw bone and to which other components may be joined when constructing a prosthetic superstructure. The connection between these components and the implant body should be sufficiently rigid to resist vertical masticatory loads, which have a significant torsional component. Endosseous dental implants may, therefore, incorporate features to restrict rotation at the connection. If this is insufficiently strong, then undesirable incidents, including screw loosening, distortion and fracture of the linked components will occur. A cyclic torsional screw loosening test for the connection between implant body and implant abutment would facilitate comparative evaluation.