TECHNICAL SPECIFICATION

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Dentistry — Determination of the strength of dental amalgam by the Hertzian indentation strength (HIT) method

Médicine bucco-dentaire — Détermination de la résistance des amalgames dentaire par l'indentation hertzienne (HIT) méthode

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The committee responsible for this document is ISO/TC 106, *Dentistry*, Subcommittee SC 1, *Filling and restorative materials*.

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Introduction

This document gives the practical details of the test method for the measurement of the strength of a dental amalgam by the Hertzian indentation (HIT) method. In this test, the specimen geometry and the localized application of force leads to radial crack formation at the surface opposite the one to which the force is applied and under the point at which it is applied. This protocol produces a loading condition similar to that encountered during normal oral function.

When a requirement is agreed, it is the intention of ISO/TC 106/SC 1 to consider the inclusion of this test procedure in the ISO standards for dental amalgam.

This method for measuring the strength of a brittle material (and materials that have very low plasticity) can be applied to other dental restorative materials.

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