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First edition  
2003-03-15

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## **Metallic materials — Fatigue testing — Axial-strain-controlled method**

*Matériaux métalliques — Essais de fatigue — Méthode par déformation  
axiale contrôlée*



Reference number  
ISO 12106:2003(E)

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Published in Switzerland

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## Foreword

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The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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 12106 was prepared by Technical Committee ISO/TC 164, *Mechanical testing of metals*, Subcommittee SC 5, *Fatigue testing*.

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## Introduction

The design of mechanical components subjected to fatigue loadings requires, in a number of industrial sectors (nuclear, aeronautical, mechanical engineering), the knowledge of the behaviour of the materials under reversed strain control conditions (referred to as low-cycle fatigue) when cyclic plasticity is present.

In order to ensure reliability and consistency of results from different laboratories, it is necessary to collect all data using test methodologies that comply with a number of key points.

This International Standard concerns both the generation and the presentation of results for fatigue properties of metallic materials.