
**Metallic materials — Verification of static
uniaxial testing machines —**

Part 2:

**Tension creep testing machines —
Verification of the applied force**

*Matériaux métalliques — Vérification des machines pour essais
statiques uniaxiaux —*

*Partie 2: Machines d'essai de fluage en traction — Vérification
de la force appliquée*



PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

This document is a preview generated by EVS

© ISO 2006

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Foreword.....	iv
1 Scope	1
2 Normative references	1
3 Symbols and their meanings.....	2
4 General inspection of the testing machine	2
5 Verification of the force applied by the testing machine.....	3
5.1 General.....	3
5.2 Masses	3
5.3 Determination of the discrimination threshold.....	3
5.4 Determination of the lower limit of verification	4
5.5 Test procedure	4
5.6 Assessment of the force applied by the machine	6
6 Class of the testing machine	6
6.1 General.....	6
6.2 Lever-type creep testing machines.....	6
6.3 Creep testing machines with the force applied by direct acting masses	7
6.4 Creep testing machines with the force applied directly by a spring.....	7
7 Verification report.....	8
8 Intervals between verifications	8
Annex A (normative) General inspection of the testing machine	9

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

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 7500-2 was prepared by Technical Committee ISO/TC 164, *Mechanical testing of metals*, Subcommittee SC 1, *Uniaxial testing*.

This second edition cancels and replaces the first edition (ISO 7500-2:1996), which has been technically revised.

ISO 7500 consists of the following parts, under the general title *Metallic materials — Verification of static uniaxial testing machines*:

- *Part 1: Tension/compression testing machines — Verification and calibration of the force-measuring system*
- *Part 2: Tension creep testing machines — Verification of the applied force*

Metallic materials — Verification of static uniaxial testing machines —

Part 2: Tension creep testing machines — Verification of the applied force

1 Scope

This part of ISO 7500 specifies the verification of testing machines used for uniaxial creep testing in tension in accordance with ISO 204.

The verification consists of

- a general inspection of the testing machine, and
- a verification of the force applied by the testing machine.

This part of ISO 7500 applies to dead-weight machines, lever-type creep testing machines and direct-spring-loading machines.

Machines with a force-measuring system¹⁾ should be verified in accordance with ISO 7500-1, *Metallic materials — Verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Verification and calibration of the force-measuring system*.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 204, *Metallic materials — Uniaxial creep testing in tension — Method of test*

ISO 376, *Metallic materials — Calibration of force-proving instruments used for the verification of uniaxial testing machines*

1) For the purposes of this part of ISO 7500, a force-measuring system comprises the load cell plus conditioning plus indicator.