
**Metallic materials — Ductility testing
— High speed compression test for
porous and cellular metals**

*Matériaux métalliques — Essais de ductilité — Essai de compression
à haute vitesse des métaux poreux et cellulaires*



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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

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Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Symbols and units	2
5 Principle	2
6 Testing machine	2
6.1 Type of testing machine	2
6.2 Drop weight impact testing machine	3
6.2.1 General	3
6.2.2 Weight	3
6.2.3 Pressing jig	3
6.2.4 Load cell	3
6.2.5 Displacement sensor	4
6.2.6 Absorber	5
6.3 Servo-type high-speed compression testing machine	5
6.3.1 General	5
6.3.2 Pressing jig	5
6.3.3 Load cell	5
6.3.4 Displacement sensor	5
6.3.5 Rupture pin	5
6.3.6 Stopper	5
7 Test piece	5
7.1 Preparation of test piece	5
7.2 Shape and dimensions of the test piece	6
8 Drop weight impact test	7
8.1 Preparation	7
8.2 Test	8
9 Servo-type high-speed compression test	9
9.1 Preparation	9
9.2 Test	9
10 Calculations	10
10.1 Compressive strain	10
10.2 Compressive stress	10
10.3 Compressive stress-strain curve	10
10.4 Plateau stress (σ_{pl})	10
10.5 Plateau end	10
10.6 Plateau end strain (e_{ple})	10
10.7 Energy absorption	11
11 Test report	12
Annex A (informative) Filtering of the measurement data	14
Bibliography	17

Foreword

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This document was prepared by Technical Committee ISO/TC 164, *Mechanical testing of metals*, Subcommittee SC 2, *Ductility testing*.

This second edition cancels and replaces the first edition (ISO 17340:2014), of which it constitutes a minor revision. The changes compared to the previous edition are as follows:

- the title of ISO 7500-1 has been updated in [Clause 2](#);
- a list of symbols and units has been added as [Clause 4](#);
- information about the use of adhesives in [8.2 b\)](#) has been revised;
- minor editorial changes have been made to align with ISO/IEC Directives Part 2:2018.

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Introduction

Porous and cellular metals have attractive properties due to their unique cell morphology. When they are used as impact energy absorbing components in automotive structures, knowledge of their high-speed compressive properties is necessary for industrial design. The high-speed compressive deformation behaviour of porous and cellular metals is quite different from their static compressive properties. Testing methods for static compressive deformation are, therefore, insufficient for characterization of high-speed compressive deformation. Standardization of a testing method for the high-speed compressive behaviour of porous and cellular metals is required.