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Second edition
2020-05

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*



Reference number
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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.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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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.