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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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Foreword

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The committee responsible for this document is ISO/TC 164, *Mechanical testing of metals*, Subcommittee SC 2, *Ductility testing*.

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.