INTERNATIONAL STANDARD

ISO 4507

Second edition
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Sintered ferrous materials, carburized or carbonitrided — Determination and verification of case-hardening depth by a micro-hardness test

Matériaux ferreux frittés, cémentés ou carbonitrurés — Détermination et vérification de la profondeur de cémentation, par mesurage de la microdureté

Reference number
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Foreword

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

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 International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 4507 was prepared by Technical Committee ISO/TC 119, *Powder metallurgy*, Subcommittee SC 3, *Sampling and testing methods for sintered metal materials (excluding hardmetals)*.

This second edition cancels and replaces the first edition (ISO 4507:1978) which has been technically revised.

Sintered ferrous materials, carburized or carbonitrided — Determination and verification of case-hardening depth by a micro-hardness test

1 Scope

This International Standard specifies methods for determining the case-hardening depth of carburized or carbonitrided sintered ferrous materials by micro-hardness measurement.

The methods are adapted to materials having porosity and only apply to quenched materials.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 2639, *Steel — Determination and verification of the effective depth of carburized and hardened cases.*

ISO 4498:—[1)], *Sintered metal materials, excluding hardmetals — Determination of apparent hardness and micro-hardness.*

3 Term and definition

For the purposes of this International Standard, the following term and definition applies.

3.1
case-hardening depth
CHD
distance, measured normal to the surface of a case-hardened workpiece at a point at which the hardness corresponds to a specified limit

1) To be published. (Cancels and replaces ISO 4498-1:1990 and ISO 4498-2:1981)