



ISO 18203

Steel — Determination of the thickness of surface-hardened layers

Acier — Détermination de l'épaisseur des couches durcies superficielles

**Second edition
2026-01**



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Published in Switzerland

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This document was prepared by Technical Committee ISO/TC 17, *Steel*, Subcommittee SC 7, *Methods of testing (other than mechanical tests and chemical analysis)*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 459/SC 1, *Test methods for steel (other than chemical analysis)*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 18203:2016), which has been technically revised.

The main changes are as follows:

- removal of the reference to shot peening;
- removal of the compound layer thickness (CLT);
- introduction of standard test loads for the determination of hardness depths, and the procedure for measurements in the event of arbitration;
- extension of [Table 1](#) by Rockwell test methods;
- extension of [Table 2](#) by further abbreviations;
- precise definition of how the core hardness shall be tested;
- determination of the edge distance of the first hardness impression from the edge;
- explanation of how to determine the total thickness of surface hardening depth THD.

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There are several ways of creating a surface-hardened layer in steel, but the measurement of its thickness follows the same principle, regardless of the chemical composition or heat treatment of the sample. This document presents the basic principle of determining the thickness of surface-hardened layers as well as the differences particular to the different methods of creating the surface-hardened layer.

No method of estimating uncertainty is presented in this document. As real applications of this procedure accrue, the need may arise to address this topic in future revisions.