

DIN EN ISO 14577-1:2015-11 (E)

Metallic materials - Instrumented indentation test for hardness and materials parameters - Part 1: Test method (ISO 14577-1:2015)

Contents		Page
European foreword	3
Introduction	4
1	Scope	5
2	Normative references	5
3	Symbols and designations	6
4	Principle	8
5	Testing machine	8
6	Test piece	9
7	Procedure	9
8	Uncertainty of the results	12
9	Test report	13
Annex A (normative)	Materials parameters determined from the force/indentation depth data set	15
Annex B (informative)	Types of control use for the indentation process	28
Annex C (normative)	Machine compliance and indenter area function	29
Annex D (informative)	Notes on diamond indenters	31
Annex E (normative)	Influence of the test piece surface roughness on the accuracy of the results	32
Annex F (informative)	Correlation of indentation hardness H_{IT} to Vickers hardness	33
Annex G (normative)	Drift and creep rate determination	35
Annex H (informative)	Estimation of uncertainty of the calculated values of hardness and materials parameters	37
Annex I (normative)	Calculation of radial displacement correction	47
Bibliography	49