

# DIN EN ISO 6508-2:2015-06 (E)

## Metallic materials - Rockwell hardness test - Part 2: Verification and calibration of testing machines and indenters ( ISO 6508-2:2015)

---

<b>Contents</b>		<b>Page</b>
Foreword .....		3
1	Scope .....	4
2	Normative references .....	4
3	General conditions .....	4
4	Direct verification of the testing machine .....	5
4.1	General .....	5
4.2	Calibration and verification of the test force .....	5
4.3	Calibration and verification of the depth-measuring system .....	5
4.4	Calibration and verification of the testing cycle .....	6
4.5	Calibration and verification of the machine hysteresis .....	6
5	Indirect verification of the testing machine .....	7
5.1	General .....	7
5.2	Procedure .....	7
5.3	Repeatability .....	8
5.4	Bias .....	9
5.5	Uncertainty of measurement .....	10
6	Calibration and verification of Rockwell hardness indenters .....	10
6.1	General .....	10
6.2	Diamond indenter .....	10
6.2.1	General .....	10
6.2.2	Direct calibration and verification of the diamond indenter .....	10
6.2.3	Indirect verification of diamond indenters .....	11
6.3	Ball indenter .....	12
6.3.1	Direct calibration and verification of the ball indenter .....	12
6.3.2	Indirect verification of the ball holder assembly .....	14
6.4	Marking .....	14
7	Intervals between direct and indirect calibrations and verifications .....	14
8	Verification report .....	15
Annex A (normative)	Repeatability of testing machines .....	16
Annex B (informative)	Uncertainty of measurement of the calibration results of the hardness testing machine .....	18
Bibliography .....		27