

# DIN ISO 15632:2015-11 (E)

Microbeam analysis - Selected instrumental performance parameters for the specification and checking of energy-dispersive X-ray spectrometers for use in electron probe microanalysis (ISO 15632:2012)

---

<b>Contents</b>	<b>Page</b>
National foreword .....	3
National Annex NA (informative) Bibliography .....	3
Introduction .....	4
1 Scope .....	5
2 Normative references .....	5
3 Terms and definitions .....	5
4 Requirements .....	7
4.1 General description .....	7
4.2 Energy resolution .....	7
4.3 Dead time .....	7
4.4 Peak-to-background ratio .....	8
4.5 Energy dependence of instrumental detection efficiency .....	8
5 Check of further performance parameters .....	8
5.1 General .....	8
5.2 Stability of the energy scale and resolution .....	8
5.3 Pile-up effects .....	8
5.4 Periodical check of spectrometer performance .....	9
Annex A (normative) Measurement of line widths (FWHMs) to determine the energy resolution of the spectrometer .....	10
Annex B (normative) Determination of the L/K ratio as a measure for the energy dependence of the instrumental detection efficiency .....	13
Bibliography .....	15