

DIN EN ISO 15708-4:2025-09 (E)

Non-destructive testing - Radiation methods for computed tomography - Part 4: Qualification (ISO 15708-4:2025)

Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Qualification of the testing	1
4.1 General	1
4.2 Qualification of defect testing	2
4.2.1 General	2
4.2.2 Objects and features	2
4.2.3 Feature detectability/test system/system parameterisation	2
4.2.4 Verification of suitability	3
4.2.5 Consistency check	3
4.2.6 Documentation	4
4.3 Qualification of dimensional testing	4
4.3.1 General	4
4.3.2 Test and measurement task	4
4.3.3 Dimensional testing/test system/system parameterisation	4
4.3.4 Degree of accuracy	5
4.3.5 Consistency check	5
4.3.6 Documentation	5
5 Qualification of the CT system	6
5.1 General	6
5.2 Integral overall system verification	6
5.3 Checking the system components	6
5.3.1 General	6
5.3.2 Manipulation system	6
5.3.3 Image scale	6
5.3.4 Beam axis perpendicularity	6
5.3.5 Tube focal spot	6
5.3.6 Tube stability	7
5.3.7 Detector	7
5.3.8 Reconstruction	7
5.3.9 Visualization	7
5.4 Documentation	7
6 Example of CT system resolution evaluation methods	7
6.1 General	7
6.2 Acquisition parameters	8
6.3 Recommendations for creating reference objects	8
6.4 Density resolution measurement method	8
6.4.1 General	8
6.4.2 High energy reference object	9
6.4.3 Low energy reference object	9
6.4.4 Experimental measurements	9