

ISO/TR 11462-4:2022-02 (E)

Guidelines for implementation of statistical process control (SPC) - Part 4: Reference data sets for measurement process analysis software validation

Contents		Page
Foreword		iv
Introduction		v
1 Scope		1
2 Normative references		1
3 Terms and definitions, and symbols and abbreviated terms		1
3.1 Terms and definitions.....		1
3.2 Symbols and abbreviated terms.....		2
3.3 Abbreviated terms.....		4
4 Overview of the test examples		4
4.1 Overview.....		4
4.2 Notes.....		5
4.2.1 Notes on the accuracy of the test examples and results.....		5
4.2.2 Note on outlier detection.....		5
4.2.3 Note on capability indices.....		5
4.2.4 Note on the model of the measurement and correlations.....		5
4.2.5 Note on other reference data sets.....		5
4.2.6 Note on systematic errors.....		6
5 Reference data sets description and evaluation		6
5.1 Test data set 1 – example of linearity study with at least three standards.....		6
5.1.1 Test data set 1 – information.....		6
5.1.2 Test data set 1 – data, calculations and results.....		6
5.2 Test data set 2 – attribute measurement process – operator influence (ISO 22514-7).....		12
5.2.1 Test data set 2 – information.....		12
5.2.2 Test data set 2 – data, calculations and results.....		12
5.3 Test data set 3 – attributive measurements – capability calculations using reference values – calculation of the uncertainty range (ISO 22514-7).....		13
5.3.1 Test data set 3 – information.....		13
5.3.2 Test data set 3 – data, calculations and results.....		13
5.4 Test data set 4 – measurement process capability with three reference standards (VDA 5).....		16
5.4.1 Test data set 4 – information.....		16
5.4.2 Test data set 4 – data, calculations and results.....		16
5.5 Test data set 5 – Measurement Process Capability of a CMM (VDA 5 and ISO 15530-3).....		19
5.5.1 Test data set 5 – information.....		19
5.5.2 Test data set 5 – data, calculations and results.....		20
5.6 Test data set 6 – measurement process capability of automated test device.....		23
5.6.1 Test data set 6 – information.....		23
5.6.2 Test data set 6 – data, calculations and results.....		23
5.7 Test data set 7 – measurement process capability of a multiple-point measuring Instrument (VDA 5).....		27
5.7.1 Test data set 7 – information.....		27
5.7.2 Test data set 7 – data, calculations and results.....		27
Bibliography		32