

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