ISO 7870-8:2017-04 (E)

Control charts - Part 8: Charting techniques for short runs and small mixed batches

Contents

Page

Foreword v

Introduction vi

1 Scope 1

2 Normative references 1

3 Terms,definitionsandsymbols 1
3.1 Terms and definitions 1
3.2 Symbols 1

4 HowtoselectthecorrecttypeofShewhartcontrolchartforcontinuousvariablesdata 2
4.1 General 2
4.2 How to select the correct type of Shewhart control chart for measured data generally 2
4.3 How to select the Shewhart control chart when the characteristic does not have a constant aim or process spread 3

5 How to prepare for short run, small mixed batch control charting 5
5.1 Focus on the process 5
5.2 Procedure for grouping similar processes 5
5.3 Typical applications 7
5.4 Preliminary process diagnosis 8
5.5 Procedure to establish the correct initial set-up of a process characteristic 8
5.5.1 Purpose 8
5.5.2 Scope and limitations 8
5.5.3 Reasons for need of procedure 8
5.5.4 Method 9
5.5.5 Example 10
5.6 Procedure to pre-establish control limits for SPC charts for short run, small batch, processes 11
5.6.1 Purpose 11
5.6.2 Scope of application 11
5.6.3 Reasons for need of procedure 11
5.6.4 Method 11
5.6.5 Example 12

6 Howtoestablishandapplyshortrun,smallmixedbatch,controlcharts 15
6.1 General 15
6.2 Variable aim, individual and moving range chart 15
6.2.1 Purpose 15
6.2.2 Scope of application 16
6.2.3 Method 16
6.2.4 Example 16
6.3 Variable aim, moving mean and moving range chart 18
6.3.1 Purpose 18
6.3.2 Scope of application 18
6.3.3 Method 18
6.3.4 Example 19
6.4 Universal, individual and moving range chart 20
6.4.1 Purpose 20
6.4.2 Scope of application 20

6.4.3 Method 20
6.4.4 Example 21
6.5 Universal, moving mean and moving range chart 22
6.5.1 Purpose 22
6.5.2 Scope of application 23
6.5.3 Method 23
6.5.4 Example 24

Annex A (informative) Reproducible copies of control charts forms and normal probabilityworksheet 25

Bibliography 31