

ISO 7870-6:2024-07 (E)

Control charts - Part 6: EWMA control charts for the process mean

Contents	Page
Foreword.....	iv
Introduction.....	v
1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions.....	1
4 Symbols and abbreviated terms.....	2
5 EWMA for inspection by variables.....	3
5.1 General.....	3
5.2 Weighted average explained.....	3
5.3 Control limits for EWMA control chart.....	4
5.4 Construction of EWMA control chart.....	5
5.5 Example.....	7
6 Choice of the control chart.....	10
6.1 Shewhart control chart versus EWMA control chart.....	10
6.2 Average run length.....	11
6.3 Choice of parameters for EWMA control chart.....	11
6.3.1 Choice of λ	11
6.3.2 Choice of L_z	12
6.3.3 Calculation for n	12
6.3.4 Example.....	13
7 Procedure for implementing the EWMA control chart.....	13
8 Sensitivity of the EWMA to non-normality.....	14
9 Advantages and limitations.....	14
9.1 Advantages.....	14
9.2 Limitations.....	14
Annex A (informative) Application of the EWMA control chart.....	16
Annex B (informative) EWMA control chart for a proportion of nonconforming items.....	20
Annex C (informative) EWMA control charts for a number of nonconformities.....	22
Bibliography.....	24