ISO 8258:1991-12 (E)

Shewhart control charts

Contents

Page

1 Scope 1
2 Symbols 1
3 Nature of Shewhart control charts 2
4 Types of control charts 3
4.1 Control charts where no standard values are given 3
4.2 Control charts with respect to given standard values 3
4.3 Types of variables and attributes control charts 3
5 Variables control charts 4
5.1 Mean (X) chart and range (R) or standard deviations (s) chart 4
5.2 Control chart for individuals (X) 5
5.3 Control charts for medians (Me) 6
6 Control procedure and interpretation for variables control charts 6
7 Pattern tests for assignable causes of variation 7
8 Process control and process capability 7
9 Attributes control charts 9
10 Preliminary considerations before starting a control chart 11
10.1 Choice of quality characteristics 11
10.2 Analysis of the production process 11
10.3 Choice of rational subgroups 11
10.4 Frequency and size of samples 12
10.5 Preliminary data collection 12
11 Steps in the construction of control charts 12
12 Illustrative examples: Variables control charts 13
12.1 chart and R chart: Standard values given 13
12.2 X chart and R chart: No standard values given 15
12.3 Control chart for individuals, X, and moving range, R: No standard values given 18
12.4 Median chart: No standard values given 20
13 Illustrative examples: Attributes control charts 22
13.1 *p* chart and *np* chart: No standard values given 22
13.2 *p* chart: No standard values given 24
13.3 *c* chart: No standard values given 26
13.4 Number of nonconformities per unit: u chart 26

Annex
A Bibliography 29