

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