

İSTATİSTİKSEL KALİTE KONTROL ÖDEV-2

1. Let us assume that the readings in table are the number of defective items in 18 sample batches, each containing a total of 50 items ($n = 50$). The total number of defectives in the 18 sample batches collected is 229. Determine the control limits and plot the control chart.

Data for p Chart

Batch Number (i)	Number of Defectives (x)	Proportion of Defectives (\bar{p})
1	9	0.18
2	10	0.20
3	11	0.22
4	13	0.26
5	13	0.26
6	8	0.16
7	18	0.36
8	12	0.24
9	11	0.22
10	8	0.16
11	14	0.28
12	21	0.42
13	18	0.36
14	10	0.20
15	8	0.16
16	18	0.36
17	19	0.38
18	8	0.16

2. The table gives the results of daily inspection of a vacuum tube. The standard value of fraction defective p_0 established at the start of the month 0.04. Establish a single set of control limits based on this table and plot a control chart.

Date	Number of inspected	Number of defectives	Fraction of defectives
Now. 2	531	25	0.0471
3	1393	62	0.0445
4	1422	61	0.0429
5	1500	73	0.0049
6	1250	46	0.0368
7	2000	58	0.0290
9	685	28	0.0409
10	2385	89	0.0373
11	2150	89	0.0414
12	2150	58	0.0270
13	2417	115	0.0476
14	2549	115	0.0451
16	2331	75	0.0322
17	2009	81	0.0403
18	2198	86	0.0391
19	2271	67	0.0295
20	1948	41	0.0210
21	2150	77	0.0358
23	1700	49	0.0288
24	2214	68	0.0307
25	2394	82	0.0343
26	1197	56	0.0468
27	850	27	0.0318
28	848	30	0.0354
30	850	33	0.0388
Total	43392	1591

Teslim tarihi: 11.11.2008

NOT: Ödevler elde hazırlanacaktır.