c chart Examples

Lot Identification	Sample Size (Constant)	Number of Defects (In the Sample)
1	100	5
2	100	8
3	100	7
4	100	5
5	100	7
6	100	3
7	100	3
8	100	4
9	100	2
10	100	2
11	100	3
12	100	3
13	100	2
14	100	3
15	100	1
16	100	9
17	100	6
18	100	7
19	100	7
20	100	4
21	100	7
22	100	1
23	100	6
24	100	5
25	100	4
k = 25	n = 100	$\sum c = 114$

$$k = 25 \qquad \bar{c} = \frac{\text{total defectives}}{\text{no. of lots}} = \frac{114}{25} = 4.6$$

The control limits are determined by the formulas:

$$UCL_c = \bar{c} + 3\sqrt{\bar{c}} = 4.6 + 3\sqrt{4.6} = 11$$

$$LCL_c = \bar{c} - 3\sqrt{\bar{c}} = 4.6 - 3\sqrt{4.6} = -1.8 = 0$$

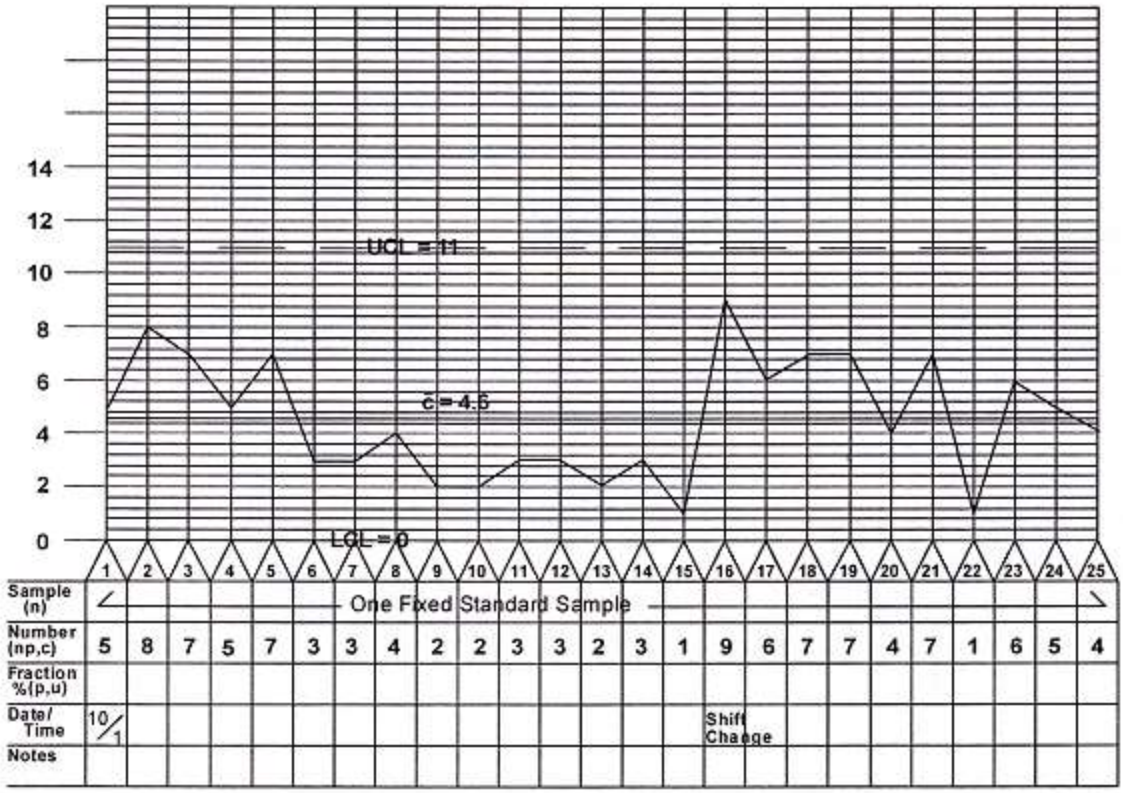
Attributes Control Chart Form

p ☐ np ☐ c ☒ u ☐

PART #: Encyclopedia DESCRIPTION: SPC Checklist CHARACTERISTIC: Defects DATE: 10/1

SOURCE: Binding Department OPERATOR: _____ INSPECTOR: You

UCL _____ LCL: 0 AVERAGE: _____



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Sample (n)	One Fixed Standard Sample																								
Number (np,c)	5	8	7	5	7	3	3	4	2	2	3	3	2	3	1	9	6	7	7	4	7	1	6	5	4
Fraction %(p,u)																									
Date/ Time	10/1															Shift Change									
Notes																									