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(Optimal solution)

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.2

(Reliability)

.3

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.3

.4

(5) (4)

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:

(Constraints

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(Objectives)

(

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⁽⁶⁾ ⁽²⁾ (Problem)

:(6) (2)

" : .1
"

) : .2
(

(: .3
)

(physical)

(logical) (mathematical) .4
()

.5

.6

(6):

(Resolve the Problem)

.(Clinical Approach)

Scientific)

(Solve the Problem)

(Approach

(Scientific team)

(Dissolve the Problem)

(Design Approach)

(7) (5) (4) **(Specifications)**

.(tolerances)

(4)

:(4)

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" .7
. .8

:(6) (5) (4)

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()

()

.()

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(1)

100

(Operating characteristics curve :OC)

(900)

(100)

:

(c =2)

(n =100)
(900)

(N =900)
(100)

Average)

(4)

.(3)

outgoing quality curve :(AOQ

0	100	2000 - /1
0	100	2000 - /2
2	100	2000 - /3
1	100	2000 - /4
0	100	2000 - /5
1	100	2000 - /6
1	100	2000 - /7
2	100	2000 - /8
0	100	2000 - /9
7	900	

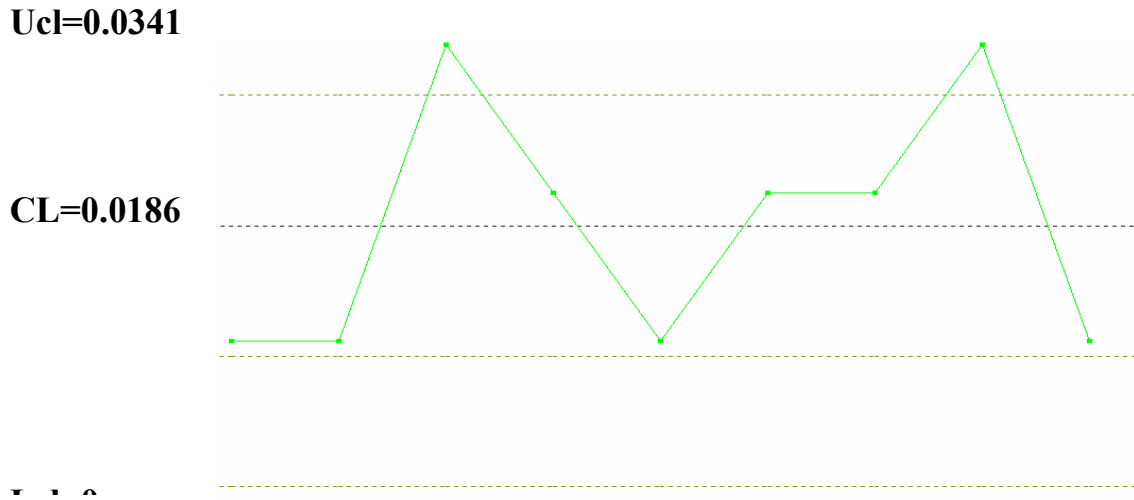
. (1)

control charts for

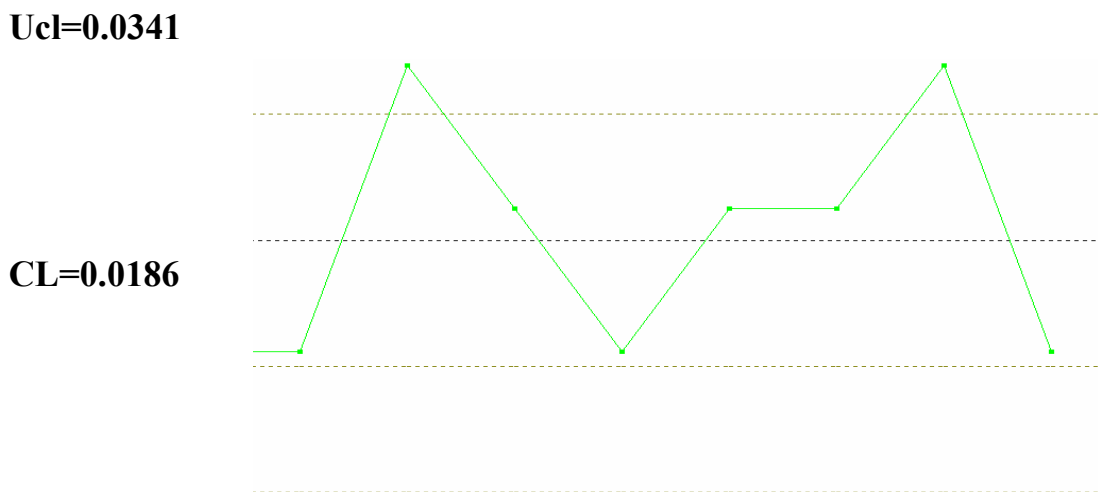
(WinQSB)

(np-chart) (P-chart)

((attributes



(p-chart) (1)



(np-chart) (2)

(100)

(3) : (2)

	1	2	3	4	5	6	7	8	9
n(t)	25	20	14	9	8	8	7	6	3

: (2)

:()

t : n(t)

t : r(t)

() : Q(t)

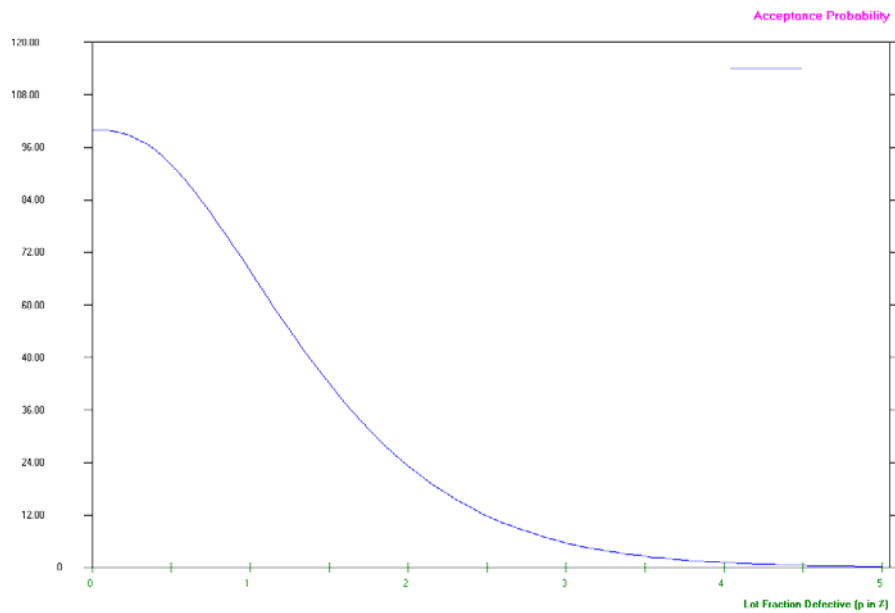
:

F(t)

t t : f(t)

: R(t)

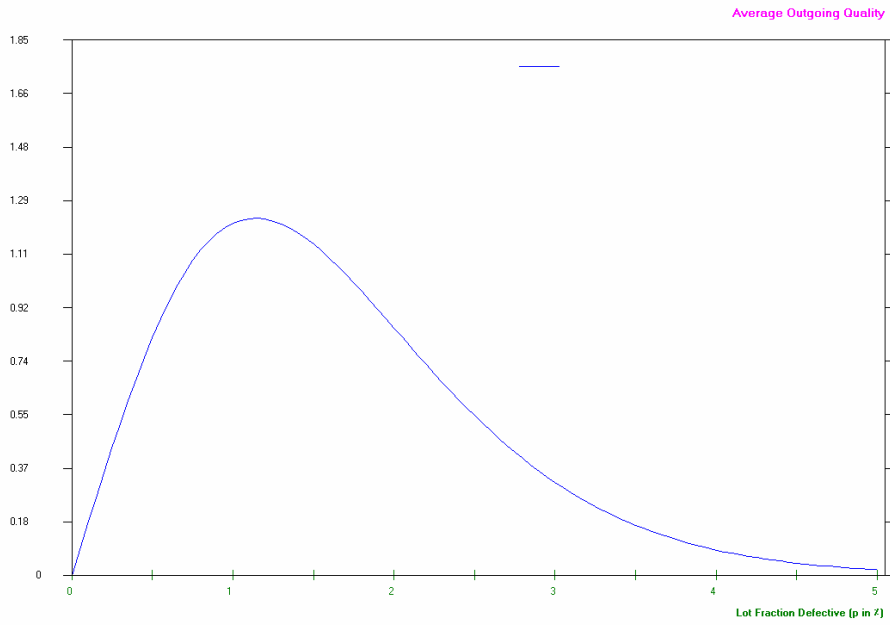
T	n(t)	r(t)	f(t)	Q(t)	R(t)	F(t)
1	25	75	0,666	0.25	0.375	0.624
2	20	55	0.306	0.2	0.651	0.348
3	14	41	0.333	0.14	0.42	0.58
4	9	32	0.246	0.09	0.365	0.634
5	8	24	0.285	0.08	0.28	0.719
6	8	16	0.4	0.08	0.2	0.8
7	7	9	0.56	0.07	0.125	0.875



8	6	3	1	0.06	0.06	0.94
9	3	0	2	0.03	0.015	0.985

:(3)

(3)



(AOQ)

(4)

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.1
.2
.3
.4
.5
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1. Dhillon, Balbir S. " Power System Reliability, Safety and management" ,An Arbor Science.(1983)
2. Edwards Dilwyn and Mike Hamson , " Guide to Mathematical Modelling", Macmillan. (1989)
3. Frankel, Ernst G. " .Systems Reliability and Risk Analysis" , Kluwer Academic Publisher. (1988) .
4. [Http://WWW. cs. hat. Fi /studies/ Tik-76.601/english.html](http://WWW.cs.hat.Fi/studies/Tik-76.601/english.html).
5. Reid. R. Dan, Nada R. Sanders, "Operations Management", John Wiley & Sons. Inc. (2002).
6. Revett, Patrick " Principles of Model Building "John Wiley & Sons. (1972).
/ " " : . - .7
(1999).