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Riahi@iust.ac.ir

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C

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C chart

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c chart

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(LCL)

(UCL)

[10]:

$$C=(c_1+c_2+...+c_k)/k$$

$$Udc=C+3\ C$$

$$Ldc=C-3\ C$$

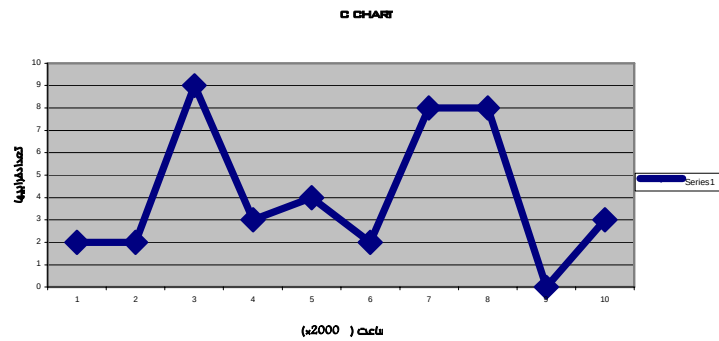
UCL

(out of control)

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C chart



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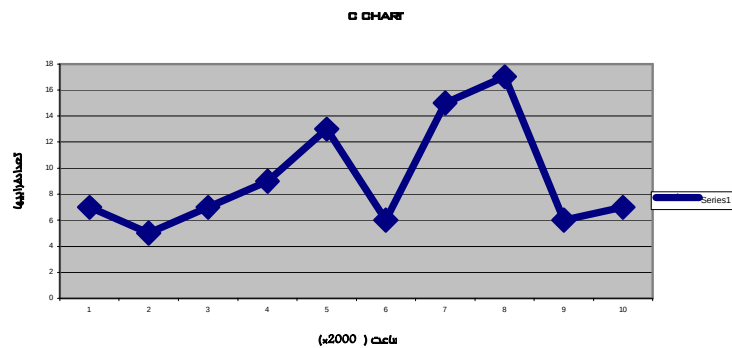
$$C = 41/10 = 4.1$$

$$K = 10$$

$$Uclc = 4.1 + 3(4.1) = 10.1$$

$$Lclc = 4.1 - 3(4.1) = -1.97$$

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$$C = 92/10 = 9.1$$

$$K = 10$$

$$Lclc = 9.1 - 3(9.1) = -0.1$$

$$Uclc = 9.1 + 3(9.1) = 18.3$$

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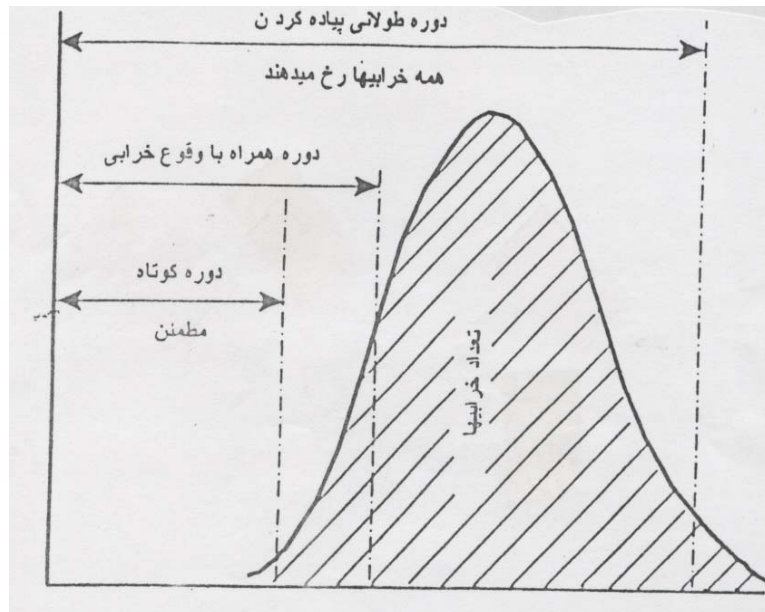
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c

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(CBM)



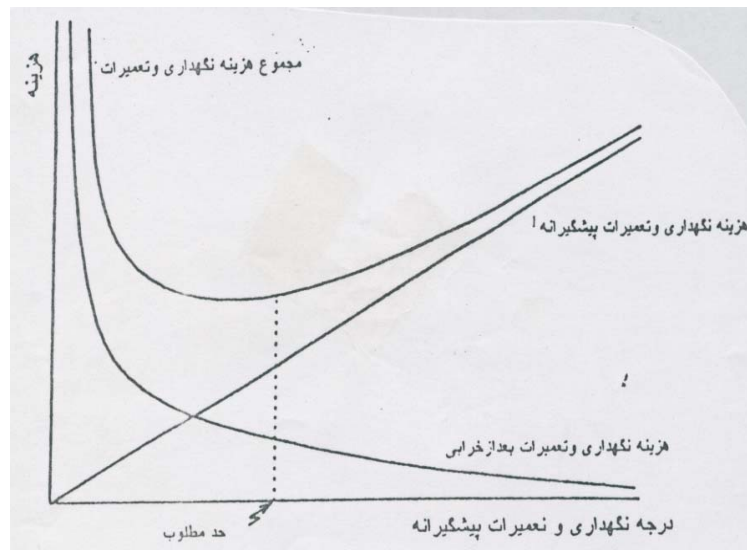
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[2] "Desing of hydraulic systems" (module H.3), ,pp33-34&98-106,2000.

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[3]Alan.L.Hitchcox,"HSTcontributes to award winning design",Internet,PP.2-3,April 2004.

[4]Esposito,Antony"Fluid power With Application".3rd ed.2001.

[5]yeaple,franklin "Fluid Design Handbook",2nd ed ,rev.and expanded,pp.27-30,2001.

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" PR731&PR751" []

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[9]Ken Brown,Utility Service Associates,"Codition-Monitoring of phosphat Easter Hydraulic Fluids".Machinery Lubrication Magazine.November 2002.

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