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FMEA

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(Shafee, 1995)

(Windsor, 2005)

(Ehrlich, 2002)

(Ahmadi, &

Mollazade, 2009)

(MWD)

(Hemmat *et al.*, 2007)

(Abbaspour-

Gilandeh *et al.*, 2009)

(Stagliano, 2004)

Majidnamdari@gmail.com :

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1. Mean Weight Diameter

, ()

(Windsor, 2005) / (MWD)

:(Windsor, 2005)

$$C_{pk} = \text{Min} \left[\frac{USL - \mu}{3\sigma}, \frac{\mu - LSL}{3\sigma} \right] \quad ()$$

μ : σ : C_{pk}
 :LSL :USL

(Windsor, 2005)

- () DMAIC¹

.(Stagliano, 2004)

.(Bastani *et al.*, 2009)

(DOE) (FMEA)

FMEA

Ehrlich,)

(RPN)

.(2002)

:(Stagliano, 2004)

$$RPN = D \times O \times S \quad ()$$

= D

= RPN :

= S

= O

S O D

.(Stagliano, 2004)

.(Ehrlich, 2002)

.(Ehrlich, 2002)

.(Stagliano, 2004)

-
2. Upper Specification Limit
 3. Lower Specification Limit
 4. Cause and Effect Diagram
 5. Failure Mode and Effect Analysis
 6. Design of Experiment
 7. Risk Priority Number
 7. Detection
 8. Occurrence
 9. Severity

C_{pk}

$\bar{X} - R$

C_{pk}

1. Define – Measure – Analyze – Improve – Control

Bastani *et al.*,)

(2009

() () .(Ehrlich, 2002)

FMEA

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/ x ()

SAS

(Abbaspour-Gilandeh *et al.*, 2009; Berntsen, & Berre, 1993; Braunack, & Dexter, 1989; Khajehpour, 2004)

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MWD

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(Ehrlich, 2002)

MINITAB

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x

MWD

MWD

RNAM, 1995)

(Hemmat *et al.*, 2007;

MWD

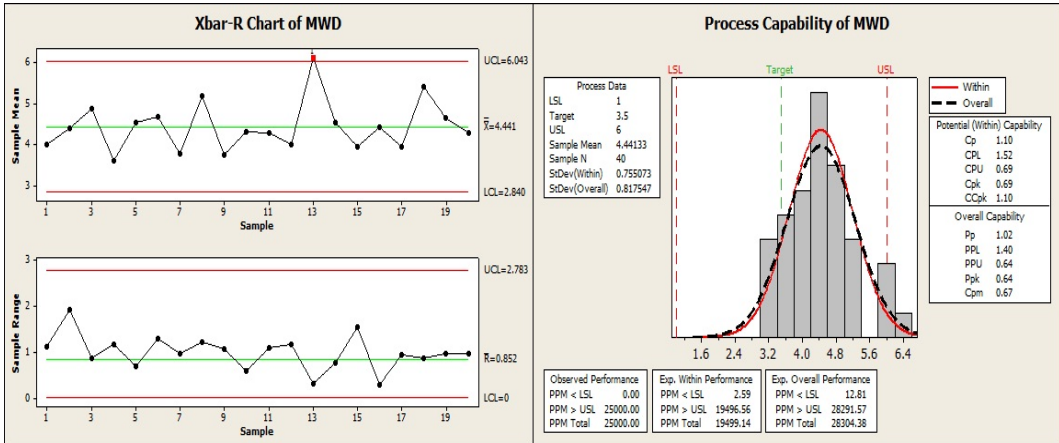
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$$\frac{\bar{X}}{(\quad)} \quad \left(\frac{\quad}{\quad} \right) /$$



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() \bar{X}

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FMEA

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C_{pk}

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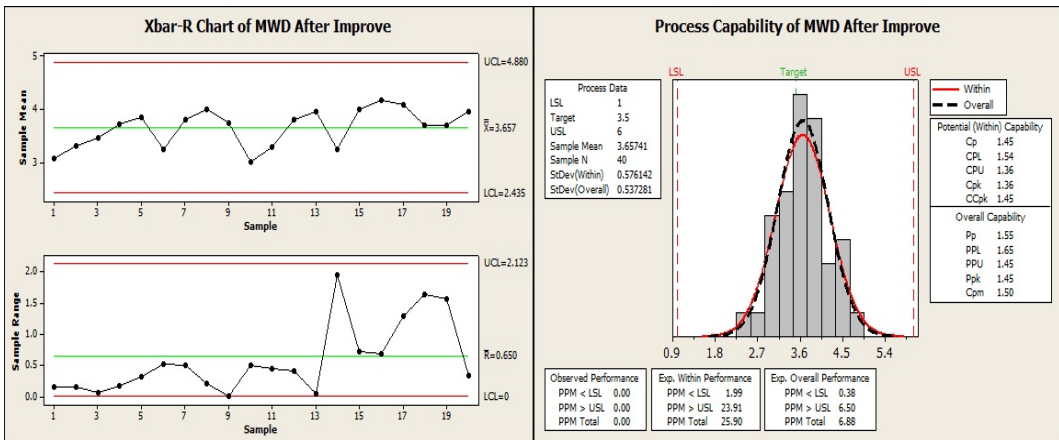
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FMEA

Solhjou *et al.*

(2009) Ahmadi & Mollazade (2002)

(2009) Kabiri & Zarean



() $\bar{X} - R$

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C_{pk}

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C_{pk}

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DMAIC

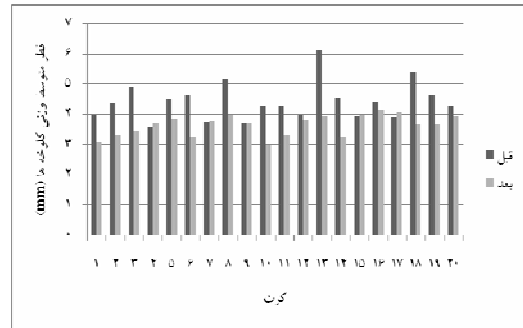
(C_{pk})

/ /

C_{pk}

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