

(STARFISH)

- (Coefficient of Variation) -

가 (variability)
 (variation) (unavoidable)
(Starfish)

가
(avoidable variation)

가 (variability) 가 ?

(data)
 ;

(remedial action)가

가
가 “ (coefficient of
variation)” CV (percentage)

$$CV\% = \frac{100 \times S}{\bar{X}}$$

S (standard deviation) $\bar{X}$
(mean value)

(S)

$$\sqrt{\frac{\sum (X - \bar{X})^2}{n - 1}}$$

X

n

가

(distribution)

○ 68%가 1 σ (one standard deviation) 가

○ 95%가 2 σ (two standard deviation) 가

○ 99%가 3 σ (three standard deviation) 가

CV

가

가

(batch)

(lot)

가

(relative variability)

가

가

13 (cone)

가

X

(Ne)	$ x - \bar{X} $	$(x - \bar{X})^2$
27.9	1.9	3.61
30.4	0.6	0.36
29.5	0.3	0.09
29.7	0.1	0.01
29.4	0.4	0.16
30.8	1.0	1.00
30.4	0.6	0.36
30.4	0.2	0.04
29.2	0.6	0.36
31.1	1.3	1.69
29.5	0.3	0.09
29.2	0.6	0.36
30.6	0.8	0.64
$\bar{X} = 29.8$		$= 8.77$

$$(S) = \sqrt{\frac{8.77}{12}} = 0.85(\text{Ne})$$

$$CV = \frac{100 \times 0.85}{29.8} 2.9(\%)$$

가 가

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(mean count)가 29.8

(S) 0.8

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○	68%	29.0	30.6	.
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○	95%	28.2	31.4	.
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○	99%	27.4	32.2	.
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가