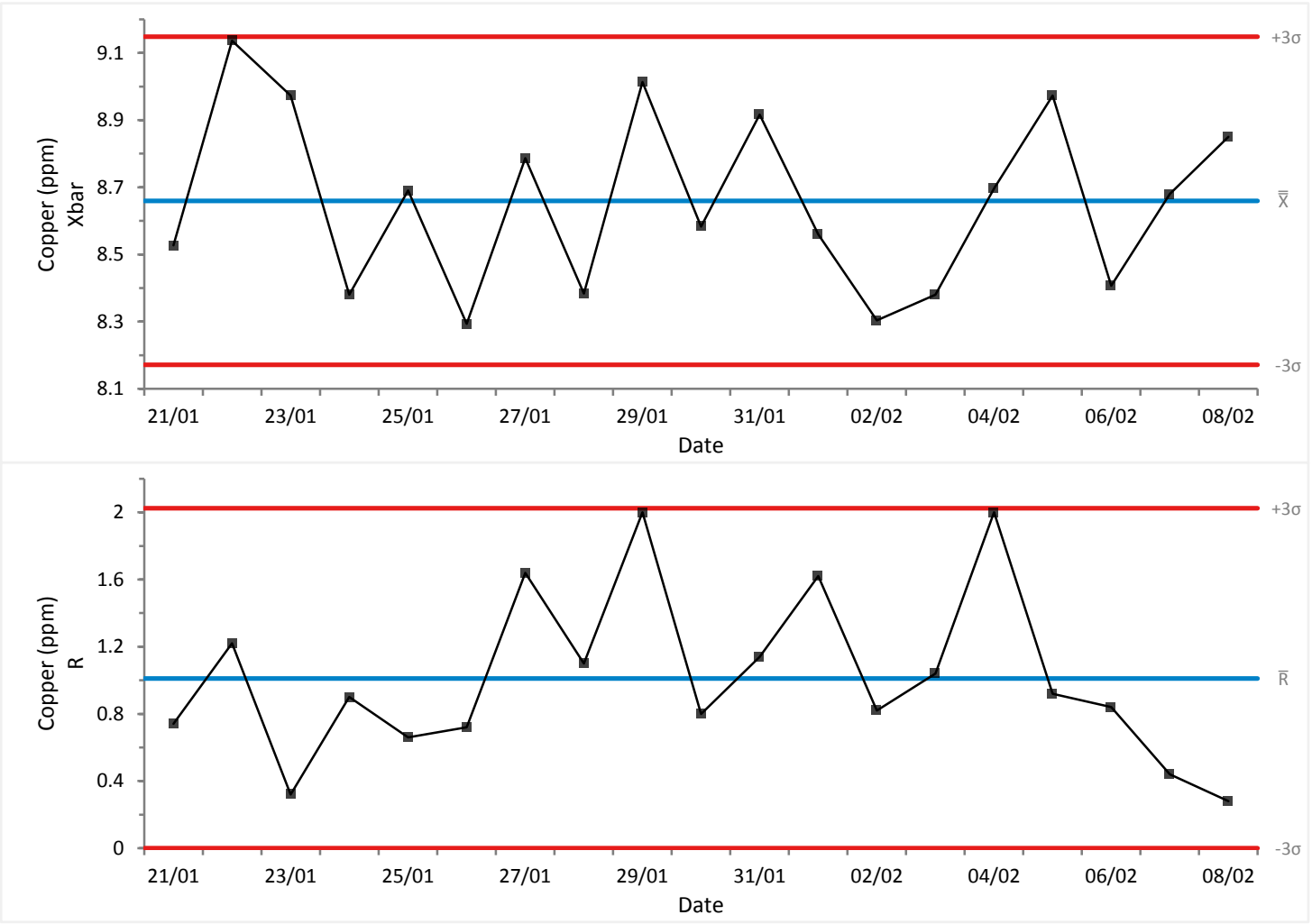
Process Control: Copper

Analyse-it v4.60

Copper concentration in plating pool

Last updated 2 February 2016 at 8:01 by Analyse-it Software, Ltd.

Control



Montgomery rules: 1, 2, 3, 5, 8 applied to Xbar statistic.

Process parameters

	Mean	Sigma
Copper (ppm)	8.660	0.399 [1]

[1] Sigma estimated by Rbar.

Process control statistics

Statistic	Sample size	Centre	±3-sigma limits
Xbar	6	8.660	8.171 to 9.148
R	6	1.011	0.000 to 2.025

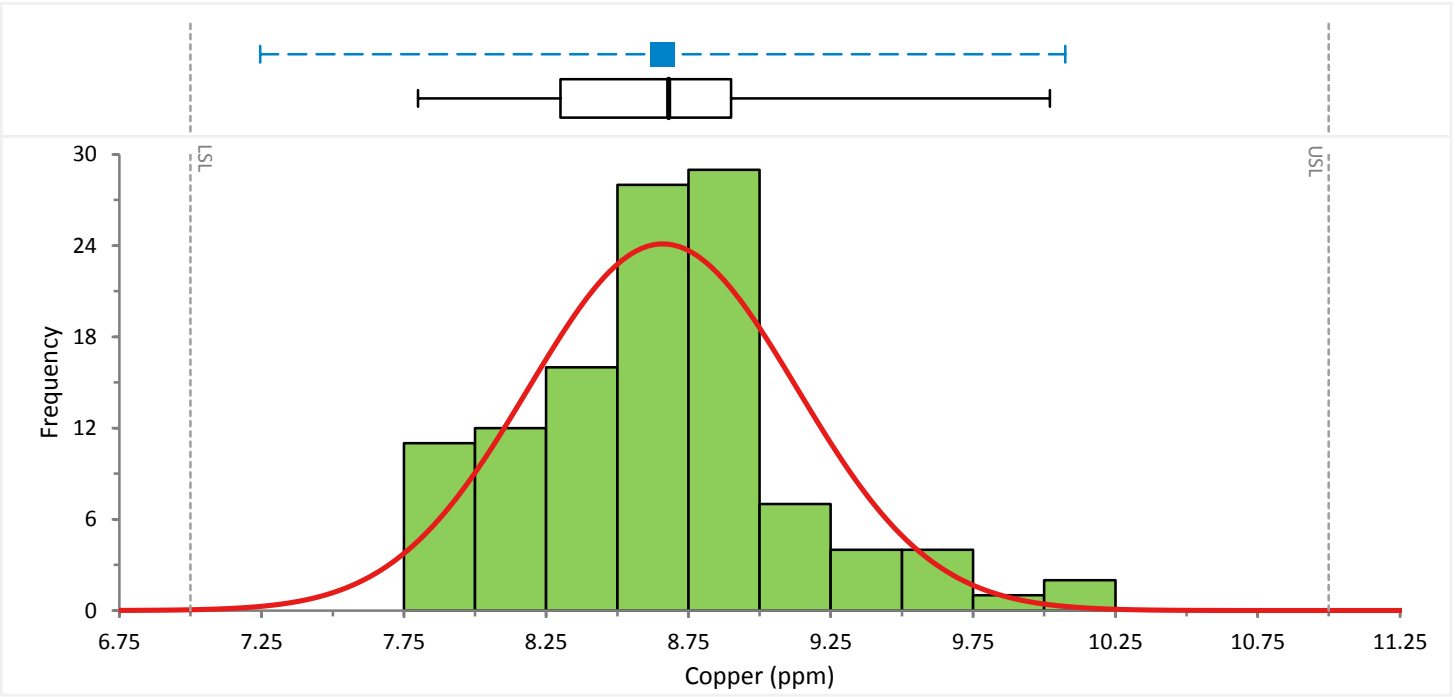
Process Control: Copper

Analyse-it v4.60

Copper concentration in plating pool

Last updated 2 February 2016 at 8:01 by Analyse-it Software, Ltd.

Distribution



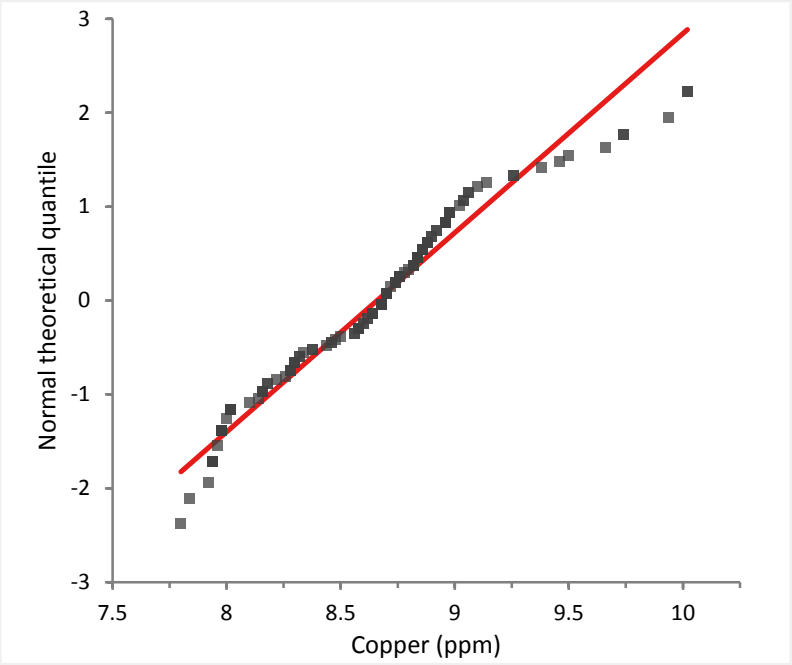
Process Control: Copper

Analyse-it v4.60

Copper concentration in plating pool

Last updated 2 February 2016 at 8:01 by Analyse-it Software, Ltd.

Normality



Shapiro-Wilk test

	W statistic	p-value
Copper (ppm)	0.96	0.0009 [1]

H0: F(Y) = N(μ, σ)
The distribution of the population is normal with unspecified mean and standard deviation.
H1: F(Y) ≠ N(μ, σ)
The distribution of the population is not normal.
[1] Reject the null hypothesis in favour of the alternative hypothesis at the 10% significance level.

Process Control: Copper

Analyse-it v4.60

Copper concentration in plating pool

Last updated 2 February 2016 at 8:01 by Analyse-it Software, Ltd.

Capability

Specification limits	7.00 to 11.00
Mean	8.660
Long-term sigma	0.471

Capability ratio	Index	95% CI
Pp	1.414	1.230 to 1.598
Ppl	1.173	1.035 to 1.312
Ppu	1.655	1.466 to 1.843
Ppk	1.173	1.009 to 1.338

Nonconforming units	Observed (%)	Expected (%)	Expected (PPM)
< LSL	0.0000%	0.0216%	216
> USL	0.0000%	0.0000%	0
< SL >	0.0000%	0.0216%	216

Benchmark	Z
< LSL	-3.52
> USL	4.96
< SL >	3.52