somonic solutions

Cost-benefit-calculator

for application of *dresor EL* in electroless nickel processes

Benefit from reduction of over coating

Operation time - daily	16 h
Operation days - weekly	5,00 d
Operation weeks - annually	48 w

Benefit from replacement of manual samples

You can online monitor the thickness and deposition rate with dresor EL during the metal plating. Thus you can specifically adjust the thickness by using of dresor EL in electroless nickel plating processes. So you can avoid over coating.

You can calculate cost savings that can be achieved through avoiding of over coating by specifying of the operation parameters (on top in the middle) and by entering the following parameters.

Volume of the plating tank	1.000 L
Goods area	15,0 m²
Deposition rate	15,0 µm/h
Plant utilisation	50 %
Costs of deposition of 1 µm electroless nickel	1,40 €/m²
Reduction of coating by	2 %

reset

Calculation »

You can substitute the measurements of deposition rate with manual samples by using of dresor EL. The usual process monitoring during electroless nickel plating causes costs that can be reduced by measuring with dresor EL.

You can calculate cost savings by specifying of the operation parameters (on top in the middle) and by entering of the following parameters.

Personnel costs per hour	20,00 €
Acquisition costs per manual samples	0,80 €
Number of saved manual samples per working shift	6 pcs.
Reduction of expenditure of time for handling of manual samples (Preparation, application, evaluation) per working shift	30 min

reset

Calculation »

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Benefit from reduction of over coating

Bath loading (ratio of working piece surface to tank volume)	1,5 dm²/L
Deposition thickness on the work per hour	7,5 µm
Saved costs of coating per hour	3,15 €
Operation time per week	80 h
Number of necessary Somonic-probes per week	5 pcs.
Operating costs of Somonic-probes per week	12,50 €
Cost savings through reduction of over coating per week	**239,50 €**

« change parameter

RESULTS

Benefit from replacement of manual samples

Manual samples		Somonic -probes
60 pcs.	Number of manual samples/ Somonic-probes per week	10 pcs.
2.304,00 €	Material costs per year	1.155,20 €
4.800,00 €	Personnel costs per year	320,00 €
7.104,00 €	Total costs per year	1.475,20 €
Costs savings through replacement of manual samples per week		**117,27 €**

« change parameter

Cost savings through reduction of over coating per year **11.496,00 €**

Costs savings through replacement of manual samples per year **5.628,80 €**

Costs savings of both effects per year **17.124,80 €** **Costs savings of both effects per year**