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The research team had the opportunity to cooperate closely with one of the leading assemblies suppliers in the automotive industry for leading Automotives in Europe region. The university metrology lab was initially solved the problems of poor quality component subcontractors who supply the components.

For the experiment itself has been selected group of test subjects = operators with current throughput body electrocution respectively 30, 40, 50, 70 and 100µA. Two types of tests were done in two series - visual inspection + control of surface roughness and after 7 days and after 28 ' days from realization of the experiment.



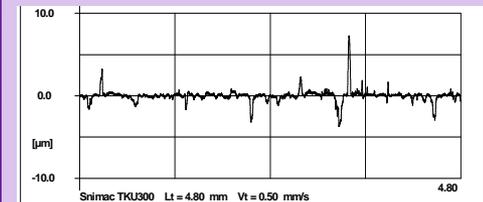
Based on the experiment, the complex protection system of components for company was designed and will be implemented in the supply chain. For parts supplied in 7days it has been proposed to use the protection liquids. Parts supplied in 28days it is then necessary to use specific solid base or the base film preservatives.

Supplementing roughness control then showed that there was a change of surface roughness parameters Ra, Rz, Rq tens of percent, which exceeded all the roughness tolerance in the manufacturing drawing

The Experiment Provides statistical stable results and is a worthy example of how financially very undemanding intervention significantly improve or increase the entire production process and chain attached to it.

This paper includes results created within the project SGS031-2013

Value (µA)	Explanation
20-40	Requirements for subsequent purification preservation are increased
40-60	Corrosion of nonferrous metals
60-80	Corrosion in hours
80-100	worker causes corrosion even without direct contact



Pz	11.05 µm	Rz	5.40 µm	Wz	0.45 µm
Ps	0.35 µm	Ra	0.35 µm	Wa	0.15 µm
Pq	0.77 µm	Rq	0.64 µm	Wq	0.17 µm

