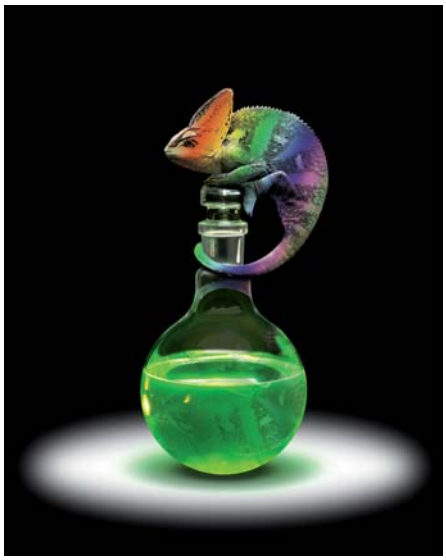
A bright green success story

High quality: choosing the right dielectric pays off

Since 1969 the company Dachs based in Reutlingen specializes in producing precise parts in small series. Flexibility, speed and high quality are thus crucial for an enterprise that has established itself as a problem solver. Naturally, the requirements concerning the machinery in use and the respective peripheral products are just as high.



dielectric Ionoplus®

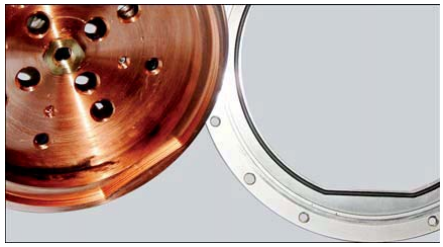
About two years ago, a new erosion machine for the production of specific parts for the wafer industry was purchased. To keep the costs down, it was initially filled with a "traditional dielectric". A strong and unpleasant smell was one of its most noticeable characteristics. When it was time for a refill one year later, the company chose to try out the product recommended by the machine manufacturer: IonoPlus® by oelheld – with astonishing results.

The first thing noticed was that the new, shimmering green liquid IonoPlus® is almost odorless. But managing director Stefan Dachs soon realized that there is much more to IonoPlus®. It turned out that the first parts eroded with the new liquid were good for nothing. All the holes and dents in the V4A steel were too big. The reason was that with IonoPlus® the build-up of the ionization channel leads to a much better disruptive strength.

After adjusting the voltage on the electrode, this fact could be made good use of and the machine's productivity rose by 20%. Yet it didn't stop there. Thanks to the high efficiency which could be reached with IonoPlus®, not only the metal removal on the piece rose by 20% but at the same time the abrasion on the copper electrode was lowered by 40%.

Stefan Dachs

Apart from an increase in output, another advantage that soon paid off the product's higher purchase costs, were the extremely lower current costs. Two reasons which are already more than convincing. IonoPlus®, however, has even more to offer. Due to the special and



electrode and eroded piece

unique additive mixture of IonoPlus®, it was not only possible to optimize productivity and reduce costs but during finishing one achieved a surface roughness of 4-6µ in the same length of time that only allowed for 12µ before.

Earlier tests with IonoPlus® showed that even a surface roughness of 0,1µ can be achieved. The dielectric also proved that because of its excellent flushing abilities, short circuits and spark failures can mostly be prevented. Compared to other dielectrics IonoPlus® can remain in the machine at least twice as long without showing signs of aging.

A test that could not have yielded better results!