

**APPLICATIONS FOR
RBnano:**

ID-MARKING

- Nano-printing matrix
- Labelings with relief design from nano to macro
- Counterfeiting marks (encoded and/or DEO with laser lecture)
- Test patterns for electronic and ultimate optic microscopy (USAF with 100 nm steps)

SURFACE TREATMENTS

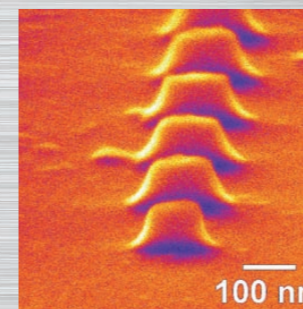
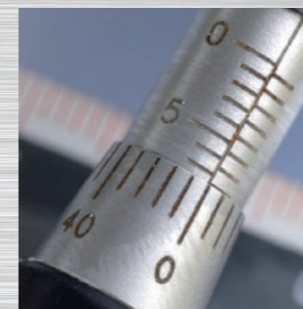
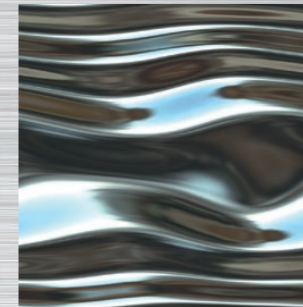
- Surface colorations similar to black chromium or blue titanium nitride (TiN) without PVD
- Reinforcement of cutting tools with multi layers Al_2O_3 , Fe_2O_3
- Planarity of surfaces (tribology, sensors protection)
- Sealing, screw brake for watch industry
- Thermal and electric insulation (hot spots, hot corrosion)
- Transparent conductive oxide, ITO, by spray coating or Inkjet

RBnano makes its special know-how available to answer to your specific requirements.



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Looking
for industrial
nanotechnologies?



SEMIA
INCUBATEUR D'ALSACE

This booklet has been prepared with the support of SEMIA, incubator of innovative companies in Alsace.

A PATENTED TECHNOLOGY

RBnano carries out treatments and markings on all kinds of materials, with an exclusive technology based on soluble oxide precursors.

To meet your specific requirements, RBnano has developed a number of solutions allowing new surface treatments and ID-labelings varying from a few nanometers to macro of your products.

Our company is also interested in your specific requirements, in order to provide you innovative and customized end products.



INNOVATION

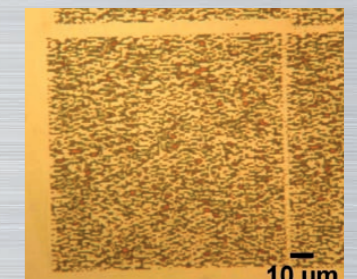
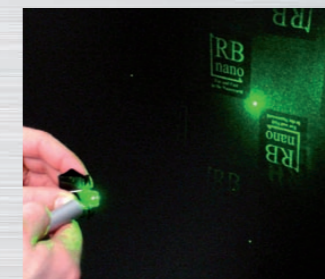
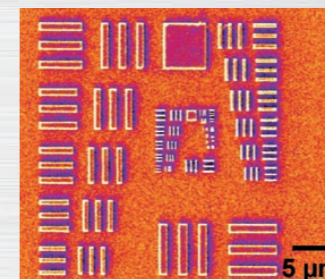
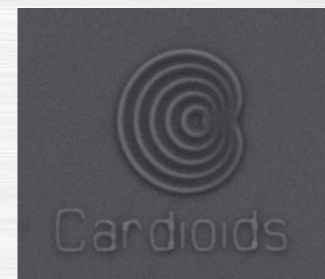
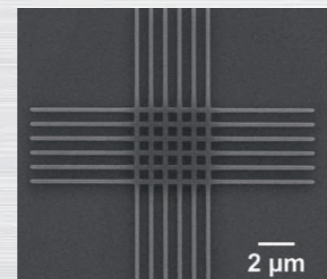
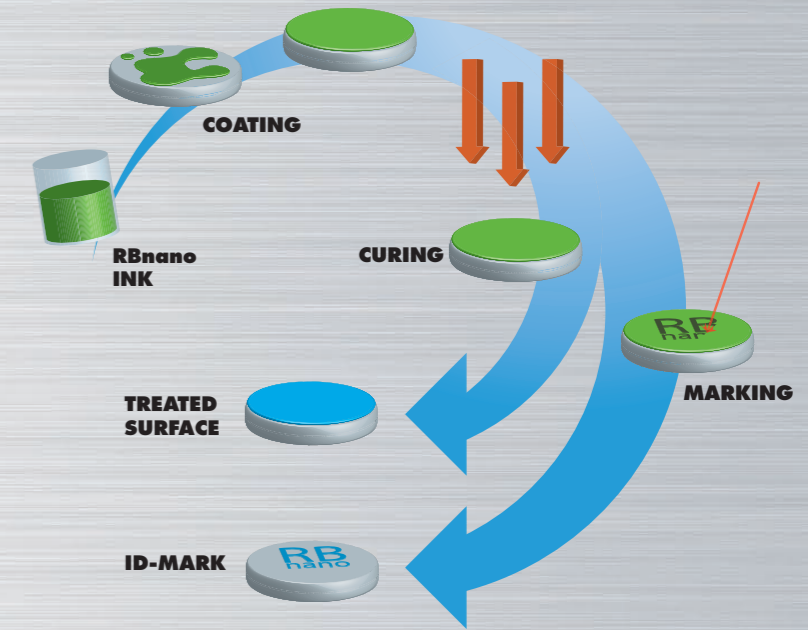
RBnano PROCESS

RBnano know-how lies in innovative inks that can easily be mineralized in oxide by energy input. Due to the versatility of the patented RBnano technologies they can be readily applied to a wide scale range from small to large industrial requests. It offers new answers for industrial needs.

RBnano was founded in 2007 in Strasbourg France at the IPCMS (Institute of Physics and Chemistry of Material of Strasbourg), to commercialize promising new technologies. RBnano scientists form a pluridisciplinary team recognized internationally in the field of material sciences.

The flexibility of RBnano technologies gives you the opportunity to minimize raw material and energy costs for your product. Our company allows you to go a step ahead in productivity for reasonable prices. We offer a high performing innovative and flexible solution to reach beyond the limitations of conventional material processing technologies.

RBnano inks are non-toxic and can be washed away with water. Our company aims to be environmentally friendly.



SURFACE TREATMENTS

GIVE YOUR SURFACES NEW FUNCTIONS !

Deposition of RBnano inks provide a brand range of possibilities, usually unseen and most of the time exclusive. These coatings give you an advance on the actual limits of surface treatments on metal, silicon, glass, sapphire, ceramic, carbon, plastic, as well as in technical levels than in design creation.

From design to surface treatment, numerous production and development applications of RBnano soluble oxide precursors are available [tribology, flat resurfacing, color, corrosion, reinforcement, surface protecting].

ID-MARKING

YOUR PRODUCTS CAN BECOME AN INFORMATION SOURCE OR DEVELOP NOVEL FUNCTIONAL ASPECTS

RBnano Ink layers reach a new level of thinness (30 nanometers), in order to answer your most sophisticated labeling and identification needs.

The marking can be:

- passive and become an information holder (identification, signature, bar code)
- active by localized spot of specific material, which will induce a new functional aspect to your product (magnetic spots, conductive spots or luminescent signs).

RBnano technology has been used for industrial production of diffractive optical elements (DOE) and for permanent ID-DOE-marking of high-tech objects.