Optaglio develops extremely resistant microholograms.

08/02/18

High-resolution security holograms firm Optaglio has introduced "extremely resistant" microholograms.

This new forensic measure allows law enforcement experts to identify genuineness of documents destroyed by water, fire, acids etc. At the same time, it retains all existing benefits of microholograms, such as covering three levels of inspection (visible, hidden, forensic) with a single tool.

New special microholograms are resistant against water, press, abrasion, mechanic stress generally, heat (up to 800°C), frost (up to - 80°C), radiation and some chemicals, such as xylene, petrol, acetone, toluene and a range of acids. The lifetime of 10 years with keeping full resistance is guaranteed, but Optaglio researchers claim that real operating life will be much longer.

"The decision about genuineness now can be based on remains of completely destroyed documents," says Tomas Karensky, senior research manager at Optaglio. " „At the same time, new opportunities open up in the marking of machine components and other items used in difficult conditions. I would like to use this opportunity to express my appreciation to our colleagues from materials department. They did an outstanding job."

Optaglio has manufactured microholograms since 2010 and had innovated them step by step during these years. This technology is now accepted as a de facto industry standard for the multilevel protection of documents. At basis visual level, inspectors see metallic dust. At the second level, they can use magnifiers and watch the regular shape of grains, engraved letters, engraved pictures and holographic surface. At forensic level, view through a microscope show holograms with all visual effects.

"Of course, the current state is not the end. We are working on further improvements," added Karenský. Resistant microholograms were developed in Optaglio Labs. This centre was established in 2015 through concentrating activities from different places in the Czech Republic and the United Kingdom. In Optaglio Labs, several research units work at the same time. Cooperation with universities is also managed here. Some of the projects are supported by European Union funds.