Krypten Plans Production and Technical Expansion

'Krypten Delivers Another Set of TWINS on New House Banknotes', 'NFCHOLO™ technology for ID document security' and 'KRYPTEN Releases Updated eCatalog App' are the titles of just three of the articles that Holography News® has run on Russian-based producer of holograms and optical security components, Krypten, in the past year. With all of this activity, it will come as no surprise that Krypten has announced plans for a large-scale expansion of the company's production and technological capabilities.

To get behind the scenes and learn more about the company's plans, HN arranged an interview with KRYPTEN's CEO, Mr Alexander Lisovsky.



KRYPTEN's CEO Mr. Alexander Lisovsky.

- Q: Hello Mr. Lisovsky and thank you for taking the time to reach out to the readers of HN. Before we discuss Krypten's plans for expansion perhaps you could tell us a little about your own early life, education and career?
- A: I was born in St Petersburg, finished secondary school, entered the Leningrad Institute of Aviation Instrumentation, then completed a dissertation in Economics at the Financial University in St Petersburg, and then got an MBA at the Stockholm School of Economics.
- Q: Can you give us some background to the foundation of Krypten and how it grew to its current position in the commercial holography market?

A: The research and production corporation Krypten was founded in 1997 in the Moscow region of Russia, when holograms were booming in popularity all over the world. At that time this trend became very popular in Russia too. In those years the trend of using holograms for counterfeit protection of recorded media and in regional programs for product quality protection was growing. We took part in such projects. Then active use of holograms in federal programs commenced - ID documents, banknotes, excise marks, etc. - where we also participated. Today Krypten is the largest company making optical protection elements in Russia and in the territory of the former Soviet Union.

At present the company's staff is about 500 people, about a fifth of them are scientists and engineers. We have more than 80 pieces of internally branded equipment, occupying 10,000 m² of production space. From 1998 the company has been a member of the International Hologram Manufacturers Association (IHMA).

- Q: Krypten has always been known for its cutting-edge holographic imagery and materials technology. Do the plans for expansion also include an extension of the research and development capabilities?
- A: Krypten invests up to 30% of its income into development and implementation of advanced protection technologies. The high scientific and engineering potential together with the laboratory and research base allow us to be the leader in the development of modern protection elements and marking for documents, banknotes and goods.

The company holds 22 patents, has developed multiple in-house technologies and know-how, and has registered eight trademarks.

- Of course, extending research and development capabilities takes an important place in our plans in terms of buying new equipment, modification of the existing stock and attraction of new specialists and other scientific institutions of Russia.
- Q: Is the increase in production capacity a shift in strategy for the company or did you simply run out of capacity to meet growing demand?
- A: The company's strategy has always been the same and we do not plan on changing it. The planned increase in production capacity is a natural response to the requirements of potential customers both in terms of increase in production, improvement of the quality of the supplied goods and enlargement of the range of products.

- Q: How are plans to release a demo banknote with a two-colour 3D-Gram-C® photopolymer patch progressing?
- A: Krypten works actively towards the development of 3D-Gram-C® photopolymer patch with a unique visual feature, which may be used to protect banknotes or ID documents. The new element has a very simple memorable visual effect which was highlighted in a new demo banknote (See HN August 2021).
- Q: I'm fascinated by your work on augmented reality and NFC holograms. Where do you see the commercial applications for these technologies?
- A: Augmented reality elements may be used as an interactive tool for identification of products in any field of application of optical protection elements. No direct commercial application is envisioned here, it is rather a convenient modern tool involving the banknote or document user into identification process, which indirectly increases the commercial appeal of the main types of products.
- Q: The past 18 months of the COVID pandemic have been devastating for public health and business activity alike. How did Krypten navigate that very difficult period?
- A: We started making masks and taking an active part in all the initiatives of Rospotrebnadzor (the Federal Service for Surveillance on Consumer Protection and Human Wellbeing), which ensured rather low COVID-19 incidence rates at our company.
- Q: What do you see as the largest forces at play in the technical and business environments for holography and secure documents over the next three years?
- A: In my opinion, over the next three years the highest development will be shown by photopolymer technology, which will give new easy-to-read features that make it easier to verify document authenticity.



Nobelists House Note (© Krypten).