

PRESS RELEASE nSILVER[®] SUCCESS STORY

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Kalevala Koru and Lapponia Jewelry to adopt a novel industrial nSILVER[®] anti-tarnishing coating method for their jewelry

Background

Tarnishing of sterling silver is a well-known problem in silver industry. Tarnishing is mostly caused by sulfur reacting with surface of silver object to create black silver sulfide, Ag₂S. In addition, many other chemical compounds have also been found on tarnished surfaces.

Several surface treatment methods have also been used for protecting the silver objects from tarnishing. Many different processes based on lacquers are widely in use, even though the lacquer layers have limited adhesion to silver surface and the lacquer layers are usually visible.

Previously **Kalevala Koru and Lapponia Jewelry** (Finland) have been using different methods to get rid of harmful tarnishing effect of the silver jewelry. However, they have been in continuous search of better industrial solutions for anti-tarnishing. Kalevala Koru designs, produces and sells high quality gold, silver and bronze jewelry. Kalevala Koru is the largest jewelry manufacturer in Finland and one of the largest in Scandinavia. The ground of design is strongly based on Finnish and Scandinavian culture combining the historical heritage with modern life alike. All jewelry is manufactured in Finland.

Proven benefits in production

The new anti-tarnishing method nSILVER[®] has conveyed many new benefits for Kalevala Koru and Lapponia Jewelry.

“Our target was to have an ultimate anti-tarnishing solution for our surface finishing without changing the appearance of the jewelry. We were looking for an industrially proven system which could be easily integrated into our existing production and logistics. Fortunately, Beneq had just released this new technique and we got enthusiastic of its features. To put it short: streamlined production flow in surface finishing and 100% quality has been the main outcome of this project for us”, explains **Ms. Marja Usvasalo**, Managing Director of Kalevala Koru. *“Also, this novel technique has allowed us to reduce the use of environmentally harmful chemicals in our surface finishing and get rid of outdated techniques and equipment. Our sales agents all around the world have been extremely happy to receive our nSILVER[®] treated jewelry since there is basically no tarnishing effect anymore”,* she continues.



Ms. Marja Usvasalo, Managing Director of Kalevala Koru Group and Mr. Sampo Ahonen, CEO of Beneq observing Kalevala Koru jewelry in front of nSILVER[®] coating equipment TFS 500.

nSILVER[®] in a nutshell

nSILVER[®] is a novel coating method developed by **Beneq** (Finland). It is based on surface controlled reactions of certain chemicals in vapour phase. These vapours are able to react with silver surface of any shape and in any direction. Vapour molecules are very small and able to penetrate even the narrowest grooves leaving no pin-holes on the surface. Since the vapours react only with the surface and not with each other in vapour phase, the coating is extremely uniform and pinhole free all over the silver object which guarantees the ultimate protection against tarnishing. nSILVER[®] is superior to other thin film techniques in this respect. Moreover, the thin film is completely transparent and does not change the original finish and appearance of the silver object.

Further information

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