Technology Transfer

Idvac-Giriraj Tech Transfer Agreement

British vacuum coating specialist consultancy Idvac Ltd and Indian foils manufacturer Giriraj Foils Pvt Ltd have signed a technology transfer agreement which will see Idvac providing know-how on a range of advanced metallizing processes.

Idvac was founded by Professor Nadir Ahmed in 2004. Over the past 10 years it has often featured in *Holography News*® as it has introduced new vacuum processes and technologies for hologram coating, including high refractive index (HRI) coating using zinc sulphide (ZnS), as well as copper, chrome alloy, dry gold colour finish and colour shift coatings for the security and packaging markets. Prof Ahmed gave a paper at The Holography Conference in November on Idvac's latest development, a semi-transparent heat reflecting hologram material.

Giriraj Foils, based in Vrindavan, was founded in 1993 by Mr Shobhit Arora. It specializes in manufacturing a wide range of specific coated films and foils for the security and packaging markets, with an emphasis on substrates for holographic embossing. Giriraj Foils was the platinum sponsor for The Holography Conference and Prof Ahmed told *Holography News* that the two companies met and 'comprehensive talks' took place at the Conference.

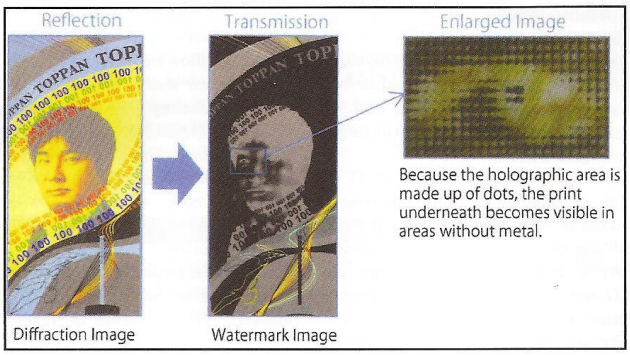
Giriraj Foils will now provide to its customers a new range of customized film solutions to meet specific requirements, based on the technology from Idvac, which will include chrome for outdoor holograms and films coated with the technologies mentioned above.

Ashish Nebula, vice-president of Giriraj, told Holography News that 'This agreement will give us a fair chance to get a good share of this niche market. With IDVAC & some other technology transfer agreements (which are on the cards), we hope to increase our share in the global base film market.' He mentioned that sponsoring The Holography Conference had 'definitely given a good boost to our efforts.'

Professor Ahmed commented that 'the two companies have the state of art technologies for applying high quality advanced metallized products into foils and labels to provide unique security products with special environmental durability and functional applications. We look forward to working with Giriraj Foils to develop and launch other advanced products that incorporates covert and overt features soon'.

www.idvac.co.uk,
http://girirajfoils.com.

Toppan Zero Registration... cont'd



Annotated illustration of Nano Edge Watermark negative image.

plement the hologram design. The total removal of the metal layer also means that the substrate polymer, when laid down on to paper, is almost invisible except where the metal remains.

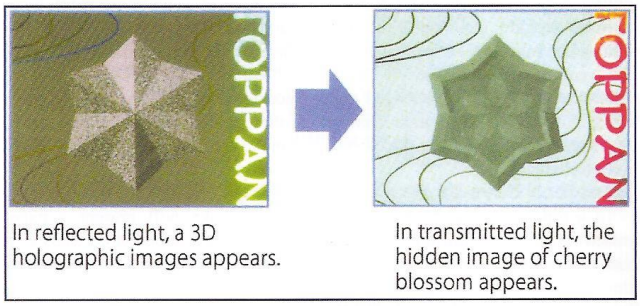
The sample that Toppan has produced shows a holographic image of a TV tower with the height of the tower shown in demetallised microtext within the thin antenna at the top of the tower (as illustrated).

This sample also demonstrates *Nano Edge Watermark*, an image only visible in transmitted light, available in negative image and hidden image versions. The effect is achieved by perfect alignment of the OVD image with the demetallised image, so that the negative switch effect can also be achieved in reflection viewing, by aligning the demetallised areas of the OVD with an underlying printed graphic. When viewed at an angle that replays the hologram, the holographic image is seen, but tilting the image results in a negative image being seen.

The hidden image version of Nano Edge Watermark can reveal a related but different image between the reflection and transmission viewing, as shown in the example illustrated.

Toppan is offering Nano Edge as a patch, stripe or window thread and is positioning the Watermark version for windows in banknotes. It can be combined with Toppan's various origination and duplication techniques, including gold metallisation and with a magnetic element or with fluorescent ink overprinting.

www.toppan.co.jp



And Watermark showing the reflection and transmission image