The Holography Times

Endeavour to protect people and products

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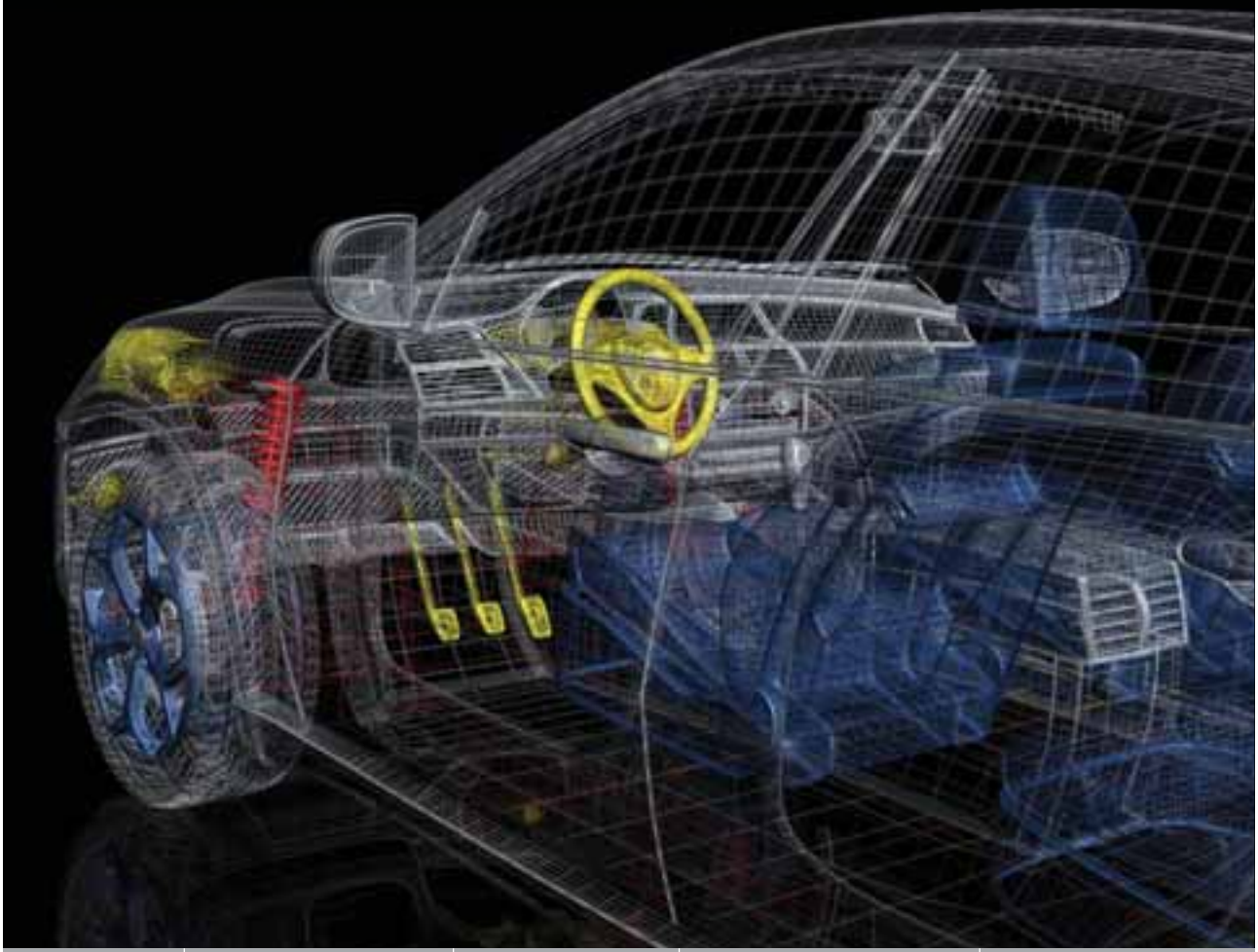
AUTO COUNTERFEITING

CROSSED USD 2 BILLION MARK



Grey market	Sales loss to industry	Direct tax loss to Government	Indirect tax Loss to Government	Tax loss to the Exchequer
29.60%	2 Billion ($)	93 Million ($)	512 Million ($)	605 Million ($)

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Viewpoint

Dear Reader,

Welcome to the 23rd edition of The Holography Times, which I hope you will found of interest.

Counterfeiting continues to be a major growing issue in the automotive component industry. According to Motor Equipment Manufacturers Association (MEMA), USA the global automotive industry loses US $ 12 billion to counterfeiting. The Indian scenario is not a different story. According to FICCI – CASCADE latest study (Grey market the invisible enemy) released in 2012, the Auto component industry loses 29.6% of its sales due to grey market, worth US $ 2 billion (INR 9198 crores out of estimated size of INR 31,046).

To combat this menace all Stakeholders need to fight at their level. Governments have a particularly critical role to play in this effort. All over world, they are doing their best creating the necessary legal infrastructure, educating police force, developing suitable laws to deter fraudulent behaviour. Businesses, however, must also do their part to prevent the production and sale of counterfeit products.

Our current issue highlights the “Need of an effective anti-counterfeiting strategy to combat auto counterfeiting”. Apart from this the issue also covers industry updates including news, patents & events.
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Do send us your feedback/critics at info@homai.org.

With Best Regards,
C S Jeena
Editor

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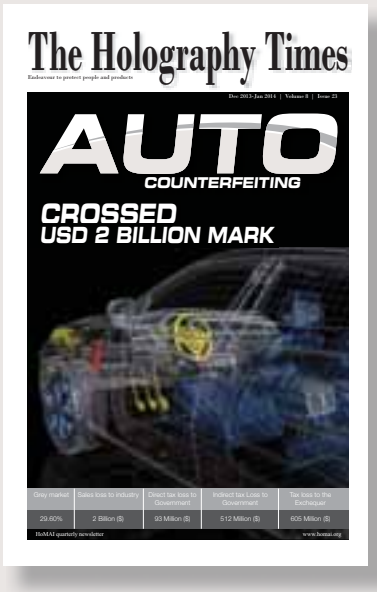

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3D holograms
to help heart surgeons

RealView Imaging LTD says it has recently completed a successful clinical study in which surgeons used live-action 3D holograms of their patients' beating heart to help them operate.

To illustrates the technology, he company has produced a video which can be seen at https://www.youtube.com/watch?v=dTjw4X0Z2Fk. Developers say a live observer really would see a 3D hologram of a patient's beating heart or other organs floating in mid-air in real time.

The trial, carried out at Schneider Children's Medical Center in Israel in collaboration with healthcare giant Philips, included eight patients. RealView's prototype system allowed surgeons to view, touch and manipulate a three dimensional image of the patient's heart "floating" in mid-air during minimally-invasive cardiac procedures.

Doctor Einat Birk, head of the heart institute at Schneider Children's Medical Center who worked with the system, says the experience was "enlightening".

"It's very intuitive because we are all used to our three dimensional world and instead of having two dimensional cuts through the heart we are able to see the heart floating in front of us, we are able to cut through it, to touch it, to see the interaction between the device and the tissue around it. And it was really a wonderful, enlightening experience that we're never exposed to," she said.

RealView's medical director, Elchanan Bruckheimer, says the system gives surgeons information about the entire organ in real time.

"What that does is that gives you the patient's anatomy, the real patient's anatomy in a position where it's hyper realistic, you can see all of it, you can intuitively know where you are or what's going on inside that anatomy in real time. So you can use that to guide procedures, you can use that to understand better the anatomy that you want to deal with. So I think that because we deal with 3D patients, having their 3D imaging in 3D, or 4D because it works with real time, is a great advantage because we can see what's happening with the anatomy while we're doing the actual procedure," said Bruckheimer, who also serves as the head of cardiac catheterization at Schneider Children's Medical Center.

The results of the trial, the company said, were presented by Dr. Bruckheimer in October at the 25th Annual Transcatheter Cardiovascular Therapeutics (TCT) scientific symposium in San Francisco, sponsored by the Cardiovascular Research Foundation.

The system operates by using data analysis and densed projection of light. Measurements and dimensions produced by x-rays, MRI or ultrasound images create the hologram and technology that uses light-scattering to project the image onto a fixed point in space does the rest, according to RealView president and co-founder Shaul Gelman.

"The system is involving two main aspects. One is computation, which receives 3D data sets and computes the hologram. And then after the computation of the hologram, the system has an electro-optical part that actually propagates this light into space and reconstructs the image in free air, allowing the user to go and interact with the image."

He added that unlike other 3D solutions, this technology does not necessitate special eye-wear and creates real images rather than illusions. It can be used for surgery or for periodic evaluation of a fetus during pregancny, much like a conventional ultrasound.

RealView says it plans to launch its medical imaging system in 2015.

Source: www.realviewimaging.com

Clean hologram stickers for Chennai's violation-free autos

Chennai: If you sight an autorickshaw sporting a unique, flashy, red sticker with a swish, consider the driver has maintained a clean sheet and not been penalized for traffic violations over the last 24 months.

In a step towards recognizing law-abiding auto rickshaw drivers from more than 71,000 vehicles plying in the city, the police, in coordination with the State Transport Department, recently carried out a study on the on-road track record of auto rickshaw drivers.

"We have identified over 16,000 autorickshaws that have maintained a clean record for two years, in terms of violations, as per the Motor Vehicles Act. To acknowledge the drivers, we have introduced an exclusive sticker which will be pasted on their vehicles," said Commissioner of Police, S. George.

The sticker with the hologram of the city police emblem will be issued to deserving drivers as part of the autorickshaw meter enforcement drive carried out by the city police from November 16, 2013. Elaborating on the initiative, Joint Commissioner of Police (Traffic), A. Arun, said another sticker in a different shade would be issued to drivers on a temporary basis following on-road checks by police personnel.

"The navy blue sticker will indicate the vehicle has undergone inspection by traffic police personnel and is clear of violations. Therefore, the driver will not be pulled over frequently," Mr. Arun said.

Source: www.thehindu.com

MCD introduced hologram on certificates

New Delhi: East Delhi Municipal Corporation has introduced the security hologram on birth and death certificate in its efforts to stop forging of identity document's. It is perhaps the first time in India, a Municipal Corporation has introduced such kind of initiative. While releasing the certificate on December 19, 2013 the Mayor of East Delhi, Ram Narayan Dubey said;" The initiative by the Bureau of Health Intelligence is a commendable and it will help department in curbing the menace of fake certificate".

Source: www.mcdonline.gov.in

IIP enhanced security of UN certificates

Indian Institute of Packaging had enhanced the anti-counterfeiting features to the UN certificate, which it issues for the export bound packaged hazardous products, after testing the packages for their transport worthiness.

The UN certificates are issued subject to passing the type testing as per International Maritime Dangerous Goods (IMDG) Code, Volume - I and in accordance with the technical instructions of International Civil Aviation Organisation (ICAO) for export of hazardous goods by sea and air, respectively.

The new enhanced certificate, which was earlier issued on IIP's letterhead, will now be printed by India Security Press, Nashik, on a special paper of 95 to 120 gsm. The new format of the certificate incorporates more than 20 covert and overt security features such as laser micro perforation, use of visible fluorescent bright red ink, and intricate design among others.

"The move was planned as there have been numerous complaints from Directorate General of Shipping and Directorate General of Civil Aviation with regards to fake UN certificates responsible for packaging failure during transit by sea and air," said Dr Sanjay Chattopadhyay, Professor, Additional Director and head laboratories division at IIP.

Source: www.printweek.in

HoMAI gets trademark for HEAL™

Hologram Manufacturers Association of India (HOMAI), the industry association of hologram manufacturers in India have received the trademark for word HEAL™ an abbreviated form of Holographic Excise Adhesive Label.

Holographic excise adhesive label (HEAL) which have been used by various State excise departments to protect consumer from illicit liquor as well as to curb counterfeiting. In 2012, more than 180 billion HEAL were used in India.

Now, HOMAI is an exclusive owner of the mark "HEAL" under the class 40 and no one can use

the mark "HEAL™" without the permission/license of HOMAI. This registration is valid for 10

years from the date of application i.e. March 30, 2022.

Source: www.homai.org

Kaygee Loparex awarded IMS certification

Kaygee Loparex India, leading manufacturer of Silicone coated Release Liner products has been awarded the prestigious IMS certification for demonstrating its commitment to Quality, Environment, and Occupational Health & Safety Management Systems. This certification has been awarded to the world-class manufacturing facility at Silvassa and its head-office in Mumbai.

Lloyd's Register Quality Assurance (LEQA) , the globally respected certificatin body presented the IMS certification to Kaygee Loparex Management Representatives, Mr. Mahesh Divate (Sr. GM Marketing) and Mr. Ravindra Yawkar (GM Plant).

The IMS Certification award covers three essential management systems standards. The first, ISO 9001:2008 for Quality Management System (QMS), assures that quality management processes at Kaygee Loparex meed customer needs for excellence. Second, ISO 14001:2004 for Environmental Management System (EMS) shows commitment if its process to continually monitor and improve environmental performance. Finally, OHSAS18991:2007 for Occupational Health & Safety Management System demonstrates importance of health and safety of all people involved in its operations.

"We are proud to have been awarded this certification for our integrated management systems. At Kaygee Loparex, we place a high priority on excellence in customer satisfaction and our operations, including Environment, Health and Safety. This certification is one more step in asserting Kaygee Loparex's long-term commitment to delivering superior, consistent products expected by our customenrs in a safe and environment friendly manner.: said Mr. Manish Jain, CEO for Kaygee Loparex India.

"Our global customers demand only the highest quality release liner products. the quality, environmental and safety systems and culture that we have achieved in all Loaprex manufacturing sites aroun the world ensure we meet those expectations. Congratulations to the Kaygee Loparex team for the award of the IMS certification". said Mr. Michael Warner, Executive Vice President, Global Sales and Marketing for Loparex.

Source: www.kaygeeloparex.com

African countries unite for drug anti-counterfeiting initiative

The first ladies of four African countries have agreed to cooperate on training programmes, laws and other actions to prevent use of counterfeit drugs.

Burkina Faso, Central African Republic, Mali and Niger have come together for the project which revolves around three primary goals, the first of which is education, reports the International Institute of Research against Counterfeit Medicines (IRACM). The information campaign will target mothers, who are often the buyers of a family's medicine. If these women can spot fakes, sales of counterfeits will slow.

The collaborators also want to stop counterfeit drugs ever reaching the point of sale. A training programme for police and customs officers is planned to give the authorities the knowledge and tools they need to stop traffickers of counterfeit medicines.

Finally, the initiative aims to ensure legislation is in place to support these officials. The collaborators want to set up a legal framework in areas that currently lack anti-counterfeiting regulations, and also apply existing laws more forcefully.

Source: www.securingindustry.com

Golf Group's eliminate counterfeit websites

The U.S. Golf Manufacturers Anti-Counterfeiting Working Group has announced that a preliminary injunction has been issued by the Southern District Court of Florida to shut down 60 websites where counterfeit clubs and products were reportedly being sold.

When a final judgment is rendered, visitors going to many of the websites will ultimately be redirected to *keepgolfreal.com* where they can find more information about how to avoid being duped by counterfeiters.The counterfeit products being sold from the 60 websites included clubs, balls, head covers and bags. In addition to shutting down the websites, the restraining order also froze all PayPal accounts associated with them and transferred existing funds to a holding account until the legal process is complete.

This is not the first time the Golf Group has employed this tactic in fighting the production and sale of counterfeit clubs. In 2012, the Golf Group successfully shut down more than 250 websites selling fake golf products.

The Golf Group is dedicated to educating consumers about how to spot and avoid fake golf products and operates its own website, www.keepgolfreal.com.

Source: www.keepgolfreal.com

Canadian anti-counterfeit bill re-introduced

A bill aimed at strengthening protection of trademark and copyright owners has been re-introduced in Canada's parliament.

The Combating Counterfeit Products Act (C-56) was first introduced in March but failed to be considered before parliament's extended summer break, caused by Prime Minister Stephen Harper delaying (by prorogation) the start of the current session.

The bill was put forward once again on October 28 under a new code (C-8) and is identical to the earlier draft, which sought to bring Canada's legislations into line with the controversial Anti-Counterfeiting Trade Agreement (ACTA).

It seeks to amend Canada's Copyright Act and the Trademarks Act by providing brand owners with new rights to sue for damages for counterfeits and infringing activity, creating new criminal offenses for trademark counterfeits and the possession or export of infringing goods, packaging or labels, and granting new powers for enforcement of intellectual property (IP) rights at the border.

Source: Parliament of Canada, www.parl.ca

ECB unveils new €10 note

The European Central Bank (ECB) had unveiled the new €10 banknote in its Europa series, which it hopes will prove tougher for fraudsters to replicate than its predecessors and help keep the eurozone's counterfeit rates in check.

Like the €5 note before it, the new €10 note will feature a portrait of Europa – a princess from Greek mythology – in both the hologram and watermark. It will also include an emerald number that changes colour when the note is tilted, and raised print on its edges.

Executive board member Yves Mersch unveiled the new note, which will enter into circulation in September 2014, in Frankfurt this morning. The ECB launched an online competition to raise awareness of the notes' new design and security features in December, while there is a separate website dedicated to educating the public about the new banknote series. In addition to the security features the banknotes will feature an "innovative coating" that makes them more durable. "The €5 and €10 euro notes are not always treated kindly. By protecting them better, we can prolong their service life and reduce their environmental impact," Mersch said.

The ECB also released the latest statistics on the number of counterfeits withdrawn from circulation in the eurozone. National central banks found 670,000 fakes in 2013 – the largest total in the past three years – but the ECB insists this is still "very low". As in previous years, the €20 and €50 denominations were the most counterfeited. Together they comprised 80% of the total – around 536,000 notes. Far fewer €10 fakes were found. Around 30,500 counterfeits were withdrawn, the vast majority of which (73%) were found in the second half of the year. This is a particularly notable increase and highlights the timeliness of the new series.

The ECB is replacing each of its banknotes on a rolling basis. Mersch reiterated that the remaining denominations (€20, €50, €100, €200 and €500) will be "gradually upgraded" in ascending order.

Source: www.centralbanking.com

US University joins war against counterfeits

USA: The South Dakota School of Mines & Technology will serve as the lead institution for a newly created Center for Security Printing and Anti-Counterfeiting Technology (SPACT). The SPCAT will receive $300,000 in start-up funding from the state for new projects to address the most pervasive and destructive security and counterfeiting problems.

SPACT has already led to the creation of QR codes that remain invisible in ambient lighting but are readable with a near-infrared laser and can be scanned using a smart phone. Other SPACT research and development includes creating non-toxic fluorescent inks for printing on pharmaceuticals, developing techniques to determine the source and authenticity of pharmaceuticals, security printing of covert markings and labels and electrospinning of tagged fibers and fabrics.

"Our researchers are at the forefront of advanced manufacturing and anti-counterfeiting technology. We hope to use these awards to continue to grow the research done at Mines and transfer technology to industry to create better products and more high-paying jobs," said Mines President Heather Wilson, D.Phil.

Source: www.sdsmt.edu

China revises anti-counterfeiting plan

China is revising its anti-counterfeiting strategy in response to rising online sales of fake medicines and a shift in the geographic focus of criminals.

The Deputy Director of the Chinese Anti-Counterfeiting team, Chai Haitao, outlined the new plans to China Daily. Increased emphasis on stopping online sales, particularly of counterfeit medicines, is planned as China adapts to the same trends that have made fakes more readily available in Western markets."We will launch a series of special campaigns and hope to collaborate with e-commerce platforms to reduce the criminal activities," Haitao said. Chinese e-commerce giant Alibaba and its subsidiary Taobao have both taken steps to cut the availability of counterfeits on their platforms over the past year.

Source: www.securingindustry.com

Combating auto counterfeiting needs an effective anti-counterfeiting strategy

Author is Secretary of Hologram Manufacturers Association of India (HoMAI) since 2006 and also serves as Editor of The Holography Times. He is member of Association of Certified Fraud Examiner (ACFE), USA & Global Association of Risk Professionals (GARP).

C S Jeena

Introduction

Counterfeiting continues to be a major growing issue in the automotive component industry. According to Motor Equipment Manufacturers Association (MEMA), USA the global automotive industry loses *US $ 12 billion* to counterfeiting. The Indian scenario is not a different story.

According to FICCI – CASCADE latest study (Grey market the invisible enemy) released in 2012, the Auto component industry loses 29.6% of its sales due to grey market, worth *US $ 2 billion (₹9198 crores* out of estimated size of ₹ *31,046)* affecting the growth of economy, loss of jobs, brand owner goodwill as well as risk to public safety. *(See Table 1)*

The parts that tend to be counterfeited the most are frequent replaced parts such as brake pads, spark plugs, and various types of filters. *(See figure 1, page no. 10).*

Governments have a particularly critical role to play in this effort. All over world, they are doing their best creating the necessary legal infrastructure, educating police force, developing suitable laws to deter fraudulent behaviour. Businesses, however, must also do their part to prevent the production and sale of counterfeit products.

Need of an integrated brand protection strategy

Several studies have been carried out to measure the impact of the problem but suggested solutions have been mainly to enhance the effectiveness of law enforcement. Auto component manufacturers can fight this menace more effectively if they take a more proactive approach towards brand protection. A wide variety of industries are increasingly implementing authentication solutions that empower their end customer to verify the authenticity prior to making the purchase. The requirements vary from industry to industry. There is no one set of best practice that is effective for all businesses. However, there are lessons that can be learned from businesses that take the security of their supply chains seriously. It is very important that a holistic solution is developed in this fight. The solution to this ever-growing menace lies at the very core of the product i.e. a dire need to create an end-to-end holistic

Table 1: * Loss to auto components sector due to counterfeiting

Grey market	29.60%
Sales loss to industry	2 Billion ($)
Direct tax loss to Government	93 Million ($)
Indirect tax Loss to Government	512 Million ($)
Tax loss to the Exchequer	605 Million ($)

Source: FICCI CASCADE Study: Invisible Enemy: Socio-Economic Impact of Counterfeiting, Smuggling and Tax Evasion in Seven Key Indian Industry Sectors

** The loss is calculated for the year 2012.*

Figure 1: Most commonly counterfeit parts and accessories

PARTS		
Maintenance	Collision / Repair	Suspension
Oil filter	Bumpers	Steering Arms
Air Filter	Covers	Tie Rods
Brakes	Head Lamps	
Brake linings	Tail lamps	
Seals	Sheet Metal	
Rotors	Oil Pumps	
Flex Disks	Water Pumps	
	Windshields	

ACCESSORIES	
Automotive	Collection / Vintage
Alloy Wheels	Key Rings
Body striping	Caps
Decals	Lighters
Trim	Toys
Plates	Model Cars
Logos	Clothing

Impact of counterfeited auto parts:

- Counterfeit oil filters cause sudden engine failure.
- Counterfeit brake pads, made of grass clippings and saw dust, have caused fatal accidents.
- Counterfeit windshields without safety shatterproof glass, cause injury or death.
- Counterfeit and piracy undermine consumers confidence in these brands.

Source: The Motor & Equipment Manufacturers Association (MEMA)

brand protection strategy. This strategy can be broken into various stages.

Analysis / changes in approach towards brand protection

Firstly, every CEO or Brand owner should take the responsibility of brand attack and make Brand Risk Management (BRM) an intrinsic part of his business plan, review and report. The team may comprise of CEO/ Brand owner, Brand Managers, Head of Marketing, Product Development, Sales, Logistic, Packaging, Manufacturing or outside consultant accountable for the brand. The idea is to curb the penetration of counterfeits, across the entire supply chain. The team can periodically review the BRM by analyzing various issues like:

- Product categories & markets
- Buyer profiles
- Supply chain management and SWOT analysis of the counterfeiters.

Make a customized & integrated solution:

This can be done by increasing the participation of co-opting consumer or channel partner and by conducting verification, raids or ensuring strong law enforcement.

Emphatic use of technology *(figure 2)*:

Use a secure, anti-counterfeiting device comprising overt, covert & forensic security features like security hologram seals and labels, tamper evident security films and light-sensitive ink

Figure 2: Examples of usage of anti-counterfeiting technology

High security holographic label with a KeySecure code for Bosch developed by Scheiner. This KeySecure code enables online authentications to be performed anywhere in the world.

Mercedes-Benz Genuine Parts, hologram on the packaging.

designs. While there are number of technologies available in the market, it is advisable to choose smart and contemprary solutions while keeping track of some basic guidelines like:

- Find a vendor who can provide you overt as well as covert technologies as it is important to select a solution using multiple technologies.
- Seek help from an established trade association to select ethical vendor, best practices and resources to fight counterfeiting.
- Select the technology in terms of the difficulty to copy/ tamper evidence posed by it, uniqueness, availability of suppliers, ease of verification at the point of sale and user friendliness.
- Solutions should also have feasibility of being integrated with the automated production /packaging line if required, especially wherever the volumes are very large.
- Try to combine low and high security elements to enhance protections, for example, by integrating sequential or unique numbers in the solution.

"Brand Risk Management" should be treated as a crucial part of risk management under the direct responsibility of Board of Directors/Brand owners. The vision and mission statement of the company should be communicated to all the stakeholders and customers to ensure that the Brand Protection concern is communicated to all concerned. This can be done by putting the information on the up on the company's corporate website, including it in the annual report or circulating it via intranet in the form of a document or video. *(Companies like Mercedes Benz have a section on their website which defines their steps in product protection).*

Monitoring and developing an Intellectual property strategy:

The technology solution can be helpful in identifying and authenticating the original from counterfeit. It is however very important that a planned surveillance program be in place to constantly monitor that there is no infringement. Equally important when an infringement is seen, an immediate action must be taken so that the guilty is punished and others sitting on the "fence" are deterred.

Adopt New ISO Standards 12931 "Performance criteria for authentication tools used in anti-counterfeiting of material goods":

The new ISO 12931 is already published. It is a very useful document for anyone who wants to follow globally accepted standards and approach to fighting against the counterfeit. The ISO document can be seen on http://www.iso.org/iso/catalogue_detail?csnumber=52210 . It is strongly recommended that all brands who want to have a safety net of a global standard, should plan to comply with this standard.

Conclusion:

While the trade of counterfeit parts has dramatically increased, tackling counterfeits is not impossible. Counterfeiting is a problem that needs to be addressed quickly and decisively. Ideally, as a first move, more effective partnerships should be built between law enforcement agencies and the private sector with focus on intelligence sharing, awareness and product identification training.

- Manufacturers should create a team that focuses on anti-counterfeiting strategy
- Selection of right anti-counterfeiting strategy should be employed
- Use strong first level visual authentication features
- Track supply chain at distributor end

However, involvement of all segments of the automotive and heavy-duty industries cannot be understated. Perhaps the industry associations such as Automotive Component Manufacturers Association of India (ACMA) and Soiciety of Indian Aoutomobile Manufacturers (SIAM) also need to take the lead in creating the awareness of ISO 12931 amongst their membership and encourage their members to adopt a proactive strategy in line with this standard. It is our hope that this document will serve as a resource to brand owner in their fight against auto component counterfeiting. For more information please email us at *info@homai.org.*

Sources:

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Vol. 8, Issue 23

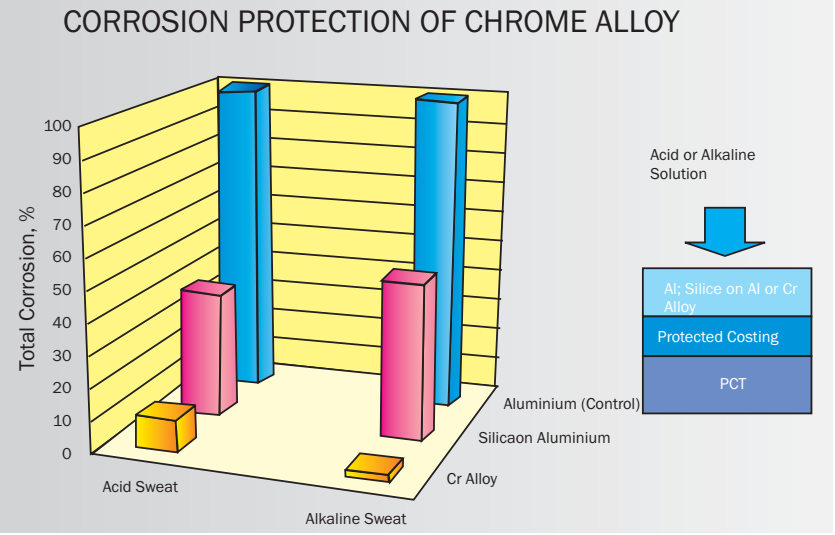
Advanced metallization for new holographic image

by Professor Nadir A.G.Ahmed
Idvac Ltd., Manchester, UK
In collaboration with
Giriraj Foils, India

Idvac Ltd has signed a technology transfer agreement with Giriraj Foils, India to deliver a wide range of novel advanced metalized process know how based on Idvac Ltd. expertise in this field.

Idvac Ltd., Manchester, UK is a leading company in the development of advanced processes for holographic and packaging applications. Founded by Professor Nadir Ahmed in 2004.

Giriraj Foils, was founded in 1993 by Mr Shobhit Arora and currently based at Vrindavan, India. It specializes in manufacturing a wide range of specific coated films and foils to the security and packaging markets. Giriraj Foils has ISO 9001:2008 certification. It is also a member of IHMA (International manufacturers Association) and a member of HOMAI (Hologram Manufactures Association of India).



This collaboration will provide customized solutions that are specifically designed and produced to meet individual customer demand for functional and decorative holograms.

Vacuum metalizing

Vacuum metalizing has been used for a long time to metalize plastic films with aluminium for packaging and standard holographic hot stamped foils. Vacuum metalizing is a batch process in which a substrate is coated with specific material such as aluminium inside a vacuum chamber. For standard holographic applications aluminium is used to give high reflectance on the embossed film to exhibit the striking interference colours of a hologram. However, the demand for new vacuum metalized functional coatings on holograms has resulted in the development of many products to fight counterfeiting and to meet the environmental challenge. As an example, metalized aluminium has high reflectance and minimum transmission. The demand for semi-transparent coating that can be applied on security documents has resulted in the development of high refractive index (HRI) zinc sulphide or titanium oxide to give 40% reflectance and about 60% transmission. Zinc sulphide is widely used now on embossed films for passports, driving licence, identity cards and other security document which requires semi-transparent hologram for protection against counterfeiting.

Disclaimer:
This section is received from Giriraj Foils without any involvement of The Holography Times Team.

Gold colour effect on metallised holographic film with no inks or dyes

This is a vacuum metallisation process to convert silver metallised film into golden colour without using inks, dyes or chemicals. Unique shade of gold colour can be applied on the top side of metallised film.

Significant Features:

- Bright, Gold colour on embossed, plain metallised films and metallised paper.
- Vacuum dry and environmentally friendly process since no chemicals such as inks or dyes are used.
- Lower production cost than gold colour produced by inks and dyes. It can be done at faster line speed. Also, it offers lower disposal costs.
- Can be used on moisture sensitive substrates including paper without introducing extra moisture.
- It is used for holographic hot stamping foils or plain metallised films for security and decorative packaging applications.
- Adhere securely to numerous kinds of reflective surfaces.
- The hologram can contain a range of overt and covert security features.
- Unique gold shade which is difficult to reproduce by dyes or inks.
- Different unique gold shades can be applied on the top, back or both sides of aluminium metallised films or papers.
- It is carried out inside a standard vacuum web Metalizer at average line speed of 200-300m/min depending on gold shade required.

Unique metalized products

The continuous demand for new holograms with special properties to fight counterfeiting and to have special environmental durability has lead to the development of advanced vacuum metallised coatings.

Following this collaboration, Giriraj Foils, India, will provide a new range of customized solutions to meet individual customer demand. The new range of metalized products includes:

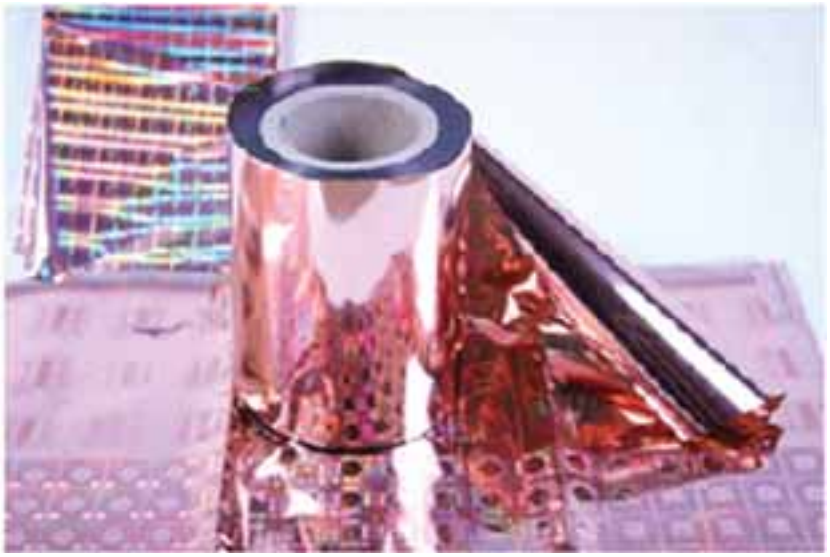
Chrome alloy

This is a vacuum metallization process to metalize embossed holographic films or plain films with Chrome Alloy. The bright Chrome Alloy metalized film is moisture durable and can be used as outdoor hologram for vehicle registration number plates, licence disc and other outdoor applications. It provides durability against salty humid environment. Chrome Alloy metalized product has the following significant features:

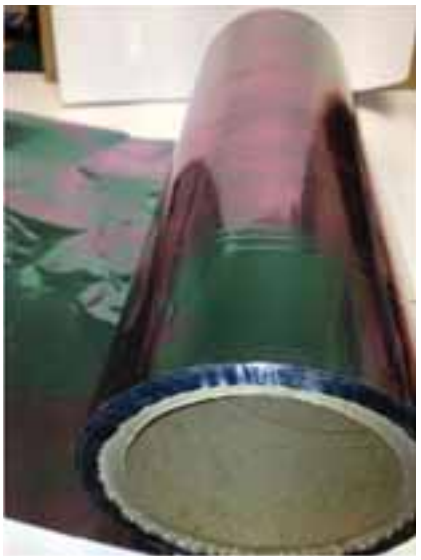
a. More reflective and brighter finish than pure chrome.
b. Lower production cost than pure chrome since it can be done at faster line speed.
c. Durable against salty humid environment than standard metalized aluminium.
d. It is used for hot stamping foils for use on vehicle registration plates.
e. Adhere securely to numerous kinds of reflective surfaces.
f. The hologram can contain a range of overt and covert security features.
g. Can help governments, vehicle registration organisations and transport organisations worldwide stay one step ahead of the counterfeiters and tax evaders.

Copper metallization

A copper metallized holographic film exhibits an aesthetically appealing copper lustre that cannot be produced by ink. There are two main reasons for the production of copper metallization as an alternative to aluminium. The first is the bright lustre of copper, which is difficult to be replicated by using standard aluminium metallization with pigments or dyes, and the second is the de-metallization of copper, which is somewhat harder than the de-metalizing of aluminium, In the de-metallization process the metal is partially removed by



Copper Metallization



Colour Shift

chemical or physical processes to print text, logos, or patterns within the metalized side. De-metalizing add another feature to the security hologram to fight counterfeiting. The other added advantage is the electrical conductivity of copper, which could be used for other electrical or electronic applications such as RFID.

Gold colour effect

This gold colour effect can be produced on metalized surface without using inks or dyes. This is a vacuum metallization process to convert the silvery metalized film into golden colour without using inks or pigments. Unique shade of gold colours can be produced. This is an environmentally friendly process since no wet chemicals are used. This offer lowest disposal costs. This process can be used on moisture sensitive substrates such as paper without introducing extra moisture. The unique gold colour can be used for holographic hot stamping foils or plain metalized films for security and decorative packaging applications.

Colour shift

The colour shift effect is produced on films with quick colour switch from green to red without using grating structure or embossing. The final finish is highly bright with aesthetically appealing lustre and can be used for hot stamping foil or lamination. The colour shift effect can be printed on films to produce text, logos, patterns and other textured features with quick colour switching from green to red, or red to green. This effect can contain a range of overt and covert security features. It is produced inside a standard vacuum web Metalizer.

The collaboration between Idvac Ltd., UK and Giriraj Foils, India, will introduce more advanced metalized products into the holographic and functional markets to meet present and future demands.

Professor Ahmed commented that 'the two companies have the state of art technologies for applying high quality advanced metalized 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'.

Counterfeit seizure report 2013

The CSR report displays all the counterfeiting seizures reports in Indian newspaper. HOMAI compiled these reports from various newspapers in India and published on quarterly basis. However, the current report is for period January 2013- December 2013. For more information, email at info@homai.org.

D/M/Y	News Title	Sector	Region	Reported in Media
01 Jan 2013	Fake cough syrup unit busted	Pharmaceutical	Ghaziabad, U.P.	Deccan Herald
01 Jan 2013	60 bags of poppy husk seized	Animal Food	Bathinda, Punjab	Tribune
19 Feb 2013	3 held for smuggling liquor	Liquor	New Delhi	Hindustan Times
20 Feb 2013	Man arrested for using forged cheque	Fiduciary Document	Ghaziabad, U.P.	Hindustan
28 Feb 2013	BIS seized GLS lamps with fake ISI marks	Electronics	New Delhi	Pioneer
05 Mar 2013	Chemist shop seized selling counterfeit medicines	Pharmaceutical	Kanpur, U.P.	Dainik Jagran
06 Mar 2013	Fake certificate racket busted	Document	New Delhi	Indian Express
22 Mar 2013	Fake currency racket busted	Currency	New Delhi	Indian Express
22 Mar 2013	Fake Ghee unit busted	FMCG	Ghaziabad, U.P.	Dainik Jagran
23 Mar 2013	Graduate held for preparing fake DDA papers	Document	New Delhi	Hindu
04-Jul-2013	Bogus ration card racket busted	Document	Pune (Maharashtra)	Times of India
05-Jul-2013	Fake Passport Racket busted in Kanpur	Identity Document	Kanpur, U.P.	Times of India
26-Jul-2013	Fake driving licence racket busted at RTO	Identity Document	Surat, Gujarat	Times of India
26-Jul-2013	Fake visa racket busted, 2 arrested	Identity DocumentD	New Delhi	Times of India
24-Jul-2013	Fake hall marking units flourishing in India: BIS	Identity Document	Chennai, Tamilnadu	Times of India
23-Jul-2013	Fake certificate racket busted	Identity Document	Kanpur, U.P.	Times of India
25-Jul-2013	6 from Amritsar held with fake ITBP appointment letters	Identity Document	Amritsar, Punjab	Times of India
27-Jul-2013	Two held for fake documents racket	Identity Document	Hyderabad, A. P.	Times of India
21-Jul-2013	Officials to be booked for 12L fake ration cards	Document	Mumbai, Maharashtra	Times of India
19-Aug-2013	Fake currency racket busted	Currency	Mumbai, Maharashtra	Times of India
14-Sep-2013	Duplicate tobacco products seller held	Tobacco	Hyderabad, A. P.	The New Indian Express
02-Sep-2013	Three held with fake notes	Currency	New Delhi	Business Standard
16-Sep-2013	Two held with fake currency	Currency	Allahabad, U.P.	Times of India
24-Sep-2013	Fake degree scam	Document	Bangalore, Karnataka	Times of India
25-Sep-2013	Fake stamp papers valued at Rs 107 crore seized	Financial Document	Patna, Bihar	NDTV
26-Sep-2013	2 'foreigners' arrested for travelling to Sharjah on fake passports	Identity Document	Pune (Maharashtra)	The Indian Express
25-Sep-2013	Illicit arms factory busted, pistols seized	Arms & Ammuniation	Munger, Bihar	INB Live
26-Sep-2013	160 cartons of illicit liquor seized, one held	Liquor	Ghaziabad, U.P.	India TV
23-Dec-2013	Fake birth certificate in Kejriwal's name surfaces in TN	Document Identity	Madurai, Tamilnadu	Hindustan Times

Global patents

Publication DD.MM.YYYY	Title	Int. Class	Application Number	Applicant / Inventor
03.01.2014	Wo/2014/000020 - Antistatic Film	B42D 15/10	PCT/AU2013/000633	Innovia Security Pty Ltd

Brief Abstract: A film having antistatic properties, said film comprising a transparent polymeric substrate, said substrate being partially opacified on at least one surface so as to provide opacified and non-opacified regions and wherein both the opacified and non-opacified regions are coated on at least one surface with an antistatic coating said coating having greater than 70% transmission. In particular for use as a transparent antistatic coating on polymer banknotes including transparent window regions.

03.01.2014	Wo/2014/000484 - Flexible Display and	G09F 9/35	PCT/CN2013/073349	Newnagy (Tangshan, LLC

Brief Abstract: A flexible display and an anti-counterfeit unit and device using same. The flexible display comprises a nano power generation power supply (61) and a flexible display panel (63). The nano power generation power supply (61) is connected with the flexible display panel (63) to supply the power to the flexible display panel (63) by transforming the mechanical energy into the electric energy. The nano power generation power supply (61) comprises a nano generator (611). The flexible display panel (63) displays using the electric energy of the nano power generation power supply (61). Because of the nano power generation power supply (61) supplying the power to the display, the display can supply the power itself without connecting an external power supply or a battery, so that the display can be produced fully flexible. The flexible display can be applied to a handbag, a bottle cap, a smart card, an anti-counterfeit unit and a device using the anti-counterfeitunit etc.

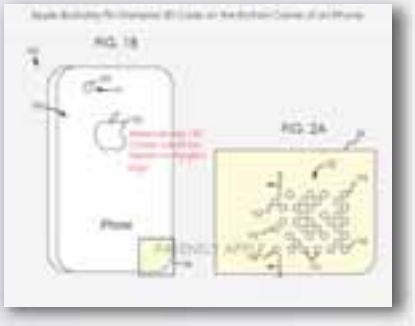
03.01.2014	WO/2014/000022 - Security Identification	B32B 5/16	PCT/AU2013/000664	Allen, Ian Peter

Brief Abstract: A batch of virgin plastic pellets wherein the pellets have data tags of microscopic size embedded therein.

03.01.2014	WO/2014/000044 - Optically Variable Colour Image	G02B 3/00	PCT/AU2013/000701	Innovia Security Pty Ltd

Brief Abstract: A security element including: a plurality of focusing elements,a plurality of image regions where each image region is associated with a focusing element,each image region is printed with at least two layers, the first layer is offset by a first predetermined amount from a reference axis in the image region,the second layer is offset by a second predetermined amount from a reference axis in the image region,each layer being in different colours, and each image region includes at least a first and second sub-region, wherein a first image is formed in a first range of viewing angles from the first sub-region and a second image is formed in a second range of viewing angles from the second sub-region.

Apple invents a unique anti-counterfeit solution for hardware



On December 26, 2013, the US Patent & Trademark Office published a patent application from Apple revealing a new and unique anti-counterfeiting solution for future hardware such as an iPhone, iPad or even MacBook Pro. The proposed invention will utilize a 3D variable depth coding system on various parts of products that could either be visible or invisible to the naked eye. Whether Apple has gone to the trouble of inventing such a sophisticated anti-counterfeiting system to combat current or future Black Market activity is unknown at this time.

According to Apple, the 3-D codes may be provided on electronic device housings to help track the device during and/or after manufacture. In particular, the 3-D coding may identify electronic devices including, but not limited to, media players, computers, televisions, mobile phones, and so forth. The 3-D code may be positioned within another feature of the device so that it may be obscured. For example, the 3-D code may be positioned within a letter of a brand name or within a logo printed on the surface of a device.

For more information visit: http://patentscope.wipo.int/search/en/search.jsf

Upcoming events

Date	Event Name / Place / Website
Feb 12-13, 2014	**Pharmapack Europe** Paris www.pharmapack.fr
Feb 17-19, 2014	**High Security Printing, Europe** Milan, Italy www.hsp-europe.com
Feb 17-20, 2014	**Saudi Print & Pack** Riyadh International Convention & Exhibition Centre www.saudiprintpack.com
Mar 03-05, 2014	**Global IP Exchange** Dolce Munich, Germany www.globalipexchange.co.uk
Mar 13, 2014	**Converters Expo** Lambeau Field, Home of the Green Bay Packers, Green Bay, WI www.convertersexpo.com
Mar 18-19, 2014	**Consumer Packaging Summit (CPS 2014)** Ramada Plaza Pudong, Shanghai www.advantiquegroup.com
Mar 19-20, 2014	**Cartes Asia** Hong Kong Convention & Exhibition Centre www.cartes-asia.com
Mar 24-26, 2014	**Specialty Packaging Films Asia 2013** SwissotelNaiLert Park, Bangkok, Thailand www.amiplastics.com
Apr 2-4, 2014	**Global Forum on Access to Safe Medicines 2014** London, United Kingdom www.accesstosafemedicines.com
Apr 10-11, 2014	**Materials and Technologies in Anti-Counterfeiting Conference 2014** Amsterdam www.anti-counterfeiting-conference.com
Apr 24-26, 2014	**Pharma Pro Pack Expo 2014** Mumbai, India www.pharmapropack.com
May 08-14, 2014	**Interpack** Dusseldorf, Germany www.interpack.com
Jun 16-18, 2014	**Security Document World** London, United Kingdom www.sdw2014.com
Jun 23-25, 2014	**High Security Printing 2014,** Santiago, Chile www.hsp-latinamerica.com
Sep 15-17, 2014	**Tax Stamp Forum** Dubai, UAE www.taxstampforum.com

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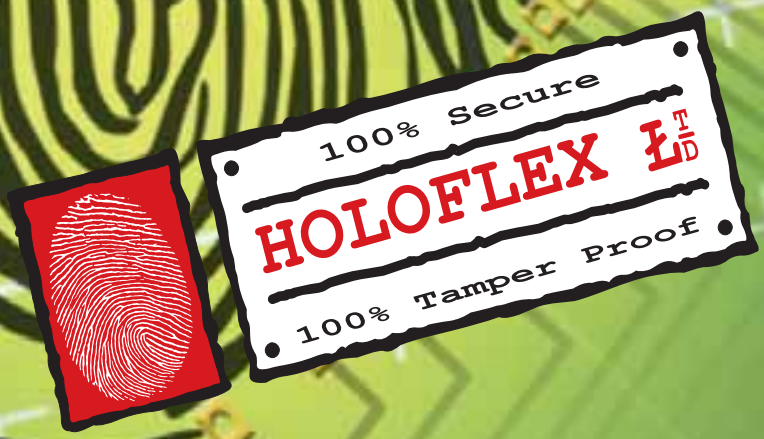
Counterfeit cartoon

"Why is counterfeiting a crime? We're in business to make money just like everyone else."

About HoMAI
The Hologram Manufacturers Association of India (HoMAI) is the world's 2nd and Asia only association representing hologram industry.

Ultimate Technology. Total Protection.

Your brand is at risk. It's time to take the counterfeiters head-on. Get the ultimate in technology. Save your brand.



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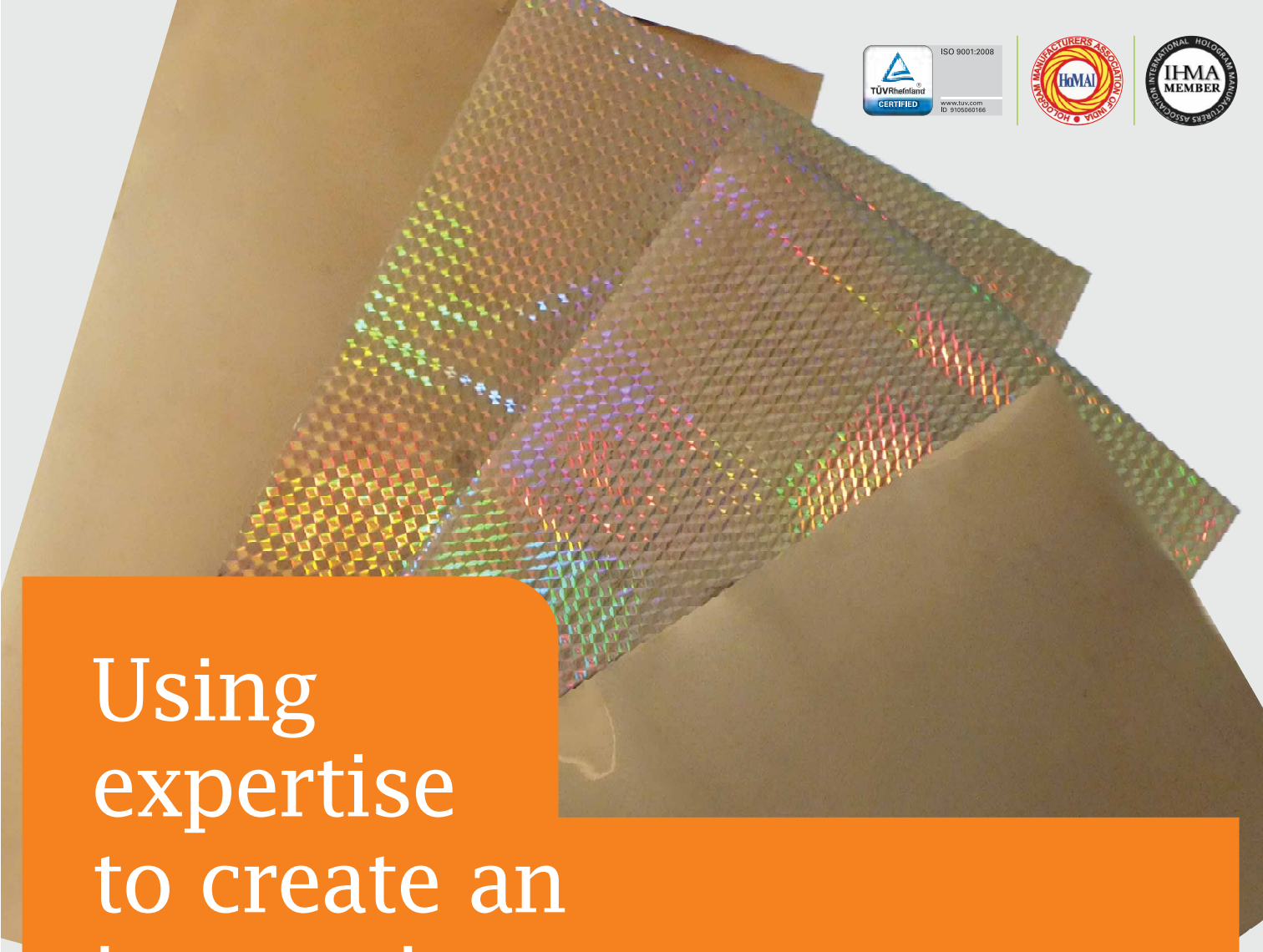

Using expertise to create an innovative product

GFPL offers specialized metallization processes such as Chrome Alloy, Copper Alloy and Gold color metallization without dyes. The product made out of these processes is Unique and have various features which keeps them poles apart from common products.

A) Durable Chrome Alloy for Outdoor Hologram, Security Number Plates
B) Copper Metallisation for Holographic and Functional Applications
C) Gold Colour Effect on metallised holographic film with No inks or dyes

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