



广东侨盛新材料科技有限公司

Guangdong Qiaosheng New Materials Technology Co., Ltd.

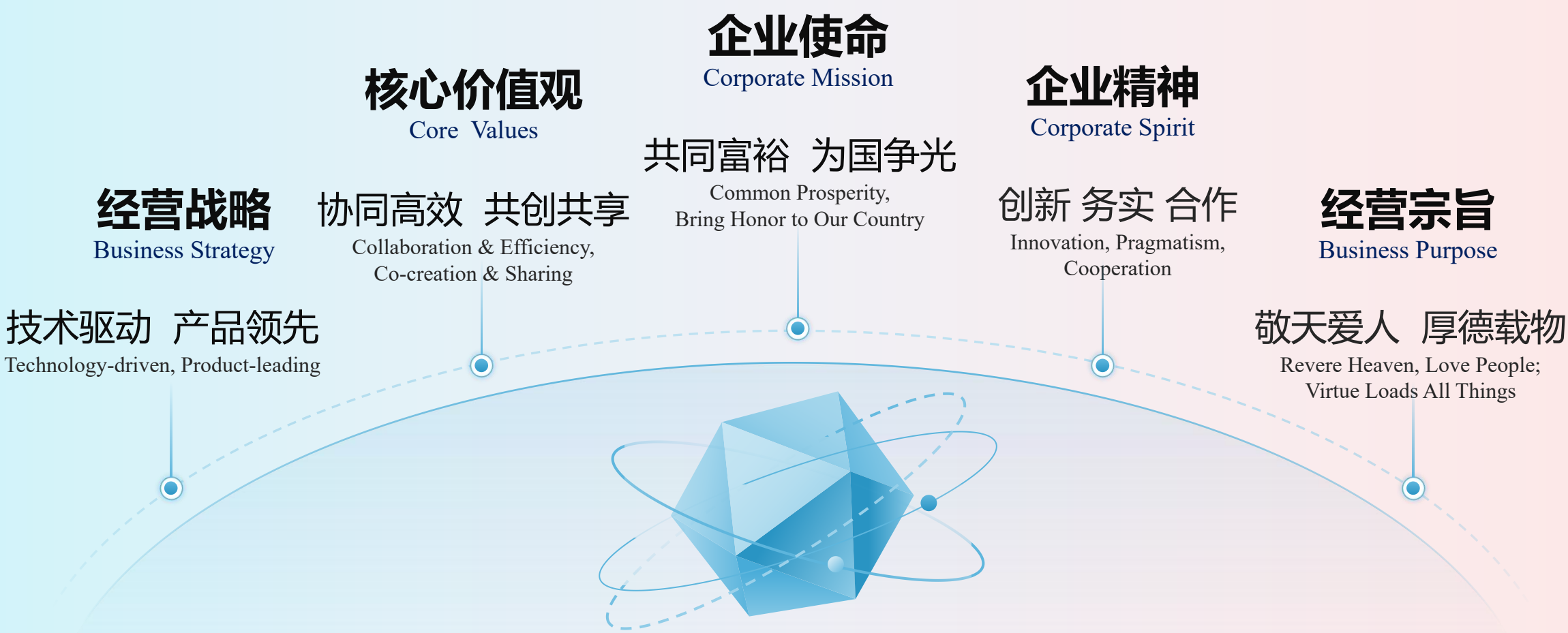
企业简介 Company Profile

广东侨盛新材料科技有限公司是一家研制生产货币高安全材料及压力测试膜，光变膜等不同产业用功能膜新产品的专精特新企业，获评为广东省2016~2018年度脱贫攻坚突出贡献单位；现有授权专利技术80多项且荣获第二十一届全国专利优秀奖。

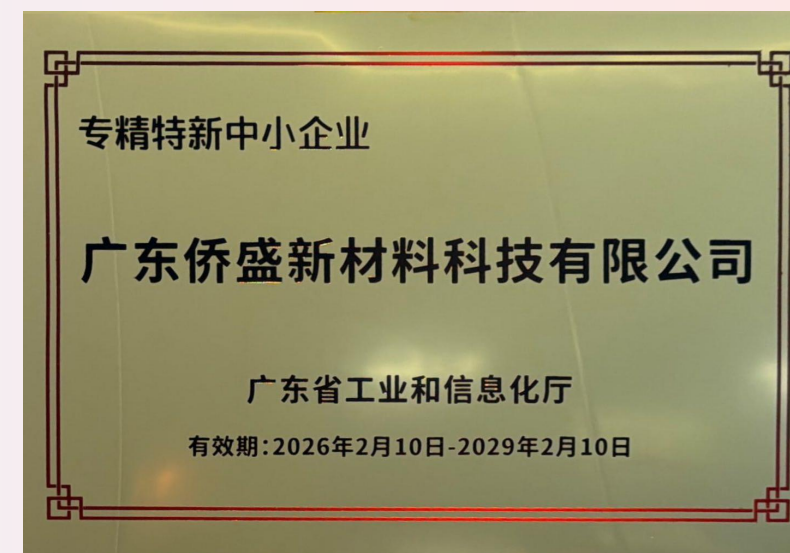
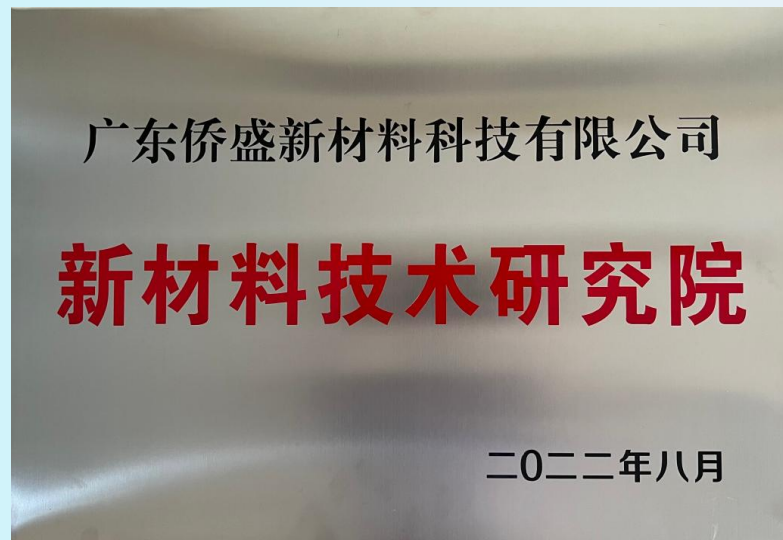
Guangdong Qiaosheng New Materials Technology Co., Ltd. is a specialized, sophisticated, and innovative enterprise dedicated to the research and development and production of high-security materials for currency, pressure-testing membranes, optical-variable films, and other functional films for various industrial applications. The company was recognized as an outstanding contributor to poverty alleviation efforts in Guangdong Province from 2016 to 2018. It currently holds over 80 authorized patented technologies and has been awarded the 21st National Patent Excellence Award.



企业文化 Corporate Culture



企业荣誉 Corporate Honors



共同富裕·实业报国

Common Prosperity, Serve the Nation through Industry



叶建忠 董事长兼CEO

Chairman & CEO

暨南大学电子工程系本科毕业；操盘运营实体企业逾30年；现任新材料技术研究院院长。长期支持教育事业，先后向暨南大学、河北保定马兰小学、贵州遵义桃林乡中学及韶关市曲江区大塘小学捐资助学。

A graduate of Jinan University's Department of Electronic Engineering, Mr. Ye has more than 30 years of experience operating industrial enterprises and currently serves as Director of the Institute of Advanced Materials Technology. He has also supported education through donations to schools and universities in Guangdong, Hebei, and Guizhou.

校企融合 · 共创共享

School-Enterprise Integration: Co-creation and Shared Benefits

李闻哲教授 首席科学家履历:

Professor Li Wenzhe – Chief Scientist Biography:

2021.10 - 至今 暨南大学 教授 (博导)

2021.10 - Currently: Professor (Doctoral Supervisor), Jinan University

2018.10-2021.10 暨南大学 副研究员

2018.10 – 2021.9: Associate Researcher, Jinan University

2017.01-2018.10 暨南大学 讲师

2017.01 – 2018.09: Lecturer, Jinan University

2014.10-2015.04 牛津大学 物理系 联培

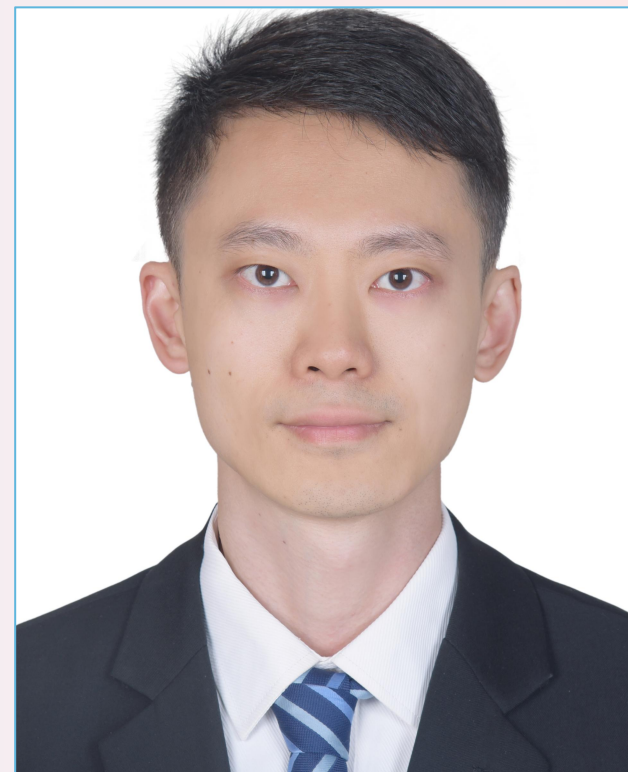
2014.10-2015.04: Joint PhD Program, Department of Physics, University of Oxford

2012.09-2017.01 清华大学 化学系 博士

2012.09 – 2017.01: PhD in Chemistry, Tsinghua University

2008.09-2012.07 北京化工大学 高分子材料 学士

2008.09-2012.07: Bachelor of Polymer Materials, Beijing University of Chemical Technology



院士赋能·专家助力

Empowered by Academicians, Supported by Experts



范滇元 中国工程院院士

FAN DIANYUAN · MEMBER, CHINESE ACADEMY OF
ENGINEERING

侨盛科技与范滇元院士团队于2020年签署合作协议，赋能助力侨盛建设院士专家企业工作站。

In 2020, Qiaosheng signed a cooperation agreement with Academician Fan Dianyuan's team to establish an enterprise workstation for academicians and experts.

宋伟杰 中科院宁波材料工程研究所 研究员、博导

SONG WEIJIE · RESEARCHER & DOCTORAL SUPERVISOR

侨盛科技联袂宋伟杰研究员、李闻哲教授
攻关研制货币用光变膜新产品。

Qiaosheng works with Researcher Song Weijie and Professor Li Wenzhe on new optically variable film products for currency applications.



光学变色颜料 Optical Variable Pigment · OVP



1. 光学变色颜料（简称光变颜料）是指通过薄膜干涉形成如自然界肥皂泡、蝴蝶翅膀绚丽的色彩变化，是一种在自然光下不同角度观察呈现不同颜色，随角异色的特殊颜料。

2. 光变颜料是纳米级薄膜叠加构成，多层薄膜结构形成强烈的干涉颜色和高光泽效果，可实现明显的动态颜色变化和金属光泽。

1. Optical Variable Pigment (abbreviated as OVP) is a special pigment that produces brilliant color changes through thin-film interference, similar to the iridescent colors of soap bubbles and butterfly wings in nature. It exhibits distinct color variations and angle-dependent metamerism when viewed from different angles under natural light.

2. OVP is composed of stacked nano-scale thin films. The multi-layer thin-film structure generates strong interference colors and high gloss, enabling obvious dynamic color shifts and metallic luster.

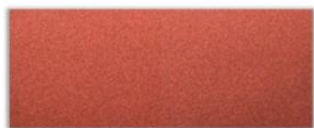
光变颜料品类

Optical Variable Pigment Category

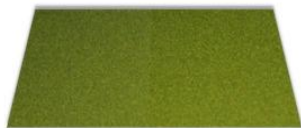
侨盛光变颜料包含：TA高亮，M磁性，T半透，TS全透四大系列，可根据客户需求进行个性化定制。

Qiaosheng Optical Variable Pigments include four major series: TA High-Brightness, M Magnetic, T Total Transparent, and TS Semi-Transparent. Customized solutions are available according to customer requirements.

TA-RYG
橙变黄绿
Orange - Yellow Green
5-37 μm



TOP VIEW-俯视图



SIDE VIEW-侧视图

TS-02
蓝紫变红
Glory Purple - Red
60-80 μm



TOP VIEW-俯视图



SIDE VIEW-侧视图

T-04
浅金变浅绿
Light Gold - Light Green
60-80 μm



TOP VIEW-俯视图

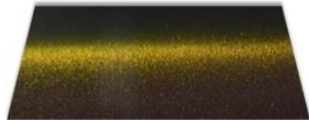


SIDE VIEW-侧视图

M-PG
紫红变黄绿
Purplish Red - Gold
5-37 μm

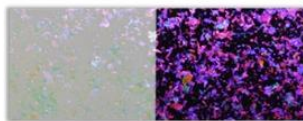


TOP VIEW-俯视图

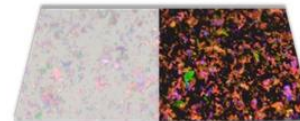


SIDE VIEW-侧视图

TS-02 大
紫红变黄绿
Purplish Red - Yellow Green
200-300 μm



TOP VIEW-俯视图



SIDE VIEW-侧视图

T-05 大
古铜红变黄绿
Orange Red - Yellow Green
200-300 μm



TOP VIEW-俯视图



SIDE VIEW-侧视图

全球首创专利产品OVMRI:

World's Premiere patented product OVMRI:

磁性磁共振光学变色颜料

Magnetic Magnetic Resonance Optical Chromatic Pigment

磁共振系统由两种核心组件构成：其一是涂覆于被检测物体表面的特殊标记粉末 (Taggant) ， 其二是用于检测物体表面Taggant存在并验证其真实性的检测器 (Reader) 。通过气相沉积技术， Taggant被蒸发至 OVI 颜料中形成 OVMRI 颜料。该 OVMRI 颜料不仅保留了 OVI 颜料的性能特性， 还具备射频共振效应， 可被磁共振阅读器有效识别。

The Magnetic Resonance system consists of the specific marking powder (Taggant) which is applied to the protected object and the detector (Reader) which is used for detecting the presence of the Taggant on the object and verify it's authenticity.

The taggant is evaporated into the OVI pigment using vapor deposition technology to produce the OVMRI pigment. The OVMRI pigment not only retains the performance of the OVI pigment but also exhibits an RF resonance effect, allowing it to be recognized by an MR reader.

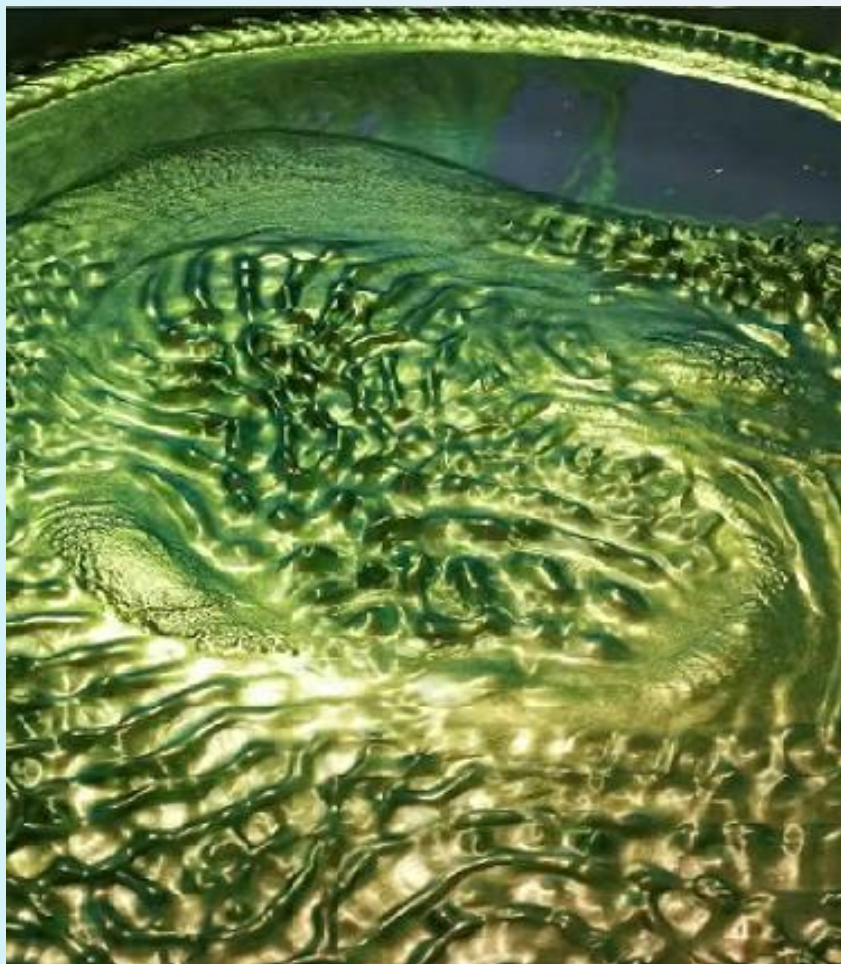


TOP VIEW-俯视图



SIDE VIEW-侧视图

光学变色油墨 Optical Variable Ink



光变油墨又称光学变色油墨和变色龙，印品色块呈现一对颜色，例如：红—绿、绿—蓝、金—银等。

Photovarying ink is also known as Optically variable pigments or chameleon, printing things present a pair of colors, such as red - green, green - blue, gold - silver and so on.

在白光下正视或侧视，随着人眼视角的改变，呈现两种不同的颜色，光变特性强，色差变化大，特征明显，不需要任何仪器设备都可以识别，其颜色角度效应无法用任何高清晰度的扫描仪、彩色复印机及其它设备复制，印刷特征用任何其他油墨和印刷方式都无法效仿。

As the angle of view of the eye changes, the optical color-changing pigment will appear two different colors when viewed directly or laterally under white light. It has the characteristics of strong light variation and large color difference, which does not need any equipment to identify. This effect cannot be replicated with any high definition scanner, color copier or other equipment, and its printing characteristics cannot be replicated by any other ink or printing method.

其防伪可靠性极强，所以被世界上多个国家指定用于要求最严、难度最大的货币和有价值证券的防伪上，国内一些著名的厂家也已用于包装防伪。

It's security reliability is very strong, so many countries designated for the most stringent requirements, such as currency and securities security. Some famous domestic have also been used for packaging security.

全息防伪烫印箔

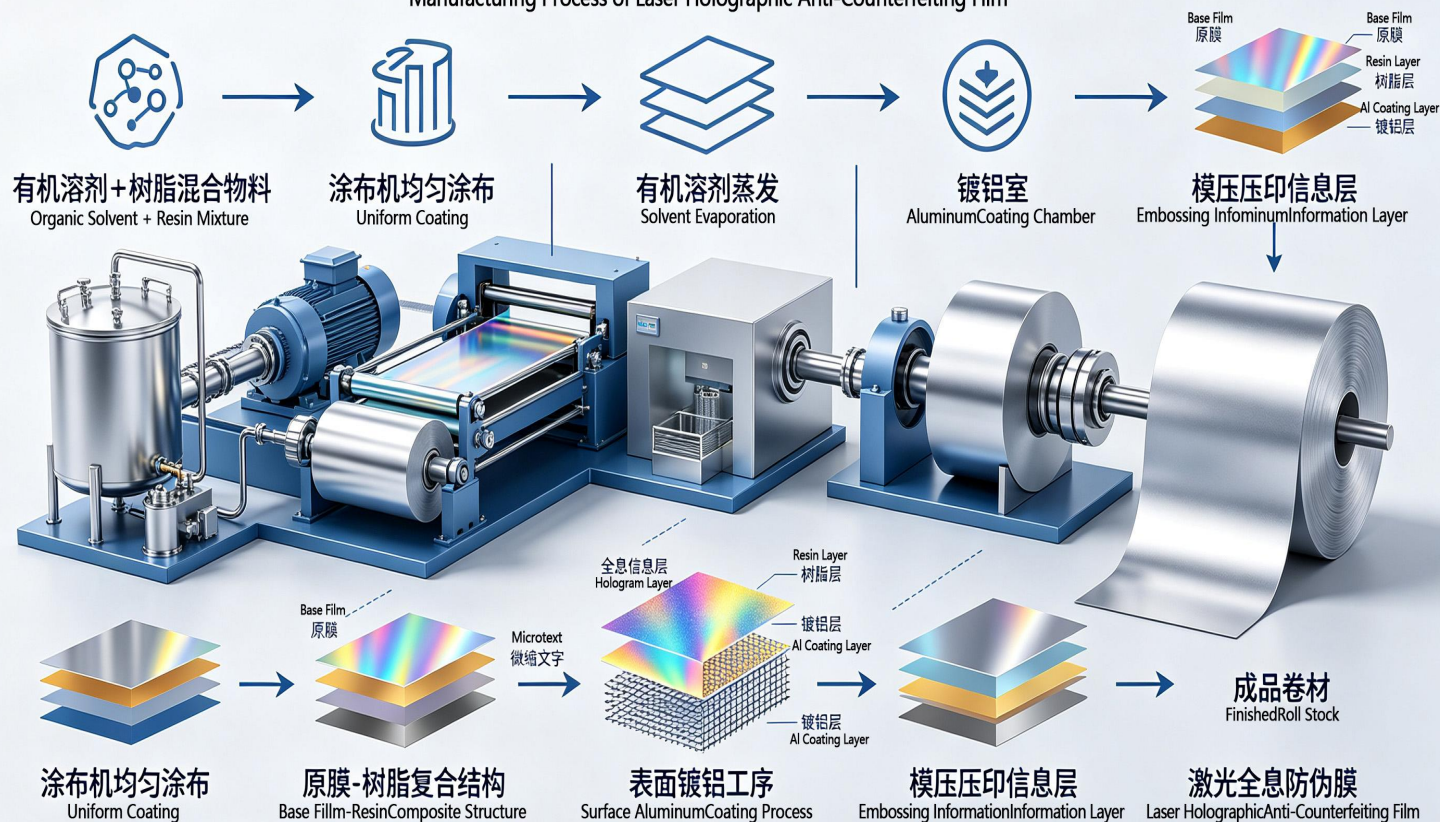
holographic anti-counterfeiting hot stamping foil

全息防伪烫印箔也叫激光全息电化铝烫印膜，是将激光全息光栅微结构复合在多层电化铝膜上，依靠热烫印工艺，把全息光学图文转印到纸张、塑料、卡纸等基材表面的特种防伪材料。

Holographic anti-counterfeiting hot stamping foil, also known as laser holographic hot-stamping electro-aluminum film, is a special anti-counterfeiting material that integrates laser holographic grating micro-structures into multi-layer electro-aluminum films. By means of the hot stamping process, it transfers holographic optical graphics and texts onto substrates such as paper, plastics and cardstock.

激光全息防伪膜制备流程

Manufacturing Process of Laser Holographic Anti-Counterfeiting Film

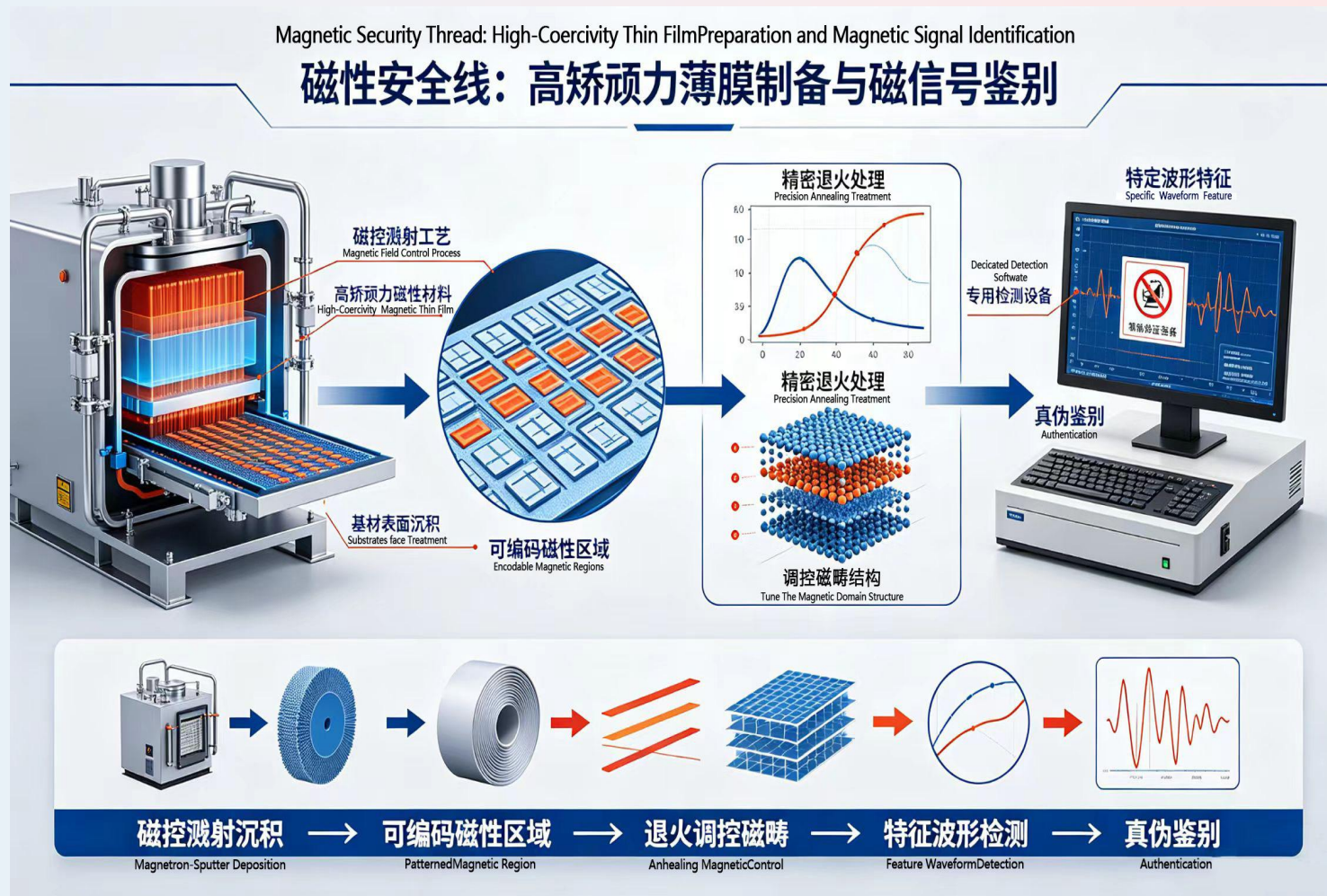


磁性安全线

Magnetic Security Thread

磁性安全线：采用磁控溅射工艺在基材表面沉积高矫顽力磁性材料，形成可编码的磁性区域；通过精密退火处理调控磁畴结构，使磁信号具备特定波形特征，配合专用检测设备实现真伪鉴别。

Magnetic Security Thread: A high-coercivity magnetic material is deposited on the substrate surface by magnetron sputtering to form encodeable magnetic zones. The magnetic domain structure is then controlled through precision annealing, giving the magnetic signal defined waveform characteristics that enable authentic verification with dedicated detection equipment.



动感安全线

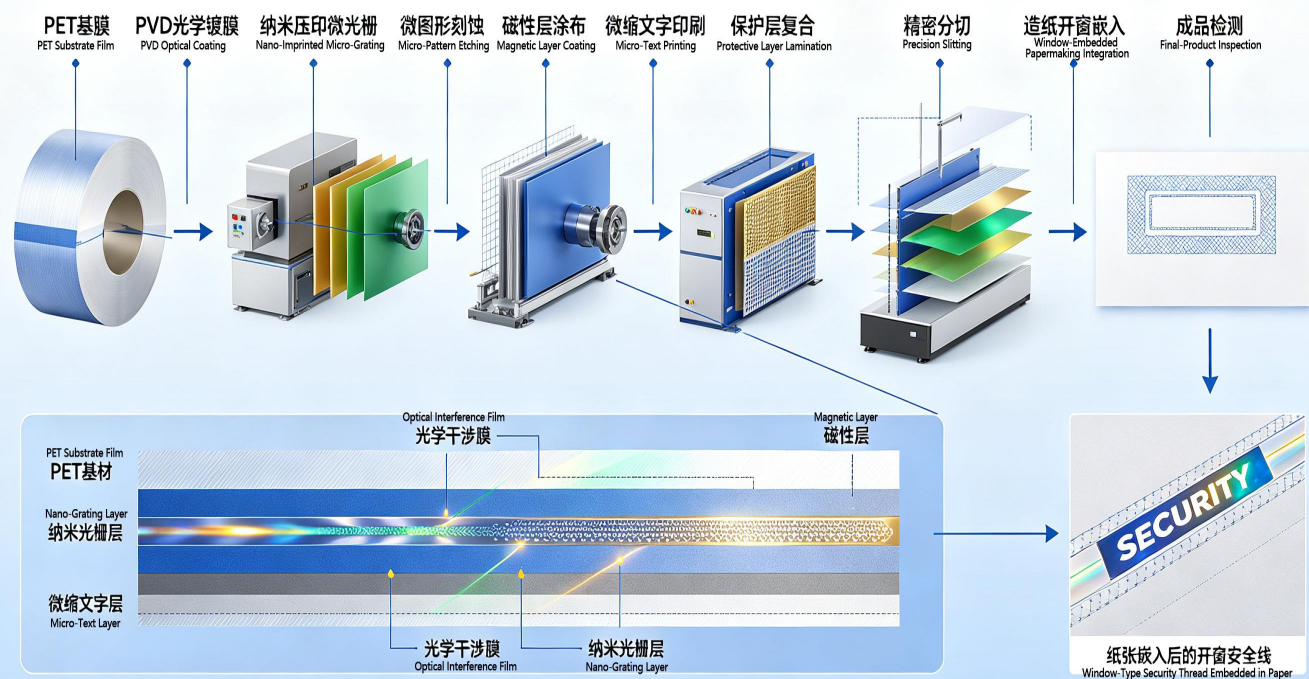
Motion-Security Thread

动感安全线属于高安全光学-复合防伪，以 PET 薄膜为基材，集成PVD 多层光学镀膜、纳米压印微光栅、磁性涂布、微缩图文印刷等多道精密工序，制成窄幅薄膜条带，在造纸环节嵌入纸张内部；核心识别特征为：倾斜观察时，安全线上图标、文字产生视觉位移跑动效果，伴随角度光变。

The motion-security thread is a high-security optical-composite anti-counterfeiting carrier. Using PET film as the substrate, it integrates multiple precision processes including PVD multi-layer optical coating, nano-imprinted micro-gratings, magnetic coating and micro-text printing to form narrow-width film strips, which are embedded into paper during the papermaking process. Its core identification feature: when viewed at an inclined angle, icons and texts on the security thread produce visual displacement-motion effects accompanied by angle-dependent color shift.

动感安全线工艺

Motion-Security Thread Manufacturing Process



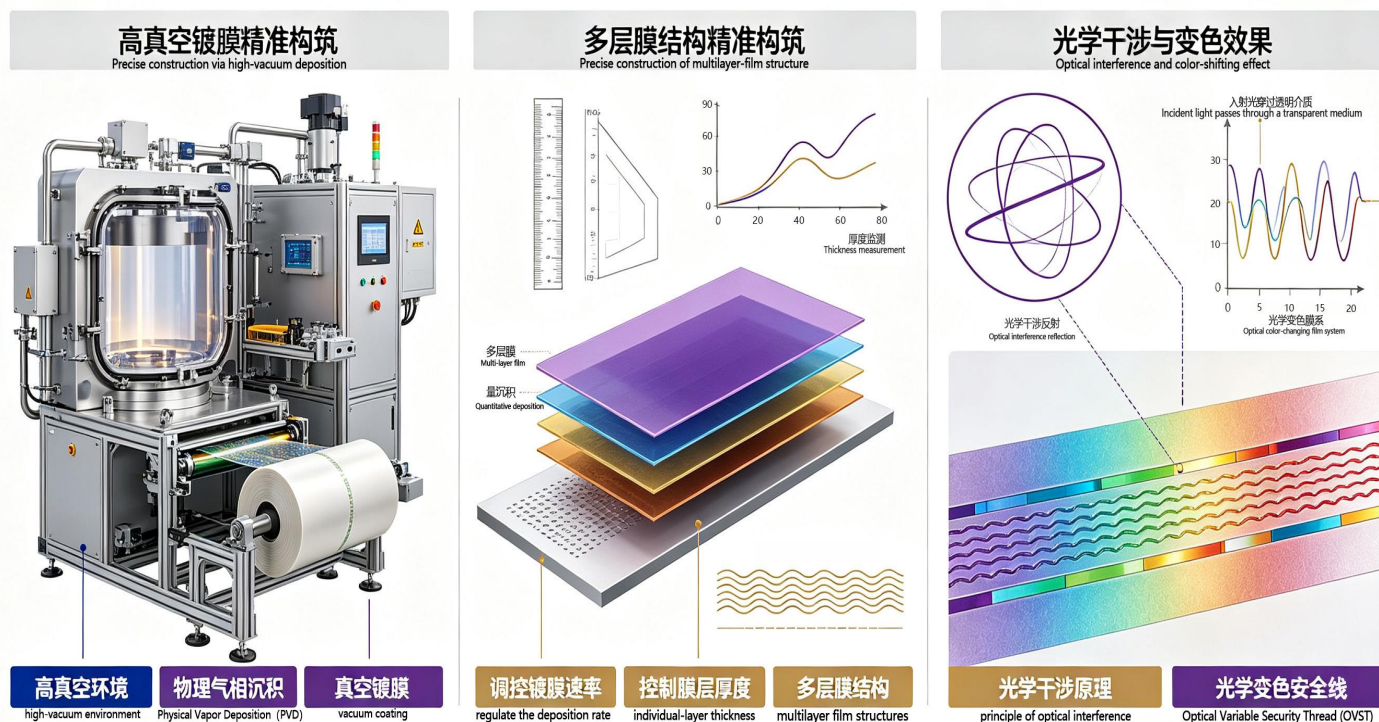
光变安全线

Optical-Variable Security Thread

光变安全线：在高真空环境下采用物理气相沉积工艺实施真空镀膜，通过调控镀膜速率与膜层厚度，完成多层膜结构的精准构筑，并依托光学干涉原理构建光学变色安全线。

Optical Variable Security Thread:
Adopting physical vapor deposition (PVD) technology for vacuum coating in a high-vacuum environment, the precise construction of multi-layer film structures is completed by regulating the coating rate and film thickness. Based on the optical interference principle, optically variable security threads are fabricated.

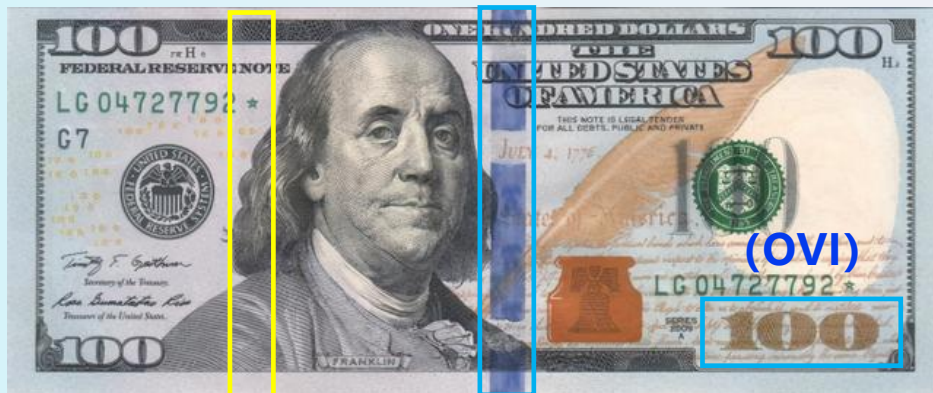
Optical Variable Security Thread (OVST): Multilayer interference film system fabricated via vacuum coating technology 光学变色安全线：真空镀膜制备多层干涉膜系



在高真空环境下通过物理气相沉积调控膜层厚度，构建具有光学干涉效应的变色安全线
Color-shifting security threads featuring optical-interference effects are constructed by tuning layer thickness via Physical Vapor Deposition (PVD) under high-vacuum conditions.

光变材料在货币高安全领域的应用

Application of Optical Variable Materials in High-Security Currency Field



Fully-Embedded
Magnetic Security Thread

MOTION



Fully-Embedded
Magnetic Security Thread

MOTION



Fully-Embedded
Magnetic Security Thread

OVST



Fully-Embedded
Magnetic Security Thread

HDST

覆盖美元、欧元、人民币、埃及镑等高安全印刷场景

This solution is applicable to high-security anti-counterfeiting printing scenarios for multiple currencies including the US Dollar, Euro, Renminbi and Egyptian Pound.

光变材料在货币高安全领域的应用

Application of Optical Variable Materials in High-Security Currency Field



覆盖伊朗、哈萨克斯坦、南非、缅甸、沙特、印尼等高安全印刷场景

This solution applies to high-security printing scenarios for currencies of Iran, Kazakhstan, South Africa, Myanmar, Saudi Arabia, Indonesia and other countries.

光变油墨在证照领域的应用

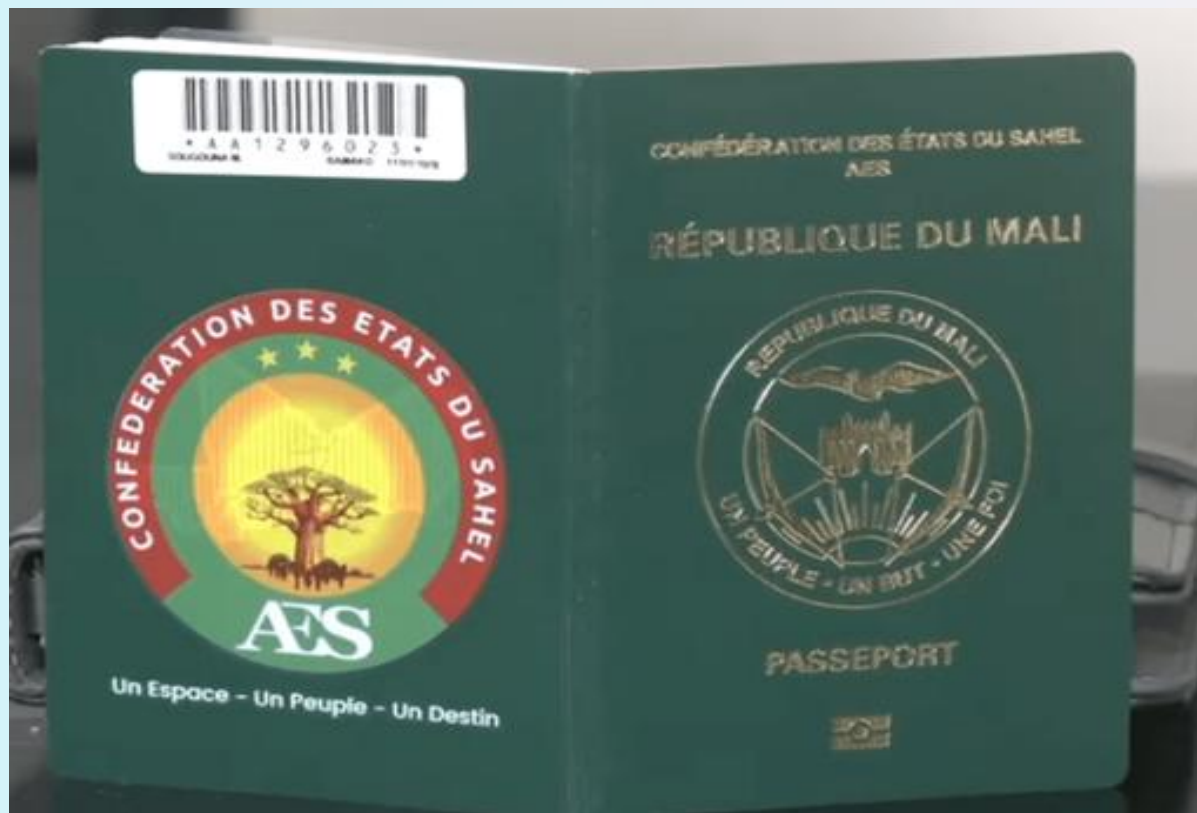
Application of Optically Variable Ink in the Certificate and Document Industry



埃塞俄比亚护照：封面国花图案采用OVMI，随视角呈现明暗动态变化；紫外光下可显现隐藏数字、图案与星徽等核验特征。
The national-flower motif uses OVMI for a dynamic light-dark effect. Under ultraviolet light, hidden numerals, motifs, and emblem features become visible for authentication.

光变油墨在证照领域的应用

Application of Optically Variable Ink in the Certificate and Document Industry



马里护照/身份证: 护照及身份证证采用光学可变油墨OVI。国徽与图案随观察角度产生细微色变，并可与激光打孔、显微点阵、隐藏图文等特征组合，形成多层次核验体系。

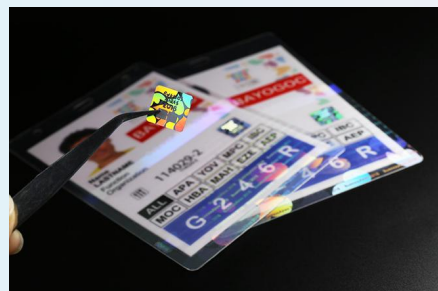
Passport and identity-document applications can combine optically variable ink with laser perforation, micro-patterns, and hidden graphics. Emblems and motifs shift subtly with the viewing angle, supporting layered authentication.

光变油墨在税票领域的应用

Application of Optically Variable Ink in Tax Stamp Field



金融与制卡
Finance & Cards



证照与税务票据
Documents & Tax Invoices



葡萄酒与白酒
Wine & Spirits



工业与日化
Industrial & Personal Care



光变油墨在高档包装行业的应用

Application of Optical Variable Ink in High-Grade Packaging Industry

侨盛光变油墨的耐候性，色饱和度，粒径均匀度等核心指标均达到高档烟/酒包的防伪要求，目前已成功供应烟包所需的光变油墨。

The core indicators of Qiaosheng optically variable ink, including weather resistance, color saturation, and particle size uniformity, all meet the anti-counterfeiting requirements for high-grade cigarette and alcohol packaging. At present, it has been successfully supplied for the optically variable ink required in cigarette packaging.



白酒LOGO光变效果
Light Change Effect of Baijiu Logo



标签光变效果OVMI
OVMI colour-shifting effect for labels



烟包光变效果OVI
OVI colour-shifting effect for cigarette packaging

光变油墨在高档包装行业的应用

Application of Optical Variable Ink in High-Grade Packaging Industry



贵州中烟的“贵烟”烟包表面磁性光变
(GUIYAN · OVMI)



湖南中烟的“芙蓉王”烟包盖光变
(FURONGWANG · OVI)



河南中烟的“黄金叶”烟包盖磁性光变
(GOLDEN LEAF · OVMI)



广西中烟的“真龙”烟包底光变
(ZHENLONG · OVI)



江西中烟的“金圣”烟包盖光变
(JINSHENG · OVI)



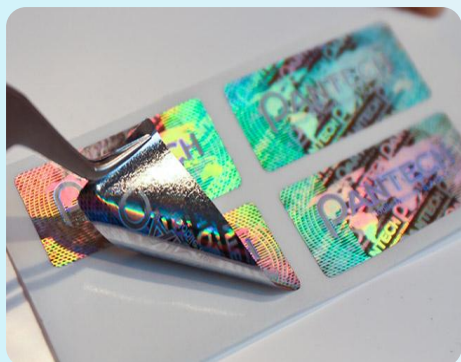
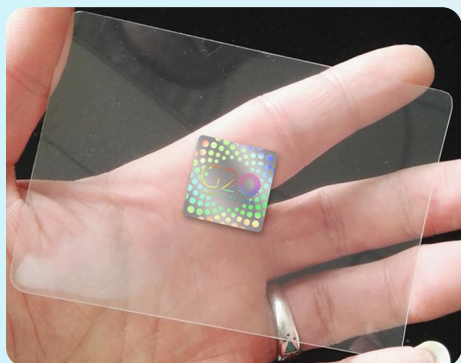
川渝中烟的“娇子”烟侧身光变
(JIAOZI · OVI)

光变油墨在高档包装行业的应用

Application of Optical Variable Ink in High-Grade Packaging Industry

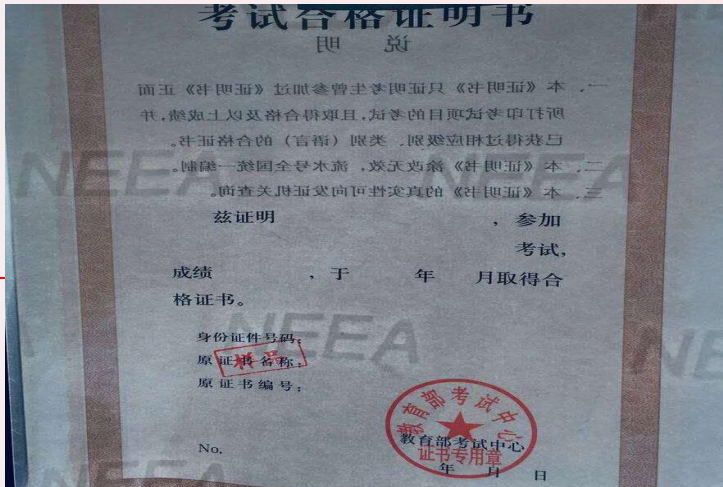
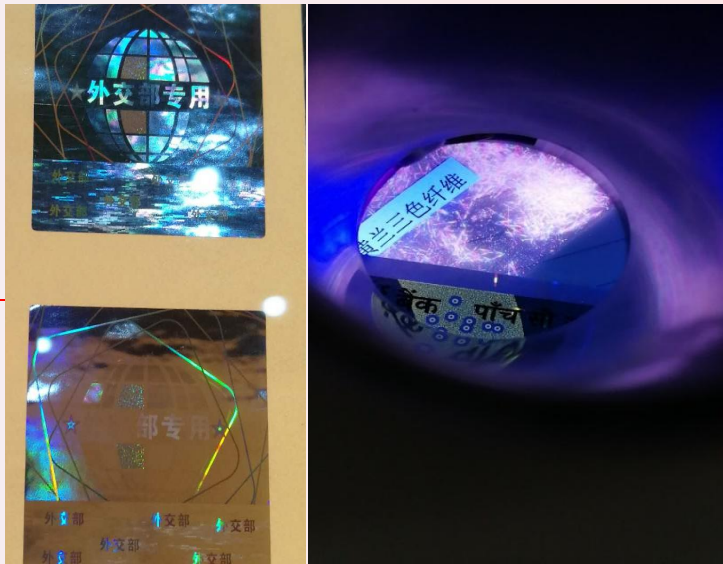
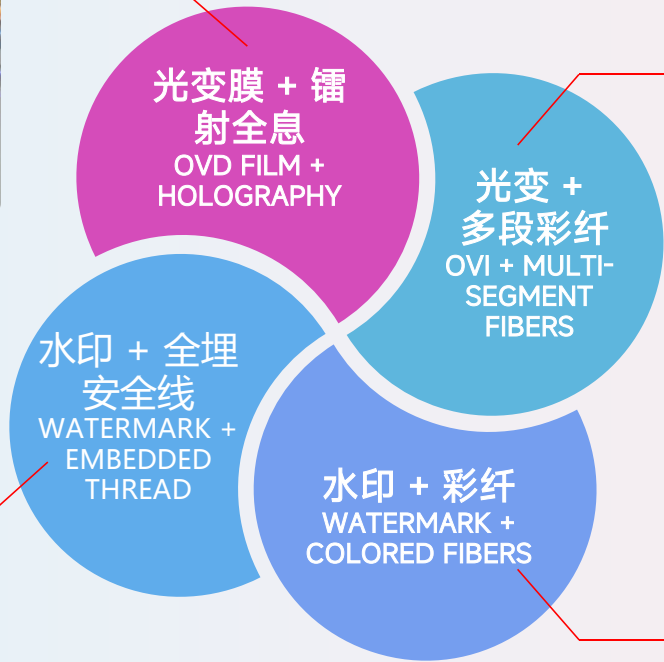
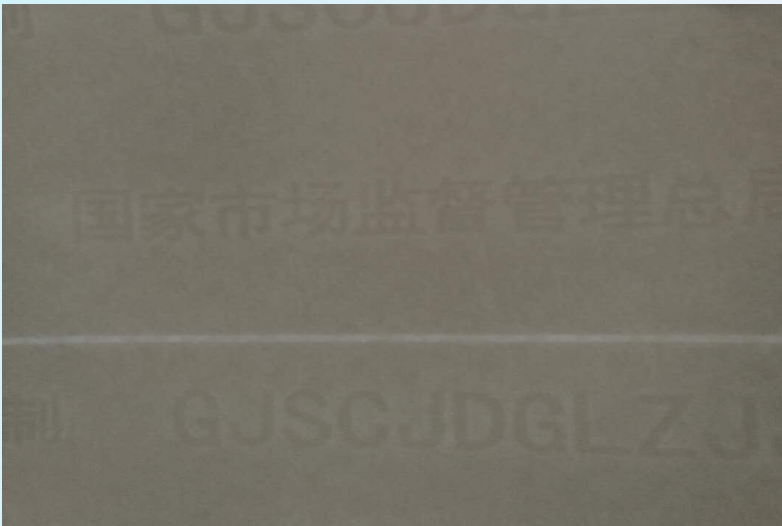
防伪标签与证卡

Security Labels & Cards



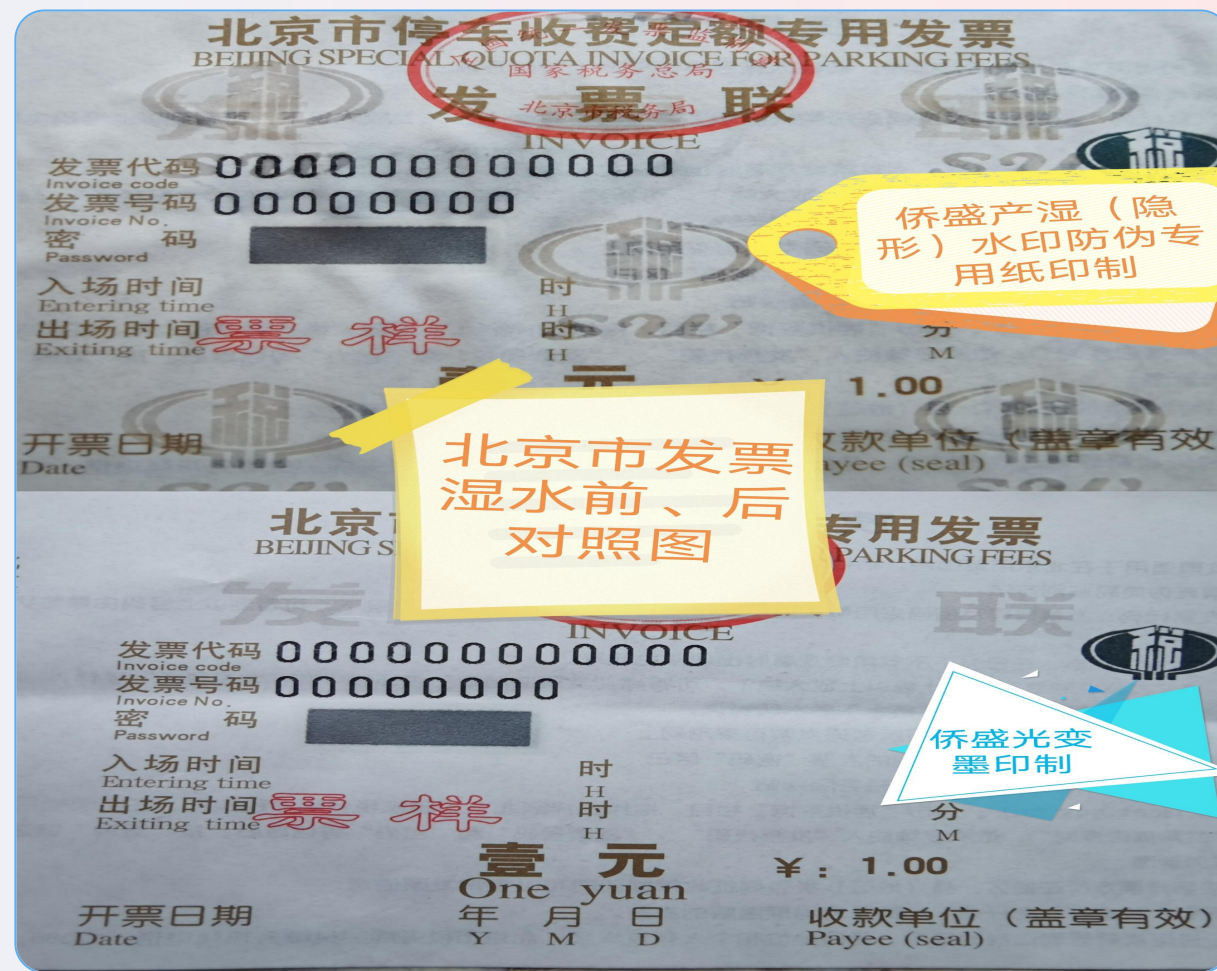
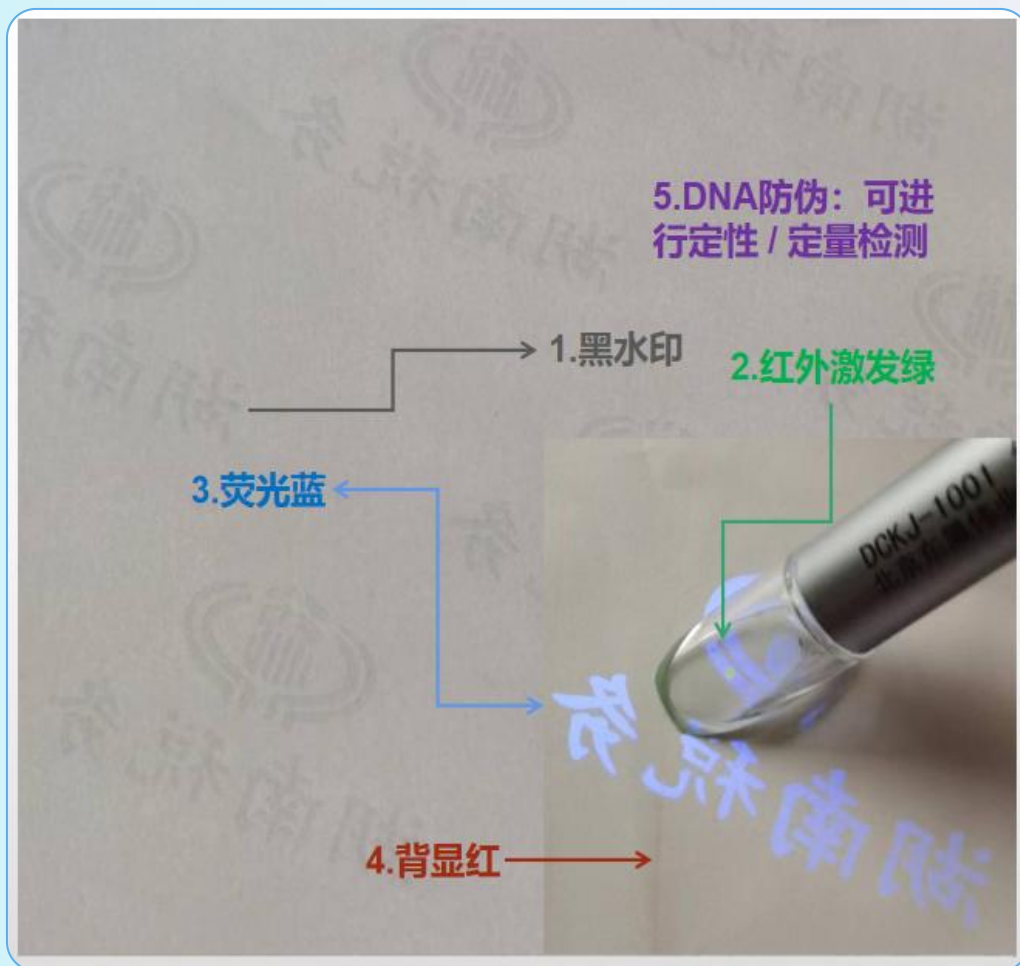
票证领域的复合防伪应用

Layered Security For Documents



防伪油墨在票证领域的应用

Security Inks For Tikits & Documents



湿水显影、隐形水印、红外激发、荧光蓝、背显红及DNA等多重特征，可形成分层核验体系。
Moisture-reveal, hidden watermark, infrared response, fluorescent blue, reverse-side red, and DNA features can be combined into a layered authentication system.

防伪油墨在票证领域的应用

Security Inks For Tikits & Documents



ABOUT
DETAILS

商品细节展示



日光变色油墨能吸收可见光从而激发物质本身的颜色。油墨外观浅色，受到太阳光或长波紫外光照射后呈现颜色，光源撤离后恢复成浅色。

紫外荧光油墨



印刷后图案或文字隐形，在紫外光照射下呈现出清晰光亮的荧光图案或文字，色彩鲜艳。该防伪检测方便，只要有一紫外光源或验钞机即可。

日光变色油墨随紫外光强弱显色或褪色；紫外荧光油墨在紫外光照射下呈现清晰、鲜艳的隐藏图文。

Photochromic ink develops or fades with ultraviolet exposure, while UV-fluorescent ink reveals clear, vivid hidden graphics under ultraviolet light.

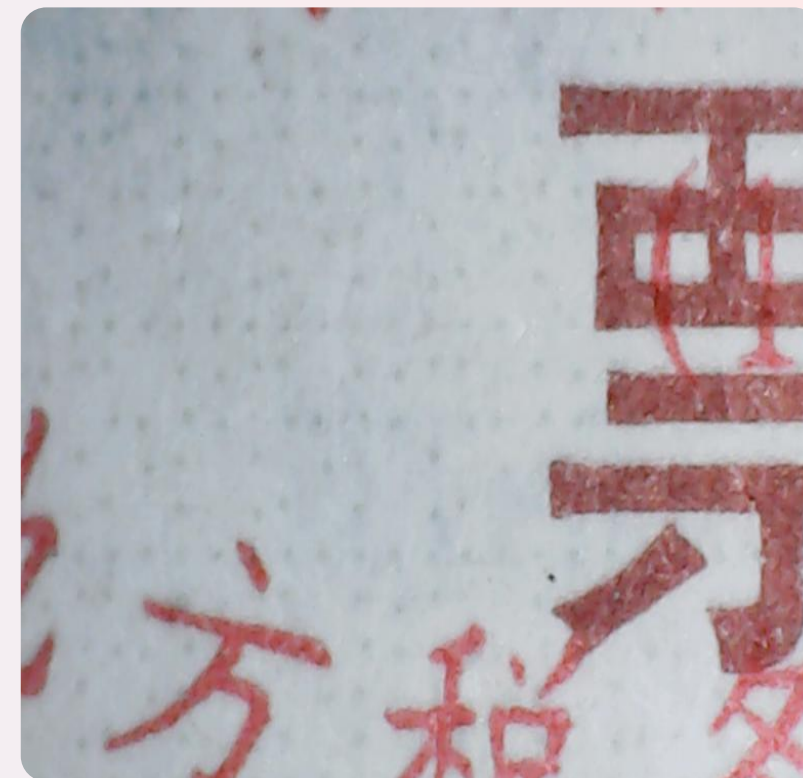
防伪油墨在票证领域的应用

Security Inks For Tikits & Documents

摩擦变色 (FRICTION-REACTIVE SECURITY INK)



红外吸收隐形

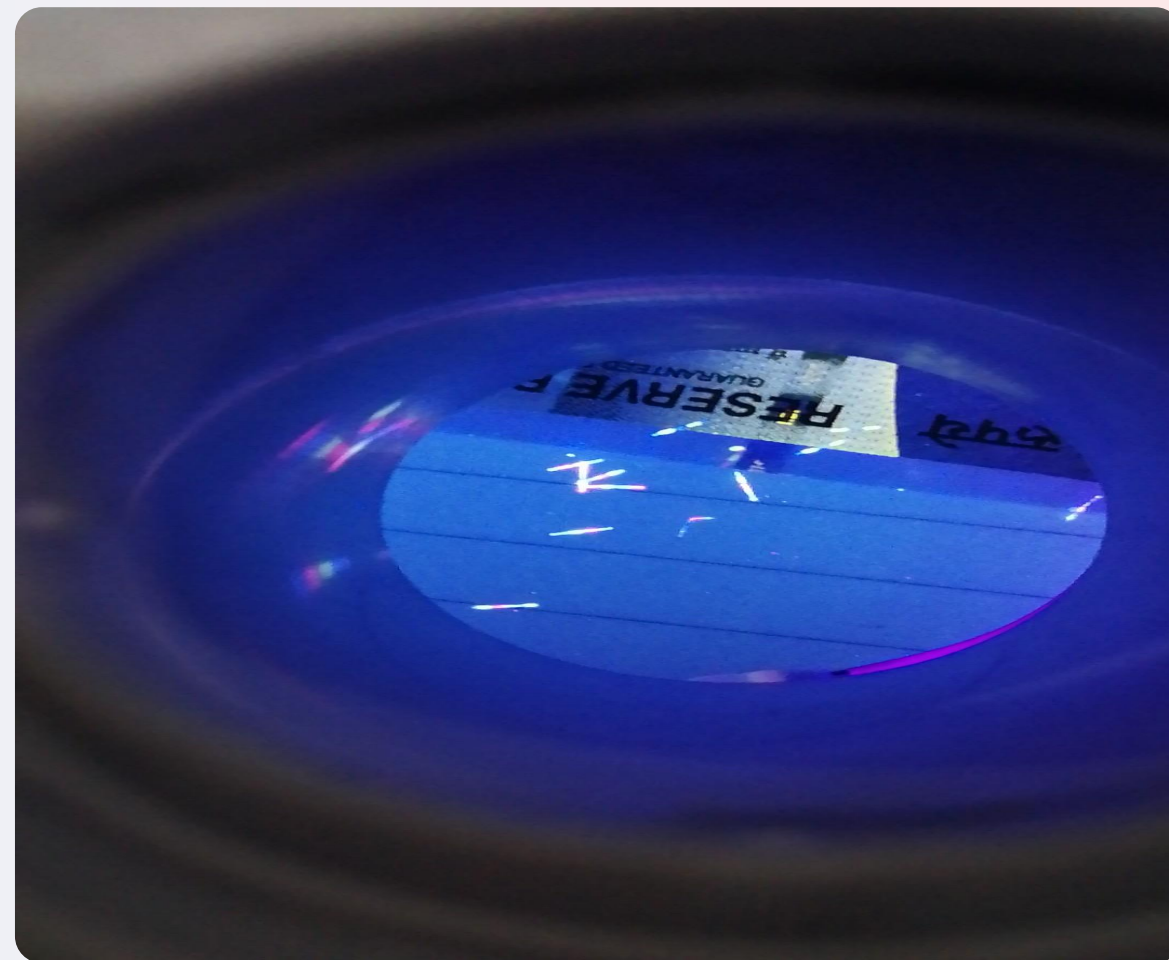
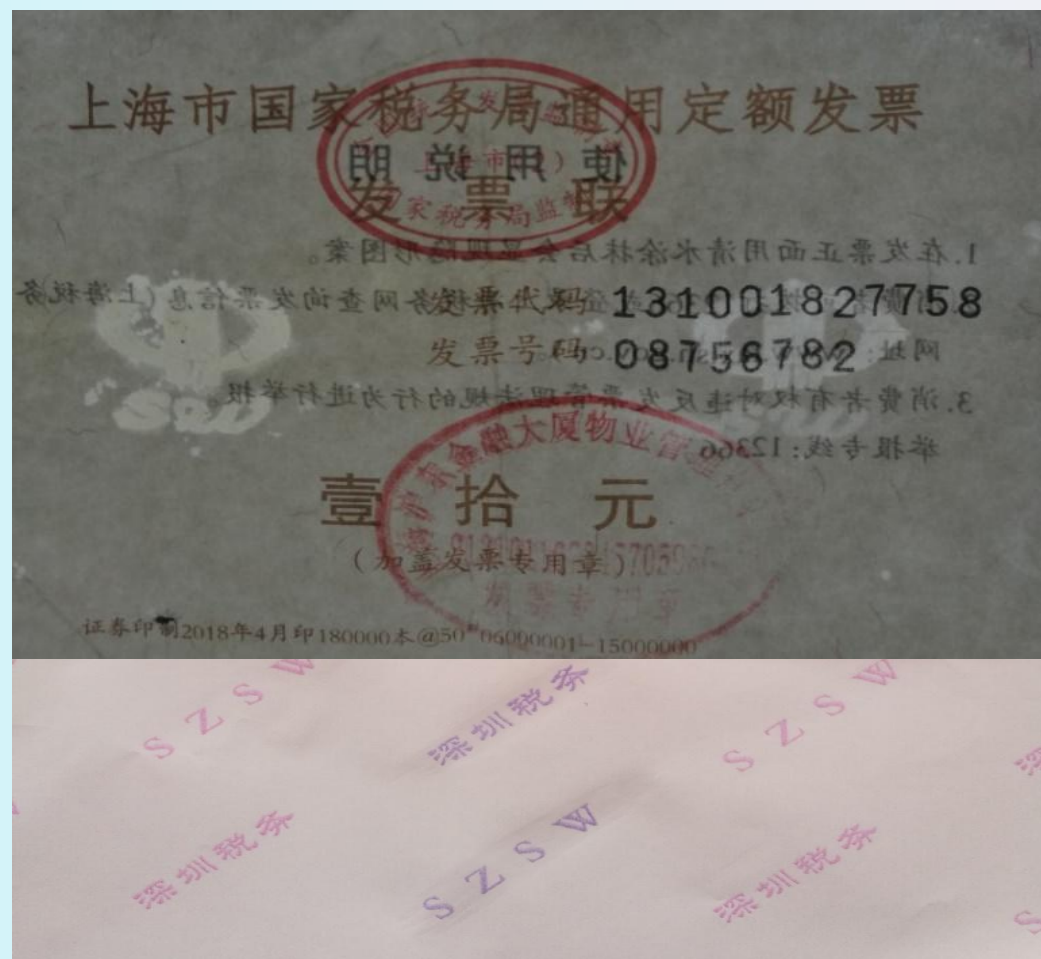


用白纸、硬币或光滑硬物摩擦数字及字符区域, 可显现红色印迹; 该特征便于现场快速核验。

Rubbing the printed numerals or character area with paper, a coin, or another smooth hard object reveals a red trace for quick field verification.

防伪油墨在票证领域的应用

Security Inks For Tikits & Documents



40°C+ 温变 + 荧光复合核验 Thermochromic + fluorescent verification

防伪油墨在票证领域的应用

Security Inks For Tikits & Documents



遇水或溶剂后，图文渗透扩散并改变颜色，过程不可逆。

Water or solvents trigger irreversible color diffusion and penetration.



01 支票可采用水溶性荧光防涂改油墨。

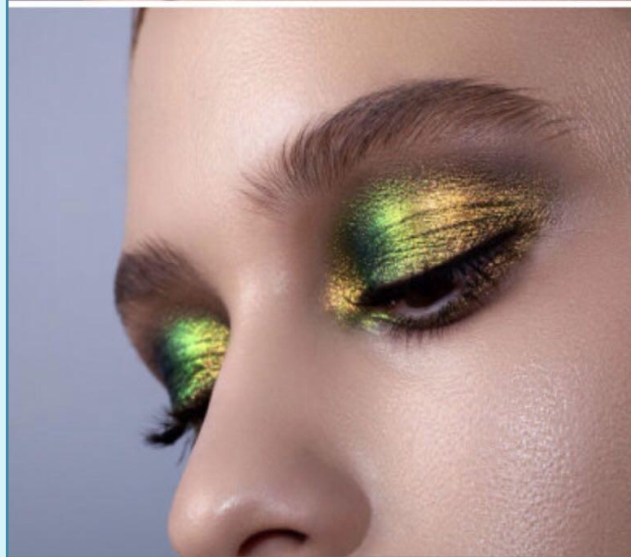
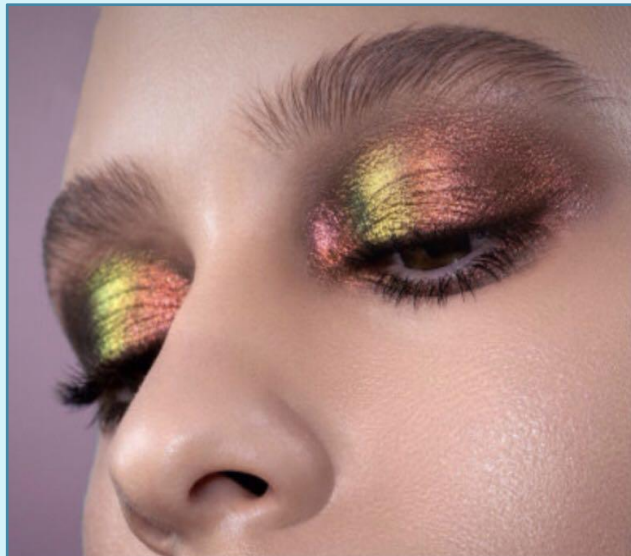
Cheques can use water-soluble fluorescent anti-alteration ink.

02 在松散纤维纸上凸版印刷，可形成正反面差异以验证真伪。

Letterpress printing on loose-fiber paper can create distinct front/back effects for authentication.

光变颜料在美妆行业的应用

Application of Optical Variable Pigments in the Cosmetics Industry



光变颜料在美甲行业的应用

Application of Optical Variable Pigments in the Nail Art Industry

细密磁粉 高光质地

细密闪粉碎钻般点缀指尖，仙气飘飘~



光变颜料在涂装行业的应用

Application of Optical Variable Pigments in the Coating Industry

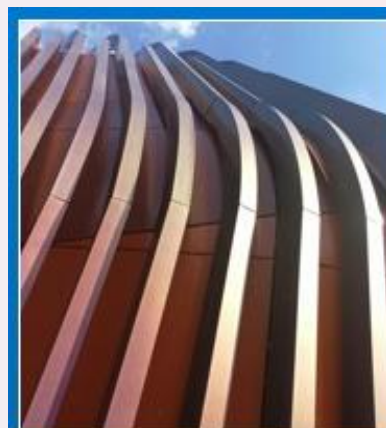


侨盛高亮、透明及半透明系列光变颜料可用于化妆品瓶体与高端装饰件喷涂，形成随角度变化的虹彩、珠光与金属质感。
Qiaosheng high-brightness, transparent, and semi-transparent pigments can be used in cosmetic-bottle and premium decorative coatings to create angle-dependent iridescent, pearlescent, and metallic effects.



光变颜料在涂装行业的应用

Application of Optical Variable Pigments in the Coating Industry



Factory Quality & Documentation System



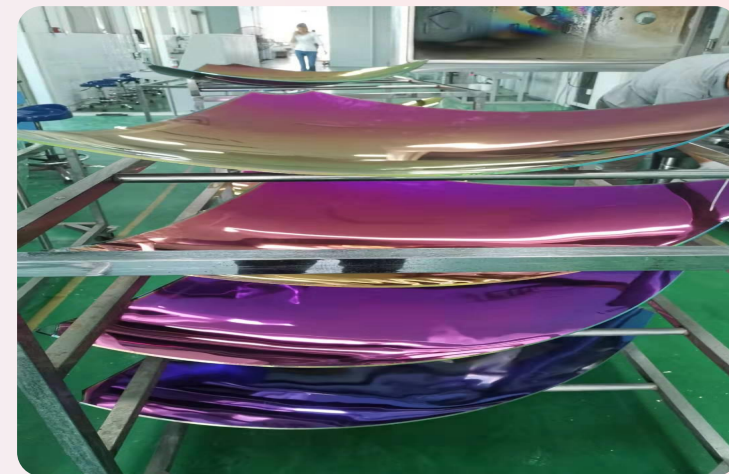
货币高安全技术研发中心

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A complete factory inspection and documentation system covering MSDS, COA, and TDS supports traceability, quality verification, and cross-border delivery.

光变颜料生产现场车间

Photochromic Pigment Production Workshop



标准化生产环境与多层薄膜制备能力。

Standardized production environment and multilayer thin-film processing capability.

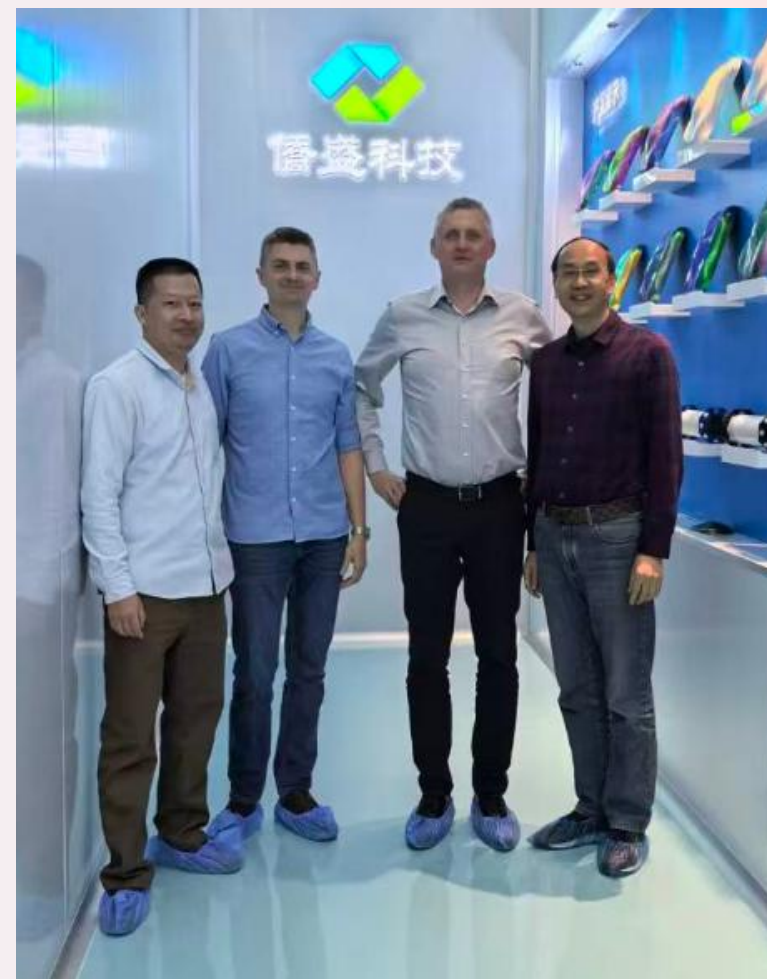
国际商务交流

International Business Engagement



2024年12月 · 泰国印钞厂考察

DEC 2024 · VISIT TO A THAI BANKNOTE PRINTING FACILITY



2025年11月 · 波兰印钞厂客人来访

NOV 2025 · POLISH BANKNOTE-PRINTING DELEGATION

侨盛科技发展规划

Qiaosheng Technology Development Plan

固定资产投资超3千万欧元，研制生产的光变颜料及配制而成的光变墨产品质量满足货币印制使用要求。

Fixed asset investment exceeds 30 million euros, and the quality of light-variable pigments developed and produced, as well as the light-variable inks formulated from them, meets the requirements for currency printing use.

