



联系方式

CONTACT INFORMATION

香港 Hong Kong: +852 2604 8262

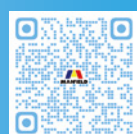
华南 South China: +86 755 3323 9899 - 3709

华东 East China: +86 519 8852 2298 - 2819 / 2802

越南 Vietnam: +84 22 9365 1222 - 107

万辉频道

MANFIELD CHANNELS



微信公众号
Wechat



万辉官网
Website

MANFIELD COATINGS FOR 3C & HOUSEHOLD APPLIANCE 万辉3C&小家电涂料



Manfield 萬輝塗料

Safety · ECO · Innovation · Society

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CORPORATE INTRODUCTION

公司简介

「万辉涂料有限公司」于1986年在香港成立，专业生产环保工业涂料，先后在深圳、广州、常州、越南及印尼建立生产基地，以迎合市场的发展和快速交付的需求。

万辉秉承安全、环保、创新、社会的品牌发展理念，实行严格的质量管理和生产体系。产品性能卓越，绿色环保，可满足多国的环保标准，并为客户在色彩趋势、涂料解决方案和施工指导等方面，提供有力的支持。三十多年来，万辉一直助力国际知名品牌客户，提供可靠、创新的涂料产品，目前已成为联想、华为、小米、格兰仕等公司的长期合作伙伴。

万辉拥有CNAS认证化学物质检测实验室，并配备雄厚的科研资源和经验丰富的研发团队，为客户提供量身定制的多元化涂装产品组合解决方案。公司产品涵盖溶剂型风干漆、烤漆、橡胶漆、PU、UV、油墨及对应全系列的水性产品，被广泛应用于3C产品、家用电器、汽车内外饰和玩具等行业。

此外，为配合国内手机市场的迅速增长，万辉与日本卡秀株式会社合资成立「卡秀万辉控股有限公司」，为客户提供高质量的产品和服务，提升客户产品竞争力，携手共创最佳效益。

Manfield was founded in Hong Kong since 1986, which specializes in manufacturing environmental-friendly industrial coatings. We have established factories in Shenzhen, Guangzhou, Changzhou, Vietnam and Indonesia to cater for the needs of market development and fast delivery.

Adhering to the brand concept of safety, ECO, innovation and society, Manfield implements strict quality management and production system to provide excellent and environmental-friendly products, complying standards from different countries. We also provide value added service like color trends forecast, paint application guidance and join product development to customers. For more than 30 years, we not only support most international famous brands such as Lenovo, Huawei, Xiaomi and Galanz, but also being their long-term business cooperative partner.

Manfield established CNAS certified chemical testing laboratory and experienced R&D teams to provide customers with high quality customized coating solutions. Our product matrix includes solvent-based air-drying coating, stoving enamel, soft touch coating, PU, UV, silkscreen and pad printing inks, and corresponding water-based series which are widely used in 3C, household appliance, automobiles and toys industry.

In addition, responding to the rapid growth of domestic mobile phone market, we set up a joint venture company CM Holding Limited with Cashew Japan, providing high quality products and services to the customers enhancing their product competitiveness to create the highest benefits.

MANFIELD

CORPORATE DEVELOPMENT
发展历程



1986

万辉涂料有限公司
Manfield Coatings Company Limited

于1986年在香港成立
Established in Hong Kong in 1986



1991

深圳松辉化工有限公司
Shenzhen Pinefield Chemical Enterprises Co., Ltd.

于1991年在深圳松岗成立, 作为华南地区销售运营中心
Established in Songgang, Shenzhen in 1991, as the sales department in South China
年产量可达15000吨 (合资公司“卡秀万辉”华南地区主要生产基地)
As a main factory of JV company CM Holding Limited in South China
The annual production capacity can reach 15000 tons.

万辉 (常州) 高新材料有限公司
Manfield (Changzhou) Innovative Materials Limited

于2007年在常州武进成立, 作为华东地区主要生产基地
Established in Wujin, Changzhou in 2014, as a main factory in East China
年产量可达8000吨
The annual production capacity can reach 8000 tons.

2007



万辉 (广州) 高新材料有限公司
Manfield (Guangzhou) Innovative Materials Limited

于2013年在广州增城成立, 作为华南地区主要生产基地
Established in Zengcheng, Guangzhou in 2013, as a main factory in South China
年产量可达15000吨
The annual production capacity can reach 15000 tons.

2013



万辉涂料越南有限公司
Manfield Coatings Viet Nam Company Limited

于2020年在宁平省嘉兴社成立, 作为服务东南亚地区的主要生产基地
Established in Gia Hung Commune, Ninh Binh in 2020, as a main factory in Southeast Asia
年产量可达5000吨
The annual production capacity can reach 5000 tons.

2020



CORPORATE VISION & MISSION
企业愿景与使命



BRAND CONCEPTS

品牌理念

SAFETY

安全

产品符合性：满足RoHS、REACH、PAHS等国际环保标准

合作伙伴：联想、华为、小米、格兰仕等公司的长期合作伙伴

实验室：中国合格评定国家认可委员会（CNAS）的认证实验室

Product Compliance: Comply to RoHS、REACH、PAHS worldwide testing standards

Business Partner: Being the long-term business cooperative partner of Lenovo, Huawei, Xiaomi and Galanz

Laboratory: In-house CNAS accredited laboratory

ECO

环保节能

研发团队：设有专业的水性研发团队，致力于环保水性涂料的研发和应用

环保产品：低VOC光固化涂料，环保水性涂料

R&D Team: With professional waterborne R&D team, focusing on the development and application of waterborne products

Environmental-friendly Products: Low VOC UV coating, environmental-friendly waterborne coating



INNOVATION

创新

特殊效果：温感/光感变色、水变透、水溶油、变色龙和彩虹效果等

功能性产品：长效抗污涂料、手感漆、抗菌抗病毒涂料

新型工艺技术：DOD覆膜工艺

Special Effects: Thermochromic effect, photochromic effect, hydrochromic effect, water soluble paint, chameleon effect and iridescent effect etc.

Functional Products: Long-term stain resistance coatings, soft touch coatings, antibacterial and antiviral coatings

New Technology: DOD laminating process

SOCIETY

社会责任

儿童村：华恩基金会成立于80年代，2004年华恩与美国角声基金会开始携手合作“中国儿童之家事工”项目，共投建6所儿童村，分别在国内福建三明、广西都安、四川绵阳、陕西咸阳和国外巴基斯坦、孟加拉

沙漠植树：2011年出资成立阿拉善盟源辉林牧有限公司，在位于内蒙古阿拉善左旗腾格里沙漠的马兰湖基地开始治沙。截止2022年6月，绿化沙漠面积总计13.6万亩，其中：马兰湖基地治理3.9万亩，哈希哈基地治理6.7万亩，超格图呼基地治理2万亩，腾格里镇治理1万亩

Children Home: Gratia Foundation Limited was established in 1980s, and jointly launched the “China Children Home” with CCHC (Chinese Christian Herald Crusades) in 2004. They have built 4 children's villages in Sanming Fujian, Duan Guangxi, Mianyang Sichuan, Xianyang Shanxi in China, and 2 children's villages in Pakistan and Bangladesh.

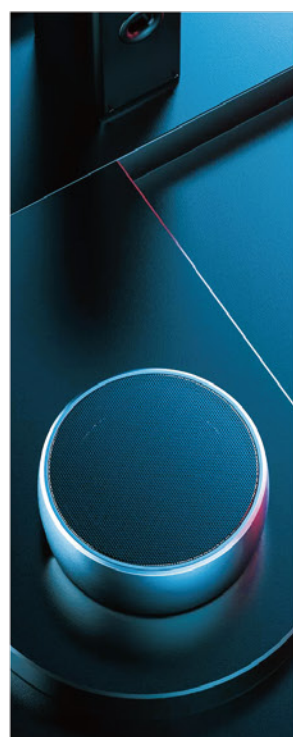
Planting Trees In Desert: Alxa League Springfield Forest Co., Ltd was established in 2011, and started planting trees in Malan Lake located in Tengger Desert, Zuo Qi, Alxa League, Inner Mongolia to control the desertification. Until June 2022, total area of planted desert was 136000 mu (1 mu = 666 m²), including 39000 mu in Malan Lake, 67000 mu in Hashha, 20000 mu in Chaogetuhu, and 10000 mu in Tengger Town.

CORE COMPETITIVENESS

核心竞争力

Diversified Products & Broad Market Application

多元化的产品和广泛的应用



多元化的产品：溶剂型风干漆、烤漆、橡胶漆、PU、UV、油墨及对应全系列的水性产品

Diversified Products: solvent-based air-dry coating, stoving enamel, soft touch coating, PU, UV, silkscreen and pad printing inks, and corresponding water-based products

应用市场：3C、家用电器、汽车内外饰、玩具等

Market Application: 3C, household appliance, automobiles and toys industry etc.



Reliable Quality Control System

可靠的质量管控体系

严格的进料控制、生产控制、出货检验，保证产品质量稳定

Stringent IQC, PQC and OQC to ensure product quality stability

完善的产品追溯系统：每批次产品均能追溯到其原料的批次及对应的检测报告，以确保所交付的产品满足客户要求

Systematic Traceability Records: Every batch of product is traceable to its ingredients and the corresponding IQC reports so as to ensure the product compliance of customer standards

产品满足RoHS、REACH、PAHS等国际环保标准、联想和Acer等知名品牌的测试标准

Products comply to RoHS, REACH, PAHS world-wide testing standards, Lenovo & Acer famous brands testing standards etc.

Efficient & Stable Supply

高效稳定的供应能力

五大生产基地：深圳、广州、常州、越南、印尼

Five factories in Shenzhen, Guangzhou, Changzhou, Vietnam and Indonesia

有效及系统性的原材料采购计划，确保及时供货

Effective and systematic raw material planning to ensure prompt delivery



PLASTIC COATINGS
塑胶漆



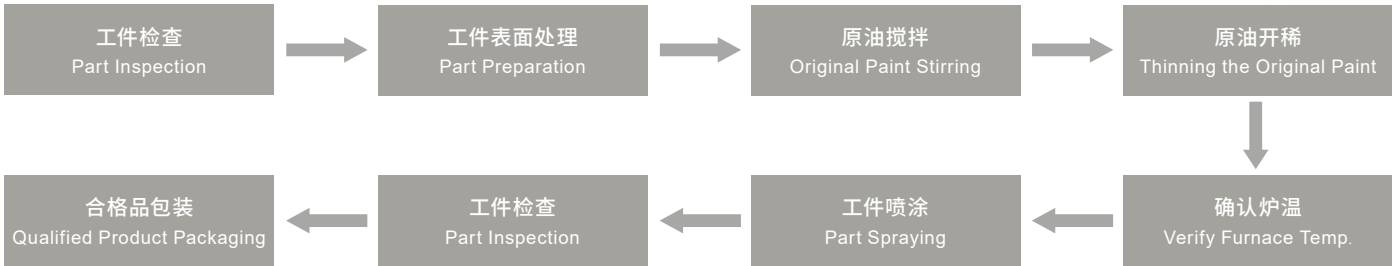
PLASTIC COATINGS

2K PU Plastic Coatings
双组分PU塑胶漆

- 适用于ABS/PC/ABS+PC等底材
Applicable on ABS/PC/ABS+PC substrates
- 优异的耐化学品性、耐磨性、耐候性及抗水解性能
Excellent chemical resistance, abrasion resistance, weathering resistance & hydrolysis resistance



施工工艺 Construction Process



溶剂型 Solvent Base

施工条件 Construction Requirements			
项目 Item	一涂调色PU 1-layer tinted PU	二涂PU 2-layer PU	二涂手感PU 2-layer soft-touch PU
施工粘度 Applicable Viscosity	NK-2#杯 9-10秒 NK-2# cup 9-10s	底漆: NK-2#杯 9-10秒 面漆: NK-2#杯 10-12秒 Basecoat:NK-2# cup 9-10s Topcoat:NK-2# cup 10-12s	
喷枪口径 Nozzle Diameter	1-1.5mm	1-1.5mm	1-1.5mm
喷枪气压 Nozzle Pressure	3-5Kg/cm ²	3-5Kg/cm ²	3-5Kg/cm ²
固化条件 Curing Condition	60-70℃/20-30min	60-70℃/20-30min	60-70℃/20-30min
干膜厚度 Dry Film Thickness	15-20um	底漆: 12-16um 面漆: 18-22um Basecoat:12-16um Topcoat:18-22um	底漆: 12-16um 面漆: 40-60um Basecoat:12-16um Topcoat:40-60um

技术指标 Technical Specifications

试验项目 Test Item	试验方法 Test Method	溶剂型PU Solvent Base PU
附着力 Adhension	百格法, 3M610胶带剥离试验 3M 610, cross-cut tape test	5B
硬度 Hardness	三菱Uni铅笔, 负重500g.f Mitsubishi Uni pencil, load 500g.f	HB-H
耐醇性 Alcohol Resistance	95%乙醇,500g/cm ² , 60次 (往返擦拭) /分, 素材无露底 95% ethanol, load 500g/cm ² , 60 strokes (back-and-forth wiping)/min, no substrate exposure	≥500次(strokes)
耐橡皮擦 Eraser Resistance	耐橡皮擦摩擦机, EF74橡皮, 500g/cm ² , 素材无露底 Rubber eraser abrasion tester, EF74 eraser, 500g/cm ² , no substrate exposure	≥1000次(strokes)
耐水煮 Boiling Steam Resistance	恒温水浴, 以80℃去离子水进行水煮30分钟 Boiling in deionized water at a constant temperature of 80℃ for 30 minutes	5B/漆膜表面无异常 5B/not change
RCA磨耗性 RCA Resistance	RCA纸带测试, 负重175g.f,循环摩擦测试, 素材无露底 RCA paper tape test, load 175g.f, cyclic friction test, no substrate exposure	50-150次(strokes)
Taber耐磨性 Taber Abrasion Resistance	Taber耐磨仪, 砂轮CS-10,负重500g*2/循环, 素材无露底 Taber abrasion tester, CS-10 abrasive wheel, load 175g*2/cycle, no substrate exposure	500圈(cycles)
水滴角测试 Water Contact Angle Measurement	垂直放置于水滴角测试仪, 取三点测试, 计算平均值 Placed vertically in the contact angle goniometer, measured at three points, and the average value was calculated	≥100°
耐候性 Weathering Resistance	室温, QUV测试: 100小时 Room temperature, QUV test: 100 hours	ΔE ≤2.0
耐冷热冲击 Thermal Shock Resistance	调温调湿箱 (室温×1H, -40℃×1H, 80℃×85RH×1H, 室温1H),15个循环 High-low temp. cycles tester (room temp.×1H, -40℃×1H,80℃×85RH×1H, room temp.×1H), 15 cycles	5B/漆膜表面无异常 5B/not change
耐湿热性 High Temperature & Humidity Resistance	50℃×95%RH×72H后, 进行附着力测试和外观检视 Adhesion test and visual inspection after 50℃×95%RH×72H	5B/漆膜表面无异常 5B/not change

水性 Water Base

施工条件 Construction Requirements			
项目 Item	一涂调色PU 1-layer tinted PU	二涂PU 2-later PU	二涂手感PU 2-layer soft-touch PU
施工粘度 Applicable Viscosity	zahn 3#杯 25-45秒 zahn 3# cup 25-45s	底漆: NK-3#杯 25-35秒 面漆: NK-3#杯 15-25秒 Basecoat:NK-3# cup 25-35s Topcoat:NK-3# cup 15-25s	底漆: NK-3#杯 25-35秒 面漆: NK-3#杯 25-35秒 Basecoat:NK-3# cup 25-35s Topcoat:NK-2# cup 25-35s
喷枪口径 Nozzle Diameter	1.2-1.5mm	1.2-1.5mm	1.2-1.5mm
喷枪气压 Nozzle Pressure	4-6Kg/cm ²	4-6Kg/cm ²	4-6Kg/cm ²
固化条件 Curing Condition	60-70℃/20-30min下线,60-70℃/6-8H加烤或常温放置>7天以上 Offline after 20-30min at 60-70℃, then additional baking at 60-70℃ for 6-8 hours, or store at room temperature for 7 days or more		
干膜厚度 Dry Film Thickness	12-18um	底漆: 12-16um 面漆: 25-35um Basecoat:12-16um Topcoat:25-35um	底漆: 12-16um 面漆: 25-35um Basecoat:12-16um Topcoat:25-35um

技术指标 Technical Specifications

试验项目 Test Item	试验方法 Test Method	水性PU Water Base PU
附着力 Adhension	百格法, 3M610胶带剥离试验 3M 610, cross-cut tape test	5B
硬度 Hardness	三菱Uni铅笔, 负重500g.f Mitsubishi Uni pencil, load 500g.f	≥HB
耐醇性 Alcohol Resistance	95%乙醇,500g/cm ² , 60次 (往返擦拭) /分, 素材无露底 95% ethanol, load 500g/cm ² , 60 strokes (back-and-forth wiping)/min, no substrate exposure	≥500次(strokes)
耐橡皮擦 Eraser Resistance	耐橡皮擦摩擦机, EF74橡皮, 500g/cm ² , 素材无露底 Rubber eraser abrasion tester, EF74 eraser, 500g/cm ² , no substrate exposure	500-1000次(strokes)
耐水煮 Boiling Steam Resistance	恒温水浴, 以80℃去离子水进行水煮30分钟 Boiling in deionized water at a constant temperature of 80℃ for 30 minutes	5B/漆膜表面无异常 5B/not change
RCA磨耗性 RCA Resistance	RCA纸带测试, 负重175g.f,循环摩擦测试, 素材无露底 RCA paper tape test, load 175g.f, cyclic friction test, no substrate exposure	30-100次(strokes)
Taber耐磨性 Taber Abrasion Resistance	Taber耐磨仪, 砂轮CS-10,负重500g*2/循环, 素材无露底 Taber abrasion tester, CS-10 abrasive wheel, load 500g*2/cycle, no substrate exposure	500圈(cycles)
水滴角测试 Water Contact Angle Measurement	垂直放置于水滴角测试仪, 取三点测试, 计算平均值 Placed vertically in the contact angle goniometer, measured at three points, and the average value was calculated	/
耐候性 Weathering Resistance	室温, QUV测试: 100小时 Room temperature, QUV test: 100 hours	ΔE ≤2.0
耐冷热冲击 Thermal Shock Resistance	调温调湿箱 (室温×1H, -40℃×1H, 80℃×85RH×1H, 室温1H),15个循环 High-low temp. cycles tester (room temp.×1H, -40℃×1H,80℃×85RH×1H, room temp.×1H), 15 cycles	5B/漆膜表面无异常 5B/not change
耐湿热性 High Temperature & Humidity Resistance	50℃×95%RH×72H后, 进行附着力测试和外观检视 Adhesion test and visual inspection after 50℃×95%RH×72H	5B/漆膜表面无异常 5B/not change

UV Curing Coatings

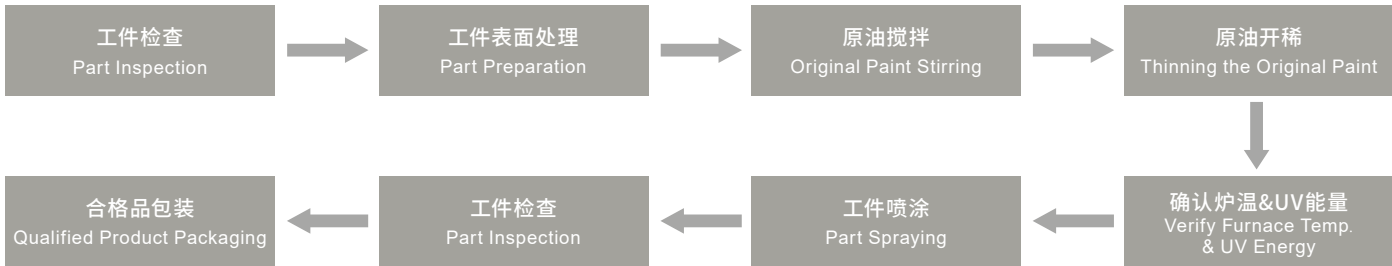
光固化涂料

- 适用于ABS/PC/ABS+PC等底材
Applicable on ABS/PC/ABS+PC substrates
- 高硬度 & 高耐磨、优异的耐化学品性、UV光直接固化，施工能耗低
High hardness & wear resistance, excellent chemical resistance, UV curing with low energy consumption during application



施工工艺

Construction Process



溶剂型

Solvent Base

施工条件

Construction Requirements

项目 Item	一涂调色UV 1-layer tinted UV	二涂UV 2-later UV	二涂手感UV 2-layer soft-touch UV
施工粘度 Applicable Viscosity	NK-2#杯 9-10秒 NK-2# cup 9-10s	底漆: NK-2#杯 9-10秒 Basecoat:NK-2# cup 9-10s	面漆: NK-2#杯 8.5-9.5秒 Topcoat:NK-2# cup 8.5-9.5s
喷枪口径 Nozzle Diameter	1-1.5mm	1-1.5mm	
喷枪气压 Nozzle Pressure	3-5Kg/cm ²	3-5Kg/cm ²	
固化条件 Curing Condition	55-60°C/5-8min 800-1000mj/cm ²	底漆(Basecoat): 60-70°C/20-30min 面漆(Topcoat): 55-60°C/5-8min 800-1000mj/cm ²	
干膜厚度 Dry Film Thickness	12-14um	底漆: 8-12um 面漆: 18-22um Basecoat:8-12um Topcoat:18-22um	

技术指标

Technical Specifications

试验项目 Test Item	试验方法 Test Method	溶剂型UV Solvent Base UV
附着力 Adhension	百格法, 3M610胶带剥离试验 3M 610, cross-cut tape test	5B
硬度 Hardness	三菱Uni铅笔, 负重500g.f Mitsubishi Uni pencil, load 500g.f	H-2H
耐醇性 Alcohol Resistance	95%乙醇,500g/cm ² , 60次(往返擦拭)/分, 素材无露底 95% ethanol, load 500g/cm ² , 60 strokes (back-and-forth wiping)/min, no substrate exposure	≥500次(strokes)
耐橡皮擦 Eraser Resistance	耐橡皮擦摩擦机, EF74橡皮, 500g/cm ² , 素材无露底 Rubber eraser abrasion tester, EF74 eraser, 500g/cm ² , no substrate exposure	≥1000次(strokes)
耐水煮 Boiling Steam Resistance	恒温水浴, 以80°C去离子水进行水煮30分钟 Boiling in deionized water at a constant temperature of 80°C for 30 minutes	5B/漆膜表面无异常 5B/not change
RCA磨耗性 RCA Resistance	RCA纸带测试, 负重175g.f,循环摩擦测试, 素材无露底 RCA paper tape test, load 175g.f, cyclic friction test, no substrate exposure	50-300次(strokes)
Taber耐磨性 Taber Abrasion Resistance	Taber耐磨仪, 砂轮CS-10,负重500g*2/循环, 素材无露底 Taber abrasion tester, CS-10 abrasive wheel, load 500g*2/cycle, no substrate exposure	500圈(cycles)
水滴角测试 Water Contact Angle Measurement	垂直放置于水滴角测试仪, 取三点测试, 计算平均值 Placed vertically in the contact angle goniometer, measured at three points, and the average value was calculated	≥100°
耐候性 Weathering Resistance	室温, QUV测试: 100小时 Room temperature, QUV test: 100 hours	ΔE ≤2.0
耐冷热冲击 Thermal Shock Resistance	调温调湿箱(室温×1H, -40°C×1H, 80°C×85RH×1H, 室温1H),15个循环 High-low temp. cycles tester (room temp.×1H, -40°C×1H,80°C×85RH×1H, room temp.×1H), 15 cycles	5B/漆膜表面无异常 5B/not change
耐湿热性 High Temperature & Humidity Resistance	50°C×95%RH×72H后, 进行附着力测试和外观检视 Adhesion test and visual inspection after 50°C×95%RH×72H	5B/漆膜表面无异常 5B/not change

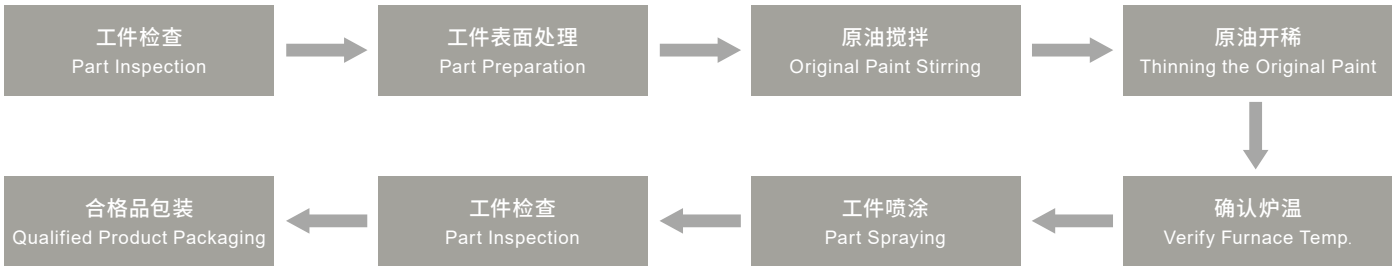
1K Plastic Coatings

单组分塑胶漆

- 适用于ABS/PC/ABS+PC/HIPS/PS等底材
Applicable on ABS/PC/ABS+PC/HIPS/PS substrates
- 快干、良好的耐酒精 & 耐刮擦性能
Fast-drying, good alcohol resistance & scratch resistance



施工工艺 Construction Process



施工条件 Construction Requirements

项目 Item	通用型（溶剂型） General Solvent Base Stoving Enamel	通用型（水性） General Water Base Stoving Enamel
施工粘度 Applicable Viscosity	NK-2#杯 9-9.5秒 NK-2# cup 9-9.5s	zahn-3#杯 30-40秒 zahn-3# cup 30-40s
喷枪口径 Nozzle Diameter	1-1.2mm	1.2-1.5mm
喷枪气压 Nozzle Pressure	3-5Kg/cm ²	4-6Kg/cm ²
固化条件 Curing Condition	55-70°C/10-20min	55-70°C/20-30分钟下线, 55-70°C/2-4小时加烤 Offline after 20-30min at 55-70°C, then additional baking at 55-70°C for 2-4 hours
干膜厚度 Dry Film Thickness	8-12um	8-12um

技术指标 Technical Specifications

试验项目 Test Item	试验方法 Test Method	溶剂型1K Solvent Base 1K	水性1K Water Base 1K
附着力 Adhesion	百格法, 3M610胶带剥离试验 3M 610, cross-cut tape test	5B	5B
硬度 Hardness	三菱Uni铅笔, 负重500g.f Mitsubishi Uni pencil, load 500g.f	HB-F	HB-F
耐醇性 Alcohol Resistance	95%乙醇, 500g/cm ² , 60次(往返擦拭)/分, 素材无露底 95% ethanol, 500g/cm ² , 60 strokes (back-and-forth wiping)/min, no substrate exposure	200次(strokes)	200次(strokes)
耐橡皮擦 Eraser Resistance	耐橡皮摩擦机, EF74橡皮, 500g/cm ² , 素材无露底 Rubber eraser abrasion tester, EF74 eraser, 500g/cm ² , no substrate exposure	500次(strokes)	500次(strokes)
RCA磨耗性 RCA Resistance	RCA纸带测试, 负重175g.f, 循环摩擦测试, 素材无露底 RCA paper tape test, load 175g.f, cyclic friction test, no substrate exposure	10-20次(strokes)	<10次(strokes)
耐水煮 Boiling Steam Resistance	恒温水浴, 以80°C去离子水进行水煮30分钟 Boiling in deionized water at a constant temperature of 80°C for 30 minutes	5B/漆膜表面无异常 5B/not change	
耐冷热冲击 Thermal Shock Resistance	调温调湿箱(室温1H, -40°C×1H, 80°C×85%RH×1H, 室温1H), 15个循环 High-low temp. cycles tester (room temp. ×1H, -40°C×1H, 80°C×85%RH×1H, room temp. ×1H), 15 cycles	5B/漆膜表面无异常 5B/not change	
耐湿热性 High Temperature & Humidity Resistance	50°C×95%RH×72H后, 进行附着力测试和外观检视 Adhesion test and visual inspection after 50°C×95%RH×72H	5B/漆膜表面无异常 5B/not change	

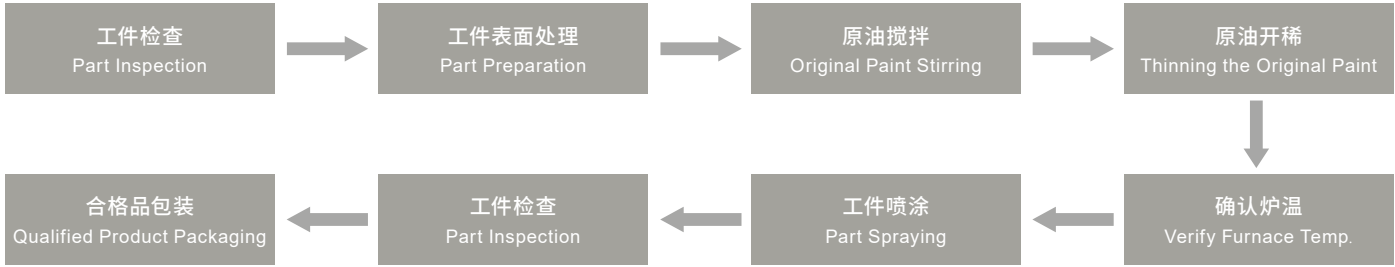
STOVING ENAMEL
烤漆



STOVING ENAMEL

- 适用于镁铝合金、电木、铜、金属及合金等底材
Applicable on magnesium-aluminum alloy, bakelite, copper, metal & mazak substrates
- 高金属质感、优异的耐蒸煮和耐RCA性能
High metallic effect, excellent steam resistance & RCA resistance

施工工艺 Construction Process



溶剂型 Solvent Base

施工条件 Construction Requirements

项目 Item	通用型底漆 General Basecoat	高性能烤漆 High Performance Stoving Enamel	耐RCA烤漆 RCA Resistant Stoving Enamel	高金属感烤漆 High Metallic Effect Stoving Enamel
施工粘度 Applicable Viscosity	NK-2#杯 9-12秒 NK-2# cup 9-12s	NK-2#杯 9-12秒 NK-2# cup 9-12s	NK-2#杯 9-12秒 NK-2# cup 9-12s	NK-2#杯 8.5-10秒 NK-2# cup 8.5-10s
喷枪口径 Nozzle Diameter	1-1.5mm	1-1.5mm	1-1.5mm	1-1.5mm
喷枪气压 Nozzle Pressure	2.5-4Kg/cm ²	2.5-4Kg/cm ²	2.5-4Kg/cm ²	2.5-4Kg/cm ²
固化条件 Curing Condition	140°C/25-30min	单层(1-layer): 140°C/20-30min或160°C/15min 多层(Mutilayer): 底漆&中漆(Basecoat & Mid-coat): 120°C/20-30min或140°C/15min 面漆(Topcoat): 140°C/20-30min或160°C/15min		
干膜厚度 Dry Film Thickness	10-15um	15-25um	15-25um	5-10um

技术指标 Technical Specifications

试验项目 Test Item	试验方法 Test Method	通用型底漆 General Basecoat	烤漆系列 Stoving Enamel
附着力 Adhension	百格法, 3M610胶带剥离试验 3M 610, cross-cut tape test	0-1级 (level)	0-1级 (level)
硬度 Hardness	三菱Uni铅笔, 负重500g.f Mitsubishi Uni pencil, load 500g.f	HB-F	H-3H
耐醇性 Alcohol Resistance	95%乙醇,负重500g.f, 60次(往返擦拭)/分, 素材无露底 95% ethanol, load 500g.f, 60 strokes (back-and-forth wiping)/min, no substrate exposure	/	500次(strokes)
RCA磨损性 RCA Resistance	RCA纸带测试, 负重175g.f,循环摩擦测试, 素材无露底 RCA paper tape tester, load 175g.f, cyclic friction test, no substrate exposure	/	20-200次(strokes)
耐水煮 Boiling Steam Resistance	恒温水浴, 以100°C去离子水进行水煮 Boiling in deionized water at a constant temperature of 100°C	30-60min	30-120min
耐冲击 Impact Resistance	冲击试验仪,1Kg重锤从50cm高度自由落下撞击试板 Impact tester, 1Kg weight drop freely from a height of 50cm to strike the sample	正冲/反冲 Forward / Reverse	正冲 Forward
弯折实验 Bending Test	圆锥弯曲试验, 将试板围绕圆柱轴弯曲180°, 观察漆膜开裂处距离轴小端最远的距离 Cone bending test, bends the sample around the cylindrical axis to 180°, and observes the maximum distance from the cracking point of the film to the small end of the axis	2mm	3mm
耐盐雾 Salt Spray Resistance	中性盐雾试验, 5% NaCl溶液, PH值6.5-7.2, 温度为35°C Neutral salt spray test, 5% NaCl, PH6.5 - 7.2, 35°C	100-300小时 100-300 hours	48-120小时 48-120hours
耐湿热性 High Temperature & Humidity Resistance	60°C×90%RH×48H后, 进行附着力测试和外观检视 Adhesion test and visual inspection after 60°C×90%RH×48H	5B/漆膜表面无异常 5B/not change	

水性 Water Base

施工条件 Construction Requirements		
项目 Item	通用型烤漆 General Stoving Enamel	耐蒸煮烤漆 Steam Resistant Stoving Enamel
施工粘度 Applicable Viscosity	NK-2#杯 20-30秒 NK-2# cup 20-30s	NK-2#杯 20-30秒 NK-2# cup 20-30s
喷枪口径 Nozzle Diameter	2-3mm	2-3mm
喷枪气压 Nozzle Pressure	3-4.5Kg/cm²	3-4.5Kg/cm²
固化条件 Curing Condition	预热(Preheating): 60-80°C/5-10min 烘烤(Baking): 150-160°C/30min	60-80°C/5-10min 预热(Preheating) 单层烘烤(1-layer baking): 160°C-170°C/25-30min 多层烘烤(Mutilayer baking): 底漆及中漆(Basecoat & Mid-coat): 130°C-140°C/25-30min 面漆(Topcoat): 160°C-170°C/25-30min
干膜厚度 Dry Film Thickness	15-25um	15-25um

技术指标 Technical Specifications

试验项目 Test Item	试验方法 Test Method	烤漆系列 Stoving Enamel
附着力 Adhension	百格法, 3M610胶带剥离试验 3M 610, cross-cut tape test	0-1级 (level)
硬度 Hardness	三菱Uni铅笔, 负重500g.f Mitsubishi Uni pencil, load 500g.f	H-2H
耐醇性 Alcohol Resistance	95%乙醇,负重500g.f, 60次(往返擦拭) /分, 素材无露底 95% ethanol, load 500g.f, 60 strokes (back-and-forth wiping)/min, no substrate exposure	200次(strokes)
RCA磨耗性 RCA Resistance	RCA纸带测试, 负重175g.f,循环摩擦测试, 素材无露底 RCA paper tape tester, load 175g.f, cyclic friction test, no substrate exposure	20-30次(strokes)
耐水煮 Boiling Steam Resistance	恒温水浴, 以100°C去离子水进行水煮 Boiling in deionized water at a constant temperature of 100°C	20-120min
耐冲击 Impact Resistance	冲击试验仪,1Kg重锤从50cm高度自由落下撞击试板 Impact tester, 1Kg weight drop freely from a height of 50cm to strike the sample	正冲 Forward
弯折实验 Bending Test	圆锥弯曲试验, 将试板围绕圆柱轴弯曲180°, 观察漆膜开裂处距离轴小端最远的距离 Cone bending test, bends the sample around the cylindrical axis to 180°, and observes the maximum distance from the cracking point of the film to the small end of the axis	3mm
耐盐雾 Salt Spray Resistance	中性盐雾试验, 5% NaCl溶液, PH值6.5-7.2, 温度为35°C Neutral salt spray test, 5% NaCl , PH6.5 - 7.2, 35°C	48-120小时 48 - 120 hours
耐湿热性 High Temperature & Humidity Resistance	60°C×90%RH×48H后, 进行附着力测试和外观检视 Adhesion test and visual inspection after 60°C×90%RH×48H	5B/漆膜表面无异常 5B/not change



Primer for Special Substrates

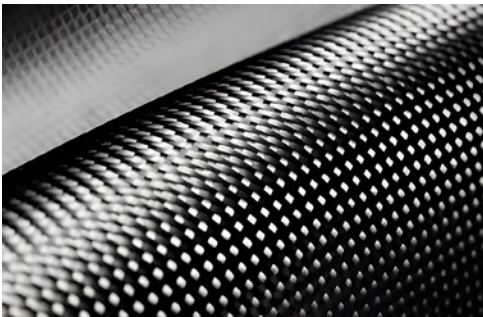
特殊基材底漆

- 适用于SS、PPS/PBT、PA、PA+GF等特殊底材

Applicable on SS, PPS/PBT, PA and PA+GF substrates

- 增强底漆与特殊基材之间的附着力, 提升涂层的稳定性

Enhance the adhesion between the primer and special substrates, and improve the stability of the coating



金属前处理工艺 Metal Pre-treatment Process



施工条件 Construction Requirements

项目 Item	通用型(溶剂型) General Solvent Base Stoving Enamel	通用型(水性) General Water Base Stoving Enamel
施工粘度 Applicable Viscosity	NK-2#杯 9-9.5秒 NK-2# cup 9-9.5s	NK-3#杯 30-40秒 NK-3# cup 30-40s
喷枪口径 Nozzle Diameter	1-1.2mm	1.2-1.5mm
喷枪气压 Nozzle Pressure	3-5Kg/cm²	4-6Kg/cm²
固化条件 Curing Condition	60-80°C/20-30min	55-70°C/20-30分钟下线, 55-70°C/2-4小时加烤 Offline after 20-30min at 55-70°C, then additional baking at 55-70°C for 2-4 hours
干膜厚度 Dry Film Thickness	15-20um	8-12um



Soft Skin Haptic Feel UV Coatings

纳米肤感UV涂料

- 适用于ABS/PC/ABS+PC、镁铝合金、玻纤及尼龙等底材

Applicable on ABS/PC/ABS+PC, magnesium-aluminum alloy, GF and PA substrates



“婴童肌肤”般触感
Baby Skin Soft Touch



漆面“柔润极哑”
Velvety-Soft & Ultra-matte Surface



不回粘不掉漆
Non-sticky & Peeling Resistance

产品优势 Product Advantages



超哑雾面
Ultra-matte Haze



肌肤触感
Skin-like Texture



抗指纹
Anti-fingerprint



2H硬度
2H Hardness



耐磨耐刮
Good Wear & Scratch Resistance



易清洁
Easy to Clean



耐湿热耐干热
Humidity & Heat Resistance



耐化学腐蚀
Chemical Resistance



牢固漆膜附着
Good Adhesion



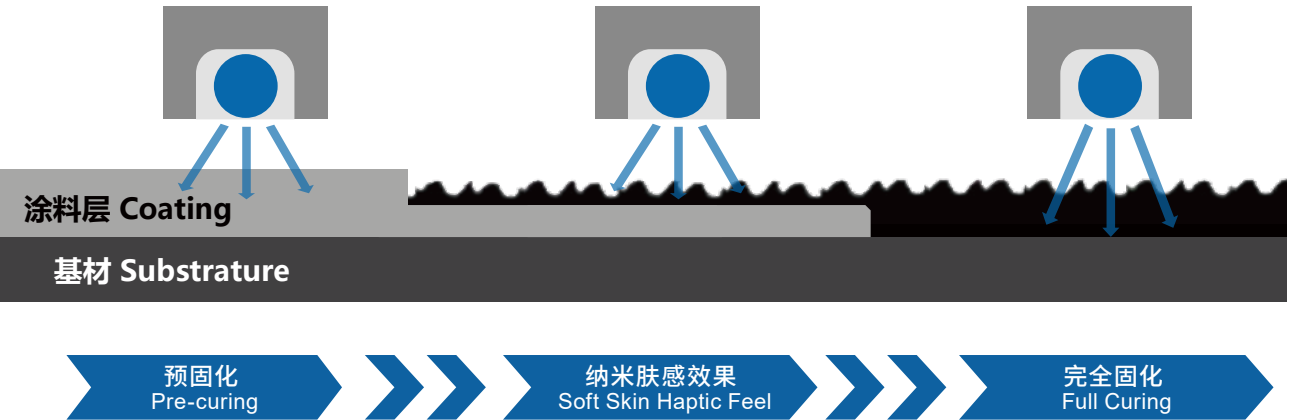
无醛无味
Green & Odorless

施工工艺 Construction Process

经过LED光源，
涂料表层固化
cured via LED light exposure

经过准分子灯，
涂层形成褶皱消光
micro-wrinkled & matte finish
through excimer lamp treatment

经过UV光源，
涂层完全固化
fully cured after UV light exposure



溶剂型 Solvent Base

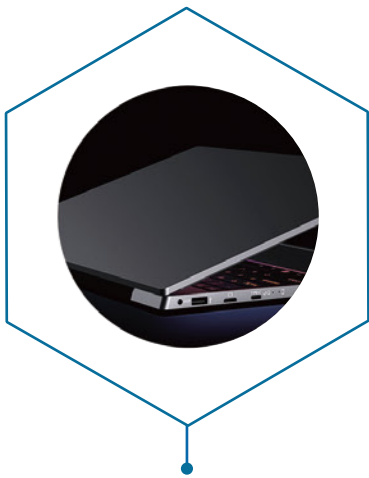
施工条件 Construction Requirements	
项目 Item	二涂纳米肤感UV 2-layer Soft Skin Haptic Feel UV
施工粘度 Applicable Viscosity	底漆: NK-2#杯 9-10秒 面漆: NK-2#杯 8.5-9.5秒 Basecoat:NK-2 cup 9-10s Topcoat:NK-2# cup 8.5-9.5s
喷枪口径 Nozzle Diameter	1-1.5mm
喷枪气压 Nozzle Pressure	3-5KG
固化条件 Curing Condition	底漆: 60-70°C/20-30min 面漆: 55-60°C/5-8min 准分子灯固化 800-1000mj/cm² UV汞灯固化 Basecoat:60-70°C/20-30min Topcoat:55-60°C/5-8min excimer lamp curing 800-1000mj mj/cm² UV light curing
干膜厚度 Dry Film Thickness	底漆: 8-12um 面漆: 18-22um Basecoat:8-12um Topcoat:18-22um

性能对比 Performance Comparison		纳米肤感UV Soft Skin Haptic Feel UV	手感UV Soft Touch UV
试验项目 Test Item	试验方法 Test Method		
膜厚 Film Thickness	膜厚仪 Film Thickness Analyzer	28±3 um	20-24 um
附着力 Adhension	百格法, 3M610胶带剥离试验 3M 610, cross-cut tape test	≥4B	≥4B
光泽度 Gloss	光泽仪, 60°的测量角度 Glossmeter, 60° measurement angle	0.5-3Gs	光泽可调 Adjustable gloss
硬度 Hardness	三菱Uni铅笔, 负重500g.f Mitsubishi Uni pencil, load 500g.f	2H	H
耐橡皮擦 Eraser Resistance	耐橡皮擦摩擦机, EF74橡皮, 500g/cm², 素材无露底 Rubber eraser abrasion tester, EF74 eraser, 500g/cm², no substrate exposure	≥3000次(strokes)	≥1000次(strokes)
RCA磨耗性 RCA Resistance	RCA纸带测试, 负重175g.f,循环摩擦测试, 素材无露底 RCA paper tape test, load 175g.f, cyclic friction test, no substrate exposure	400次(strokes)	100次(strokes)
水滴角测试 Water Contact Angle Measurement	垂直放置于水滴角测试仪, 取三点测试, 计算平均值 Placed vertically in the contact angle goniometer, measured at three points, and the average value was calculated	≥100°	≥100°
羊毛毡测试 Wool Felt Test	钢丝绒耐磨试验机, EMPA701羊毛毡, 负重500g.f, 素材无露底 Steel wool abrasion tester, EMPA701, load 500g.f, no substrate exposure	250000次(strokes)	100000次(strokes)
耐污测试 Stain Resistance Test	zcbra0.5mm油性笔划上后, 室温放置2H, 用无尘布蘸酒精擦拭 Marked by zcbra0.5mm felt-tip pen, placed for 2 hours at room temperature, then wiped with a dust-free cloth dipped in alcohol	无痕迹残留 No residue	无痕迹残留 No residue



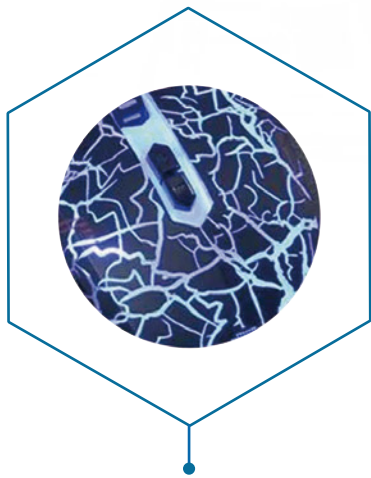
Decorative Coatings Series

装饰性涂料系列



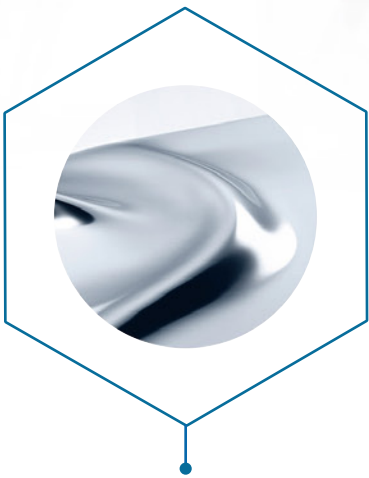
仿阳极效果涂料

Simulated Anodizing Effect Coating



裂纹效果涂料

Crackle Effect Coating



仿电镀效果涂料

Simulated EP Effect Coating



Functional Coatings Series

功能性涂料系列



抗菌抗病毒涂料

Antibacterial & Antiviral Coating



粉末涂料

Powder Coating



香味涂料

Fragrant Coating