



涤纶化纤面料数码印花工艺

上海星墨坊数码科技有限公司

主讲人：杜小帅

时 间：2021-04-10



目录 CONTENTS

01

企业概况

企业简介
企业资质

02

传统纸印花工艺

关联工艺介绍
染化料管理及相关配方与牢度的对应关系
传统纸印花主要生产工段图片展示

03

数码纸印花工艺

相关主要工艺介绍与图片展示
染化料管理及相关配方与牢度的对应关系
影响数码印花的因素

目录 CONTENTS

04

传统纸印花同数码纸印花对比

影响交货的效率分析
能耗及环保
安全问题

05

面料管理对纸印花工艺的影响

胚布流转的原则
来胚的检查内容
相关案例分析
胚布对纸印花牢度的影响

目录 CONTENTS

06

大货牢度测试

开发阶段牢度检验
大货订单测试报告

07

企业成长

企业文化
企业成长过程
企业优势与未来



上海星墨坊实业有限公司是中国优秀的转移印花专业制造商，专业从事热转移印花纸、印花布的研发、生产和销售。公司地处于中国大陆的经济、金融、贸易和航运中心的上海市，上海位于中国大陆海岸线中部的长江口，拥有中国最大的外贸港口、最大的工业基地，是中国大陆第一大城市，具有优越的对外贸易优势和良好的投资环境。

公司创建于 2011 年，注册资本 100 万元，经过 10 年多全体员工的勤劳创造和艰苦磨练，公司现拥有总资产近 2000 万元，占地 8682 平方米，厂房建筑面积 4600 平方米，拥有现代化的厂房和先进的转移印花设备，数码工业印刷生产线 10 条，具备年生产转移印花 1000 万米的能力。

公司是 NIKE、aididas、H&M、FILA、Burton、Walmart、DISNEY、COSTCO、REALTREE 等公司在中国的重要合作伙伴，是国内规模较大、实力较强的专业转移印花公司。主要产品远销欧美、大洋洲、东南亚等地区。

公司拥有 Bluesign, OK100, GRS, DISNEY, ISO9001, ISO14001, OHSAS18001 等认证！

公司拥有专业的设计制作人员，融合欧美流行布艺，将异国情调和东方魅力完美结合。公司先进的数码喷绘系统，在制版前可做出数码喷绘样供客户参考，大幅降低投版风险，缩短生产周期。转移印花具有耐光晒，耐水洗，色牢度佳，层次感强，色彩丰富等优点。且公司生产原料全部采用环保产品，技术指标都通过 MSDS 的检测。

公司产品广泛应用于服装（男女装面料，里料，沙滩裤，羽绒服，滑雪登山服），家用纺织品（窗帘、窗纱、床上用品、沙发、台布、浴帘等）；户外休闲用品（户外家具、伞、遮阳蓬、沙滩椅、帐篷、箱包、睡袋等）；汽车饰品（汽车座垫、太阳档等）。先进的技术设备；精细的制作工艺；环境保护的贯彻，迅速的生产能力；快捷的配送支持；热忱的售后服务，是您最理想的选择。

品质铸就辉煌，信誉决定成败，服务成就未来！公司以诚信、协作、环保的核心价值观，高效创新的竞争理念，我办事您满意的工作作风，最优质和周到的服务态度，愿与海内外朋友共创转移印花的光辉里程！

Shanghai Xingmofang Industrial Co., LTD. Is an outstanding transfer printing manufacturer in China, specializing in the research, development, production and sales of thermal transfer printing paper and printed fabric. The company is located in Shanghai, the economic, financial, trade and shipping center of mainland China. Shanghai, located at the mouth of the Yangtze River in the middle of the coastline of mainland China, has the largest foreign trade port and the largest industrial base in China. It is the largest city in mainland China, with superior foreign trade advantages and good investment environment.

Company was established in 2011, the registered capital of 1 million yuan, after all staff of more than eight years of hard work to create grinding and hard practice, the company now has total assets of nearly 10 million yuan, covers an area of 8682 square meters, building area of 4600 square meters, has a modern plant and advanced transfer printing equipment, of which printed paper production line 4, 4 printed cloth production lines, and several yards 5 industrial printing production lines, with an annual production capacity of 10 million m transfer printing.

The company is an important partner of NIKE, Aididas, H&M, FILA, Burton, Walmart, DISNEY, COSTCO, REALTREE and other companies in China. It is a large and powerful professional transfer printing company in China. The main products are exported to Europe and The United States, Oceania, Southeast Asia and other regions. The company has Bluesign, OK100, GRS, DISNEY, ISO9001, ISO14001, OHSAS18001 certification!

The company has a professional design and production staff, integration of European and American popular cloth art, exotic and Oriental charm perfect combination. The company's advanced digital inkjet system can make digital inkjet sample for customers' reference before plate-making, greatly reducing the risk of printing and shortening the production cycle. Transfer printing has the advantages of light fastness, water fastness, good color fastness, strong layering and rich color, etc. And the raw materials produced by the company are all environmentally friendly products, and the technical indicators have passed THE DETECTION of MSDS.

The company's products are widely used in clothing (men's and women's clothing fabric, lining, beach pants, down jacket, ski climbing clothing), home textiles (curtains, window screens, bedding, sofa, tablecloth, shower curtain, etc.); Outdoor leisure products (outdoor furniture, umbrellas, awnings, beach chairs, tents, bags, sleeping bags, etc.); Car accessories (car seat, sun stand, etc.) Advanced technical equipment; Fine manufacturing process; Implementation of environmental protection, rapid production capacity; Fast delivery support; Enthusiastic after-sales service, is your most ideal choice.

Quality cast brilliant, reputation determines success or failure, service achievements in the future! The company with integrity, cooperation, environmental protection core values, efficient and innovative competitive concept, I handle your work style, the best quality and thoughtful service attitude, is willing to friends at home and abroad Friends to create transfer printing glorious mileage!

企业概况



企业资质

Bluesign



Awarded to bluesign[®] SYSTEM PARTNER

Xingmofang Industrial Co., Ltd.

No. 659, Hengguan Rd., Industrial 4th Park, Waigang Town, Jiading District, Shanghai
China

This certificate attests that the article range

Transfer printing paper

(for exact article identification see "bluesign[®] APPROVED article lists 022.182.007.xxx")

manufactured in

Xingmofang Industrial Co., Ltd.,

No. 659, Hengguan Rd., Industrial 4th Park, Waigang Town, Jiading District, Shanghai,
China

meets the relevant bluesign[®] CRITERIA.

Furthermore, above company is granted authorization to use the trademark

bluesign[®] APPROVED

for above article(s) according to the valid communication guidelines.

Certificate number: 022.182.007

Certificate valid until: June 15, 2021

St. Gallen, June 19, 2020


Jiri Dolrain
CEO
bluesign technologies ag

bluesign[®] SYSTEM PARTNERS are responsibly acting parties of the textile supply chain committed to applying the bluesign[®] SYSTEM. They aim to continuously improve their environmental performance and are focused on a sustainable future

This document is issued by bluesign technologies ag under the terms and conditions of the current valid agreement between bluesign[®] SYSTEM PARTNERS. Attention is drawn to the limitation of liability, indemnification and jurisdiction clause defined therein. Any holder of this document is advised that information contained herein reflects the findings of bluesign technologies ag at the time of its intervention only. The sole responsibility of bluesign technologies ag is to its Client and this document does not constitute a trademark or a certification of the quality of the goods or services. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and liable to prosecution in the subject matter at hand.

bluesign technologies ag | Moeyenstrasse 18 | 9015 St. Gallen | Switzerland
Phone +41 (0)71 272 29 90 | info@bluesign.com | www.bluesign.com

CERTIFICATE

Disney

FACILITY AND MERCHANDISE AUTHORIZATION

LICENSEE/VENDOR NAME: Miniso (Guangzhou) Limited Liability Company
CONTACT NAME, TITLE, E-MAIL ADDRESS:
Kylie Li
Zhiguo.Li@miniso.com

STREET ADDRESS: R2501, Heye Plaza, No. 468,
Kangwang Middle Road, Liwan District
Guangzhou, Guangdong, 510000
China
TELEPHONE NUMBER: 86 2032306888 ext. 1445

1. Facility Name (Place where Disney-branded product will be produced): Xingmofang Industrial Co., Ltd. (FAC-061991) 1a. Facility Address: Building 2, No. 659, Hengguan Road, Industrial 4th Park, Waigang Town, Jiading District Shanghai, Shanghai, 201800 China 1b. Telephone Number: 86 2139192198	1c. Facility Contact Telephone Number: 86 2139192198 1d. Contact Name, Title and E-mail: Xiaoshuai Du, X.s.d @163.com 1e. List all other names by which the Facility is known:
---	--

Once signed below by an authorized signatory of Disney Worldwide Services, Inc. or its affiliate (such individual as "Authorized Signatory"), this Facility and Merchandise Authorization (1) confirms that the above-named Licensee/Vendor is authorized to manufacture and/or distribute products bearing intellectual property of The Walt Disney Company and/or its affiliate(s) ("Disney") (which may include, without limitation, Marvel, Pixar and/or Star Wars-branded products) (collectively, the "Disney-Branded Products"), all in accordance with and subject to Licensee/Vendor's written agreement(s) with Disney and (2) may be presented by Licensee/Vendor to Customs authorities to confirm Disney's authorization to import/export Disney-Branded Products.

This Facility and Merchandise Authorization expires on the Expiration Date set forth below unless earlier revoked by Disney.

Notice to Licensee/Vendor: Disney hereby reserves all of its rights and remedies arising from any unauthorized use of this Facility and Merchandise Authorization. Without limiting the foregoing, any unauthorized use of this Facility and Merchandise Authorization by Licensee/Vendor, including without limitation submitting a Facility and Merchandise Authorization which has been revoked by Disney prior to the Expiration Date, may result in the termination of the applicable written agreement between Licensee/Vendor and Disney.

Authorized Signatory


Alex Zhai
Digitally signed by Alex Zhai
Date: 2019.09.27 14:16:49
+0800

Alex Zhai
Senior Analyst, Regional Management ILS APAC

Issuance Date: 2019/Sep/26
Expiration Date: 2022/Sep/26

企业概况



企业资质





Control Union Certifications B.V.
Meeuwenlaan 4-6, 8011 BZ, Zwolle, Netherlands
+31 38 426 0100
www.controlunion.com

CERTIFICATE OF COMPLIANCE
(Scope Certificate)

Certificate No: CU102 2966GRS-2020-00017776
Registration No: 1022966

Control Union Certifications declares that:
XINGMOFANG INDUSTRIAL CO., LTD.
659 HENGGUAN ROAD, INDUSTRIAL 4TH PARK, WAIGANG TOWN, JIADING DISTRICT
201806 Shanghai
China

has been inspected and assessed in accordance with the
Global Recycled Standard (GRS) 4.0

and that products of the categories as mentioned below (and further specified in the annex) comply with this standard:

Fabrics

Processing steps / activities carried out under responsibility of the above-mentioned company (by the operations as detailed in the annex) for certified products

Printing, Trading

This certificate is valid until:
2021-04-20
This certificate is valid from:
2020-05-06

Place and date of issue: 2020-05-07, Zwolle

Name of authorized person: On behalf of the Managing Director
Ya Gao | Certifier

This certificate cannot be used as a transaction certificate. The issuing body can withdraw this certificate before it expires if the declared compliance is no longer guaranteed. Accredited by: SE Lanka Accreditation Board (SLAS). Accreditation No: CP 004-01

 **CONTROL UNION**
This electronically issued document is the valid original version.

Control Union Certifications B.V.
POST: Meeuwenlaan 4-6, 8011 BZ, Zwolle, Netherlands
T: +31 38 426 0100 - F: +31 38 423 7040 - certifications@controlunion.com

OEKO-TEX

Shirley Technologies Limited
Unit 11, Westpoint Enterprise Park
Clarence Avenue
M17 1QS Manchester, United Kingdom

OEKO-TEX®
CONFIDENCE IN TEXTILES

CERTIFICATE

The Company

Hangzhou Honghua Digital Technology Stock Co. Ltd.
No. 3911 Binsheng Road
Zhejiang
310052 Hangzhou, CHINA

is granted authorisation according to ECO PASSPORT by OEKO-TEX® to use the OEKO-TEX® mark

for the following chemical products

Product(s): See attached enclosure
Category: Pigments and inks

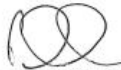
Supporting documents

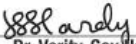
- Declaration of conformity in accordance with EN ISO 17050-1 included in ECO PASSPORT by OEKO-TEX® Terms of Use.
- Analytical test report number: 49476
- RSL Screening Report
- Detailed information about the components and safety data sheets of the chemical products mentioned above.

The above captioned product(s) can be used for the production of human-ecological optimized textiles. The combined results of the reports mentioned above reveal that there is no harmful effect on the human and environmental health of the textiles treated/finished with the above mentioned products. This evaluation used the test methods and requirements of the ECO PASSPORT by OEKO-TEX® that were in force at the time of the evaluation date. ZDHC MRSL Conformance Level 1 is achieved for certified product(s) without restriction(s).

The certificate EP 49476 is valid until 30.09.2019

Manchester, 10.10.2018


Phil Whitaker
Ecology Services Director
Shirley


Dr. Verity-Gay Hardy
Technical Officer
Shirley

OEKO-TEX® Association | Genferstrasse 23 | P.O. Box 2006 | CH-8027 Zurich

114

企业概况



企业资质



ISO9001

Higg

2019 COMPLETION OF
SELF-ASSESSMENT
SUSTAINABLE APPAREL COALITION



SHANGHAI XINGMOFANG INDUSTRIAL CO.,LTD

The Sustainable Apparel Coalition certifies that the facility named above utilizes the Higg Index to measure and grow its sustainability practice.

Amina Razvi
Executive Director
Sustainable Apparel Coalition

企业概况



企业资质



OHSAS18001

环境管理体系认证证书

证书编号: 17E1019R05

兹证明:
上海星墨坊实业有限公司

组织机构代码: 56959255-7

环境管理体系符合:
GB/T24001-2004 idt ISO14001:2004 标准

证书覆盖范围:
数码喷绘/转移印花纸、转移印花布的生产及相关管理活动

注册地址: 上海市嘉定区外冈镇恒冠路 659 号 2 幢
实际地址: 上海市嘉定区外冈镇恒冠路 659 号 2 幢、1 幢 A 区厂房

颁证日期: 2017-02-20
有效期至: 2019-09-15

证书签发人



此证书的有效性依赖于获证方持续符合认证标准的要求。
随时可登陆认证机构网站: www.bjhead.com.cn 查询。
也可登陆中国国家认证认可监督管理委员会网站: www.cnca.gov.cn 查询。

北京海德国际认证有限公司

中国·北京·朝阳区北辰东路19号院5号楼1601室 (100012)

ISO14001

ENVIRONMENTAL MANAGEMENT SYSTEM CERTIFICATE

Certificate No.: 17E1019R05

We hereby certify that the organization:
Shanghai Xingmofang Industrial Co., Ltd.

Organization code: 56959255-7

is in conformity with Environmental Management System Standard:
GB/T24001-2004 idt ISO14001:2004

The certificate is valid to the following product(s)/service:
The production of Digital Printing/Transfer Printing Paper, Transfer Printed Cloth and Related Management Activities

Registration Address: Building 2, No.659, Hengguan Rd., Industrial 4th Park, Waigang Town, Jiading District, Shanghai, P. R. China
Actual Geographic Address: 1 A District Plant, Building 2, No.659, Hengguan Rd., Industrial 4th Park, Waigang Town, Jiading District, Shanghai, P. R. China

Date of Issue: 2017-02-20
Date of Expiry: 2019-09-15

Issued By



The effectiveness of the Certificate is subject to QR Code in the lower left corner.
Meanwhile, you can search the website of certification body: www.bjhead.com.cn, or search the CNCA website: www.cnca.gov.cn.

Beijing Head International Certification Co., Ltd.

Address: 1601 Room, Building 5, No. 19 Beiyuan East Rd., Chaoyang District, Beijing, P.R.China (100012)

职业健康安全管理体系认证证书

证书编号: 04617S10129R05

兹证明:
上海星墨坊实业有限公司

组织机构代码: 56959255-7

职业健康安全管理体系符合:
GB/T28001-2011 idt OHSAS18001:2007 标准

证书覆盖范围:
数码喷绘/转移印花纸、转移印花布的生产及相关管理活动

注册地址: 上海市嘉定区外冈镇恒冠路 659 号 2 幢
实际地址: 上海市嘉定区外冈镇恒冠路 659 号 2 幢、1 幢 A 区厂房

颁证日期: 2017-02-20
有效期至: 2020-02-19

证书签发人



此证书的有效性依赖于获证方持续符合认证标准的要求。
随时可登陆认证机构网站: www.bjhead.com.cn 查询。
也可登陆中国国家认证认可监督管理委员会网站: www.cnca.gov.cn 查询。

北京海德国际认证有限公司

中国·北京·朝阳区北辰东路19号院5号楼1601室 (100012)

OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM CERTIFICATE

Certificate No.: 04617S10129R05

We hereby certify that the organization:
Shanghai Xingmofang Industrial Co., Ltd.

Organization code: 56959255-7

is in conformity with Occupational Health Safety Management System Standard: GB/T28001-2011 idt OHSAS18001:2007

The certificate is valid to the following product(s)/service:
The production of Digital Printing/Transfer Printing Paper, Transfer Printed Cloth and Related Management Activities

Registration Address: Building 2, No.659, Hengguan Rd., Industrial 4th Park, Waigang Town, Jiading District, Shanghai, P. R. China
Actual Geographic Address: 1 A District Plant, Building 2, No.659, Hengguan Rd., Industrial 4th Park, Waigang Town, Jiading District, Shanghai, P. R. China

Date of Issue: 2017-02-20
Date of Expiry: 2020-02-19

Issued By



The effectiveness of the Certificate is subject to QR Code in the lower left corner.
Meanwhile, you can search the website of certification body: www.bjhead.com.cn, or search the CNCA website: www.cnca.gov.cn.

Beijing Head International Certification Co., Ltd.

Address: 1601 Room, Building 5, No. 19 Beiyuan East Rd., Chaoyang District, Beijing, P.R.China (100012)

OHSAS18001

02

传统纸印花工艺

关联工艺介绍

染化料管理及相关配方与牢度的对应关系

传统纸印花主要生产工段图片展示

传统纸印花的工艺流程-1来稿分色

来稿分色是指：根据设计师的设计意图，将主色分成单一通道色，且利于版辊调浆还原。来稿文件主要分为AI档和PSD档或者样品扫描



MARTINI OLIVE
TERRA CAMO
12 17 19

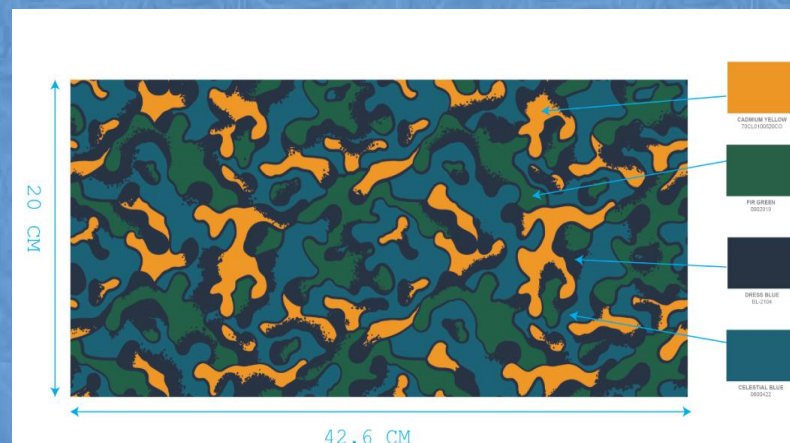


MARTINI OLIVE
TERRA CAMO
MILL SHEET 01
09 20



传统纸印花的工艺流程-2配色打印

配色打印是指：将分成的单一通道色，根据设计师意图，用数码模拟制版调浆的方式进行表现，供设计核稿。
（在标准光源下根据设计师提供的对色依据进行看色）



传统纸印花的工艺流程-3制版

制版是指：雕刻版辊时按配色打印设计师核可的结果进行二次分色制版。备注：
（因凹印调浆的色彩线性与数码线性不一致. 为最大程度还原核可意图的分色原理。）制版工序比较繁多复杂。



机加工
-下料



机加工
-卷板



机加工
-精车

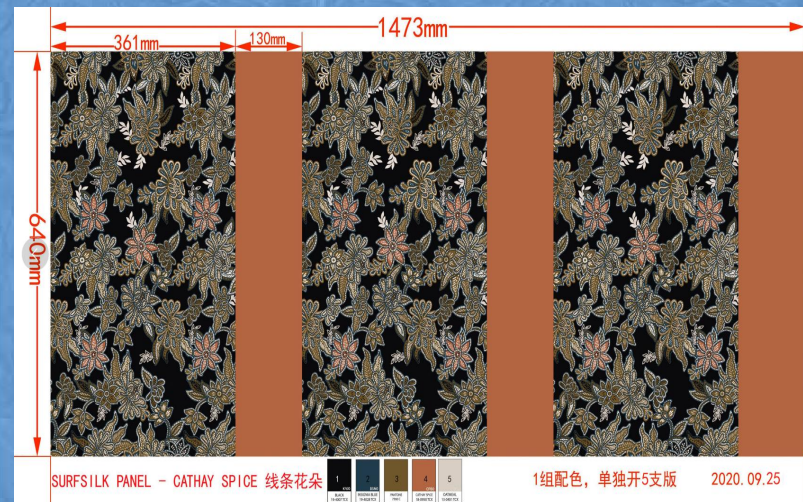


机加工
-磨床



传统纸印花的工艺流程-4调浆配色

调浆配色是指：根据核可颜色，色号，或样品按油墨特性，在指定光源，按同色异谱原理，同时关注物性要求进行配色



传统纸印花的工艺流程-5凹印机印纸

印纸是指：将调好的油墨颜色一色对应一支版辊，将花型和颜色印在纸上。
(首先对配好的墨浆进行过滤，对版辊及导辊进行清洁。)



传统纸印花

传统纸印花的工艺流程-6烫布机印布

印布是指：将前面印好的指通过印布机高温升华，将颜色转印到相对应的织物上面（印前需对布机的环境进行清洁工作，根据布种调整布机的对应速度、温度、气压及相关注意事项）



传统纸印花的工艺流程-7验布打卷

验布打卷是指：将印好花的织物根据美标10分进行检验、打卷。并做好验货记录。（10以内放行，10分以上主管审核沟通决定。）



染化料管理及相关配方与牢度的关系

根据染化料的特性，我们在油墨方面的把控分为四个级别：

一、高日晒黑、高级兰、桃红、青口黄，正常服装定单，除黑色外，我公司采用高级兰、桃红、青口黄作为基色调色，在碰到浅灰或浅兰时，我们往往采用高日晒配方作为补充。

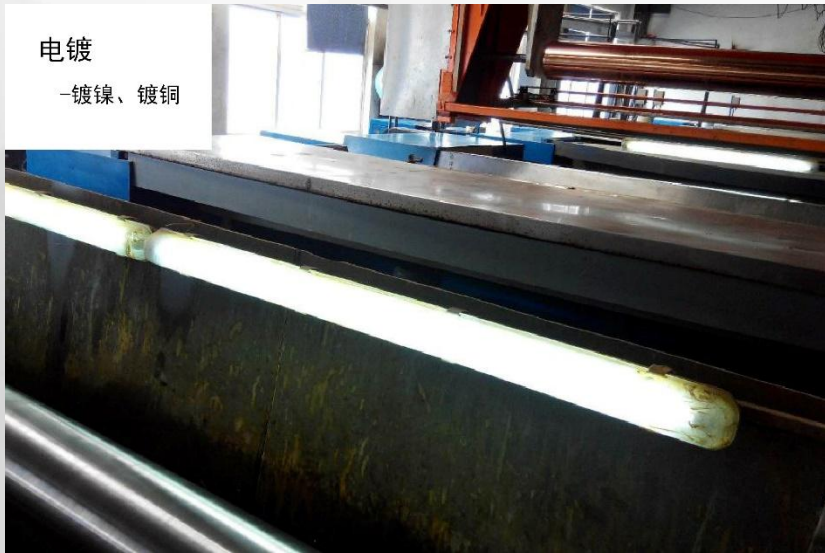
二、日晒管控在 80 小时四级时，我们采用宝兰及翠兰配色方式替代高级兰。同时将青口黄改为 5 G P 黄。温度 225 度 20 秒。

三、在更高日晒要求时(150-200)小时，我司有专门的高耐晒兰、高耐晒红、高耐晒黄、及耐晒橙打底调色方案。

四、针对服装定单适用于第一条，此处需特殊指明，不同克重的面料对于分散染料的承载力有一个度的范围！超量供给会带来干、湿、升华牢度、水洗牢度的风险！！所以在开发时，要注意结合设计师意图及物性要求进行出样！！

制版时涉电镀废洗图片

电镀
-镀镍、镀铜



电镀
-粗研磨



电镀
-粗研磨



电雕
-图像雕刻
(因涉及技术参数,
在门外拍摄, 请谅解!)



电镀
-镀铬

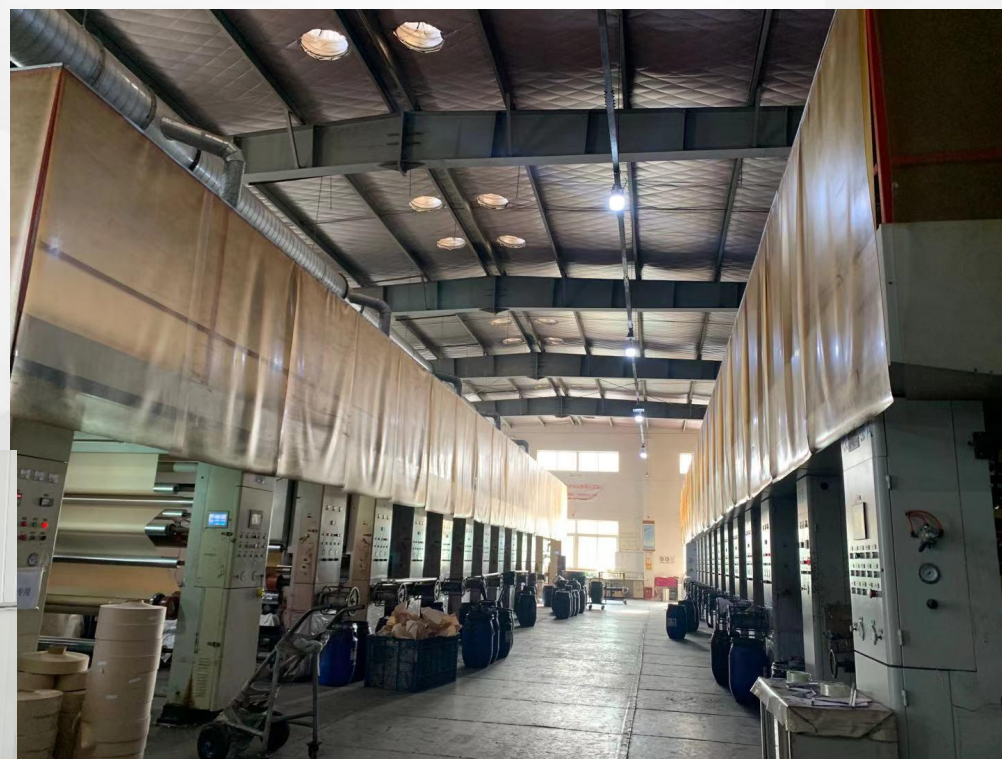


凹样
-试印刷



传统纸印花

传统纸印花车间



传统纸印花现阶段小结

- 从制版到印布，工段多，品质控制点多。
- 从来稿到定稿需要跨越数位出样、制辊、凹印版辊上机出样的用时长，至少需要 1 5 天定稿！
- 涉及废气排放、重金属污染、危废管理难度大
- 能耗及损耗大、碳排放大
- 对于花型多，数量批次多在生产时无经济优势，且生产效率低！
- 占地面积大，生产时待摊销基础成本高！
- 主要工段不符合政府管理目标！传统纸印花应该归类为落后高耗能产业。
- 传统产业面临优秀技工后备不足之困扰！！

03

数码传统纸印花工艺

相关主要工艺介绍与图片展示
染化料管理及相关配方与牢度的对应关系
影响数码印花的因

数码纸印花

上海星墨坊数码科技有限公司纸印花工艺介绍

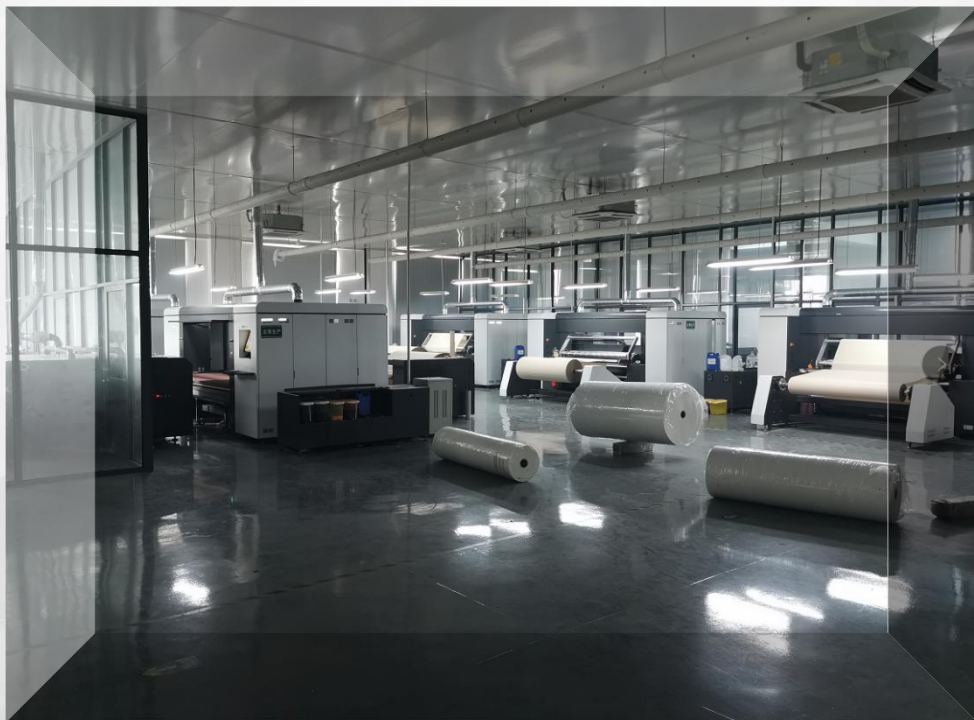
客户来稿

美工完稿

12小时内出排版，72小时内完成出样

烫布机印布

数码打印



数码打纸产能1天5万米

数码纸印花



蓝宇数码根据不同工业应用领域对墨水色光与耐晒牢度的不同要求，开发出具有不同特点的热升华青色墨水，并根据各色墨水的耐晒等级推出如下应用方案供客户参考：

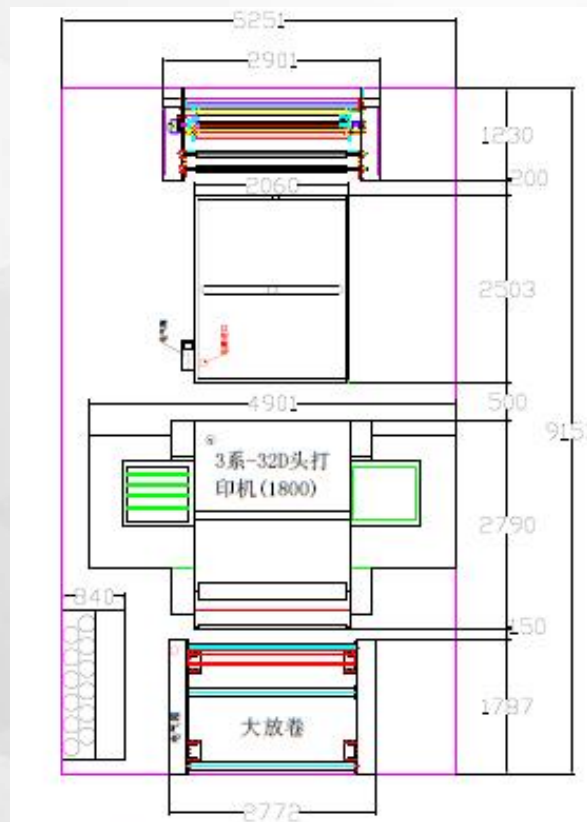
	低成本墨水方案	高耐晒墨水方案	6 色高耐晒墨水方案
墨水颜色	C1 , M、 Y、 K	C2 , M、 Y、 K	C3 , M、 Y、 K、 B、 O
墨水特点	印花产品色彩鲜亮 优良的打印流畅性与干头性能 墨水成本低 低 VOC 排放、安全环保	印花产品色彩亮丽 优良的打印流畅性与干头性能 耐晒牢度较好 低 VOC 排放、安全环保	色彩亮丽、层次分明、图案精细 优良的打印流畅性与干头性能 耐晒牢度高 低 VOC 排放、安全环保
推荐使用	适用于对耐晒牢度要求不高 的印花产品	适用于对耐晒牢度有一定要求的 印花产品，尤其是外贸出口订单	适用于高色彩表现力高耐晒要求的 印花产品，尤其是外贸出口订单

数码纸印花

影响数码印花效果的相关因素之：数码打印**机器**

✓ 各类应用于数码纺织印花的打印机：广告机（Epson）与工业喷墨机（京瓷、星光、精工、理光），大多采用卷对卷打印机，打印面容易起拱，且相对只有四色；

星墨坊配置的打印机中有采用四通道、六色通道、八通道的打印喷头，可以根据客人的花型做对应的打印方案，对客人希望的打印精度具有更高更精准的表现，精细度已经超越了传统纸印的表现，由于多机型的配置，更具有产量优势！



星墨坊31800T打纸机（配峰州新牧卷）场地图

数码纸印花

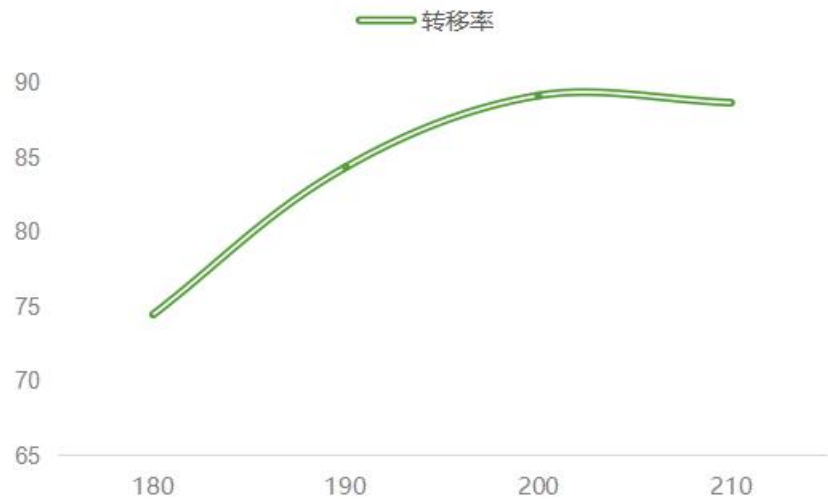
机型	配色通道	走纸方式	烘干方式	打印方法	工艺选项	优缺点 1	优缺点 1	优缺点 1
M S	4	导杆	上打下烘	扫描式	1 — 4 PASS	起皱，毛点	较厚纸张	精度差
X M F	8	导带	独立干湿分离	扫描式	1 — 4 Pass	无	薄纸	可比传统
ONEPASS	8	导带	独立干湿分离	固定式	1 PASS	退出服装单	退出服装单	退出服装单

数码纸印花

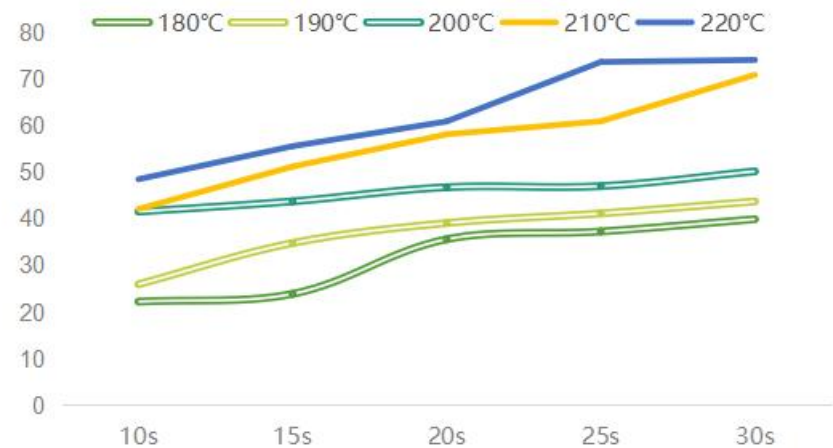
数码印花生产过程中注意事项：

- ✓ 第一次进行数码印花的面料需进行面料是否适合热转移印花与印花工艺参数的摸索和确认；
- ✓ 印花工艺参数：转印温度、时间和压力影响织物上色率、牢度与手感

热升华红色染料（343红）不同温度下的上色率



热升华黄色染料（54黄）不同温度与时间的转移率



04

传统纸印花同数码纸印花对比

影响交货的效率分析
能耗及环保
安全问题

传统纸印花与数码纸印花交货的效率分析

从工艺流程角度来看,传统纸印花在 **来稿分色** → **配色打印** → **制版** ,占据了较大的开发时间, 按目前的工艺水平来看存在以下几个矛盾:

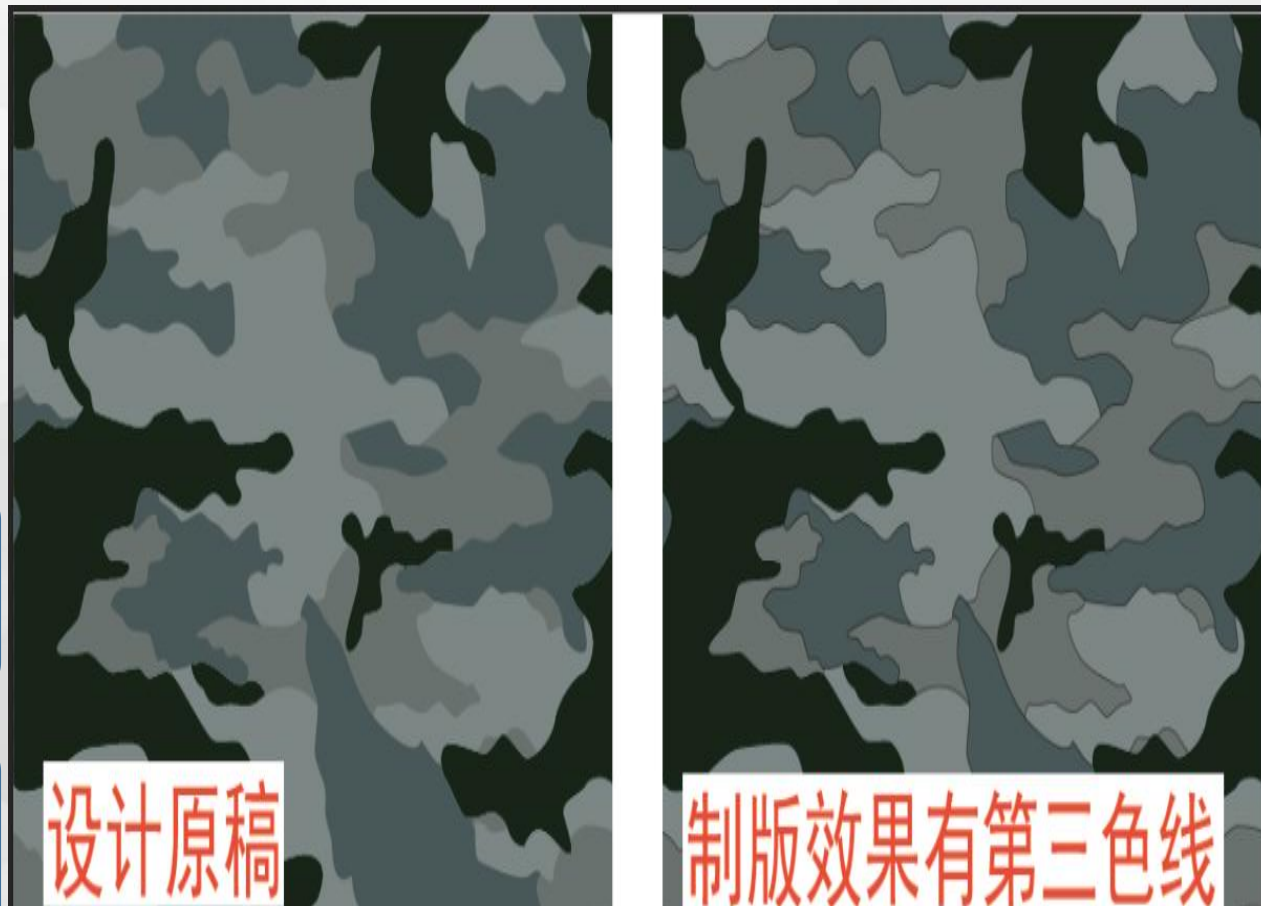
传统纸印花

一、数码开发的 S / O 与凹版还原之间的线性还原问题, 造成制版完成后多次上机或版辊返工。增加工作量, 交期变长。正常交期是15天。

二、版辊加工的特性, 决定了版辊的易损伤特性。

三、凹印机的套印工作原理决定了色与色之间存在第三色线, 对设计师的设计风格, 存在破坏性。如右图:

四、数量较少定单存在着频繁装卸版辊、开停机、清洗墨槽致使效率无法展开的局限性。



数码纸印花

一、数码开发的 S / O 确认后, 5天左右即可交货, 着急单子隔天可以交

二、数码纸印花只需要将文件保存好即可。

三、数码和设计原稿一致

四、文件传输好后直接打印即可

能耗及环保问题

传统纸印花以下环节的能耗及环保问题比软突出

一、制版:工序多、存在电镀镍、铜、铬、强酸液、强碱液、及制程需要的各种化学品添加剂,存在着跑、冒、滴、漏问题。且电镀在生产时,不能随意停工,为持续高耗能项目,存在中途污染的巨大风险!!

二、凹印纸印花:油墨中存在甲醇、异丁醇、及P V D糊粉的VOCs挥发问题,为无组织排放,相关研究证明,一滴甲醇的挥发可以污染一立方的空气!单色烘箱生产状态为20个千瓦,以8色为例, $20\text{ KVA} \times 8\text{色} = 160\text{ KVA}$ 。耗电量大。对于小定单来讲,单位人工效能低!! 5个人开1条线。

三、针对这两个工段,在现在节能减排、绿色环保生产的大形式下,势必将遭到无情淘汰。

数码纸印花对于能耗及环保问题的突出优势:

一、画稿:工序简单,电脑作稿。效率高,可任意变化花型,对颜色数量及画稿圆周无限制。

二、数码纸印花:水墨,高环保,无组织排放,颜色鲜亮。

三、智能化,人机效率高。2个人即可完成多台机操作。

能耗及环保问题

传统印花	制版1平方米/支	单位	传统印纸/支（印刷过程）	单位	烫布	单位	以6色每1000码的能耗	单位
水	250	L	无	L	无	L	1.5	L
电	57	KW. h	28	KW. h	60	KW. h	0.59	KW. h
数码印花	无需制版	单位	数码印纸（喷绘过程）	单位	烫布	单位	以6色每1000码的能耗	单位
水	0	L	无	L	无	L	0	L
电	0	KW. h	10	KW. h	60	KW. h	0.13	KW. h

传统纸印花存在以下安全生产问题，数码纸印花则没有

- 一、制版需要电镀，而电镀生产过程中涉及的化学品管理是安全生产中一个非常重要的管控项目，在安全生产检查中存在着巨大的风险，随着环保形式的发展，被政府取缔风险加大！！
- 二、纸印花中的甲醇、异丁醇，被定义为危险化学品，在安全生产中存在重点监管及易燃易爆的风险！印花厂的操作风险变大！！！！

05

面料管理对纸印花工艺的影响

胚布流转的原则
来胚的检查内容
相关案例分析
胚布对纸印花牢度的影响

面料管理对纸印花的影响

1.胚布流转的原则(为降低彼此损耗，保证印花品质，印花坯布前处理请注意以下问题：)

一、转移印花坯布，主要成分为涤纶，其它的如锦纶、全棉等是不能作为转移印花布料的，主要原因为色牢度差，不耐高温。

二、从纱织开始把关，最好有专业的无尘车间或专业的防尘设施，防止油污等疵点。

三、要有专业的漂白车间、漂白缸，以防止布料在漂白过程中出现其它色点等瑕疵。

四、如印花位置有浅色底的（如浅杏等）请用染色布投布量产。

五、印花前面料供应商，应提供漂染工艺中的助剂名称，以防止特别功能助剂会影响印花色牢度。

六、热升华转移面料，不建议加荧光增白剂增白，会影响印花日晒色牢度。

七、定型时请用专用的漂白定型机，最好有专业的漂白车间，防止细小染料颗粒夹杂在坯布上。在转移印花过程中，通过高温发色会使浮着的细小色点放大。

八、定型时在确保手感的前提下应慢速定型，保证定型效果稳定，降低印花缩率和定位花型尺寸的稳定性。

九、定型手感应控制在，比印花成品手感好10%-20%，且布料要密度均匀、厚薄统一。

十、如布料需要做预缩、磨毛等前工艺，一定要用专业漂白预缩机及磨毛机等，磨毛布成品前需要做吸绒处理，以确保成品磨毛布表面无浮绒（浮绒在印花时造成白点）。

十一、成品的包装最好在无尘车间操作。

十二、如坯布有“卷边”现象，请做“浆切边”处理。

十三、因坯布在印花过程中会有高温回缩，故在成品麦架排版时应考虑缩率问题，常规缩率在3%左右。

十四、印花前面料供应商，发货到印花厂时，必须随带明细查验表。

十五、送胚根据明细表分缸装货。

面料管理对纸印花的影响

2.来胚的检查内容

- 根据码单明细表分缸卸货。
- 检查胚布的克重，门幅及印后有效。
- 每缸需抽剪2-3支白胚查下缸差，匹差。缸差匹差大的情况下需重新分缸调色。
- 每缸还需查下胚布的左中右色差，色差较大的情况下，则退胚处理。
- 以上检查无误后方可安排生产

面料管理对纸印花的影响

3.1 案例分析-缸差，匹差

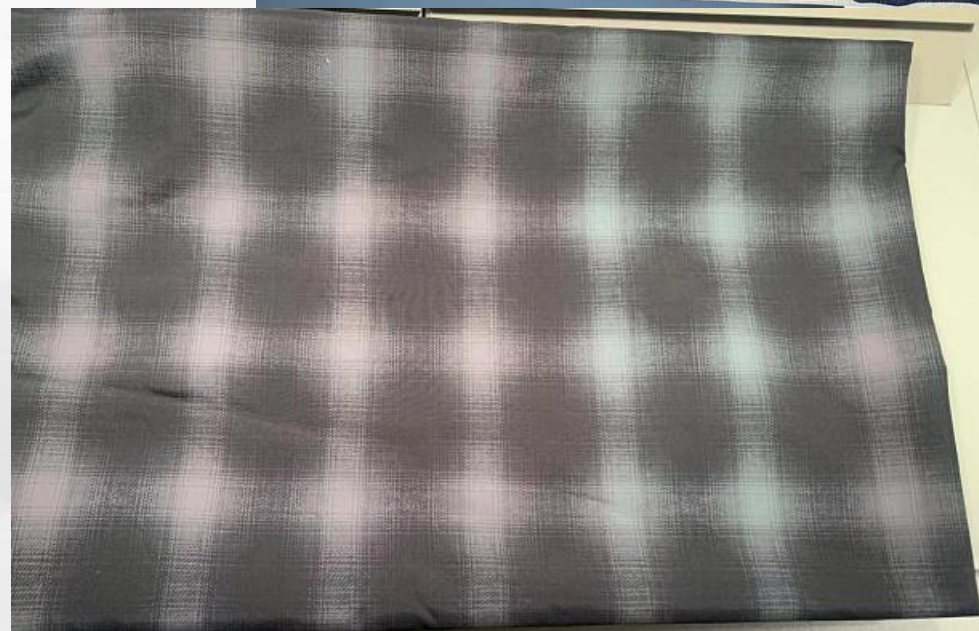
- 右图为同一个花型，不同缸，不同匹在同一条件下印下去所呈现的2个不同的颜色。此类条件下会重新分缸，按重新分好的缸根据花型调色生产。
- 缸差，匹差主要来源于胚布的PH值，水的酸碱度不一样造成的



面料管理对纸印花的影响

3.2案例分析-左中右色差

- 右图1为一个花型在同一个门幅下所呈现的不同颜色
- 右图2为同一个花型1米样内，左右中，上中下所呈现的不同颜色
- 以上胚布所表现的情况是助剂没有加均匀的情况导致的。泼水剂对颜色的影响非常大。



面料管理对印花的牢度影响

4.1面料管理对印花牢度的影响- 泼水剂

- 升华印花不同于胚布染色，胚布染色是把颜色渗透到纱线中了，而升华印花是将颜色浮在胚布的表面。
- 泼水剂是在胚布的表面上形成一层薄膜。
- 加了泼水的胚布印花，就类似于将颜色转移到了膜上，泼水剂越强，各项牢度就越差。
- 反之清水的胚布印花牢度就比较好。

4.2面料管理对印花牢度的影响- 荧光剂

- 含荧光剂的胚布对中深色系的耐光牢度没有大的影响。
- 主要表现在特别浅的颜色，类似于浅米色的颜色。浅色的会把胚布本身的荧光剂晒掉一部分，荧光剂本身对颜色是存在影响的。
- 所以对于浅色花型，耐光又要求高的，建议使用本白胚布。

06

印花牢度测试

开发阶段牢度测试
大货订单测试报告

对于测试要求比较高的订单 开发时期就进行内部检测。

干湿磨 升华测试。一般日晒牢度 浅灰、浅蓝这两个颜色只有2-3，我们会采用高日晒配方，同时在制作稿件时，结合原稿对颜色进行对比度调，既要确保设计师原有的风格也要确保物性指标。

牢度检测

intertek
Total Quality Assured.

Test Report

Number: TWNT02008393

Applicant: J&B INTERNATIONAL LTD. TAIWAN BRANCH
14F.-4, No. 186, Jian 1st Rd.,
Zhonghe Dist., New Taipei City 235,
Taiwan, R.O.C.

Date Issued: Jun 06, 2022

Sample Description :

Two (2) pieces of submitted sample said to be 100% Recycled Polyester woven fabric, in Blue Print marked as (A) and (B).

Applicant's Provided Care Instruction/Label : -

Date Received/Date Test Started : May 31, 2022
Standard : Nike
Style/Article No. : 1016120
Order No. : -
Mill : -
Buyer's Name : Nike
Agent's Name : -
Brand Name : Nike
Ref. : -

Authorized By:
On behalf of Intertek Testing Services
Taiwan Limited

Carol Peng
General Manager

695/Sakura

Intertek Testing Services Taiwan Ltd.
8F., No. 423, Ruiguang Rd., Neihu District, Taipei 114690, Taiwan, R.O.C.
全國公證檢驗股份有限公司
114690 台北市內湖區瑞光路423號8樓
Tel: (+886-2) 6602-2888 • 2797-8885 Fax: (+886-2) 6602-2400 • 6602-2401



intertek
Total Quality Assured.

Test Report

Number: TWNT02008393

Tests Conducted (As Requested By The Applicant)

- 1 Colour Fastness To Washing (ISO 105 C06-2010, Test No.B1M, 45 Minutes Mechanical Wash At 50°C In 0.4% IEC Reference Detergent With 50 Steel Balls):

	(A)	(B)	Requirement
Colour Staining			
-Polyester	4.5	4.5	4.0
-Nylon	4.5	4.0	4.0
-Cotton	4.5	4.5	4.0
Colour Change	4.5	4.5	4.0
Without UV Suppressor			
Colour Change	4.5	4.5	4.0
With UV Suppressor			
Self Staining	4.5	4.5	-

- 2 Colour Fastness To Perspiration (ISO 105 E04-2013):

	(A)		Requirement
	Acid	Alkaline	Acid Alkaline
Colour Staining			
-Polyester	4.5	4.5	4.0 4.0
-Nylon	4.5	4.5	4.0 4.0
-Cotton	4.5	4.5	4.0 4.0
Colour Change	4.5	4.5	4.0 4.0
Self Staining	4.5	4.5	-
	(B)		Requirement
	Acid	Alkaline	Acid Alkaline
Colour Staining			
-Polyester	4.5	4.5	4.0 4.0
-Nylon	4.5	4.5	4.0 4.0
-Cotton	4.5	4.5	4.0 4.0
Colour Change	4.5	4.5	4.0 4.0
Self Staining	4.5	4.5	-

- 3 Colour Fastness To Crocking As Received (AATCC 8-2016):

	(A)	(B)	Requirement
Dry	4.5	4.5	4.0
Wet	4.5	4.5	3.0

intertek
Total Quality Assured.

Test Report

Number: TWNT02008393

Tests Conducted (As Requested By The Applicant)

- 4 Colour Fastness To Water (ISO 105 E01-2013):

	(A)	(B)	Requirement
Colour Staining			
-Polyester	4.5	4.5	4.0
-Nylon	4.5	4.5	4.0
-Cotton	4.5	4.5	4.0
Colour Change	4.5	4.5	4.0
Self Staining	4.5	4.5	-

- 5 Colour Fastness To Light (ISO 105 B02-1994, Modified Test, Xenon-Arc Lamp, Grade 4):

	(A)	(B)	Requirement
Grade	4.0	4.5	4.0

- 6 Colour Fastness To Dye Migration - Fabric (Nike Test Method, NAL.TM.2100 V2.1, For Printed Fabric : 70°C +/- 5°C For 48 Hours):

	(A)	(B)	Requirement
-Colour Staining			Min 4
On To Self White Fabric	4.0	3.0	

End of Report

Except where explicitly agreed in writing, all work and services performed by Intertek is subject to our standard Terms and Conditions which can be obtained at our website: <http://www.intertek.com/terms>. Intertek's responsibility and liability are limited to the terms and conditions of the agreement.

This report is made solely on the basis of your instructions and / or information and materials supplied by you and provide no warranty on the tested sample(s) be truly representative of the sample source. The report is not intended to be a recommendation for any particular course of action, you are responsible for acting as you see fit on the basis of the report results. Intertek is under no obligation to refer to or report upon any facts or circumstances which are outside the specific instructions received and accept no responsibility to any parties whatsoever, following the issue of the report, for any matters arising outside the agreed scope of the works. This report does not discharge or release you from your legal obligations and duties to any other person. You are the only one authorized to permit copying or distribution of this report (and then only in its entirety). Any such third parties to whom this report may be circulated rely on the content of the report solely at their own risk.

Reporting Statements of Conformity: Please note that the test results contain statement of conformity with the decision rules which are based on the specifications of customers, regulations and standards, and does not consider measurement uncertainty.

TEST REPORT

Number : SHAT07335542

Applicant : NANTONG TEIJIN CO., LTD.
NO.19 ZHONGYANG RD., ECONOMIC
DEVELOPMENT DISTRICT, NANTONG,
JIANGSU, CHINA

Date : Jul 06, 2022

Attn : BIAN PENG

Provided Information

Date Received : Jun 27, 2022

Test Type : Develop Testing - Selective

Client Ref. No. : 70031067

Material : Woven Fabric

Fibre Content : 100% Recycled Polyester

Construction : 74g/m²

Gauge (Knit Only) : -

Color : ADFX/31F0

End Product : -

Buyer : Adidas

Article/Style No. Received : -

Order No. : -

Season : SS23

Fabric Supplier's Name : -

Applicant Proposed Care Instruction : -

Prepared And Checked By:
For Intertek Testing Services Ltd., Shanghai

Jennifer Ren

Jennifer Ren
General Manager

TEST REPORT

Number : SHAT07335542

Tests Conducted (As Requested By The Applicant)

- 1 Washing Fastness (Adidas PHM-AP0501 Version 5.1, Raise The Temperature From 25°C To 40°C Then Wash For 30 Minutes In 0.4% ECE(A) Reference Detergent, 0.015% TAED And 0.067% Sodium Percarbonate Solution With 25 Steel Balls):

		Requirement
Colour Change	4-5	4-5
Colour Staining		4
-Acetate	3-4	
-Cotton	4-5	
-Nylon	3-4	
-Polyester	4-5	
-Acrylic	4-5	
-Wool	4-5	

- 2 Washing Fastness (Adidas PHM-AP0501 Version 5.1, Raise The Temperature From 25°C To 40°C Then Wash For 30 Minutes In 0.4% ECE(A) Reference Detergent, 0.015% TAED And 0.067% Sodium Percarbonate Solution With 25 Steel Balls):

		Requirement
Cross Staining	N/A	4-5

- 3 Washing Fastness (Adidas PHM-AP0501 Version 5.1, Raise The Temperature From 25°C To 30°C* Then Wash For 30 Minutes In 0.4% ECE(A) Reference Detergent, 0.015% TAED And 0.067% Sodium Percarbonate Solution *With 25 Steel Balls):

		Requirement
Colour Change	4-5	4-5
Colour Staining		4
-Acetate	4	
-Cotton	4-5	
-Nylon	4	
-Polyester	4-5	
-Acrylic	4-5	
-Wool	4-5	

Remark : # = Per As Client's Request, The Test Temperature Is Modified To 30°C.

TEST REPORT

Number : SHAT07335542

Tests Conducted (As Requested By The Applicant)

4 Perspiration Fastness (Adidas PHM-AP0502 Version 3.1):

	Acid	Alkaline	Requirement
Colour Change	4-5	4-5	4-5
Colour Staining			4
-Acetate	4	4	
-Cotton	4-5	4-5	
-Nylon	4	4	
-Polyester	4-5	4-5	
-Acrylic	4-5	4-5	
-Wool	4-5	4-5	

5 Water Fastness (Adidas PHM-AP0503 Version 3.1):

		Requirement
Colour Change	4-5	4-5
Colour Staining		4
-Acetate	4	
-Cotton	4-5	
-Nylon	4	
-Polyester	4-5	
-Acrylic	4-5	
-Wool	4-5	

6 Crocking Fastness (Adidas PHM-AP0504 Version 4.1):

	Length	Width	Requirement
Dry	4-5	4-5	4
Wet	4-5	4-5	3

TEST REPORT

Number : SHAT07335542

Tests Conducted (As Requested By The Applicant)

7 Light Fastness (Adidas PHM-AP0511 Version 5.1, Refer To: ISO 105 B02:2014, Exposure Cycle A1, Xenon-Arc Lamp):

		Requirement
<u>Intermediate Exposure (Rating 1)</u>		
Grade	3+	
<u>Final Exposure (Rating 2)</u>		
Grade	4	3-4

8 Colour Migration Fastness (Adidas PHX-AP0515 Version 4, 70°C For 48 Hours):

		Requirement
Colour Change	4-5	4-5
Colour Staining		4
-Polyester (Face To Specimen's Face)	4	
-Polyester (Face To Specimen's Back)	4	

End of Report

This report is made solely on the basis of your instructions and/or information and materials supplied by you. It is not intended to be a recommendation for any particular course of action. Intertek does not accept a duty of care or any other responsibility to any person other than the Client in respect of this report and only accepts liability to the Client insofar as is expressly contained in the terms and conditions governing Intertek's provision of services to you. Intertek makes no warranties or representations either express or implied with respect to this report save as provided for in those terms and conditions. We have aimed to conduct the Review on a diligent and careful basis and we do not accept any liability to you for any loss arising out of or in connection with this report, in contract, tort, by statute or otherwise, except in the event of our gross negligence or willful misconduct.

This report shall not be reproduced except in full, without written approval of the laboratory.

升华牢度测试仪



干湿磨牢度测试仪



水洗牢度测试设备



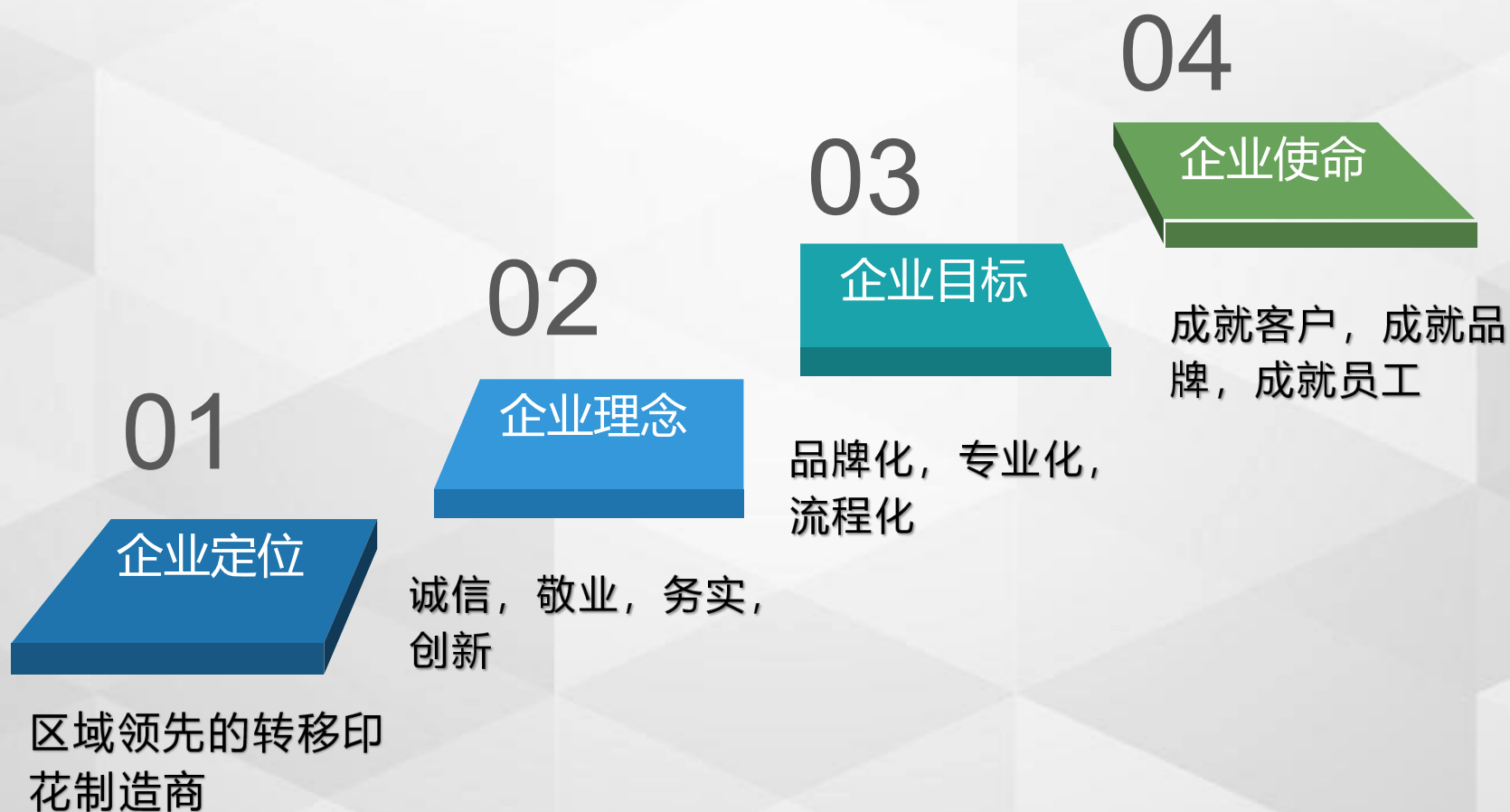
07

企业成长

企业文化
企业成长过程
企业优势与未来

企业文化

“543”管理目标，宗旨：提供目标预期



企业成长过程

腾飞期

2019-至今 2020年我们又新增了7台宏华高速机，此时产能已经可以媲美传统纸印花了。我们继而又申请了GRS,OK100, HIGG, Disney等认证。成立了自己的厂内实验室，研究了解决数码布面有杂点的浅色墨水和满足浅色耐光的高日晒墨水。2021年3月再新增4台宏华32D.产能500米/h/台。大货交期缩短为3-5天！

壮大期

2017-2019年 2017年我们接触到了更多的品牌客人，此时我们对于环保的意识已经很清晰了，定位也越来越清楚。将原有的黑金刚换成了宏美工业机。但这远远不够。此时的数码墨水对于品牌的各项牢度满足不了，我们开始了大量的市场实验。认识了蓝宇，他们专业研究升华转移墨水。最终选择了宏华，2018年底我们上了3台宏华高速工业机。200米/h/台。

成长期

2014年-2017年。2014年BURTON使我们初步有了环保意识，申请了BLUESIGN。这时我们还是以传统纸印花为主，数码为辅。投产数码纸印花机黑金刚20台，问题多，效率低，10米/h/台

萌芽期

2013-2015年，2013年成立工厂，这3年内我们主营传统纸印花工艺，4条传统纸印花机。那时我们做的超市单较多。此时我们拥有ISO9001，



星墨坊未来的战略定位仍然是坚持品牌路线，大力发展数码科技！

我们有以下几大优势：

1

专业团队

我们的销售与美工都是经过专业的制版学校培训选拔出来的。对于升华转移印花拥有丰富的制作经验。

2

品质保证

我们会对来胚进行检验，提前将问题暴露，印布时采用跟机打卷，印的同时可检查每1米印花布的布面。采用美标4分制出货。

3

交期确保

我们每天的产能是5万米，大批量的订单正常5-7天可以交货，着急的订单可随时协商交期，保证1-2天交货。

4

交通发达

地处于中国大陆的经济、金融、贸易和航运中心的上海市，上海位于中国大陆海岸线中部的长江口，拥有中国最大的外贸港口、最大的工业基地，是中国大陆第一大城市，具有优越的对外贸易优势和良好的投资环境。



欢迎咨询下单



创造价值 分享价值

CREATING VALUE SHARING

THANKS FOR WATCHING