



COLOR 3D TECHNOLOGY APPLICATION

赛纳彩色3D技术应用案例



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Equipment Parameters

Global Leader in Full - Color 3D Printing



Zhuhai Sailner 3D Technology Co., Ltd.

- A high - tech enterprise under Sailner Technology Group focusing on the R & D and application of additive manufacturing technology
- A leading enterprise globally focusing on full - color 3D printing technology

30,000 +

Employees

260 billion RMB

Annual Revenue

Technology
R & D



Material
Development



Complete
Industrial
Ecological
Chain

Equipment
Production



After - sales
Service



Core Technology and Innovation

- WJP 3D printing independent core technology
- The earliest in China to master the independent core technology of direct - jet color multi - material 3D printing

Technical Highlights

- Inkjet - based layer - by - layer solidification
- Precisely jet photosensitive resin
- instant UV curing, and layer - by - layer stacking for forming



Customized Solution for Real - Person Figurines — sailner3D



Application value

Personalized Art Collectibles

Customized exclusively based on real individuals

New Trend in the Industry

Meeting personalized demands, emerging as a growth driver in niche markets

Technical Advantages

Sailner Full - Color 3D Printers

Wide - gamut Coverage & High - Precision Reproduction

Efficient Production & Multi - material Compatibility

Ideal for small - batch, customized manufacturing

Production Process

3 Steps to Finish

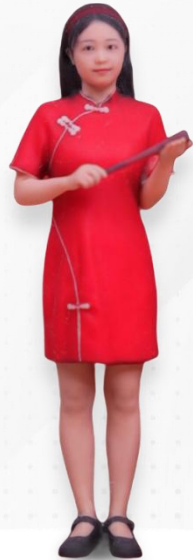
Scanning: 1–5 seconds

Modeling Refinement: Precision optimization of details

Printing: High - speed production of final products



Sailner 3D Real - Person Figurines — Full - Link Competitiveness



Brand Advantages

Source Manufacturer •
Independent R & D Technology

Product Advantages

Ultra - high Fidelity & Smooth Surface
Over 10 Million Color Coverage
High Efficiency & Low Consumption

Service Advantages

Integrated Technical Training
On - site After - sales Engineer Support
Full - process Solution Support

Model Advantages

Flexible Business Model
Support for Diverse Revenues

High Fidelity • Vivid Colors • Delicate Texture

The Advancement of Technology Always Comes for You

AI - Driven 3D Data Generation

Closed - loop Solution of
Sailner Full - Color Printing
Technology



Technical Core

- Deep Learning + Computer Vision Algorithms

Core Capabilities

- Reconstruction from 2D Images to 3D Space
- High - precision 3D Models from Single/Multiple Photos

Principles of AI 3D Data Generation



Sailner Equipment Undertaking

- Over 10 Million Colors Coverage (Wide - gamut Restoration with AI Data)
- 1 μ m - scale Magnetic Grating for Micron - level Precision
- Multi - material Compatibility Supporting Customized Output
- Efficient Production for Small - batch Orders

Saina Equipment Undertaking



Application Scenarios

- Rapid Materialization of AI - Generated Models
- Small - batch Production of Cultural and Creative Products



Sailner AI Data Application — Driven by Dual Engines of Technology + Service



Technical barriers

Ultra - high Fidelity + Mirror - level Smoothness
Industrial - grade Stability + Low Consumption



Technical barriers

Integrated Training for AI Modeling + Printing
On - site Engineer Support for Optimization Solutions
Support for In - depth Custom Development



Technical barriers

- Independent R & D of AI → Printing Full - Link Technology
- Triple Leadership in Color, Precision, and Efficiency

Seamless Connection • Precise Restoration



New Era of 3D Printing for Fabrics — Sailner Full - Color Technology Reshapes Flexible Material Manufacturing



Technical Revolution

Seamless Conversion of Digital Entities

Transform gradient colors + three - dimensional folds in virtual models directly into physical entities.

Cross - fusion of Materials

Fabric flexibility × 3D printing precision structure = Brand - new functional fabrics.

Sailner's Core Breakthroughs

Over 10 million colors coverage (natural gradient transitions).

1 μ m - scale magnetic grating for micron - level precision.

No support structures needed (no post - printing processing costs).

Transparent + color 3D stacking effects.

Application Scenarios

Custom high - end fashion | Smart wearable devices |
Art installation fabrics | Flexible automotive interiors

Sailner Fabric Printing — Dual Subversion of Technology + Efficiency



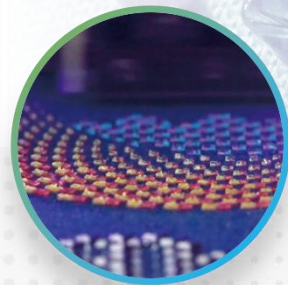
Sailner Fabric Printing — Dual Subversion of Technology + Efficiency

Translucent Gradient Texture · Embedded Circuit Structure



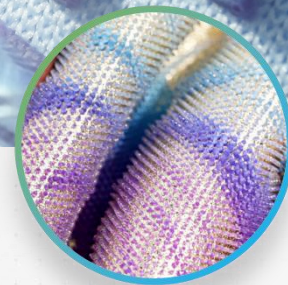
Technical Barriers

- Independently developed color - material (synergy) system
- Leading patent for “Unrestricted Printing Path”



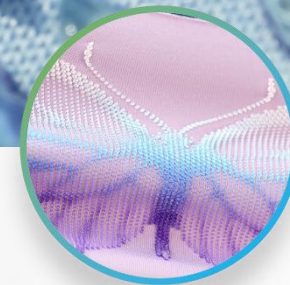
Product Efficiency

- industrial - grade stability: 7 × 24h
- Rapid delivery of fabric products with complex structures
- Material consumption rate < 10% (varies by height)



Design Freedom

- Supports micron - level textures (lace/embossment/translucent gradient)
- Compatible with cotton/polyester/composite fiber substrates



Service Depth

- Full - process solutions from digital design to mass production
- Material development and customized laboratory support

Sailner Full - Color 3D Printing — Reshaping the New Standard for Personalized Keycap Manufacturing



Pain Point Terminator

- Bid farewell to traditional water-based sticker fading
- Break through the limitations of CNC engraving
- Solve the defect of poor paint color fastness

Small - Batch Customization

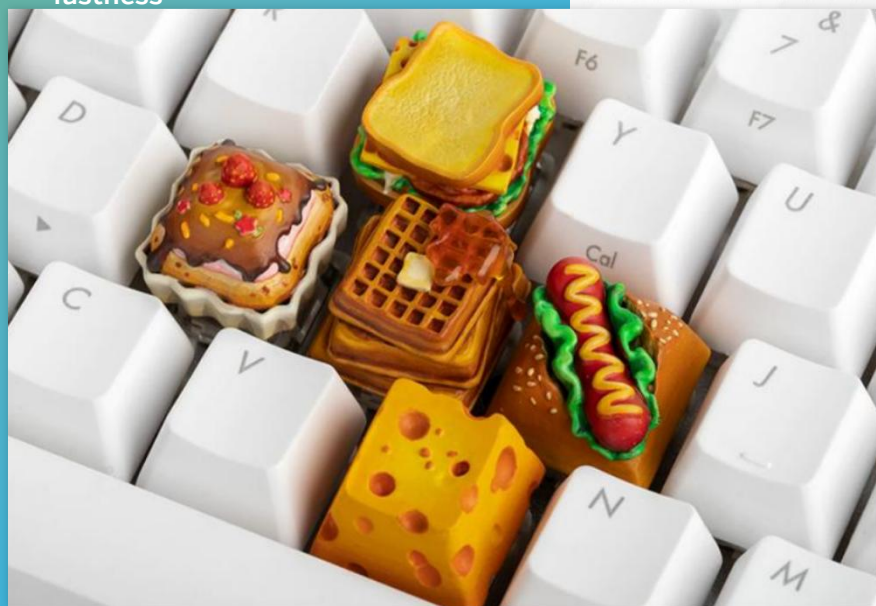
- Order from a single piece · Lower cost than traditional mold opening
- Full - color integrated molding

Freedom for Complex Structures

- Support designs like three - dimensional reliefs/translucent characters/embedded textures, etc.
- Special - shaped designs

Industrial - Grade Precision Output

- 1 μ m - scale magnetic grating for micron - level precision
- Coverage of 10 million colors
- Mirror - level smoothness



Sailner Keycap Solutions — Absolute Barriers from Design to Delivery



Technology Monopoly

- Self-Developed Color-Hardness synergistic material system
- "Micro-Droplet Control" Patent (Solves Coating Issues)



Production Efficiency

- Full-page high-efficiency printing, with an efficiency superior to that of similar devices
- 24-hour continuous printing



Cost Advantages

- The material utilization rate is superior to that of similar equipment
- Patent for unlimited printing path, reducing waste



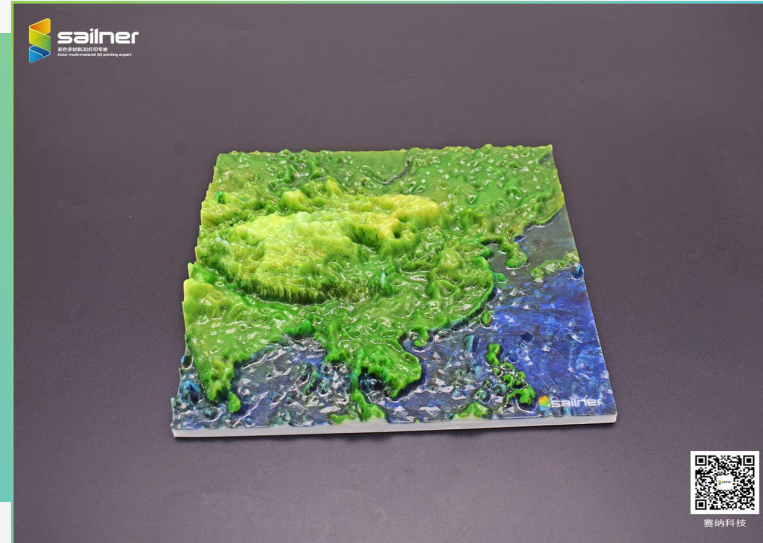
Ecosystem Support

- Open API access to mainstream keycap design software
- Provide material/check broussonetia papyrifera verification



————— Translucent gradient characters · Cool texture touch · High color reproduction —————

Sailner Terrain Solution - A scientific closed loop from Data to entity



Data compatibility

seamlessly integrates STL、PLY、WRL、OBJ and WJP format data

Precision certification

1um scale magnetic grating, achieving micron-level precision

Efficiency revolution

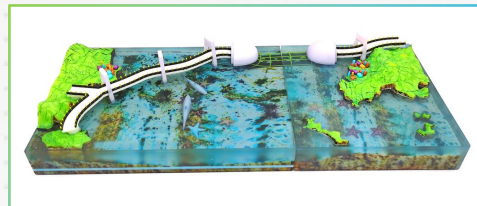
More refined than traditional manual model making
Mass production consistency

Cost control

No molds required · Labor costs are significantly reduced

Service depth

Provide topographic data processing training



Sinai full-color 3D printing — Unlocking Infinite Possibilities in Educational Innovation



Interdisciplinary revolution

Print transparent + colored models
Producing geological teaching specimens
(integrated molding of soft and hard materials)

Engineering Art

Mechanical transmission teaching aids can dynamically demonstrate
Cultural relic reliefs restored to scale
(Rich surface texture effects)

Rich surface texture effects

0 high temperature/0 dust
Colorful soft and hard integrated printing
(Single-molded skeleton + muscles)

Teaching-friendly design

Supports STL、PLY、WRL、OBJ、WJP, Formatted data
AI cloud platform retrieves printing information

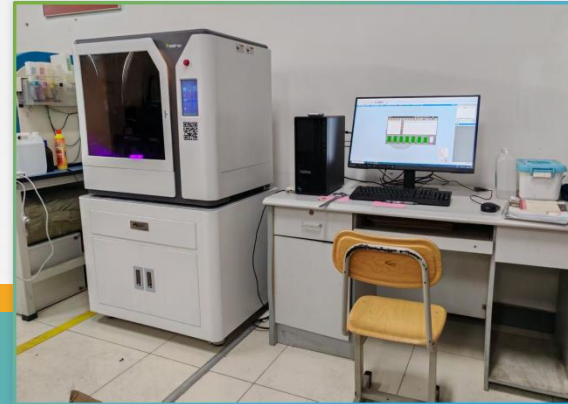


Core values

- Materialization of abstract concepts
- low risk solution
- Low-cost Innovation Workshop



Sainer Education Solution



Equipment Advantages

Industrial-grade precision
Intelligent AI Cloud Platform System

Resource Ecology

Subject teaching plan materials
Practical Training Course Package

Case training

Simulating the *Phoxinus phoxinus* subsp. *phoxinus* practical project
Simulating the *Phoxinus phoxinus* subsp. *phoxinus* practical project



Six Major Scenarios as the Cornerstone of Intelligence

From concept to physical entity: Scanning · Printing Technology
Panorama Unveiled



Sailner Smart Scan Flagship Matrix - Ultra-High Precision Full-Scene Coverage.



Portrait scanner - Su 7 V4

500W

110V 或 220V
(Non-self-adaptive,
must be preset before leaving the factory)

2.3 × 1.4 × 1m

57kg

5000million pixels

Rotate the turntable, camera components,
lighting module, Network module,
built-in computer module

Product model

Power

Input voltage

External
dimensions

Product weight

Pixel

module



Portrait scanner - JZ WHP03

1400W

220V
(Distribution box 220V to 24V)

2.7 × 2.7 × 2.5m

-

9.6million pixels

-

Sailner D Series — 10 million colors full-chain industrial-grade output



D450Plus - C

600 * 600 * 1200 dpi

2sets

8 material channels

Outer diameter $\phi 460\text{mm}$,
inner diameter $\phi 120\text{mm}$, height 150mm(circular area)

Full-color printing, transparent color printing,
texture printing

870 × 675 × 790mm

STL、PLY、WRL、OBJ、WJP

0.9KW

Maximum
resolution

Print nozzle

Print channel

Maximum
forming size

Printing effect

Dimensions

Supported
formats

Rated power

D452Plus - C

600 * 600 * 1200 dpi

2sets

8 material channels

Outer diameter $\phi 460\text{mm}$,
inner diameter $\phi 120\text{mm}$, height 150mm(circular area)

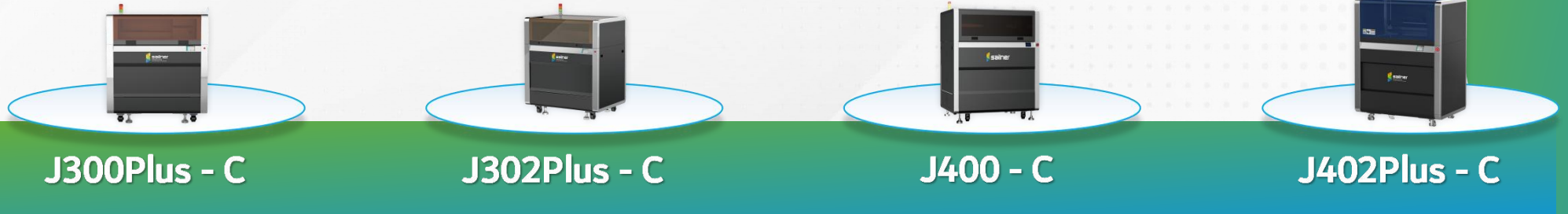
Full-color printing,
texture printing

870 × 675 × 790mm

STL、PLY、WRL、OBJ、WJP

0.9KW

Sailner J Series — 10 million colors full-chain industrial-grade output



	J300Plus - C	J302Plus - C	J400 - C	J402Plus - C
Maximum resolution	600 * 600 * 1800 dpi	600 * 600 * 1200 dpi	600 * 600 * 1800 dpi	600 * 600 * 1800 dpi
Print head	3 sets	3 sets	2 sets	2 sets
Print channel	12 material channels	12 material channels	8 material channels	8 material channels
Maximum molding dimensions	395 x 345 x 250 mm	395 x 345 x 250 mm	495 x 395 x 300 mm	495 x 395 x 300 mm
Printing effect	Full-color printing, Transparent color volume printing, Soft and rigid composite printing, Voxel-level Texture mode printing, Gradient printing	Full-color printing, Transparent color volume printing, Voxel-level Texture mode printing, Gradient printing	Full-color printing, Transparent color volume printing, Soft and rigid composite printing	Full-color printing, Transparent color volume printing, Voxel-level Texture mode printing, Gradient printing
External dimensions	1,170 × 860 × 1,280mm	1,170 × 860 × 1,280mm	1,500 × 1,100 × 1,460mm	1,500 × 1,100 × 1,460mm
Data format	STL、PLY、WRL、OBJ、WJP	STL、PLY、WRL、OBJ、WJP	STL、PLY、WRL、OBJ、WJP	STL、PLY、WRL、OBJ、WJP
Rated power	1.2KW	1.2KW	1.2KW	1.2KW