



对版、烘版、晒版三版一体机

Three-in-One Plate Drying, Registration, and Exposure Machine

DGN-UV-LED90120 产品规格书



■ 对版、烘版、晒版三版一体机

K3 三版一体机是一款集烘版、对版、晒版于一体的多功能丝网印刷印前制版设备,专为高效、精准的印前制版需求设计。通过整合三大核心功能(烘干、对版、曝光),显著节省车间空间,降低设备投资成本,提升制版效率与精度。

K3 三版一体机是一款集烘版、对版、晒版于一体的多功能丝网印刷印前制版设备。

■ Product Overview

The K3 Three-in-One Machine integrates plate drying, registration, and exposure into a single multifunctional pre-press screen printing plate-making device. Designed for high-efficiency and precision in pre-press

plate-making, it combines three core functions (drying, registration, and exposure), significantly saving workshop space, reducing equipment investment costs, and improving plate-making efficiency and accuracy.

The K3 Three-in-One Machine is a multifunctional pre-press screen printing plate-making device integrating plate drying, registration, and exposure.

■ 技术参数

设备规格	参数
设备型号	DGN-UV-LED90120
主机外形尺寸(长宽高)	1740mm×1350mm×990mm
控制箱外形尺寸(长宽高)	700mm×370mm×850mm
最大网框面积	900mm × 1200mm
总功率	9kW
烘版箱功率	6kW
烘版箱温控范围	室温—50℃（可调）
UV-LED光源功率	2kW
控制方式	PLC全自动控制
显示界面	触摸屏操作
对版方式	菲林对位
菲林贴合方式	抽真空吸附

Technical Parameters

Item	Specification
Model	DGN-UV-LED90120
Main Unit Dimensions(LWH)	1740mm×1350mm×990mm
Control Box Dimensions(LWH)	700mm×370mm×850mm
Max. Screen Frame Are	900mm × 1200mm
Total Power	9kW
Drying Oven Power	6kW
Drying Oven Temp. Range	Room temp.---50℃ (adjustable)
UV-LED Light Power	2kW
Control Method	PLC Full-Automatic Control
Display Interface	Touch Screen Operation
Registration Method	Film Registration
Film Attachment Method	Vacuum Adsorption

■ 核心功能

1. 烘版功能

- 五层抽屉式烘版箱设计,可同时存放多块网版,取放便捷。
- 外置 6kW 热风循环加热系统,提供高速恒温热风(室温—50°C可调),热风对流均匀,快速干燥感光胶。

2. 对版功能

- 菲林对位技术,通过基准定位实现多套色精准对版,晒版完成即对版完成,减少人工调整步骤。

3. 晒版功能

- 高密度 UV-LED 光源,功率大、能量稳定,确保曝光效率与效果。
- 整块 6063-T5 铝基板散热设计,光源平面度优异,散热快,能量分布均匀,曝光效果一致。

■ functional characteristics

1. Drying Function

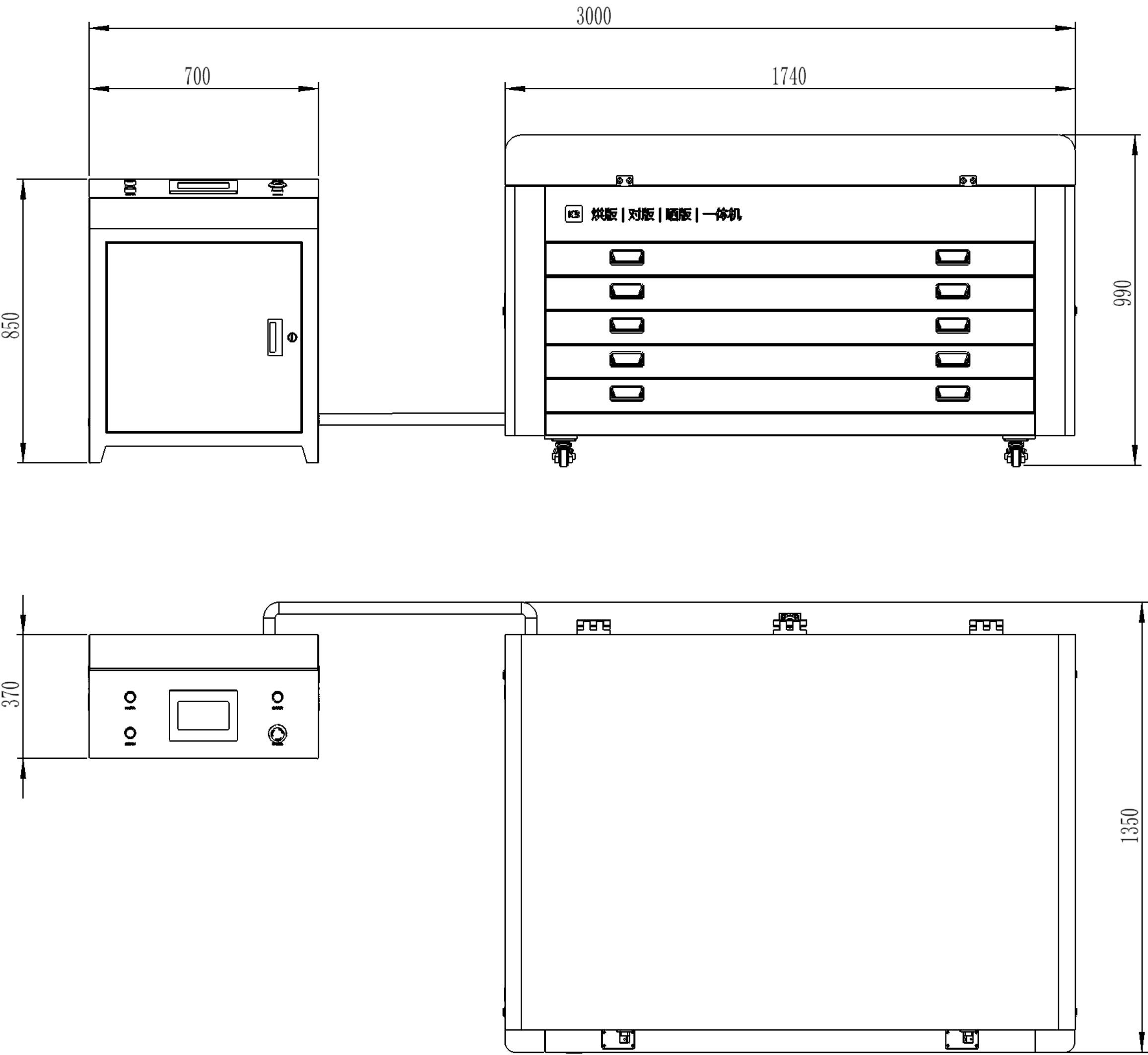
- Five-layer drawer-style drying oven design allows simultaneous storage of multiple screens for easy access.
- External 6kW hot air circulation heating system provides rapid, uniform, and adjustable heat (room temp.---50°C), ensuring fast and even drying of photosensitive emulsion.

2. Registration Function

- Film registration technology ensures precise multi-color alignment. Registration is completed immediately after exposure, minimizing manual adjustments.

3. Exposure Function

- High-density UV-LED light source with stable energy output guarantees efficient and consistent exposure results.
- 6063-T5 aluminum substrate heat dissipation design ensures excellent flatness, rapid cooling, and uniform energy distribution for consistent exposure.



■ 产品特点

1. 三机一体，高效节省

- 集成烘版、对版、晒版功能，节省车间空间，降低设备采购与维护成本。

2. 智能温控烘版系统

- 五层抽屉式烘版箱，容量大、操作直观；外置热风循环加热箱，恒温干燥速度快。

3. 精准对版技术

- 菲林基准定位技术，从源头解决多套色对版偏差问题，提升制版精度。

4. 高性能UV-LED光源

- 2kW大功率UV-LED光源，配合铝基板散热设计，确保高能量输出与长寿命。

5. 全自动控制

- PLC+触摸屏智能控制，参数设定灵活，操作简便，流程自动化。

■ Product Highlights

1. Three-in-One Design, Space-Saving Efficiency

- Integrates drying, registration, and exposure, reducing workshop space and lowering procurement/maintenance costs.

2. Intelligent Temperature Control System

- Five-layer drawer-style drying oven with large capacity and intuitive operation; external hot air circulation ensures fast and constant-temperature drying.

3. Precision Registration Technology

- Film-based benchmark positioning eliminates multi-color misalignment issues, enhancing plate-making accuracy.

4. High-Performance UV-LED Light Source

- 2kW high-power UV-LED with aluminum substrate cooling ensures high energy output and long lifespan.

5. Full-Automatic Control

- PLC and touch screen interface enable flexible parameter settings, simplified operation, and automated workflows.

■ 结构组成

1. 主机模块

- 包含烘版箱、UV-LED 曝光单元、对版机构, 采用一体化框架设计。

2. 控制箱

- 独立控制单元, 集成 PLC、触摸屏及电气系统, 支持人机交互与参数设置。

3. 热风循环系统

- 外置 6kW 加热箱, 通过风道与烘版箱连接, 实现热风循环。

■ Structural Components

1. Main Unit Module

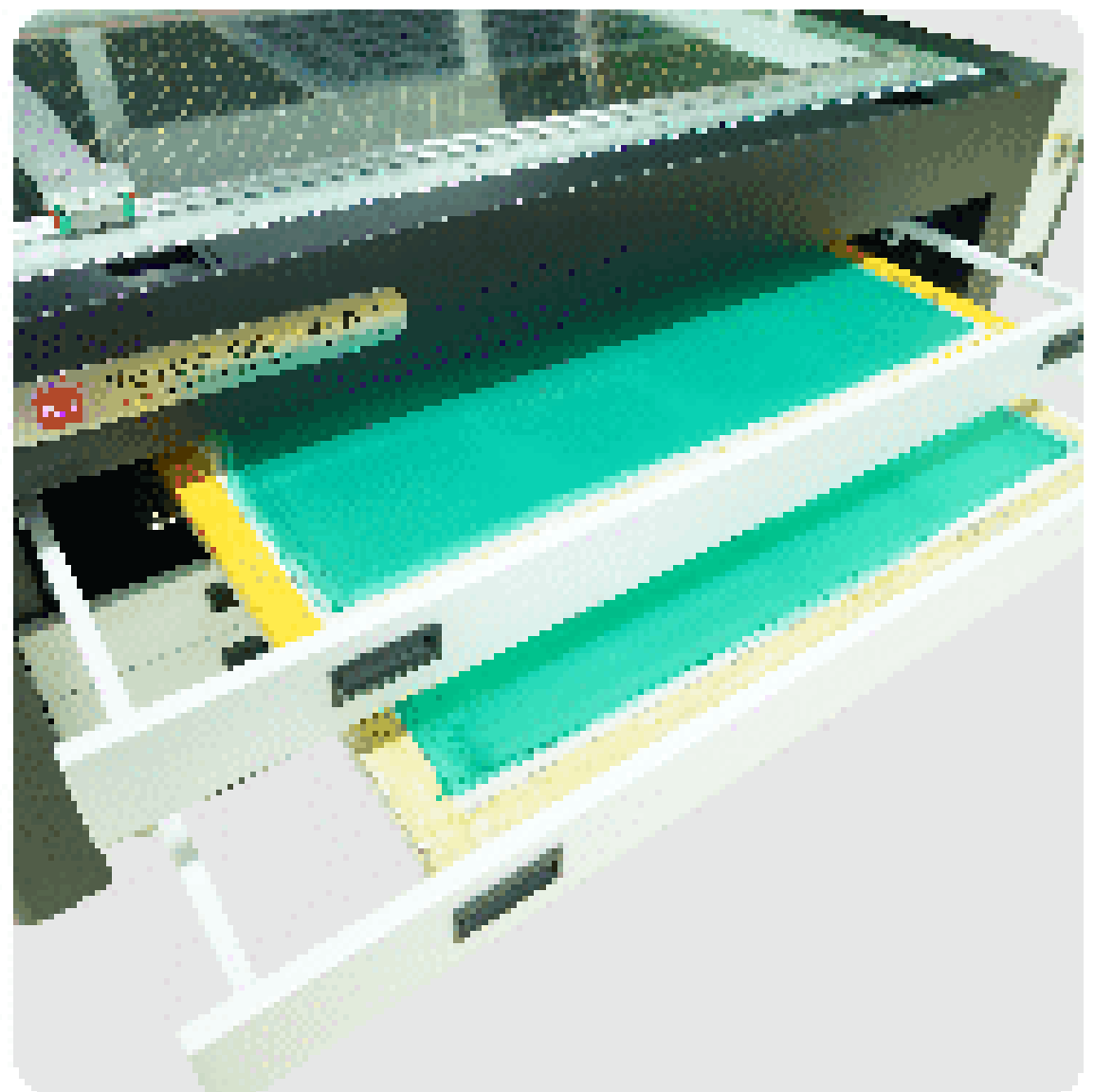
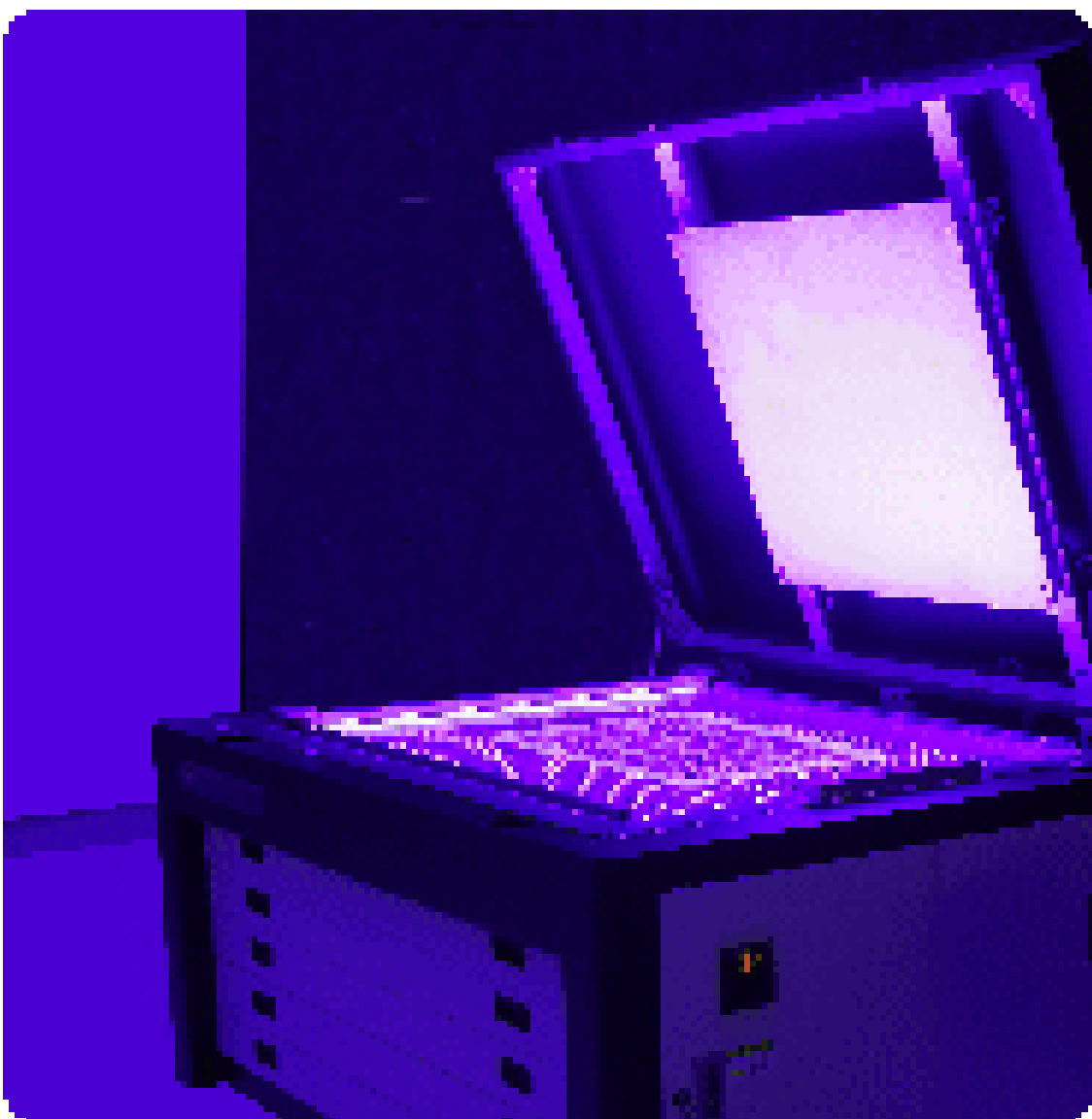
- Includes drying oven, UV-LED exposure unit, and registration mechanism in an integrated frame design.

2. Control Box

- Independent control unit integrating PLC, touch screen, and electrical systems for human-machine interaction and parameter configuration.

3. Hot Air Circulation System

- External 6kW heating box connected to the drying oven via ducts for efficient heat circulation.



■ 注意事项

1. 设备需接入稳定电源(电压根据用户需求定制)。
2. 使用前需校准菲林基准位置,确保对版精度。
3. 定期清洁 UV-LED 灯板及烘版箱滤网,维护设备性能。

(注: 本规格书参数为标准配置,可根据客户需求定制特殊型号。)

■ Precautions

1. Connect the device to a stable power supply (voltage customizable per customer requirements).
2. Calibrate film benchmark positions before use to ensure registration accuracy.
3. Regularly clean UV-LED panels and drying oven filters to maintain performance.

Note:

Specifications listed are for standard configurations.
Custom models are available upon request.

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参数可能因配置或软件版本调整，具体以实际设备为准。
Specifications may vary depending on configuration or software version. Refer to the actual device for details.