Guaranteed print quality with Inspection camera system

High-performance, precise

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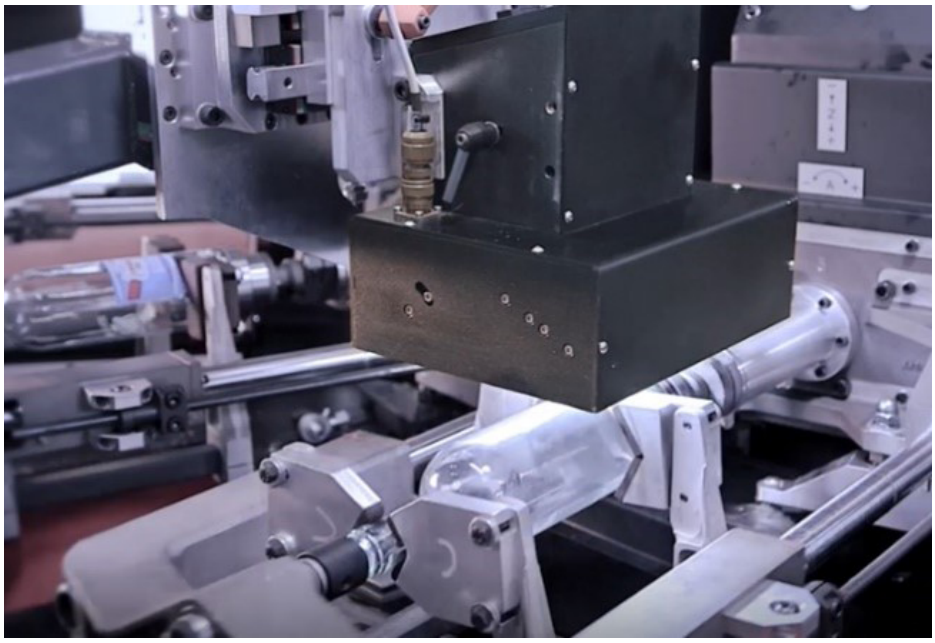
DeCoSystem

Ensures every piece meets the highest standards and earns customer trust.

High-performance, precise cameras detect defects instantly—maintaining consistent quality from start to finish.

- Prevents defective prints from reaching customers
- Reduces printing waste
- Maximizes production efficiency



Enhance Competitiveness

For food, beverage, and cosmetic manufacturers, accurate and complete printed information is crucial. Inspection cameras help verify text precisely, boosting customer confidence.

Why Choose an Inspection Camera System for Quality Control?

- **Stability:** Consistent inspection throughout printing, unaffected by fatigue
- **Accuracy:** Detects small prints, missing/excess parts, and multilingual text
- **Speed:** Supports high-speed printing with full inspection
- **Data Recording:** Records defect images and data for analysis

DeCoSystem

Manufactures print quality inspection

for packaging industries, including plastic, metal, and glass.

Trusted by leading printer manufacturers, our systems support screen, offset, flexo, digital, pad, and hot/cold foil printing.

Compatible with:
- New printers
- Older printers with available space, rotary clamps, or removable screen print heads

DeCoSystem continuously innovates to advance our technology, offering:
- Inspection on transparent materials
- QR code reading
- Custom-designed equipment for various printers
- Easy-to-use control screens with fast job setup

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SPECTRO DeCoSystem model

- Line scan camera with 4,096 pixel resolution
- Detectable defect types: missing or excess print, blurs, dirt, mis-registration, color variation, scratches

Designed to meet specific inspection needs on different materials and shapes with 4 solution options as follows:

SPECTRO-L	SPECTRO-AL	SPECTRO-G	SPECTRO-M
Inspection on plastic bottles and tubes In the L-CVI model, Hot foil stamping quality can be inspected.	Inspection on Cylindrical metal objects The AL-150 model can inspect Offset printed tubes at a speed up to 600 tubes/min.	Inspection on Glass With the unique technology of lighting system and processing, it is possible to detect the transparent glass material.	Inspection on Oval and Flat objects With the matrix cameras
			

A Stand alone off-line inspection machine or installed at the end of the printing line.

For printers that cannot accommodate cameras, DeCoSystem developed the SPECTRO inspection system combined with conveyors, rotary devices, and reject units—each model tailored to different product types.

MULTIPLUS

Print inspection module for Plastic bottles. Bottles range up to 250mm lengths and 120mm diameter.

- MULTIPLUS-VVG model for Glass bottles and Jar. Bottles range up to 180mm lengths and 80mm diameter.

MINITUB

Print inspection module for Plastic tubes.

MINITUB is easy to use: the setup of a new job can be done in less than 5 minute.

MOMENTO

Print inspection module for Glass bottles: suitable for beer, soft drink.

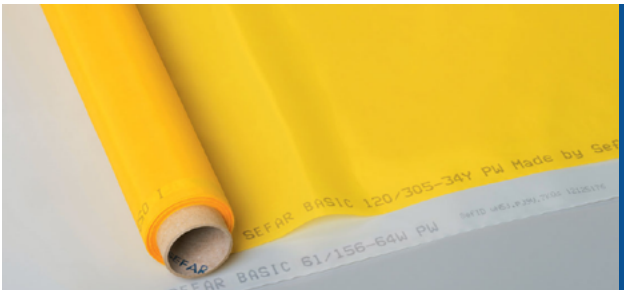
It is possible to inspect cylindrical bottles up to 400 bottles per minute.

DeCoSystem has been proven effective

by real users in the container & packaging printing industry in many countries that it can meet the needs of printing quality inspection very well.

Currently, DeCoSystem has distributors in more than 35 countries worldwide, with T.A.O. Bangkok Corporation Ltd. as the distributor in Thailand and T.A.O. Bangkok (Vietnam) Limited Liability Company in Vietnam.

For more information about the product, please get in touch with Mr. Rangsan Sriwilai at email: rangsans@taobangkok.co.th



Screen Frames and Mesh — The Heart of Quality Screen Printing

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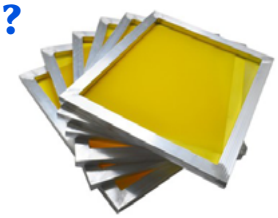
Screen Frames and Mesh

In screen printing, common issues like blurry images, uneven colors, and misaligned prints often require constant adjustments, making quality dependent on the printer's skill.

This article offers practical tips to identify root causes and improve clarity, accuracy, and consistency.

One key factor is the screen stencil—when prepared correctly, it makes printing faster, more reliable, and cost-efficient while reducing waste.

So, what does a high-quality screen printing stencil look like?



Core Components of a Screen Printing Stencil

1. **Frame** – Rigid, warp-resistant, and holds high mesh tension.
2. **Mesh** – Properly tensioned for sharp, clear prints.
3. **Emulsion** – Compatible with your ink and application, and offers good durability.

Benefits: when these components are well-selected and maintained, they result in:

- Longer stencil life
- Faster and more efficient setup
- Sharper prints and consistent ink deposit & opacity
- Reduce static issues

Key Considerations When Choosing a Stencil

Frame Type – Why Frame Strength Matters

Strong frames are essential for:

- Long-term reuse
- Consistent and accurate print registration
- Reduced warping over time (prevents tension loss)

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Screen printing frames come in 3 types

1 Wood Frames
- Affordable and beginner-friendly
- Common in small-scale print
- Can warp over time due to moisture
- Not ideal for high-tension mesh or repeated washing

2 Metal Frames (usually Aluminum)
- Durable and lightweight
- Resistant to warping and moisture
- Great for professional use
- Great for high-tension applications
- Can be reused multiple times with proper care

3 Retensionable Frames
- Advanced and adjustable
- Allow mesh tension to be fine-tuned over time
- Ideal for high-volume or precision printing
- More expensive and require skill to use properly

Each type of frame can be used with various mesh options, depending on image detail and ink thickness. For long-term quality and consistency, aluminum frames are a highly recommended choice.

Mesh Types

1 Nylon Mesh
- Suitable for flexible applications
- Not suitable for high-precision work

Application : Textile printing, Curved surface material

2 Polyester Mesh
- Most commonly used today
- Durable and flexible
- Compatible with various inks

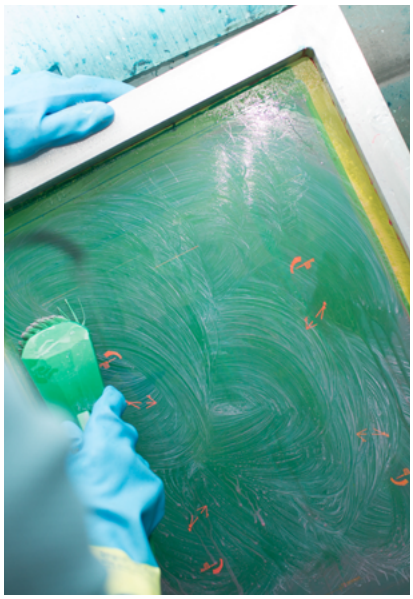
Application : Container printing, Automotive & Electronics parts, Graphics, Decals, PCBs etc.

3 Stainless Steel Mesh / Metal mesh
- Ideal for high-precision printing
- Allows fine control over printing detail
- High tensile strength but low flexibility

Application : Printed Electronics, Solar cells, Microelectronics, ...

What You Should Know for Preparing a Stencil for Printing

- **Artwork Design** – The size and detail of the image for determine the mesh count.
- **Substrate Type (flat or curved)** – Influences required for screen tension.
- **Ink Type (e.g. UV, solvent-based, water-based)** – Related with emulsion selection and coating thickness.



T.A.O., we don't just supply — we collaborate with you as your trusted printing buddy.

Our technical team provides consultation to help customers develop the most suitable stencil for your production. We help optimize key variables like mesh angle, screen tension, and emulsion thickness to ensure consistent, high-quality results every time.

T.A.O. Stencil Making Service Solutions
We offer a full range of stencil-making services tailored for specific printing needs:

- **Ready-to-Print Stencils** – Simply put the stencil and ready to produce directly.
- **Pre-coated screen** – Pre coated screen under controlled conditions for consistent emulsion thickness reduces working time and increases process reliability.
- **Screen Tensioning Service** – Professionally stretched screens for optimal mesh tension and accurate printing.

For more information about the product, please get in touch with Miss. Suparat Tansangthong at email: suparatt@taobangkok.co.th

In today's world, waste and environmental issues have become critical matters that all sectors must recognize and address.

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Turning Waste into a Pathway to Sustainability

AT T.A.O.,
we are deeply aware of our responsibility to society and the environment. We believe that implementing a systematic waste management approach within the organization is essential. It marks a strong starting point toward building lasting awareness and fostering true sustainability.

Waste Management System

The company's internal waste separation system is divided into three categories: general waste, recyclable waste, and hazardous waste. Initially, TAO has provided training sessions for employees to review their understanding and apply it in practice.

This waste separation training is not merely about delivering basic knowledge—it also aims to instill a sense of responsibility toward society and the environment. The main objectives of the training include:

1. Educate on waste types: general, recyclable, and hazardous
2. Teach proper waste separation methods
3. Promote daily waste reduction practices
4. Foster an eco-conscious workplace culture

The company provides designated waste disposal points: each office floor has bins for general and recyclable waste, while hazardous waste has separate collection points. In production areas, hazardous waste bins are inside, and general/recyclable bins are outside the work area.

Waste Separation

General Waste

- Food containers, such as snack bags, food wrappers, and foam boxes
- Tissue paper
- Small paper scraps
- Food waste

Recyclable Waste

- Paper boxes
- Corrugated cardboard
- Used A4 paper
- Paper cores
- Plywood and wood scraps
- Wooden pallets
- Plastic caps from ink cartridges not directly contacting ink
- Plastic cores and sheets
- Stretch film
- Glass and plastic bottles
- Aluminum caps from ink cartridges not directly contacting ink
- Electronic devices that cannot be repaired

Hazardous Waste

- Containers contaminated with printing ink, thinner, and production chemicals, such as drums, cans, and gallons
- Materials contaminated with printing ink, thinner, and production chemicals, such as gloves, cloths, and fabric masks
- Printer ink cartridges
- Light bulbs
- Batteries (e.g., AA/AAA)
- Rechargeable batteries
- Expired or unusable ink and thinner

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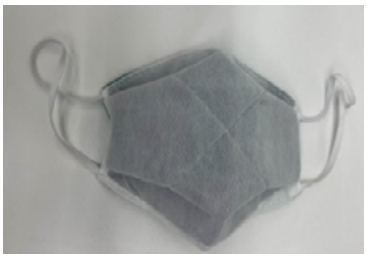
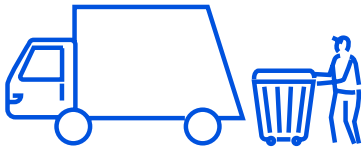
General Waste

Recyclable Waste



Hazardous Waste

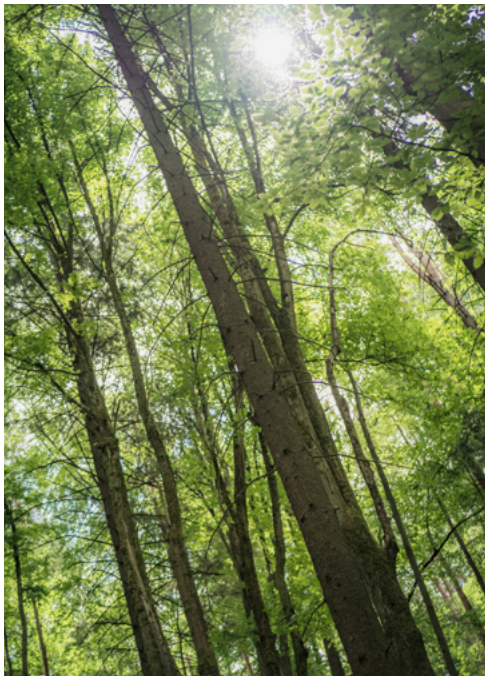
Waste Management



1 General Waste
Collected and handled by the municipal waste service

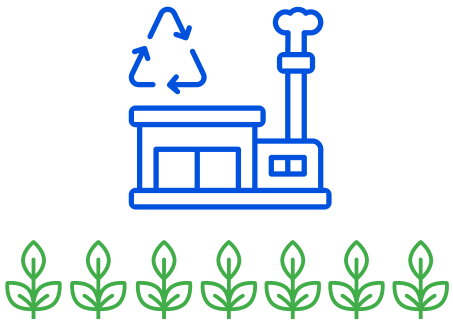
2 Recyclable waste
Sold to a company for recycling processing

3 Hazardous waste
Disposed of by a licensed and legally registered waste disposal company under the Department of Industrial Works



Benefits

- Reduce the amount of waste sent to landfills
- Lower waste management costs
- Promote employees' social responsibility awareness
- Create a clean, safe, and sustainable work environment



Proper waste separation and management are key tools that drive the organization toward tangible sustainability.

They mark the beginning of a cultural shift within the company that benefits the business, employees, and our planet.