

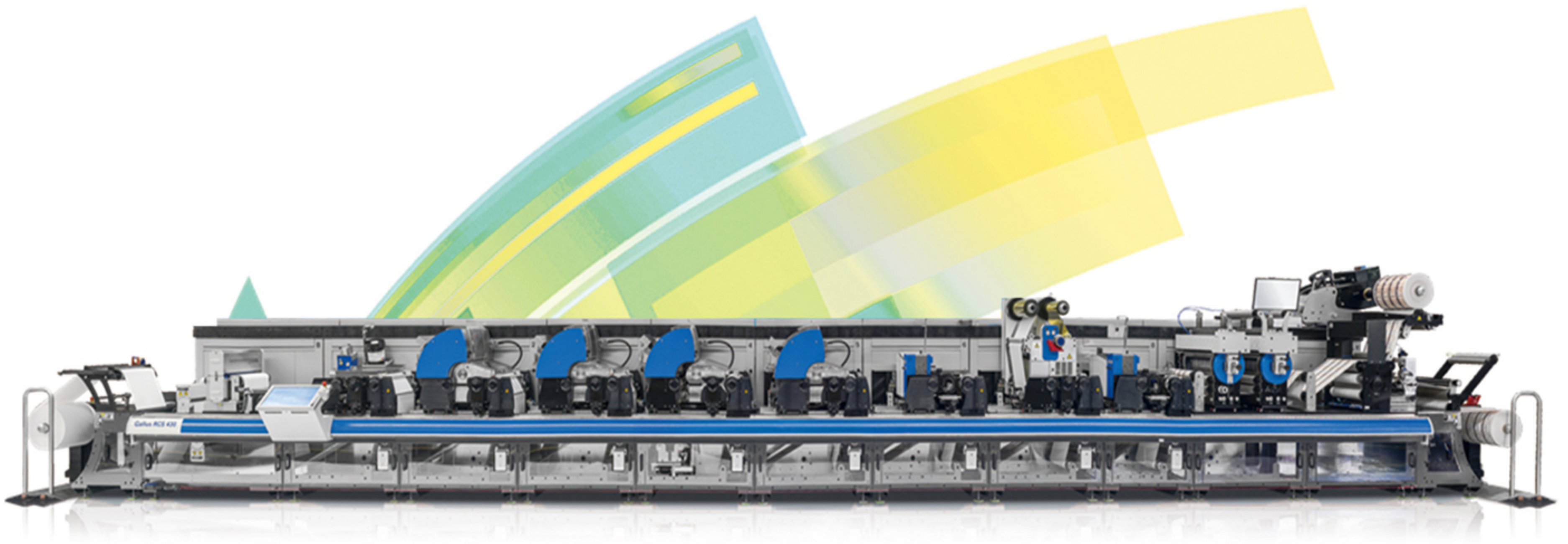
# Print Area

UV-LED FLEXPLO INK



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## UV Flexo Inks

Stronger ink transfer performance, higher color strength, and better printing density, high-definition dots, text and solids are obtained when printing on high screen line.

### Features

1. High color strength, 10-15% higher than ordinary ink.
2. Lower odor, suitable for odor-sensitive product packaging such as food cosmetics.
3. Good curing performance, suitable for high speed printing.
4. Suitable for various doctor blade systems.
5. Lower viscosity and more stable and consistent viscosity.
6. Excellent combination printing.
7. Excellent printability and dot reproduction.
8. Wide range of applicable materials, good adhesion to materials.
9. Less printing and absorption on paper materials.

### Application range

1. In-membrane label 2. Wrapping tags 3. Various non-absorbent materials 4. Sticker  
Notes: Hot stamping and thermal transfer embossing

### Four Colors Process



Features	Advantage
In-membrane label	Low ink consumption for high-quality printing
Low viscosity	Good ink flow and good transfer performance
Environmentally friendly raw materials, lower odor	More suitable for food/cosmetic packaging and labeling
Excellent printing stability	Consistent print quality
Clear screen dots and text can be obtained at the same time when printing on high screen lines	Enables flexographic printing to produce high-quality prints
Wide range of materials used, good product resistance	Able to meet the different use requirements of various products
Higher curing speed	More suitable for high-speed printing and increase yield
Good combination printing performance	Improve combined printing yield

### Notes

- Available in four colors and Pantone basic colors
- Hexachrome six-color basic colors are also available

## PANTONE SPOT COLOR SERIES

**021C Orange**

**Warm Red**

**Rubine Red**

**Rhodamine**

**Green**

**Purple**

**Violet**

**Reflex Blue**

**072C Blue**

**032C Red**

**PANTONE 2420 C** PANTONE Green 35.76  
PANTONE Yellow 012 10.21  
PANTONE Trans. Wt. 54.03

**PANTONE 2421 C** PANTONE Yellow 012 60.73  
PANTONE Green 39.27

General UV Ink	Features
UV Flexo Ink	High color strength,Low viscosity,Low odor
UV Flexible Board Lightfast Ink	High color strength,Low viscosity,Low odor,And high level of light resistance
LED UV Flexo Ink	LED lamp curing,Power saving,Environmental protection,Fast curing speed, High color strength,Low viscosity,Low odor
LED UV Flexible Board Lightfast Ink	LED lamp curing,Power saving,Low odor, Environmental protection, Fast curing speed,High color strength,Low viscosity,High light resistance
UV Flexible Plate Low Migration Ink	Low migration,High color strength,Low viscosity,Low odor

**APPLYING EFFECT**  
 Self-adhesive labels / In-film labels / Surround labels /  
 Various non-zbsorbent materials





## Technology Data Sheet(TDS) - Ceres Process Ink and Pantone Ink

Product name	Lightfast		Acid Resistance	Alkali Resistance	Resistant to soap	Resistant to solvents	Heat-resistant
	High concentration	Low concentration					
Yellow	4	3	4	4	5	5	4
Magenta #	4	3	2	2	1	1	4
Cyan	8	7	5	5	5	5	5
Black ##	8	7	5	5	5	5	5
Deep Yellow	4	3	4	4	5	5	4
Orange #	4	3	3	3	2	2	4
Warm Red #	3	2	3	3	1	1	4
Warm Red	4	3	2	3	2	2	4
Red	4	2	2	2	1	1	4
Rhodamine Red	3	2	4	3	1	1	3
Violet	7~8	6~7	5	5	5	5	5
Reflex Blue	8	7	5	5	5	5	5
Process Blue	6	4	5	5	5	5	5
Green	8	7	5	5	5	5	5
Medium	8		5	5	5	5	5
White	8	7	5	5	5	5	5
UNS Orange	7	6	5	5	5	5	5
UNS Yellow	7	6	5	5	5	5	5
UNS Magenta	8	6	5	5	5	5	5
UNS Warm Red	7	5	5	5	5	5	4
UNS Rhodamine Red	8	6	5	5	5	5	5

- Note**
- Light resistance is divided into 8 grades, with 8 being the best and 1 being the worst.
  - Others are level 5, with level 5 being the best and level 1 being the worst.

## FRESISTANCE AND LIGHT RESISTANCE TEST METHODS

**Lightfastness** Expose printed matter to Atlas Fade-O-Meter ( ARK carbon black lightfastness tester),simulate the exposure of sunlight,and rate the lightfastness to 8.

- 1.Determine the strength according to the fade of the international blue wool fabric exposed to different times.
- 2.Note : # is the test result under normal conditions.As a result,when the humidity is high,the light resistance will be extremely poor.

- High density low density =100%ink/90%transparent +10%ink
- Printing conditions:2 rolls of RI colorimeter,equivalent ink volume 0.15cc~0.20cc

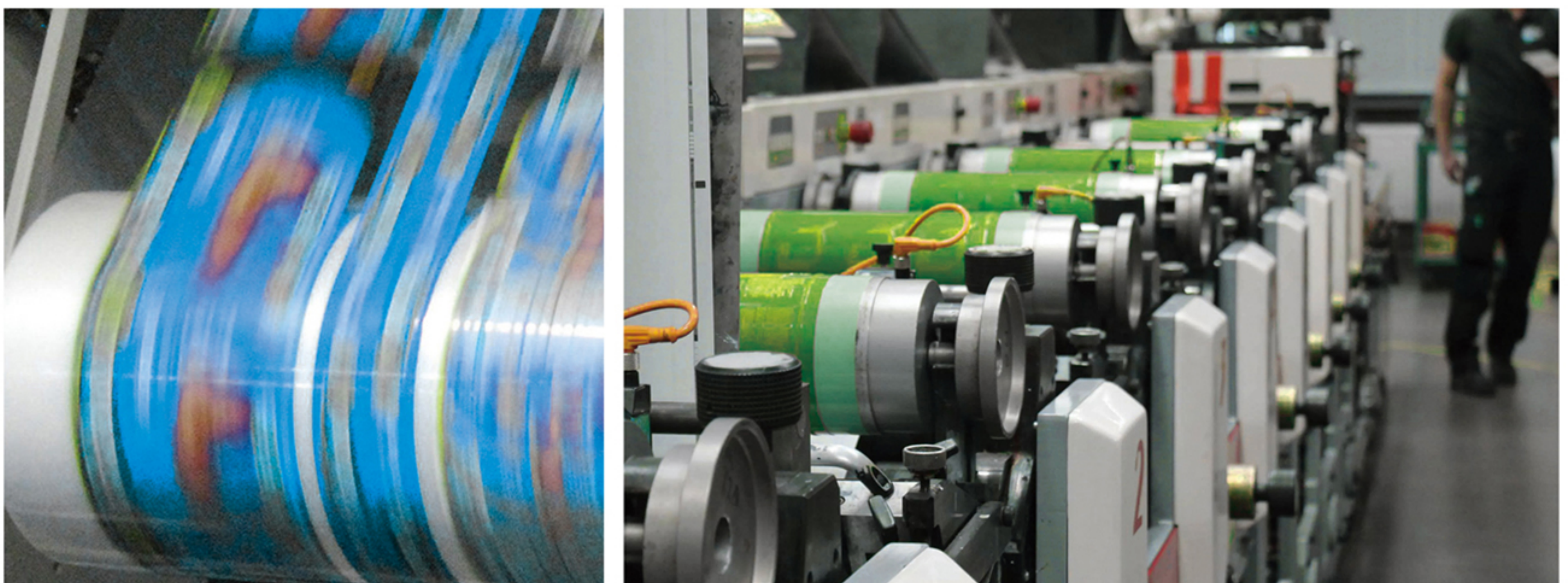
**Acid resistance** The printing paper is kept at 20C~25C and immersed in 2%sulfuric acid solution for 2H,and the strength is determined according to the degree of discoloration.

**Alkali resistance** The printing paper was kept at 20C~25C for 30 minutes,and immersed in 1%sodium hydroxide for 30 minutes,and the strength was judged by the degree of discoloration.

**Soap resistance** The printing paper was kept at 40C and immersed in 10%soap solution for 1H,and the strength was judged by the degree of discoloration.

**Solvent resistance** The printing paper is kept at 20C~25Cfor 5 minutes,and the strength is judged by the degree of discoloration and dissolution.

**Heat resistance** The printed paper was placed in a constant temperature dryer at 150C and heated for 30 minutes,and the strength was judged according to the degree of discoloration.



## Technology Data Sheet(TDS) - TOP COLOR FLEXOCURE UV INKS

Printing speed	150m/min	Printing speed	150m/min
Ink layer cm <sup>3</sup> /m <sup>2</sup>		Combination printing	
Cable	1.3-1.6cm <sup>3</sup> /m <sup>2</sup>	UV Flexo	●●●
In the field	1.8-3.0cm <sup>3</sup> /m <sup>2</sup>	Water-based Flexo	—
Printability		UV letterpress	●●●
Cable	●●●	UV screen	●●●
In the field	●●●	UV offset printing	●●●
Printing stability	●●●	UV Varnish	●●●
Substrate		Variable information printing	
Paper	●●●	Thermal printing	●●●
Coated thermal paper	●●	Thermal transfer printing	●●●
Coated film	●●●	Bronzing	●●●
Uncoated film	●●●	Cold stamping	●●●
Solvent content	—	Laser embossing	●●●
Patience		Inkjet printing	●●●
Chemicals	●●●	Complex	
Water	●●●	Free radical adhesive	●●●
Solvent	●●●	Cationic adhesive	●●●

### Ceres Ink

Ceres inks are **high-performance environmentally friendly** water-based flexographic inks designed for printing on film materials. Ceres inks are **easy to operate and maintain**, have **good stability and good color density**, and can provide users with the best solutions.

**Features** The product features high color strength, bright gloss, clear printing dots, strong three-dimensional impression of printed products, good printing transfer and leveling performance, fast drying speed, and can be used directly on the machine without adjustment. The product has no irritating odor and is easy to clean.

**Applicable substrates** Various plastic films (PE, PP, PET, etc.) after corona treatment, various metal foils, aluminized paper, non-woven fabrics.

#### Resistance

Water resistance ★★★

Grease resistance★★

Alcohol resistance★★

Blocking resistance★★

Alkali resistance★

**Color** Four colors are available, PANTONE basic colors, and personalized doping can also be provided according to customer requirements.

**Note** It is recommended to confirm the adhesion of each material before printing (the surface tension of the substrate of the play must reach 40-45 dyne cm)



# UV Flexo Auxiliary Ink

## UV Varnish

Provide UV gloss varnish, matt varnish and high-resistance varnish, widely used in various materials.

## UV Laminating Adhesive

High initial binding force, zero VOC, single component

## UV Foilbond Thru cure

Excellent cold stamping performance, good curing performance

## UV Flexo Primer

Improve the adhesion and scratch resistance, can realize the use of one ink on different materials, a wide range of materials.



UV Varnish



Glue



UV Primer

Model	Name	Characteristic	Application range
UV100-3	UV Flexo Varnish	Fast curing, suitable for various materials, especially good adhesion to white PE	Paper and film printing varnish
UV 100-6	UV Flexo Printable, Bronzable Varnish	Printable and bronzable surface	Daily chemical, medical, food, tag etc
UV 00028	UV Flexo Primer	Excellent adhesion to difficult-to-adhere film materials such as PET	Daily chemical, electronic label
UVF 00271	UV Flexo Cold Stamping Glue	Strong adhesion to PP/PE and cold foil	Daily chemicals, food, cigarette packs

# UV Rotary Screen Ink

## Combi White

It can be used on the machine without adjusting the ink, taking into account the dot clarity and field leveling, zero VOC, and using environmentally friendly raw materials.

## UV Screen Elite

Take into account the sharpness of the dots and the leveling in the field, zero VOC, using environmentally friendly materials, can achieve UV letterpress, offset, and flexographic overprinting.

## Special Effect Inks

Provide a variety of inks and varnishes to help customers obtain solutions with special printing effects: including product anti-counterfeiting, brand safety, enhancing product image, and enhancing product characteristics.

### UV Invisible Ink



### Optical Variable Ink



### Temperature Sensitive Ink



General UV Ink	Features	Mainly Used Substrate
UV Fluorescent Ink	Excellent fluorescence and colorful	Paper, Film, Plastic sheet
UV Scratch Silver	Fast drying, High coverage, Good peeling effect	
UV Stripping Varnish	Fast drying, High coverage, Good peeling effect	
UV Scratch Silver Ink	Fast drying, High coverage, Good peeling effect	
Fragrance ink	Colorless, Long-lasting fragrance, Full range	
UV Gold, Silver Ink	Strong metallic feeling and good printability	
UV Reverse Varnish	Reverse matte effect, Fast curing, Good wear resistance	
UV Matte Oil	Good Matte Effect	
UV Pearlescent Ink	Various pearlescent color effects	
UV Temperature Change Ink	Effect of color change at different temperatures	
UV Light Variable Ink	Various light changing effects under different light sources	

# COLD STAMPING TECHNOLOGY

## UVLT 00012

Cold stamping glue is a new type of UV curing glue for PE,PP,PET, paper with or without coating, and cold stamping foil.

## Technical index

Color:light color mixed liquid  
Viscosity:7000(CPS AT25C)  
Solid content:≥99%

## Application

- Coated uncoated paper,PE,PP,etc.
- In-membrane labels (PE,BOPP,etc.)
- Surrounding labels PE,BOPP,PVC, PET,etc.

## Application Tips

To obtain a good hot stamping effect,the cooperation of all units is required,including the number of lines of the anilox stick the amount of glue,the UV lamp power, the hardness of the printing plate,the peeling angle,the substrate,and the UV curing glue.

## Ink Roller-average Sizing Amount

According to different patterns,choose the correct number of lines for the ink roller.We don't recommend UV glue directly on the rough surface of the untreated material. It should be primed first.

## Foil Unit

We recommend that after the U glue is applied,cover the cold foil with a silicone roller of appropriate hardness, and the tension of the sending receiving unit is appropriate to prevent wrinkling.If the hardness of the nip roller is too low,the transfer effect of the cold pen is not good. The rollers of the foil unit must be completely clean and dust-free.Appropriate pressure of the foil unit is important to avoid air bubbles,which will cause poor transfer results.

## Applicable UV Lamp

The power of the UV curing device used for cold stamping should be at least 300 watts per inch.And keep the U lamp tube and there flection cover clean,do not stick to the ink,paper scraps and dust,etc.,and make the UV lamp device as close as possible to the pressure roller, timely and effectively curing UV glue.

## Laminating Roller

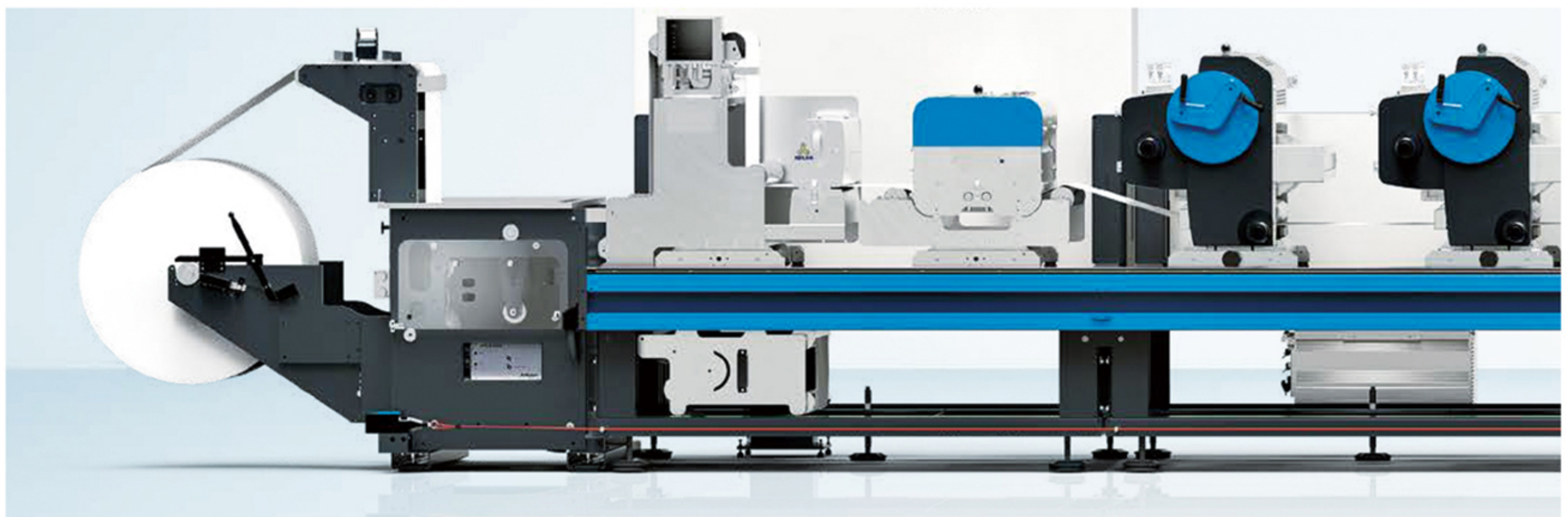
In order to achieve the adhesion between the UV glue and the foil,it is necessary to apply a sufficient and uniform pressure between the label material and the foil by a laminating roller.Generally,the upper and lower rollers are 3-inch rollers,with hard metal rollers as the bottom rollers,and rubber rollers with a hardness of HS80-90 as the pressure rollers.The laminating angle of the label material and the foil should not be too large.If the laminating angle is too large,it will cause cracks and wrinkles.

## ★ Peeling Device

After bonding,the gold foil should be peeled from the label material immediately after the UV glue is cured. The peeling roller should use a clean and smooth metal roller.The peeling angle should be adjustable.

## ★ Distance requirements between glue coating,cold stamping,U lamp curing and peeling processes

To avoid wrinkling,the shorter the distance between the processes,the better.There should be no idler wheels between the foil coating and the peeling unit.In general structure,the distance from glue.application to peeling process should not exceed 1 meter at most.The processing speed is generally 45-80 meters per minute.



## Bronzing Foil

Because the UV glue is bonded between the hot foil and the printing material when curing the UV glue, the hot foil should have good permeability to UV light, so the hot foil anodized aluminum layer of cold foil is very thin and uniform, and has precise release properties.

## Bronzing Foil Winding and Unwinding Device

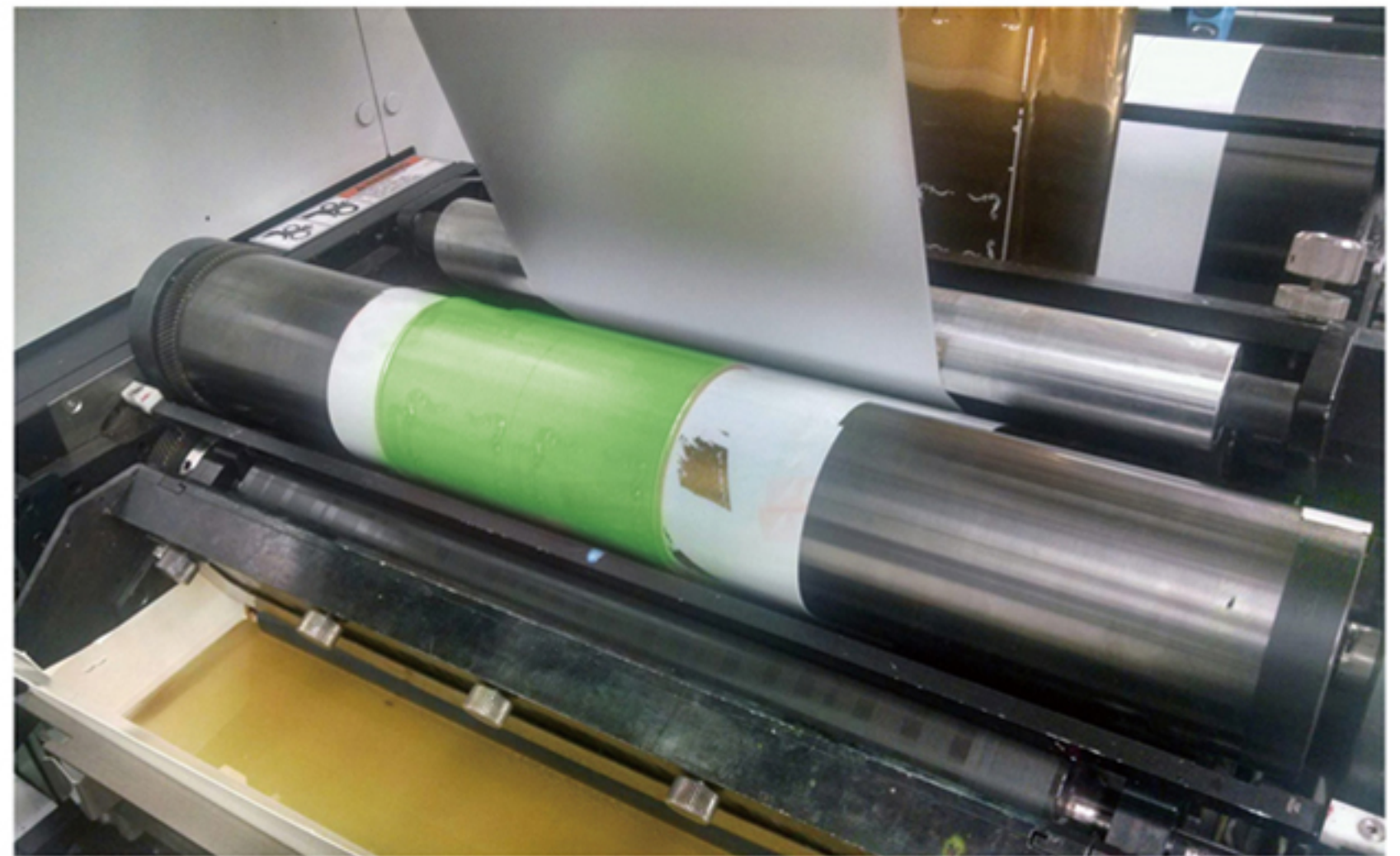
During the hot stamping process, the hot stamping foil should be able to maintain a moderate tension through the retractable device. Too low tension will loosen the hot stamping foil, causing the hot stamping pattern to appear wrinkled; too high tension may cause the hot stamping foil to form cracks, causing the hot stamping pattern fracture to occur.

## Note

In order to achieve the best performance, all UV cold foil glue must be fully stirred or shaken before use.

## Shelf Life

The shelf life of UV cold stamping glue is at least 12 months. The 12 months here means from the date of production (the batch number on the label can be seen). To ensure that the shelf life does not deteriorate, the temperature in the warehouse is kept at 15-20°C (60-70°F), and the shelf life can be extended at 10-15°C (50-60°F). Avoid exposure to sunlight and, if possible, store in a dark room.



# USC 90178-4 SILICONE-FREE MESH WHITE TECHNICAL SPECIFICATION

## Usage Suggestions

Silicone-free screen white is a 100% solids rotary screen printing ink, suitable for printing of PP/PE/PET and other materials, especially it has strong hiding power on the above transparent materials, in order to obtain satisfactory printing results. Please test the compatibility of the printed substrate with the "Ceres" series inks before use.

## Product Features

- Good leveling
- Strong hiding power
- Fast curing
- Good scratch resistance
- Good adhesion to PP, PE, PET and other substrates
- Fine graphic printing

## Screen Cleaning

Clean with a special screen cleaner.

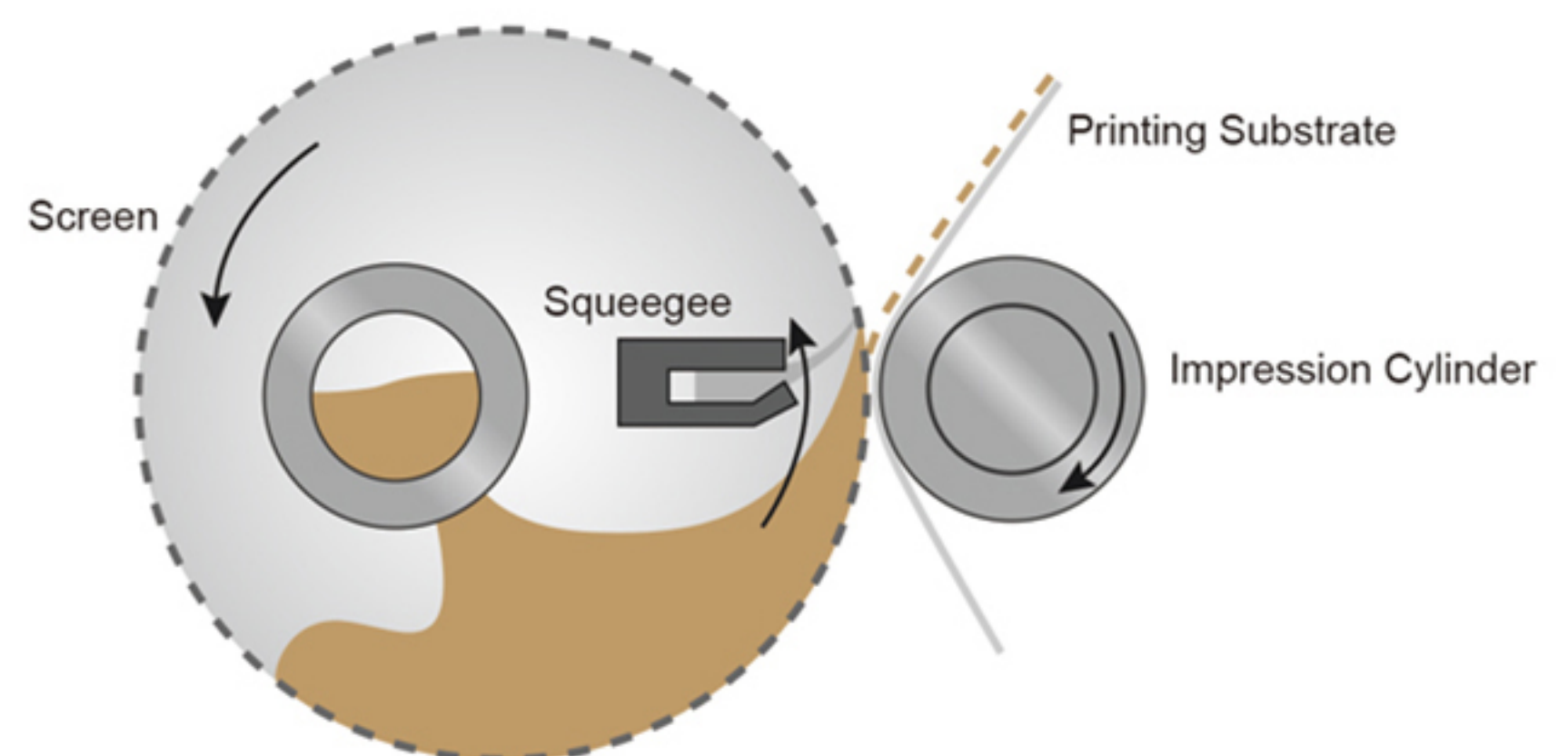
**Packaging:** 5kg barrel

## Curing

The power of at least 200W per inch is required. Generally, the maximum 10KW UV lamp is 6KW.

## Matters Needing Attention

Avoid direct contact between the ink and the skin and clothes. If it comes in contact, wash it with warm soapy water and dry it. If it comes in contact with the ink, wash it with water for 15 minutes before going to the hospital for treatment.



## Printing Advice

The ink should be fully stirred when used, and the printing speed should not exceed 60 meters per minute. This ink does not contain silicon. Be careful not to be contaminated by other inks. After using other inks, carefully clean the screen, squeegee, and squeegee handle. If using an ink pump, thoroughly clean the entire delivery system or renew the delivery hose.

## Thinner

This product has no solvent volatilization. Generally, no diluent is used. If special needs, please add our special diluent, the amount should not exceed 3%.

## Mesh

Generally use a 305 mesh screen version with an opening rate of 11%-13%

## Scraper

Using a Shore hardness of 85, polyurethane (PU) doctor blade.

## Screen Version

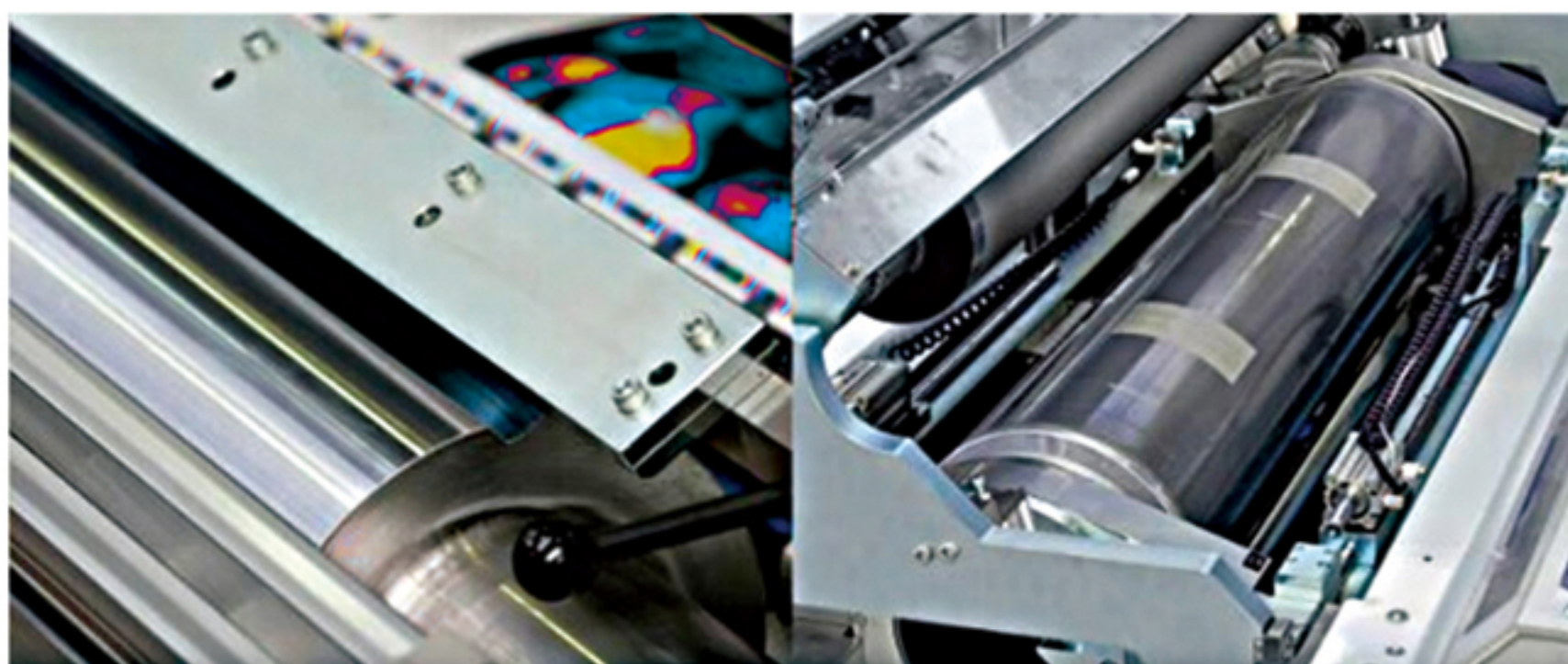
Use a special metal-plated nickel screen, the best original manufacturers such as GALLUS.

## Dosage: 8-14g/m

## Shelf Life

UV screen white ink has a shelf life of at least 12 months. Here 12 months refers to the date of production. In order to ensure that the shelf life does not deteriorate, it is recommended to keep the temperature in the warehouse 15-17 degrees Celsius (60-70 degrees Fahrenheit).

At 10-15 degrees Celsius (50-60 degrees Fahrenheit), the shelf life can be extended to avoid exposure to sunlight, preferably in a dark room.



# Company Profile



20+ Year Professional Experience In Printing Industry



160+ Countries Recognition



10000+ Customers Admire Our Service



## One-stop Printing Materials Supplier



# Our Friendship Lasts Forever

