

# COMBI SCREEN



# Combiscreen for label applications



	Combiscreen
PS Paper Labels	• • •
PS Film Labels	• • •
PS Thermal Labels	-
• • • Highly recommended   • Can be used   - Not recommended	

# UV screen range

- Combiscreen
  - Rotary ink system (Opaque White and Pantone Base Colors) for high quality label applications – for use in combination with other ink technologies.



# Combination printing

- Why is it difficult to over print UV screen with UV flexo?
  - UV flexo is “kiss” printing method
  - UV screen inks often contain silicones and flow agents
- How does it show?
  - Low density of the UV flexo printed on top of UV screen ink
  - Pin holing, fish-eyes
  - Bad adhesion of the UV flexo ink



# Combination printing



- Top layer shows excellent over printability with inks and VIP.
- Printed with Combiscreen & UV flexo
- Lower layer show poor trapping over "normal" UV screen ink

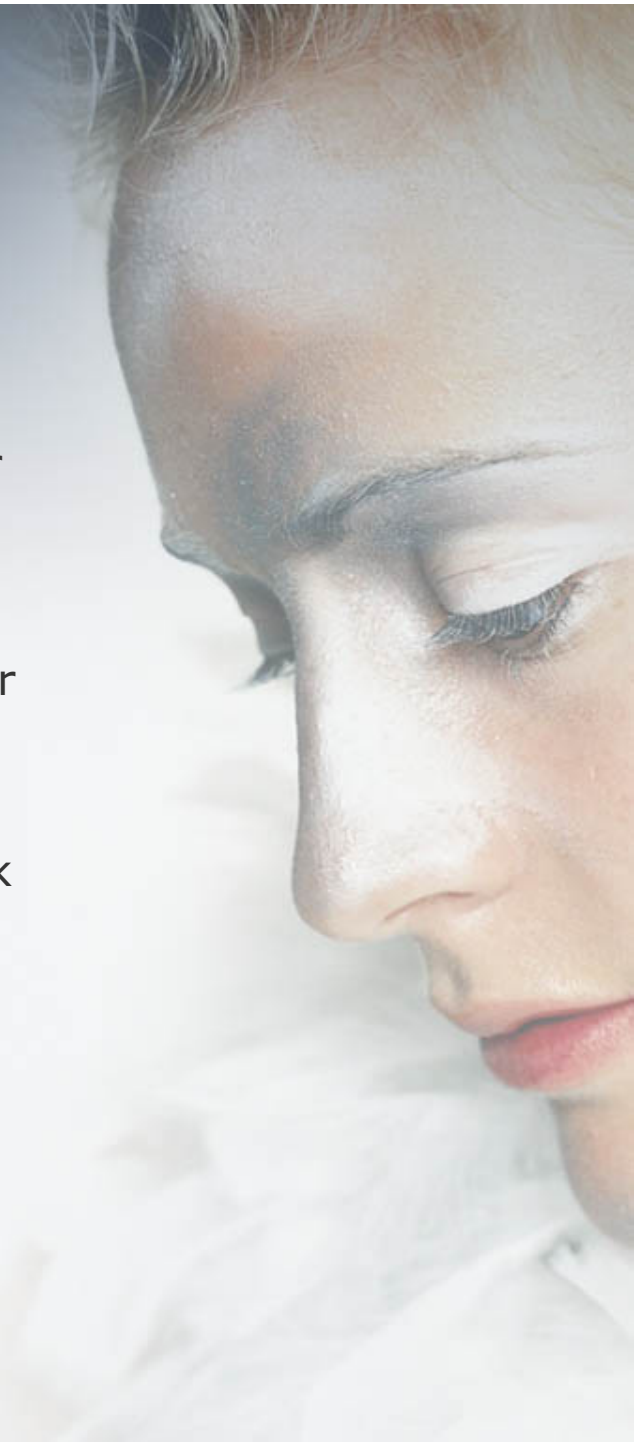




# UV screen

## PS Film

- To get optimal adhesion
  - Follow recommendations from substrate supplier
  - Surface tension needs to be above 38 dyne/cm
  - Use corona treatment if needed
  - If top coated substrates are corona treated water resistance can be compromised
  - Optimal condition for humidity is 40-60%
  - UV screen is printed with high film weight – if ink film is not cured thoroughly this can result in poor adhesion. Check ink cure!

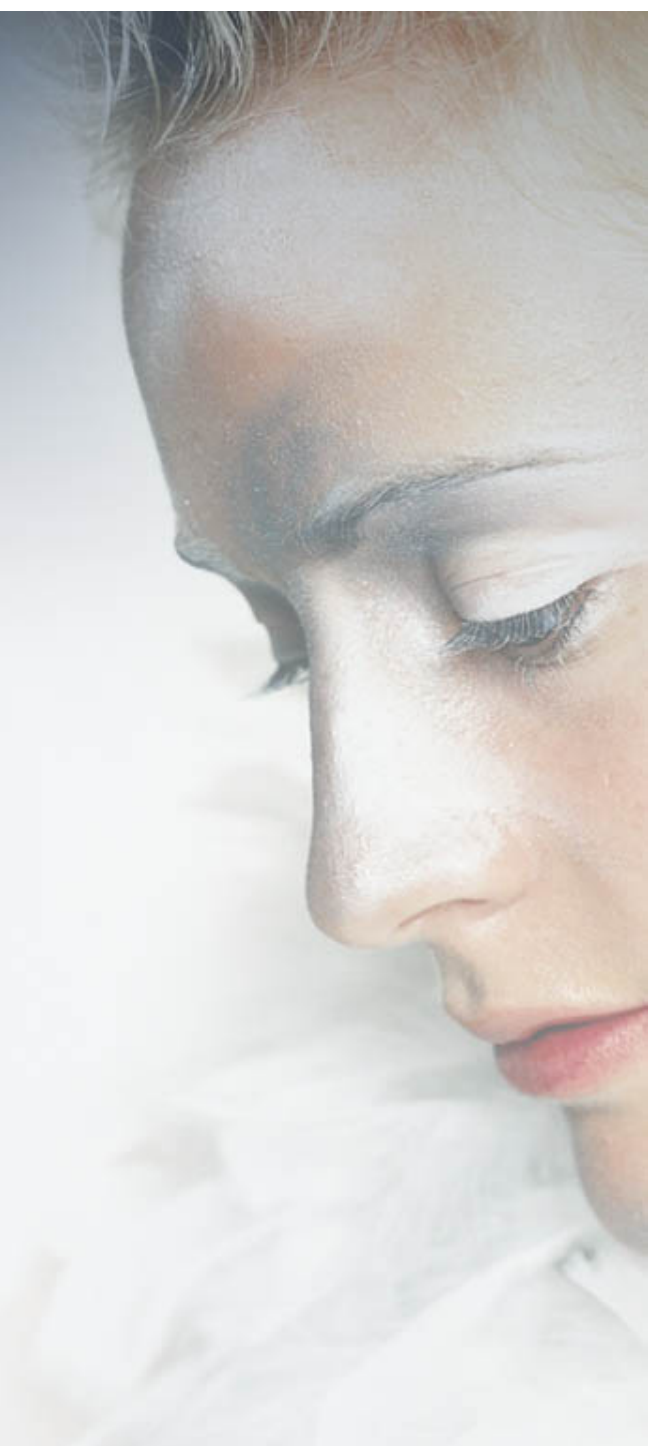


# UV screen

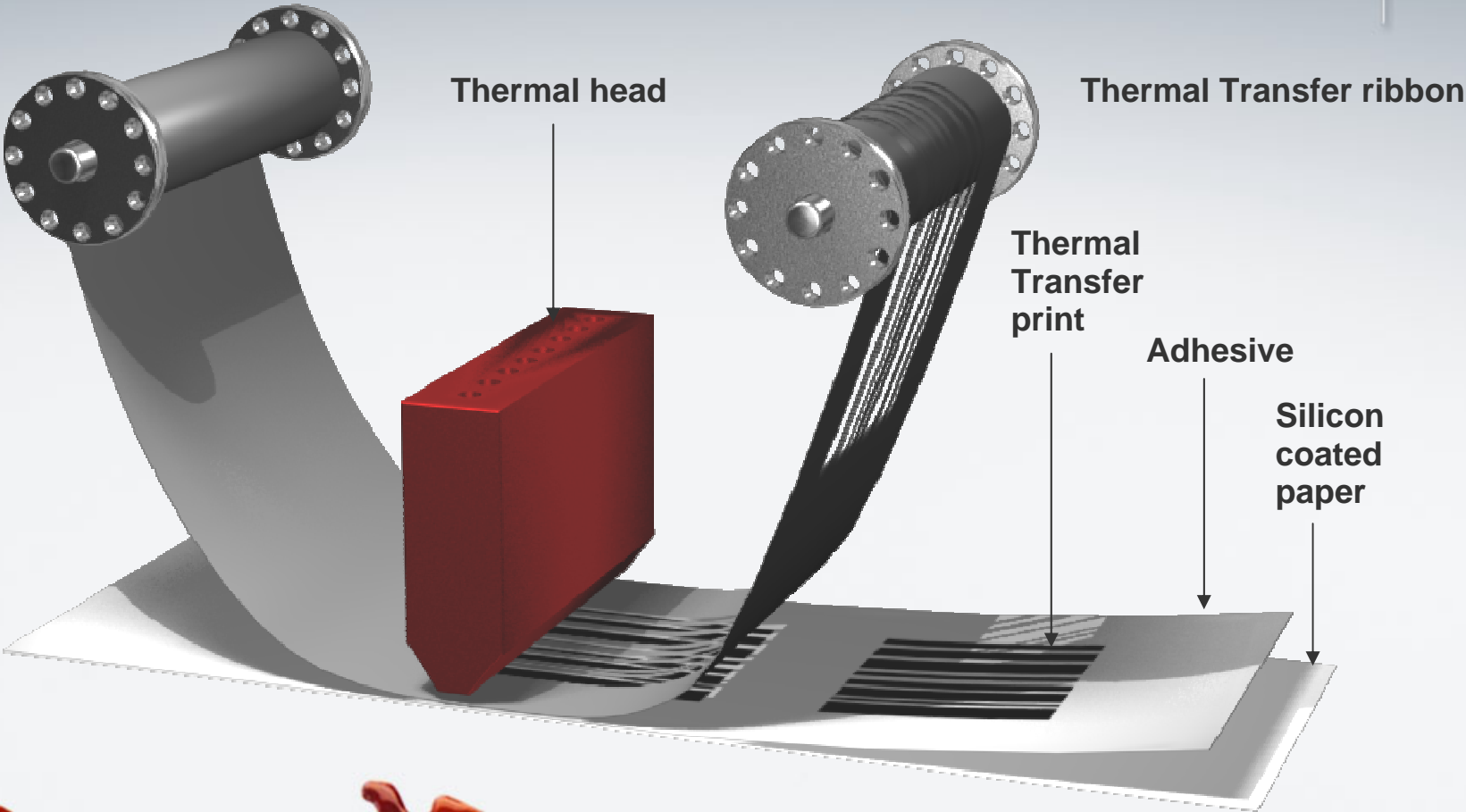
## Recommendation – PS Film

Material	Combiscreen
PE	• • •
PE TC	• • •
PP	• •
PP TC	• •
PVC	• •
PET	• • •
BOPP	• •

• • • Highly recommended • Limited use - Not recommended



# Thermal Transfer Printing



**FlintGroup**  
Narrow Web



# UV Screen Thermal Transfer Printing

Following factors may influence TTR Printing

- **Type of printer**
  - Print head
  - Settings; heat, speed and pressure of the printer
- **Ribbon**
  - Type (Resin, wax or combination), Series
- **Ink /varnish**
  - Printing ink & varnish (silicon free)
  - Ink lay down (surface smoothness, pinhole free)
- **Substrate**
  - Absorbance
  - Top coating / smoothness



# UV screen

## Thermal Transfer Printing

- To get optimal TTR result
  - "Overcured" UV Screen inks shows bad over printability with some ribbons.
  - Use a UV varnish that is specially designed for TTR
  - Follow recommendations from ribbon supplier
  - Follow the instructions from Thermal Transfer printer supplier
  - Aim for optimal lay-down of print/varnish as even ink/varnish film is much easier to TTR print (more receptive).



# UV screen

## Recommendation – TTR

Ribbon	Combiscreen
Wax	• •
Wax/Resin	• •
Resin	• •
• • • Highly recommended • Limited use - Not recommended	



# UV Screen

## Thermal Transfer Ribbon recommendation



Manufacturer	Wax	Wax/Resin combination	Resin
ARMOR	AWR210, AWX500	APR5	AXR7+, AXR8
RICOH			B110CR
SONY		TR4065, TR4080, TR5050	
KURZ		K200	
DNP		M260,	R316, R300
CALOR			T516Sw, T550Sw
DYNIC		M345	HL60

The TT ribbons that we recommend have shown good compatibility with our inks and varnishes. However this is only a guideline based on our experience and is not a guarantee.

