



# **PRINT PROCESS GUIDE**

## **DYE SUBLIMATION PRINTING**

## *PRINT PROCESS OVERVIEW*

# PAPER TRANSFER DYE SUBLIMATION

Dye sublimation printing always requires a polyester, polymer, or polymer coated item. The design is printed in reverse onto a transfer paper, it then goes through a rotary calendar with the polyester material on-top. The solid ink converts into a gas while the pores of the polymer in the material open; this allows the gas to enter that material. When the temperature drops, the pores close and the gas reverts to a solid state. The ink has now become a part of the polymer and is dyed into the material.

### Benefits

- High quality print on small and large designs.
- Ideal for short runs with quick turnarounds.

### Limitations

- Two part process which adds extra time to the production process on long runs.
- Material must have a specific polyester base to be printed on.



### *PRINTERS*

## MIMAKI TS300P

Products: flags, tablecloths, sashes, fabric banners.

## *PRINT PROCESS OVERVIEW*

# **DIRECT ON DYE SUBLIMATION**

Direct on dye sublimation works in a similar way to traditional dye sublimation except it prints directly onto the material and goes through an in-line fixation unit where it is cured using infra-red lights. Instead of being printed in reverse, the design is printed in positive because it doesn't have to transfer from the paper onto the material.

### Benefits

- High quality print on small and large designs.
- In-line printing is a quicker production process.

### Limitations

- Material must have a specific coating and polyester base to be printed on.

### *PRINTER*

## **LIYU TEXUMA**

Products: flags, tablecloths, fabric banners, black back fabrics, stretch frames, silicon edge graphic frames.

