

PRINTING INSTRUCTIONS

- Mesh:** Polyester fabrics with 55-48 T mesh. For optimal opaqueness use 48 T. Tension of the mesh should be between 28-30 newton.
- Stencil:** A waterproof stencil must be used!
Norikop 7 S is recommended.
- Squeegee:** Vulkollan squeegees with an average hardness of 65 up to 70 Shore A.
- Flood Bar:** Use a round edge bar and adjust to achieve a flood-ink-thickness of approx 2mm (0,1 inch) on the screen.
- Thinner:** Only when necessary – then use DST Flow Additive 3-5%
- Hardener:** Always use DST Catalyst in the white ink, by stirring 8-10% gently into the ink. Viscosity will rise. If large amount of ink is required mix smaller portions – 2-5kg – being able to add fresh mixed ink during printing.
- Pot Life:** Depending on the room temperature between 2-4 hours.

Printing Process:

The humidity in the printing room should be higher than 60% to avoid drying of the ink in the screen.

Preparations:

Prepare the ink by gently stirring when adding the Catalyst.

Moisten the stencil first by spraying water.

Pour sufficient ink into the screen.

Start printing immediately.

During long printing runs or if the temperature is above 25C (77F), spray water onto the area where the ink is not moved to avoid skinning. Also move ink from the edges of the screen into the middle in order to consume the ink accordingly, and remember to add fresh ink during printing.

Printing Breaks:

Short printing stop (max. 2 min.): Cover stencil with a thick film.

Longer printing stops (max. 20 min.) Cover the stencil with a thick layer of ink and spray water on it.

For breaks longer than 20 min.: Remove all the ink immediately and clean with water.

Cleaning process:

Take out the residual DST White, and spray immediately plenty of water onto the whole mesh.

Take the squeegee out of the press and clean.

Remove the ink from the screen, and do not put residues of the ink back in the original container.

Take the screen out of the machine and clean it. If an immediate cleaning is not possible, submerge the screen into water. The screen can then be cleaned at any time.

Dried ink residues may be removed using a solvent cleaner.

Drying of DST white:

It is important that the white is correctly dried and fully bonded to the toner before the adhesive is applied; **this is the most important part of the production.**

Infrared as well as gas dryer's can be used. Be careful if using a combined IR/ HOT AIR oven and try to reduce air circulation as much as possible. If blistering is still occurring try to lower the temperature but not beyond 120C. If blistering is still a problem the oven is probably not suited for drying water based inks!

Use ambient belt temperature (120-140 C depending of the heat source IR, gas or hot air) and use maximum drying time, which production allows. (min. 60 seconds), preferable longer. When testing the capability of the oven – use maximum available drying time.

Under curing of the white ink will result in toner left on the release liner after transferring, especially in the concentrated toner areas. Under curing will also be seen when the adhesive is printed, as blisters from the white ink will appear in the adhesive film.

Drying of DST adhesive:

The DST adhesive should be printed within the same day otherwise delaminating may occur when washed. If the printing is further delayed, then store the white ink printed sheets in as cold environment as possible. Make wash tests of printed fabrics at high temperature (90C) to see if delaminating occurs.

The water-based adhesive DST Bond should preferable be printed within 4-8 hours.

The water-based adhesive shall be dried at about 90-100 C temperature. Use max. drying time.

Take care that the adhesive layer is printed in an even thick layer (min. 27 mesh), and the layer is free from bubbles.

When drying DST PLAS, PLAS-SS & PLAD, the temperature should be about 140C. (min. 60 seconds). Mesh 32-24 should be used.

If the adhesive layer is not printed in a proper manner, wash ability will be poor, and a fine crackling on the surface of the print, will be shown after washing.

Do not conduct wash tests until 24 hours after printing the adhesive.

Application settings:

The following application settings of DST transfers are standard recommendations and tests must always be carried out on substrates which have not already been approved.

DST Bond water based adhesive:

Temp. 175-180 C.
Time: 10-15 seconds
Pressure: 35-40 PSI

This quality does not contain PVC, Phthalates, or solvents. It is meant for leisure wear of cotton, cotton blends, nylon and polyester. Wash recommendation is 40-60 degrees C – depending on substrate. This quality can also be dry cleaned.

DST PLAS adhesive:

Temp. 170-175 C.
Time: 12-15 seconds
Pressure: 35-40 PSI

This quality is a plastisol based adhesive which is soft and elastic. It is meant for cotton and cotton blends and PVC substrates. Wash recommendations is 60 degrees C. No dry cleaning.

DST PLAS-SS Soft adhesive:

Temp. 170C.
Time: 10 seconds
Pressure: 35-40 PSI

This quality is a plastisol based adhesive which is soft and elastic. It is meant for cotton and cotton blends, polyester, nylon and PVC substrates. Wash recommendations is 60 degrees C. No dry cleaning.

DST PLAD adhesive:

Temp. 175-180 C.
Time: 12-15 seconds
Pressure: 40-45 PSI

This quality is a plastisol based adhesive meant for work wear garment of cotton and cotton blends, and where high temperature washing is a requirement. Wash recommendation is 90 degrees C. Depending on the wash process; it can also withstand industrial washing. No dry cleaning.

Please be aware of that black substrates sometimes absorbs more heat than lighter colours, and therefore the temperature becomes too high and a reduction of about 10 degrees C. can be necessary. Always carry out wash tests before going into production.