Sericol Textile Transfer Systems

Sericol Textile Transfer Systems have been developed, by our applications specialists, utilising readily available Sericol products to provide a comprehensive solution for customising and decorating garments. The products comprise inks, adhesives and additives used to produce a variety of transfer types for applications that include sportswear and industrial clothing – requiring high mechanical and wash resistance.

Textile Transfer Printing

In the simplest terms, textile transfers are an indirect method of producing a print onto garments. Inks are printed onto a special paper, dried and then transferred under a heat press onto the garment. Therefore, the printing process is similar to any other paper printing process and, ideally, requires the use of a vacuum bed printing press.
The main types, or categories, of transfers are as follows :

1. Plastisol Transfers see pages 2 & 3.

Made by printing MultiTran XM plastisol inks onto a special transfer paper, then heat setting each colour. The transfer is applied to a garment using a heat press and a combination of time and pressure to effect the transfer. The end uses for plastisol transfers include most garments which are made of cotton or blends of at least 50% cotton. There are at least four variations of plastisol transfers including Cold Peel, Hot Split, Litho and Hybrid.

2. Workwear Transfers (Badges) see page 4.

Made by printing Nylotex NX catalysed (2-pack) solvent-based inks onto release paper and applying Duracal XT screen-printable adhesive onto the print. A heat press is then used to produce prints capable of withstanding industrial washing at 95°C. The transfers are intended for logos or identification on work garments and overalls. A number of optional systems exist.

3. Sportswear Transfers see page 5.

A speciality transfer system, which has been developed to enable the generation of high stretch products for use on previously sublimated materials such as football / sports shirts. The system combines the use of Nylotex NX ink colours plus special dye blocking layers and MultiTran XM plastisol adhesives. The combination prevents discolouration of the transferred print by the dyed fabric.

4. Workwear Emblems see page 6.

Differing from Workwear Transfers in that a release paper is not used. Catalysed Nylobag NB (2-pack) solvent-based inks are printed onto a tough woven fabric which has a special hot melt adhesive laminated on the underside. Once printed, the emblem is applied using a heat press. Emblems are used for similar purposes as Workwear Transfers. i.e. workwear and clothing requiring resistance to repeated high temperature industrial washing.

5. Foil Transfers see page 7.

Uses a combination of direct printing and heat pressing to produce highly metallic effects on garments. A Metatran adhesive is first printed and partially cured on the fabric. Then Metatran foil, carried on a polyester film, is applied by heat press. Removing the polyester carrier film leaves the metallic foil adhered to the printed adhesive. The end uses of foil transfers are novelty and fashion.

6. Sublimation Transfers see page 8.

Made by printing Subliscreen HQ Dye Concentrates, blended into a water or solvent based medium, onto a non-release paper and drying. Under the high temperature and pressure of the heat press, the dye turns to a gas and colours the fabric directly in contact with the print. The resulting print is of high colour brilliance and the handle of the fabric is unchanged. End uses include garments made from synthetic fabrics such as cycle / swimwear and replica football kits.

7. Flock Transfers see page 9.

A special combination of a pre-fibred sheet and suitable water-based adhesives. The combination of direct printing onto the fibre, followed by transferring using a heat press allows the creation of soft feel transfers. Multi-colour transfers can be created by first printing onto white fibred sheets using Texiscreen Aqua AJ, water-based inks, followed by the adhesive. Flock transfers typically have end uses in fashion and sportswear garments.

Transfer Papers

See **Transfer Papers Summary** on Page 10.

1. PLASTISOL TRANSFERS

Plastisol Transfers use the highly versatile range of MultiTran XM transfer inks. They enable printers to produce a variety of plastisol transfers including Hot Split, Cold Peel, Lithographic, Hybrid and more.

Overview

Products Required

Colours

MultiTran XM plastisol inks. Available in 22 intermixable lead-free colours (see page 11 for full colour range).
XM381 Opaque Extender Base may be used to reduce colour strength.

Back-up Adhesives

XM451 White Adhesive
XM452 Clear Adhesive
XM011 Litho Back-Up White

Available in 5 ltr containers.

XM378 Transfer Adhesive Powder

Available in 1 kg containers.

Reducer

ZE591 Plastisol Flow Thinner
Available in 5 and 1 ltr containers.

Paper

See relative section

Fastness/Resistance

Wash	Up to 60°C.
Dry Clean	Not suitable.
Direct Iron	Not suitable.
Industrial	Not suitable.

Recommended Transfer Equipment

Flat-bed Transfer Press
Rotary Presses

Printing Information

In each of the transfer types, XM inks are printed and heat 'set' (dried) prior to transferring.

Drying	Heat set on paper until touch dry. Typically 90-110°C for 15-20 seconds (infra-red or convection oven).
Thinning	If required, up to 5% ZE591 Plastisol Flow Thinner.
Mesh	21-100 depending on detail and opacity required.

It is important not to over cure, especially with multi-colour transfers, as adhesion and transfer properties can be affected.

Hot Split Method

Hot Split transfers are produced by printing the ink onto a non-release coated paper, for which the ink has some affinity. When transferring, the paper is removed immediately after the pressure is released – whilst the ink is still hot, causing the ink to 'Split' between the paper and the garment. This creates a softer, less 'plastic' surface to the print and thus a more appealing handle.

Designs for Hot Split Transfers

Images should be printed in reverse. Colours should be butt-registered only (overlapping colours will mix on transfer).

Hot Split Opaque

Best results are achieved by using the inks unmodified. Successful transfers require a minimum deposit of 150 microns. A coarse mesh is recommended to provide adequate deposit, but only by measuring the thickness of the dry ink film can excellent results be assured.

Mesh	21–34.
Recommended paper	TRC11 Soft-Trans Paper

Transferring

Once all colours are printed the image can be transferred to the garment. This should be done with a heat press, typically set at 180-190°C. Place the garment on the base platen of the heat-press with the transfer on top, print side down. Close the heat-press and leave for 5-10 seconds. Open the press and peel the paper immediately, before removing the garment from the base platen. For this reason, a press where the heated platen can be easily moved away is recommended. The ink should divide smoothly between paper and garment as the paper is peeled. This peeling technique may require practice before a production run can be undertaken.

Tips – Hot Split Transfers

1. Warm the base platen of the heat-press before beginning to transfer. This prevents the first few transfers failing to split properly due to base not being up to production temperature.
2. Printing of Opaque Hot Split transfers requires the use of a dedicated ink system. MultiTran XM has been designed specifically for this application. It still requires specific film weights and printing techniques. Therefore, recommendations should be thoroughly studied before printing of this type of transfer is attempted.

Hot Split Transparent

Very thin ink films will produce poor split characteristics. Mixing XM inks with 10% XM391 Transparent Split Additive will improve ink split at low film weight.

Mesh Count	21-62.
Recommended paper	TRC11 Soft-Trans Paper.
Recommended Transfer Schedule	170-190°C for 12-15 seconds, high pressure, remove paper immediately.

Cold Peel Transfers

Cold Peel transfers are those in which the whole of the printed ink film is transferred to the garment.

Transfer

This is done with a heat press, typically set at 170-180°C. Place the garment on the lower platen and position the transfer on top, print side down. Close the heat press and leave for 10-15 seconds. Open the press, carefully remove the garment with the transfer still in place and allow to cool. When cold, carefully peel the paper from the garment, to leave the print attached.
Cold Peel transfers produce prints that are usually flexible and wash-resistant but, as with all plastisol prints, they are not resistant to ironing. These properties will vary depending on the ink and printing conditions used.

Cold Peel Method

Use MultiTran XM ink unmodified to gain maximum opacity and adhesion.

Mesh Count	21-62 (or up to 90 if a back-up white or adhesive is used).
Recommended paper	TRB08, TRB20, TRW28 siliconised transfer papers.
Recommended Transfer Schedule	170-190°C, 10-15 seconds, high pressure, wait until paper has cooled prior to removal.

Litho Back-up Method

'Litho' back-up transfers are a combination of lithographic offset inks, and a white or clear back-up plastisol adhesive. This unique process allows the generation of 'photo-like' transfers.

Lithographic Inks	Oxidation Drying Inks.
Plastisol Back-up Adhesives	XM451, XM452, XM011
Mesh	27-55 (62 can be used, with a subsequent loss of opacity).
Recommended Paper	TRB08, TRB20 siliconised transfer papers.
Recommended Transfer Schedule	170-190°C, 10-15 seconds, medium pressure, wait until paper has cooled prior to removal.

Tips - Litho Back-up Method

Oxidation Drying Lithographic inks once printed must be backed with the plastisol white within a short period of time, typically 2-7 days (dependent on the Litho inks used). If the prints are left beyond this time, the litho inks may harden, with a resultant loss in wash fastness. Only the areas of the litho print covered by the back-up adhesive will transfer to the garment.

Due to the variable nature of litho inks, no guarantee as to the compatibility of the ink systems can be given. All prints should be thoroughly tested for acceptability before production is commenced.

'Imitation' Litho Method

Utilising solvent-based graphic screen inks onto siliconised transfer paper can lead to print quality / definition approaching that of lithographic transfers, whilst maintaining the benefits and practicality of the screen process.

Inks Required	Plastijet XG / TL.
Plastisol Back-up	XM451, XM452.
Mesh	Colours: 120-140. Plastisol Back-up: 34-55.
Recommended paper	TRB08, TRB20 siliconised transfer papers.
Recommended Transfer Schedule	170-190°C, 10-15 seconds, medium pressure, wait until paper has cooled prior to removal.

Gloss Transfers

Utilising the Cold Peel method onto a high gloss transfer paper allows the creation of high impact gloss transfers, of particular appeal to the fashion and speciality markets.

Mesh Count	21-62 (or up to 90 if a back-up white or adhesive is used)
Recommended paper	TRQ97 siliconised transfer paper
Recommended Transfer Schedule	170-190°C, 10-15 seconds, high pressure, wait until paper has cooled prior to removal.

Glitter Effects

Incorporating a flaked, coated polyester glitter into conventional plastisol products, leads to striking, high impact transfers. A variety of flake sizes are available, with maximum impact being generated by 0.008 sq inch glitter flakes.

Mesh Count	10.5 for 0.008 sq inch (0.2 mm) flakes. 34 can be utilised with 0.004 sq inch (0.1 mm) flakes
Recommended paper	TRQ97
Recommended Transfer Schedule	170-190°C, for 10-15 seconds, medium pressure, wait until paper has cooled prior to removal.
Mixing Ratio	Up to 25% Glitter (by weight) may be added.

Printable Adhesives and Adhesive Powder

XM451 (white) and XM452 (clear) adhesives can be used to overprint XM colours to give better adhesion to synthetic substrates or to reduce the transfer temperature to as low as 135°C.

Recommended Mesh	21-55
Recommended Transfer Schedule	135°C or higher for 15-20 seconds.

Maximum adhesion onto synthetic garments can be achieved using the XM378 Transfer Adhesive powder. To use this process, print the Multitran Plastisol print as recommended, sprinkle the back of the wet ink with the adhesive powder prior to setting. Transfer would then be as recommended for printable adhesives.

Due to the variable nature of synthetic coatings, prints should be fully tested for suitability before commencing production.

2. WORKWEAR TRANSFERS (Badges)

Workwear Transfers or Badges are specifically designed for applications where maximum mechanical and wash resistance are required.

Overview

Products Required

Colours
Nylotex NX solvent-based inks (see page 11 for full colour range).

Adhesives

XTA01	Special Adhesive – White
XTA05	Special Adhesive – Clear

Available in 5L containers.

Additives

NB386	NB Catalyst

Available in 1 ltr and 0.2 ltr containers.

ZE811	Hold Out Additive

Available in 0.2 kg containers.

ZEA09	Flow Aid

Available in 5 ltr and 1 ltr containers.

Solvents

ZE805	Nylo Thinner
ZE806	Nylo Retarder
ZE592	S.303 WB Retarder

Available in standard 25, 5 and 1 ltr containers.

Papers
TRB08, TRB20 Silconised Transfer paper.

Fastness/Resistance

Wash	Up to 95°C.
Dry Clean	Recommended.
Direct Iron	Recommended.
Industrial	Recommended.

Transfer Equipment

Flat-bed Transfer Press.

Workwear Transfers – Printing Information

Inks are printed onto specialised transfer paper, then transferred with a heat press onto the garment. For some applications excellent resistance to boil-washing can be attained.
The production of Workwear Transfers involves the use of two distinct systems : Nylotex NX solvent-based inks and XT water-based adhesives. For best results, backing of the colours with a flexibility layer consisting of 50:50 blend of Nylotex white and extender base is recommended.
White and clear adhesives are available, with clear adhesives being recommended to maximise wash resistance.

Nylotex NX inks

Catalyst	5% Addition of NB Catalyst.
Thinning	If required, up to 20% ZE805 Nylo Thinner. Hot-shop conditions, up to 10% ZE806 Nylo Retarder.
Mesh Count	34 – 77
Drying	Heat set on paper until touch dry. Typically 120°C for 2-3 minutes.
Recommended Paper	TRB08, TRB20 siliconised transfer paper.

Catalysed ink left over at the end of the printing run should be discarded. Typical pot-life, 8 hours.

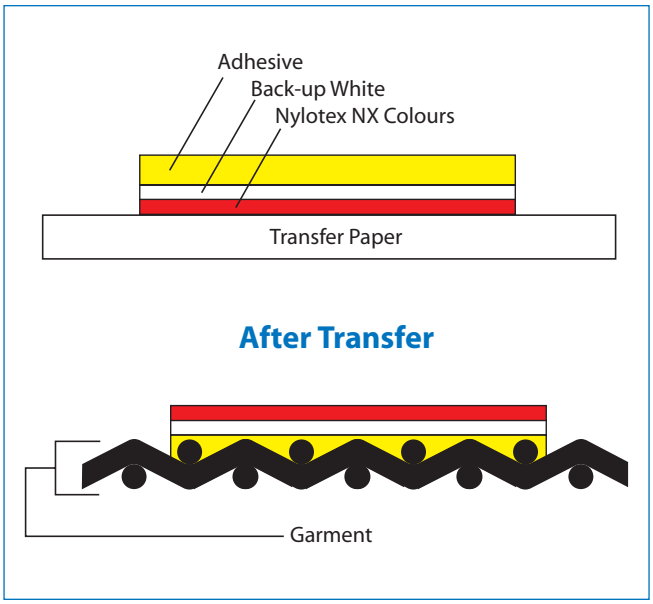
XTA01, XTA05 Adhesives

Catalyst	Not required
Thinning	If required, up to 5% water. Hot-shop conditions, up to 5% ZE592.
Mesh Count	21-27
Drying	Heat set on paper until touch dry. Typically 120°C for 2-3 minutes. For best results leave to air dry.

Transfer Schedule

190-200°C for 15-30 seconds.

Workwear transfers are not suitable for use on Nylon or for application with rotary presses.



3. SPORTSWEAR TRANSFERS

Sportswear Transfers are used for decorating previously sublimated materials such as Sportswear including football shirts, cycle wear etc.

Overview

Products Required

Colours
Nylotex NX solvent-based inks (see page 11 for full colour range).

Dye Blocking Silver

VVX44	Special Nylobag Silver

Available in 5 ltr containers.

Adhesives

XM451	Multitran Plastisol Adhesive – White
XM452	Multitran Plastisol Adhesive – Clear
XMA11	Special Multitran Adhesive – Clear (Formulated on non-phthalate plasticisers)

Available in 5 ltr containers.

Additives

NB386	NB Catalyst

Available in 1 ltr and 0.2 ltr containers.

ZE811	Hold Out Additive

Available in 0.2 kg containers.

ZEA09	Flow Aid

Available in 5 ltr and 1 ltr containers.

Solvents

ZE805	Nylo Thinner
ZE806	Nylo Retarder
ZE591	Plastisol Flow Thinner

Available in standard 25, 5 and 1 ltr containers.

Papers
TRB08, TRB20 Siliconised Transfer Paper.

Fastness/Resistance

Wash	Up +60°C.
Dry Clean	Not Suitable.
Direct Iron	Recommended.
Industrial	Not Suitable.

Transfer Equipment

Flat-bed Transfer Press

Sportswear Transfers – Printing Information

Production of Sportswear Transfers involves the use of two distinct ranges: Nylotex NX solvent-based inks backed up with Multitran XM plastisol adhesives. For best results, backing of the colours with a flexibility layer consisting of 50:50 blend of Nylotex NX white and extender base is recommended. Use of dye blocking layers are required when transferring onto sublimated materials, or substrates that are prone to dye bleed.
White and clear adhesives are available, with clear adhesives being recommended to maximise wash resistance.

Nylotex NX inks

Catalyst	5% Addition of NB catalyst
Thinning	If required, up to 20% ZE805 Nylo Thinner. Hot-shop conditions, up to 10% ZE806 Nylo Retarder.
Mesh Count	34 – 77
Recommended Paper	TRB08, TRB20 siliconised transfer paper
Drying	Heat set on paper until touch dry. Typically 120°C for 2-3 minutes.

Catalysed ink left over at the end of the printing run should be discarded. Typical pot-life, 8 hours.

Dye Blocking Layer

Ink	VVX44 Special Nylobag Silver
Catalyst	10% NB Catalyst
Mesh Count	43-55

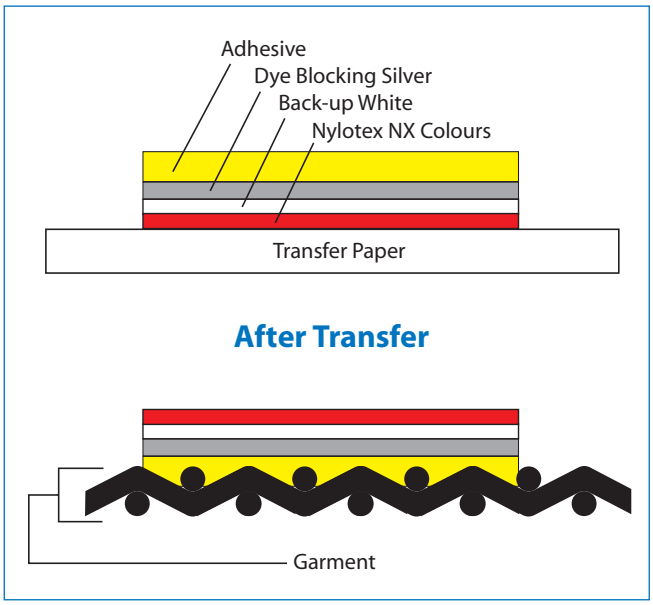
(For best results VVX44 should be air dried overnight rather than force dried).

Adhesive Layer, MultiTran XM451, XM452 or XMA11

Catalyst	Not required
Thinning	Adhesive: If required, up to 5% ZE591. Best results are achieved unthinned.
Mesh Count	21-77 depending on detail and opacity required.
Drying	Heat set on paper until touch dry. Typically 120°C for 2-3 minutes.

Transfer Schedule

170-190°C for 10-15 seconds.



4. WORKWEAR EMBLEMS

Workwear Emblems are an effective way of producing prints with excellent resistance to industrial washing processes. Typically prints are produced by printing images onto poly-cotton sheets, pre-laminated with a suitable hot-melt adhesive.

Overview

Products Required

Colours

Nylobag NB inks (see page 11 for full range).

Additives

NB386	NB Catalyst
NB431	Flexibility Additive

Available in 1 ltr and 0.2 ltr containers.

ZE811 Hold Out Additive

Available in 0.2 kg containers.

Solvents

ZE805	Nylo Thinner
ZE806	Nylo Retarder

Available in standard 25, 5 and 1 ltr containers.

Pre-laminated Poly-cotton

Fastness/Resistance

Wash	Up +95°C.
Dry Clean	Recommended.
Direct Iron	Recommended.
Industrial	Recommended.

Transfer Equipment

Flat-bed Transfer Press

Workwear Emblems - Printing Information

Pre-laminated adhesive sheets can be either printed with a coating white to improve wash resistance and print definition, or printed directly with a 2-pack solvent-based ink system.

Coating White

Ink	Nylobag Coating White.
Catalyst	10% NB catalyst.
Thinning	If required, up to 20% ZE805 Nylo Thinner. Hot-shop conditions, up to 10% ZE806 Nylo Retarder.
Mesh	34-62 depending on detail and opacity required.
Drying	Air drying, 24 hrs. Can be force dried in suitable cabinets at 80°C for 2-4 hrs.

Nylobag NB colours

Catalyst	10% NB Catalyst.
Thinning	If required, up to 20% ZE805 Nylo Thinner. Hot-shop conditions, up to 10% ZE806 Nylo Retarder.
Mesh	34-90 depending on detail and opacity required.
Drying	Air drying, 24 hrs. Can be force dried in suitable cabinets at 80°C for 2-4 hrs.

(Note : each colour must be suitably dried before overprinting)
For maximum opacity / wash-fastness, particular colours can be improved by addition of 1% ZE811 Hold Out Additive.
Catalysed ink left over at the end of a print run should be discarded. Typical pot-life, 8 hours.

Transfer Schedule

Dependent on the laminated adhesive – typically 170-210°C for 10-30 seconds, also dependent on substrate.

5. FOIL TRANSFERS

Foil Transfers comprise a screen printable adhesive plus heat transfer foils, for the production of mirror finish metallic prints onto cotton and many synthetic fabrics.

Overview

Products Required

Metatran Transfer Foils

Standard Packing

KFT23	Gold
KFT24	Silver
KFT26	Metallic Red
KFT27	Metallic Blue
KFT28	Metallic Green
KFT32	Bronze
KFT33	Copper
KFT34	Metallic Fuchsia

Rolls 750mm x 100m.

Metatran Adhesive

FT421	Metatran Adhesive

Available in 5 ltr containers.

Reducer

ZE591	Flow Thinner

Available in 5 and 1 ltr containers.

Fastness/Resistance

Wash	Up 40°C.
Dry Clean	Not Suitable.
Direct Iron	Not Suitable.
Industrial	Not Suitable.

Transfer Equipment

Flat Bed Transfer Press
Rotary Press

Foil Transfers – Printing Information

Two options are available for the production of foil transfers, these are as follows :

Method 1: Hybrid Transfer System

(Print image using Metatran Adhesive directly onto the fabric, set and then apply Metatran foil to adhesive image using a transfer press).

Mesh	34-62.
Thinning	If required, up to 5% ZE591.
Drying	Heat Set 120-140°C for 1-2 minutes.
Paper	TRW28, TRB08 siliconised transfer paper.

Transfer Schedule

170-180°C for 7-10 seconds.

(Allow the transfer to cool before removing the foil).

Method 2 : Two Step Transfer Process

Print Metatran Adhesive image onto siliconised transfer paper, then transfer onto the garment. Allow to cool, then transfer Metatran foil onto the adhesive.

Thinning	If required, up to 5% ZE591.
Mesh	43 – 62.
Drying	Heat Set 110-120°C for 10-20 seconds
Paper	TRW28, TRB08 siliconised transfer paper.

Transfer Schedule

170-180°C for 7-10 seconds

Allow adhesive transfer and foil transfer to cool before removing carrier.

6. SUBLIMATION TRANSFERS

The Sericol Sublimation Transfers System comprises a range of dye concentrates and an extender base. When blended together they provide ready to print inks for the production of transfers for polyester and other synthetic fabrics.

Overview

Products Required

Subliscreen Aqua HQ Dye Concentrates

HQ001	Ultra Black
HQ057	Primrose
HQ103	Orange
HQ153	Carmine
HQ154	Fuchsia
HQ132	Violet
HQ218	Azure
HQ206	Deep Blue
HQ236	Reflex Blue
HQ053	Fluorescent Yellow
HQ139	Fluorescent Pink

Available in 1 kg containers.

Extender Base

HQ381	Extender Base (water-based).
HQ382	Extender base 2000 (solvent-based).

Available in 5 kg and 15 kg containers.

Thinner

ZC656	Detail Thinner
ZV552	Low Odour Thinner

Available in 5ltr and 15 ltr containers.

Paper

115-150 gsm matt coated cartridge.

Fastness/Resistance

Wash	60°C
Dry Clean	Recommended.
Direct Iron	Not Suitable.
Industrial	Not suitable.

Transfer Equipment

Flat-bed Transfer Press

Sublimation Transfers – Printing Information

Water-based and solvent-based extenders are available for use with the dye concentrates. For lower grammage papers solvent-based extender HQ382 should be used to minimise paper cockle

Extender Bases	HQ381, HQ382
Thinning	HQ381, up to 10% ZC656 HQ382, up to 10% ZV552.
Mesh	120--150.
Drying	Air drying, 3-5 mins. Can be force dried at 40-50°C for 15-20secs.
Paper	90-150gsm matt coated cartridge paper is recommended

Transfer Schedule

200-210°C for 30-40 seconds

Colour Strength / Mixing Ratios

A ratio of 90 parts extender base to 10 parts dye concentrate is recommended to give good colour strength and economy of use. Colours with higher levels of dye concentrate may have reduced rub/scuff resistance.

NOTE: Due to the natural transparency of the dyes, best sublimation results will only occur when transferred onto white uncoloured substrates. Because of the wide range of synthetic substrates, it is vital to check suitability before commencing production.

To maximise tack levels to synthetic garments during the transfer process, and thus reduce the likelihood of shadowing or "blurred" edges, overprinting with a layer of extender base is recommended. For this application the extender base should be thinned 10% with the appropriate thinner (ZC656 Detail Thinner for HQ381 water-based extender and ZV552 Low Odour Thinner for HQ382 solvent-based extender).

Storage

When stored in a cool environment:

- HQ Dye Concentrates are expected to have a shelf-life of 24 months from the date of manufacture.
- HQ381/2 Extender Bases are expected to have a shelf-life of 12 months from the date of manufacture.
- should be stored away from heat.

7. FLOCK TRANSFERS

Flock Transfers are a combination of a screen printable flock transfer paper and a water-based inks/adhesive. Flock Transfer Papers are supplied either coloured, or available in white for screenprinting with colours.

Overview

Products Required

Colours

Texiscreen Aqua AJ water-based inks (see page 11 for full range).

Binder Concentrate

AJ432	Binder Concentrate

Available in 1 ltr containers.

Adhesives

FT404	Flock Transfer Adhesive

Available in 5 ltr containers.

FT409	Flock Transfer Adhesive Powder

Available in 1 and 10 kg containers.

Additives for Texiscreen Aqua

ZT635	WB Flow Thinner
ZE592	S303 WB Retarder
ZE596	WB Thickener

Available in 1 ltr containers.

PW386	PW Catalyst
RY386	Reflec Catalyst

Available in 500 g containers.

Flock Paper

Single Colour, 0.5 mm Flock Transfer Paper.
Multi-colour, 0.3 mm Flock Transfer Paper.

Fastness/Resistance

Wash	60°C
Dry Clean	Recommended.
Direct Iron	Not Suitable.
Industrial	Not Suitable.

Flock Transfers – Printing Information

Flock Transfer Papers are available at various fibre lengths. For single colour flock transfers 0.5mm Flock Transfer Paper is recommended, and is suitable for use with Sericol water-based adhesives. For multi-colour flock transfers, 0.3mm flock transfer papers should be utilised in combination with Texiscreen Aqua AJ water-based inks.

Drying	160°C for 2-3 minutes (for best results, sheets should be racked for 30-60 mins. before curing).
Thinning	If required, up to 5% ZE592.
Mesh	Inks, 34-77 Adhesive, 21-27.

Single Colour Flock Transfers

The recommended procedure is as follows :

1. Use 0.5mm flock transfer paper
2. Print FT404 through a 21-27 mesh
3. Whilst still wet, powder with FT409 Adhesive
4. Set at 110-130°C for 2-3 minutes
5. Brush excessive powder from image
6. Cure at 160°C for 2-3 minutes
7. Transfer at 180-190°C for 10-20 seconds

Final cure temperature, for the AJ colours, can be reduced by the addition of up to 5% of PW386 or RY386 catalyst.

Multi-colour Flock Transfers

The following procedure should be utilised :

1. Use 0.3mm flock transfer paper
2. Print Texiscreen Aqua AJ Colour
3. Cure at 130-140°C for 1-2 minutes
4. Repeat stages 2&3 as required (each colour should be fully dried before overprinting)
5. Print FT404 through a 21-27 mesh
6. Whilst still wet, powder with FT409 Adhesive
7. Set at 110-130°C for 2-3 minutes
8. Brush excessive powder from image
9. Cure at 160°C for 2-3 minutes
10. Transfer

Suitability of Transfers

Almost all textiles and many papers and boards can be decorated with flock transfers, but users should satisfy themselves that the transfers are compatible with the material to be decorated before commencing production.

TRANSFER PAPERS SUMMARY

Papers for Hot Split Transfers

Hot Split Transfers are only suitable for use with plastisol systems.
These transfers require the ink to adhere to the transfer paper. Because of this no siliconised transfer paper should be used for Hot Split systems.
The recommended products are as follows:

TRC11 Soft Trans Paper (HS)
700 x 1000 mm Packs of 1000 sheets

TRC22 Soft Trans Paper (HS)
700 x 1000 mm Packs of 500 sheets

Papers for Cold Peel Transfers

Cold peel transfers can utilise a variety of ink systems based on both plastisol and solvent chemistries. Siliconised transfer papers are the recommended products. Most papers have an optimum print side - facing up when the pack is opened. Confirmed with your paper supplier.

TRW28 Vegetable Parchment Paper
700 x 1000 mm Packs of 250 sheets

Vegetable Parchment Paper is the thinnest transfer paper and is an economical option for single or non-registered colour transfers, Multi-colour transfers are not recommended for use with Vegetable Parchment Paper.

TRB08 T75 Transfer Paper
700 x 1000 mm size Packs of 250 sheets

T75 (75 gsm – grammes per square metre) siliconised transfer paper is the standard recommendation for cold peel transfers. The wide format of application leads to suitability for both plastisol and solvent-based ink systems.

TRB20 T105 Transfer Paper
700 x 1000 mm Packs of 250 sheets

T105 (105 gsm) siliconised transfer paper is used where maximum stability in paper is required. This is most suitable for use with multi-colour images where registration is critical and shrinkage is to be kept to a minimum.

TRQ97 Glitcote Transfer Paper
635 x 965 mm Packs of 500 sheets

High gloss transfer paper can be used in combination with plastisol inks to generate high gloss prints. The transfer paper is single sided with the reverse side having no silicon coating. Glitcote Transfer paper can be used as a post-press process, to give a gloss finish.

Transfer Paper Selector

	Transfer Type						
	Plastisol					Workwear/ Sportswear	
Product Code	Hot Split	Single Colour CP	Multi Colour Cold Peel	Gloss Cold Peel	Litho	Single Colour	Multi-colour
TRC11	√						
TRC22	√						
TRW28		√					
TRB08		√	TEST		√	√	TEST
TRB20		√	√		√	√	√
TRD16		√	√		√	√	
TRQ97			√	√			

COLOUR RANGE

The list below details the inks used to produce the transfers described. Each ink range has a separate Information Sheet outlining full applications details.

	MultiTran XM	Nylotex NX	Nylobag NB	Texiscreen Aqua AJ
Black	XM001*	NX001†*	NB001*	AJ001†*
White	XM021*	NX021†*	NB021*	AJ021†*
Opaque White	–	–	–	AJ025†*
Coating White	–	–	NB033*	–
Light Chrome	XM042*	NX042†	NB042*	–
Mid Chrome	XM043 *	NX043 †	NB043†*	–
Yellow	–	NX045 †	NB045 *	–
Seritone Yellow (Green Shade)/Primrose	–	–	–	AJ057†*
Seritone Yellow (Red Shade)/Golden Yellow	–	–	–	AJ046†*
Seritone Orange/Orange	–	–	–	AJ103†*
Seritone Red (Yellow Shade)/Scarlet	–	–	–	AJ122†*
Light Orange	XM101*	NX101 †	NB101†*	
Light Red	XM162 *	NX162 †	NB162†*	–
Red	XM134 *	NX134 †	NB134†*	–
Deep Red	XM124 *	NX124 †	NB124†*	–
Brick Red	–	–	–	AJ152†*
Seritone Red (Blue Shade)/Carmine	–	–	–	AJ153†*
Fuchsia	XM154*	NX154†	NB154†*	–
Seritone Magenta/Fuchsia	–	–	–	AJ154†*
Deep Violet	XM127 *	NX127 †	NB127†*	–
Seritone Violet/Violet	–	–	–	AJ132†*
Seritone Blue/Azure	–	–	–	AJ218†*
Light Blue	XM227 *	NX227 †	NB227†*	–
Blue	XM212*	NX212 †	NB212†*	–
Oxford Blue	–	–	–	AJ219†*
Emerald Green	–	–	–	AJ315†*
Seritone Green/Sea Green	–	–	–	AJ316†*
Green	XM320 *	NX320 †	NB320†*	–
Brown	–	–	–	AJ343†*
Metallic Gold	–	–	–	AJ475†*
Metallic Silver	–	–	–	AJ476†*
Extender Base	–	NX381 *	NB381†*	AJ381*
Extender Base (Opaque)	XM381 *	–	–	–
Opaque White Base	–	–	–	AJ403*
Metallic Ink Medium	–	–	–	AJ382*
Transparent Split Additive	XM391 *	–	–	–
Expanding Base	XM417*	–	–	–
Fluorescent Yellow L	XM077 *	–	–	AJ053*
Opaque Fluorescent Yellow L	–	–	NB077†	–
Fluorescent Orange M	XM119 *	–	–	AJ105*
Opaque Fluorescent Orange M	–	–	NB119†	–
Fluorescent Red M	XM179 *	–	–	AJ137*
Opaque Fluorescent Red M	–	–	NB179†	–
Fluorescent Magenta M	XM180*	–	–	AJ139*
Opaque Fluorescent Magenta M	–	–	NB180†	–
Fluorescent Green M	XM294 *	–	–	AJ312*
Opaque Fluorescent Green M	–	–	NB294†	–
Trichromatic Yellow	XM052 *	–	–	AJ052*
Trichromatic Cyan	XM215 *	–	–	AJ215*
Trichromatic Magenta	XM135*	–	–	AJ135*
Trichromatic Black	–	–	–	AJ004*
Trichromatic Extender Base	XM396 *	–	–	–
Transparent Glitter Base	XM397*	–	–	–

† Available in 1 ltr containers. *Available in 5 ltr containers. †*Available in 1 and 5 ltr.
Do not use AJ025 Opaque White with AJ333 Cold Cure Catalyst.

Safety and Handling

MultiTran XM, Nylotex NX, Nylobag NB, Texiscreen Aqua AJ screen Inks, Metatran Adhesive and Subliscreen HQ Dye Concentrates & Extender Base:

- are formulated to be free from any (toxic) carcinogenic, mutagenic or reprotoxic chemicals.
- should be stored away from heat.
- are formulated free from lead and other heavy metals and are tested to comply to the EN71-3: 1988 Toy Safety Standard.

MultiTran XM, Nylotex NX, Texiscreen Aqua AJ screen inks, Metatran Adhesive and Subliscreen HQ Dye Concentrates & Extender Base:

- do not have a flashpoint and are therefore exempt from the Highly Flammable Liquid Regulations.

Nylobag NB Inks:

- contain barium and therefore should not be used on objects liable to be sucked or chewed by children.

NB386 NB Catalyst:

- contains isocyanate and should not be used by persons suffering from bronchitis or asthmatic symptoms.

Texiscreen Aqua AJ

- **do not use AJ333 Cold Cure Catalyst in AJ Metallic Colours as this can lead to an exothermic reaction, which could cause the container to explode.**
- **MP477 and MP478 Bright Metallic Gold and Silver Powders should not be poured, as this can give rise to electrostatic discharges. These powders should be ladled when transferring from one container to another.**

Comprehensive information on the safety and handling of MultiTran XM, Nylotex NX & Nylobag NB, Texiscreen Aqua AJ screen inks, Metatran Adhesive and Subliscreen HQ Dye Concentrates & Extender Base are given in the appropriate Sericol Safety Data Sheets, available on request.

Due to the complex nature of decorating garments with transfers, customers must confirm suitability through pre-production testing.

Environmental Information

MultiTran XM, Nylotex NX & Nylobag NB , Texiscreen Aqua AJ Inks and Metatran Foils and Adhesive:

- do not contain ozone depleting chemicals as described in the Montreal Convention.

MultiTran XM, Texiscreen Aqua AJ inks and Subliscreen HQ381 Extender Base:

- are formulated free from aromatic hydrocarbons which are known to have an adverse effect on the environment.
- are free of any volatile solvent and are therefore beneficial to the environment when compared to solvent-based products.

Subliscreen HQ381 Extender Base:

- is biodegradable.

SERICOL
More than ink...Solutions.

Sericol Limited Pysons Road Broadstairs Kent CT10 2LE England
Telephone: (01843) 866668 Fax: (01843) 872074

UK Sales - Tel: (020) 8391 8010 Fax: (020) 8391 8008
Email: UKsales@Sericol.com

Customer Service Centres - Tel: 0845 084 89 89
Birmingham, Bristol, Broadstairs, Gateshead, Glasgow, Leeds, London-North, London-South, Warrington.

Technical Helpline - Tel: 0845 770 80 70

Export Sales
Pysons Road Broadstairs Kent CT10 2LE England
Tel: *+44* (0)1843 866668 Fax: *+44* (0)1843 872122
Email: Exportsales@Sericol.com

www.sericol.com

PRINTED IN ENGLAND 1580/S2