Screen Printing Technology Hand Book

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Screen printing is a printing technique that uses a woven mesh to support an ink blocking stencil. The attached stencil forms open areas of mesh that transfer ink or other printable materials which can be pressed through the mesh as a sharp edged image onto a substrate. A roller or squeegee is moved across the screen stencil, forcing or pumping ink past the threads of the woven mesh in the open areas. Screen printing proves to be a good printing process for multi colour printing. Half tone printing is related to screen printing of photographs. Printings of photographs was at one time considered to be very difficult in screen printing, but now screen printed halftone photographs are also effective and economical in certain types of reproduction. Over the time stickers (transfer) have become an important medium of advertising. Now millions of stickers are printed every year through this method. Transfer stickers are of three types; instant transfer, heat transfer and water lade transfer. Gumming is an integral part of sticker production. Screen printing technique make use of and is compatible with a variety of materials, including textiles, ceramics, metal, wood, paper, glass, and plastic. It is this quality that allows this printing technique to be used in different industries, from clothing to product labels, fabric labels to circuit board printing etc. Screen printing industry experiences growth in the 10 to 15% per year rate.

Some fundamentals of this book are basic concept and classification of stencils, basic screen printing process, basic registration techniques, screen printing frames, pre treatment of screen printing fabrics, screen printing press, principal of screen process printing, printing on paper and card, printing on vertical surfaces, printing on shaped objects, cylindrical object printing, printing on uneven surfaces, ceramic and glass printing, printing on plastics etc.

This method of Printing has achieved wide spread popularity since the Second World War, although the basic ideas in this process were used by the Chinese centuries ago. The present book contains latest technologies of screen printing along with machinery photographs, addresses of suppliers of machinery and raw materials. This book will be very helpful to new entrepreneurs, existing units and for those who want to diversify in to this field.

Contents

Introduction
What is Screen Printing?
Seeking a challenging and creative career?
Screen printing is ancient, yet a highly
revolutionary industry
Print on virtually anything
Screen printing is universal - you see it
everywhere

Screen printing is simple Screen Print Materials Frames Screen Mesh Screen Prep Tape Stencil Systems Capillex Film (Pre-Sensitized Photo Stencils G&S Pigment System **Essential Components** Base Pigment Resfix Anti-bleedScreen Softener Ink Retarder **Creating Artwork** Other basic Tools and Supplies Creating a Positive by Hand Rubbing Dry Transfer Lettering onto Clear Acetate (Transtay) For Straight Type For Arched Type Tracing an Image onto Matte Acetate Assembling Base Art Putting together all parts of your artwork images and message Cutting the Image out of Masking Film Instant Positives with Velum (Drafting Paper) For All Multi-Colour Artwork Labeling Artwork Mesh Preparation Roughening the Mesh Procedure Degreasing the Mesh Procedure Preparing the Stencil Using Capillary Film Using Direct Emulsions Mixing the Emulsion Coating the Emulsion onto A Screen Storage and Handling of Stencil Materials **Capillary Films Direct Emulsions** Exposing the Stencil Positioning the Artwork: Size and Placement of Image on Substrate Positioning the Artwork on the Screen Exposing Units Table Top Exposing Unit Features Building An Exposing Unit The Fluorescent Tube Unit To Expose

The Plate Light To Expose **Exposure Time of Different Stencil Materials Direct Emulsions** Preparing the Screen For Printing Washing Out the Stencil **Blocking Out Pinholes** Taping the Screen Printers Table Top 4 Colour Printer Printing on A Table Surface **Off-Contact Printing** Printing Flood Stroke Print Stroke Stencil Removal/Screen Reclaiming **Reclaiming A Screen** Removing Tape And Ink **Removing Stencil Material** Procedure Removing Stains Or Ghost Images with Autohaze Procedure Roughening the Mesh with Autoprep Degreasing the Mesh with Universal Mesh Prep **Review - Screen Reclaiming** Fault Finding Guide Capillex Films Stencil film washes off mesh Ragged edges Fine detail filling Pinholes Poor adhesion Patchy stencil Difficult washout **Direct Emulsions** Sawtoothing Exposed emulsion washes off mesh Fine detail filling in Premature stencil breakdown Pinholes Scumming Image does not wash out at all 2. Screen Printing

Historical Background Introduction Section 1 Basic Concept and Classification of Stencils The Stencil Types of Stencils Fabric and Frame Preparation

Screen Fabrics Screen Frames Fabric Stretching Techniques Mechanical Stretching Hand Stretchig Fabric Treatment Photographic Stencil Methods Direct Process **Direct/Indirect Process Determining Photographic Stencil Exposures** Indirect Photographic Stencil Process Exposure **Development and Washing** Application of the Stencil Drying Removal of the Base Material **Direct photographic Stencil Process** Preparation Application Drying Exposure Development Masking the Stencil Preparing a Paper Mask Preparing a Lquid Block-out Mask Squeegee and Ink Considerations Selecting the Proper Squeegee Shape Chemical Makeup Flexibility Length Squeegee Preparation Selecting the Proper Ink **Product Characteristics Production Limitations** Ink Preparation Basic Screen Printing Process **Basic Registration Techniques On-Contact and Off-contact Printing** Printing the Stencil **Multicolor Printing** Drying the Image Cleaning the Screen Removing the Stencil **Troubleshooting Clogged Screens** Halftone Reproduction in Screen Printing Methods of Halftone preparation for Screen Printing Fabric Selection Moire Patterns **Printing Considerations High-Speed Production Presses** Semiautomatic Presses

Fully Automatic Presses Special Machine Configurations Screening Cylindrical surfaces Carousel Units

3 Screen printing frames Pre-treatment of Frames Stretching equipment Pneumatic stretching clamps Advantages Mounting Components of the SST system Correct stretching Optimum tensioning force for different fabrics Stability Control of tension in measuring fabric stretch Stretching at a fabric angle Stretching methods Angled stretching with a prop profile Adhesive Adhering screen printing fabrics onto the frame Screen Storage The manufacture of diapositives Manual diapositives Photographically prepared diapositives Important Stencils Pre-treatment of Screen Printing Fabrics Stencil making Manual stencils Photo-mechanical stencils Manual stencil making The hand-cut stencil Water soluble hand-cut film Cellulose hand-cut film Causes of errors Bad adherence Turned-up film edges The direct stencil with emulsion General procedure Sources of errors with direct stencils Imade only with emulslion Formation of fish-eyes after coating Air inclusions during coating Poor adherence of the photo emulsion after exposure Light scatter when copying (loss of detail) Saw-tooth effect Half-tone printing Difficulties in decoating Stencils for water-based inks Emulsions (photo emulsions)

Sensitizers CHROMATE photo emulsion **DIAZO** photo emulsions Printing requirements Lines Half-tones UV-inks Fineness of fabrics Examples for coating The direct stencil with film and emulsion General procedure Sources of errors with direct stencils made with film and emulsion Bad adherence of the film on the fabric Use of too fine a fabric Too hard or too sharp a squeegee Dust inclusions Too short an exposure time Error in exposure General procedure Source of errors with direct stencil made with film and water Bad adherence of the film on the fabric Insufficient treatment of the fabric Error in exposure Indirect stencil General procedure Sources of errors with indirect stencils Bad adherence of the film on the fabric Insufficient treatment of the fabric Insufficient degreasing of the fabric Too long an exposure time Inactive developer Drying the stencil with warm air Exposure Hardening of stencils for printing of water based colours in textile printing General procedure The hardening procedure Attention Suggestion The diapositive The stencil Steel and light-alloy frames The linear co-efficient of thermal expansion Frame distortion by fabric pull Warping of the frames under various mechanical stresses Steel versus Aluminium Recommendations for frame size and profile Screen printing fabrics Optimum tightnes of the fabric stretch

Degree of Stretch Gluing the fabrics to the printing frames The printing substrate Stencils for half-tone printing Types of screen rullings Printing Setting a flat bed printing table SST-measuring wedge The squeegee Squeegee System Flood coat squeegee (Doctor blade) Printing speed Printing shaped objects Single operation multiple colour printing 4. The difference between multi-filament & mono-filament screen printing fabrics UV-Goldorange 5. Screen Printing Press The Screen-Printing Press Types of Fabrics **Construction of Fabrics** Mesh Count, Mesh Strength, and Mesh Opening Stretching The Screen Fabric How to Build A Screen-Process Press? Step 1 : Assemble Needed Materials Bill of Materials Step 2 : Construct the Frame Step 3: Attach the Screen Fabric Step 4: Tape and Seal the Screen Step 5: Prepare the Base Step 6: Hinge the Frame to the Base Step 7: Add a Frame Support Print drying equipment **Constructing Specialty Equipment** Screen Printing On: Papers, Textiles and Other Printing Substrates Type of Paper Principal of Screen Process Printing Common Types of Paper Color of Stock Textiles Type of Fabric Common Types of Fabrics Printing on T-shirts Plastics Types of Plastics Metals Woods Ceramics

Screen-Process Stencils Hand-cut Paper Stencil To Prepare a Paper Stencil Step1: Image the Paper Step 2: Cut the Stencil Step 3: Adhere the Stencil Hand-cut film stencil To prepare a Film Stencil Step 1: Prepare for Cutting Step : Cut the Stencil Step: Adhere the Stencil Step 4: Remove the Backing Sheet Photographic stencils To Prepare an Indirect Photographic Stencil Step 1: Prepare for Exposure Step 2: Load the Frame Step 3: Expose the Stencil Step 4: Develop the stencil Step 5: Wash Out the Stencil Step 6: Adhere the Stencil To Prepare a Direct Photographic Stencil Step 1: Mix the Emulsion Step 2: Coat the Screen Step 3: Expose the Screen Step 4: Process the Stencil To prepare a Direct/Indirect Photographic Stencil Step 1: Sensitize the Coating Solution Step 2: Adhere the Film to the Fabric Step 3: Expose the Stencil Step 4: Wash out the Stencil Screen Printing Automatic Press The printing form makes it possible The screen printing features and their singularity **Choosing A printing Process** Letter Press Advantage Limitations Lithography Advantage Limitation Photo Gravure Advantage Limitation Screen Printing Advantage Limitation Collo Type Advantage Limitation Flexo Graphic

Advantages Limitation What process to use

6. Printing On Various Surfaces Printing on Paper and Card Articles With Thick Surfaces Printing on Metal & Metal Foils Textile Printing Textile Inks Make Ready Very long Banners Printing On Vertical Surfaces Printing On Shaped Objects Cylindrical Object Printing Printing on Uneven Surfaces Ceramic and Glass Printing Printing On Plastics Summary

7. The Printing Process Actual Printing Elementary Work Selection of Ink Use of Squeegee Coating of ink layer Racking or Drying Multi - Colour Screen Printing **Colour Scheme Colour Separation Temporary Blockout** Permanent Blockout Single Operation Multiple Colour Printing Printing of coloured background (Patch) Halftone Printing Preparation of stencil for half tone printing Stickers (Transfers) Transfer stickers Gumming **Cleaning Operations** Summary

8. Tabulation Polyester Monofilament Nylon Monofilament Metallized Polyester Monofilament UV-Goldorange Polyester Monofilament Fabric number Carbon

Machinery Section

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