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.

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