DOWNLOAD PDF SILK SCREEN PRINTING MANUAL

Chapter 1 : Screen Printing Equipment-Silk Screening Supplies-Kits & packages

The M&R Genesis Manual Screen Printing Press makes it easier than ever to become a screen printing professional. Whether you are new to the world of screen printing or looking to launch your own business, the Genesis is the ideal solution.

Easy setup and easy operation. Disadvantages Not much suitable for deep-colored t-shirts. Time-consuming for a large volume of garments production. The printing industry has had a new era of press and printing business. It has, in the meantime, come a long way. Its journey was not much smooth. Rather it has reached here through a lot of struggles and the present success is the result of the revolution. Can you imagine how much time it took to print a single newspaper or the pages of a small book in those days? It would make you stumbled. You might be exclaimed; really!!! It would take a whole day or even more print that newspaper or those pages. The then operators would try to move each of the paper to every page. The amazing advancement of science and technology has contributed to the introduction of the fastest and the most efficient heat press machine and screen printing machine. Both types of the machine make the printing process very easier and more flexible. And consequently, they let the businesses that depend on the printing procedure flourish, especially for t-shirt printing business, for example. If you consider the printing field, the screen printing machine and the t-shirt heat press machine is the recent inventions. But there is an important question here. We received the question from many of the customers, even from the users. What is actually the difference between these two types of the machine? To satisfy them with a reliable answer, we came to a decision to write down the major and minor difference between the two modern machines. We also tried to interpret the existing similarities between a heat press machine and a screen printing machine. This particularly helpful for you to come to a decision when you are planning to customize your apparel, like the t-shirt screen printing business. Which is the Best t-shirt Printing Machine for You? There might be a dilemma. Which t-shirt printing machine should you choose for your t-shirt screen printing? The best t-shirt printing machine bears 3 key factors in printing the design of the garments. Time, pressure, and temperature. It has no minimum design. You can use a different design every time. On the contrary, a screen printing machine has been contributing for so many years. It has been reliable for its great printing functions. It will reign for the millennium. For your t-shirt printing business, this machine will ensure a high-quality end product to satisfy your clients or customers. Similarly, for screen printin g or t-shirt printing business it requires a detail conception. Our researchers who have a lot of practical experience in different types of design printing on different cloths has spent a lot of time for listing 8 best heat press tee shirt screen printing machines. We did our best to bring the best product for you according to the lifespan, color stations, portability, durability, cost, and size of the machine. This Digital t-shirt press machine is ideal for applying images, letters, numbers, and transfers on garments, t-shirts, ID badges, mouse mats, bags, ceramic tiles, jigsaw puzzles, and other items. While you are going to buy a heat press you should test whether it can apply vinyl or not. The working surface is of 15 inches x 15 inches dimensions where you can easily transfer your artwork. The sublimation printer for t-shirts is the best heat press for shirts and also included the adjustable pressure and a stopwatch alerts you ensuring you get the desired results. You can apply the right pressure while printing different items. You will get a silicone gel badges board at the bottom of the press which ensures the stability of the machine. Sound beeps when transferring it over The pressure can be adjusted easily The silicon pad can endure maximum degrees without any distortion Easy parameter setting Integrated electric control system for simply adjusting and maintenance. Dual electric system protection provides safe operation. It is the top bestseller digital heat press machine in the present market and the best sublimation printer for t-shirts. This Fancierstudio heat press is easy to assemble and easy-to-use. This shirt heat press is a clamshell type t-shirt maker machine. It is suitable for t-shirts, garments, bags, mouse mats, transfers, letters, numbers, ID badges, ceramic tiles, jigsaw puzzles, and other items printing. Heats fast and evenly. The surface of the t-shirt sublimation printer press is smooth and well-finished. Distributes both pressure and heat well. The interchangeable system heat platens and other elements of the press machine express its popularity for various printing design. You can transfer characters

and colorful pictures of sublimating and printing ink onto textiles, glasses, ceramics, such as flax, chemical fiber, cotton, nylon, etc. F2C Pro professional t-shirt printing press 6 in 1 Combo malfunction heat press swing-away designed machine can rotate full degree rotation. This Brand new professional t-shirt printing machine swing-away design heat transfer press comes with Non-stick surface. The F2C 6 in 1 Combo sublimation printer digital t-shirt heat press is a versatile and flexible heat transfer t-shirt sublimation equipment. Its heating plate is thicker and evenly distributed heat on the flat surface is achieved. Zeny Heat Pro t-shirt screen printing machine is tailored for you as it includes heat press and also mugs press. This t-shirt printing machine has voltage requirement of V with US grounded plug and W power. Machine temperature may rise up to degrees Fahrenheit. Optimum heating time is within 10 to 15 minutes. Cord length is 4. It is available in black color. It is available with upgraded aluminum alloy cradle. Options for selecting any temperature scale from Fahrenheit and Celcius. Contains an adjustable multi-spring balancer. Heating up is very fast. Offers the scope of printing mugs by detached cradles which is compact and lightweight than other mug cradles. The Superland power press t-shirt printing heat press machine can heat up to degree Fahrenheit. The press machine comes with the voltage: This Swing away designed Superland power heat transferring t-shirt mug multi-functional sublimation press can rotate -degree full rotation. The heat platen size: The heat transferring machine distributes pressure across the entire heat platen more evenly when it is closed. The digital timer control is adjustable up to seconds. The manual open and close handle is easy to operate and can be adjusted with the pressure knob at the rear of the machine.

Chapter 2 : Workhorse Products Screen Printing Equipment Manufacturer

Ryonet offers the widest variety and selection of screen printing presses in the industry, each offering different useful features. Find the press for you!

Screen printing was largely introduced to Western Europe from Asia sometime in the late 18th century, but did not gain large acceptance or use in Europe until silk mesh was more available for trade from the east and a profitable outlet for the medium discovered. Early in the s, several printers experimenting with photo-reactive chemicals used the well-known actinic light â€"activated cross linking or hardening traits of potassium, sodium or ammonium chromate and dichromate chemicals with glues and gelatin compounds. Roy Beck, Charles Peter and Edward Owens studied and experimented with chromic acid salt sensitized emulsions for photo-reactive stencils. This trio of developers would prove to revolutionize the commercial screen printing industry by introducing photo-imaged stencils to the industry, though the acceptance of this method would take many years. Commercial screen printing now uses sensitizers far safer and less toxic than bichromates. Currently there are large selections of pre-sensitized and "user mixed" sensitized emulsion chemicals for creating photo-reactive stencils. A group of artists who later formed the National Serigraph Society, including WPA artists Max Arthur Cohn and Anthony Velonis , coined the word Serigraphy in the s to differentiate the artistic application of screen printing from the industrial use of the process. Since rudimentary screenprinting materials are so affordable and readily available, it has been used frequently in underground settings and subcultures , and the non-professional look of such DIY culture screenprints have become a significant cultural aesthetic seen on movie posters, record album covers, flyers, shirts, commercial fonts in advertising, in artwork and elsewhere. Warhol was supported in his production by master screen printer Michel Caza , a founding member of Fespa , and is particularly identified with his depiction of actress Marilyn Monroe , known as the Marilyn Diptych , screen printed in garish colours. Sister Mary Corita Kent , gained international fame for her vibrant serigraphs during the s and s. Her works were rainbow colored, contained words that were both political and fostered peace and love and caring. American entrepreneur, artist and inventor Michael Vasilantone started to use, develop, and sell a rotatable multicolour garment screen printing machine in Vasilantone later filed for patent [4] on his invention in granted number 3,, on February 18, The Vasilantone patent was licensed by multiple manufacturers, the resulting production and boom in printed T-shirts made this garment screen printing machine popular. Screen printing on garments currently accounts for over half of the screen printing activity in the United States. Screen printing lends itself well to printing on canvas. Andy Warhol , Arthur Okamura , Robert Rauschenberg , Roy Lichtenstein , Harry Gottlieb and many other artists have used screen printing as an expression of creativity and artistic vision. Printing technique[edit] Screen printers use a silkscreen like this Screenstretch version, a squeegee, and hinge clamps to screen print their designs. The ink is forced through the mesh using the rubber squeegee, the hinge clamps keep the screen in place for easy registration A. How to screen print one image How to screen print with multiple layers using CMYK Different samples of the printed image Used to hold screens in place on this screen print hand bench Trolley containing a wooden squeegee and acrylic ink A wash out for cleaning screens Screen printing four layers on a hand bench A screen is made of a piece of mesh stretched over a frame. The mesh could be made of a synthetic polymer , such as nylon , and a finer and smaller aperture for the mesh would be utilized for a design that requires a higher and more delicate degree of detail. For the mesh to be effective, it must be mounted on a frame and it must be under tension. The frame which holds the mesh could be made of diverse materials, such as wood or aluminum, depending on the sophistication of the machine or the artisan procedure. A stencil is formed by blocking off parts of the screen in the negative image of the design to be printed; that is, the open spaces are where the ink will appear on the substrate. Next, the screen and frame are lined with a tape. The type of tape used in for this purpose often depends upon the ink that is to be printed onto the substrate. If these holes are left in the emulsion, the ink will continue through and leave unwanted marks. The screen is placed atop a substrate. Ink is placed on top of the screen, and a floodbar is used to push the ink through the holes in the mesh. The operator begins with the fill bar at the rear of the screen and behind a

reservoir of ink. The operator lifts the screen to prevent contact with the substrate and then using a slight amount of downward force pulls the fill bar to the front of the screen. This effectively fills the mesh openings with ink and moves the ink reservoir to the front of the screen. The operator then uses a squeegee rubber blade to move the mesh down to the substrate and pushes the squeegee to the rear of the screen. The ink that is in the mesh opening is pumped or squeezed by capillary action to the substrate in a controlled and prescribed amount, i. As the squeegee moves toward the rear of the screen the tension of the mesh pulls the mesh up away from the substrate called snap-off leaving the ink upon the substrate surface. There are three common types of screen printing presses: Most screens are ready for re-coating at this stage, but sometimes screens will have to undergo a further step in the reclaiming process called dehazing. This additional step removes haze or "ghost images" left behind in the screen once the emulsion has been removed. Ghost images tend to faintly outline the open areas of previous stencils, hence the name. They are the result of ink residue trapped in the mesh, often in the knuckles of the mesh the points where threads cross. While the public thinks of garments in conjunction with screen printing, the technique is used on tens of thousands of items, including decals, clock and watch faces, balloons, and many other products. The technique has even been adapted for more advanced uses, such as laying down conductors and resistors in multi-layer circuits using thin ceramic layers as the substrate. Stencilling techniques[edit] A macro photo of a screen print with a photographically produced stencil. The ink will be printed where the stencil does not cover the substrate. A method of stencilling that has increased in popularity over the past years is the photo emulsion technique: Hand-painted colour separation on transparent overlay by serigraph printer Csaba Markus The original image is created on a transparent overlay, and the image may be drawn or painted directly on the overlay, photocopied , or printed with a computer printer, but making so that the areas to be inked are not transparent. Any material that blocks ultra violet light can be used as the film, even card stock. A black-and-white positive may also be used projected onto the screen. However, unlike traditional plate-making, these screens are normally exposed by using film positives. A screen must then be selected. There are several different mesh counts that can be used depending on the detail of the design being printed. Once a screen is selected, the screen must be coated with emulsion and dried. The overlay is placed over the screen, and then exposed with a light source containing ultraviolet light in the nanometer spectrum. The screen is washed off thoroughly. The areas of emulsion that were not exposed to light dissolve and wash away, leaving a negative stencil of the image on the mesh. Materials[edit] Caviar beads A caviar bead is a glue that is printed in the shape of the design, to which small plastic beads are then applied â€” works well with solid block areas creating an interesting tactile surface. Cracking ink Cracking ink effect is when the ink produces an intentional cracked surface after drying. Discharge inks Discharge ink is used to print lighter colours onto dark background fabrics, they work by removing the dye of the garment â€” this means they leave a much softer texture. The cons with this process is that they are less graphic in nature than plastisol inks, and exact colours are difficult to control. One of the pros of using this process is they are especially good for distressed prints and under-basing on dark garments that are to be printed with additional layers of plastisol. It adds variety to the design or gives it that natural soft feel. Expanding ink puff Expanding ink, or puff, is an additive to plastisol inks which raises the print off the garment, creating a 3D feel and look to the design. Mostly used when printing on apparel. Flocking Flocking consists of a glue printed onto the fabric and then flock material is applied for a velvet touch. Although foil is finished with a heat press process it needs the screen printing process in order to add the adhesive glue onto the material for the desired logo or design. Four-colour process or the CMYK colour model Four-colour process is when the artwork is created and then separated into four colours CMYK which combine to create the full spectrum of colours needed for photographic prints. This means a large number of colours can be simulated using only 4 screens, reducing costs, time, and set-up. The inks are required to blend and are more translucent, meaning a compromise with vibrancy of colour. Usually available in gold or silver but can be mixed to make most colours. Gloss Gloss ink is when a clear base laid over previously printed inks to create a shiny finish. Metallic Metallic ink is similar to glitter, but smaller particles suspended in the ink. A glue is printed onto the fabric, then nano-scale fibers applied on it. This is often purchased already made. Mirrored silver Mirrored silver is a highly reflective, solvent-based ink. Nylobond Plastisol Plastisol is the most common ink used in commercial garment

decoration. Good colour opacity onto dark garments and clear graphic detail with, as the name suggests, a more plasticized texture. This print can be made softer with special additives or heavier by adding extra layers of ink. Plastisol inks require heat approx. It also has a soft texture. Suede Ink Suede ink is a milky coloured additive that is added to plastisol. With suede additive you can make any color of plastisol have a suede feel. It is actually a puff blowing agent that does not bubble as much as regular puff ink. Water-Based inks these penetrate the fabric more than the plastisol inks and create a much softer feel. Ideal for printing darker inks onto lighter coloured garments. Also useful for larger area prints where texture is important. Some inks require heat or an added catalyst to make the print permanent. High Build High Build is a process which uses a type of varnish against a lower mesh count with many coats of emulsion or a thicker grade of emulsion e. Versatility[edit] Screen with exposed image ready to be printed. Screen printing is more versatile than traditional printing techniques. The surface does not have to be printed under pressure, unlike etching or lithography , and it does not have to be planar. Different inks can be used to work with a variety of materials, such as textiles, ceramics, [7] wood, paper, glass, metal, and plastic. As a result, screen printing is used in many different industries, including:

Chapter 3 : Manual Textile Presses :: Textile Screen Printing Equipment

Peopleprint Community Media in Rochdale do all sorts of creative things. Here's our 4 minute guide to silk screen printing. The video was edited by one of our volunteers, John - thanks John!

With sales associates, distributors, and technicians in over 40 countries on six continents, we have the largest network of sales and support in the industry. And our technical support is available 24 hours a day, every day of the year. Wherever you are, whatever you need, well be there for you. The Diamondback R Series is our first auto press, and it is the best thing we have ever done here at Showdown Merch. This press is the easiest press to set up and do a large order with, and take down is a breeze. Amazing service on such a great product. Any shops out there can feel free to give us a call at if you need any other reviews on this product. Even with that said, parts get old and can wear out. Usually, at the worst possible time. They are part of the fabric that is Ink Brigade. An instrumental partner in our success. A frantic call in the middle of the night is always met on the other end of the line by an experienced member of their service staff who expertly diagnoses my issue, and starts the process of solving our problem. We rest easy knowing people like Dan Goldberg and the rest of the service and parts departments are working hard for us behind the scenes every day. Installation and training was a breeze, could not have been easier. It is the biggest time saver we have ever added to our process. We are printing and exposing screens in less than 90 seconds. Not only does it eliminate film cost completely, it produces screens faster and reduces setup time at the press. On top of that we are holding greater detail than ever before. And i-Image has virtually eliminated post-processing screen touch-ups. We could never produce screens of this qualityâ€”or at this speedâ€”the conventional way. Our CTS screens are unmatched. Multi-screen jobs come out perfectly registered, and since i-Image ST pre-registers screens for Tri-Loc, our entire prepress process, from screen prep to registration, has been cut dramatically. We have had our Gauntlet III in production for nearly 3 months and have been thrilled with the machine. We have already put over , impressions on the machine and it is still going strong. We have found that the individual off-contact for each printhead helps with various printing techniques. We were able to run the machine comfortably at pieces per hour. The addition of the laser for print placements has saved us valuable time where we used to mark our pallets with a T-Square. The touchscreen interface is very user friendly and easy to make adjustments when needed. We have not had any problems to date with the machine but are at ease knowing that all parts that we could ever need are able to be overnighted to us. Overall, we have seen an increase in our production numbers due to the efficiencies gained with the newest technology on the market. We are able to run as fast as we can clear a screen and dry our underbase.

Chapter 4 : Silkscreen manual press - Tech Support Screen printing supplies Pittsburgh

This bench model manual screen printing press gives you 4 color capability at a budget price while being the most sturdy and durable bench manual screen printing machine on the market. Great for on-site screen printing at raceways, sporting events, trade shows, concerts, fairs and any other place that people gather.

Light enough for ease of use day in and day out, but solidly welded to provide a rigid platform for life. The large diameter and full-length center shaft, combined with print station support struts, maximize rigidity. The precision machined cast aluminum print heads and center wheel provide the tightest registration. With the optional cap, jacket, sign, coozie, sticker and pocket attachments, this screen printing machine is the do it all answer for any shop. Combined with the tool free X, Y, and Z micro registration, this screen printing machine is the best of all worlds. Mach screen printers also come in a variety sizes to fit your printing needs. Welded Structural Steel Print arm struts ensure that platens remain square and stable while maximizing strength. Light Weight Aluminum Center Wheel The light weight, precision machined, single cast aluminum center wheel provides the tightest registration with smooth quick turns. Advanced Print Heads Precision cast aluminum heads with tool-free, off contact. Side Clamp Option For our customers who prefer a side clamp press, we can accommodate your preference. The Odyssey line is ideal for start-up operations such as home-based business, sporting goods retailers and other decorated apparel companies that want to add a screen printing department. Because of its durable design, the Odyssey will not only help you begin your business, it will also remain reliable as you continue to grow. Honeycomb Turret Design The re-designed turrets provide an easier to use carousel with improved structural support. It provides little to no wear and with no adjustments needed. Extended Center Shaft The shaft is now twice as long and supported at the bottom. This provides over five times the strength as before and creates additional support to all portions of the press. Covered Spring Cartridge A covered die compression spring cartridge has replaced the exposed extension springs. The compression springs provide a longer lifespan and a more secure setting for the springs. Each press will also include a set of rubber coated aluminum pallets. Great for on-site screen printing at raceways, sporting events, trade shows, concerts, fairs and any other place that people gather. It has the ability to add additional colors if needed and is one of the most inexpensive ways to start or expand your screen printing needs. OB This screen printing machine is ideal for printing single color jobs on shirts, sleeves, tote bags, name drops, tagless labels, etc. Add a cap, jacket or vacuum attachment and convert this machine into a dedicated special purpose screen printer. Simply depress the footswitch and the powerful vacuum pump holds any flat stock securely without the use of spray adhesive.

Chapter 5 : Screen Printing Equipment :: M&R :: NuArc :: Amscomatic

Screen printing packages to suit any budget, or production capability. Starting with home based hobby or starter kits for t-shirt printing; entry level small business silk screening shop packages; professional manual shop packages to completely automated, high production set ups.

Chapter 6 : Used screen printing equipment: presses, dryers, exposure units, pressure washers, and more

*Silkscreen Basics a Complete How-To Manual [Matteo Cossu, Claire Dalquiae] on calendrierdelascience.com *FREE* shipping on qualifying offers. This book is a perfect primer for anyone who's ever been intrigued by screen printing.*

Chapter 7 : 5 Best Screen Printing Machine Reviews & Buying Guides|silk screen machine

Manual press for screen printing. TECH SUPPORT SCREEN PRINTING SUPPLIES, LLC Metropolitan St. Pittsburgh, PA

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Chapter 8 : Screen Printing,Kits,Shop Packages,Manual, Automated

Ranar mfg. Inc. est. in is a manufacturer of screen printing equipment. We sell quality and affordable silk screening machines for the t-shirt, textile, and garment printing industry. We have manual or automatic multi color screen printing presses.

Chapter 9 : Manual Screen Printing Press | eBay

Silk screen printing is a bit intimidating at first, but it's easier than it looks and it's possible to set up a printing area in your own home for cheap.