Printex
Your Printing Partners

evolve

March 2013
Issue 2

Printex Monthly News Bulletin

"If you don't much care where you want to get to, then it doesn't matter which way you go!" Organization exist to achieve some purpose, Someone has to define that purpose and the means for its achievement. A Manager is that someone. Every organization's success depends on its type of Management.
By applying the best management policies we can get things done Effectively and Efficiently.

TIPS OF THE MONTH

"Hope is the Rope that swings us through Life. Always believe that today is better than yesterday & tomorrow will be better than today, by Grace of God (ALLAH ALMIGHTY) the Most Beneficent, the Most Merciful".

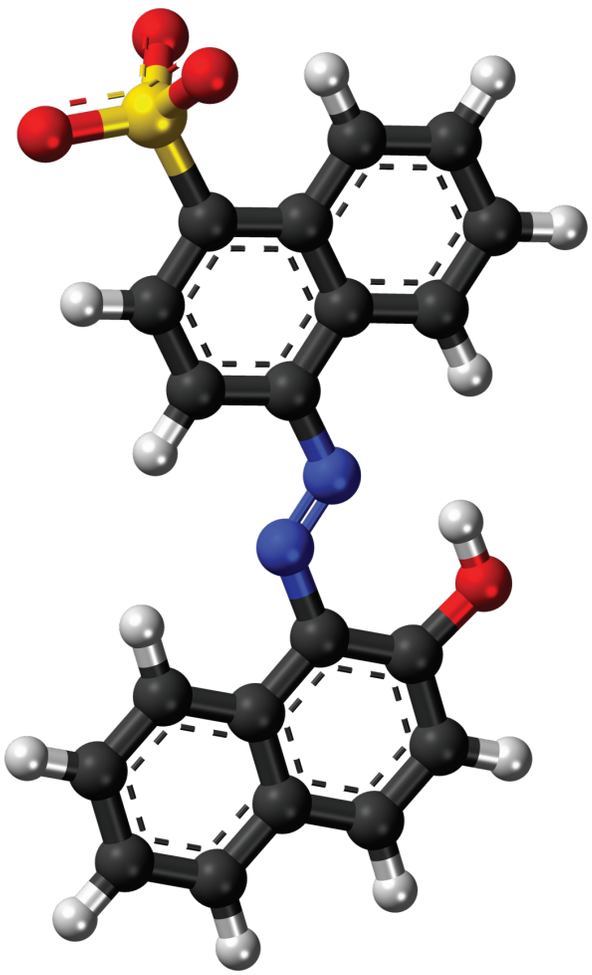
Understanding of PPM

The concentration of a component can be measured as mass per unit volume as mg/liter, mg/cm3, mg/kg etc.
Parts per million - ppm - is commonly used as a measure of small levels of pollutants in air, water, body fluids, etc. Parts per million is the mass ratio between the pollutant component and the solution and ppm is defined as
1 mg/kg = 1 part per million
Alternatively mass related units to measure very small concentration levels used are
ppb - parts per billion
ppt - parts per trillion

It is pleasure for me to introduce myself as a part of Printex Company , which is the most trusted and reliable Unit providing Printing facilities and also providing customer with the best printing chemicals with great technical advises.
Here I have learnt how give value to the clients and how to fulfill their needs and demands on time. We value our customer the most and serve them with our best.

Raza Mahmood'

AZO Dyes



Azo Dyes are used as colorants in the Textile industry because they have outstanding color-fastness and wide range huge spectrum.
However, these dyes may split off aromatic amines and some of them are proven carcinogenic.
Azo dyes are usually used as vivid coloring agents, especially Red, Orange and Yellows. Due to the potential release of aromatic amines, such dyes and pigments are mutagenic, carcinogenic and sometimes allergic.
Azo dyes are also not biodegradable and are difficult to remove from our ecosystem.

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Targeting 2013

If you set sweeping goals for the new year, you may well have trouble focusing on how to reach them. But placing smaller goals beneath the larger ones can put you on the right track.

We live in a very goal-oriented culture. And we are accustomed to setting goals for the new year in the belief that they help us move forward in big and small ways."Goals can be extremely effective, depending on how people set and approach them."

"When you set smaller, specific goals, your brain can activate behaviors it knows will help you achieve them." If, for example, you have a vague goal of moving into management this year, your brain will probably have trouble pinpointing the behaviors you need to get there.

But if you instead set a smaller goal beneath the larger one, such as networking with two additional people each week, you now have a specific behavior associated with achieving that bigger goal. Another reason we fail to achieve goals is a lack of emotional investment in them.

An example of a better goal is to be your department's top sales performer. "You would stand out not only to your peers but to your leader, which will be satisfying for you.

Fear and anxiety, however, can undermine your efforts.

Set an overall goal and then smaller milestone goals at short intervals, "With goal-setting, what's missing is usually the action steps," People think about what they want, but they don't think through what will actually need to happen to get there. "Maybe you don't have all the leadership and public speaking skills you will need, so your first goal becomes enhancing those. That may involve taking a management course or working with a particular coach. Establish what needs to happen in three months, six months and nine months." You should also consider the time, effort and money that may be involved: "Think through the sacrifices and compromises you will have to make."

MESH INFORMATION FOR THE SCREEN PRINTER

There are many types of mesh fabrics available and they can be made from many types of substrates.
There are multifilament and monofilament threads, stainless steel, nylon, polyester, and silk. (where the name silk screen came from)
This article is limited to monofilament polyester, the best choice for screen printing garments.

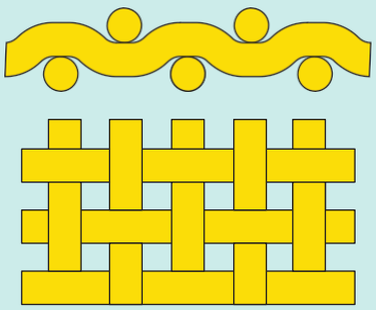

Fig. 1

You have for example many choices in thread weave available. The plain weaves (Fig. 1) and the twill weaves. (Fig.2)

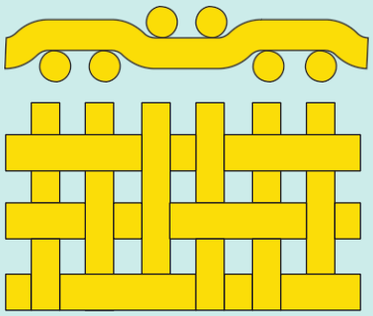

Fig. 2

Twill weaves can provide higher ink volume when used in higher meshes but the ability to hold sharp edges with a coated emulsion is diminished. (Fig.
3) Almost all applications will be best served with a plain weave.

twill weave print plain weave print (Fig. 3)

There are two directions to the threads or yarns in mesh due to the mode of manufacture. The length (or feed from the machine) is called WARP. The thread direction that spans the width of the roll is called WEFT.
Mesh fabric is flexable and will return to the unflexed position. This fabric property is called elastic memory.
Mesh fabric has a flex limit refered to as the yield point. Mesh tensioned beyond this stable point will no longer be able to hold tension or return to the unflexed posittion (loss of elastic menory). Mesh threads have a breaking point called the tensile strength.

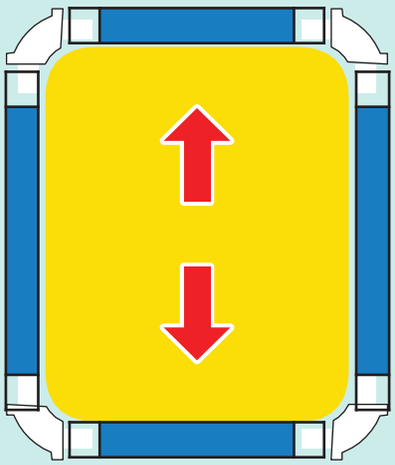

Fig. 4

Screens are best stretched with the warp and weft directly horizontal and vertical, with the warp running the direction of the squeegee stroke. The warp threads will be able to hold 5 to 15% more tension (Fig. 4)

Fig. 5

Mesh fabric is available in a calendered form. Calendered mesh is a product with one or both sides flattened at their highest point in the weave to reduce fabric thickness and create a level profile. (Fig. 5) Calendered mesh has reduced open area in the diameter thread available and is unneeded for typical textile printing.
Monofilament polyester mesh is available in white and dyed. White mesh will refract light past the stencil edge while exposing, and will transmit the light along the white threads in the same way fiber optic threads will, the light transmission causes undercutting of the stencil.

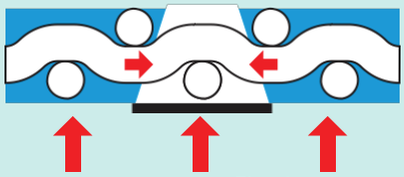

Fig. 6

Dyed mesh will reduce the refraction and light travel because dyed mesh reduces the travel of ultraviolet light. Exposure times for dyed mesh will be 50 to 100% longer. Dyed mesh is the best choice for detail and stencil sharpness.

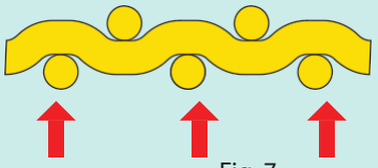

Fig. 7

Monofilament polyester mesh is available in several thread diameters and mesh opening choices for each mesh thread count.

Standard monofilament polyester is joined by the low-elongation (LE) mesh fabrics. Low elongation mesh provides higher tension levels and has the ability to maintain stable tension for longer print use.

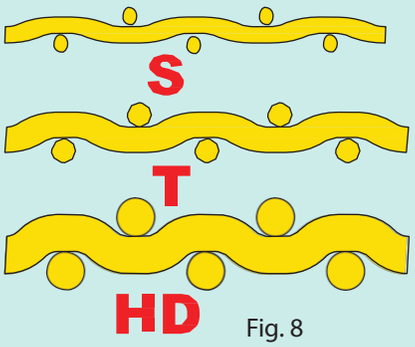

Fig. 8

The older standard method of ordering mesh uses letter designations for the three available thread diameters, S for small, T for medium, and HD for Large. (Fig. 8)

S for small.

S diameter meshes have a lower maximum tension, loose tension rapidly and are easily damaged. The sacrifice in strength will gain a higher resolution and detail. S meshes create more ink flow due to the larger open areas in the mesh. S meshes will produce a thinner stencil, printing a thinner ink deposit and giving a softer hand.

T for medium.

T mesh is the most commonly used textile printing diameter range and is the best choice for most situations.

HD for large or heavy duty.

HD mesh has the highest tensile strength and will hold tension the longest. The large diameter mesh will create a thick ink deposit. Large threads reduce ink flow due to the small open areas. Printing with HD mesh can be difficult.

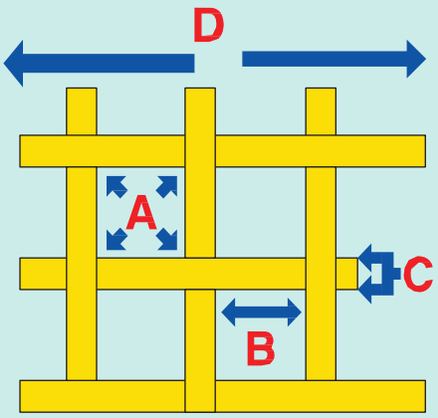

Fig. 9

Mesh opening is dependent on the fabric thread diameter (Fig. 9-C) and the relation to the mesh count (threads per inch/centemeter Fig. 9-D). The thicker the thread the less open area (open area measured in percentage Fig. 9-A) for ink travel. Fig. 9

When ordering a screen or mesh fabric for your retensionables it would be best to specify not just S, T, or HD but the exact diameter you desire. An example: not just 156 T yellow mesh but rather find the mid range plain weave (64 micron) and ask for the 156 yellow mesh in the 64 micron thread diameter in plain weave.

An advertised sale of 260 white mesh screens could be 2 over 1 twill mesh weave with the thickest thread diameter available in that mesh. One fabric brand, used as an example, has available 8 variations in 230 mesh. In this fabric, there are choices in dyed and white, two different weaves, and three different thread diameters. This mesh count had an open area ranging from 13 to 38%. Consistency problems with halftones on 230 mesh would be dramatic with a mix of mesh fabric.

The majority of the stencil gasket formed by mesh and coated emulsion is the thickness of the mesh itself.

Theoretical ink volume (TIV) is the representation of your printable ink volume. TIV is dependent on the mesh count, thickness, open area, and thread diameter. (Fig. 10)

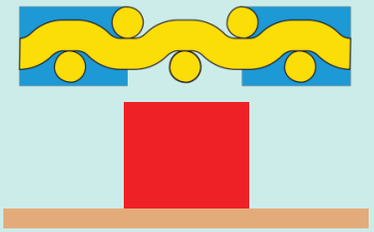
Fig. 10

Mesh properties are quite important to printing ink volume and print quality.

Stay consistent and you will be able to predict your results with greater accuracy. Your goal should be consistency, predictability, and repeatability.

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NEWS FROM PRINTEX

Launching of Cresa Ready to use Discharge Clear Paste, Formaldehyde Free Discharge white Paste & Low Price Soft, Elastic white "Cresablanc LT"

"PRINTWELL"

will serve the Customers with High Quality Printing with Latest state of the Art Techniques .We will start the setup in 2nd week of March with new team.

First time in Pakistan, introducing the PLASTISOL DISCHARGE INKS.

Launching of special effect inks like Photo chromic, Thermo chromic, Hydro chromic & Fragrant.

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