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Printex Monthly News Bulletin

May 2013
Issue 4

TIPS OF THE MONTH

Often the difference between a successful man and a failure is not one's better abilities or ideas but the courage that one has to bet on his ideas, to take a calculated risk–and act.

Maxwell Maltz

The greatest obstacle to discovery is not ignorance - it is the illusion of knowledge.

Daniel J Boorstin

Teams and Teamwork

Teams and teamwork (teaming) are the life blood of most of the things we humans do in life because not many humans may have all the ideas, knowledge and creativity needed for a particular solution of a problem. Every team objective can be posed as a question (problem) needing an answer (solution). Using set theory, teams can be can be explained as subsets of a set of individuals with a common bond: humanity, societies, cultures, citizens, intellectuals, professionals. The parameters of the common bond need to be established at the formation of the team: values, responsibilities, behaviors, rewards and process (or no process).

The team needs to have a strong and relevant bond between its leader and members. The team leader should show extreme passion, select team members with extreme passion, listen objectively to each team member, allow team members to freely present ideas using any method, willing to learn continuously, have the ability to pick the best solution(s) when a choice has to be made, do the right thing by the team members, not be afraid to fail (astute teams do not fail because they learn from their mistakes), accept responsibility for failures as a team leader and accept credit for success as a team, and a few other qualities.

Hints & Tips

Dye Bleed

What are dyes?

Most textiles are coloured with dyes which fix chemically to the textile fabrics, colouring the garment without a noticeable change in the feel of the fabric itself. The chemistry of these dyes varies with the fabric type, different dyes required for different fabrics.

Dye bleed with plastisol printing is an effect seen principally with dyes used for polyester fabrics and poly-cotton blends.

Many peoplewill have experienced cotton garments 'bleeding' in the wash, and have pink garments to show it. However, this is caused by action of water washing out unfixed dye, and is no indication of potential bleed on printing with plastisol inks.

How do I recognise Bleed?

In its most active form dye bleed is quite easy to spot, turning your plastisol whites into versions of the underlying colour, but the effect is not always so dramatic.

A subtle discolouration caused by dye bleed on curing is often mistaken for lack of opacity on the part of the printing ink. It can however be easily distinguished by comparing the print immediately after printing, with the print as it leaves the dryer. If the cured print shows a change in colour, what you are seeing is likely to be dye bleed.

Discolouration caused by dye migration is more difficult to recognise, as it often occurs some time after the garments were printed, and thus no unaffected print is available for comparison.

So what is Bleed?

Dye bleed when plastisol printing can occur by one or both of the following mechanisms:

Dye Sublimation

Heating the garment to the temperatures required to cure a plastisol can cause the dyes in the garment to turn to gas and travel into the plastisol ink. This effect is known as dye sublimation. Sublimation becomes progressively worse as the temperature used increases, and is usually immediately evident as the garment exits the dryer.

Dye Migration

Some fabrics contain a proportion of dye which is not sufficiently fixed to the fibres.

This residual dye is usually removed during fabric manufacture, but if not, it can leach into the plastisol ink without the need of heat. This leaching is known as dye migration. The potential for dye migration is often not evident following printing and curing, and can occur subsequently in anything from a few hours to a number of weeks.

What can I do about it?

Once printed garments have shown bleed there is nothing you can do to reverse the effect. The only way to combat bleed is to eliminate the cause prior to printing.

The first step towards this is to be aware of the possibility of bleed when printing fabrics containing polyester, and to thoroughly check garments prior to production. For sublimation bleed this simply entails comparing a wet print with a fully cured print for any change in shade.

As mentioned earlier, migratory bleed can sometimes take weeks to show itself, thus testing means monitoring the print over time for any effect. Though migratory bleed can take up to 6 months to occur, it is rare, and 6-8 weeks is usually long enough to be safe. Obviously this extended time period does not fit in with real-time production conditions, but is important to bear in mind that any reduction in testing time is a potential gamble.

So how do I reduce bleed?

Some garments are simply unprintable with plastisol inks due to their bleed characteristics. In these cases the only option is to accept a level of bleed, or to change the garment to a 100% cotton type.

When the option to change the garment is not available, in many cases the level of bleed can be satisfactorily reduced by one of the following:

Reduced-Temperature Curing

As mentioned earlier, dye sublimation is caused by heating.

It can thus be minimised by keeping the dryer temperature set the minimum for full cure of the plastisol, which should be quoted in the relevant Product Information Sheet. care should be taken not to undercure inks in an effort to achieve satisfactory reduction in bleed.

Ink Choice

The use of a lower temperature curing system will facilitate temperature reduction thus helping to reduce sublimation bleed. However in some cases this is still not enough and a dedicated 'low-bleed' plastisol may be required.

What is a Low-Bleed Plastisol?

Low-Bleed inks are special plastisol products, usually Whites, which look superficially like a standard plastisol, but contain agents which prevent the polyester dyes from penetrating into the plastisol ink. They can be used on their own, or as a basecoat to prevent dye bleed over the whole printed area, and are printed in the same manner as a standard opaque white plastisol.

Though this type of product is often very effective, they are not always 100% effective, and their use should not be considered a sure solution to a bleed problem.

So what is my best policy?

Above all be aware of the possibility of bleed when printing polyester-containing garments with plastisol inks. Simply being aware of the situation, and testing garments under the proposed conditions may prevent you from suffering the heavy cost of unforeseen dye bleed.

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Lead

Lead (CAS# 7439-92-1): 100%

Identification number(s): EINECS Number: 231-100-4

Lead is a naturally occurring bluish-gray ductile metal found in small amounts in the earth's crust. Lead can be found in all parts of our environment. Much of it comes from human activities including burning fossil fuels, mining, and manufacturing.

SOURCES OF LEAD

MINING OR SMELTING: Produce lead fume by primary or secondary smelting--includes brass, copper, and lead foundries and scrap metal recycling operations

- **MANUFACTURING:** Lead-acid battery; crystal glass; lead joints/babbitt; pewter; fishing weights; leaded or stained glass; paint and ink; leaded plastics; ammunition; electronic components (ceramic coated capacitors and resistors); electrical components using fritted glass; lead pipe, sheet, solder, type metal, cable shielding, or anodes; ceramics (mix glaze & fire kiln); mix and weigh lead powders
- **USING:** Weld, cut, braze, grind, sand or blast old paint: houses and buildings (painted before 1978); bridges; ships; steel towers; water, petroleum or underground tanks; Produce lead fume or dust by heating, machining, or spraying lead products; radiator repair; firing ranges
- **RESTRICTED:** Organic lead was added to gasoline in the US until January 1996. Lead allowable in US paint was reduced to 1% in 1971 and to 0.006% in 1977

What happens to Lead when it enters the environment?

- Lead itself does not break down, but lead compounds are changed by sunlight, air, and water.
- When lead is released to the air, it may travel long distances before settling to the ground.
- Once lead falls onto soil, it usually sticks to soil particles.
- Movement of lead from soil into groundwater will depend on the type of lead compound and the characteristics of the soil.

- **Some Common Activities with risk of exposure to Lead**
- Cooking or drinking wine in a lead-glazed ceramic container
- Drinking water from a private well
- Enameling
- Home remodeling
- Ingesting an herbal remedy
- Living in a house with old plumbing or old paint
- Living near a smelter
- Painting
- Smoking cigarettes

Where is lead found in textiles and footwear?

In textiles, apparel and footwear, lead may be associated with:

- Plastics,
- Paints,
- Inks (like screen printing inks),
- Pigments, Binders
- Metal components (like buttons, snaps, zippers)
- Leather

Health Effects of Lead

- **People can get lead in their body if they:**
  - Put their hands or other objects covered with lead dust in their mouths.
  - Eat paint chips or soil that contains lead.
  - Breathe in lead dust (especially during renovations that disturb painted surfaces).
- **Lead is even more dangerous to children than adults because:**
  - Babies and young children often put their hands and other objects in their mouths.
  - These objects can have lead dust on them.
  - Children's growing bodies absorb more lead.
  - Children's brains and nervous systems are more sensitive to the damaging effects of lead.
- **If not detected early, children with high levels of lead in their bodies can suffer from:**
  - Damage to the brain and nervous system
  - Behavior and learning problems (such as hyperactivity)
  - Slowed growth
  - Hearing problems
  - Headaches
- **Lead is also harmful to adults. Adults can suffer from:**
  - Difficulties during pregnancy
  - Other reproductive problems (in both men and women)
  - High blood pressure
  - Digestive problems
  - Nerve disorders
  - Memory and concentration problems
  - Muscle and joint pain

CPSC-CH-E1003-09: Standard Operating Procedure for Determining Lead in Paint and Other Similar Surface Coatings

- This composite testing procedure does not specify the number of paints to be mixed
- Intertek suggests a maximum of 3 colors mixing. Due to the dilution factor concern, we do not suggest mixing more than 3 colors.
- The test method states that "in considering results from such a composite sample, it is imperative that a sufficient "safety factor" be applied to account for weighing inaccuracy and propagation of errors from each step in the analytical procedure to ensure no volatile paints are misrepresented as non-volatile.
- It has been suggested, for example for a composite of 3 samples, that any sample possibly having greater than 80% of the limit for lead in paint in any of the composite paints should be retested.
- CPSC staff considers this a reasonable practice -adopting this 80% safety factor on the 90 ppm lead in paint requirement = 72 ppm.
- The method also states the testing of wet paint is about the product itself is a wet paint.
- Using wet paint (raw material) for compliance testing is not acceptable for a product with dried paint coating.
- For a 3 paint mix testing, we need to achieve 72 ppm/3 = <24ppm level in order to ensure individual paint would be less than 80% of 90 ppm lead in paint limit for individual paint.
- If the composite test result is greater than or equal 24ppm, than individual paint coating may fail the lead in paint limit, and further confirmation test is required to check if the individual paint would fulfill the lead in paint limit or not.

How can you ensure a lead compliant product?

- Make sure all subcontractors, accessory suppliers, mills, tanneries, chemical suppliers etc. are aware of the brand's specific lead restrictions
- Work to understand the chemistry and where lead may be found in the apparel and footwear supply chain
  Insist that the chemical supplier provides material safety data sheets (MSDS) for dyes and textile auxiliaries supplied

FIVE COMMON MISTAKES

Managers Can Make Which Kill Morale, MOTIVATION AND ENGAGEMENT

Posted by shonagarner on Thursday, August 12, 2010
• Leave a Comment

What is morale like in your organisation?
What is morale like in your team?
And if an organisation is facing a lot of tough challenges, restructuring, or jobs are under pressure, is it possible to maintain strong morale despite the situation?
Whilst the tone for the type of place you work in has to be set at the very top, it's the job of the managers to implement day in, day out. They're the "front line"; their behaviours and expectations will set the standards for how people feel and respond to all sorts of situations.

Can a manager improve morale regardless of circumstances?

Yes. I believe they can.

Being a manager is always a challenge. Managing the people bit is always tricky, but maintaining morale, engagement and motivation is a critical part of any manager's role.

Even in good times a manager needs to maintain engagement and minimise complacency. When business is slow, or there's lots of internal change and pressure, a manager needs to know how to respond and work with their team in such a way as to keep people on board.

Whatever the strategy for the team or organisation ….

A manager has to win hearts and minds if he or she wants to see their team perform at their best.

But building such high performing teams doesn't happen accidentally.

It is the result of behaviours, values and beliefs which underpin the way people work together. Sometimes these values or beliefs are unspoken, sometimes they operate at an almost sub-conscious level: but they are still affecting the attitudes, behaviours and performance of every single individual within the team and wider organisation.
It's up to the manager to communicate "How we do things around here".

Sometimes, however, despite the best of intentions, despite setting and clearly communicating the expectations and vision for how people work together, some things sabotage the results. Take a look at the following and see if any of these apply to you or your organisation.

FIVE COMMON "KILLERS" OF MORALE

1. INCONGRUENT ACTIONS

When the boss does or says one thing – then turns around and does or reinforces the opposite, employees are quick to see the inconsistencies. The more your staff see this happen, the more they lose respect for and trust in the individual manager or the wider organisation.

High trust environments are built on consistent and congruent actions.

Erosion of trust dampens morale and creates negative emotions inconsistent with high productivity.

2. NO ACTION

Another common failing is leaders who "talk a good talk" – that is they state grand visions, plaster values and belief statements everywhere – but then take little or no action to ensure these grand statements are actually followed through.

It is hard to expect your staff to take vision statements seriously when staff see that nothing actually happens. They can be forgiven for thinking "we've heard this all before", or "here goes yet another meaningless initiative."

Managers must act on their vision – and they must act in a reasonable time frame.

3. OVER COMPLICATING THE VISION

Sometimes leaders state visions so complicated people can barely read them – let alone remember them.

If people can't remember the vision, chances are it isn't simple enough.

4. LOST IN DETAIL

Some managers are so detail oriented that they simply find it hard to understand the idea of vision. They are consumed by detail, and give little attention to thinking about tomorrow and the "big picture" in a creative way.

It's not that details aren't important, but they should not be the sole focus.

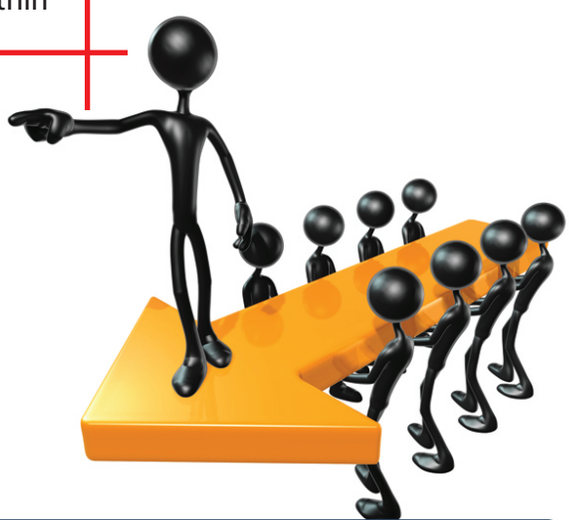
5. SABOTAGING THE VISION

Sometimes, some people within the organisation try to sabotage the vision. They understand it, but try to work in the opposite direction. Other people know they are doing this; and they expect the leadership does too. If nothing is done to stop these efforts then those who are genuinely trying to adhere to the vision end up thinking, "What's the use?"

Managers must act swiftly when they see this happening. And it begins, not with a reprimand, but with a question – to understand why people are behaving in this way.

Do any of these exist in your team or your organisation?

By taking time to uncover some of these "morale killers", and taking steps to change things, a manager can improve morale – at least within his or her own team, and sometimes, even despite morale issues in the wider organisation.



We at Printex sincerely appreciate your business and the support you have given us over the years. We look forward to servicing all of your textile screen printing needs and assuring that all of our products are up-to-date. Together we can work towards a profitable business relationship for many years to come.

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