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## **Print Production Shifting to the Middle Kingdom**

**By Denise Breard, Member Academy of Screen Printing Technology**

*As technical services manager with a multi-national manufacturing corporation in China, I recently enjoyed the opportunity to visit factories that screen-printed everything from T-shirts to automotive instrument panels. Seeing the “other side” of the US job loss has given me a new perspective.*

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T-Shirts are funny things. They can be used as conversation starters, souvenirs, political billboards, symbols of group identification, familiar examples for discussions of trade imbalances, and yes, they can even be used as underwear, or more likely, as outerwear. One t-shirt manufacturer reports that only one fifth of their production is now underwear. This is an amazing reversal, considering that ten years ago, 80% of their production was underwear.

Small shops did well in 2003 and had the best sales increases, reports Deborah Sexton, the former editor of Impressions magazine. But we find a completely different picture for many of our high volume brand producers, and it is becoming easier to understand why our larger USA print shops are losing their contract printing business to lower-cost producers abroad. As companies move away from vertical manufacturing to brand marketing, it makes better financial sense to shift production to areas where the cost of manufacturing is lower. There are also trade agreements that encourage this very shift. NAFTA and CBI (Caribbean Basin Initiative) are well-known, but we also have agreements with several Asian countries including Egypt, Pakistan, Vietnam, and of course China. There are both positive and negative aspects to these agreements, on both sides of the Pacific.

The move toward lower cost production reduces the prices we pay here in North America. A classic example can be seen at Wal-Mart, who ended their “Buy American!” advertising campaign more than five year ago. Now, they are the world’s largest importer of products made in China, and US consumers have voted with their feet and wallets. They buy where they can find the products they need, cheaply and conveniently.

Some similar reasons are included when US firms move their print production abroad. For some, the move is about reducing the cost of production. For others, the company made the decision to focus on brand management (including design, sales, and marketing), so having other firms handle the manufacturing is part of the corporate strategy. This approach is sometimes described as, “It’s all about the brand.”

Many of the leading edge print designs are engineered in the USA, sample printed in the USA, and sent to China (or Mexico, or Honduras, etc.) for scaling up and production. The most likely scenario for success appears to be a design and short run production facility in the US, with a large volume production facility in one of the other countries. Many large US printers have

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suggested that the best option is to become a one-stop program shop, where custom orders and low-volume jobs can be printed in-house in the USA, while the large printing orders can begin the print program in the USA until the large volume overseas print partners can start shipping their production to the USA.

Many garment decoration factories in China employ hundreds or even thousands of people. Sometimes the equipment is top-notch, modern, and imported from manufacturers in the USA. But a lot of work is still printed on long hand-tables similar to those we see in the US for custom wall coverings, short-run piece goods, or samples.

Some of the factories I visited in China employed hundreds of people, but as is typical with manually-oriented processes, they were less productive than better equipped shops there in China and here in the USA. For example, a 200-person factory in China may produce the same number of printed garments as a 15-person shop with a few automatics in North America. In fact, there is an optimized shop on the west coast that can produce a thousand prints per hour with just a few staff members.

Part of the problem with upgrading equipment in China may seem strange to westerners. We can buy and sell equipment at will, and upgrade our facilities whenever our spaces and finances permit. On the other hand, Chinese printers must hang onto a piece of equipment pretty much forever once it is registered as a business asset. That four-color, 1-head-down manual carousel cannot simply be sold to another start-up once it has been replaced; it had better still be there, in cobwebs or not, the next time the tax assessor looks at the business. Before private enterprises were allowed in China, factories and equipment were owned by the government, which needed to ensure that equipment was not being sold off down the road without government approval.

Many Chinese workers come from distant provinces to work in the industrial areas of Guangzhou, Shanghai, and even Beijing. There are 1.6 billion people living in China, and of the working population, many migrate from their provinces to cut, print, and sew in the major centers for screen-printing such as Dongguan and Ningbo. Some of the provinces have little development, and are dominated by subsistence farmers. While a prevailing wage in China may be around \$80 to \$100 monthly (including housing and some meals), bear in mind that in the provinces, per capita earnings are closer to \$70 per year. For jobs with this relatively high pay, it is common for workers to travel two to three days or longer from home to the industrial areas. Westerners may marvel at the two-week factory closures over the Chinese New Year, but for many workers it is necessary in order for them to spend time with their families, as so many days are spent traveling.

In some factories, workers do not enjoy occupational health and safety measures such as ventilation, machine access safety guards, or personal protective equipment. I've been in several factories where printers are barefoot or wearing flip-flops. The move toward safer solvent blends has not been made in most printing plants; it is not unusual to see a worker mopping the floor

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with a bucket of solvent in an effort to clean ink and adhesive off the floor. Our worker protections in the west do have a measurable cost.

Many Chinese printers have not yet switched to plastisol for domestic use, but instead use it only for their exported products. Prints for domestic consumption are commonly printed with what is locally known as “rubber ink” – a water-based latex product available for a couple of dollars per kilogram. Many of the printers who are familiar with plastisols have Lindsay Rotherham of Wilflex AsPac to thank; his tireless work in the Asia Pacific region for the last couple of decades has brought wider acceptance of plastisols.

Discharge inks are also popular for export products, and many of the discharge products are from the same manufacturers we would use here in the West. Flock and distressed flock are popular with the outdoor outfitter brands, and these products are carefully printed and inspected to ensure the proper “worn” look. Printing or brushing with diazo stain remover gels are useful techniques for producing the popular “worn” or distressed look in denim jeans and some other garments.

Flocking, work-wear transfers, discharge, and other types of decoration are also contracted to China because they can be done more cost-effectively. Jobs with multiple flash cures are a perfect example. It is normally suggested that special effect inks (fluorescent, puff, metallic, crystallina, glow in the dark, etc.) be printed last. For those designers who ask for all the special effects on one design, low labor costs are one factor that contributes to cost-effectiveness.

We shall be seeing a lot more of our printed garments being imported from the Caribbean basin and Asia, especially China, so we need to learn to understand the needs of our large volume customers, Chinese manufacturing, and the effects of international trade on our own businesses. For North American garment decorators who are considering a print program partnership with a Chinese textile manufacturing or decorating facility, you are strongly encouraged to visit your potential partners to gain an understanding of their business, their production capabilities, and of course their quality programs. We all need to understand that international trade takes place at the intersection where our laws meet those of our international trade partners, and the better we understand each others’ needs and concerns, the better our print program partnerships will be. With China being fully embraced by the WTO in 2004, many import duties and trade quotas will be lifted; some US textile lobbyists warn that China could rapidly take as much as 75% of the US apparel market. They are prepared for it, and we also need to be.

I’ve been in remote Chinese provincial towns where I was the first westerner seen by some of the local residents. I found them curious and helpful. Sometimes small children just stare in surprise to see a large white woman in their midst, but sometimes they run up, tug on one’s trouser leg, and run a few steps away while laughing with their friends in uproarious excitement.

As we end this column, let’s look at an incident involving t-shirts. Fashion faux pas and sartorial indiscretions can be taken very seriously in business situations in China, even in regard to T-shirts. This incident was reported in our local South China Morning Post newspaper. A western

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expatriate businessman walked into a Chinese restaurant in Nanjing while wearing a T-shirt printed in Chinese. Unfortunately, the message listed ten things that the expatriate believed Chinese people should or should not say to foreigners. The advice consisted of several directives, such as

- Do not shout “hello” or “OK” to every foreigner you see;
- Don’t stare at foreigners;
- Don’t tout cheap hotels to foreigners;
- Charge foreigners the same price as locals; and other insulting instructions.

When other businessmen in the restaurant asked him to remove or cover his t-shirt, the expatriate called for the police and said he felt threatened by people’s reactions to the shirt. Sensibly, the police made him remove the offending garment, and required him to issue a public apology for offending the Chinese people. Let’s all show a little R-E-S-P-E-C-T when we travel abroad.

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## ASPT Member Biography

### Denise Breard

Inducted into the Academy in 2003 <http://www.sgia.org/aspt/>



Denise Breard is a technical writer, consultant, and technical services provider. Denise Breard currently works with the Technical Department of the SGIA offices near Washington, DC. She has previously worked with Autotype, Sericol USA, Sericol Australia, and most recently with Sericol Hong Kong, before returning to the USA to join the SGIA. Denise was elected to the prestigious Academy of Screen Printing Technology in 2003. Denise is a foster mom, and an amateur naturalist, chef and scuba diver with a particular interest in marine environments. She lives near Philadelphia with her family and three red cats. Denise can be reached by e-mail at [denise@sgia.org](mailto:denise@sgia.org) or [dbreard@aol.com](mailto:dbreard@aol.com).

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