

DESTINATION — INDIA PART 2 “The tour & more”

Discovering the struggle for international quality recognition

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In Part 1, I outlined the initial reason for my being in India, to conduct a series of technical seminars at the Screen Print India 2004 Exhibition in Mumbai. Immediately following the expo, I ventured out on a ‘tour’ and visited five completely different but very interesting screen printing companies. In this second and last part of the article, I share a candid view but entertaining account of the experiences gained during the tour.

THE TOUR

Before dawn the morning following the exhibition and seminars, I hit the road for the more comfortable less humid inland city of Puné, a gigantic manufacturing hub about 125 miles (200 Km) east of Mumbai. Once the Maratha Empire capital, the British captured the city in 1818 during the battle of Koregaon then developed it along the lines of a large archetypal army town. Noted as the epicentre of India’s independence movement, Mahatma Gandhi, his wife Kasturba and other leaders of the Congress Party were interned there during their early struggles. Once independence was achieved, industrialisation rapidly changed the city’s character considerably.



Photo 1. Pune Metagraph factory in Puné, India.

Today with over 3 million people, modern Puné is hometown to the biggest industrial titan of them all, Tata, India’s dominant truck and bus manufacturer. It also accommodates one of the most sophisticated screen printing communities in the country, in terms of upscale commercial/industrial printing companies and suppliers. Some of the industry’s leading importers, manufacturers and

suppliers have made the city either their base or boast a large presence; Sericol being one of several. The city is also the home of my next host, Pune Metagraph (photo 1), a company that evolved around other related businesses formed after independence in 1947 and long before venturing into screen printing some 29 years later.

As the company name tends to imply, they started out printing, stamping and diecutting various types of metal nameplates for domestic OEMs. Over the years, their core business took on additional product lines, such as self-adhesive OEM labels, logos, auto decals (huge business in India worth literally millions), signage, in-mould decorating (IMD) and doming to name but a few. Today with a 24,000 sq. ft. (2,230 M²) facility (an additional 30% extension currently underway) and staffed efficiently with a total of 110 personnel—they enthusiastically bill themselves as a “one stop shop for all labelling solutions.”

While I cannot question the degree of quality this company fabricates everyday, which is extremely high in my estimation, let me go back for a moment to an earlier observation regarding the quality-mindset of the community in general. Not only did this company gain the coveted ISO 9002 certification in 1999, they went further by achieving the highest certification level possible, the ISO/TS 16949:2002 — principally for greater process discipline and reliability in their respective marketplace. I tip my hat to Pune Metagraph for their ongoing desire and passion to go beyond status quo (photo 2).



Photo 2. Presenting the Award of Excellence in recognition for quality to Mr. Bhushan Musale, CEO of Pune Metagraph.

PREMIUM GRAPHICS

After three days experiencing what it feels like to work in a highly certified auto decal/OEM labelling environment, I retraced my steps back to Mumbai, this time for a two-day visit with a leading commercial graphic art screen printer, Spectrum Scan. They specialise in 4-color process of high impact screen printed premium POP/POS display items. With a combined total staff of 110 people, Spectrum Scan has two separate working businesses; 45 highly-skilled personnel in prepress (thus the 'Scan' in their name) and another 65 skilled/semi-skilled in screen printing and display fabricating that currently has a monthly round-the-clock capacity of some 500,000 sq. ft. (46,500 M²).

Taking prepress first, this part of the operation is housed in an old area of the city full of textile mills built by the British during the early 1900s, with their corporate office located in another part of the same building. Other than seeing mouth-watering sweets being made in one area, the building seems to be exclusively for companies in the printing industry. While walking around, I saw several old Heidelberg, Komoris, MAN Rolands, Mark Andys and the likes, as well as an assortment of envelope making, cutting, folding bookbinding and-you-name-it type operations going on with the corridors full of printed matter presumably ready for shipping.

Due to the nature of required cleanliness with prepress, Spectrum Scan had obviously gutted out everything and re-built both locations from scratch. The transformation in entering a rustic old worn down busy building and then suddenly plunged into the bright lights of Spectrum Scan hits you immediately. Climatically controlled, of course, with an armada of top-of-the-line large monitor desktop Macs handling every imaginable graphic design software under the sun, is backed up with a fleet of the latest technology in scanners of all types and sizes, imagesetters and small-to-large format digital printers—all merrily churning away non-stop in a 24/7 professional-looking environment. The compact 6,000 sq. ft. (560 M²) prepress operation is truly impressive to say the least and one would never know this from the outside of the building. I am sure there are many western prepress companies who would willingly give their right arm to possess a similar sophisticated level of operation.

Amit Shah, the very capable man behind Spectrum Scan, started the business in 1987. Just six years ago in 1998, he opened a separate 18,000 sq. ft. (1,670 M²) screen printing operation in a nearby location to focus on premium POP/POS displays. In those few short years, with two 30 x 40 (76 x 100 cm) and a jumbo size 48 x 96 (122 x 244 cm) sophisticated semiautomatic screen printing lines, he has

rapidly established his firm to be one of the leading names in upscale screen printing in the country.

It appeared Spectrum Scan is never satisfied by what they ship to the customer, because Amit and his creative team continuously search for ways to improve beyond the norm in all their endeavours. So proud of their achievements and abilities to date, incorporated boldly into their company logo is the catchphrase “*Ignite Your Imagination.*” Today, they have amassed several SGIA Golden Image Awards, for 4-color process and digital, as well as adding other international honours to their portfolio.

My visit was topped off by conducting an in-house technical seminar (photo 3) in readiness for the company to tackle the next phase of its business life; soon to move into a brand new 35,000 sq. ft. (3,250 M²) custom-built factory outside of Mumbai. The ensuing aim is to meet the growth experienced with high-end screen printed products with the possibility of expanding at a later date. When completed, it is hoped the new operation will be one of the industry’s most impressive, thereby serving as an inspiration to others in advancing the process in India.



Photo 3. Demonstrating the finer qualities of printing halftones at Spectrum Scan of Mumbai with owner, Amit Shah in the orange shirt, looking in with his print crew.

QUALITY T-SHIRTS GALORE & MORE

Not far from Spectrum Scan is another highly renowned leading quality printing company, Tarun, which specializes in T-shirts and heat transfers for garments. They also have two separate operations but under different names, Tarun Print Tech for direct printing and Tarun Transfer Works for indirect processing. Interestingly, the moment I walked into the textile operation, I could recognize quality was in the making because I was suddenly surrounded by thousands of American supplied roller frames.

Upon closer scrutiny, I found the company, headed by brothers Bharat and Tarun Shethia, spent a great deal of time developing new ideas to provide different looks and finishes

for their clients. For an hour or more, they continuously displayed a large selection of print finishes and special techniques that were under development for further marketing consideration. It then occurred to me that Tarun, as a company, was not an imitator but truly an innovator of their industry.

While I cannot claim to be an expert on the subject, India does not have a printed T-shirt type industry to speak of as compared to the western world, particularly North America. However, thanks to a younger generation, modern youth, pop music, trendy movies and generally newer trends, the market is rapidly developing in this area.

One thing the brothers were ecstatic about was their ability to produce consistently fine halftone details that kept cleanly open, crisp and sharp from the first print to the last. Even more amazing was the trouble their development team experienced trying to discover techniques to produce even finer halftones and superior aesthetic designs for transfers, an industry that is fast expanding with children's apparel. Again, I find I am completely in awe due to comparing what they produce and constantly pushing the envelope of quality further while enduring the previously mentioned hardships. Once more, I am reminded how much quality is produced from so little!

EQUIPMENT MANUFACTURING

Before we move on to our next host in my tour, I observed that the majority of screen printing equipment were imported from three predominant areas—the US, Europe and Taiwan. However, flatbed printers, textile printers and dryers of all types, sizes and automation levels are domestically made, although limited to only a few manufacturers. I cannot attest to the quality or sophistication except to say they seem to be a good fit for the domestic marketplace especially when the economic factor is taken into account. As for the alleged “10% doing 90% of the work” in India, their needs understandably would require the best of domestic brands in most cases—otherwise imports become the rule by default. That said, a sliding table/4-post printer is domestically made, so too are in-line multicolour and cylinder presses—unfortunately the latter not presented at the show.

Sunday should have been my day of rest but no such luck. Allowed to get out of bed a little later as compensation, I was personally ushered by Bhargav Mistry to his intriguing purpose-built factory, Grafica Flextronica, an independent screen printing equipment manufacturer about a ninety minute drive north of Mumbai. Bhargav is the company's famed Managing Director and VP of India's SPAI (photo 4). The business originally started in 1952 as a screen printing display company by his father, Dhirubhai Mistry—an early

pioneer of the country's screen printing industry. From there, it slowly diversified into printing PC boards—thus the 'Flextronica' later added to its corporate name. Since there were no alternatives to expensive imports at that time, they set about designing and manufacturing their own range of screen printing equipment in 1989, the first 30 months spent entirely on R & D. Crazy—perhaps, but they did it anyway and subsequently succeeded to become a major powerhouse in the industry throughout India.



Photo 4. Outside of Grafica Flextronica's factory in Thane, near Mumbai, taking a few minutes in the lush restful garden with Managing Director Bhargav Mistry.

While I do not intend to get into commercialism about the company's product line, suffice to say they do manufacturer 2- and 4-post models, clamshells, large format multicolour in-line (one European company seriously contemplating one), a wide range of dryers as well as ancillary equipment such as exposure systems, automatic coaters, drying cabinets, stretching clamps and squeegee sharpeners to boot.

By all accounts, most of the designing, fabricating and assembly are carried out on-site, including software programming and training field service technicians. Even screen frames and metal squeegee holders are made in-house. Having worked for a few equipment manufacturers myself, I was very much appreciative of the visit and, in particular, I saw what is their new struggle—to be recognized in the international marketplace as a serious contender in the world of screen printing equipment, despite being a continuous member of SGIA for more than 35 years.

With over 15,000 sq. ft. (1,400 M²) of manufacturing space, assisted by 45 highly specialized manufacturing professionals and administrative staff, together with over 1,000 satisfied customers to their credit, the company's presence today is maintained in all corners of the country by a network of supportive dealers. Their business aim is to export into Europe and beyond. To support this goal, they

were to exhibit their multicolour for the first time at this year's SGIA show in Minneapolis. However, due to paperwork snafu, confirmation of timely equipment arrival could not be given. At the time of writing, the intentions are to make do with a display-cum-hospitality booth at the show.

Considering their focus has been serving the domestic market, there is one extraordinary service that Grafica Flextronica offers that is exceptional. Together with his extensive apprenticeship under France's legendary Michel Caza, Bhargav has opened one of the finest nongovernmental/association-type screen print training centre I have seen anywhere. Realizing some flak may be forthcoming for that statement—as I am not a spokesman for institutional training—the sheer depth and level of programs covered has to be commendable nonetheless and perhaps a challenge for industry educators to match. A full range of theoretical & multimedia presentation training programs have been specifically developed, while classes, typically lasting ten 12 hour-days, are held quarterly in a permanent purpose-built 800 sq. ft. (75 M²) air-conditioned training centre for 15 students. While additional topics concerning quality issues are constantly under review for future training purposes, present courses cover prepress, scanning, colour separation, colour management, complete screen making techniques, ink mixing, colour matching, press settings as well as printing 4 colour process, textile transfers, decals and rounded off with visits to various leading screen printing companies.

What is even more astonishing is that the training centre accepts final year school students institution-free (a honorary service worth at least US\$1,200) for those who cannot afford to pay, which includes transportation from any part of the country. Upon successful competition with a diploma, the centre does its best to find suitable employment for graduates with prominent printing companies. Is it unusual to offer such in-depth training programs like these from a capital equipment manufacturer? Sure it is and, perhaps, this is one company to watch out for in the future. Who said equipment manufacturers only look out for themselves!

FOCUSING ON DOING THEIR BEST

Prior to the cows mooing in the early hours of Monday morning I was on a flight to Bangalore—a major transport centre at the crossroad of south central India and the country's most forward-looking city. As the state seat of Karnataka, it is extremely pretty with a more tolerable climate and home on the city's south side to a very enterprising company called SJS Enterprises, one that I was privileged to spend four days with.

During the British Raj, Bangalore was a popular garrison town with pleasant climate, parks, gardens with

splendid government and public buildings. Since independence, it has become the country's IT capital due its immense computer software industry, academic influence, modern universities and major research centres for science and technology. Blessed with a choice of good accommodation, excellent eating-places, many pub-style bars catering for the younger generation and boasting a 5th Avenue-style shopping centre, it has, as a consequence, attracted a population of over 5 million. The savoury delights of South India are diverse and varied from the cuisine found in the north (and Mumbai). Languages and written scripts are also vastly different, with Hindi widely spoken mainly in the north, Tamil in the south—Kannada being the principal language in Bangalore. Lucky for me, English is widely spoken since it is the official government language of the region.

Arriving at the company's gates, I thought at first I was entering into the twilight zone. A short turn off from a main road was one magnificent looking factory to behold (photo 5). SJS Enterprises started business in 1987 by three entrepreneurs; S. Sivakumar - Director of Finance & Marketing, K. A. Joseph - Technical Director and V. Srinivasan - Director of Operations (thus the acronym in the company's name), doing what they know best—screen printing some of the world's best instrumentation overlays, OEM product labels, logos and decals for the automotive industry. Establishing a world-class 40,000 sq. ft. (3,715 M²) manufacturing facility with an impressive bank of sophisticated semiautomatic presses and industrial dryers operating in different levels of cleanroom environments, the state-of-the-art infrastructure is headed by a dedicated staff of 250 to handle various in-house operations, finishing processes and support services.



Photo 5. SJS Enterprises' prestigious purpose-built office and factory on the outskirts of Bangalore, India.

Not wanting to rest on their laurels with the sought-after ISO 9002 certification, SJS Enterprises earlier this year achieved the most coveted qualification of them all, the ISO/TS 16949:2002—chiefly for greater process discipline

and reliability—and audited by no less than TÜV Rheinland; reputed to be among the most rigorous and demanding in the certification business! Among other prominent attributes, the company officially bill themselves as offering unique solutions as a world-class manufacturer of self-adhesive labels with emphasis on process discipline and defect-free products by adopting an innovative ERP-based working environment. A mouthful perhaps, but it is abbreviated here just illustrate their constant obsession for quality is never far from anyone’s mind.

To further attest their desire to push the envelope to new heights in quality, six-sigma certification is on the cards as a number one priority. It is no wonder that they are experiencing a staggering growth of over 300% in the past five years, as a global leader in their field, exporting to some 16 countries with sales offices in other parts of the world including Chicago. I believe it is their shrewd business attitude and proven subsequent results reconfirm something I have known for a long time; people will emphatically pay for the very best quality if offered. As a company, SJS Enterprises does what it knows best—just simply focuses on understanding the ‘real’ underlying need of the end user. Since my hat was symbolically tipped at another company previously and can no longer praise SJS for their extraordinary efforts in the same manner, I will do the next best thing—cartwheels across the floor!

IN SUMMARY

Before coming to a close about this amazing tour of superb printing operations, I would like to reveal how these companies achieved the quality level attained. Without exception, they simply invested in excellence! Top-of-the-line equipment by itself doesn’t do it, or with great materials/consumables, or nice loyal people, or product/process training, or great processing techniques, or unique skills, or ideal working environment, or extraordinary suppliers, or special deals, or lowering prices, or fast turnarounds, or beating your competitors, or discovering wonderful opportunities, or clever marketing or an operation that runs by itself. Excellence does not just happen by accident. Everything has to be carefully designed and engineered to become part of the mechanism that provides the necessary root for excellence to form and develop. This is the only way it will grow and prosper and will never come about otherwise. It was once said that to make something look so simple, easy or simply second nature—a great deal of time and effort must be invested into it first.

Upon a review of this draft earlier, I realised one could be accused of being either too benevolent or overly patronizing, or both, with my praises regarding print quality seen during my tour. Having wrestled with this notion for a while, I decided the honours showered were indeed worthy.

I think anyone else in my shoes would be hard pressed not to have done the same. As mentioned, the marketplace in India is quite a bit different from others for a variety of reasons; a noticeable one is that screen printed products of any kind are just simply not seen on every street corner as in other parts of the world. Since this means fewer products are screen printed in volume, could it possibly be that the median print quality is therefore higher in India? It will be very interesting to see what others may opine of such a possibility.

For those who travel to India for vacation, particularly to Goa, take a tip. Steal a side trip to one or two screen printing companies in the area—or other parts of the country travelled, by letting them know of your intentions beforehand. Not only will they eagerly show you what they are made of, they will gladly arrange pick up/drop off and give you a taste their regional savoury delights—just for being there. That style of regal treatment you will never experience from any hotel!

THE BOTTOMLINE

The Indian screening community, associations like the SPAI, SGIA and other groups with vested interests, such as manufacturers and suppliers to the industry, must play a much larger role in promoting the process with its enormous and unique advantages. Although it is easy to say throw open your doors and hold product training sessions more frequently, conduct more process training sessions and other forms of knowledge-sharing programs—but why not? Let’s learn from the people like the Bhargav Mistrys of this world, who personally made and continuously make great sacrifices on behalf of his company, delivering dynamic training programs for any person willing to attend. Share just a little of your knowledge and be prepared to teach at workplaces, local schools, colleges and other suitable institutions that are crying out for such help. I was once told it is everyone’s duty to improve the industry in which they work and leave it better than they found it—and screen printing is no different.

In short, make the industry work for you by working for the industry’s overall betterment. It hasn’t hurt anyone in India or anywhere else that I know of. Remember what was said in the sidebar at the very beginning in Part 1, “...give more while expecting less...” Just by putting that little extra effort in to ensure a better all-round industry will always payback handsomely in pure satisfaction, contentment and some. Who knows, you may enjoy being a mentor to others.

In closing, I should take this opportunity to thank those that worked hard to make this trip a reality and enjoyable to carry out. They are Madhukumar Dishy, Bhargav Mistry, Sanjay Vora, Huned Rangwala, Ajit Lalvani, Amul Patel (my personal computer guru), Kalyan Varde and others who I am sure were working in the background—and of course, who

can forget the last but not least, Deveng Sheth, my esteemed sponsor.

While many new acquaintances were made with printers and suppliers alike throughout my stay, one of the most

pleasurable events was meeting up with old friends from a previous visit. In that respect, I trust it will not be three years until I meet up with my newly made friends this time.



About the writer:

British-born Mike Young has been a specialist in high-definition graphic and industrial screen printing for more than 30 years. He is a SGIA Fellow, a member of the Academy of Screen Printing Technology, recipient of the prestigious Swormstedt Award for technical writing. He is also a frequent contributing writer to trade publications, SGIA Golden Imaging Award print judge, legal expert witness and a popular speaker at industry events. Mike is the creator of the internationally known **Troubleshooting Chart** and published several technical books on advance screen printing techniques, including **The Register Guide** about achieving print excellence. Mike operates Imagetek Consulting International, a Connecticut USA-based consulting firm, which trains and troubleshoots screen printing operations worldwide. He can be reached at: www.imagetekconsulting.com or mike@imagetekconsulting.com