

Akshat Jain (left) and Sushil Jain

This year, *The Recycler* is celebrating 25 years, and so is Indian Toners and Developers - this is their story.

n 1992 remanufacturing was in its infancy - CX, SX and LX cartridges and the odd IBM 4019. Lexmark had recently been spun out of IBM, and knowledge and expertise were in short supply. The dominant office printing technology was the copier and the dot-matrix printer. Typewriters were still in use, as were duplicators, and inkjet printers were still a thought.

The technical challenge was understanding the interactions of OPCs with different spectral responses, the properties of toners and the various additives and coatings that the OEMs were introducing into the cartridges. The PCR was something new, and was a particular remanufacturing challenge, especially understanding the electronics and chemistry involved.

The US market was the leading market for remanufacturing, and even though the market was young there were several thousand remanufacturers across the USA, and they had been active in rapidly growing a 15 percent market share, while Europe was rapidly catching up. Every remanufacturer was seeking knowledge and information to make informed decisions, and avoid the many witchdoctors selling various lotions and potions that would work magic to improve your remanufacturing.

Then, like today, the keys to successful remanufacturing were and are knowledge and understanding of the products

- from how the printer works, the interactions of the cartridges, the chemistry of the paper - and all overlaid with a working knowledge of intellectual property law, and don't forget the entrepreneurial sales and marketing skills.

India was a particularly expanding market for copiers. There were particular tax advantages for Indian companies to import second-hand photocopiers, and it was possible to make a good return on shipping a container or two of used copiers to Mumbai. The availability of preowned copiers saw a rapid expansion of the copier market, and almost every street had a copyshop of one form or another. OEM toner was made in Japan, Europe and the USA, and because of adverse exchange rates, was expensive to import, creating niche demand for a good quality, domestically-produced toner.

Sushil Jain had been working in his father's company, which produced steel pipes from half-inch size (12mm) to 16 inches (400mm). As Vice President of the company, one of Sushil's responsibilities was to evaluate new projects, especially in the area of import substitution, and was perhaps the forerunner of the very successful 'Make in India' campaign.

According to Jain: "We came across that compatible toners were being imported as there was no manufacturer in India at the time, so we went ahead with the detailed study

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of this project, and in 1990 incorporated Indian Toners and Developers as a Public Limited Company, with 18,000 shareholders. Like in any new project, there were some real challenges and obstacles to overcome.

"The first challenge was to get a good collaborator who could provide the technology, and because this was the first project of its kind in India, we had to recruit and train all the technical people from scratch. The next challenge was developing and formulating toners for the domestic market. But the key was investing in the right technology that enabled us to make high quality and consistent batches of our toner formulations."

In November 1992, it established its manufacturing unit in Rampur, Uttar Pradesh with a capacity to produce 330 tonnes a year. The manufacturing unit was a five-year collaboration with a Swiss company that enabled the company to develop in-house manufacturing and development expertise. A core part of the company then, as it is today.

The next challenge was to start selling the domestically-produced toner, and while there were some negative perceptions, the product quality soon convinced customers to switch to ITDL products, and the company reached the break-even sales point after several months.

Looking back on the early years of the company, Jain said: "It took us lot of time to understand the actual need of the market. We made toner which was as per the acceptance of the European market, as the technical knowhow was given to us by a Swiss company. But things were different in India. People wanted jet-black prints, and they also wanted the toner to give good prints even with, the very old components.

"The formulation costs of the recipes given by the collaborators were very high and we had to later apply our own knowledge gradually to improvise the formulation and bring the cost down. Our cost of borrowing was very high, and it took us almost five years to swap the high interest-bearing term loan to a low cost one. Once the above problems were conquered there was no looking back."

That success continued, and in 2002 doubled their annual production capacity to 650 tonnes by rigorously implementing debottlenecking techniques throughout the production department.

Two years later, production was again doubled to 1,200 tonnes, with each line running at near full capacity, and the rapid growth of ITDL enabled the company to become debt-free by 2007.

The ITDL investment strategy has always been to align investment with capacity, and to maximise output, so as each production line becomes operational, its output is already in demand. With demand, growing a new factory was planned that would add a further 1,200 tonne capacity. ITDL created a new subsidiary for the factory, and I.T.D.L.

Imagetec was formed. The factory is located in Sitargunj in Uttarakhand, North India, and came online in 2008. and the company was now producing 2.400 tonnes per year with four production lines.

In 2012, planning started on further expansion, and in 2015 another production line was added, increasing the capacity to 3,000 tonnes per year. More recently, yet another production line has been added, bringing the total capacity to 3,600 tonnes per year.

Growth and expansion isn't just about factories and capacity. According to Akshat Jain, President at ITDL: "Our management has been loyal to us, and most of the people working on the management level have been working with us right from inception. It is a key part of our business philosophy that the work environment and atmosphere of the company is very employee-friendly."

Market changes

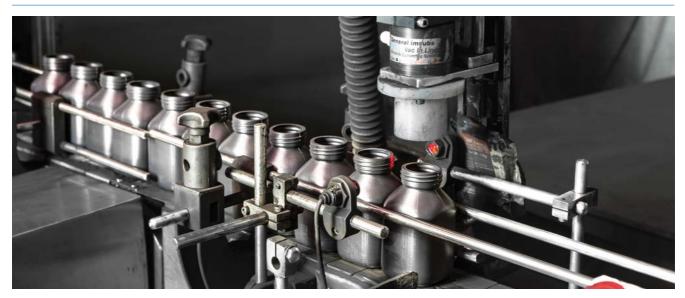
As printer and copier technology evolved from basic analogue copiers to fast monochrome and colour digital devices, toner technology has kept pace, and the ITDL R&D team is at the forefront of developing high quality toners that meet the domestic and export business. Today they supply a full spectrum of monochrome and colour printer and copier toners for the office imaging market, as well as some specialised toners.



DFL Tower

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Slowly, analogue printers were phased out. Colour laser printers and copiers and MFDs were also introduced subsequently. So these changes in the hardware required new consumables to suit the need of the new machines. Toners with technical properties to suit the new machines had to be developed.

According to Akshat Jain: "The market has become very dynamic and price-sensitive, and we have seen many toner manufacturers close their doors in recent years. The challenge is always to deliver high quality toner products and maintain stable energy and raw materials costs. ITDL's investment in modern plant has enabled us to produce high quality and competitively-priced toner.

"In the laser cartridge market, we have seen an increase in new-mould cartridges in the market, and this is adversely impacting on the remanufacturing market, but the ITDL copier/laser portfolio mix means we have been able to maintain full production, and our ongoing expansion. The copier market is still an important part of the imaging industry in India. It will continue to stay like this. The change which has come is from analogue to digital machines, which have further moved towards multi-function devices."

ITDL today

ITDL has a strong research and development centre that develops all the new toners in-house, and a large product portfolio that is tailored to the needs of the domestic and export markets that ITDL currently exports to in over 20 countries worldwide. This is available in most markets or direct from the factory, and in its 25th year it is still growing, as its sixth production line has come on stream, increasing its capacity to 3600 tons per year.

At the time of writing the article, ITDL has recently filed for a merger of the two companies, Indian Toners and Developers Ltd and ITDL Imagetec ltd. The merger should increase the shareholder value.

Looking forward

The office imaging market is a challenging market, and consolidation is happening in the imaging industry. According to Jain: "The HP and Samsung merger will probably see HP utilising the strengths of Samsung in the A3 copier segment. HP will now be able to emerge as a strong entity with strength in copier and multi-function device market segment along with the laser printer segment."

ITDL continues to explore relevant expansion opportunities and, according to Jain "the market continues to grow, and it is important for us that ITDL are not part of the crowd, but are on the leading edge, developing and delivering the global demand for speciality toners. There are no quick fixes and ITDL has always maintained that there are no shortcuts to success, and that being a quality-conscious manufacturer and sticking to the principle of doing business with ethics is always rewarding in the long run."

A final question to Sushil Jain - would you do it again?

"Yes we would do it again and again, as long as the numbers are viable."



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