



INNOVATIVE INK SOLUTIONS

Ink management – systematic and process-driven

India's first fully integrated Siegwerk ink room for solvent flexoprinting inks is located in Pune, Maharashtra, at Parakh Flexipacks. Parakh Flexipacks is a subsidiary of the Parakh Group and one of the leading innovators in the printing & packaging industry. The ink room complements Parakh's advanced facilities that comprise three blown film extrusion lines, four CI flexo presses, two lamination lines, seven slitters, and ten pouching machines.

Siegwerk has been a key, long-term partner of Parakh Flexipacks since the company's early days in 2007. Parakh Flexipacks is now headed by Harshal Parakh, grandson of the founder, and industry veteran Vinay Nalawade. The new ink room was set up in 2016 with Siegwerk's support featuring an optimum lean workflow and an automatic dispenser in its arsenal. Harshal Parakh mentioned that Siegwerk has supported their organization on their journey from implementing conventional methods of ink handling to the current set-up.

"Over the years Siegwerk has helped us to set things right for all our ink requirements and that has been possible due to their excellent service organization in India," Harshal Parakh added.

Sharing experience

Before the new ink room was set up, the printing team used a manual method of mixing base colors to get the required color. With the Siegwerk

Standard Operating Procedure (SOP) this method worked very well for many years. "But with an increased printing portfolio, this led to repeated obstacles, such as high stock levels, high press return stocks, long ink mixing times, limited database management and traceability," said Nalawade. As a step forward, Parakh shared their production data with Siegwerk in order to analyze and come up with a comprehensive solution for calculated benefits, increased production potential and return on investment.

With Siegwerk's support and expertise, the new ink operations with a well-equipped lab came on stream at Parakh Flexipacks. "Given the various sectors we supply and based on post data analysis, the Siegwerk team recommended us to set up an ink room with an automated ink dispensing system to eliminate errors like color variations, reduce press waiting times and ensure the right ink supply to the press at the right time," Nalawade recalled. He also stated: "We respect Siegwerk's integrity and their confidentiality ethics of not sharing our data elsewhere."

Persuasive benefits

Implementing the right workflows was one of the key responsibilities of Siegwerk. The new ink room workflow streamlines the ink dispensing process. A specific color is created by mixing a number of base color concentrates according to the formulation stored in the database. During dispensing of the ink,



Parakh Flexipacks is part of the Parakh Group, India's leading producer of commodities, such as flour, wheat, edible oils and legumes, and has over 50 years of experience. The packaging business subsidiary was founded 10 years ago to provide customers around the world with integrated, tailor-made adaptive packaging solutions. Customers benefit from high quality, low costs and unlimited options. Parakh Flexipacks has a basic extrusion capacity of 8,000 tonnes per annum and a printing capacity of 12,000 tonnes per annum. About 350 employees work on a 12-hectare production site and are mainly involved in converting from gravure printing to flexographic printing – divided into:

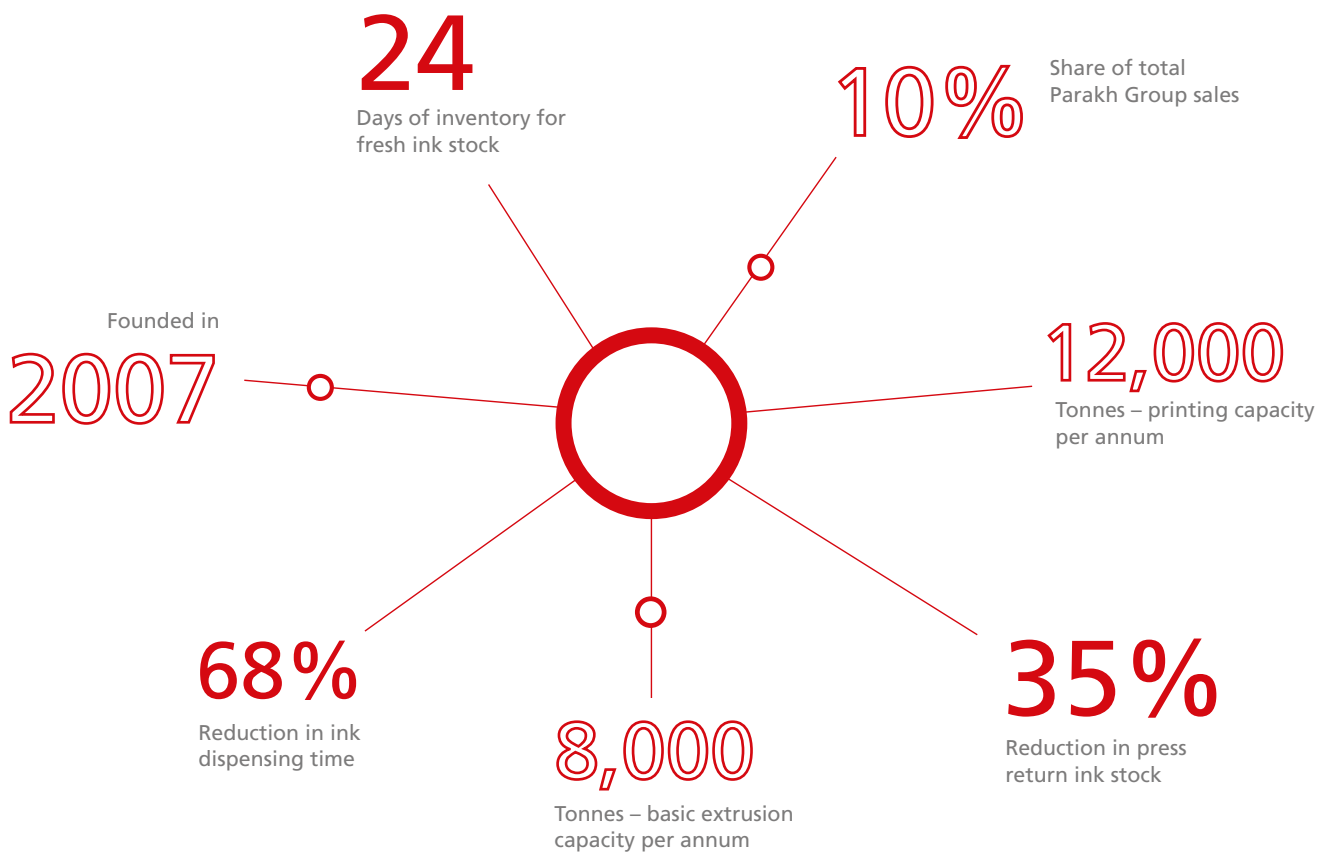
- 20 % each: Export jobs, Personal Hygiene & Care and UHT Milk
- 15 % each: Parakh InHouse jobs, Food and Beverages
- 10 % FMCG

each base color quantity from the formulation is pumped through the dispensing head from the drum into a pail, thus reducing ink dispensing time by 68 percent. "Today with four presses and an enlarged product portfolio, we still have the same ink room headcount that we had when running two presses and manual ink mixing operations," stated Bhimrao Wankhede.



"Parakh Flexipacks supplies packaging materials across the sector and together with Siegwerk we achieve high print quality when it comes to conversion from gravure to flexography processes."

*Harshal Parakh,
Director Parakh Flexipacks*



“With just enough ink mixed and supplied for each print job, this reduces press return ink stock by 25 percent. The new Siegwerk system and procedures help to redirect press returns into different formulations. This has further reduced press return stock by an additional 10 percent and has reduced fresh ink supply and ink wastage. This also means that less space is needed for ink storage and there is a decrease in capital tied up in inks,” said Wankhede.

Due to improved press return usage and accurate estimation of press supply

quantities, the lean stock management system is in place and has helped us to cut down fresh ink stocks held from 84 days to 24 days.

“In the past, we prepared shade cards for the customers to depict light, standard, and dark shade proofs. With the new automatic proofing method and a digital color matching process implemented by Siegwerk, we are now able to send the LAB values to the end-user/customer so that they can be used as digital color standards for the whole process chain,” Wankhede added.

Siegwerk: ink room expertise for innovative solutions

Safety plays a vital role in any ink room implementation process. Once the ink room project was initiated, two safety audits were conducted jointly by the Safety Teams from both companies.

“Along with the Siegwerk team we designed the ink room and are proud to state that it is one of the finest ink rooms in existence and features an automated dispensing system. Together, we have ensured that all the elements inclusive of the ventilation system, illuminants, floors,



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*Vinay Nalawade,
Director Parakh Flexipacks*



Exterior view of the plant



The new high-standard ink laboratory



Siegwerk training session with Parakh Flexipacks staff

retention area and safety controls match world class standards," Nalawade concluded.

A workplace organization (5S) plan was drafted, based on the ink room design. 5S has now been implemented in the ink room and it is acting as a model for Parakh Flexipacks' printing facilities.



*Bhimrao Wankhede,
Printing Manager Parakh Flexipacks*

Siegwerk also mastered the challenge of changing the working methods of the ink room staff and aligning them to the new ways of working. It took about two months for the printing team to become proficient in the new system, new standards and new processes. Siegwerk supported Parakh Flexipacks with a phased training program. The company adapted to the new working methods through classroom sessions and on-the-job training conducted by Siegwerk. Siegwerk's expert training capabilities were complimented by the required process documentation that included ink room templates and schedules.

Systematic, process-driven operations with minimum human intervention ensure that optimum results are achieved. Nalawade summed up the situation saying, "Together with Siegwerk it has been a great journey for us to reach this level." Harshal Parakh added, "Siegwerk plays

an important role, not only at the print end but also pre- and post-R&D. It's a win-win relationship for both of us".

To drive this concept further towards continuous improvement, Siegwerk will conduct a Process Management & Consulting (PMC) audit to define additional print process improvements.



The new automated ink dispensing system reduces ink dispensing time by 68 percent.

Vinay Nalawade · Director – Parakh Flexipacks

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