

A Case Study

On

“Image Gravures: Rotogravure Cylinders Manufacturing Unit”

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Case Study on Image Gravures: Rotogravure Cylinders Manufacturing Unit

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Introduction to Image Gravures

Image Gravures is an Indian Company with its manufacturing plant at Chhatral, District Gandhinagar which is enabling the world to the roto gravures cylinders used by the flexible packaging & printing industry. Image Gravures was established in the year 2010 with a promoter's vision to give the best quality product and services to the society. Image Gravures is different through innovation in manufacturing environmental friendly products using latest technology, imported plant & machineries with high accuracy, in-house fabrication, research & Development activity and experienced work team.

Promoter's business acumen and entrepreneurial skills lead to the untapped market of the rotogravures cylinders more precisely with digital & imported machineries. Promoter's foresight, vision and zeal also lead to the backward integration in short span of time named as a Shree Ram Engineering in same industrial area at near distance.

Image Gravures has been established with the latest machineries and equipment's to provide the world class rotogravure cylinders. The company is committed to give best quality product with minimum lead time. Their basic focuses are on improvising number of print impression and minimize ink consumption with use of latest technologies. Image Gravures is creating the unique products that leave its impression in the Flexible Packaging as well as Gravure Printing Industry.

Business Overview

Image Gravures is a single stop destination for quality rotogravure cylinders, which are used for flexible packaging printing. Company is producing rotogravure cylinders for the widest variety of applications. Flexible packaging printing involving the most diverse requirements in terms of

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materials being printed, colour implementation and tactile surfaces is particularly prominent. Equipped with state-of-the-art technology with automated machines from Germany & Italy, which makes company able to achieve and fulfill industry standards and stringent requirements.

Base of the rotogravures cylinder is MS seamless pipe which is copper plated and used for engraving purpose. The MS base shells are procured from fabrication house. The customer provides design artwork and same is engraved on copper plated cylinders. Each and every design is different and unique and according to that the cylinders are tailored made. Company is supplying engraved cylinders to the printing industry in India as well as across the globe. Image gravures has wide variety of customer segments like flexible packing, woven sac, shrink sleeve, decorative laminates, gift wrappers etc.

Who are the clients?

Rotogravure cylinders are used by flexible packaging printing ultimately used in packing of commodities like food (biscuits, potato chips, salty & sweet ready to eat products), cosmetics, utility products etc..... The company's clients include leading printers in the country and few international users.

Business philosophy

The company operates with the following business philosophy:-

- Image Gravures envisages being a company that serves quality cylinders for the flexible packaging industry.
- To always be committed to a life-long relationship with customers and work towards total customer satisfaction.
- To lay importance on bettering its quality, safety and environmental standards.
- To conduct business with the highest standards of ethics.

Promoters

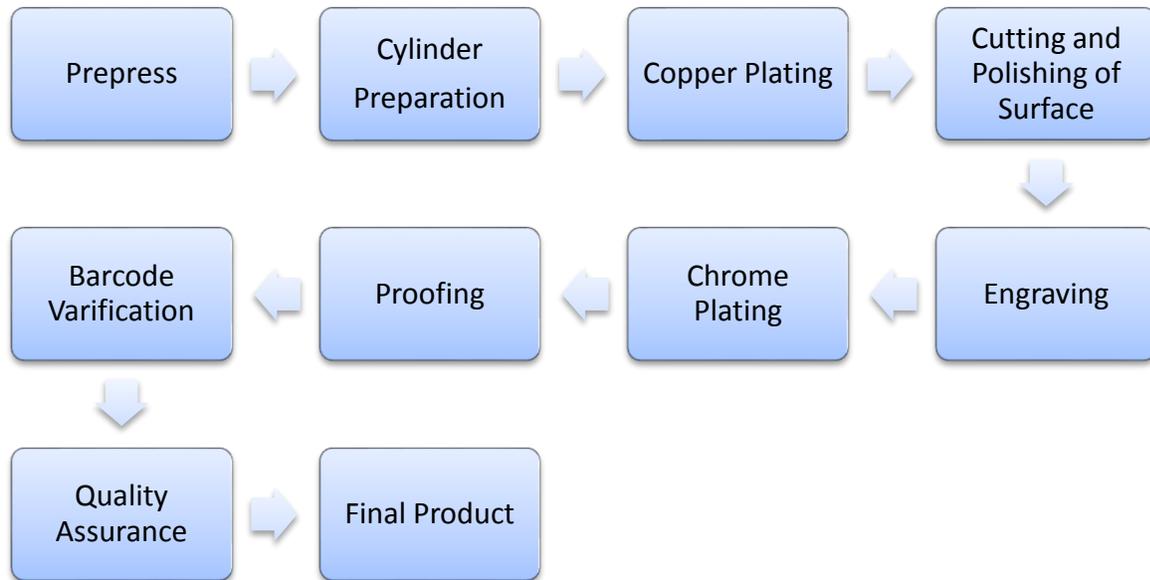
The company has been registered as partnership firm and both the partners Mr. Parag Patel and Mr. Anant Patel are technocrats, having rich collective experience of 5 & 20 years respectively of running various business. Parag has done his Masters in Engineering. After his study he had used his business acumen in to the textile industry. Anant has a Bachelors Degree in Mechanical Engineering and hence both are well conversant with technical aspect of product. Both the promoters wanted to diversify their business and that lead to the origin of Image Gravures.

Manufacturing Facilities and Production Process

The company is equipped with state of the art machinery for producing rotogravure cylinders. The MS Base shell is copper plated with the help of German plating machines. It is easy to do engraving on copper plated surface. The copper plated cylinder surface is cut and finished on Cutting and Finishing Machine which works with the accuracy of $\pm 10 \mu\text{m}$ over the 1600mm face length of cylinder. The cutting and finishing process defines the parallelism and surface roughness of the copper plated cylinder. These finished cylinders are electromechanically engraved with the help of diamond stylus on engraving machines. For getting maximum no. of printing impressions in final production, the engraved cylinders are chrome plated. And at the last, the chrome plated cylinders are proofed with different inks to check the final design outcome of the engraving. The proofing is must to cross check the engraving quality and to meet the customer's requirement. The different types of test and measurement equipments are used in production process for achieving and maintaining quality parameters.

Parallel to the soft floor production process, the artwork designing and approval is carried out in graphics department. With the help of different designing software, the designs are converted for engraving process. Before going to engraving the design, customer needs to approve the final and corrected designs. The JPEG or PDF files, paper printouts, cylinder proof are submitted to customer for approval purpose.

The whole production process is graphically represented as below:



Quality Control & product Certifications

Image Gravures has sound department for quality check for the rotogravures cylinders. These cylinders are used by the flexible packaging and printing industry with accurate finishing. So Image Gravures is using roughness tester, Hardness tester, photo spectrometer, micrometer, verniar calipers as quality check equipments. Research & Development activity is uniqueness to the Image Gravures. Company continuously focuses on accuracy of the product by introducing R & D as a part of their curriculum.

Environment & Safety Policy

Promoter's aim is to provide quality cylinders to the society with adhere to the legal legislations. Company adheres to the rules under Factories Act, 1948 and other applicable labour & environmental laws. The company strictly follows the rules and regulations prescribed by Gujarat Pollution Control Board and Gujarat Electricity Board. As a measure to protect safety of the employee and visitors, the company proactively has established entry norms of any person in manufacturing & storage area. Company provides safety shoes, eye glasses, gloves,

fire extinguisher, and shower point as per the requirements set by the law and for the protection of the employees.

Products

Image Gravures is producing rotogravure cylinders for gravure printing, copper plated cylinders for ready for engraving and MS base shell.

- **MS Base Shell**

Image Gravures, serves both, domestic and export markets, for the need of MS base shell by engraving houses. Product outline as below:

Type: Hollow and Shafted
Periphery: 400 mm-1200 mm
Length: 400 mm-2200 mm
Thickness: 8 mm-22 mm (On demand)
Balance Value : 1000 revolution / min 5-10gr
Surface Roughness : Ra 0.8



- **Electro-Mechanically Engraved Cylinders**

Image Gravures, serves both, domestic and export markets, for the need of electro mechanically engraved cylinders for gravure printing houses. Product outline as below:

Type: Hollow and Shafted
Periphery: 400 mm-1200 mm
Length : 400 mm-1400 mm
Thickness : 8 mm-22 mm (On demand)
Balance Value : 1000 revolution / min 5-10gr
Surface Roughness : Ra 0.3
Chrome Hardness: 800 to 1000Hv



MS Cylinder



Ready to Engrave Cylinder



Engraved Cylinder



Chrome Plated Cylinder



Market & Trends

Indian printing industries has seen growth of more than 15% in last half a decade and as per industry experts, printing industries in India, is going to have more than 25% growth over the next decade.

Awareness of requirement of packaging, larger color gamut offered by gravure printing and growth of FMCG markets, use of gravure printing in flexible packaging is increasing day by day. With Most sophisticated machinery, Image Gravures provide best solutions for gravure cylinders.

Global market (Export & Import)

Image Gravures is exporting their cylinders to the global market. They are generally focusing on developing countries like Sri Lanka, Sudan and developed country like Austria. Image gravure is importing their machineries from Germany and Italy for the better performance.

Marketing and Sales function

Image gravures have sound team for the marketing and sales of the products. They used to do visits to the business tycoons. Company's employers are frequently visiting and participating in to the exhibitions nationally and internationally. Image gravures take appropriate measure on promotional activities.

Human Resources

Image gravures main strength is their experienced and expert manpower. There are approximately 50 employees working in the company, comprised skilled and semi skilled. Promoters have designed their own policy for the recruitment and selection process of the employees.

Work Culture

The company believes in establishing conducive but quality conscious & innovative work culture by framing employee friendly policies. Agility, creativity, value addition, commitment and

integrity are prominent work culture features at Image Gravures. Highly effective and efficient team of 50 employees leads to success of the company. Work culture is friendly and flexible for the employees. Promoters are always ready to welcome the suggestions for the betterment of the company and it achieves objectives of the company.

The company transparently announces the parameters of success and important mile stones. Whenever employee reached to the mile stone in to the production department promoters are motivating them by small treats, said Mr.Parag manager of the company. He added that employees are free to change and analyze the production parameters for the improvement of the outcome. Employees are also celebrating festivals at premises of the company and promoters are use to provide them some gifts as a token of their love and gratitude. Mr.Parag said that they are arranging their annual meetings at outside the factory premises with all members of the company so it leads to motivate them and refreshing them for a whole year. Promoters also welcome industrial visit of the students for the knowledge sharing purpose and as a part to social service and encourage students to learn more on the industry and governance practices.

Competitive Strength, Strategies & Differentiation Factors

The company has well formulated strategies to differentiate its presence in the market by identifying unique selling proposition (USP). USP of the Image Gravures are imported plant machineries with high accuracy, in house fabrication, experienced & expert staff members, amicable working environment, continuous Research & Development activity supported by after sale service. The company welcomes suggestions from any corner of stakeholders (including clients, employees, visitors & researchers) to improve its product & services. This has lead to the success and built competitive strength.

Image Gravures-CSR activities

With a view to give back to the society, the company voluntarily discharges its Corporate Social Responsibility by undertaking several activities helping society & environment. Tree plantation in the company premises is the first step towards the corporate social responsibility. Promoters

and their families are also associated with the different types of CSR activities like girls education, contribution to the old age homes, donating to the needy institutes etc.

Training

The company appreciates importance of the training to new employee and continuous training to all employees. Image Gravures used to introduce induction programme for the new joiner. They are also providing on the job training to the existing employees.

Communication

Image Gravures is always believe in horizontal and vertical communication. Employees have a right to say in to the decision making process.

Changing growth drivers

Company was procuring MS base shell from the supplier of the cylinders but it was time consuming and incurring cost of transportation. Because of that promoters have done backward integration as a fabrication house in a same industrial area for their convenience.

Key Challenges for Image Gravures

Image Gravures has plant machineries from Italy and Germany, so whenever machinery break down happened it lead to waiting period to get ready and interruption of the production process. Due to inflation; fuel cost and transportation cost is also increasing substantially. Labor regularity is a challenge and labor charges are also very high. Technology and its updation is also big challenge for the company.

Emerging Markets

Image Gravures is supplying their cylinders to the flexible packaging which are used for the printing industry. Now a days technology is changing very fast so as design of the packaging material.

SWOT analysis

Strengths:

Owners' involvement, imported plant machineries with high accuracy, in house fabrication, experienced & expert staff, amicable working environment, continuous Research and Development, After sale service

Weakness:

Partnership firm has limitations to grow, break down of machinery require foreign technicians leading to production interruption, industrial products are not yet accustomed to e-marketing

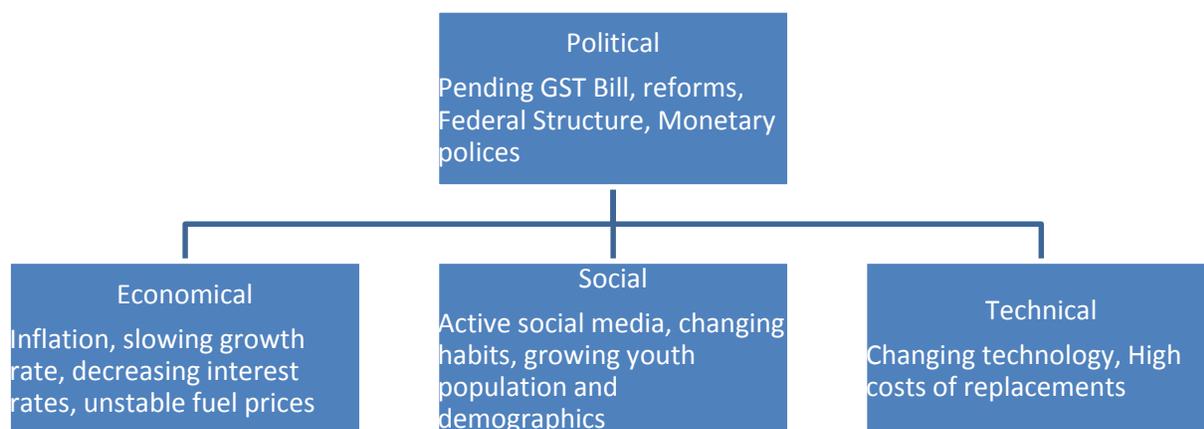
Opportunities:

India's growing GDP, Consumer awareness on hygienic packing, growing middle class and working women leads to higher demand of packed products, changing government policies like Make in India

Threat:

Increasing competition among entrepreneurs, substitute products, cheaper packing material for consumers who want cheap products and not quality, credit crunch, inflation and employee turnover due to emerging new growth

PEST Analysis



Future outlook of the company and Industry

Printing industry is also growing exponentially so as the rotogravure cylinders. Therefore, to conclude business prospects, stability and growth prospects seems to be very high for Image Gravures. The Indian packaging industry is expected to become the fourth-largest packaging market in the world, with revenues of US\$43.7 billion in 2016. Flexible plastic packaging was the fastest-growing packaging category in India, achieving a CAGR of 16.6% during the review period. During the review period, the packaging industry benefitted from strong growth in the Indian retail market. Other end-user markets from packaging, including pharmaceutical and processed food, have been growing rapidly over the review period, both domestically and internationally. This demand from end-user markets is expected to remain high during the near future. Indian economy is expected to grow above 7% per annum. The company has established in its first five years with strong foot and is now in growth stage. Looking to the enthusiasm and past performance the company's sale will grow at significant high rate than national GDP. The growth is driven by Increase in FDI, increasing consumable production, demand from Small Scale Businesses, automation, changing positive demographics and social media.

Conclusion

Image Gravure's success is striking in light of their experienced and expert team, quality focus, continuous Research & development activities; imported plant machineries etc. The company is always strives to provide quality products to the customers. Printing industry is also growing exponentially so as the rotogravure cylinders. Therefore, to conclude business prospects, stability and growth prospects seems to be very high for Image Gravures. The company may need to expand its shareholder base, adding more professionals and use social media as marketing tools.