

## Case Study

# Rectifiers & Controls, Faridabad

Aashish Jindal\*  
Pavan Narang\*  
Richi Kotadia\*  
Satish Nair\*\*  
C. Gopalkrishnan\*\*\*

\* Students of MBA (Family Business and Entrepreneurship), Institute of Management, Nirma University, Ahmedabad.

\*\* Faculty, Institute of Management, Nirma University, Ahmedabad.

\*\*\* Director, Institute of Management, Nirma University, Ahmedabad.

- *The editor invites responses from interested readers. Responses should be limited to two pages, (A4 size).*

Bimal Kumar Gupta (BKG), Chairman and Managing Director of Rectifiers & Controls, was relaxing after celebrating the most famous Hindu festival, Diwali.

BKG looked back at his early business life with satisfaction. He had traversed through some most difficult experiences in establishing his business. He now tried to focus on future.

He went back to the late 1970s, when, without any business background or financial support, he started his entrepreneurial journey. BKG lost his mother when he was studying in the tenth standard. His father, Bhagwan Das, a clerk at Modi Mills (Patiala, Punjab), wanted all his children to be well educated. Coming from a middle class family, he had no business stories or exploits to tell his children, as none in his family (paternal or maternal branches) was involved in business.

### Late 1970s

BKG graduated in electrical engineering from Thapar Institute of Engineering and Technology, Patiala, in 1977.

BKG started his career with CSI, Chandigarh, as a junior research fellow in 1977. After about 7-8 months, he shifted to Technical Associates Private Ltd., Lucknow, where he worked for about two years. This company was involved in manufacturing transformers. Owing to growing potential in

the business, Technical Associates opened up another plant in Sangur (Punjab). BKG was selected for posting at the new plant where he worked approximately for a year and a half when the spirit of entrepreneurship stuck him. With a few thousand rupees as capital, he promoted Ajasan Electricals which manufactured electrical control panels and accessories in Patiala (Punjab). He was the first one in his family to start a business, and this later proved out to be a motivational factor for his elder brother, Suresh Gupta, to start a business. The small capital came from BKG's brother-in-law and therefore Ajasan Electricals operated as a partnership firm.

## **1980s**

After about 16-18 months of operations, the partnership oriented home-run business was shut down because of losses. Lack of business experience on the part of BKG was the main reason for the losses. Market was another hurdle. While most of the sales were on cash basis, a few customers delayed payments considerably putting tremendous pressure on funds. This led to the closure of the business venture in April 1981.

In July 1981, BKG joined Jindal Electricals which manufactured transformers and rectifiers. He was heading the company's manufacturing plant and also looked after sales and services, marketing, production, excise, etc. Sales of the company soared in his stewardship. After working for six years, BKG decided to leave when a new plant head was appointed over him. He felt that the company had been unfair to him.

His inner urge to be an entrepreneur took possession of him once again. The business experience that he had gained at Jindal was to be the platform for the next venture. BKG borrowed money from the family and friends for the new business and in September 1987, Rectifiers and Controls (Recon) was born.

Initially, BKG provided repairing services and dealt in spares. During the initial period, he himself went to the field for service and repairs. He slowly moved into manufacturing from merely servicing equipment.

Once again, things did not move very smoothly. The DLF area where he was operating from was highly unsafe owing to very little industrial activity. Thefts were common and Rectifiers & Controls too fell a victim. In February 1988, in spite of best efforts, the company lost copper worth Rs. 40,000 from factory premises when thieves broke open the premises. BKG therefore decided, in March 1988, to shift the plant to a new location in Faridabad.

## **1990s**

Till 1991, sales could reach Rs. 1 lakh only though there were signs of growth. In 1991, BKG felt that he was not in a position to concentrate on marketing and therefore decided to appoint a marketing manager. He also decided to add another 12 to 15 workers. Recon had major orders from Usha Rectifiers for rectifiers which were mainly used in electroplating industries. BKG also did job work for another organization. Sales to these two companies gave enough stability to the company.

However, these orders could not last long and another crisis was in the offing. When the crisis was in full swing, he received an offer to add 400 sq. yards to his production facility in another location. He was in a serious dilemma, but his entrepreneur's vision suggested that he go for the addition, even though his manufacturing had come to almost a standstill. Though the two production facilities in separate locations posed difficulties, BKG managed to hold on. He also had a power back-up and made some additions to the shopfloor. At the end of the third year, sales had shot up to Rs. 60 lakh a year, thanks to some major orders.

In 1996, BKG expanded the existing portfolio to include his dream product, voltage stabilizer. Though the product was not new in the market, he decided to move into this segment with an all together different strategy of differentiation. He focused on improved quality along with aesthetics. The technology was rolling contact type stabilizers. This was a niche product. He started with variac type stabilizers. This was done to understand the market and the buyers' mindset.

He hired a few diploma holders to work on this project. However, they did not remain in the organization for long. He had also made additional investment in equipment. Competition and premium prices made it difficult for him to enter the market with variac type stabilizers and in 1998, BKG closed down production of variac type stabilizers.

Learning from the experience, he appointed an engineer to design the process of rolling coil type stabilizers. BKG himself trained the engineer for a year before passing him the steering wheel of research and development of the product.

By the end of 1997, the company recorded sales of Rs. 70 lakh a year.

End of 1998 saw the launch of the niche product, stabilizer, in the market. The focus was again on better design, improved quality, and extremely high aesthetics. Initially, the designing work was outsourced to a private designer in Calcutta and the designs were improved frequently at the on-site R&D. To carve out a niche, BKG appointed an extremely intelligent and highly experienced marketing manager to look after marketing operations. He worked with BKG closely and the company was able to supply to some of the well-known organizations in India. This is one of the most successful brands in stabilizers across North India.

### **Late 1990s to 2010**

From 1998 to 2007, the company was able to cater to clients such as Airtel, Max Hospitals, Citibank, Reliance Communications, Idea, Dabur, Tata Indicom, Philips, HCL etc. At this time, the company also manufactured low tension (LT) and high tension (HT) stabilizers, and HT transformers with built-in voltage stabilizers.

BKG approached several consultants to develop the market. In the second half of the decade, Recon supplied customized stabilizers to Airtel. It also directly or indirectly exported to countries like Oman, Ethiopia, Nepal, Bangladesh, Dubai, Nigeria, etc. This decade proved out to be the most beneficial for the

company. The company's sales graph showed an all time high, starting from Rs.1 crore in 1998 and reaching the mark of Rs. 7 crore by 2007.

In recent years, the company has added to its portfolio normal transformers, transformers with OLTC (Oil Load Tap Changer), and dry type transformers (Exhibit 1). Looking at the growing market, the company is targeting a much wider clientele base (Exhibits 2 and 3). Sales reached Rs. 10 crore in 2010. BKG, however, thinks that though the business is running at a good pace, it is essential to change the track. He feels that there is a much larger pool of competitors now in the market, who are indulging in price cutting for survival. As a result, margins have eroded. Also, there has been very slow growth in terms of technology advancement. BKG fears that the business may fall into saturation.

Sushant and Jayant, BKG's sons, have joined the business. Sushant is an electrical engineer. He is introvert, analytical, and has a broad focus. Jayant is a mechanical engineer. He is a visionary, extrovert, and optimistic.

With growing family needs and dreams to achieve, BKG wishes to expand the business, for which purpose the following facilities have been established.

## **Resources**

### **Infrastructure**

The company has well established production, testing, and R&D facilities spread over an area of 2250 sq. yards in Faridabad. Advanced technology machines have been installed in the machine shop and these have been upgraded continuously to achieve high quality production. The organization has following facilities:

- customized production facility
- testing facilities
- R&D facilities
- customized packaging facility
- CAD (computer-aided design)
- CAM (computer-aided manufacturing)

### **Marketing**

The company has a good marketing team. They are always on the move, visiting customer sites for orders. At present, the company has manual recording systems. These may include getting data from the customers' end, noting their requirements, feedback, services, etc. and then transmitting the data to the marketing team at the headquarters. This is done through face to face communication or phones.

## **Research and Development**

A dedicated R&D team works on quality enhancement and development of advanced power control equipment. R&D of the organization is aligned with the long term strategy, especially with regard to the needs of international business.

## **Achievements and Honours**

Winners of the ITID quality excellence award, Recon has edge over others owing to quality of raw materials used, testing facilities, workmanship, better efficiency of equipments, and best possible service. The company got ISO 9001:2000 certification in 1995, and since then has been supplying products which conform to international quality standards and safety. The company is ERDA certified and is approved by the Bureau of Energy Efficiency.

## **BKG's Beliefs as an Entrepreneur**

Though BKG did not belong to a business family, he had a vision which gave him the direction throughout his whole entrepreneurial journey. He was the inspiration for the family and has been able to instill the spirit of entrepreneurship in his sons. But, he never takes the credit for anything.

He remembered with gratitude the people who had helped him reach the present position in business. He felt grateful to his employees who stood with him during the ups and downs. He remembered an incident when he was stuck with a serious tuberculosis infection in 1994. It was a very difficult period and his staff helped the business move smoothly. He thought of Mr. B. B. Jindal, his immediate senior at Jindal Electricals, Ludhiana, from whom he had learnt various intricacies involved in running a business. He fondly remembered Mr. Arun Jindal, whom he knows from his graduation days. His wife all through the married years supported him. She belonged to a business family and gave valuable suggestions during tough times.

BKG has immense faith in the almighty and believes that God gave him strength and confidence. Humans are just doers rather than planners, he believes.

BKG has always tried to maintain cordial, healthy, and family-like relations with employees. Though senior management consists of BKG and his eldest son Sushant, they are supported by an employee strength of 100 people.

## **Vision 2015**

Though the father and sons were celebrating, all of them are in deep thoughts pondering on the next course of action.

Browsing through the financial daily, BKG wants to enter aluminium wire production. What are the current players doing? Whom are they serving? Who are the major players in this area? What are the

opportunities in this sector? Should we directly start production, or go with trading first to gain an understanding of the sector?

Sushant has started implementing management systems in the business. His immediate mission is to transform the business into a professional organization by setting up systems for human resources, training existing and new employees, research and development, inventory control systems, quality improvement, and many more. He wondered whether the company should go for further international certification. Should he employ some HR managers? Should he look out for what other companies are doing currently in these areas?

Jayant, on the other hand, is looking at adding new products to the product portfolio. What new strategies are necessary for pushing the existing products more deeply into the market? Which new regions and markets can be covered? Jayant was trying to look into the quantum aspect of the business. Currently, the company's manufacturing is based on orders it receives. But, looking at the continuously decreasing margin, bulk production is the only way out to remain in this industry, he thinks. The major benefit of standardized large scale production will bring economies of scale, especially in terms of cost reduction in production, R&D, and electricity. Jayant believes that Recon will be able to set its own terms and conditions, rather than follow the dictates of customers. In view of the accelerated growth of the Indian economy and expansion taking place in the electricity sector, turn-key projects, he thinks, would be a great idea. However, this would need some major changes in the organization, which he thinks he should discuss with his brother Sushant.

## Exhibit : 1 Types of Products

PRODUCT	DESCRIPTION
<b>H.T. Automatic Voltage Stabilizers (HT AVR)</b>	HT automatic voltage stabilizers and servo voltage stabilizers are used to get stable input voltage, irrespective of the voltage received from electricity authorities. Additionally, these stabilizers also prevent the transformer and other electrical equipment from getting overloaded. Automatic voltage stabilizers and servo voltage stabilizers take care of wide voltage variation ranges continuously and in on load conditions.
	
<b>H.T. Transformer with Built In H.T. Automatic Voltage Stabilizer (Transformer with Built In AVR)</b>	The HT transformer is basically a combination of HT AVR and standard HT distribution transformer. The company is HT transformers manufacturer with built-in stabilizers and HT Automatic Voltage Regulators are available in capacity up to 5000 KVA. HT transformers with built-in HT Automatic Voltage Regulators are highly effective for isolating sensitive electrical equipment from spikes, DC leakage, and line voltage transients.
	
<b>Oil Cooled Distribution Transformer</b>	We cover a wide range Oil Filled Transformer with Off Circuit Tap Changer / On Load Tap Changer (up to 5000 KVA in 11 KV and 33 KV) conforming to the international standards of quality and safety for industries and commercial set-ups. These transformers are designed and developed using latest technologies and can be provided with a variety of terminations so as to suit the requirements for new installation or replacement.
	
<b>Dry Type Distribution Transformer</b>	Recon's offer technologically advanced range Dry Type (VPI) Transformers use CRGO M3 to MS MOH Lamination and Electrolytic Grade 99.9% pure copper. These transformers are designed for trouble-free performance, conforming to IS - 2026 with low power loss and low noise. These are fitted in enclosure for indoor installations and are totally maintenance free and safe from fire as the material used is metal, ceramic, NOMEX, and resin. It is environment friendly as there is no oil.
	

## PRODUCT

### On Load Tap Changer (OLTC)



## DESCRIPTION

Recon's Transformer with On Load Tap Changer and Electric Tap Changers are designed for trouble-free performance, conforming to IS – 2026 with low power loss and low noise. Use of modern manufacturing techniques and optimum utilization of active materials for On Load Tap Changer Transformers ensure cost effectiveness, reliability, and trouble-free performance.

### L.T. Automatic Voltage Stabilizers (L.T. AVR)



L.T. Automatic Voltage Stabilizers hold its potential for units having either L.T. supply or low capacity H.T. connections. L.T. AVR prevents direct exposure of fluctuating voltage to critical electrical equipment. It also prevents frequent tripping of overload relays to ensure uninterrupted production. These are designed for balanced supply and unbalanced loads as well as unbalanced supply and unbalanced loads.

### Rectifiers



Recon has designed silicon rectifiers and electroplating rectifiers to fulfil the needs in electroplating, anodizing, hydrogenation, and other electrochemical processes. These rectifiers are completely tailor-made and are available in a range of 25 amps to 15000 amps at different output DC voltages. Silicon rectifiers are available in three different models.

**Source: Rectifiers and Controls**



## **Exhibit : 2 Client Groups**

RECON offers a wide range of power control equipment which are used mainly in following fields:

- Engineering Units
- Commercial Establishments
- Production Plants
- Rolling Mills
- Hotels and Hospitals
- Processing Units
- Teas Estates
- Office Buildings
- Distilleries and Beverages
- Oils Plants
- Township

Source: Rectifiers & Controls

### Exhibit : 3 Clients



Source: Rectifiers & Controls