



# Amit Capacitors Limited

Leaders in Manufacturing of Capacitors Since 1983

## SUMMER INTERNSHIP REPORT

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MBA Part 1, 2021-2022.



## DECLARATION

I, the undersigned Kabita Mahanti, student of MBA Semester-II of Goa Business School here by declare that the project work presented in this report is my own work and has been carried out under the supervision of Professor M.S.Dyanand and Miss. Rubina Kalsur, Operation manager.

The information and data given in the report is authentic to the best of my knowledge.

Date:

Place:

Student Signature

(KABITA MAHANTI)



## ACKNOWLEDGEMENT

This internship report would not have been possible without the guidance and the help of several individuals who in one way or another contributed and extended their valuable assistance in the preparation and completion of this study.

I would like to express my gratitude to Goa Business School for including internship program as a ten-credit course which has provided an opportunity to gain practical working experience in the organization. My sincere gratitude to Amit Capacitor Pvt Ltd for giving an opportunity to be a part of their company.

A special thanks to Ms. Rubina Kalsur, Operation Manager for providing a warm learning and training environment in the Operation and HR Department, and also for being my mentor in the company throughout my internship period.

I am thankful to Mrs. Sapna Naik – Quality check manager, Mrs. Prachi K. – Packaging Supervisor and Mr. Gaurav Raj and Mr. Prasad Shetye – Machinery Operator Heads for devoting time from their busy schedule and explaining how work is being done in the departments and assigning me with various tasks during these 8 weeks of internship period.

I would also like to extend special thanks to the entire staff for their full co-operation, guidance and support during my internship.

Lastly, I would like to thank Professor M.S. Dyanand for guiding and being a strong pillar throughout the semester and internship period.

Sincerely,



## AMIT CAPACITORS LTD.

ISO :9001 COMPANY

WORKS : Plot No. 90 & 91, IDC Pilerne Industrial Estate

Pilerne Bardez - Goa - 403 611

Email: [acigoa@concap.in](mailto:acigoa@concap.in)

Website : [www.concapcapacitors.com](http://www.concapcapacitors.com)

Ref.No.:

Date:

### CERTIFICATE

Date: - 08<sup>TH</sup> JULY 2022

#### TO WHOM SO EVER IT MAY CONCERN

THIS IS TO CERTIFY THAT, MS. KABITA MAHANTI , STUDYING AT GOA BUSINESS SCHOOL, GOA UNIVERSITY, TALEIGAO PLATEAU, GOA HAS CONDUCTED A SUMMER INTERSHIP IN OUR FACTORY FOR A PERIOD OF 8 WEEKS FROM 16.05.2022 TO 08.07.2022.

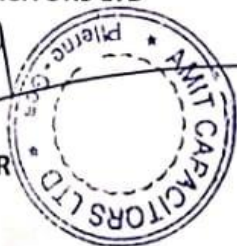
WE FOUND HER CONDUCT TO OUR SATISFACTION.

THANKING YOU

FOR AMIT CAPACITORS LTD



N K SARAF  
CHIEF MANAGER



Regd. Office :A-8, CO-op. Industrial Estate, Balanagar, Hyderabad - 500 037, Phones:040- 23879990/91/92/93/94  
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MANUFACTURERS OF  -  CAPACITORS



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## EXECUTIVE SUMMARY

This is the internship report based on the 8 weeks internship program that I had experienced at Amit Capacitor private Limited, IDC Pilerne Industrial Estate.

During my internship I gained practical knowledge on how a manufacturing unit works and how the human resource division of an organization operates and coordinates its activities to ensure smooth functioning of the company at all levels by ensuring right numbers of people are available.

In the profile of the company of the report, general information of the company, is collected through primary and secondary data.

The objective of this report is to understand the various decision making and strategy planning at each department of the company. This report will highlight the theoretical knowledge practiced and adopted by the company to improve their efficiency.

This report also carries the industrial and company analysis that touches upon strengths, weakness, opportunities and threats to the organization followed by findings and recommendation on critical factors regarding department Management of Amit Capacitors Private Limited (ACL). Finally, there are learnings and the conclusion derived from the internship program. The departmental analysis is limited to the Pilerne Unit of ACL.



## COMPANY PROFILE

Amit Capacitors Limited (ACL) is one of the first company to Colonize manufacturing of capacitors in South India, since 1983. The company was founded by Late Shri Ashok Kumar Tibrewala. ACL all together has four manufacturing units in India, the second unit was opened in 1991 at Hyderabad and the third and fourth unit are existing in Goa. Corlim unit was started in the year 1994 and Pilerne unit was started in 1998. ACL products are marketed under two brands, CONCAP AND AMCAP. ACL is specialized in manufacturing film capacitors. ACL caters to reputed National & International markets, Electrical Industry OEM's segments of Electric Fans, Submersible Pumps, Motor Pumps, washing machines, Mixer Grinders, Air conditioning, Refrigeration and Fluorescent Light Fixtures etc. which are used in our day to day electrical maintenance activities. The Organization is an ISO certified 9001:2015 company and their products are complying with CE and ISI quality markings. They are also leaders in PFC Capacitors used in industries for Power Factor Correction.

Amit Capacitors Limited (ACL) has emerged into a vast capacitor manufacturing plant across India with latest manufacturing facilities. ACL established 4 manufacturing units to manufacture highly qualitative and quantitative capacitors in India. ACL established its own in-house Laboratory to perform R&D operations with NABL Certified testing facilities. Unit-1 Hyderabad, India Unit-2 Hyderabad, India Unit-3 corlem, Goa Unit-4 Bardez, Goa Unit-5 Hardware park, Hyderabad- Under construction MPP Film is heart for a Capacitor, ACL has its own in-house MPP film manufacturing facilities which has its unique technology in manufacturing precision guided high quality MPP film for long-life.

ACL uses BOPP film which is imported from Japan, Korea & European Countries. ACL has its own in-house injection moulding facilities to manufacture its plastic cans and discs which are used for encapsulation for capacitors. ACL has installed automatic machineries to construct robust capacitors and created mistake proofing systems in all manufacturing stages. ACL has a track record of supplying enormous quantities of capacitors to customers in time.



## INDUSTRY ANALYSIS



**Threat of New Entrants :** AMCAP and CONCAP are two of the brands of ACL, which is highly demanded in day to day electrical maintenance activities. The capacitor manufacturing industry is a highly competitive industry with many big players at national and international like Ensave, Indtech etc., dominating the market in terms of volumes, variety and quality. A huge amount of manufacturing and R&D expenses are required to set up a capacitor manufacturing unit like ACL, which is not easy for new entrants. A bigger financial backing is required. Also, the existing brands have created strong brands and trust in the minds of consumers to not let in new players to make space easily. All of the above factors make the entry of new players restricted, thereby decreasing their threat.

### **Threat of Substitutes :**

capacitor manufacturing companies offend substitute each other with the type of raw material used for manufacturing the capacitors. The raw materials used have kept substituting the quality and durability of the products. Presently there are capacitors made of mica, ceramic, paper, film aluminium etc. Ceramic and film capacitors are long lasting and better conductor for various applicators. ACL is one of the best producers of polypropylene film capacitors. The demand for capacitors will never go off the market but the timely innovations can create more opportunities for this industry. Hence yet there is no proper substitute for the product but the mode of how it is made can define the need of the buyers.

### **Bargaining Power of Customers :**

The capacitor industry is a vast industry with many big players giving a dozen of choices to the consumer at competitive prices, thereby increasing the bargaining power of the customers to easily switch if they are unsatisfied with the current brand. The majority of the sales are done after comparing the specification requirement by the buyers. All this leads to a





highly sensitive market to price. But several time ACL cannot reduce its prices due high cost of manufacturing. customer have high bargaining power in this industry but still the type of need of the customer sometimes are not able to cut off the prices.

### **Bargaining Power of Suppliers :**

The raw materials used in this industry varies from company to company. The supplier cannot hike prices to a vast extent as this will shift the demand away from their raw material. At certain times shortage of polypropylene film production and less supply ceramic can hike the prices. As most of the raw material requirement is fulfilled by imports, the trade laws and taxes also affect the price.

### **Competitive Rivalry :**

The capacitor industry is a vast industry with many big players, thereby increasing the bargaining power of the customers to easily switch if they are unsatisfied with the current brand. This industry is highly sensitive market to price and capacitance required. ACL is lagging in terms of marketing and customer attraction, and also for not being able to capture the need of the buyers at right time. Companies which had started later have gone in the top ten list in India.



**Political /Legal:** This industry is an electricity consumption sector for its manufacturing and production schedules, frequent power cuts and future scarcity of thermal energy can bring political and legal barrier in future if alternative sources are not found. Secondly the increasing tax rate might curtail more of their profits as tax.

**Environmental:** The monsoon season breaks the production line as demand is less by the buyers. This is because the production of electronic items is reduced due humidity and rain affecting the raw materials and degrading the value of electrons.

Disposing the MPP & BOPP films are hazardous to the environment and health.

**Socials:** As the electronic market is evolving with time the requirement for electronic elements and parts are having high demand. As people lifestyles are getting engaged with gadgets, the market has a higher scope of growth. Customers relationship build-up is done by ACL by providing quality products on expected time.

**Technical:** Top companies in this industry are using highly equipped technology, reducing labour requirement. This helps them to cut down cost. ACL is on the other hand still needs to get more technical advance for welding and shouldering as its little harmful while working on the old machines.

**Economical:** in India most of the raw materials in this industry is imported from China and other nations, hence the fall in India rupee has affected this industry in terms of purchase of raw materials at higher cost. Exports are also affected adversely, as any increase in cost will create demand for other company's products in different nation.



## COMPANY ANALYSIS



### **Strengths:**

Recruitment: Their recruitment and selection policy is just around two steps that is interview and on the job training from office level to worker level employees. Everyone is cordial and helpful and cooperative. There is less internal conflict or politics at play which is essential for conducting a productive working environment.

Leave Management: They Provide 44 days leave balance which include earn leave 20 days, Casual leave 10 days and Medical leave 14 days. So, employees have no worries regarding having leave.

### **Weakness:**

High Wastage: Many times, the good quality elements are rejected due to wrong assembling, broken can, lose wire and unhardened epoxy. Hence a lot of elements go waste.

Workers Turnover: one of the major issues for worker turnover is the low wages by the contractors. Every time new employees delay the work in their learning process.

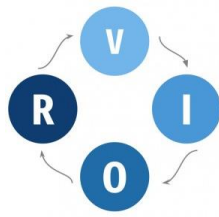
### **Opportunities:**

Fast growing electronic industry: the growth in electronic industry means in demand of home appliances, and this is where ACL has a niche in catching its customers. As more production of electronic appliances take place ACL will focus on expanding the customers demand by fulfilling the need of this industry and market.

**Threats:**

High competition: Capacitor industry is vast industry with lots of unorganised competitors already existing in the present market to capture the available opportunities at any time. Hence the competition is really high.

Inventory gets out date fast: after the manufacturing of element, it must get processed to poring and packaging within days of winding as the elements starts to lose it value.



## VRIO Analysis

### **Value:**

#### Brand image in terms of social responsibility

ACL play key role in social and economic development activity by providing free education & stationery to develop young generation in India and donating needs to poor through Variable charitable Trust Board.

#### Brand image

The brand image has been developed over a long time, and through continuous effort and quality product offering by the General Electric Company

#### Relationship with suppliers

The company's relation with dealers and suppliers is particularly string and based on strictly followed standards and criteria

This is a valuable resource for the company that allows the Company to exploit further opportunities in different regions and countries globally

### **Rarity:**

#### International presence

The global presence since 2013 has allowed the ACL to build an expanded consumer base and earn revenue through multiple regions.

This has given the company not only higher financial strength but also higher cultural exposure and international recognition.

#### Problem solving skills

The ACL fosters an organizational culture of problem solving amongst its employees and management. This allows higher teamwork and saves employees interest to be in the company for long run. A good employee motivation in terms of safe work place and treating employees with respect, has led to higher productivity at each level, which leads to competitive advantage and benefit for the company in the market place in the short run and the long run.



## **Imitability:**

### Quality product offering

ACL offers high quality products to consumers that have been a source of the brand appeal. The high and consistent quality leads to repeat purchases, and increases consumption of ACL's products.

This is an inimitable resource for the company as the high quality, and specific of prediction are known internally to the top management of the company only.

### Customer experience

ACL provides a unique customer experience to the customers. The company offers customers high brand engagement with the experience that is memorable, and relevant for the target groups. The engagement and brand experience for customers for the ACL has also expanded beyond the basic product offering, and evolved into offering and engaging consumers with relevant content generation that allows the brand to increase its equity.

## **Organization:**

### Employee training

The company provides in house trainings specific for different job roles and job designs to its employees which helps them in achieving their desired job responsibilities. The training provided by the company refines individuals not only for their job roles and professional growth, but also towards personal growth and development

The training and investment by the company in individuals leads to strong organizational commitment, and is a valuable competency in allowing the company to benefit through a strong and committed workforce.

### Production capacity

ACL has high production capacities.

The brand supplies products globally at different location, in over 8 countries. The streamlined production process that employs effective and efficient operational costs and inventory management systems provides a unique edge and competitiveness to the ACL. This in turn becomes a non-substitutable advantage for the company that allows it to explore new regions efficiently as well.



## DEPARTMENT ANALYSIS

### **1) FINANCE:**

Amit Capacitor Limited authorised share capital is INR 3.0Cr. and total paid-up capital is INR2.46Cr of the overall company.

### **2) HUMAN RESOURCE:**

ACL do not have a lengthy hiring process like most of the companies do. In the administrative department the hiring process is done just through simple interview and qualification verification.

ACL also hire freshers and provide all type training for lower level machinery operating and manual work to all its employees. The company trains all its employees with all sort of work as absence of few employees must not curtail the production.

There is no objection for random holidays and long leave for employees in ACL as it hires temporary employees through contractor to fulfil the gaps. The employees who are settled in Goa or are from nearby places or the employees who like taking frequent offs in middle, work longer in this company. Other than that, the company has high employee turnover due to low wages.

Employees most offend get on the job orientation and training, and this improves communication and team build up amongst workers for job completion.

#### Employee motivation

ACL listens to staff suggestions and opinions, but also to empower staff, accept their constructive criticisms and use their suggestions in daily production process. ACL tries change the traditional ways of doing things. As far as staff motivation is concerned, the biggest challenge the company tries to do is to stop focusing on problems and the guilty party and start looking for those responsible for things gone right.

Today's employees want a respect that can be seen as involvedness in decision that will affect them. Listening to the employees is a way of Motivation. All the motivation functions focus on one primary goal, to have some competent and adapted employees with up-to-date skills, knowledge and abilities, exerting high energy levels.



### Maintenance of employees

ACL provides ESIC benefits to fixed and casual employees, but the employees coming through contractor do not get these benefits.

Employees are not in fear of losing job or getting shouting for taking more than 7 days a month. Hence it is easier for the employees to be part of their personal life important tasks.

The employees also have a chit fund benefit in the company.

### **3) OPERATIONS**

As shown in the fig [1.1] before starting with the actual manufacturing raw material inspection is a very important task in capacitor making industry.

Step 1: All the material to be used in the step 2 must be checked well because the winding process is the actual making of the main core body of the element. If the raw material is up to the standard then the element also has a good capacitance.

Step 2: winding room has certain temperature maintained and everyday before starting the machinery it is sanitized. Dust and high temperature will not support the building in the film's roles. There are 4 machineries, each machinery produces 4200 elements in every 8 hours.

Step 3: the elements are metalized with zinc spray so that it gets further protected from losing its value.

Step 4: after metalizing is done the elements are heated for 8 hrs so that the zinc layer is properly attached to the elements.

Step 5: brushing of the elements is done so that all rough edges are removed and it becomes easier for testing.

Step 6: this step checks the value, voltage tolerance of the elements. Good ones are passed forward and rejected ones go to waste.

Step 7: copper pvc wires are attached to the elements through welding and disks are also attached with wires through soldering. Wires are cut in a machinery with predefined length as per the element. There are different types of cans and disks as per the customer demand.

Step 8: the disk and sleeves are assembled with the elements and it is moved forward for pouring.





Step 9: mixer of resin and hardener are filled in can to cover the elements are dried for further 8hrs. The epoxy mixture must be mixed in a percentage of around 3 parts of resin to 1 part of hardener.

Step 10: the element is one again tested and the good once are passed forward for printing.

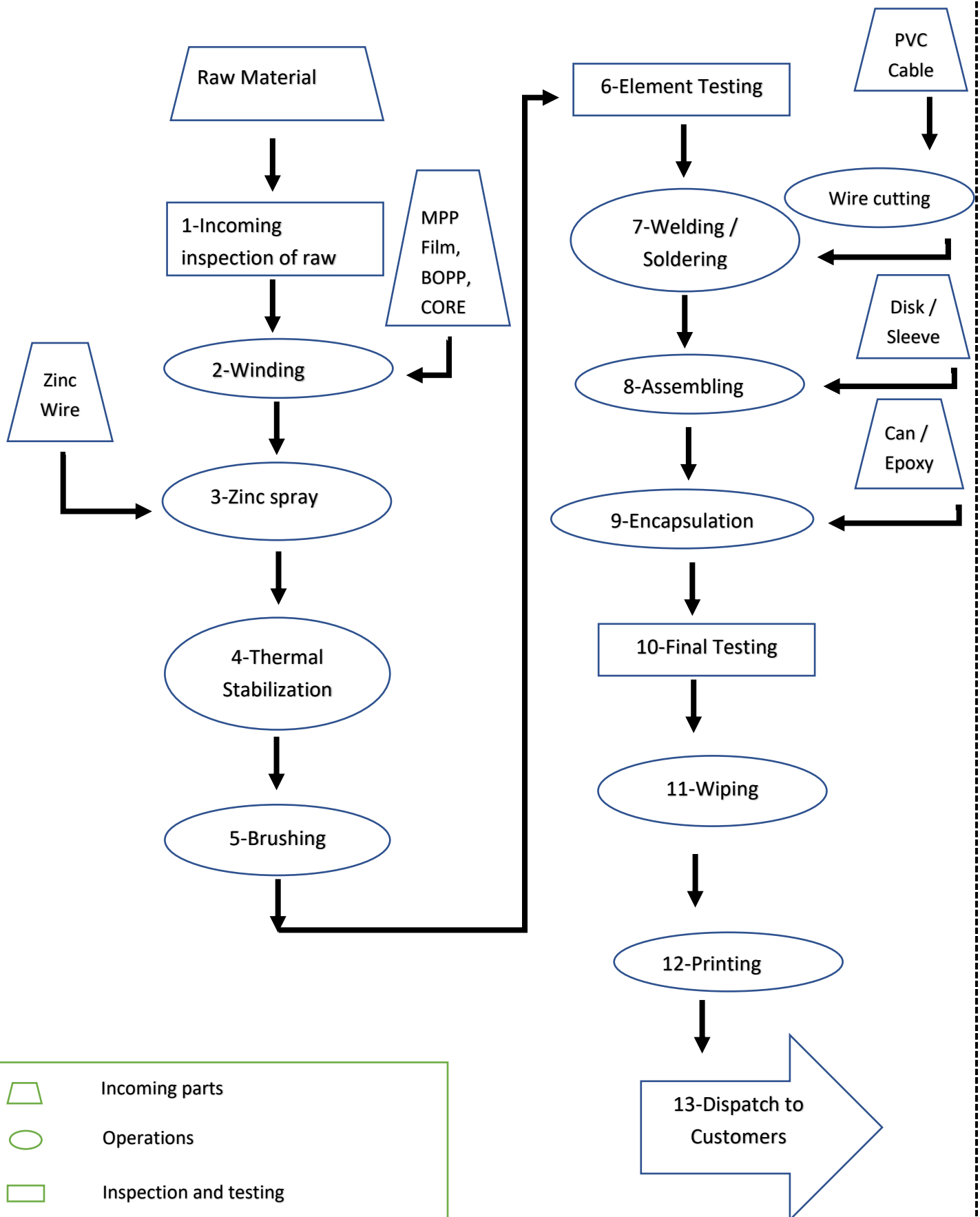
Step 11 -12: the elements are than cleaned and given for laser and ink printing. Laser printing is permanent, hence any mistake in printing will reject the entire stock of elements.

Step 13: the elements are than packed and labelled as per the customer needs and kept in warehouse till the logistics agency come and transport it to its customers.

Every month first day is the counting day of all the elements in every department. This process helps to report the inventory flow. All the waste is sold is scrape thrice in a month.



Flow Chart of Manufacturing Operations. Fig[1.1]



Incoming parts



Operations



Inspection and testing



Transportation and dispatch



#### **4) MARKETING STRATEGIES & CUSTOMER SERVICES**

ACL Highly deals with B2B customers and has a niche selected.

The customers can be divided into two different categories:

a) Original equipment manufacturer (OEM)

This category of customers is given more preference as they are the regular customer. ACL Pilerne unit deals with company like CG motors, Crompton Electronics, Silver Pumps & Motors and Vansal Electricals.

b) Resellers

There large number of resellers from all over India and Middle East nations buying the capacitors.

Manufacturing elements as per their customers needs is one of the main priorities to maintain customer retention and this helps ACL to get more orders.

Other than this, ACL Promote their product through business Fairs, Business relationship build-ups and business pamphlets. Customers relationship build-up is done by ACL by providing quality products on expected time. ACL always worked on Brand reputation maintenance.

#### **5) INVENTORY**

Raw materials and semi-processed inventory move in First In First Out (FIFO) method as the microns and elements lose value quickly due to humidity and moisture.

ACL works very close with their suppliers so that Raw Material arrive just two weeks prior the production is schedule. This is very relatable to just-in time theory. All the inventory is well planned and utilised.

All the inventory goes through proper batch card at every department for maintaining accuracy and exact details of the inventory. Inventory without batch card are offend tend to get mixed or not noticed on time, wasting the elements.



## **6) PROCUREMENT/ SUPPLIES**

Supply chain functioning of ACL is looked by Fed Express. The company has tie up with Fed Express Logistics purchase and supply of resources. Before finished good is packed the packaging department makes sure that the elements are clean, well printed and labelled with right stickers. The dispatch bills are signed and kept with the security. The stock is packed and kept at the factory warehouse and from there it is supplied by the logistic company to different company in India and abroad.

The customers who are going to resell the capacitors have the final rates labelled on the packaged with copy of the bill, whereas the OEM customers get direct bills on delivery.

Sales returns are very less as quality management works well in the company.



### LEARNINGS AND CONCLUSION

Being in a company for 8 weeks, taught me a lot of theoretical concept in practical form. Maintaining a positivity in working hours is difficult when the production is at the peak level.

The communication of each department must be synced to each other as misleading or fault in one will affect all the other department.

Time management and stock tracking is very essential in this company because if the stock is left out without continuous process than the element will degrade. Problem solving and decision making are quick as the delegation of authority in work is smooth and effect manner.

ACL has a great opportunity for the people who are new and want learn something.