

TEKNIC ELECTRIC (I) PVT LTD, VERNA

SUMMER INTERNSHIP REPORT



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Declaration

I, the student of M.B.A. Part I of Goa Business School, Goa University, hereby declare that the internship project entitled “**Summer Internship Report at Teknic Electric Pvt Ltd, Verna**” has been prepared by me towards partial fulfilment of the degree of Master of Business Administration under the guidance of my faculty guide Ms. Priyanka U. Naik. This project is neither in full nor in part has previously formed the basis for the award of any other degree of either this University or any other University.

Date: 8th July 2022

Place: Goa University

Name: Caiado Rebecca Janet

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Acknowledgement

I would like to thank the HOD of Goa Business School For giving me the permission for doing my internship in this company. and for the constant support for this internship and helping all of us with asking different questions to the company officials. I would also like to thank ma'am Nutan Kelkar who is the person to report to, for constantly guiding me about the functions of the company. I would like to extend my special thanks to Sir Mr. Jino Jeeth and the staff of Teknic Electric Pvt Ltd.,for always helping me when I needed help and solving all my queries and doubts. This internship has helped me a lot to know about the way the company's function on a daily basis according to the different schedules. This company has very good staff, who help you at any time possible and solve our doubts and difficulties. I'm very grateful to be doing my internship in this company.

I was able to understand all the functions because it was explained to me in the simplest language and they made sure i understood everything and were open to clear my doubts.It was really a great experience for me personally.

Internship Certificate

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Executive Summary

Teknic Electric Pvt Ltd is the leader in switchgear and Controlgear Products and also manufacturer of electro-mechanical devices It has branches across various states in India as well as Countries worldwide . The Goa Plant However only deals in making Control Stations and Enclosures, Pilot LOne, Actuators , Contact Elements , etc.

The company has different representatives handling different departments. This report states the process of a particular product from start to the end and also the functions of each department with respect to the roles and responsibilities.

It also states the Industry, Company and department wise analysis and my learning derived

Description of the project

Having Internships is an integral part of the MBA degree requirement, in order for students to take real life exposure of the activities of the organisation and their functioning. It originated as the course requirement of the MBA program. I hope the report will give a clear idea about the activities of Teknic Electric (I) Pvt Ltd.

Methodology

Data Collection: Both the primary as well as the secondary form of information was used to prepare

the report. The details of these sources are highlighted below:

(a) **Primary** Source I have collected primary information by interviewing employees, managers and also supervisors/operators and by observing various organisational procedures, structures. Primary data were mostly derived from the discussion with the employees of the organisation.

(b) **Secondary** Source I have elaborated different types of secondary data in my research. Sources

Like the internet and reference to other websites, data is mostly considered as a secondary source.

There was some information that had to be kept confidential and so the staff were unable to give me the proper information on certain aspects but I'm highly grateful because they tried their best to deliver the information and inputs to me

Profile: Company Overview



Teknic's main mission is to provide the highest standard of products to our customers.

TEKNIC has been in business since 1971, manufacturing quality engineering plastics components for Philips India. Since then, TEKNIC has been the leading supplier of such components in India. The company started manufacturing push buttons and pilot lights in 1980, and in 1984 introduced a metal and plastic range. The range has international approvals, namely UL, CSA, VDE, IEC. In the late 1980s, TEKNIC began manufacturing aluminium/plastic enclosures. All of the enclosures are designed to be dust and moisture-tight.

As regards enclosures for elevators, TEKNIC supplied the first pit switch to OTIS in 2000. Since then TEKNIC has supplied these switches to various companies in INDIA e.g. OTIS, KONE, THYSSENKRUPP, SCHINDLER, FUJITECH etc. In 2011, after rigorous testing by SCHINDLER Locarno, TEKNIC started to supply SCHINDLER and continues to supply different types of enclosures till today.

Head Office: Bandra (East), Mumbai – 400 051 and **Branches in:** Bangalore, Chennai, Mumbai (Mahim, Mumbai-400 016), Kolkata, Pune

Teknic works with latest technologies to give its users sustainable, eco-friendly and efficient products



Group Companies in india : Teknic Euchner and Teknic Electromeconics

All Products have International Approvals viz., UL, CSA, VDE, ENEC.

Competitors of Teknic Electric Pvt Ltd.



It has also partnered with the best in the industry to give its clients a wide range of control gear products such as:

- Cable conduits/cable trays, Industrial plugs and sockets, Cable drag chains, Tower lights, MPCB, Load break switches, Distribution assemblies and cable reets.



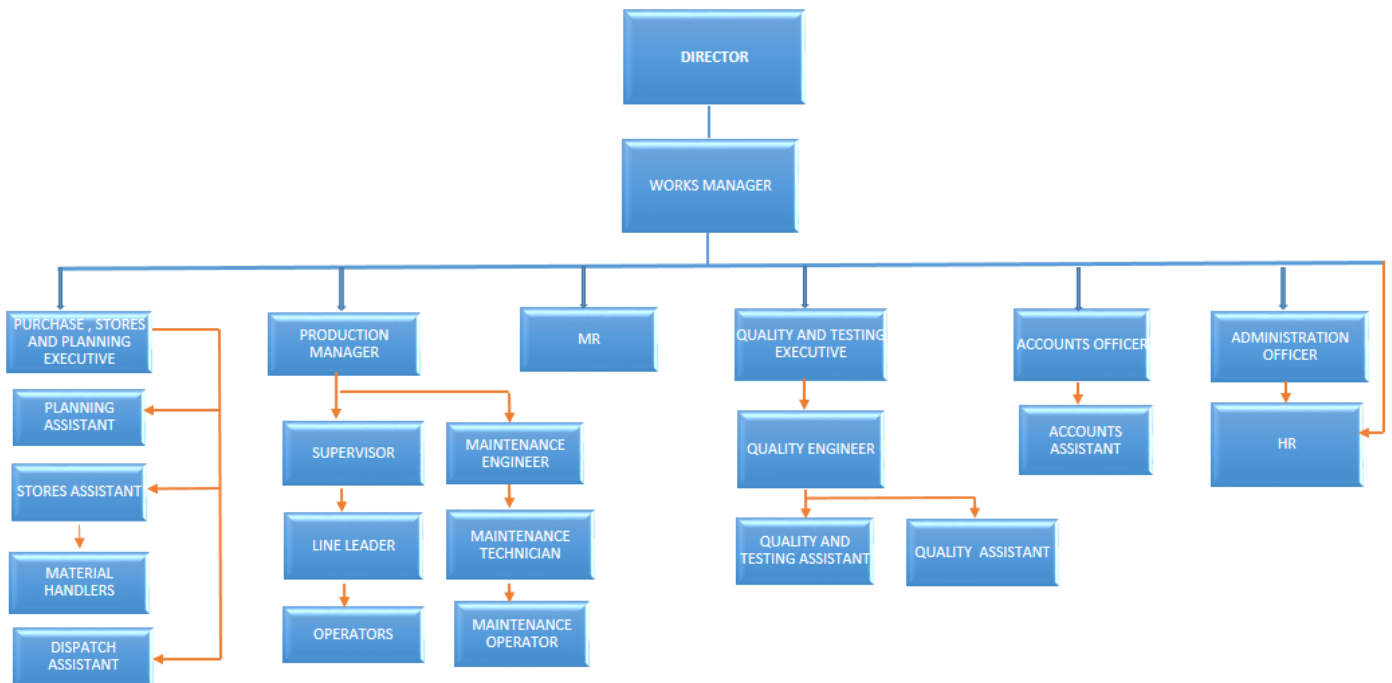
The Goa Plant only deals in Enclosures and Control Stations, Pilot Lights, S1/S2 contact elements, Push buttons, actuators and moulding is done only of plastic components and metal

items are fetched from other branches. Soon Goa is going to start the extruder machine and start manufacturing its products .



Apart from this , Goals plant manufactures sub assembled products and small components that are sent to the Head Office for final assembly

Organisation Hierarchy Chart



Company Policies

Teknics Environmental and Safety Initiatives	
Environmental	Safety
Plantation of Coconut Trees, Mango, Neem and Green Carpets Lawn Covering Area 475 metres sq	Proper induction for all employees on safe work practices
Rainwater harvesting - rooftop rainwater filtered and reused for plantation and gardening. Tank size is 78000 litres	Periodic training
Drip and sprinkler irrigation system for water conservation	Committed for above cause and ensure continuous improvement

Teknic Electric- Quality Policy

Teknic Electric (India) Private Limited, Goa is involved in: Manufacture, Export and Supply of Control and Signalling Devices, Enclosures, control accessories and cable drag chain., and is committed to continually enhance customer satisfaction by:

- Understanding customer needs with products that meet customer requirements as well as compliance to applicable regulatory and statutory requirements.
- Delivering consistent and reliable quality products and services to our customer in time
- Increasing value derived from all interested parties through continuous interactions with effective monitoring
- Developing employee motivation and skills through regular trainings and teamwork
- Proactively managing identifies risks and issues and seeking opportunities of continuous improvement for up-gradation and manufacturing methods and resources.

Industry Analysis

PORTERS 5 FORCES ANALYSIS

1. Threat of New Entrants

Ans. Low to Medium

Since Teknic has been well established for more than 50 years, it has established its brand image in manufacturing high quality products at cost effective prices. It is very difficult initially for new companies to enter into the field of switchgear and control gear as there are already high competitors with high numbers of loyal customers, diversified products. In case new entrants enter as everyone is goal oriented, they will be facing problems in recovering customers and establishing themselves. High capital requirements are also required to set up the company.

2. Bargaining Power Of Suppliers

Ans. Medium

Customers bargaining power is medium as they slowly negotiate with teknic to a desired price ,There are many suppliers available in the market but however the Goa Plant has very few suppliers specially. This industry helps companies to experiment with product designs and customizations in order to find cheaper suppliers of raw materials. The suppliers finally agree to the negotiations provided by the company decided mutually by bth oarties

3. Bargaining Power of Buyers

Ans. Medium

It is a natural tendency to get products at lower prices. So buyers / customers also bargain for a lower price. The customers rarely switch to other companies, given the limited new entrants. The switching of products are low for the customers and they can compare with existing brands that offer them higher quality products than their original Company. However, this power is moderate as customers also rely on their loyalty for a Particular brand and the relationship they have built over the years. The rapid innovation and customisation of this industry has helped companies secure their loyal customers and create a wider base of prospective customers.

4. Threats of Substitutes

Ans. Medium

Product differentiation and customisations are important in order to differentiate yourself from the other competitors' products. Teknic offers products at lower and cost effective prices than that of its competitors who offer at higher prices

5. Competitive Rivalry in the Industry

Ans. Medium,

High intense competition because companies like ABB, Siemens, Schneider , etc. , Since teknic is now well established it is itself a competitor to these companies and new companies coming up. The rivalry between the industry players is considered medium to high when there are many competitors in a fragmented market, all of which offer similar products and services. Players compete by pricing their products in a way that is advantageous to them. Consumers face negligible switching costs between companies. In a low-competitive industry, there are few dominant players who offer distinctive products and services. This leads to healthier profits and a more sustainable competitive advantage for businesses in these industries. Teknic also invests a lot into their R and D department at Mumbai in order to diversify and find new ways to stand out from competitors, making use of technology and keeping up to trends and customers' requirements should be their utmost goal.

PESTLE ANALYSIS

Political	Environmental	Social
<p>Elections and political trends and regulation trends</p> <p>□ Inter-country relationships</p> <p>Make in India. Government taxation policies affect the cost of the input products hence affecting the final price of the products. The prices increase or decrease based on the taxation policies of the government. Government should help</p>	<p>Including being affected by unforeseen circumstances like a breakdown, fire, global pandemic, emergencies, natural calamities that affect the industries. A breakdown can be avoided and be alerted but a natural calamity cannot be but precautions can be taken.</p>	<p>People seek for good quality products, reduce wastages, and conduct things for the society and members.e.g. Blood donation camp, safety week, vanamahotsava, etc</p> <p>The Teknic Head Office together with other branches contributes towards CSR.</p>

industries like these in order for Ease of doing business and also help new companies while setting up		
Technological ERP System, online consent management and monitoring system, Goa Online for statutory and legal compliances. Technological advances have been constantly affecting such industries for Eg. Initially there was manpower used machines and now all manually. They need to keep up with technology and software upgrades	Legal Factories Act and Boilers are highly influential for manufacturing units. Payment of Wages Act, PF, ESIC Act, employee safety, maternity benefit act, payment of bonus and gratuity act, etc These are all applicable for a manufacturing unit and employees and workers/labourers.	Economical Increasing inflation rates, and people tend to look for substitutes. Higher interest rates and taxes can affect the cost of capital, highly increasing the manufacturing cost making products costly in the market. It hampers the buying capacity of customers

Company Analysis

SWOT ANALYSIS

<p>STRENGTHS</p> <ul style="list-style-type: none"> ● In house ToolRoom and Moulding ● Cost Effective Products ● Optimum use of Quality Control and Assessment to get out the best product to deliver a good quality product ● Immediate action taken related to complaints ● Employees and workers enjoy a good working environment ● Returning customers ● Product Customisation 	<p>WEAKNESSES</p> <ul style="list-style-type: none"> ● Single Suppliers ● Few Local suppliers ,resulting in ordering items from outside Goa. ● Manpower Shortage especially in this plant because in the location it placed in ● Shortage and delay in receiving Raw Materials
<p>OPPORTUNITIES</p> <ul style="list-style-type: none"> ● Being an independent entity, there's scope to increase product lines and expand ● Setting up a new production unit ● Extruder machine will generate more sales once installed and it's a continuous process ● The Head office R and D department is highly invested for delivering new products in the future 	<p>THREATS</p> <ul style="list-style-type: none"> ● High competition in the Long Run ● Stricter Government Policies ● Threat of new entrants

VRIN ANALYSIS

- **Valuable-** Yes

Teknic is a market leader in its sector of switchgear and controlgear and has global presence across various countries. The brand image has been developed over a long time and through continuous effort and quality product offerings.

Teknics products are a valuable resource as these are highly differentiated. This makes the perceived value for these by customers high. Customers then prefer to buy the products as they are cost effective and value for money

The employees are also loyal, and retention levels for the organisation is high and training to both operators and employees is the colonies motto as it values its staff

Teknic has an extensive and structured distribution network. It can reach out to more customers and this can in turn increase profits.

Teknic invests a lot in their research and development to develop newer and more environmentally friendly products.

- **Rare- Not Really**

The products are found to be not rare as identified by since these are easily provided in the market by other competitors as well.

The distribution network of Teknic around the globe and locally is a rare resource because it takes time to establish yourself at this level and so new entrants will find it difficult.

- **Inimitable- Yes, but each product has its own uniqueness**

Rosenberger offers high quality products to their customers that have been a source of brand. Brought them to where they are. The high and consistent quality control and assurance generates repeat purchases and builds trust. But the products are not that costly to be imitated by competitors and new entrants as well if they invest a significant amount in research and development.

The distribution network of Rosenberger is also very costly to imitate by competition. This has been developed over the years gradually by Teknic and competitors will have to invest a significant amount if they are to imitate a similar distribution system.

- **Non - Substitutable- No**

Teknic invests a lot in optimum use of quality as well as training to employees. There will be a lot of other companies doing the same. They will also be having a name globally and known for their products which will be at least similar to one another

Departmental Analysis

Production Department

Without machinery and equipment, an organisation cannot function. Stated below are the main machines used to get Teknics well known products.

- **Injection Moulding**

Moulds are manufactured in the Tool Room, they look after manufacturing as well as maintenance of the moulds. Pressure is inserted onto the material that is then transferred to the mould in order to get the desired shape.

1. Fanuc
2. Engel
3. Arburg



Products Manufactured:

A. Contact Element

Types: S1, S2, EC1, EC2

B. Actuator

Types: Flush Actuator, Mushroom Actuator, Selector Actuator, Key Selector Actuator

C. Illuminated Actuator

D. Control Stations, also called Enclosures

Types: 1-6 way, cover ABS, PC (yellow and white), 1-6 way housing, ABS, PC (Black)

E. Pilot Light

The Bombay unit has a separate and large unit for Elements production

The Goa unit only deals with manufacturing and moulding and sends it to Bombay without Assembly. The Products that are outsourced are only Plastic and not metal.

MOULDING PROCEDURE



Records:

- GEMBA DOCUMENTS
- Job Cards
- Work Instructions
- Daily Planning Register
- Operator Skill Matrix
- Preventive Maintenance Card

Documents/ Data that needs to be recorded

1. Excel sheet ,records cycle time of various machines, it's recorded by operators that are assigned to various machines.
2. LR System (Infor LN)
3. Register for recording daily production for the day.
4. Trial Record
5. Machine wise planning

ASSEMBLY PROCEDURE**Records Maintained:**

1. Gemba Documents
2. Job Cards
3. Work Instructions
4. Daily Planning Register
5. Operator Skill Matrix
6. Preventive Maintenance Card

Procedure for Manufacturing of:**A. Pilot Light (3EPLBR/2PLBR)**



COMPONENTS:

- 3EPLER/3PLBR Assembly (WITH PRINT)
- PCB-LED Assembly
- Common/ Dome Lens
- AEG O Ring
- MTL Springs
- Lamp Holder Ring
- Diffuser



Process : Pilot Lights

- Workstations checked, 3EPLBR/3PLBR lamp holder assembly for defects including printing.
- Place spring inserting fixture inside the lamp holder fitting and insert springs.
- Insert the PCB-LED assembly in the lamp holder through the groove.
- Place Lamp Holder Ring on the Lamp Holder and press the ring using fixture
- Set the AC/DC indicator knob to 1 for AC and 2 for DC
- Set the voltage according to the PCB voltage and select the desired voltage on the indicator using the variable selector knob
- Check the consumption by inserting lamp Holder assembly in the tester till double low of Led
- Insert Diffuser and AEGO ring in common lens. For 3plbr it's lens used and 3eplbr common lense and diffuser is used
- Tighten the lens to the lamp holder assembly
- The first 5 self approve to Quality, if found OK bulk production is done and then sent for packing

B. S1/S2 Contact Element



COMPONENTS:

- S1/S2 Cover with Sub Assembly
- S1/S2 Housing
- S1/S2 Slider Sub Assembly
- S1/S2 Left Contact
- S1/S2 Right Contact
- S1/S2 Fixture

Process: S1/S2 Contact Element

- Visually Check all the components for any defects. Place the S1/S2 Slider ,NO/NC Left and Right Contacts In S1/S2 Housing Respectively.The S2 Housing Assembly is placed on the **Toggle Press Fixture** & Press it, so that the NC left and right contacts fix properly on Respective Slots.
- The assembled S1/S2 are pressed inside the fixture as well as the contacts and then aligned to their respective covers and housing.
- The S1/S2 Element, contact Element is removed from the fixture to check the slider for free movement.
- The required Batch Code on the element is printed using the **SEALING MACHINE**. The 2 PIN & 4PIN holes are sealed on either side of the element using the Sealing Machine.
- Checking of sealing on both sides & also pressing the Slider for free movement is conducted.Test the Element using **Continuity Machine** by placing the Contacts of the Element on **Machine Contacts Tester** , it should give a beep sound with an Indicator Glow.
- In case of S1 Element Indicator will GLOW and will GIVE BEEP SOUND when the Slider is pressed or else it is FAULTY. For the S2 Element, Indicator will NOT GLOW and NO BEEP SOUND when the Slider is pressed or else it is FAULTY.

- Items are then keep for manual inspection by the Quality Department and then for packing

Tool Room

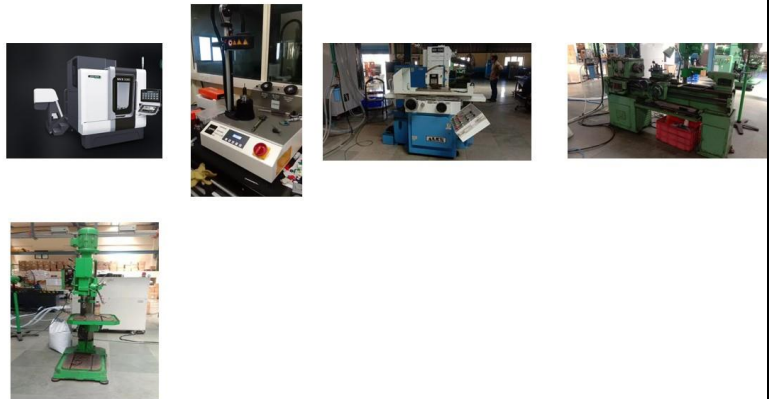
Handles:

- Materials from out. MS (Mild Steel)
- Generate the design to create the mould
- The Mumbai Plant sends the Product Design to the Goa Plant

There is 1 Programmer and 1 Designer who is incharge of the tool room along with other personnel.

Machine used:

1. CNC- Computer Numerology Control
2. Grinding Machine (Surface Grinding)
3. Lathe Machine (Job Turning)
4. Drilling Machine and Milling Machine



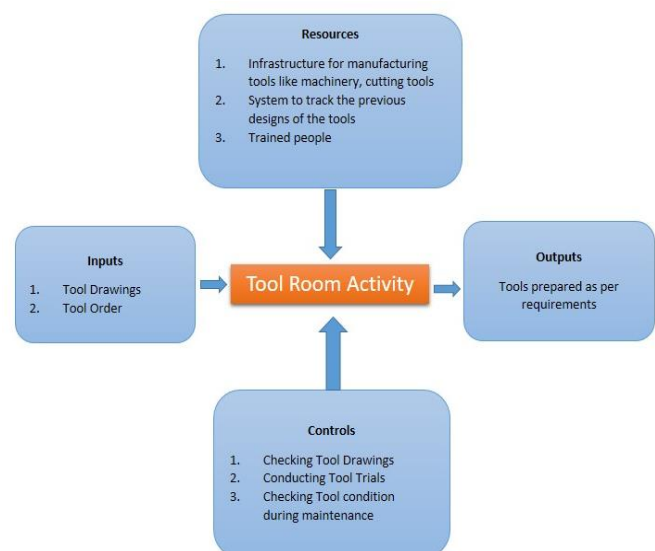
Softwares Used:

- 1) Solid Works, **Purpose:** Designing
- 2) Work NC, **Purpose:** Programming

Objective is to ensure the tool manufacturing activities are carried out as per procedures such that the tools meet with specific requirements of quality and delivery

Tool Room Activity

1. Tools for New Product Designs
2. Tools for Replacements
3. Tool Planning
4. Inspection of Material



5. Tool Manufacturing
6. Tool Trials

Records required to be maintained

1. List of tools
2. Preventive Maintenance Chart
3. Preventive Maintenance Checklist
4. Tool History Card
5. CNC Milling Process Sheet
6. Tool Trial Component Inspection Reports

Documents

1. Granule Mix up chart
2. Flow Chart for moulding
3. Process selling chart for moulding
4. Drawings

Accounts Department

1. Verify cost bills that includes checking their prices, Purchase Order, signatures and approval from the works manager that is then sent to the head office in Mumbai for payment
2. This is then shared with the purchase department and also with the suppliers
3. Sales /Accounts Assistant handles Petty cash related matters in terms of Accounts in this department with also managing sales and dispatch related responsibilities

All the main accounts, Book of accounts and other related items are managed by the HO that also includes salary to staff. The main decisions are taken by the Head Office in Mumbai and they also manage all the companies funds

Purchase Department

The company has existing business workers who they have worked with before. If a new business partner emerges and wants to contribute towards the company , the head based at Bombay has to approve of this business partner first and only then can they move ahead with

them . A code is generated then for a new partner. Codes are given to each business partner which are then entered into the system for easy access by just pasting the code.

The Purchase Order is issued on consumption basis

Raw Materials and Cost Items. Cost Items include Machine Parts

The PO is issued and then they provide an invoice for payment and then process it to the Accounts Department.. An advance is required for only cost Items.

Normal Items, regular items are Raw Materials

Sub -Contracting, it's in terms of assembly where the company only manufactures and then it to other plants

Purchase Return : This is generated when items /material are rejected from the Quality Department and returned, to which the purchase department generates a Purchase Return.

Main Objective is to check consumption, material shortages before actual shortages occur which would then result in the line stoppage and result in action and firing.

Departmental Procedure: Purchase

Objective

- Minimise line stoppages to maximum 15 working days
- External provider lead time reduction from 45 days to 30 days
- Turnaround inventory ratio: sale value/inventory value
- Cost saving on special externally provided product and service purchase.

Procedure

Supplier Evaluation selection and control

The purchase head evaluates new suppliers. This person/individuals has/have both the responsibilities and authority to approve and disapprove suppliers.

The purchase head maintains an approved external supplier list which lists all evaluated and approved external suppliers, their approved status, and the scope of their approval.

RECORDS

- Purchase orders (electronic form - ERP0)
- Supplier Evaluation cum Registration form

- Supplier Corrective Action Request (SCAR) Log
- Job-work challan (electronic form - ERP)
- Master List Of Approved External Suppliers
- RM MOQ Chart
- Requisition Slip
- Vendor ratings (electronic form - ERP)
- 8D Report

➤ FG Stores give it to the dispatch and then boxes are packed after quality check.

Usually customers prefer to club their separate orders and get them dispatched in the same day to save transportation costs to deliver on two separate days

➤ In case the company cannot manufacture the product due to shortages, instructions and directions are given to the Mumbai teknic Electric Plant to manufacture the product and send it.

Stores Department

Invoices of two types are created:

1. Consumables

Egs. Boxes, Labels, Inks (for printing on products)

2. Raw Materials

Egs. Moulding, Incoming Materials, etc

Departmental Procedure: Raw Material Stores

Objective/KPI:

- Prepare GIN within 2 working days on receipt of material from external supplier
- Maintain and Monitor List of perishable items
- Maintain FIFO
- Maintain list of Dead Stock

Procedure and workflow:

1. RM stores incharge receive the items/articles from various shipping carriers from external suppliers, he along with the stores personnel conducts an immediate visual examination of the packaging of each received item, looking for obvious

damages. If found, RM stores incharge informs the respective external supplier regarding damages observed by email and also notify the purchase head. The items are sent back to the supplier via purchase return in erp

2. The incharge then conducts an incoming receiving inspection for each package, check is the following contents against the supplier invoice for supplier and job work order for sub contractor on ERP:
 - Correct quantity received
 - Correct Articles Received
 - Obvious damages to items inside the packaging
3. On completion of this activity, the articles are placed in Incoming Inspection Rack for identification purpose, and incoming inspection quality personnel will place INSPECTION OK after articles are accepted or share communication for rejection and request the material in QUARANTINE rack for articles which have been rejected
4. For accepted articles, respective articles are placed in identified rack and labelled. Entire lot will be labelled with GIN details for identification. RM granules are shifted directly to rm granule racks. The Invoice will be stamped received with received date, then forwarded to purchase head for review and filling of respective GIN
5. Any received certificates of conformity, tests reports, certificates of analysis, etc will be forwarded for incoming inspection personnel for review who reviews these reports for adequacy to ensure they reflect the actual lot received. If there are any problems. Quality or Purchasing will notify the supplier to submit a corrected certificate.
6. All items are to be stacked to maintain FIFO and to maintained in a careful manner so as to avoid damage or deterioration
7. Items are issued to the sub contractor on the basis of job work challan generated to the erp software. The stores personnel relabel/rewrite broken packages for easy identification. No products/items are released for production prior to inspection. Items with a shelf life are placed on a single rack with the document MASTER LIST OF PERISHABLE ITEMS, based on the product guidelines

8. Tools received with calibration certificates or known to need calibration are submitted to the Quality Department for inclusion in the calibration records prior to delivery to the buyer

Records the Stores Department need to have at hand

- GIN (Goods Inward Note) (Electronic Form-ERP)
- Raw Material Requisition Slip - Assembly
- Raw Material Requisition Slip- Moulding
- Operators Skill matrix RM FG Stores
- Job Work Challan (Electronic Form- ERP)
- RM Stores list of Dead Stock
- Master List of perishable items
- Master List of Outsourced Process
- Work Instruction- Weighing and Labelling
- Work Instruction- Material Handling
- Material Location chart
- Factory Gate Pass
- Scrap Disposal Note

Raw Material and Packing Unit

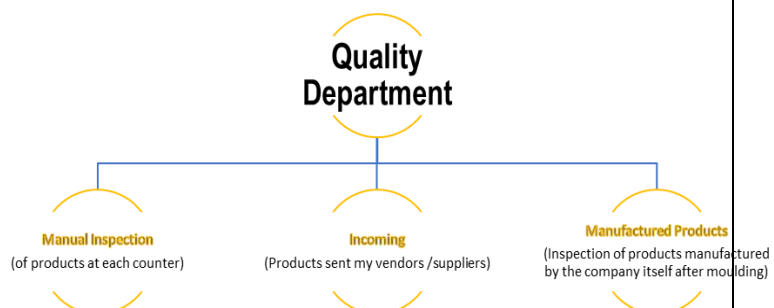
When the raw materials arrive at the gate, an LR copy and invoice copy is given to check the qty of boxes arrived, Cross checking with the invoice quantity and qty of boxes arrived as there have been instances when the suppliers send less.

Quality Department

This Department has 5 members collectively working together towards different quality management activities.

The products go through 3 filtration stages

1. Incoming. These are of two types
 - a. Inhouse Incoming (Internal)



b. Purchase Incoming (External)

2. Process

3. Final

Even after this process still a problem is found then an Alert is made to reduce rejection. The Quality alerts are created and displayed on the board for everyone to see. It is provided for prevention of such products being rejected/damaged or small errors. It's only created after you get a customer complaint.

Lab Testing for Effective Quality Control

This is done upon the request of the customers who would wish to get a double check so as to ensure their product stands out and be the best in performance .Stated below are the different Tests conducted on products

Types: HV Test, Resistance Test, Burnt Test, DC 13 Test Batch, AC 13 Test Batch, Endurance Test Setup, Impulse Generator, Thermal Chamber , Humidity Chamber, Temperature Rise Test Setup, Blow Wire Test

Purposes: to check the voltage of the product and at high voltage how it performs , to check resistance and if the product will melt, if it burns the tissue paper it's defective, if not it's good to go., to find out whether an application can withstand the processing load it is expected to have to endure for a long period.

Departmental Procedure: Quality Department

Objective:

complete incoming inspection of articles, in process and final inspection within 48 hrs after GIN/GpN of part/raw material/ plastic moulding/ sub assemblies and final inspection of plastic moulding, sub assemblies , main assemblies.

Procedure: Incoming Inspection (Plastic Components: Moulding)

The production department offers the incoming goods representative plastic moulded parts for inspection after completion. They collect specifications, drawings, relevant inspection standards, critical dimension lists and defect libraries required to inspect these plastic components, then study and understand the inspection standards, and carry out the inspection accordingly. Acceptance Test Certificate (Inspection Test Certificate: Plastic

Components) is issued to issue the first day batch of moulded plastic parts, if it meets the requirements, the next day production batch GPN is issued with the visual and functional test. In the event that they do not meet the requirements, this is sent to the manufacturer to make the necessary correction via the Goods Receipt Complaint Form (Incoming Inspection Rejection Sheet - Plastic Components). That lot of material was rejected by the ERP system and was placed in the Quarantine Inventory..

Incoming Inspection (Externally provided Parts and Sub- Contracted Parts)

You get the Raw Materials from the Local suppliers in Goa, the inspection report is to be prepared. If Few errors are found in the product a functional trial is conducted. But if the defect was observed at the incoming itself then there's a chance to reject it at that stage.

If it is above the AQL standard you reject the product and term it as NOT OK

Test certificate is given by the suppliers to check the requirements of the product to be eligible or no, on checking an Incoming Inspection Test Report is prepared

In- House Item Inspection

The processes are the same after receiving first 5 pass from the prediction, he contacts the inspection as per the requirements and dringa/samples

Final Inspection

The same processes apply here to where it's checked as per parameters. The person in charge also handles customer complaints and replacements

Records

- Inspection Test Certificate
- Supplier Rejection return note
- Deviation Request Form
- Master List of Calibration Instruments
- In-process inspection checklist
- Final Inspection Rejection sheet
- Incoming Inspection Rejection Sheet- Plastic Components (Moulding)
- Assembly Line In house housing moulding rejection

Sales, Order Planning and Dispatch Department

This department is handled by Sarika Ma'am along with 3 others who deal with dispatch related matters too.

This is then fed into the Infor LN system, punch the order and send it to the sales department for confirmation 20days to a month's time is given max. Eg. Pilot Line requires 20 days for preparation whereas Enclosures will require 1 month.

Departmental Procedure: Sales , Order Planning and Dispatch

Objective/KPI:

- Order to Deliver= 14days
- Release of weekly planning report
- Maintain FIFO for FG Articles
- Monthly sales turnover trend chart

Procedure

- Accounts assistant communicates the received customer order thru mail to planner who checks, validates and defines customer order and delivery date via sales order number in ERP and communicates to account assistant for confirmation of order rates, discounts, address.
- Accounts assistant will send Order Confirmation by Email to customers(OEM's and Dealers). In case of a new customer, if no response is received within 2 days it is assumed that the Sales Order is accepted and further processes are carried out. For existing old customers, orders are processed on the same day.
- The Planner checks FG stock for availability of received customer order, if respective stock is unavailable or insufficient in FG stock, they release production order. Planner will maintain safety stock for FG articles in the software.
- Also shares priority list of product to manufacturing team based on customer requirement .Dispatch team will get material ready and handover the signed packing slip to the account assistant.
- Account assistant will receive a signed packing slip, verify packing slip data with the ERP system, if tallies then make an invoice. If it does not tally forward to

Planned with remarks for clarification/rectification. On receiving confirmation from planner, AA generates invoice and E-way bill, forwards to planner for further processing/dispatch. Before dispatching consignment, planner along with dispatch team will check all required documents are generated or attached with forwarding note and pack dispatch material

Final Dispatch of items

- The planning and dispatch team will follow up with Transport to collect the consignment note or LR, and then forward the hard copy/soft copy to the account assistant. In the event of an observed delay in the delivery of orders, notify and obtain consent from the customer and take appropriate action to meet the customer's requirements. The accountant keeps a copy of the items sold, a triplicate copy of the invoice along with the E-Way invoice and the shipper's LR copy. The account assistant will send a triplicate invoice copy to the head office for record purposes.

GST – 18%

CGST- 9%

SGST- 9%

Records

- Customer PO
- Sales Order
- Production Order
- Work Order
- Packing Slip
- Invoice
- Dispatch Details (LR Copy)
- Work Instruction- Material Handling
- Weekly Planning Reports

Other Common Documents Maintained by this dept.

- Dispatch Stock register that records daily data of items dispatched'
- Daily Dispatch Data register.

Hr AND Admin Department

Departmental Procedure: Human Resources

Objective: To ensure employees as selected for evaluation based on defined criteria and are trained in respective function immediately or as early as possible

The Senior Account Assistant is responsible for implementation and management of HR Procedure.

Procedure in terms of: Candidate Screening

- Staff/Operator's requirement is verbally/in written through works Manager and after approval for respective function staff /operator, new requirement is generated and for which HR will take necessary actions to procure personnel resume/details for screening purpose and personnel who meet necessary requirement as per Employee Competency Criteria are selected for further proceedings/interview
- All personnel at Teknic Electric Pvt Ltd are hired by the Works Manager on the basis of their ability to perform acceptable work. It's done by comparing candidates' resumes, experience, application, etc against the job description requirements.

New Hires

- Register employee codes on biometric punches for new hires within 2 business days and keep records. New employees go through an induction training program that covers staff and operator training, including ISO 9001 training and training of quality policy by MR. The same orientation training is provided by the manufacturing head or supervisor for new operators. Orientation training must be completed within six days of employees starting date, and for existing operators as well.

Documents / Forms that the HR Manager ought to maintain at Teknic Electric Pvt Ltd

- Non- Conformity/ Corrective and Preventive Action Report (NCPAR)
- EHS Audit Findings
- Training Record and Training Attendance Sheet
- Training Effectiveness/Evaluation Form
- Biometric Punching Code
- Induction Training Programme- Operator and Staff resp.
- Application for Employment
- Employee Exit Interview Form

- Accident Register
- Work Permit

The HOD provides appraisal at the time of increment.,once a year

Staff and workers get compensation like yearly bonus, leave salary, incentives, gratuity given after 5 years, PF, ESIC, Labour Welfare Fund

Other Activities conducted are:

- Blood Donation camp
- Women's Day Celebration
- Safety week Festivals
- Employee of the year for both staff and workers
- Health checkup for workers once a yr
- Audit- MR examines monthly audits
- External Audits once a year by external heads.
- At the end of the month a PPT is supposed to be presented as part of the MRM meeting to know the progress of that particular department in that month

Contractors associated with the company

1. Chandrashekar Lamani
2. Pratiksha Enterprises
3. Active Secret Services
4. BR Industrial Services

Payment with respect to operators is done by the contractor who then proceeds to the workers.

Covid Obstacles Faced

1. Faced Losses
2. Alternate days production was conducted due to restrictions
3. Less staff as many were tested positive and the problem of transport of travel also arised.

Benefits offered by the company

1. Work from home during the lockdown
2. Payment towards covid positive patients
3. 300 n cash from total bill for birthdays

4. Accident compensation

Under contractor, workers can take monetary support

Staff get from HOD and deduct it from salary of interest for monetary support for weddings

12% employees PF, 13% employers PF, Employees .75 ESIC, Employees 3.25 ESIC

10rs employee labour welfare, 30rs employer labour welfare and Gratuity

Maintenance Department

A team of 4 look after the maintenance department, 1 being the head of department.

On breakdown of any machine that hinders the production, the production supervisor generates a Breakdown Memo.

Departmental Procedure- Maintenance Department

Objective: Complete all break down repairs within average 5 working days

Procedure:

1. The Maintenance Head maintains the cost of equipment. Also maintain a a ,list of external agency to support maintenance function
2. **Breakdown maintenance:**The head receives information regarding the breakdown of the equipment from any department via Breakdown memo.
3. In case the repairs cannot be carried out in-house the maintenance head forwards the issue to external approved agencies and coordinates for resolution with them till the machine/equipment issue is resolved.
4. Maintains list of breakdowns, monitors and analyses breakdowns and spares required for repair and the same needs to be shared in the management review meeting with other departments.
5. **Preventive maintenance:**the head identifies preventive maintenance to be carried out with respect to critical equipment whether it is weekly, monthly or yearly basis and maintains records. Maintenance head monitors, schedules preventive maintenance.

Records that have to be maintained by the Maintenance Department:

1. Master List of Approved External Services Agencies
2. Master List of Machines
3. Master list of Spares
4. Master list of Preventive Maintenance
5. Preventive maintenance card
6. Breakdown Register
7. Breakdown History Card
8. Operators Skill Matrix- Maintenance

Learnings Derived and Work Activities Assigned

1. Helped in the calculation of the monthly consumption quantity of each product. In order to know the consumption of each product for that month. This task was given under the **Purchase Department.**
2. Calculated the Overtime of Staff and Workers i.e Total no of Hours worked for females and males respectively., also calculated their total number of days worked for the entire month. (Males 12 hours and Females 8).
3. Reconciliation of the PF and ESIC of the workers/operators. It is needed to check so as to ensure that they receive the correct amounts

These tasks were given under the **HR and Admin Department.**

4. Production Department- Moulding Area

1. Filled out the production planning form for the daily production to be done for the entire day. Write out the focus products /items/parts for the day's production.
2. Created entries of items into the Excel sheet for daily moulding planning month wise that records machine time, records cycle time, no. of cavities of the product of various machines and other related items on an everyday basis and same into the register.
3. Reconciliation of the PF and ESIC of the workers/operators.

This industry comes under the monopolistic competition market structure category having few sellers but a large number of buyers. It has a Unit elastic demand as if the prices increase , the customers are still willing to pay for the products evn at this process because of how highly the quality is maintained at this company and the products are quite reasonable already.

I was able to analyse and relate to the terms taught to me in my MBA Course. From the prediction point of view I was able to relate about the machine time, cycle time, quality management and other related aspects. I was able to analyse why Quality is highly considered in an organisation, how fast you resolve issues and complaints of customers so that they return to you.

In the Accounts, Admin and HR in this company all staff multitask and handle different things so here accounts related aspects were divided among them at the same time when

they were handling other things like HR and Statutory Compliance related. Similarly there's one who looks after entire Stores as well as purchase Related so from getting the PO, to keeping a check for shortages or requirements. I learnt that how important customer satisfaction is for them it would be quickly resolving and responding to customer complaints and giving replacements. They have always aimed to provide the best cost effective good quality products to customers

The fixed costs of the company are: electricity and water payments, rent/lease, insurance and GIDC annual charges. Variable costs are salary, electricity and water bills, insurance, labour wages, etc. Each department has taught me its importance and specially how important it is to resolve any problems at the earliest

Working at the departments helped me get insights about the working of various departments and enhanced my knowledge about the same. On days I didn't get work, I would go talk to operators in order to know about the machines and assemblies and how they conduct it.

I've seen how time and effort is put into looking after customer complaints and quality assurance.

References

Official Website <https://www.teknic.co.in>