



Delta Electronics India Pvt. Ltd.
Rudrapur

EHS Handbook

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Delta Confidential



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Message From Factory Manager



“Safety” is prime, everyone know this slogan but question is, to obey this law from your heart. Simple example is, how many of us stop at Red light in late night period when no traffic police, wearing seatbelt and helmet even if no policing. Need to understand safety is for ourselves not for other person who in watching us to grab. Need to change the mentality and follow the laws defined for us. The message is very simple, need to educate ourselves for the surroundings where we are working , need to know Hazards and subsequent risk of work place to ensure safe operation & at the same time need to identify aspect and subsequent impact on Environment to protect society.

A small initiative with positive mind of frame can change the world. Let us contribute and live happily.

Manogya Kumar



Message from Quality Assurance Manager



Dear Colleagues

I would like to request all to take maximum advantage from this EHS booklet which is specially designed for your ready reference and record. By implementing a Safety Management System will allow our organization to take a risk-based approach to manage the identification of hazards that pose safety risks, accident and incident investigative processes & emergency response preparedness etc. and in the same time we should realize our responsibility towards environment pollution prevention & control and minimization of carbon emissions. Kindly actively participate & bring unsafe acts, unsafe conditions & environmental issues to the knowledge of EHS committee.

Happy Learning!

NC Sahoo

Strive for change, and pursue sustainability

Innovation

Create new ideas and take them to success effectively

Quality

Consistently deliver superior performance and pursue improvement all the time

Agility

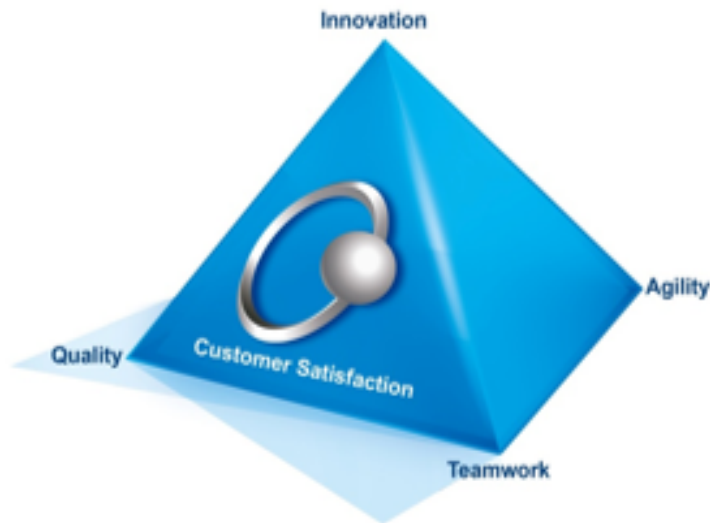
Identify emerging trends and act quickly to capture new opportunities

Teamwork

Fully leverage global value networks and collaborate to achieve mutual goals

Customer Satisfaction

Anticipate customer needs and exceed expectations





Corporate Mission

To provide innovative, clean and energy-efficient solutions for a better tomorrow

Delta's high-efficient products enabled electricity savings of **17.3** billion kWh from 2010 to 2015, resulting in lower carbon emissions by **9.2** million tons.



Delta's Solar Energy System Covers the 2009 World Games Stadium

Smarter. Greener. Together.

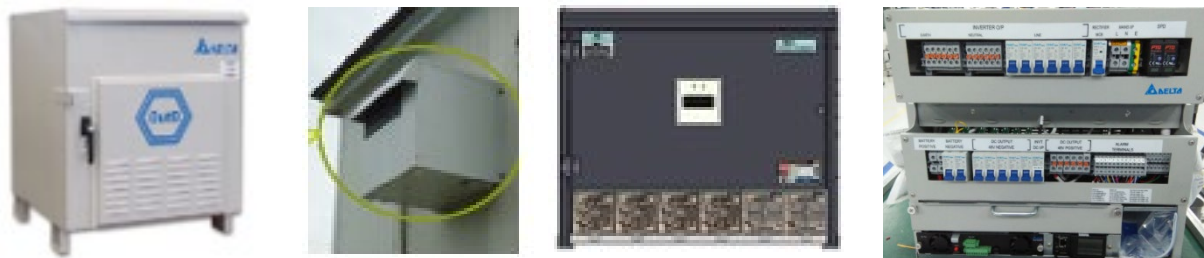


We believe in technology and collaboration and are dedicated to providing innovative and energy-efficient solutions. "Smarter" is the continuous improvement of power electronics technology. "Greener" is Delta's mission since our founding. "Together" is our business philosophy of building long-term cooperation with our customers and partners.

Telecom Power System



Outdoor Systems



Indoor Systems

UPS Solutions



Data Centre Infrastructure Solutions



EV Charging Solutions



**50kW DC Quick
EV Charger**



**25kW DC Wallbox
EV Charger**



**15kW DC001
Bharat Charger**



- Complete range of Energy efficient EV charging solutions with DC Quick Chargers, AC Chargers and Site Management System
- Convenient uses in multiple applications like Highway Service, Parking Space, Service Stations, Residential and Commercial Buildings.
- Maximizing convenience for system operators and EV drivers through smart network communication capabilities

RU



LCU



DiCa



ISU



Quality Policy

Delta Electronics India Pvt. Ltd. is committed to fulfil the needs and expectations of all stakeholders within the framework and strategic direction set by the management by complying with all applicable statutory and regulatory requirements. The activities shall be established and aimed towards continual improvement of its performance by timely delivery of cost effective products & Services, solutions of high value with latest features, meeting the requirements of our valued customers.

This shall be achieved by adhering to the Quality Management System.

The senior management is fully committed to the above and actively encourage a similar commitment by personnel at all levels of the organization to enhance quality management system.

This quality policy is evaluated as part of the overall review of the management system to ensure its stated objectives are met.

Date: 16/01/2019

A handwritten signature in blue ink, appearing to be 'R. Om Prakash', written over a horizontal line.

Managing Director
(R. Om Prakash)

Environmental Policy

We realize our responsibility and commitment towards establishing activities that helps in conserving nature and minimized resource usage, based on the business environment and the strategic direction. Our objective is to participate and contribute towards prevention and control of pollution within our premises, minimization of all types of waste generation throughout the lifecycle of the product and minimum use of natural resources.

The Management of Delta Electronics India Pvt. Ltd. are fully committed to the protection of the environment, prevention of pollution, compliance with current environmental legislation and fulfilment of compliance obligations

We, working in harmony, commit ourselves to continually improve the environment of our work place through

- Creation of awareness amongst all employees and other interested parties.
- Meeting the compliance obligation and other requirements.
- Control of pollution within our premises.
- Minimization of waste generation.
- Conservation of resources & basic amenities.

Date: 16/01/2019



Managing Director
(R. Om Prakash)

Occupational Health and Safety Policy (ISO 45001: 2018)

The management of Delta Electronics India Pvt. Ltd. is committed to provide safe and healthy working conditions to employees, workers, sub-contractors and all stakeholders for the prevention of work related injury and ill health. The Occupational Health & Safety (OH&S) management system reflects the nature and scale of the organization's OH&S risks and opportunities as per the strategic direction from management.

Health, safety and hygiene implementation is everyone's responsibility and each individual shall commit themselves and take steps towards a safe and healthy work environment, at each relevant functions and levels.

Delta is committed to the implementation of OH&S management system through:

- Promote safe and healthy workplace for all employees, customers, sub-contractors, suppliers and visitors.
- Prevention of injuries and ill health.
- Elimination of hazards and take actions to reduce OH&S risks.
- Improvement of OH&S Management System continually and ensuring that it remains relevant and available to all interested parties.
- Fulfilment of legal and other requirements.
- Consultation and Participation of worker / workers' representatives.

This policy is evaluated as part of the overall review of the management system to ensure its stated objectives are met.

A handwritten signature in black ink, appearing to read 'Om Prakash Ramamurthy', with a horizontal line extending to the right.

Date: 09/06/2020

Managing Director
(Om Prakash Ramamurthy)

QUALITY POLICY AND OBJECTIVES

Quality Policy:

Laboratory is committed to total customer satisfaction and continually improve the effectiveness of management system through reliable, accurate and prompt services in the field of calibration by implementing IS/ISO/IEC 17025:2017.

Quality Objectives:

- All measurement results are traceable to National/International standards.
- Laboratory ensure that competence, impartiality and consistent operation maintained.
- Upgrading the calibration facilities to meet the changing needs of the Customer.
- Implement risk based approach for prevention of undesired effects and promoting continual improvement.
- Provide timely delivery services (Maximum 2 days is to be taken for complete dispatch of instrument to the customer).

To achieve these objectives, the laboratory has implemented a detailed management system. It is responsibility of all personnel to familiarize themselves with the contents of management system and comply with them at all times.

Date: 11.03.2019


Plant Head (Manogya Kumar)

Energy Conservation :

- PV solar cells installed in admin block, Generating 9.8 kW, saving CO2 emission 8500 kg/year.
- Turbo ventilators improving quality of air & reducing temperature by 3 to 5 degrees energy (approximate 15KW/hour).
- Using ERS system in 2 burn in chambers, saving approx. 1,78,000 KWH per year.
- Automatic Power Factor Controller (APFC) PF of 0.99 saving electrical energy by 12 to 15%.



Water conservation :

- Recycled about 2837.45 KL of water through Sewage Treatment Plant.
- Zero discharge of domestic effluent to the public sewage from January 2009 to till date.

We are committed not to harm mother nature with our presence !





Know Your Standards



Participation in Safety, Health and Hygiene



- Participate in Incident Investigation
- Ask freely in matter of safety and hygiene .
- Identify hazards and associated risks
- Be the pillars to establish policies

Be the part of our
Occupational Health and
Safety Program Today

How to Deal With Emergency & Mock Drill

In case of fire 

DO NOT use the lift 

Use the stairs 

1 

DROP!

2 

COVER!

3 


HOLD ON!



CALM DOWN
Try to stay as calm as possible



INSIDE
Stay away from furniture, windows and lamps



OUTSIDE
Stay away from buildings, walls and power poles



Electrical Safety Do's and Don'ts

Do's:

- Treat every electrical device like it is energized, even if it does not look like it is plugged in or operational.
- Unplug appliances before performing any service or repairs on them.
- When working on electrical devices, only use tools that have official “non-conducting” handles.
- Try to limit the use of electrical equipment in rooms that are very cold or have a lot of condensation.
- When handling electrical equipment, make sure your hands are dry.
- If you spill any kind of liquid on electrical equipment, *first* immediately shut off power to the equipment via the main switch or circuit breaker *and then* unplug the equipment itself.
- Keep all electrical circuit contact points enclosed.
- Finally, if you are able to, work on electrical equipment with one hand while the other hand is out of the way at your side or in your pocket. This minimizes the chance of a current passing through your chest should a spark/accidental charge occur.

Don'ts

- First and foremost – don't touch active electrical circuits.
- Never touch electrical equipment when any part of your body is wet, (that includes fair amounts of perspiration).
- Do not store liquids of any sort near electrical equipment.
- If a person comes into contact with an energized electrical conductor, do not touch the equipment, its cords, or the person affected because the charge may pass to you. Instead, shut down the main power source via the circuit breaker and then unplug the equipment using a leather belt.
- Do not wear metal of any sort if you are working on electrical equipment.
- Also, do not try to poke, probe, or fix electrical equipment with objects like pencils or rulers because the metal in them can serve as a form of conductor.

RESCUER PROTECTION

CPR MOUTH BARRIER
(2 ONE-WAY VALVES)

VINYL GLOVES

ANTI-MICROBIAL WIPES

TIP: There are CPR Keychain Kits that include these items for protection from body fluids. Carry them with you at all times, either in your purse or with your keys.

SHOCK **BURNS** **FRACTURE**

THERMAL BLANKET

BURN GEL

CARDBOARD SPLINT

COLD PACK

WOUND CARE / BLEEDING

ANTISEPTIC WIPES
(ALCOHOL FREE)

GAUZE PADS
(SIZES 4X4 & 5X9)

TRIANGULAR BANDAGE

GAUZE ROLLS

BAND AIDS

FIRST AID TAPE

PARAMEDIC SCISSORS

TWEEZER

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Disaster Survival Skills, LLC

1 Get the right quantity of items you need for your family. Use our Family Disaster Preparedness Calculator, visit www.disastersurvivalskills.com.

Tweezers

Thermometer

WHAT SHOULD BE IN YOUR

FIRST AID KIT?

Emergency Phone Numbers

Allergy Medicine

Rubbing Alcohol

Cotton Balls

Adhesive Surgical Tape

Medical Gloves

Antiseptic Solution or Wipes

Sterile Gauze Pads

Personal Medicines

Adhesive Bandages

Matches

Calamine Lotion

Scissors

Flashlight

Soap

Elastic Bandages

Pain Killers

Anti-Diarrhea Medication

Laxatives

Antacids

Medical Emergency Treatment Facilities



Medical Emergency Treatment Facilities



Delta Medical Officer: Dr. Sudesh Chauhan, Mobile number: 9675212172, Office Ext: 9022



**Medicity Hospital
Contact Person Mr. Rajeev Kumar- 9837655777. Mr. Ravi Kant - 9599430481**

Normal and Emergency First-Aid Facility Available in our Medical Room.

- Medical Facilities
- Folding and Wheel Stretcher
 - Wheel Chair
 - Oxygen Cylinder
 - TT and Snake Bite Vaccine

Medical Facilities

Empanelled Hospital

- The Medicity:
- Narayan Hospital & Trauma Centre

**Narayan Hospital
Contact Person: Dr. Vimal Chauhan- 7500244400, Mr. P.S. Mehta : 75500244406**

HAZARD	VS	RISK
A HAZARD is something that has the potential to harm you		RISK is the likelihood of a hazard causing harm

HAZARD VS. RISK

IARC recently began reviewing pesticides for carcinogenicity. But where IARC assesses potential cancer hazards, regulatory agencies around the world assess cancer risks. In light of this, it's important to understand the difference between hazard and risk.

<p>HAZARD Something with the potential to cause harm.</p>	VS.	<p>RISK The chance you will be harmed.</p>
 DRIVING ON A ROAD		 DRIVING IN A BLIZZARD.
 SHAVING YOUR FACE		 SHAVING A BEAR
 USING A BLOW DRYER		 USING IT IN THE TUB



S	pot the hazard
A	ssess the risk
M	ake the changes

What is Aspect and Impact ?

Environmental Aspect:

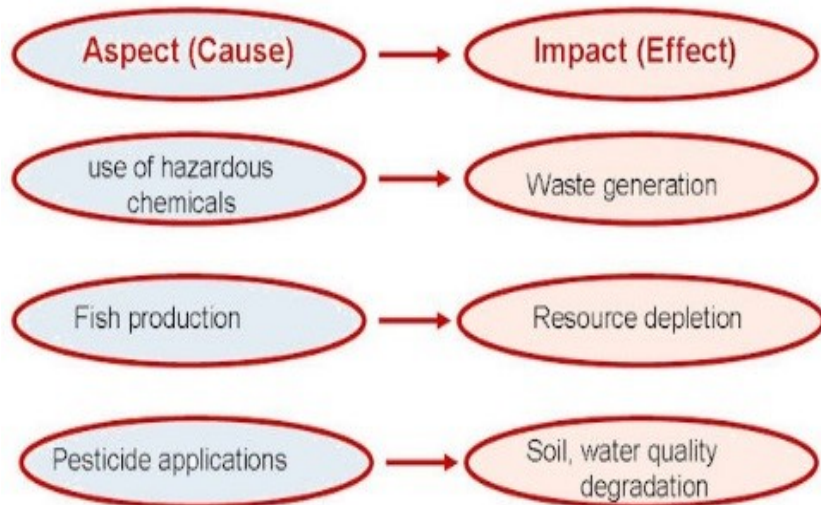
- "element of an organization's activities, products, or services that can affect the environment." **IMPACT**
- "Note: A significant aspect is an environmental aspect that has c can have a significant environmental impact." (ISO14001Sec. 3.3)

Environmental Impact:

- "any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization's activities, products, or services." (ISO14001Sec. 3.4)



ASPECT





विज़िटर के लिए निर्देश

 <p>आगमन की सूचना सुरक्षा विभाग को दें।</p>	 <p>परिसर के निषेध क्षेत्र में अधिकृत व्यक्ति के साथ प्रवेश करें।</p>
 <p>पूर्व सूचना देकर आयें तथा असुविधा से बचें।</p>	 <p>परिसर के बाहर आने पर पहचान – पत्र सुरक्षा विभाग में जमा करें।</p>
 <p>अपने सामान की सुरक्षा जांच कराएँ तथा दर्ज कराएँ।</p>	 <p>आपातकालीन स्थिति में आपातकालीन एकत्रित स्थल पर तुरन्त पहुँचें।</p>
 <p>परिसर में पहचान – पत्र प्रदर्शित करें।</p>	 <p>मदद के लिए सुरक्षा विभाग में सम्पर्क करें।</p>

गाड़ी ड्राइवर एवं क्लीनर हेतु सुरक्षा निर्देश

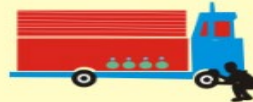


ड्राइवर क्लीनर

फैक्ट्री के अन्दर केवल वैध लाइसेंस धारक ड्राइवर ही लारी चलाने के लिए अधिकृत है, क्लीनर चाहे ड्राइविंग लाइसेंस धारक हो फिर भी वह कारखाना परिसर में गाड़ी चलाने का पात्र नहीं है।



फैक्ट्री परिसर में चलती गाड़ी पर चढ़ना या उतरना मना है।



ट्रान्सपोर्टर तथा ड्राइवर यह सुनिश्चित करें कि उनकी गाड़ी सही अवस्था में हैं। ब्रेक की सुअवस्था का ध्यान खास तौर से रखें।



कारखाना परिसर में लारी के नीचे या लारी के आस-पास सोना या आराम करना सख्त मना है। ड्राइवर, क्लीनर को केवल अधिकृत क्षेत्र में या लारी के अन्दर केबिन में ही आराम करना चाहिये।



ड्राइवर क्लीनर

ड्राइवर को गाड़ी खड़ी करने के बाद गाड़ी की चावियां निकालकर अपने पास रखनी होंगी। ड्राइवर, क्लीनर को चावियां कभी भी नहीं देगा।



फैक्ट्री के अन्दर लारी को खींचना या धक्का देना मना है। टूट-फूट की दशा में जब खींचना या धक्का देना आवश्यक हो तो लारी ड्राइवर को सिक््योरिटी सुपरवाइजर से सम्पर्क करना होगा।



लारी पीछे को चलाने की स्थिति में निश्चित करें कि क्लीनर गाड़ी के पीछे रहकर ड्राइवर का मार्ग-दर्शन कर रहा है। क्लीनर और गाड़ी में 5 फीट की दूरी हमेशा रखें।



फैक्ट्री परिसर में खाना पकाना सख्त मना है।

SAFETY INSTRUCTIONS FOR FOUR-WHEELERS



- **Park Vehicle properly in position.**



- **Don't park vehicle in no parking zone.**



- **Wear safety Belt while driving.**



- **Don't drive vehicle too fast.**



- **Don't overtake vehicle from left side.**



- **Don't use mobile phone while driving.**

SAFETY INSTRUCTIONS FOR TWO-WHEELERS



- Park Vehicle properly in position.
- Don't park vehicle in no parking zone.
- Wear helmet while driving.
- Don't drive vehicle too fast.
- Don't overtake vehicle from left side.
- Don't use mobile phone while driving.
- Don't drive vehicle with three persons sitting.

6S LEAN WORKPLACE

1. SORT

Organization – keeping only what is necessary and discard everything else – when in doubt, throw it out



2. SET IN ORDER

Orderliness – arranging and label only necessary items for easy use and return by anyone



3. SHINE

Cleanliness – keeping everything swept and clean for inspection – for safety and preventative maintenance



4. STANDARDIZE

Standardized cleanup – the state that exists when the first three pillars or "S's" are properly maintained



5. SUSTAIN

Sustaining the discipline – making a habit of properly maintaining correct procedures



6. SAFETY

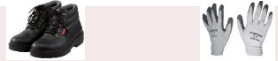


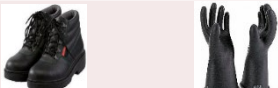




Accident prevention – awareness of all activities to identify and eliminate hazards for a zero accident and injury-free workplace

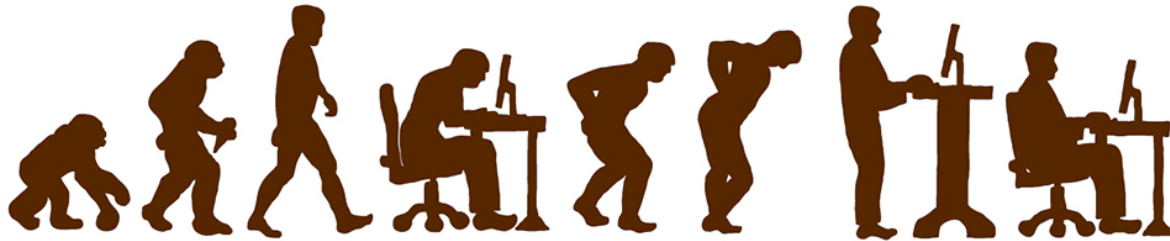


Before implementing 5S



After implementing 5S

SI. No.	Activity	Hazard	PPE	Picture
1	Assembly and Inspection	Sharp Edges	Safety Gloves	
2	Assembly and Inspection	Fall and Sharp Edge	Safety Shoes and Gloves	
3	HIPOT Test	Electricity	Safety Shoes and Electrical Gloves	
4	Final Test	Electrical	Shoes and Electrical Gloves	
5	Repair/Soldering	Sharp edge, Chemical, Electrical	Gloves, nose mask	
6	Warehouse/Kitting	Falling Objects from heights	Safety Shoes, Helmet	
7	Trolley/Fork Lift Movement	Stumble with sharp edges	Safety Shoes, Helmet	
8	Fixture making and Tool job	Generation of Chips, solid wastes	Goggles, Safety Shoes, Gloves	



ERGONOMICS

Keep load close to body

Maintain natural S Curve in spine

Use legs and thighs

Do not twist your body

Get help to lift heavy objects



CIM

Hardware
Assembly and
Torque

Workmanship

Soldering

Testing

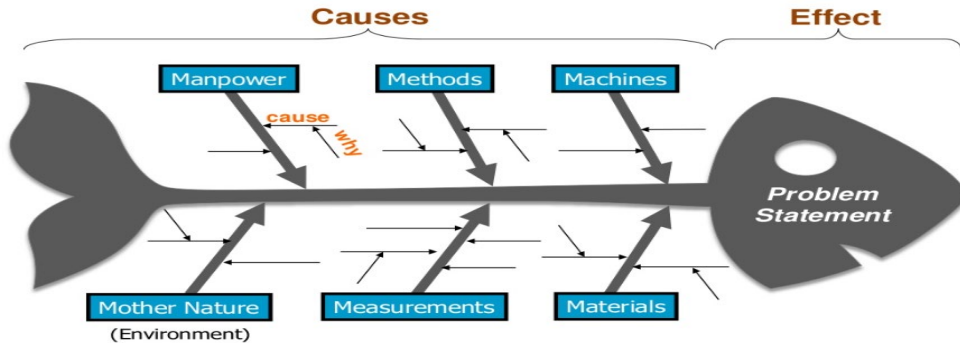
- ❑ Newly developed facility with simulated cell lines.
- ❑ An initiative for operator certification in respective work areas.
- ❑ Over 25 workmen/week trained through this facility .
- ❑ Evaluation includes theory as well as practical aspects.
- ❑ Repeated trainings and practical help reduce human error.



Problem Solving-Steps

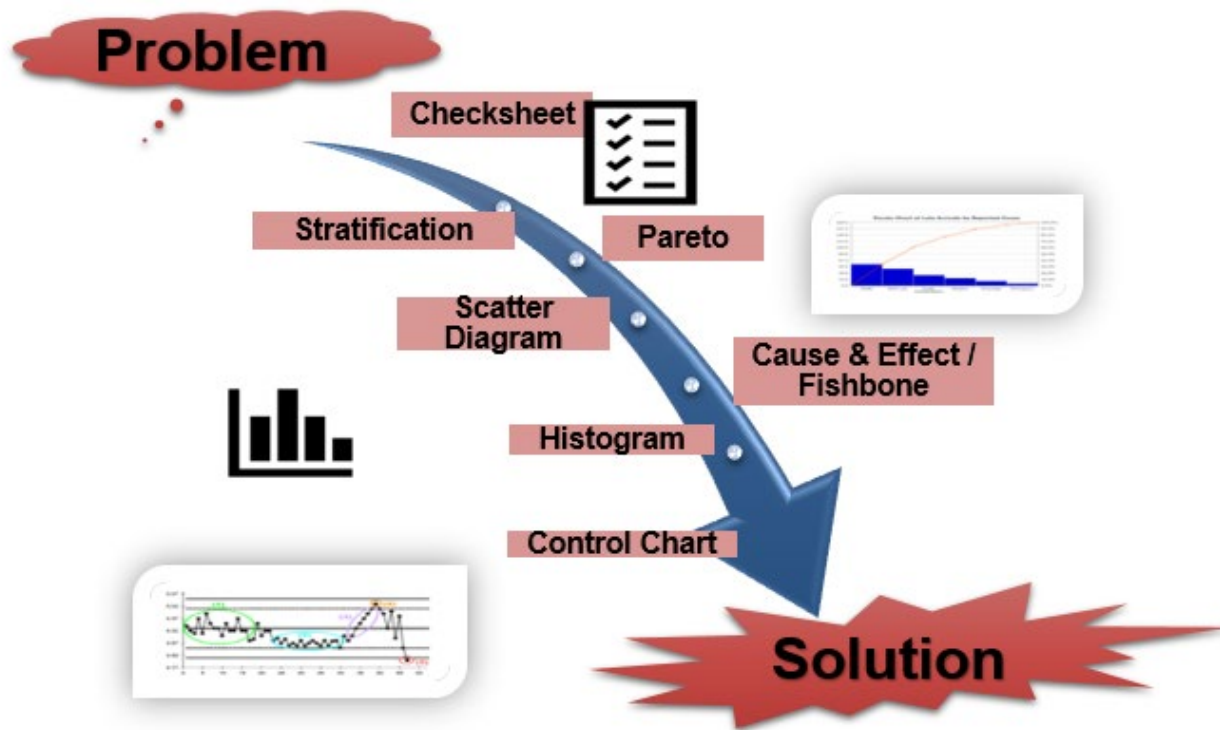
- Seven steps:
 - Define Problem } **P**
 - Observation } **P**
 - Analysis } **P**
 - Action } **D**
 - Check } **C**
 - Standardization } **A**
 - Conclusions } **A**

Cause & Effect Diagram (Manufacturing)



5 WHY ANALYSIS – GOOD EXAMPLE



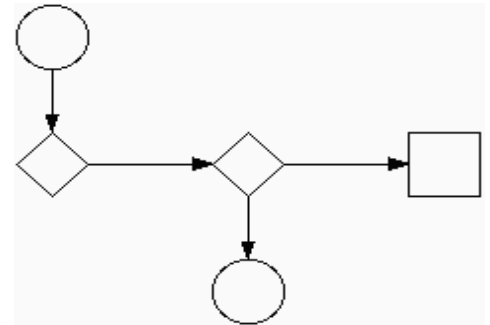


Flow Charts

- A flow chart is a pictorial representation showing all of the steps of a process.

Creating a Flow Chart

- First, familiarize the participants with the flow chart symbols.
- Draw the process flow chart and fill it out in detail about each element.
- Analyze the flow chart. Determine which steps add value and which don't in the process of simplifying the work.



Purpose:

Prioritize problems.

How is it done?

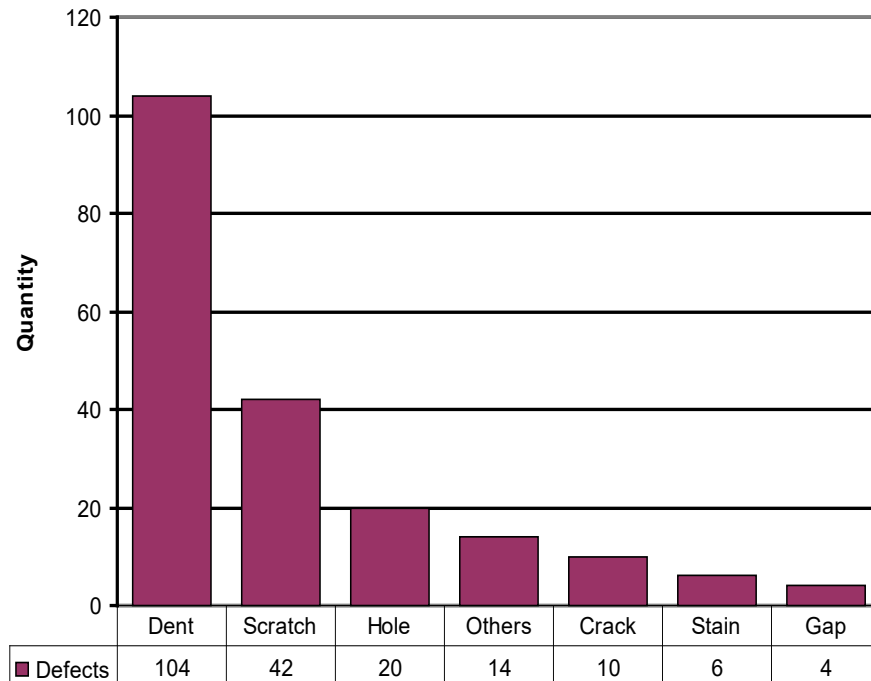
- Create a preliminary list of problem classifications.
- Tally the occurrences in each problem classification
- Arrange each classification in order from highest to lowest
- Construct the bar chart

Type of Defect	Tally	Total
Crack	II II	10
Scratch	II II II II II II	42
Stain	II I	6
Dent	II II II II II IIII	104
Gap	IIII	4
Hole	II II II II	20
Others	II II IIII	14
Total		200

Example of a data tally sheet

Benefits:

- Pareto analysis helps graphically display results so the significant few problems emerge from the general background
- It tells you what to work on first

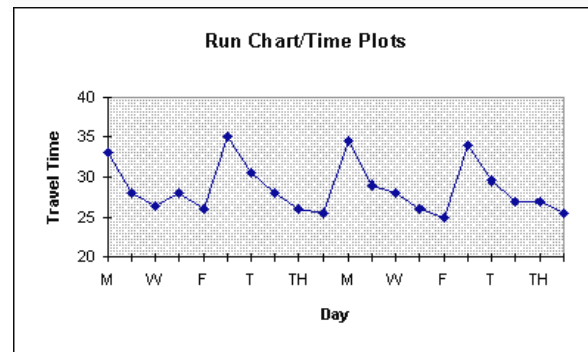
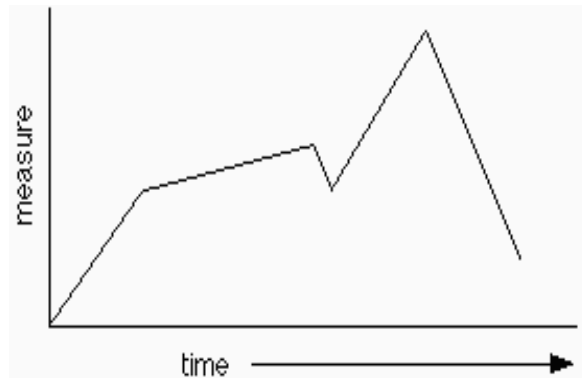


Run Charts Defined

- Run charts are used to analyze processes according to time or order.

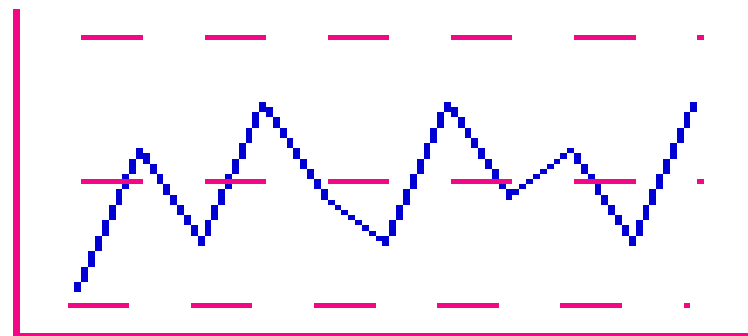
An Example of Using a Run Chart

- An organization's desire is to have their product arrive to their customers on time, but they have noticed that it doesn't take the same amount of time each day of the week. They decided to monitor the amount of time it takes to deliver their product over the next few weeks.



Control Charts Defined

- Control charts are used to determine whether a process will produce a product or service with consistent measurable properties.



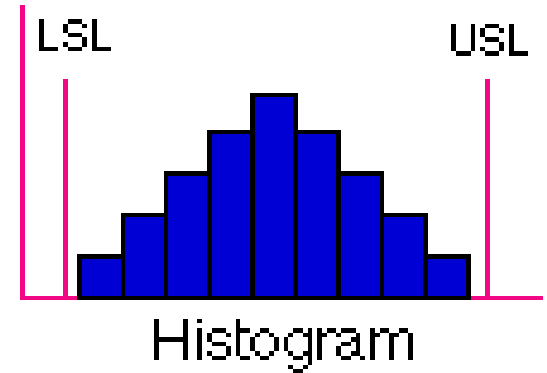
Control Chart

Purpose:

To determine the spread or variation of a set of data points in a graphical form.

How is it done?

- a) Collect data, 50-100 data point, determine the range of the data calculate the size of the class interval.
- b) Divide data points into classes Determine the class boundary
- c) Count no. of data points in each class
- d) Draw the histogram



Purpose:

- Tool for collecting and organizing measured or counted data
- Data collected can be used as input data for other quality tools

Benefits:

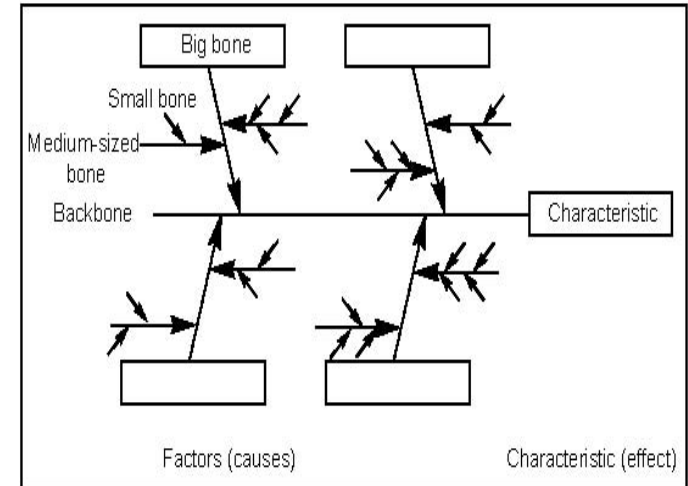
- Collect data in a systematic and organized manner
- To determine source of problem
- To facilitate classification of data (stratification)

Product:		Date:
Manufacturing stage: Final insp.		Section:
Type of defect: scar, incomplete crack, misshapen		Inspector's name:
Total no. inspected: 1525		Lot No.:
Remarks: All items inspected		Order No.:
Type	Check	Subtotal
Surface scars	/ / /	17
Cracks	/ /	11
Incomplete	/ / / / /	26
Misshapen		3
Others	/	5
Total:		62
Total rejects	/ / / / / / / / /	42

Purpose: Graphical representation of the trail leading to the root cause of a problem.

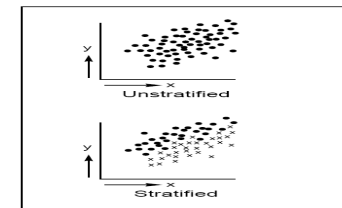
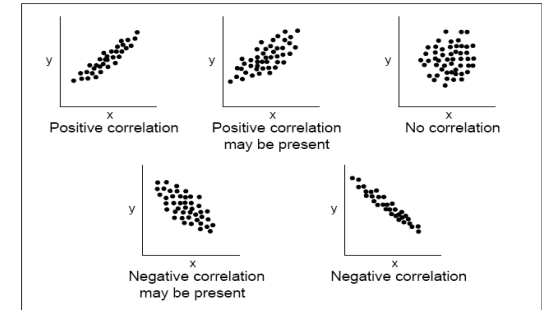
How is it done?

- Decide which quality characteristic, outcome or effect you want to examine (may use Pareto chart)
- Backbone –draw straight line
- Ribs – categories
- Medium size bones –secondary causes
- Small bones – root causes



It is to identify the correlations that might exist between a quality characteristic and a factor that might be driving it. A scatter diagram shows the correlation between two variables in a process.

- These variables could be a Critical To Quality (CTQ) characteristic and a factor affecting it two factors affecting a CTQ or two related quality characteristics. Dots representing data points are *scattered* on the diagram.
- The extent to which the dots cluster together in a line across the diagram shows the strength with which the two factors are related.
- If the variables are correlated, when one changes the other probably also changes.
- Dots that look like they are trying to form a line are strongly correlated.
- Sometimes the scatter plot may show little correlation when all the data are considered at once.
- Stratifying the data, that is, breaking it into two or more groups based on some difference such as the equipment used, the time of day, some variation in materials or differences in the people involved, may show surprising results.



Tool Matrix

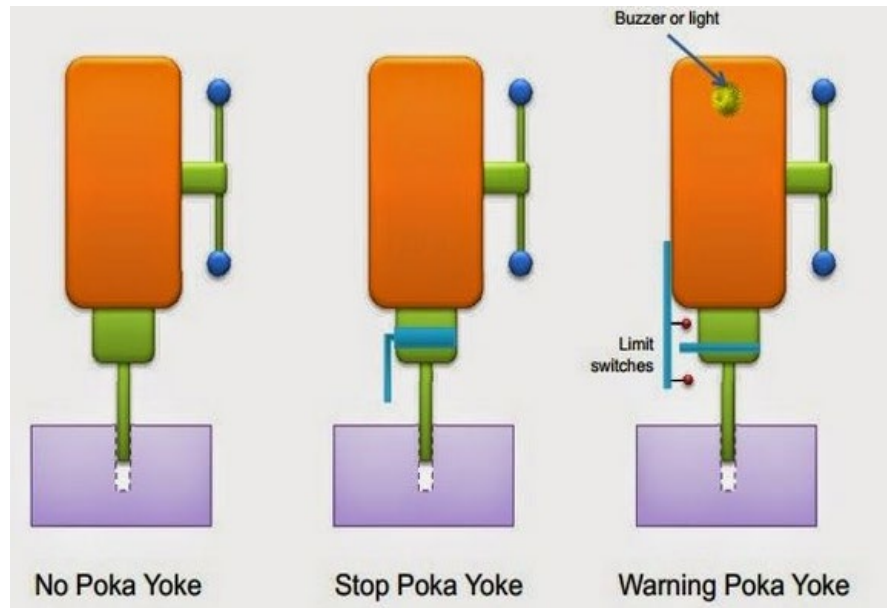
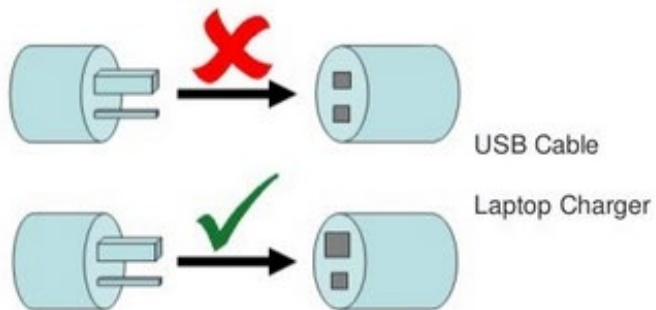
	Check Sheet	Pareto	CE Diagram	Scatter plot	Graphs	Control Chart	Histogram
Define	○	◎			◎		
Observation	◎				◎	◎	◎
Analysis	◎	◎	◎	◎		◎	◎
Action							
Check		○		○	◎	◎	○
standardization					○	○	
Conclusion		○			○		

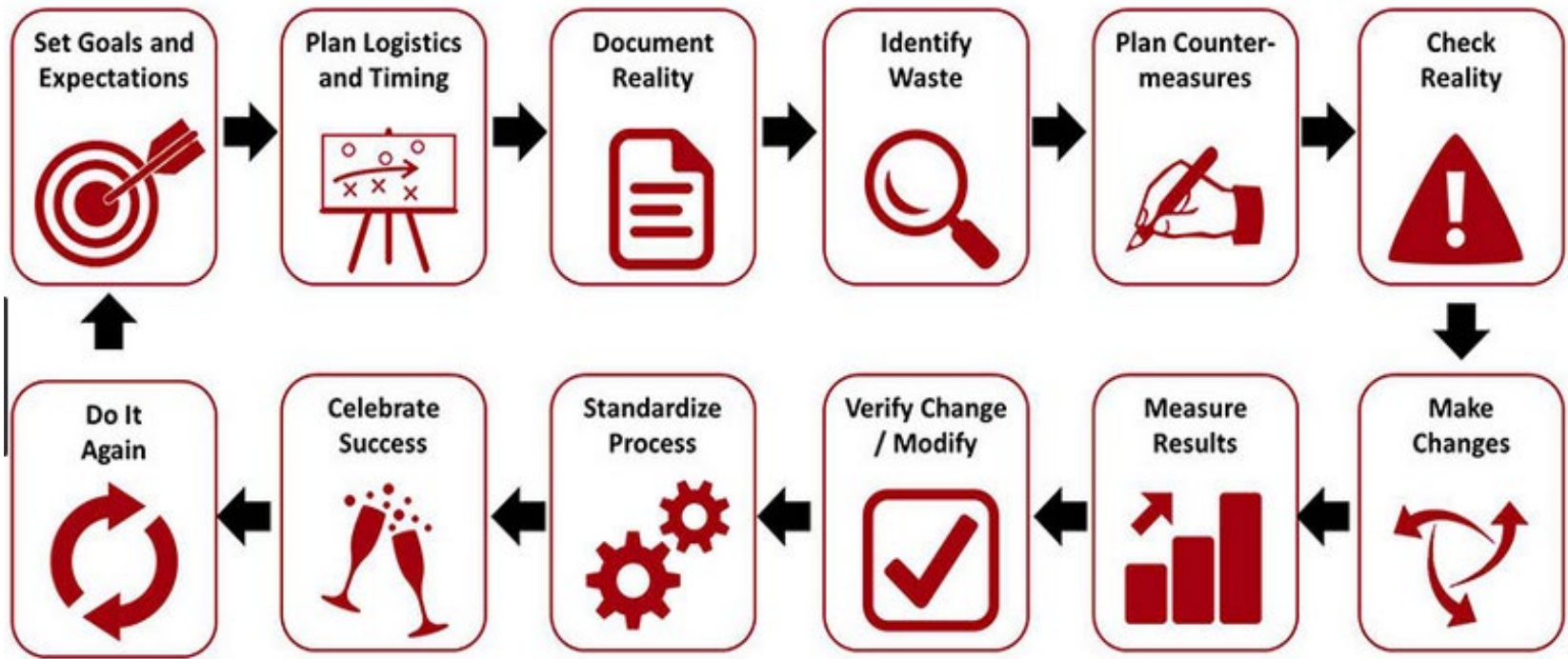
Legend: ○ Medium Relationship
◎ Strong Relationship

Poka Yoke – Mistake Proofing

A poka-yoke is any mechanism in a lean manufacturing process that helps an equipment operator avoid (yokeru) mistakes (poka).

Its purpose is to eliminate product defects by preventing, correcting, or drawing attention to human errors as they occur





What is ESD ?

Electrostatic discharge is defined as the transfer of electrostatic charges between bodies at different potential caused by direct contact or induced electrostatic field

ESD Event

It is an unplanned occurrence of electrostatic discharge

ESD Models have been defined to describe the effects on ESD sensitive devices:

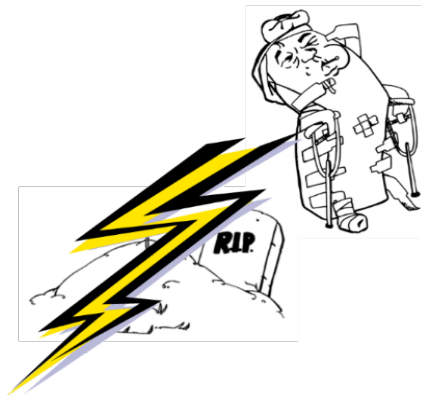
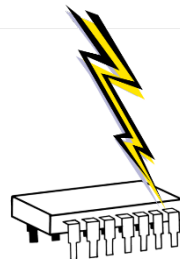
- Human Body Model
- Charged Device Model
- Machine Model

100 volts or less can damage components!

Types Of ESD Device Damage

➔ **Latent Defect**
Component wounded
But Inspection Passes

➔ **Catastrophic Failures**
Inspection
Able to detect



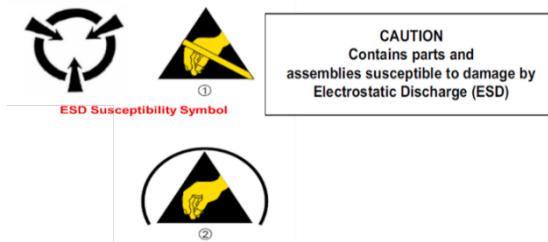
DO'S

- ☑ MINIMISE HANDLING.
- ☑ KEEP PARTS IN ORIGINAL PACKING UNTILL READY FOR USE.
- ☑ USE ESD PROTECTIVE CONTAINERS AND BAGS.
- ☑ DISCHARGE STATIC BEFORE HANDLING DEVICE BY TOUCHING NEARBY GROUNDED SURFACE.
- ☑ HANDLE DEVICES BY THE BODY.
- ☑ TOUCH THE ESD PROTECTIVE PACKAGE BEFORE TOUCHING INSIDE OF DEVICE.
- ☑ KEEP A DUST FREE WORK AREA.

DONT'S

- ☒ TOUCH THE LEADS OF DEVICE.
- ☒ SLIDE ESD DEVICES OVER ANY SURFACE.
- ☒ PUT MASKING TAPE ON PROGRAMMABLE IC'S.
- ☒ STORE OR CARRY SENSITIVE COMPONENTS OR ASSEMBLIES IN PLASTIC BAGS.
- ☒ STORE SENSITIVE COMPONENTS IN THERMOCOLE/PLASTIC FOAM.
- ☒ HANDLE ESD DEVICES IN “NON ESD CONTROLLED” ENVIRONMENT.

ESD Warning Labels



ESD Committee				
Area	Audittee	Audittee	Auditor	Auditor Contact Number
ESD Team Leader	NC Sahoo			9999673873
TRC	Suresh Singh	7895140073	Sunil Singh	9756206073
	Sunil Kumar	9756347148	Sumit Jain	9756206035
ESD Production Floor	Sanjay Rana	9997845848	Kalyan Singh	9756691848
	Anand Bhatt	7906993196	Kapil Kainth	7017102431
	Naresh Kumar	9756206027	Deepak Goswami	9720085276
PWBA Ware House	Chandra.S	9634370002	Satish Sharma	9997092802
	Pravindra Negi	9997972016	Manish Srivastava	7409342879
WPC Production	Manoj Kumar	9720438688	Himanshu Sanwal	9412513630
	Shekhar Upreti	9808703828	Pravindra Negi	9997972016
UPS Production & Testing area	Naresh Kumar	9756206027	Sunil Kumar (TRC)	9756347148
			Surendra Singh(Facility)	9756362270
PDI Testing	Deepak Goswami	9720085276	Chandra.S	9634370002
			Anil Kumar	9761469193
IQC	Pankaj Yadav	8272000498	Navneet Gaur	8800378935
TPS Engineering Lab	Akhilesh Semwal	9759700433	Manoj Kumar	9720438688
	Payarelal	9871433002	Nagendra Sharma	8755530008
UPS Engineering Lab	Ankur Malviya	8937010777	Shekhar Upreti	9808703828

Problem: Very high atmosphere temp., leading suffocation & low visibility without light at day time under shade area.

Before improvement



After improvement



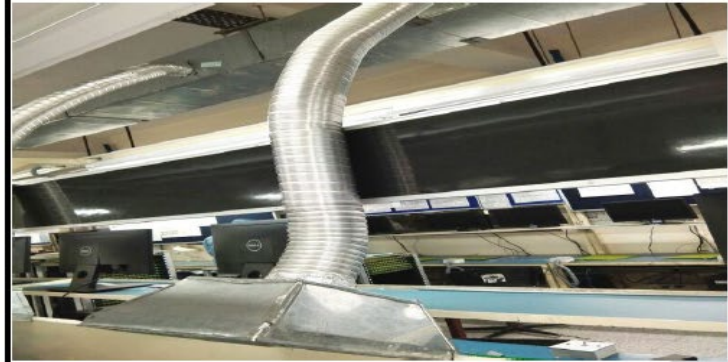
Action: Installed the self operating Air ventilation Fan with transparent FRP sheet to improve the ventilation & natural light.

Problem: No provision for dispersion of fumes after soldering process.

Before Counter Measure :- No space to smoke absorber




After Counter Measure :- We have made the exhaust hood & connect with main exhaust system.



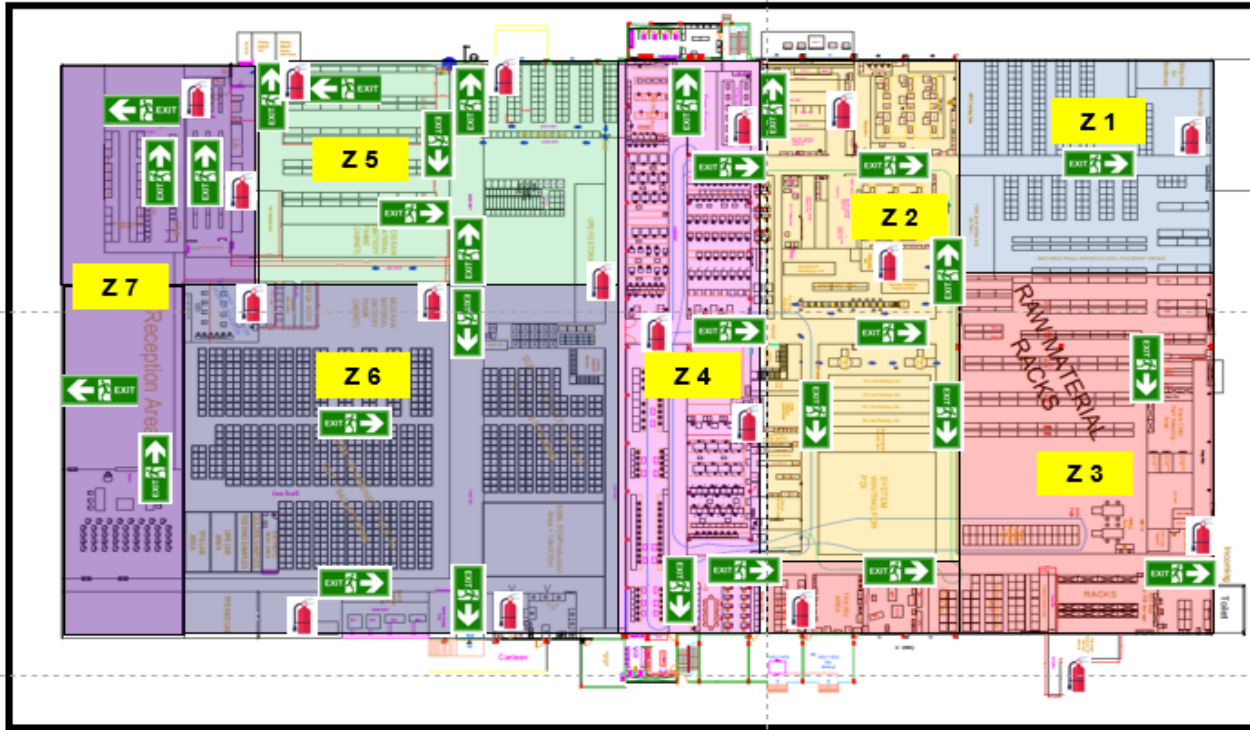
Action: Installed fume extractor for sucking fumes during soldering operation.



Emergency Response and Rescue Team

 EMERGENCY RESPONSE TEAM DELTA RUDRAPUR(Reviewed & Updated:28th Oct. 2021)					
S.No	First Aid Team member	Contact No	S.No	Rescue Team Member	Contact No
1	Suresh Singh(TRC)	7895140073	1	Lalit Bisht (Infra/Facility)	9837204662
2	Sunil Yadav(TRC)	9756347148	2	Bhanu Pratap (Engineering)	7417187816
3	Kamlesh Bisht(TRC)	7500017582	3	Rajendra S. Bhandari (Prod.-UPS)	8475063712
4	Santosh Kumar (TRC)	9634625262	4	Mahender Singh (TRC)	9917182826
5	Narayan Dutt Kapari(TRC)	8193032538	5	Navneet (Production)	9760844988
6	Umesh k.Gupta(UPS Production)	7983747161	6	Ajit Singh (Facility)	9756206036
7	Rakesh.K.Keshari(UPS Production)	9616030506	7	Bupesh Joshi (TRC)	9458202533
8	Sudesh Chauhan(Medical Officer)	9675212172	8	Ajeet Kumar Yadav (Prod.-TPS)	9639621339
9	Nirmal Singh(QA)	9675050788	9	Mani Bhusan (Production)	9634464131
10	Manoj Gunwant(QA)	8938810028	10	Chhattu Prasad (RM/Store)	7409717650
11	Naresh Kumar(Engineering)	8954556464	Firefighting Team Member		
12	Vijay Pal(Security)	9761234110	1	Sunil Kumar Singh (Facilities)	9756206061
13	Anuj Bajpai (Secutiry)	7895097838	2	Rajeev Singh (Production)	8859040063
14	Ravi Dutt Pandey(Security)	8808432489	3	Lalit Pargai (MQA - TPS)	9927332480
15	Jai Chand Parsad(Facility)	9917247519	4	Amar Kumar Jha (TRC)	8755532582
16	Ajit Singh(Facility)	9756206036	5	S. P. Singh (Infra/Facility)	9756362270
17	Rajeev Singh(TPS Production)	8859040063	6	Vijay Pal (Security)	9761234110
18	Sompal(TPS Production)	8006318830	7	Mani Bhusan (Production)	9634464131
19	Ajit Singh Yadav(TPS Production)	9639621339	8	Brijesh Kumar (TRC- Logistic)	9997274643
20	Mani Bhusan Kumar(TPS)	9634464131	9	Anuj Bajpai (Secutiry)	7895097838
21	Gourpad Mandal(TPS Production)	8474964260	10	Jaichand Prashad (Facility)	9917247519
22	Pushkar Singh Rawal(TPS)	8006679944	11	Pushkar Rawal(Production)	8006679944
23	Anand Halder(Tool Room)	9568913309			
24	Mahendra Bhandari(WPC)	7533867528			
25	Dhiraj Kumar Rai(WPC Production)	7017543523			
26	Mahesh Mishra(Logistic)	9456469865			
27	Sandeep Kumar(Ware House)	9917979757			
28	Bhupesh Rawat(Ware House)	9761124530			

Emergency Response Layout



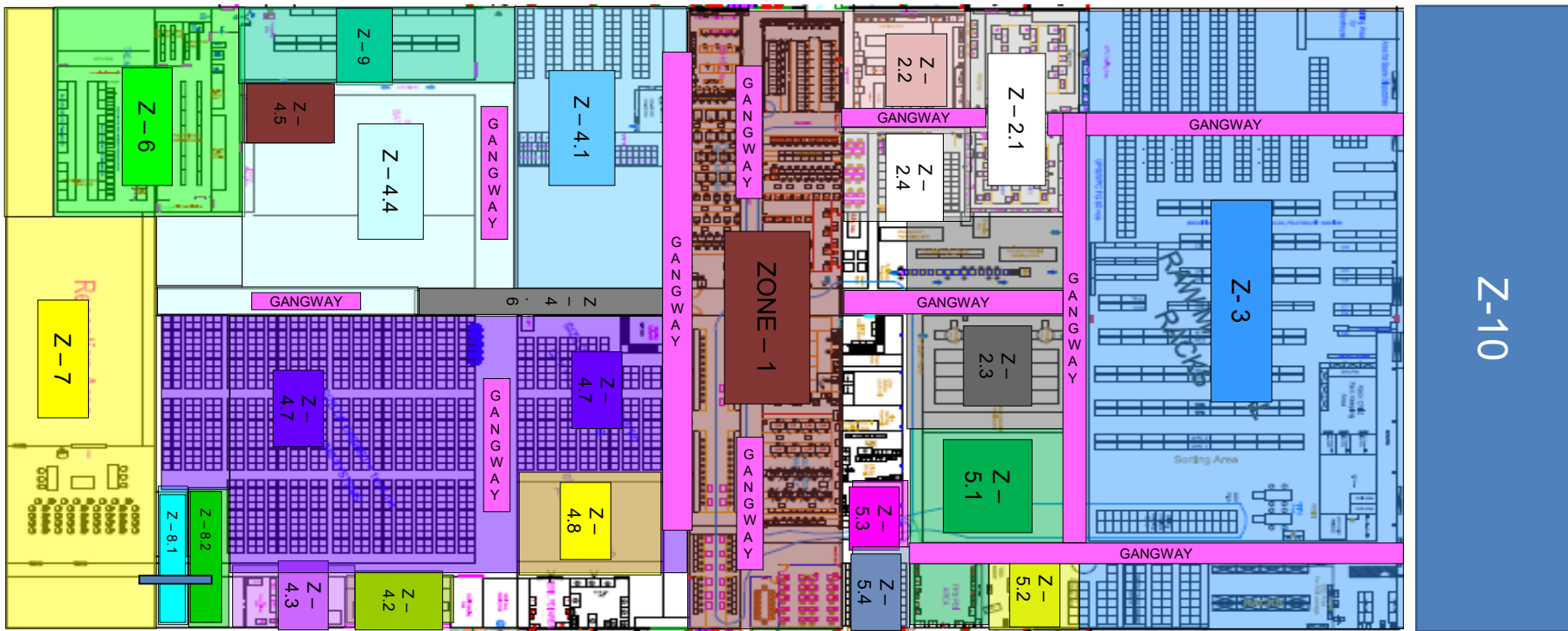
Z1	LOGISTICS
Z2	PACKING, WPC, MCIS
Z3	WAREHOUSE, TOOL ROOM, IQC
Z4	ESD SHOP FLOOR
Z5	SERVICE WH, LOGISTICS
Z6	WAREHOUSE, ENGG
Z7	TRC, RECEPTION
Z8	MEZZANINE OFFICE



**FIRE
EXTINGUISHERS**



**EMERGENCY
EXITS**



Zone	Owner	Team Support
1	Mahesh Arora	Anil Kumar
2.1	Mahesh Arora	Manoj Kumar
2.2	Mahesh Arora	Naresh Kumar
2.3	Mahesh Arora	Anil Kumar
2.4	Mahesh Arora	Naresh Kumar
3	Manoj Ahuja	Pravindra, Chandra.s, Bharat Arora
4.1	Manoj Ahuja	Chandra.S
4.2	Mahesh & NC Sahoo	Anil Kumar & Deepak Goswami
4.3 & 8.2	Manish Agrawal	Ankur Malviya
4.4	Manoj Ahuja	Pravindra Negi
4.5	Manoj Ahuja	Chandra S
4.6	Mahesh Arora	Manoj Kumar
4.7	Manoj Ahuja	Bharat Arora
4.8	Mahesh Arora	Manoj Kumar
5.1	NC Sahoo	Deepak Goswami
5.2	Sumit Jain	Kapil Kainth
5.3	NC Sahoo	Pankaj Yadav
5.4	Manoj Ahuja	Chandra.S/Pravindra Negi
6	Pashupati Semwal	Kalyan Singh & Sunil Kumar
7	Amit Mishra	Sunil.S
8.1	Manish Agrawal	Pramod & Payarelal
9	Mir Mohammad	Gajender Sharma
10	Amit Mishra	Sunil.S

Safety Guidelines for visitors

<p>PARKING</p>		<ul style="list-style-type: none"> Entering in Factory workshops and machine rooms strictly prohibited. Visit only possible with approval from authority. Smoking is only permitted in marked areas Taking alcohol on the premises are strictly profited. Taking photographs and videos prohibited. Special arrangements can be agreed with approval from plant manager 																
<p>Vehicle Parking</p> <ul style="list-style-type: none"> Please keep the speed limit 10Km/h in our premises Please park your vehicle in parking area Follow security guard instructions 	<p>Registration – Entry</p> <ul style="list-style-type: none"> Please fill in your details in visitor book Take visitor slip and Card. Wear the card visibly on your body Contact your host. 	<p>Emergency Contact</p> <table border="1"> <tr> <td>Security</td> <td>Ext # 9033/9034</td> </tr> <tr> <td>Security Officer</td> <td>Ext # 4033</td> </tr> <tr> <td>Facility</td> <td>Ext # 4087/4127</td> </tr> <tr> <td>EHS</td> <td>Ext # 4063/4064</td> </tr> <tr> <td>First Aid</td> <td>Ext # 4022</td> </tr> <tr> <td>Police</td> <td>100</td> </tr> <tr> <td>Fire Station</td> <td>101</td> </tr> <tr> <td>Ambulance</td> <td>102</td> </tr> </table>	Security	Ext # 9033/9034	Security Officer	Ext # 4033	Facility	Ext # 4087/4127	EHS	Ext # 4063/4064	First Aid	Ext # 4022	Police	100	Fire Station	101	Ambulance	102
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First Aid	Ext # 4022																	
Police	100																	
Fire Station	101																	
Ambulance	102																	
<p>Contractors</p> <ul style="list-style-type: none"> Who shall perform non-routine activities on site must be have valid work permit. Contact your host. Identify Environment Safety risk in your job. Personal protective equipment's must be worn during the work Report any unsafe acts/conditions and incidents to EHS manager Before leave from work area must inform to your host. 	<p>Emergency Response</p> <ul style="list-style-type: none"> Do not panic Follow instructions from the host. Do not use lifts in the event of a fire. Leave the building using the marked emergency exit and escape route. Assemble in designated area near main security gate. 																	

Safety Guidelines for visitors

<p>COVID-19 Prevention Guidelines</p>		
<p>Personal Hygiene</p> <ul style="list-style-type: none"> Avoid touching eyes, nose or mouth Cover always while you cough or sneeze Avoid close contact with anyone Washing your hands with soap and water at least for 20 sec regularly Always wear a mask while you go out Avoid public transport 	<p>Gate Entry</p> <ul style="list-style-type: none"> Stand in queue maintaining Social distance of 1 meter Wash your hand with Soap and water Collect the mask at office entry point Wear the mask and then proceed for Temperature check Aarogya setu app is mandatory to install in mobile and show it to security. Wait at Reception and contact your host 	
<p>Restricted Entry</p> <ul style="list-style-type: none"> Person coming from containment zone. Person have the symptoms of covid-19 (Fever/cough/sore throat) <p>Other Instructions</p> <ul style="list-style-type: none"> Don't use public transport for coming in factory Maintain Social distancing No movement allowed other than your working area 	<p>District Helpline Numbers</p> <p>District Gurugram Helpline Numbers</p> <ol style="list-style-type: none"> 1950 (09:00AM to 09:00PM) District Call Centre 108 (24x7) Ambulance Helpline 9953618102 (24x7) 0124-2322412 (09:00AM to 05:00PM) 	



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