

# NEED OF GREEN FACTORY CONCEPT IN ZIPPER INDUSTRY

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## ABSTRACT

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The research is about the zipper manufacturers of India and the efforts taken to upgrade their performance in the global arena. This particular article is one more addition striving hard to make the product greener. Create more number of green zip factories.

The awareness towards preserving the environment and natural resources is the keyword of the world and the consumers. Now it is our responsibility to manufacture eco-friendly products. Here comes the green factory concept which is general in nature to be followed by all responsible manufacturers of the world.

## KEYWORDS

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Green concepts in zipper, eco factory.

## INTRODUCTION

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Whenever a product is manufactured it should comply with the environmental policies of the world. Then only it becomes qualified to be consumed by the consumers. Every manufacturer should have an environmental policy to safeguard the mother earth for the future generation. This basically minimizes the number of components and ensures minimal handling of components with less wastage and with less harm to the environment.

## METHODS OF ADAPTING GREEN CONCEPT

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Design for assembly (DFA), whenever a product is fabricated then the design for assembly is decided and certified by the competent environmental chapters.

Design for disassembly (DFD) is decided first. These methodologies are practiced in Japan very religiously. Fastening and joining consideration by deciding the method of disassembly during the early design face and promoting the green method while preparing the design in the primitive stage.

Following environmentally conscious manufacturing by adopting environmentally responsible activities like “zero discharge” practices and Recycling of waste. The more the waste generated less efficient is the factory. Greater improvement and implementation of green practices should be adhered.

Being aware of various environmental issues like pollution, health hazard, fire safety measures, less water consumption, we have to plan in such a way that the factory is built as a green building concept. To know much about the green building concept there is a non-governmental organization backed by Confederation of Indian industry (CII) which educates the industrialists straight from acquiring land making the basic plan, water treatment plans apprising the local and international laws educating the use of natural resources, power consumptions, labour laws. This organization is called IGBC – Indian green building council which has chapters all over the country for further details about the address industry people can contact Confederation of Indian industry, the Mantosh sondhi centre, 23, Institutional area, Lodi road, New Delhi, 110003. Tel-01145771000.

## **PROMOTION OF GREEN FACTORIES**

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Japan is the only country following the promotion of green factories. They give licenses only to green factories. Standing example: Fujitsu group has coined the term green factories to refer facilities that pursue a unified approach in striving to reduce the amount of materials and energy used in business operations, minimize the amount of chemical discharge, waste, and air pollution produced through business operations and also minimize the manufacturing cost. At the same time these facilities must also make comprehensive efforts to comply fully with all relevant laws and regulations to prevent environmental risks in advance.

To promote these activities manufacturing divisions carry out green process activities and facilities like waste management divisions.

## **CONCEPT OF THE GREEN FACTORY**

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<b>AIMS</b>	Reduce environmental burden.	Reduce costs.
<b>APPROACHES</b>	Reducing the eco-burdens of manufacturing processes.	Reducing the eco-burdens of our plants and buildings.

<b>ENVIRONMENTAL PROTECTION THEMES</b>		
	GREEN PROCESS ACTIVITIES(MANUFACTURING DIVISIONS)	GREEN FACILITY ACTIVITIES (FACILITY MANAGEMENT/GENERAL AFFAIRS DIVISIONS)
<b>ENERGY AND MATERIAL SAVING</b>	1.Energy saving production.	1.Energy saving facilities
	2.Reducing water consumption.	2.Diagnosis of usages.
<b>CHEMICAL SUBSTANCES</b>	1.Less usage of chemicals.	1.Less usage of chemicals.
	2.Reducing risks.	2.Effluent management.
<b>WASTE MANAGEMENT</b>	1.Less material input.	1.Reducing less volume of waste materials generated.
<b>OTHERS</b>	1.Compliance with International environmental laws.	1.Compliance with International environmental laws.
	2.Inhouse training.	2.Greening activities.

## **CALCULATING GREEN INDEX**

Green process activities are intended to reduce the manufacturing costs and after calculating an environmental burden index which is called (CG Index) for each product line (based on the amount of materials required, the volume of chemical substances used, the energy consumed to lower environmental burdens continually.

The CG index is used to assign priorities for green process activities within the company to set quantitative targets, devising and implementing plans to reduce environmental burdens and costs. The progress in implementing these plans is evaluated at quarterly review meetings, and items for which the target values are not met or thoroughly analyzed and the results fully incorporated into activities in the following quarter. By the implementation of this plan Fujitsu, Japan has achieved through green process activities, a revenue of 936 million yen.

## **IMPLEMENTING DISASTER-PREVENTION INSPECTIONS**

To prevent risks to buildings and facilities and environmental equipments associated with natural disasters like earthquakes, typhoons, heavy rain, or ageing of structures. They have formed environmental working groups, positioning them as independent bodies that implement disaster-prevention inspections to check on the functions and status of individuals, preparedness measures on a continuing basis.

#### **FACILITIES:**

Includes buildings, electrical systems, piping, distilled water production equipment, high pressure gas equipments, chemical and raw material warehouses.

#### **ENVIRONMENTAL EQUIPMENTS:**

Waste water processing facilities and exhaust gas processing facilities.

### **REDUCING VOLATILE ORGANIC COMPOUNDS EMISSIONS**

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The revisions to Japan's air pollution control law that came into effect on April 1, 2004 stipulate regulations on VOC emissions (Volatile Organic compounds) However in line with voluntary industry initiatives we have established a goal of reducing annual discharge of 20 specified VOC substances to fiscal 2000 levels by the end of 2015. They are installing organic solvent recovery units in their electronic device of the manufacturing facilities which handle large amounts of these materials. They also switch over to substitute materials with lower toxicities in the cleaning processes.

### **REDUCING THE AMOUNT OF WASTE GENERATED**

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In working towards creating a recycling-minded society, they have adopted a basic 3'R' policy (reduce, reuse, and recycle), and in aiming for an even higher level of 3'R' achievement. Encouraging and training all employees to separate waste materials into different categories for more effective recycling.

### **POLYCHLORINATED BIPHENYL (PCB) STORAGE AND PROCESSING**

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These items are stored and managed in strict conformance with Japan's PCB special measures law.

### **AWARENESS TO BE FOLLOWED BY OUR ZIPPER INDUSTRY**

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The concern for mentioning all these laws and enactments for our reference is because our Indian manufacturers especially do not strictly follow the above said measures followed by their counter parts like YKK Japan. As world's biggest responsible manufacturing facility Japan stands as a great example and a forerunner to be appreciated and followed by our manufacturers.

#### **PAINT IN ZIPPERS:**

The lead content in the paint used should be less. This will create brain related diseases in children if they consume. The zinc used should be properly treated and stored in the warehouse.

## CONCLUSION

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The above article would have explained briefly about the importance of preserving and conserving the environment for our future generation. Indian zipper companies comparatively are very less competitive in learning the global environmental requirements of their products. They are less responsible in scaling precisely the lead contents in their products and primitive in analyzing and selecting the best environmentally friendly raw materials. Many case studies and fatal accidents have shocked the garment world by the utter failure of the Indian zippers. My sincere suggestion to our national zipper manufacturers is to follow our Japanese counterparts to have a continuous future.

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