

ABOUT OUT PRODUCT:



In modern-times, owing to hectic schedules it becomes very difficult to remain active all the time. Often , people fall asleep on the wheel which can lead to serious consequences, there can be accidents and many may even lose their lives. This situation is much more common than we know and hence, it is very important to counter this problem. So to address this issue, we have come up with a solution,

Hexadrive.

The HexaDrive works on the basis of a program that identifies whether the driver is alert or dozing using a camera. On the basis of it's observation it starts giving out a buzzing alarm which automatically stops when the driver is alert once more. It even has a compact and unique hexagonal design which allows it to be placed on the dashboard without obstructing the driver's view.

WAYS TO MAKE OUR PRODUCT AND BUSINESS ECO-FRIENDLY

We have found different ways to make to make our business and product eco friendly:

ENVIRO-WIRE

Industry and global trends are driving the need for new halogen-free, recyclable wire



and cable solutions that eliminate PVC from product design due to possible health and environmental risks.this is done by covering the wires with bio-plastic instead of PVC insulation

BIOPLASTICS



Bioplastic is a biodegradable material that comes from renewable sources and can be used to reduce the problem of plastic waste that is suffocating the planet and polluting the environment.

As an alternative, the use of bioplastics is being promoted, consisting in obtaining natural polymers from agricultural, cellulose or potato and corn starch waste. These are 100% degradable, equally resistant and versatile, already used in agriculture, textile industry, medicine and, over all, in the container and packaging market, and biopolymers are already becoming popular in cities throughout Europe and the United States for ecological reasons: they are known as PHA.

These are polyesters produced by fermenting raw vegetable materials with a series of bacterial strains. For example, PHAs can be used for injection molding to build automobile parts and for many other uses. Specifically, PHA (polyhydroxyalkanoate) is extracted from bacteria such as pseudomonas. In its natural form, it is similar to transparent kitchen film, with the difference that it is an authentic bioplastic.

SOLAR PANELS

Photovoltaic modules use light energy (photons) from the Sun to generate electricity through the photovoltaic effect. Most modules use wafer-based crystalline silicon cells or thin-film cells. The structural (load carrying) member of a module can be either the top layer or the back layer. Cells must be protected from mechanical damage and moisture. Most modules are rigid, but semi-flexible ones based on thin-film cells are also available. The cells are connected electrically in series, one to another to the desired voltage, and then in parallel to increase amperage. The wattage of the module is the mathematical product of the voltage and the amperage of the module. The manufacture specifications on solar panels are obtained under standard condition which is not the real operating condition the solar panels are exposed to on the installation site.

A PV junction box is attached to the back of the solar panel and functions as its output interface. External connections for most photovoltaic modules use MC4 connectors to facilitate easy weatherproof connections to the rest of the system. A USB power interface can also be used

Module electrical connections are made in series to achieve a desired output voltage or in parallel to provide a desired current capability (amperes) of the solar panel or the PV system. The conducting wires that take the current off the modules are sized according to the ampacity and may contain silver, copper or other non-magnetic conductive transition metals. Bypass diodes may be incorporated or used externally, in case of partial module shading, to maximize the output of module sections still illuminated

Some special solar PV modules include concentrators in which light is focused by lenses or mirrors onto smaller cells. This enables the use of cells with a high cost per unit area (such as gallium arsenide) in a cost-effective way

Solar panels also use metal frames consisting of racking components, brackets, reflector shapes, and troughs to better support the panel structure

WAYS WE MAKE OUR BUSINESS ECO-FRIENDLY

Consumers, nowadays, are focusing on buying greener products. Sustainability is a very popular term among millennials. This concern for the environment has led to many advances and technological breakthroughs. However, there are many issues left which we need to address. This is particularly the case when it comes to our methods of production. *Factories* are amongst the primary causes of pollution. Unless they become eco-friendly factories, there's no hope for any respite. Some changes are easy but even though others may be trickier and more expensive to carry out, still they are essential for the planet's future well-being. These are the following steps which will be take :

- We will be using wind power as our energy source.
- We will be using Cogeneration (CHP: Combined Heat and Power) systems installed at plants that have played a major role in achieving our energy saving goals related to production activities. Cogeneration systems generate electricity and useful heat from oil, gas or some other primary energy source. Before CHP systems existed, exhaust gas was produced as a byproduct of electricity generation. This would be let out at a very high temperature without this heat being used, but cogeneration systems help to utilize this byproduct heat by boilers to be reused as steam.
- We will be generating clean energy:
 - Heat pumps rise in temperature if compressed, and drop in temperature if expanded, and flow from high temperature to low temperature locations. Heat pumps use unutilized heat in air or water as a heat source to raise or lower the temperature of a coolant by compressing or decompressing it.
 - Extracting energy from ambient air or ambient water and generating no emissions, heat pumps have long been used in air conditioners, water heaters and other familiar appliances but nowadays should also be used for manufacturing processes that require hot water. The heat pumps will be able to create heat and cooled water at the same time. The heat will be used for sterilization, and the cooled water for air conditioning and other purposes. When you compare this method with the old method of burning fossil fuels, use of heat pumps helps in curbing energy consumption and CO2 emissions.
- We will be having eco-friendly manufacturing
 - Our company will focus to ensure that all their factory sites are environment-friendly plants: effective use of resources, reduction of CO2 emissions through the deployment of low carbon process technologies, reduction of water consumption through the use of 3R (reduce, reuse, recycle) technologies, and implementation of environmental management to conserve biodiversity through the appropriate management of chemicals and cooperation with local communities.