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" Vehicle anti-theft system "

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ABSTRACT

The growing trend of automobile production in the world as well as the production of luxurious and expensive automobiles has pushed car owners and manufacturers to improve the level of automotive technology, efficiency and variety of anti-theft systems. As well as the concern of vehicle owners as well as the increasing theft and skill of car thieves, it has led designers and builders to design new designs and ideas for anti-theft systems every day.

Introduction

Car theft and car theft are among the most common ways to steal in Iran. If you are always worried about this and you are worried about your car and you do not feel comfortable making a variety of locks and alarms, this article is a good suggestion for you. You can anti-theft with your car.

Car theft statistics

The concern you have is completely in place because according to Car theft has reached its highest level in 98- And 97-year statistics year.

Theft occurs and from this 1 Iranian population 136 Generally per each Percentage of it is for cars 40 statistics. The car theft has been reported to be 234363 In last year's statistics

The percentage has increase 7 Last year 5 related to.

This may have been due to the convenience of theft and the low security of the cars and the steady progress of the theft methods If the use of automobile trackers in Iran becomes a culture, this figure can be reduced

Used Iranian cars such as Pride, Samand, Peugeot, Nissan, Paykan and the like are the least secure in Iran and given the staggering prices of safe cars, we need to buy these cars so we should look for Let's look at ways to increase the security of these machines and make them anti-theft.

Alarm problems

One of the most common methods these days is to use alarms, but the name is in vain because it not only prevents theft but also harasses neighbors and those around for long distances. It will not work and if you are away from and by no means. your car you cannot ensure the safety of these systems can we believe in the theft of our car.

Which is the safest way

We have a special solution for you to protect your car from being stolen at a modest cost and restore your peace of mind.

By buying the best anti-theft system you can prevent a big problem.

Some of the most functional features are the most advanced Iranian anti-theft system. Send instant alert on mobile.

Sending theft alert to radar monitoring for instant tracking and vehicle tracking in collaboration with law enforcement to remotely turn off the alert when that is being studied for technical and economic investigations towing a car into the vehicle's anti-theft system. It is used in passenger cars to increase the way the product is manufactured inside the unit, protection against theft according to the nature of its components, which often include electronic Manufacturing. components, will be planned based on design, assembly equipment will also include simple assembly and quality control facilities.

The annual production volume of the product, according to the market surveys 50,000The machine is of its demand for domestic demand, to the extent intended and the main consumables including electronic and electrical components, while being exterior, can be purchased from the inside parts market as well as decorative parts such as main board frames and Internal can

He briefly discusses the investment and 1-The table below1. be supplied economic characteristics of the plan.

Summarizing the main specifications of the car alarm 1-1 Table

Production Line Devices and Equipment Internal External 100 %:section 0%:Sector	1-4	Design Characteristics Annual production Device Product 50,000 : capacity Name Vehicle Anti-Theft System	1-1
Number of Employees People 1 : Management Technician 2 : Engineer Skilled 2 : person Simple 14 : Worker Personnel 2 : worker People 29 : Staff	1-5	Operational Indicators Number of working Day 270 : days Time 2 : Number of shifts the watch 8 : for each shift	1-2
		Percentage of raw material supply :Internal :Foreign 100 % 0 %	1-3

Smart Car Anti-Theft System

Each product has specific characteristics and characteristics that must be properly recognized prior to any technical, financial and economic review of A proper understanding of the specifications and different types the design of product will undoubtedly be a good guide in making the necessary decisions in selecting production methods and operations and subsequent calculations.

One of the most effective ways to do this is to apply national and in addition, it is necessary to. international standards for each product examine the market to determine the customs tariff number (branding) of Brussels (products) in order to know the process of import and export of the product and its regulations.

Product definitions, specifications and specifications

In this section the name and application, classification, technical specifications, packaging, customs tariff number and product standards will be examined.

Product Name and Application

Smart Vehicle Anti-Theft Product Name and its Application as a Smart
And the ability to turn on the car with Master cart And GPS Device with the fingerprint introduced to the system.

Product Classification

Generally, the classification of the alarms can be distinguished on the basis of its operation, including key operating systems, magnetic sensors, optical sensors, and vibration or impact sensors.
the ability to It has the ability to intercept the car as well as GPS Existence hear inside the car's cab through the car's owner. The system has two master cards, each of which performs the following .

Master card first

And entering the fingerprint information is eight Mano This card to open numbers and referring to the system. It also enables and disables the system during maintenance at the training center (of course). Other features such as setting the date, time and more are other features of the system.

Master card second

This card behaves smartly and when the car owner is within twenty to 30 centimeters of the car, the car senses the presence of the card and acts as a central lock and no need for a remote control or switch. To stop the owner of the car and leave the car and get out of the sensitivity range of the car that
Seconds, the car turns off automatically and all the 5 feels the card after windows are closed and the central lock is activated and the car is locked.

Fingerprint on and off The system has a unique mechanism that has never been the same in the world so far, with the fingerprint turning on and off and allowing more than **one the** system. It has eight fingerprints in its memory person to use.

Note

The above is fully applicable and for cars that are ECU Cars that have ECU The car starts with the fingerprint ready and the car switches on missing.

Product Specifications

The anti-theft system intended in this design is a smart one through the doors are smartly opened and closed in such a way that by system fid approaching the car and identifying the door lock card, the system can turn on the car after fingerprint identification if approved and after leaving the system the system Automatically switches off the car and raises the glass when lowered and locks the doors again. Other features of this system are the autopilot on Google Map which can provide information such as the speed of the car moving, and he listened to the GPS And GPRS activating all Systems through the system conversations inside his cabin.

Tapping inside the car cab Vehicle tracking through google map Enable and disable all sucking systems from mobile Mechanism of electronic operation of the automatic fingerprint recognition system

Product packaging

This product is marketed as a single unit in a cardboard box with an insole made of unelated to protect against traumatic injuries and the risk of collapse in shipping and warehousing.

Product standard

No reference was found to this product when referring to national and However, due to the need for specific functional . international standards capabilities, components such as sensors and product suites, factory standards will be implemented by manufacturers, tailored to each product's specifications and required qualitative evaluation.

Replaceable commodity

Replacement items of this product, in addition to its other variants, are pedal However, in terms of the possibility of using . mechanical locks or car steering this system to open and close the door remotely operated by the master card and the car owner does not need any action to open the car door, ultimately resulting in ease of use and high operating speed., Its consumer culture has a special place in the market for car accessories and decorative parts.

Market research and selling price

Investigating the feasibility of selling the product produced in any new industrial unit can be a very effective factor in assessing the economic and in this regard, considering the specific. future position of such units' characteristics of each industry, the status of domestic production, and the amount and internal needs and uses of the product, it is analyzed and analyzed, and by determining the extent of domestic product shortage, a market share for the units must be obtained Newly evaluated.

On the other hand, the specific characteristics of each industry may provide special opportunities for the sales and marketing of its products, which should be examined separately in each case.

In this section, the above issues related to product sales opportunities will be examined and evaluated for final evaluation of unit economic indices and similar product sales prices will be presented based on official market rates.

Investigate the consumption process

Taking into account statistics of domestic car production, which is close to the device is also included and car owners are 400/ 000 annual figure increasingly welcomed by such products as surveys from distribution and sales 300Includes / 000. centers demand volumes of all types of car alarms product will be significant since it Future estimates of the need for this. device is unique and not similar in the market.

Investigation of import and export process

A digit. According to statistics released by the Customs, no export was made Includes the device, which exceeds the actual import figure 200/ above000 given that passenger goods are imported.

Check the sale price

Various parameters will affect the price of the product, some of which are as follows:

The price of raw materials consumed is one of the most important variable costs of production and plays a major role in determining the finished product price.

The geographical location of the unit will affect the associated costs, especially in terms of access to all raw material resources and product consumption points.

The type of technology used will affect the sales price of the product through its impact on investment, quality of the product manufactured and the amount of waste, etc.

The cost of manpower required has a direct impact on the variable costs of production and the cost of the finished product.

Unit production capacity is influenced by the selling price of the product, thus increasing the production capacity by reducing overhead costs and reducing the finished product price.

In view of the above, the selling price of the manufactured product must be sufficient to obtain market share in addition to having to cover the cost of production.

Pricing should also be such that it is possible for foreign producers to compete in foreign markets if export product is also considered.

In a study of the domestic market for similar products, the average price of each Rials 320/ 000 car's electronic remote-control device.

Conclusion

Given the large volume of product market welcomes, the ability to assemble parts within the country, the need for sophisticated assembly technology and the ability to utilize in-house specialized forces, the construction of

such a unit is perfectly reasonable in terms of supply and demand relations. Is acceptable.
Designing and constructing industries requires knowledge of the basics of theory and empirical and practical perspectives appropriate to the prevailing economic and cultural conditions and existing technical knowledge of society in order to achieve production goals.
Investigating the feasibility of building a unit in terms of material supply, determining the amount of investment, adapting the technology of the industry in question to the range of current and potential specialties and skills in the country, etc. Coordinated and multilateral economic, technical, climatic and geographical studies are required.
Technical studies of industry creation, a series of research into the nature of materials and products, understanding of different manufacturing processes and technology available, and examining the systems, equipment and machinery These surveys are aimed at developing, manufacturing, and enhancing. required the quality of manufactured products, making it possible to respond to market needs and compete with other global manufacturers, while being the world's leading product.
In the technical studies, different production methods are first studied, and after the necessary investigations, the most appropriate technology that is appropriate
to the work culture and potential capabilities of the industry is selected.
By choosing the most appropriate method of production for each product, you can select the required equipment and equipment based on the selected process.

Providing different production methods

Depending on the components and components of the product according to the It can be seen that operating in a small industrial unit to make any of (3-1) table the above items does not make sense. Therefore, considering the functional nature of the unit on the basis of design, assembly and programming, one can product. On the other reasonably and economically justify the production of the hand, the variety of assembly methods can also be contemplated, including manual, semi-automatic and fully automatic processes, in which the design is limited by the amount of manpower produced and employed by the manual process. The relatively low investment volume it allocates as Monte's chosen N enjoying will come into operation method.

Quantity in product	technical specification	Part name	Row
Pair 1	Two-dimensional pieces ABS Of And it has four 2/ 5× 12/ 5 × 15/ automatic screws	Central System Frame	1
1	Duplex Metallized Printed cm Circuit With green printing 12×15	Central system board	2
2	DC Volts 12 Amp 40	Relay	3
7	DC Volts 12 Amp 15	Relay	4
15	10MF … .. 2200MF	Electrolytic capacitors at different capacities and voltages	5
32	1NF… .100NF	Lens capacitors at different capacities and voltages	6

43	0.5… .100K □ 1/4 W	Resistance in different capacities	7
15	2N 2222, C 945, BD139, BD140	Transistor	8
1	ATMEGA2560	IC	9
1	SIM800	module	10
1	RFID	module	11
1	FINGERPRINT	module	12
1	3.5 ”LCD TFT	module	13
1	pin 11	Communication socket to car power system	14
1	pin 6	Communication socket to car power system	15
1	pin 3	Communication socket to car power system	16
1	pin 2	Communication socket to car power system	17
1	12V-6000MAH	Battery	18
1	3.7V-2800MAH	Battery	19
17	1N4007	Diode	20
4	Rewind	Predecessor	21

Comprehensive outline of the selected process

In this section, the assembly of components is first presented to each other and then the diagram of the operation and assembly process will be drawn. Before the assembly process begins, the components will be subjected to a qualitative review and prepared in small boxes on the assembly table.
In the first stage, the printed circuit is prepared by the device previously mapped, and after the quality control of all the components listed in the table above is installed by a few skilled operators and then soldered by another machine.
After the soldering of components such as resistors, capacitors, diodes and transistors, some of the overrides that have been ejected from the backbone will
And after the re-quality control is installed in another part. be cut by the wire of the software
Then the present set is enclosed in a plastic frame and is fully seated by two two ply automatic screws.
Later, after final quality control and packaging, the product will be transferred to the product warehouse for temporary storage until shipped to the market.

Examine stations, stages and practices for quality control

The growth and development of world industries is largely due to the in this regard, each and every industrial. competition between industrial units' unit, by increasing the quality of its products, is trying to gain more market share and this process has over time improved the quality of products and thus the Quality control is carried out to determine. quality growth of industrial societies the correctness of the production process according to the technical This operation will prevent wastage of production. specifications of the product while preventing the production of defective products and reduce the cost of finished product.

In general, the objectives of quality control can be summarized as follows Detection and improvement of products outside the standard of individual unit performance evaluation.

In other words, it can be said that quality control is the assurance of the production and production of goods and services, in accordance with established standards and inspection as an integral component of quality control in order to identify defects and provide the information needed for the general inspection. quality control system. It does all the industrial units' steps according to the status of each industry are as follows:
At the delivery stage of raw materials at the beginning of production Before the costly operation begins.
Irreversible before operation begins.
Prior to the start of operations that will cover the defects.
Each of these inspection steps may be performed at the site of the operation or laboratory.
In this unit, according to the characteristics of the industry, each of the necessary stages of quality control and the location of these tests will be as stated above, the quality control should be implemented in. determined three stages.

Production Control

The accuracy of the positioning of the components in the designated locations on the board, the quality of soldering, and the smoothness of the circuits, are among the most important considerations in this section where the operators are assembled by the operator. Also, in some cases Special control equipment such as an oscilloscope is used to evaluate the performance of a part of the circuit.

Final Control

After the assembly process is completed, all products are controlled for For this purpose, the control equipment of the simulator system . performance with pumps operating in the door is intended to evaluate the performance of the

product by fast connection through the socket to the system.

Production line equipment and equipment

Using the right machines and machines is one of the most important elements of designing industrial units, because selecting the right machinery can have an In this. important role in improving product quality and optimizing investment design due to the assembly process certain machines are required, however the required components are considered in the assembly process:

After calculating the number of machines and machinery required, the production flow machinery is presented and the material flow map is displayed, depending on the production flow.

Calculate the manpower required

The efficiency and effectiveness of any organization largely depends on the proper Determining the number of. management and effective use of human resources jobs and setting the job description of each job in different classes of organization is one of the basic principles of an organization.

The early stages of each project are accompanied by an estimate of the human resource requirements and the determination of the organizational backlog.

Various parameters are involved in determining the number and specialty of the manpower of the manufacturing unit, such as the level of technology used, the tendency for employment or automation, the range of expertise and skill

Project manpower estimation is done in two parts: production and non-. required production personnel.

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