FLOWER KNITTING MACHINE

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ABSTRACT: This paper based on automatic flower knitting machine and it is mainly having sewing process .which involve the robotic arm process before that conveyor belt is used were flower are poured using the drum. The flower from one end to another end is moved by using conveyor belt then IR sensor is been involve to pick the flowers for the tied process. Thus the flowers are tied automatically with this arrangement. Moreover it is less time consuming and finishes the work neatly.

INTRODUCTION:

In this paper we are designed an automatic flower tying machine. In this method will provide high efficiency and it reduces the labor cost so that people not spend their time to tie a flower using this automatic flower knitting machine labor concentrate on their other important work not only that it also reduce the work tension of the people. In olden days the people are used to tie the flower using the finger in 180 degrees process which will involve the string of flowers here two fingers are rolling over in tied process to make the flower knot in flowers. When two finger are released then next stage of tied process have been started continuous for required length to make flowers garland in this way olden days flower are been majorly tie and which having major problem of tied process it require more time, it required more numbers of labor to make the garland of flowers. To overcome this drawback the automatic flower knitting machine is introduced which is mainly having sewing process it involve the robotic arm process to tie the flowers. Conveyor belt have been used in knitting process and which is carry the fresh flower from drum into robotic arm end the belt material is mainly made up of fiber because to withstand the vibration and temperature . the two dc motor is used to rotate the conveyor belt and motor driver L239D will interconnected between source and conveyor side because it is higher current end compare to the source end.

The robotic arm is very important process having the different process like positional, linear, and continuous. But our robotic arm we used the positional rotation which is having 180 degree process in motion. It contains four servo motor for four different motions like gripper, wrist, elbow, shoulder function. The electromechanical device is used in process it will convert the electrical signal into the mechanical side which been involve in robotic process etc. The industrial automation are mainly helped for reduction in time process which are involved in manual process and also used to increase the production in industry, it will also improve whole production process in industry area.

BLOCK DIAGRAM:
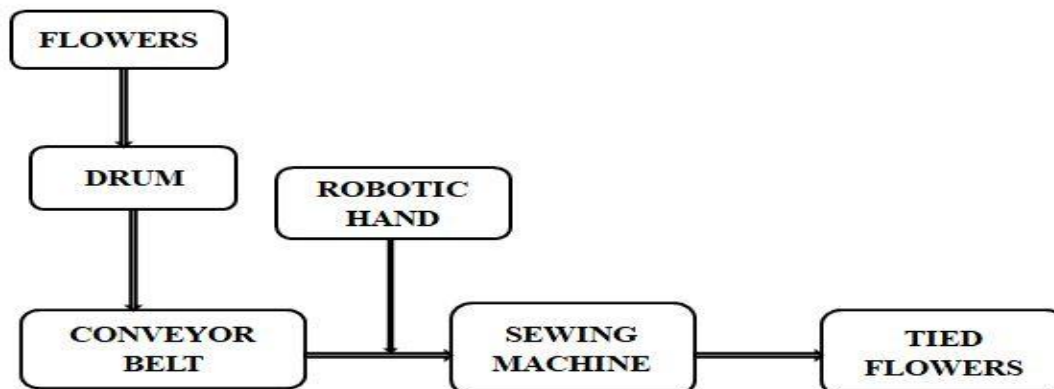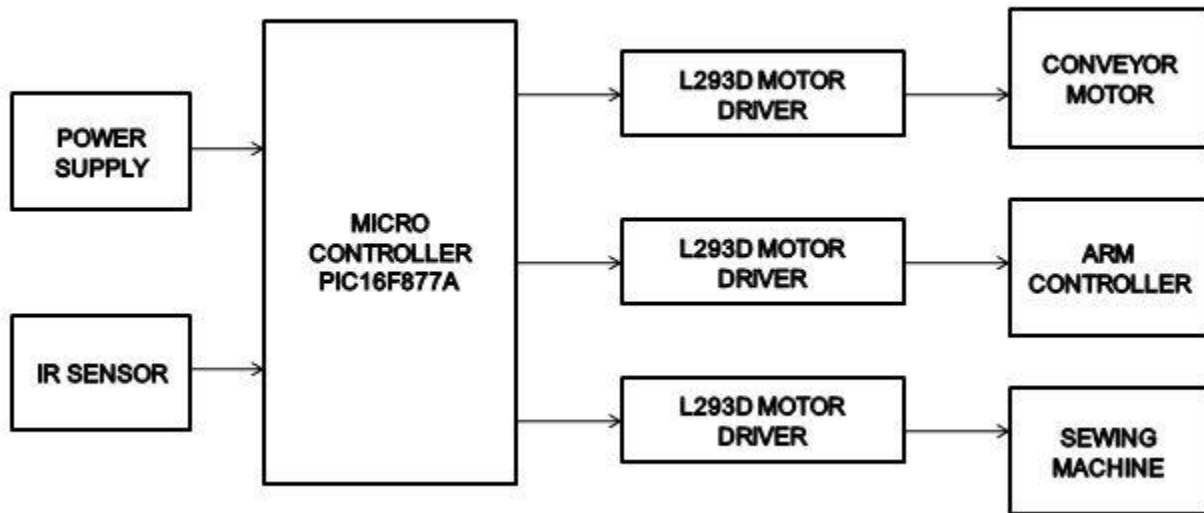
In this system we initially poured the flowers into drum from this drum the flower are falls into the conveyor belts the conveyor belt is having dc motor and which is depend up of fiber material. Then flower are directly fall into belt the conveyor will been operate in process which will have moving motion in forward and backward motion depend on the sequence by 00 and 11.the robotic arm is another process which having four servo motor to move the hand it used to pick the flower form of IR sensors signal. Which is passed in the flower to pick in clear position for the arrangements finally the sewing machine process is involve tying the flower using the hoop and string needle .To make this process PIC 16F877A microcontroller is used in the system.

CONVEYOR BELT:

We are use conveyor belt which will carry the fresh flower from drum into robotic arm end .the belt will been depend up of fiber material and withstand the more vibration during it operation. Then two dc motor set will been used to rotate conveyor belt and motor driver is used to connected between supply and controller ,so using this we reduce high current enter into the system. The PIC L239D type of controller is used for the movement operation and which is mainly interconnected between source and motor side.

ROBOTIC ARM:
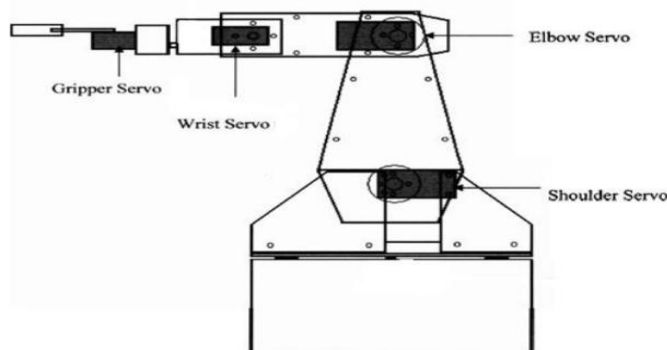
The robotic arm which is very important part in the system it is mainly having different rotation, like positional, linear, and continuous. But our robotic arm we used the positional rotation which is having 180 degree process in motion. It contains four servo motor for four different motions like gripper, wrist, elbow, shoulder function. This operation are done mainly for picking flower IR sensor are used to sense flower position and give the signal to robotic arm to pick and place the flowers.

SEWING MACHINE:
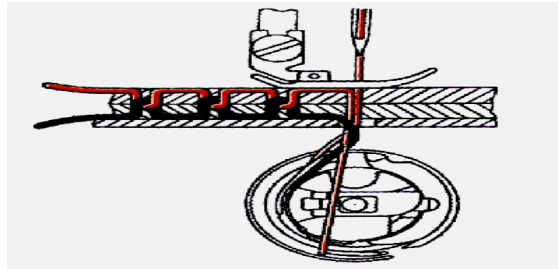
The sewing process is another important one which mainly used the needle descends type of principle. Which is mainly used for tied the flower arrangements it involve looping process to make continuous flower tie arrangement the knot will been varying depend on the flower size .so speed of sewing machine is controlled by servo motor.

CONCLUSION:

This project has provided automatic flower knitting machine using robotic arm and sewing machine. Since it is full of automation so it reduces the manual work and it also reduce the time consumption of people. This provide natural flower tying process so its freshness cannot be lost and finally it is achieved using the above technique.

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