RESEARCH ON OPERATING OF CNC MACHINE

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Abstract: This invention pertains to a CNC screen layout system in a numerical control device system that stores a dedicated utility in its main memory. This memory is applicable for making operation on CNC machine. But for making of operation have to put the code and data for making of the operation. Now a days CNC machine is more used as compared with convention machine. It may have a benefits of the precision work for making work at less time, and we can also performed that work repeatedly more than one time also.

1. INTRODUCTION

CNC machine works on axis program or coding system. We have to remember all the code and data for performing operation on that .it makes some time to make perfect in all that. And its program also take some around 50-1000 lines for making a job and it's quite a bit time consuming. So if put the scanner in that place. Scanner san the object drawing and also one scanned sensor takes a dimension of raw material object and display in to the screen on its computer. Just take a one stick and put the dimension in it. Just place dimension in it.

2. FIELD OF RESEARCH

Here just remove the input data box and placed one touch screen and one scanner in it. Whatever job makes on it just draw on paper or in cad software. And directly scanned in it that scanner scan it and stored in is memory. And whatever job raw material we placed in to chuck one sensor takes its dimension. And gives to the computer memory and that gives some of advantages of it for performing reaped work and for making job accurately placed the dimension in it.
When scanner scan the drawing and also making of dimension of raw material placed that dimension in it and that dimension fit on it and whatever change may require in it just takes a stick and chanje it just like our touch screen mobiles. That makes easy job making devise.

3. PROCEDURAL STEPS

Here given the step for do the work. And how this machine get worked is tell about step by step.

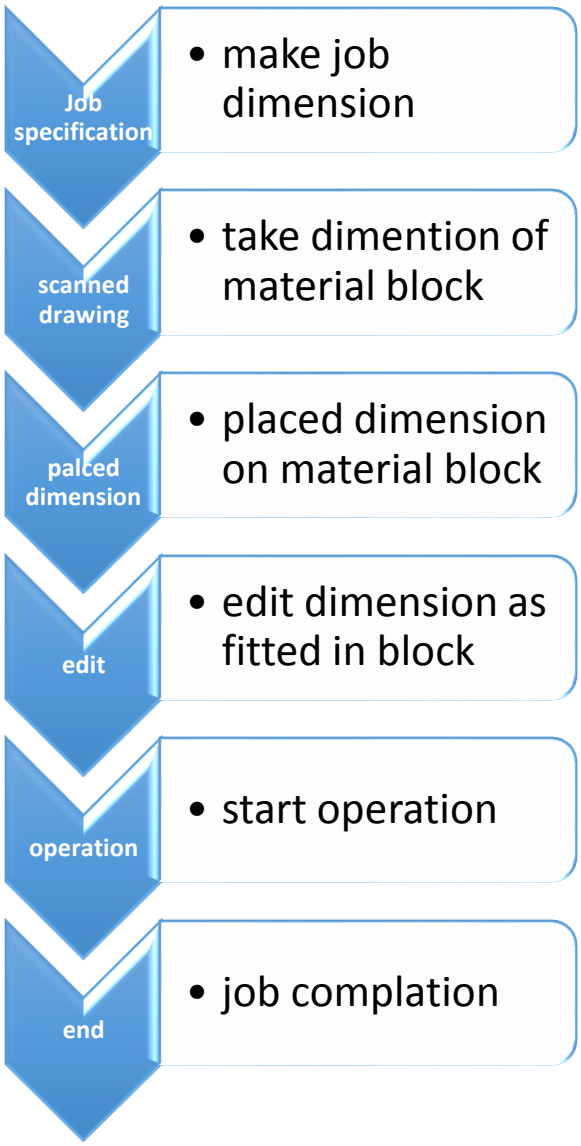

Fig. 1. Procedural Steps

Making of this kind of innovation making time is consumed and less skill worker can operated that machine very easily.

In normal CNC machine have one control panel in which we have to put all the command in it. It is very lengthy and time consuming. And operator must have knowledge about all the G codes and M codes. And write a program for it. For many complicated design program length is around 100-1000 lines. So it very very time consuming. In my research I am try to reduce the time for making a job.

For making that kind of screen provide effective dimension display and job making facility easily. In which only remove the numerical control.

Here for making clockwise and anticlockwise rotation one key is provided in key area.

And for taking operation in it same as old CNC machine but difference is only that it is operated by simple drafting or drawing.

4. LINE DIAGRAM

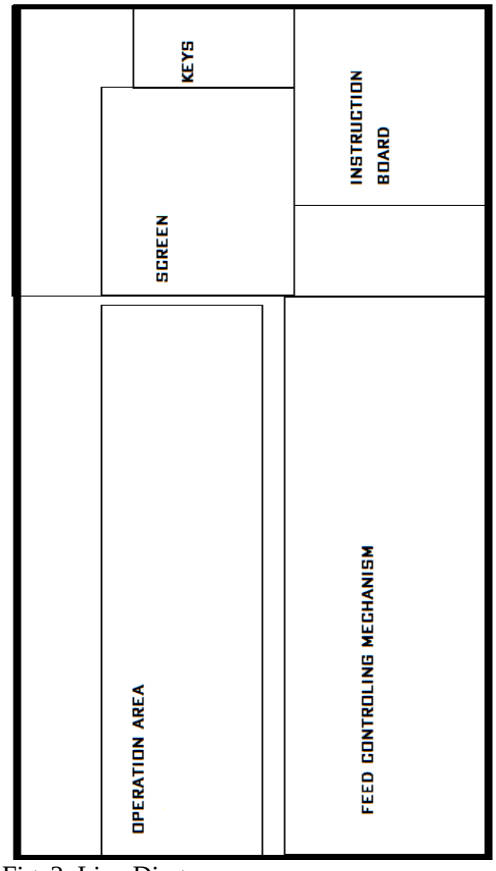

Fig. 2. Line Diagram

As shown in figure:

a. Operation area:
It is that area in which our job is to be placed in it. And all kind of operation is taking in it. And also takes a raw material dimension in it. This area is same as simple CNC machine like.

b. Feed controlling mechanism:
It is that mechanism in which tool booth is to be mounted on it. And feed and lead screw is tole place on it. That screw guide the whole tool mechanism in operation.

c. Screen:
In that screen which drawing we are scan it shows in it and that scanning. And all the dimension is to be placed in it. Whatever changes may require for the job we can easily change in it by stick. And we can also decide which operation is to be performed first and which is second. Bye the guiding of that screen.

d. Key:
All the operating buttons for start, stop, brake etc, are placed on it. We can also adjust our spindle speed by regulator.

5. ADVANTAGES

- Less time consuming
- Easy to operate
- Less skilled worker can do the job.
- No G,M codes required
- Setting of dimension easy.

6. CONCLUSION

In this paper, CNC machine can performed task without coding system and in lesser time. Which make making job easy. For using of screen and scanning fusion system can perform together with great efficiency.

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