

PART PROGRAMMING ON A
C.N.C VERTICAL MILLING MACHINE

by
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ABSTRACT

The main objective of the project was the manufacture of an aluminium component " a door handle " , using a C.N.C vertical milling machine, and of course to get familiar with this type of machine tools.

To achieve this the programming characteristics of the Bridgeport IMKII (with TNC155 Heidenhein control) C.N.C vertical milling machine were studied and the appropriate milling fixture was designed and constructed, for locating and holding the workpiece always in the proper position, during the manufacturing operation.

Finally the part programs were written by making use of linear interpolation, circular interpolation and canned cycles having as a result the manufacture of the above aluminium component using the suitable cutting tools.

All the manufacturing operations were described and analysed. Also the appropriate improvements were suggested.

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