

COMPUTER NUMERICAL CONTROL (CNC) - COMPUTER AUTOMATED MANUFACTURING(CAM) DIVISION:

CNC/CAM has been considered as an NC programming tool wherein components are generated in CAD software are used to generate CNC code to drive numerical controlled machine tools.

The process is the use of computer-based software tools that assist engineers and machinists in manufacturing or prototyping product components. CAM is a programming tool that allows you to manufacture physical models using computer-aided design (CAD) programs. CAM creates real life versions of components designed within a software package. Computer numerical control (CNC) is a computer "controller" that reads G-code and M-code commands and drives a machine tool, a powered mechanical device typically used to fabricate components by the selective removal of material.

CAD-CAM

An entry in this classification will be a combination of both a computer aided drawing w/dimensions and a computer produced or manufactured item. A printout of the first 3 pages of the NC program must be included. □

All Groups are eligible to participate.

CNC - 01 CAD-CAM (Metals)

This classification includes any project in which the machining of metal **constitutes the major operations** with the aid of a computer interface. A complete set of plans must accompany the project. A printout of NC code must be included. Examples: (V-block, step block, scriber, jig, fixture, or machined casting.) Entry must include drawing(s).

CNC - 02 CAD-CAM (Woods)

This classification includes any project in which the machining of the project **constitutes the major operation** with the aid of a computer interface. A printout of the NC program must be included. Examples: (Spindles, bowls, or lamps.) Entry must include drawing(s).

CNC - 3 CAD-CAM (Plastics or Material Combination Project)

This classification includes any project in which the machining of the project constitutes the major operation with the aid of a computer interface. A complete set of plans must accompany the project. A printout of NC code must be included. Examples: (Game pieces, Desk nameplate, Signs etc.) Entry must include drawing(s).