

# Automated Manufacturing Technology

**Purpose:** To evaluate each contestant's preparation for employment in automated manufacturing and the team approach to problem solving work environment. To recognize outstanding students for excellence and professionalism in the field of automated manufacturing technology.

**Clothing:** Acceptable work clothes, safety glasses with side shields or goggles. (Prescription glasses can be used only if they are equipped with side shields. If not, they must be covered with goggles.) No school names may be displayed on any apparel.

**Contestants:** 3 teams (3 persons) per region, determined by regional event

## **Tools/equipment to be provided by each team:**

CNC Milling System to include as a minimum:

- a. CNC Machining Center (mill)
- b. Control system for mill (computer) (see item 2a. below)
- c. Table to mount mill (tables will not be provided by Ohio SkillsUSA for mill)
- d. Vise and hold downs (stock will be 2" x 3" x 1 1/2")
- e. Parallels, to position top of 1 1/2" stock a minimum of 3/4" above vise
- f. Edge finder or equivalent to square vise on mill
- g. End mills, flat, 2 or 4 flute: 1/16", 1/8", 3/16" & 1/4" (tool change(s) will be required)
- h. Dial or vernier calipers to measure 0" to 3"
- i. Necessary hand tools for your installation including safety glasses (3 pair)

Two computers and software for CAD/CAM programs

- a. Backup copies of software
- b. All three computers must be capable of transferring data from one computer to another with a removable media device

One plotter/printer to plot/print CAD drawings, 8 1/2" by 11" and NC program

Power strip with enough outlets to connect all of your equipment, must be circuit breaker protected

25' UL approved extension cord (only one connection to power per team)

Calculator

2 #2 pencils (sharpened)

All forms for documentation and milling stock will be provided by the Technical Committee.

**Note:** The area will be available to set up equipment at 7:00 a.m. Friday, April 23, 2010.  
Equipment must be removed by 6:00 p.m. Friday.

**The contest will start promptly at 12 PM (Noon).**

## **Scope of the Contest**

The contest will be judged based on the criteria established in the 2010 SkillsUSA Championships Technical Standards.