

Missouri
SKILLS USA

2019

Automated
Manufacturing
Technology
Skills Contest

Hosted By **State Technical College of Missouri**

Skills USA State Competition 2019 Automated Manufacturing Technology Contest

Contest Objective:

This contest is to evaluate contestants in preparation for employment in Automated Manufacturing Technology.

Contest Times & Location:

Secondary Students:

Pre-Contest: 8:00 am – 8:45 am (Wednesday, April 3rd, 2019) Nilges Technology Center Building Room 130

Contest: 8:45 am – 11:30 a.m. (Wednesday, April 3rd, 2019) Nilges Technology Center Building Room 130

Post-Secondary Student Contest:

Pre-Contest: 12:15 pm – 1:00 pm (Wednesday, April 3rd, 2019) Nilges Technology Center Building Room 130

Contest: 1:00 p.m. – 3:45 pm (Wednesday, April 3rd, 2019) Nilges Technology Center Building Room 130

Contest Guidelines

All competing Skills USA team members of the Automated Manufacturing competition@ LSTC will report to proper location at proper times or be disqualified from competition if tardy.

Competing teams will be composed of three members: A CAD operator constructs the part geometry, a CAM operator to generate tool paths, and the CNC operator will set up and machine the parts.

One person will not dominate a team by doing the CAD drawing, the CAM tool path, or running the CNC machine while using the other members simply as support. Each team member will have only one of the 3 specific tasks to perform.

Teams will have 15 minutes to set-up their computer equipment only prior the official contests start time. Please report the proper location @ proper time.

Teams will be presented with tooling and dimensioned drawings of parts to produce when the competition is scheduled to begin.

The CNC operator will be directed to where they may perform their tool set-up portion of the competition.

Judges will monitor all portions of the competition.

When teams finish machining parts or time is called, they will present to the judges in a timely fashion: all documentation required for the competition & parts w/ contestant #s written on parts w/ a permanent marker for evaluation.

Materials Supplied by Contestants:

6" caliper (digital or dial)

6" or 12" file

Calculator

Safety glasses with side shields (*to be worn at all times while competing*)

Several pencils

One page, typewritten resume (due at Pre-Contest meeting)

***Two computers: One computer loaded with CAD software, One computer loaded with CAM software
Computer Printer***

Vise Parallels (full set)

Edge finder

Feeler gages or Shim set

Test indicator w/ 3/8" shank

Soft face hammer

10" adjustable wrench

Materials Supplied by Contest Host:

Vertical Machining Center w/ vise

Machine operating manuals

Part Material for pre-contest & contest

End mills

Paper

2 Flash drives **(to be return to judges upon contest completion)**

Power strip

Tables & chairs

Contest Notes:

Only HAAS machines will be available for the contest. Please visit

A viewing area will be roped off within the contest area. NO ONE will be allowed past this area except contestants, judges, and committee members. Thank you for your cooperation.

If a technical problem should arise w/ any equipment malfunction during the contest, the contestant should notify the acting chairman or a judge. If it is decided from that a malfunction has actually occurred, time will be stopped from that teams allotted time and the malfunction will be reconciled or an alternate piece of equipment will be used for the time that is remaining for the contestant.