

CNC Turning

CHAIR: Dawn Stock, Spirit Aerosystems

CO-CHAIR: Sean McCue, Spirit Aerosystems

CONTEST DATE: April 30, 2020

CONTEST LOCATION: Hutchinson Career Technical Education Academy V109

CONTEST TIME: 8:00 am

PURPOSE: To purpose of this contest is to evaluate each contestant's preparation for employment in Computer Numeric Control Turning. In addition, to recognize outstanding students for excellence and professionalism.

ELIGIBILITY: Open to active SkillsUSA members enrolled in programs with precision machining, automated manufacturing or CNC as the occupational objective

CLOTHING REQUIREMENT: Unless the contest chair says otherwise, students are required to wear the Official SkillsUSA Kansas T-shirt and blue jeans (no tares, holes, or bagginess) clean and neat with appropriate shoes for contest or Official SkillsUSA Carhartt attire.

** 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.)*

Official SkillsUSA Kansas T-shirt attire



Official Carhartt attire



2020 KANSAS STATE CHAMPIONSHIPS (KSC) CONTEST UPDATE



CONTEST UPDATES: Please refer to the Technical Standards for guideline.

RESUME AND INTERVIEW:

Each student must submit a one-page printed resume before the contest start at the contest site on orientation day (present to contest coordinator, not judges). This is the only time that resumes can be turned in. Failure to do so will result in a 10 point penalty. Interviews will happen on orientation day for all competitors.

ORIENTATION DAY:

On Orientation day, the following will be discussed.

- Orientation for all 4 events (Precision, Technician, Milling, Turning)
- Machine Operation
- Safety Features
- Mockup of part, material, measuring tools, cutting tools
- Drawing of competition available with no dimensions
- Agenda for competition day (plan / time limit / lunch, etc.)
- Resume turn in on this day
- Interviews for all competitors

Competition day (CNC Milling April 29th – CNC Turning April 30th)

On Competition day, the following can be expected

- Contestants receive project packet that includes blank grading sheet
- 30 min lunch provided at 11:30
- 2x 3.5 hour sessions:
 - Session A: Written Test
 - Session B: Programming Contest
 - Flip at lunch

Written Test:

Consists of shop knowledge, G and M Code questions, programming theory, and machining theory.

Programming Contest:

Consists of fill in the blanks given sequence of operation guidelines.

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WORKSHOP DAY:

April 18th at WSU Tech Wichita, KS

The following topics will be covered on the workshop day.

- Trigonometry review
- Machinist handbook
- HAAS ref. book
- Machinist calculator pro allowed
- Resume help
- Interview prep
- Preview competition
- Precision measuring equipment review
- Past nationals written test
- Machine overview
- Simulator review (WSU Tech and Hutch to provide)