

# HVACR

## Heating, Ventilation, Air Conditioning and Refrigeration

**CHAIR:** Jonathan Brown, Kruse Corporation

**CO-CHAIR:** ---

**CONTEST DATE:** April 25, 2019

**CONTEST LOCATION:** Hutchinson Community College ITC 108/103

**CONTEST TIME:** 1:00 pm – 5:00 pm

**PURPOSE:** To evaluate each contestant's preparation for employment and recognize outstanding students for excellence and professionalism in heating, ventilation, air conditioning and refrigeration.

**ELIGIBILITY:** Open to active SkillsUSA members enrolled in programs with heating, ventilation, air conditioning and refrigeration as the occupation 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 khaki work shirt and pants 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 SkillsUSA khaki work shirt and pants attire



## 2019 KANSAS STATE CHAMPIONSHIPS (KSC) CONTEST UPDATE



### CONTEST UPDATES:

#### HVACR SCHEDULE:

12:00 noon LUNCH in STL Theater

12:45 PM Orientation

#### CONTEST BEGINS

1:00 PM Rotation #1

1:45 PM Rotation #2

2:30 PM Rotation #3

3:15 PM Rotation #4

4:00 PM Rotation #5

4:45 PM Contest Ends

5:00 PM Debrief

Students will be evaluated by the following areas:

- Brazing
- Refrigeration Troubleshooting
- Electrical Troubleshooting – Air Conditioning
- Refrigeration System: Electrical Troubleshooting
- Refrigerant Procedures
- Electrical Troubleshooting – Heating
- Brazing Safety Seminar
- Students will be given a written test
- Students are required to bring a one-page resume
- Students are required to wear official dress for competition, see clothing requirements

#### Tools required to be brought to the contest by contestants:

- Volt Ohm Meter
- Amp Meter
- Assorted screwdrivers
- Nut drivers
- 3/8" Swaging Tool
- 3/8" Flaring Tool
- Tubing Cutter
- Wiping Cloth
- Steel rule or measuring tape
- Tubing Bender
- Basic Hand Tools
- All PPE: Safety Glasses/Gloves
- Oxy Acetylene Torch kit with two full bottles
- Refrigerant reclaim machine 410a capable
- 5cfm or smaller vacuum pump

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- 3/8' tube bender, swing or cross bow style is fine

NOTE: All of the above items will need to be marked and labeled with identifiable markings.

### **Stations to be covered:**

- Written Exam
- Furnace Operation
- Air Conditioners
- Solder + Braze
- Refrigeration