

2019 SC SkillsUSA

Welding

Individual and Fabrication (3-man team)

Notes:

- Hosted at:



Tri-County Technical College
Industrial Technology Center
Welding and CNC programs
5321 Highway 76
Pendleton, SC 29670

- Local hotel contact info will be provided on a separate attachment in the Tech chair update 2019.
 - NO prearranged rates or rooms are being held
- State level does NOT require resume or interview
 - Nationals will REQUIRE
- Contest Project plans will only be available to students once the contest begins
- Instructors will not be allowed in contest area on day of contest 3/15/2019
 - Area will be provided for waiting, Break room / Canteen
 - Snacks / coffee will be provided by Lincoln Electric Break room / Canteen
 - Lincoln Electric will have **NEW** VRTEX trainer on display for DEMO, Lobby
- NO Grinding in the individual contest portion
- Limited Grinding in fab contest portion on beveled edge prior to welding in joint
 - Grinding to be done in exterior grinding area only
 - Grinder, extension cord, face shield, hearing protection to be provided by team
 - All personnel in grinding area are to have PPE
- Safety, Safety, Safety at all times!!!!
 - Any time in the welding lab area requires safety glasses **AT ALL TIMES**
 - Point Deductions of 10 points per witnessed infraction
 - Sum TOTAL from all judges through all portions of contest
- GTAW Torches, Air-cooled, 17V
 - Depending on machine, set-up may differ, whether connected to machine with quick connect or typical external dry-rig set-up connecting to the SMAW electrode holder
 - All GTAW torch components to be supplied by students
 - Collet
 - Collet Body or Gas Lens
 - Cups
 - Back cap
 - Tungsten



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- OFC – Propylene gas
 - ESAB / Victor cutting apparatus
 - Bulk gases / NO Bottles
- FCAW & SMAW
 - .045"
 - 75/25 Shielding, provided by bulk piped into lab, no individual bottles
- Consumables provided by Lincoln Electric and Miller for their portion of the contest
- Raw Materials being provided by outside sponsor _____
- As work / project is completed in each Contest
 - An area will be designated for each competitor to submit project
 - Project to identified by contestant# / team #
 - Projects will be referenced throughout the scoring process and discarded after the day's event
 - Students are ONLY to handle their project
 - Students are NOT to handle projects after event completion
 - Instructors will NOT be allowed to view, handle, or leave with completed project
- Judging
 - Plans are for ONE Judge per process in each contest
 - OFC
 - SMAW
 - GTAW & GTAW Aluminum
 - GMAW
 - FCAW
 - Students are responsible to seek out the judge, for that process, at required inspection points
 - Mandatory Inspection points:
 - Raw material inspection
 - Tacked, in position, ready to weld
 - Each layer of weld
 - Finished weld
 - Others as requested by the Judge
 - Missed inspection points will be assessed a score of ZERO
 - Judging results are final
- Safety to be assessed throughout the day and point deductions tallied at events END
- Attire deduction made as a ONE-time penalty of a 50-point deduction. Depending on the significance of the infraction, could result in disqualification if deemed a safety risk by the event coordinator, Paul Phelps of TCTC.
 - Example, overly worn and hole ridden attire creating a fire safety concern
 - Example, trying to weld in a sleeveless shirt
 - Example, foot covering, running shoes
 - not all leather
 - or low cut exposing the ankle



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- Drinks during the contest event are being provided for the students by the sponsor of their respective contest.
- Lunch is being provided for the students by the sponsor of their respective contest.
- Equipment:
 - Individual Contest
 - (12) Group A, Lincoln Electric – Flextec 450, GMAW & FCAW
 - (12, up to 24) Group B, Miller – Dynasty 200, GTAW, GTAW Alum, SMAW
 - Change machine at mid-point
 - (6) Over flow Group A, Lincoln – 350 MP, GMAW & FCAW
 - Fabrication Contest (3 Man Team)
 - (16) Miller XMT 304 with 22A wire feeder, FCAW, GTAW, SMAW
 - (3) Over flow:
 - Miller - Maxstar 200, SMAW, GTAW
 - Miller – Millermatic 251

Questions, concerns, or needing clarification to info provided call or e-mail, e-mail preferred.

All questions answered will be submitted as an additional teaching chair update for all to see.

Paul R. Phelps

Tri-County Technical College

CNC & Welding Technology

Department Head

AWS CWI / CWE

864-646-1405 Office

864-646-5981 FAX

pphelps@tctc.edu



[Welding Technology](#)

