

Precision Machining Technology

State Contest Information

Date, Time and Location

The 2014 State SkillsUSA Precision Machining Skill Championships will be held Monday, April 28th at Tulsa Technology Center, Broken Arrow Campus. The contest orientation will begin promptly at 8:00 a.m., and the contest will start at 8:30 a.m.

There will be a required contest meeting and machine familiarization meeting on Sunday, April 27th at 4:00 p.m. shop will be open from 4:00 p.m. - 6:00 p.m. at Tulsa Tech, Broken Arrow.

REQUIRED-Bring or make arrangements to bring all tool boxes at this time.

(Any contestant not at this meeting is disqualified.)

For safety purposes each contestant is to have a copy of their Personal Medical and Liability Release form with them at the contest site. The form is to be given to the contest chairman at the Sunday meeting prior to the start of the contest. You must use the form found on the SkillsUSA web site.

No contestant will be allowed in the wing of the contest the day of the contest without a judge present with them. All contestants must display badges on chest while at Tulsa Tech, Broken Arrow or they will be disqualified.

Medical Forms and Resumes

The state supplied medical forms **are required. No others will be accepted at the contest.**

All contestants will be required to submit a typed resume. If any contestant does not submit a resume to the contest chair, penalty points will be assessed.

Transportation

You must provide your own transportation to the contest and to the contestant meeting. Due to the rising cost of transportation...there will be **no transportation provided.**

Lunch

Students will be expected to remain on campus for lunch. The meal deal is \$4.50 per person at the campus cafeteria. Students should also bring money for drinks and snacks out of the vending machines.

Clothing Requirements

Jewelry including rings and watches are not allowed during the contest. Contestants should not wear clothing that has school identification visible to the judges. Those contestants wearing program uniforms will need to cover all identifying patches.

Proper clothing includes name badges placed on chest left hand pocket area.

Awards Ceremony

Contest winners will be recognized during the Awards Assembly at 9:00 a.m. on Tuesday, April 29th, in the Arena at the Tulsa Convention Center. **OFFICIAL SkillsUSA ATTIRE IS REQUIRED!** According to the SkillsUSA Championships Technical Standards - clothing requirements are as follows: "*For men:* SkillsUSA official attire: Official red blazer or jacket, black dress slacks, white dress shirt, plain black tie with no pattern or SkillsUSA tie from Midwest Trophy, black socks and black shoes. *For women:* Official red blazer or jacket, black dress slacks or skirt, with businesslike white, collarless blouse or white blouse with small, plain collar that may not extend onto the lapels of the blazer, black sheer or skin-tone hose and black shoes." Any contest winner who is not in official SkillsUSA attire will not be permitted on stage. The student will be escorted behind the stage to receive his or her medallion and awards. The awards ceremony is the "**Showplace**" of our state conference, and many industry guests and VIP's are invited to present medallions and honor our students.

Judges

The Business and Industry Technical Committee will be organizing and judging the contest. Additional judges are needed...please contact Rick Powell, rick@rlpmail.net, with the names of those that can assist.

Industry Awards

Each instructor will need to bring a minimum of \$100 worth of prizes for each contest participant entered. Once again, your assistance is needed to obtain industry awards for the Precision Machining contest winners. All industry awards should be labeled with the name and address of the award supplier and bring to the Arena in the Tulsa Convention Center on Monday, April 28th. **All awards and Industry Award/Donation Forms are needed by 7:00 p.m. on Monday so that industry awards can be appropriately processed.**

Rules and Regulations

From this competition, we will select one secondary student and one postsecondary to represent Oklahoma at the SkillsUSA Championships. Therefore, we will follow the national rules, regulations, and the contest content as closely as possible. We want our team members to be prepared to compete at the national level.

Tools and Supplies

Continue to check this page until April 25th to confirm any materials to be supplied or to be brought.

<p>Mill</p> <p>The mill project will be made of aluminum. The material will be Squared to 3.90 x 3.90 X 1.00 with all dimensions to be finished by contestants.</p> <p>**Tools required:</p> <p>Face mill or fly cutter - 3" Max diameter End mills; 1/4" & 1/2" Center drill bits; #7, 1/4", 5/16", 27/64" & 1/2" Taps; 1/4-20, 3/8-16, 5/16-18 & 1/2-13 Set of Parallels Edge finder Tap handle RA collets, 1/2, 1/4</p>	<p>Lathe</p> <p>The Lathe project will be made of 6061-T6 Aluminum. The material will be finished to length 4.000 X 1.50 diameter.</p> <p>**Tools required:</p> <p>Center Drill, Facing & turning tool, Threading tool Grooving tool; .125" wide, Drill bit; 1/2" Chip hook Tool shank size is 3/4 max.</p>
<p>Measurement & Inspection</p> <p>Steel ruler; 6" and 12" OD Mic's, 0-1" (.0001 scale) & 1-2" (with standards) 6" Caliper 1-2" OD Blade Mic (can use 6" caliper) Depth Mic with standards; 0-4" Set of Telescoping gages Protractor</p>	<p>Other tools/Equipment</p> <p>- Pencil - Paper - Calculator - Machinist Handbook - Layout die - Scriber - De-burring tools - State Medical release form - Safety glasses with side shield - \$5.00 for lunch * Check with host site on shank size needed!!</p> <p>**And any other tools you think you might need</p>

Tool list and information

Each contestant will be required to bring toolboxes and their tools. Contestants should bring a Minimum of the tools listed below. Each contestant will need to bring there own tools. Do not bring nuts for gages. Sharing boxes or tools will not be allowed.

Safety

For safety reasons side shields and safety glasses are required. The maximum rpm are on the mill 1500 rpm and the lathe 1000 rpm. Any minor safety violations there will be one verbal warning, one warning with 25pts off and on the third violation disqualification. Major violations will deem automatic disqualification at judge's discretion.