LEVEL UP
2026 - 2027

NYS SkillsUSA

AUTOMOTIVE REFINISHING TECHNOLOGY

PURPOSE

To evaluate each competitor's preparation for employment and to recognize outstanding students for excellence and professionalism in the field of automotive refinishing technology.

ELIGIBILITY

Open to active SkillsUSA members enrolled in programs with automotive refinishing technology as the occupational objective.

CLOTHING REQUIREMENTS

NYS SkillsUSA – Mechanic

- White crew neck short- sleeved T-shirt
- Work pants or jeans,
- Leather or steel toed work shoes.
- Long hair must be restrained.
- Tyvek Paint Suit
- Safety glasses with side shields or goggles, (Prescription glasses can be used only if they are equipped with side shields and are approved by OSHA(Z-87). If not, they must be covered with goggles.

Note: Contestants must wear their official contest clothing to the contest orientation meeting.
Also bring #2 pencil, resume, and safety assurance form.

EQUIPMENT AND MATERIALS

1. Supplied by the technical committee: basic equipment for an automotive refinishing laboratory.
   a. Various grits and styles of sandpaper
   b. Clean-up thinner
   c. Waterborne basecoats
   d. Strainers
   e. Reducer
   f. Paint
   g. UV Primer surface
   h. Clear coats
   i. Paint panels
   j. Necessary masking materials
   k. Razor blades
   l. Cleaning towels
   m. Tack cloths
   n. Waterborne cleaner
   o. Sanding masks
   p. Spray guns
2. Supplied by the competitor:
   a. Clipboard, calculator, #2pencils
   b. 6'' DA sander
   c. b. Cartridge-type respirator (charcoal filtered)
   d. Paint suit and nitrile gloves for repair and painting
   e. Hook-it and sticky back DA pad/and stick it DA back pad
   f. e. 9/16" and 5/8" wrenches
   g. Air pressure gauge 25foot air hose and various air ends/Universal air connectors/fittings
   h. DA pad wrench
   i. Sanding pads
   j. Sanding blocks
   k. All competitors must create a one-page résumé using a word processor Note: Contestants will also be required to turn in two hard copies of their résumé as part of the actual contest at orientation
   l. Check the Contest Guidelines and/or the updates page on the NYS SkillsUSA Web site http://www.nysskillsusa.org

RESUME REQUIREMENT

Competitors must create a one-page resume to submit at orientation.

DEVICES

Cell phones or other electronic devices not approved by the NYS Chairperson will be collected by the contest chair during the competition. Chairpersons will announce their acceptance by listing it on their standard or at the orientation meeting. In case of emergencies advisors should allow the competitors to take their phones to the contest areas.

If the competitor uses their device in a manner which compromises the integrity of the competition, the competitor's score may be penalized.

SCOPE OF THE COMPETITION

The competition will be consistent with the Collision Repair/Refinishing Technician Task list.

Competitors will demonstrate their ability to perform jobs of skills selected from the standards mentioned above as determined by the SkillsUSA Championships technical committee. Committee membership includes (but is not limited to): 3M Automotive Aftermarket Division, Akzo Nobel Coatings Inc., Axalta Performance Coatings, BC Marketing Inc., BASF, Collision Hub, Dan Am Air, LKQ Corp., National Institute for Automotive Service Excellence (ASE), PPG, WIN, Society of Collision Repair Specialist (SCRS), Saint-Gobain Norton, SATA Spray Equipment, Sherwin-Williams, State Farm Insurance Companies, New Pig & Carstar.

KNOWLEDGE PERFORMANCE

All competitors are required to take the SkillsUSA professional development test at orientation.

The competition includes a written knowledge test given by ASE covering the automotive refinishing areas that are identified in the NATEF Collision Repair/Refinishing Program Standards and the ASE Official Study Guide: Collision Repair/Refinish. The tests for the high school and college competitors will consist of surface preparation; spray gun operation and related equipment; paint mixing, matching, and applying; solving paint application problems; and finish defects, causes, and cures and safety precautions.

SKILL PERFORMANCE

The competition includes a series of workstations, an interview process designed to assess skills in the following areas: spot repair, color tinting, featheredge, prime and block, paint id and masking. The overall appearance of the finished product, speed and proper safety practices will be judged.

STANDARDS AND COMPETENCIES

SpotRepair

ART1.0— Prepare a panel surface for a basecoat blend & clearcoat application (full panel) in relationship to the Technical Data Sheet (TDS) supplied by the supporting paint manufacture.

1.1. Demonstrate proper safety procedures.
1.2. Clean the entire area of panel being repaired; use appropriate cleaner to remove contaminants (we must use waterborne cleaner only due to fumes in the competition area).
1.3. Dry sand areas to be refinished, removing all gloss to level finish using TDS recommendations for sandpaper grit range.
1.4. Clean area to be refinished using a final cleaning solution.
1.5. Remove dust from the area to be refinished, using a tack rag.

ART 2.0 — Basecoat spot repair application in relationship to the Technical Data Sheet (TDS) supplied by the supporting paint manufacturer.

2.1. Demonstrate proper safety procedures.
2.2. Remove, with a tack rag, any dust or lint particles from the area to be refinished
2.3. Check and adjust spray gun operation.
2.4. Apply clear blender if applicable to prevent metallic halo.
2.5. Apply finish using appropriate spray techniques (gun arc, gun angle, gun distance, gun speed and spray pattern overlap) for the finish being applied.
2.6. Apply basecoat for panel blending.
2.7. Dry basecoat per Technical Data Sheet.

ART 3.0 — Full panel clearcoat application in relationship to the Technical Data Sheet (TDS) supplied by the supporting paint manufacturer.

3.1. Demonstrate proper safety procedures.
3.2. Remove, with a tack rag, any dust or lint particles from the area to be refinished
3.3. Check and adjust spray gun operation.
3.4. Apply clearcoat finish using appropriate spray techniques (gun arc, gun angle, gun distance, gun speed and spray pattern overlap) for the finish being applied.

ColorTinting

ART 4.0 — Complete color assessment in relationship to the tasks in the National Automotive TechniciansEducation Foundation (NATEF)Collision Repair and Refinishing Technical Standards for Painting and Refinishing (B2 ASE Test)

4.1. Determine the type of mismatch problem encountered while evaluating the color sample.
4.2. Determine adjustment that must be made to correct the hue/color, value/lightness or darkness, chroma/saturation/purity, and flop.

ART 5.0 — Select the correct toner for color adjustment (toner within the formula) application in relationship to tasks in the National Automotive Technicians Education Foundation (NATEF) Collision Repair and Refinishing Technical Standards for Painting and Refinishing (B2 ASE Test)

5.1. Demonstrate the ability to select the correct toner to correct predetermined mismatch problems while selecting the correct toner.

5.2. Demonstrate the ability to select the correct toner to correct the hue/color, value/lightness or darkness, chroma/ saturation/purity, and flop.

ART 6.0 — Spray out completed (includes clearcoat application) application in relationship to tasks in the National Automotive Technicians Education Foundation (NATEF) Collision Repair and Refinishing Technical Standards for Painting and Refinishing (B2 ASE Test)

6.1. OBJ Apply finish using appropriate spray techniques (gun arc, gun angle, gun distance, gun speed and spray pattern overlap) for the finish being applied.

ART 7.0 — Make proper adjustments/hits producing a blendable color match (evidenced of a spray out card) application in relationship to tasks in the National Automotive Technicians Education Foundation (NATEF) Collision Repair and Refinishing Technical Standards for Painting and Refinishing (B2 ASE Test)

7.1. OBJ Apply tinted product to produce evidence of a blendable color match for the finish being applied

Featheredge, Priming and Blocking (Scratched Substrate)

ART 8.0 — Surface cleaning application in relationship to tasks in the National Automotive Technicians Education Foundation (NATEF) Collision Repair and Refinishing Technical Standards for Painting and Refinishing. (B2 ASE Test)

8.1. Clean entire panel; use appropriate cleaner to remove contaminants.

8.2. Apply surface cleaner to remove contaminants.

ART 9.0 — Repair damaged area in preparation for primers in relationship to tasks in the National Automotive Technicians Education Foundation (NATEF) Collision Repair and Refinishing Technical Standards for Painting and Refinishing (B2 ASE Test)

9.1. Sand area using dual action sander.

9.2. Sand areas to show appropriate removal of material for good featheredge technique.

9.3. Sand beyond the repair area for adhesion of primer.

ART 10.0 — Apply UV primers application in relationship to tasks in the National Automotive Technicians Education Foundation (NATEF) Collision Repair and Refinishing Technical Standards for Painting and Refinishing (B2 ASE Test)

10.1. Apply UV primer surfacer onto surface of repaired area.

10.2. Check and adjust spray gun operation.

10.3. Apply finish using appropriate spray techniques (gun arc, gun angle, gun distance, gun speed and spray pattern overlap) for the finish being applied.

10.4. Use UV light to dry according to material manufacturer recommendations.

ART 11.0 — Perform proper block sanding techniques and final sand for basecoat application in relationship to tasks in the National Automotive Technicians Education Foundation (NATEF) Collision Repair and Refinishing Technical Standards for Painting and Refinishing (B2 ASE Test)

11.1. Dry sand the area to which two-component finishing filler has been applied.
11.2. Dry sand is the area to which UV primer-surface has been applied.
11.3. Block the sand area to achieve levelness of repaired area.

Paint Code ID and Masking

ART 12.0 — Locate and document vehicle manufacturers' paint code application in relationship to tasks in the National Automotive Technicians Education Foundation (NATEF) Collision Repair and Refinishing Technical Standards for Painting and Refinishing (B2 ASE Test)

12.1. Determine the type and color of paint already on the vehicle by manufacturer's vehicle information label.
12.2. Identify the code using paint manufacture manuals and or computer to determine paint code location.

ART 13.0 — Select the correct variant application if applicable in relationship to tasks in the National Automotive Technicians Education Foundation (NATEF)CollisionRepair and Refinishing Technical Standards for Painting and Refinishing (B2 ASE Test)

13.1. Identify variant swatches/chips.
13.2. Match variant to vehicle using color- corrected lighting.
13.3. Identify a variant that will produce the best possible blend.

ART 14.0 — Appropriate masking techniques for refinishing fender and blending into adjacent panel (front door) application in relationship to tasks in the National Automotive Technicians Education Foundation (NATEF) Collision Repair and Refinishing Technical Standards for Painting and Refinishing (B2 ASE Test)

14.1. Mask and protect adjacent panels that will not be refinished.
14.2. Mask door jams and other aperture panels.

ART 15.0 — Oral Assessment/Interview

15.1. Exhibit personal skills such as attendance, time management and individual responsibility.
15.2. Demonstrate promptness when required to meet interviewer at specific time and location.

ART 16.0 — Maintain professional conduct

16.1. Demonstrate courteous behavior while waiting for the interviewer.

ART 17.0 — Maintain professional appearance

17.1. Demonstrate proper attire (SkillsUSA uniform).

ART 18.0 — Complete job application and resume *

18.1. Properly and legibly complete a job application and resume.

ART 19.0—Demonstrate interview skills

19.1. ASE Written Test

ART20.0—Competitors will be required to take a written test.

20.1. Competitors will take a written test in painting and refinishing that includes surface preparation, spray gun operation and related equipment, paint mixing, matching, and applying, solving paint application problems, finish defects, causes, and cures, and safety precautions.

This information was obtained through the National Institute for Automotive Service Excellence Painting and Refinishing (B2) Certification Test.