

## CABINETMAKING

### PURPOSE

To evaluate each competitor's preparation for employment and to recognize outstanding students for Excellence and professionalism in the field of Cabinetmaking and Millwork.

### ELIGIBILITY

Open to active NYS SkillsUSA members enrolled in career and technical programs with Cabinetmaking and Millwork as the occupational objective.

### CLOTHING REQUIREMENTS

#### **NYS SkillsUSA Construction Attire:**

- White crew neck short- sleeved T-shirt
- work pants or jeans
- leather or steel toed work shoes
- hearing protection (OSHA approved)
- safety glasses or goggles, (Prescription glasses can be used only if they are equipped with side shields. If not, they must be covered with goggles.)

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

### SAFETY REQUIREMENT

Both the instructors and the competitors certify by agreeing to enter this competition that the competitor has received instruction and has satisfactorily passed examination on the safe use of the following power equipment that may be used in the competition:

1. Router
2. Table saw
3. Dado saw
4. Biscuit Joiner
5. Jigsaw
6. Cordless Drill/Driver
7. Hand plane
8. Power miter saw
9. Random orbit sander
10. Chisels

Both the instructors and the competitors certify that SkillsUSA Inc., the SkillsUSA Championships technical committee and national judges are released from all responsibility and liability relating to personal injury resulting from the use of all equipment provided within the competition area. Competitors will be removed from competition if proper training has not been provided and/or they are using the equipment in an unsafe manner.

## EQUIPMENT AND MATERIALS

Supplied by the NY chair/committee:

- a. Three table saws:
  - one set up with a 60 or 80 tooth combination blade, complete with fence and miter gauge
  - one set up with a stacked dado head cutter, complete with fence and miter gauge.
  - one set up with a combination blade with fence and miter gauge,
- b. 2 – Sliding Compound Miter Saws
- c. 2 – Air Compressors with Hoses
- d. 2 - Pneumatic finish nailers, brad nailers

Supplied by the contestant:

1. A “glue-up” of a given size – Posted on the Website before the competition
2. 20 – 30 Wood “plugs” made in advance and brought to the competition with counter bore to match them.
3. Router with a 3/8 round-over bit and a 45-degree chamfering bit
4. Saber Saw
5. Biscuit Joiner
6. Sander/sanding blocks with appropriate sandpaper/discs, etc.
7. Electric/Cordless Drill with #8 countersink bits, screw bits, and **specialty bit(s)** to accommodate wood plugs made at the Home School.
8. 2 – Sturdy Sawhorses
9. Variety of clamps/hand screws
10. 4 Bar clamps – open at least to 24”
11. Glue Brush
12. All appropriate hand tools – Hammers, nailsets, chisels, block plane, etc.
13. All appropriate measuring instruments – Tape, tri-square, etc.
14. Work apron
15. Cordless circular saw and jigsaw. (optional)
16. Pencils and notebook
17. Scientific calculator
18. Trim hammer
19. Measuring tape
20. Combination square
21. Two Pencils
20. 1/32”, 1/16”, 3/32” nail set
21. Block plane
22. Utility knife
23. One only - backsaw, dovetail, or pull saw
24. Two hand-screw clamps or two “F” style clamps with a maximum opening of 8”
25. One set 1/4”-1” wood chisels

26. 10” or 12” mill bastard flat file
27. One set of flat blade and Phillips-head screwdrivers and/or handle with interchangeable bits
28. Sanding block
29. Hand scraper/cabinet scraper
30. Masking or painters’ tape
31. Three pieces of sandpaper (80–220 grit)

*Note:* No additional tools will be permitted.

## **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**

### **KNOWLEDGE PERFORMANCE**

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

The competition may include a written test.

### **SKILL PERFORMANCE**

The competition consists of workstations that require the building of a small cabinet or piece of furniture from the materials and drawings supplied. Competitors will demonstrate their ability to perform jobs or skills selected from the following list of competencies as determined by the technical committee.

### **COMPETITION GUIDELINES**

1. Read drawings, generate cut list, and cut parts using a table saw, miter saw and jigsaw, with additional machining utilizing a variety of machines on the competition floor. In addition, the parts must be accurately assembled, sanded, and adjusted to the tolerances specified.
2. Competitors will be given all necessary information by verbal instruction and shop drawings of articles to be constructed. Competitors will use joinery techniques as specified.

## **STANDARDS AND COMPETENCIES**

### **CM 1.0 — Apply wood veneers and plastic laminates**

- 1.1. Apply adhesives, edge banding and wood edges
- 1.2. Apply laminate or wood veneer to core
- 1.3. Cut plastic or veneer to size
- 1.4. Fit plastic laminate or wood veneer joints
- 1.5. Trim edges

### **CM 2.0 — Assemble, fasten, and install components**

- 2.1. Apply clamping devices
- 2.2. Assemble drawers, doors and casework as specified
- 2.3. Assemble ends, back, bracing and face frame as specified
- 2.4. Attach molding/trim as specified
- 2.5. Fasten parts as specified
- 2.6. Glue boards edge to edge
- 2.7. Install functional and decorative parts including hinges, drawer guides, knobs, and pulls, etc. as specified

### **CM3.0—Cut and shape components**

- 3.1. Cut joinery including but not limited to dado/rabbit joint, mortise and tenon, dowel, biscuit and new technologies when available
- 3.2. Cut drawer front, sides, back and bottom
- 3.3. Cut ends, back and interior bracing
- 3.4. Cut face frame parts
- 3.5. Edge (shape) countertop
- 3.6. Plane stock
- 3.7. Square solid stock

### **CM4.0— Design and layout**

- 4.1. Determine materials and cut list from shop drawings provided

### **CM5.0— Finish surfaces**

- 5.1. Clean surfaces
- 5.2. Remove excess glue
- 5.3. Sand and prep surfaces ready to be finished