



Technical Drafting

ELIGIBILITY

Open to active SkillsUSA members enrolled in programs with technical drafting as the occupational objective.

CLOTHING REQUIREMENTS

Home school uniform or

For men: Official white polo shirt with black dress slacks, black socks and black leather shoes. **For women:** Official white polo shirt with black dress slacks or skirt, black socks or black or clear seamless hose, and black leather shoes. *STUDENT MUST BE IN STANDARD PROFESSIONAL OFFICE ATTIRE FOUND IN THE TRADITIONAL WORK ENVIRONMENT*

Note: At the district level if a student is not able to wear the official SkillsUSA attire he/she may wear an outfit that would be acceptable in their specific field of study. Please keep in mind that official SkillsUSA attire will be required at the state and national level.

EQUIPMENT AND MATERIALS SUPPLIED BY HOST

1. Computer w/Autodisk application

EQUIPMENT AND MATERIALS SUPPLIED BY CONTESTANT

1. All students must have a one-page, typewritten resume.
2. Removable data storage device (flash drive)
3. Acceptable reference materials - See National guidelines
4. Computer with CAD software if Autodisk application is not being used.

SCOPE OF THE CONTEST - (DEFINED BY THE NATIONAL COMPETITION REGULATIONS)

(District Competitions are meant to be a scaled down version of National Competition. It is important for the students to participate in a competition that will reflect a cross-section of the industry skills needed to prepare them for the state and national levels)

KNOWLEDGE PERFORMANCE

The contest will include a written knowledge test assessing general knowledge of technical drafting. Written portions may also exist during the skills portion of the contest. Knowledge of terms and principles used in the technical drafting profession will be required for the skill demonstration portion of the contest. (½ hour to take test)

SKILL PERFORMANCE

(3 Hours): Part 1:

Students will be given a drawing of a typical mechanical assembly or selected mechanical components. Create multi-view drawings with all views required to completely describe each part. Include all dimensions in the proper location. All dimensions will be as shown on the drawing. 1/8".12" Arial font Title Block: Create a full title block and appropriate size border of



Technical Drafting

an A size sheet be sure the title block includes all pertinent information.

For items or guidelines not covered refer to SkillsUSA National Tech Standards for this competition

Evaluation Criteria:

1. 100 possible points

Written Test 10%

1. Terminology
2. Drawing Practices

Line Work 20%

1. Center Lines
2. Hidden Lines
3. Visible Lines
4. Line Weights

Dimensioning 20%

1. Accuracy
2. Contour Location
3. Per Accepted Practice
4. Completeness

Projection and Composition 20%

1. Proper OrthoProjection
2. Auxiliary or Sections
3. Composition and Spacing
4. Completeness

Problem Solution 20%

1. Solved as Intended
2. Completeness
3. Per Accepted Practice

Text and Annotation 10%

1. Required General/Local Notes
2. Spelling and Grammar
3. Proper Technique & Completeness



Technical Drafting

Technical Drafting Scoring Sheet

Items Evaluated	Possible Points	Contestant Points
Written Test	10	
Line Work	20	
Dimensioning	20	
Projection and Composition	20	
Problem Solution	20	
Text and Annotation	10	
	Subtotal = 100	
No Resume	Deduction -10	
Safety Penalty	Deduction - 10	
Clothing Penalty	Deduction -5	
	TOTAL	

Note: No cell phones or other electronic devices may be used at any time during a competition; this includes using a calculator function on a cell phone for competitions in which calculators are permitted.

Note: Scorecards should only be used as guidance. Changes may occur.