



CONTEST SCOPE

Program Name- Industrial Motor Control

Contest Chair-Dylan Dohn

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Reading Muhlenberg Career and Technology

2615 Warren Road, Reading, PA 19604

Contest:	INDUSTRIAL MOTOR CONTROL
Purpose:	To promote excellence within the electrical trade in a competitive situation, and to give students in the electrical field the opportunity to demonstrate skills they have attained in their technical area.
Clothing:	Clothing cannot have any writing, logos, or graphics. Competitors must wear long pants free from holes and tightened at the waist (jeans are permissible), short sleeve shirt that extends to the elbow or a long sleeve shirt, leather work boots either black or brown, and safety glasses or prescription eyeglasses. All clothing must fit properly and securely. No jewelry is allowed to be worn.

Equipment and Material:

Equipment/Tools/Materials Provided by Host School:

- I. All materials needed to complete the contest will be supplied by the school. For example, the school will provide conduit, cable, boxes, equipment, and fittings.

Equipment/Tools/Materials Provided by the Contestant:

1. Assorted slotted and Phillips screwdrivers
2. Diagonal pliers
3. Needle nose pliers
4. Wire strippers
5. Linesman pliers
6. Tool pouch and belt and/or medium size box or bag
7. Torpedo level
8. Hammer
9. Electrician's knife or utility knife
10. Hacksaw
11. Tape measure/foot rule
12. Current National Electrical Code Book
13. ½ inch EMT bender
14. Crimp tool
15. Pump Pliers/Channel locks

Written test for Industrial wiring

Contestant is to draw a ladder diagram showing a motor control circuit. Circuit must include a estop, start button, a holding contact for the start button, Motor 1, a red light to indicate when motor is off, and a green light when the motor is on.

Scope of Contest

Students will demonstrate their knowledge of electrical principles, equipment, and industry standards as it relates to the design and installation of motor control circuits. Students will demonstrate their skills and abilities in applying that knowledge by properly installing motor control equipment and associated enclosures, raceways, pilot devices and circuitry. All wiring to be completed in accordance with industrial standards and the NEC. Work must be done in a safe manner in accordance with all OSHA standards.

Additional Information