



Millwright Safety Scope

Safety Orientation

A safety program containing a general safety overview and safe work practices will be conducted during the scheduled competitor orientation. **Attendance is mandatory for all competitors.**

Personal Protective Equipment (PPE)

All personal protective equipment (PPE) must be appropriate for task and meet current ANSI standards, which have been incorporated into the Occupational Safety and Health Administration (OSHA) PPE regulations as follows: Eye and Face Protection ANSI Z87.1; Head Protection ANSI Z89.1; Foot Protection ANSI Z41.1. There are no ANSI standards for gloves; however, selection must be based on the performance characteristics of the glove in relation to the tasks to be performed. During the practical performance test, **ABC National will provide and require** the proper use of the following personal protective equipment for all competitors:

- Ear protection;
- Safety glasses;
- Hard hat; and
- General work gloves EXCEPT for setting the mechanical seal, taking feeler gauge or micrometer readings, installing laser or indicator bracket, and applying lubrication.

Exceptions to the provided PPE, with prior approval from the respective project manager, are:

- Prescription safety glasses with side shields;
- Prescriptive goggles; and
- Task-specific gloves per industry standards, designed to protect against sharp edges or high heat.
- For Task #1, all competitors will use a face shield and hearing protection when drilling and tapping the hole for the pump layout.

Competitors must provide and use the following:

- Standard work shoes or boots (tennis shoes, sneakers or sandals are not permitted);
- Blue jean pants or work pants; and
- Shirts with sleeves of minimum 4 inches in length (baggy or excessively loose fitting clothing is not permitted).

NCC Furnished Tools

Task #1 - Base Plate Layout, Drill & Tap

In this task, competitors will be given dimensions to lay out the pump and motor on the pump base, and drill and tap one hole. Unplug the drill while inserting the drill bit as well as removing the bit. A ground fault interrupter also will be used.

Task #3 - Gasket Fabrication

In this task, competitors will be given ID & OD dimensions with bolt hole size, use a gasket cutter with a single cutting blade that is retracted with a plain tip screwdriver, release the blade to the depth of the gasket thickness and cut the gasket out, unscrew the blade and put in the stored position. Next, competitors will cut out bolt holes to size in the gasket, using a metal hole punch and hammer to strike the tool to make the hole. Make sure the tool is not mushroomed before use.

Jewelry and Personal Grooming

Exposed jewelry is not permitted. Examples include (but are not limited to):

- Earrings (stud or dangling);
- Wrist watches;
- Rings;
- Studs exposed through the nose, jaw, lip, eyebrow or any part of the body that is visible; and
- Gauges.

Safety Judging

Prior to the Practical performance Test, the competition project manager or judges may inspect each competitor's personal hand tools, which must meet all Occupational Safety and Health Administration (OSHA) regulations and standards. For example, "mushroomed" heads on chisels are not permitted.

Judges will be present during the practical performance test to score competitors in such safety areas as the use of personal protective equipment, hand and power tool safety, clean work area, etc. Depending on the severity and/or frequency of a violation or violations, the judges, in consultation with the project manager, have the authority to disqualify competitors.

Note: Competitors continue to be judged during disassembly/clean-up activities and are subject to disqualification or deduction of points for safety violations.

First Aid

All injuries should be reported to the project manager immediately. The project manager will determine the appropriate action, including assistance by onsite EMT personnel.