



## 2019 Industrial Team Competition

### FACT SHEET

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#### Project Manager

TBA

All event questions, contact Lisa Nardone, National Craft Championships Director, (202) 595-1789 or [nardone@abc.org](mailto:nardone@abc.org).

#### About the Industrial Team Competition

The Industrial Team Competition is redefined for the 2019 competition and now includes three craft journey-level professionals who work as a team to complete a series of craft-specific tasks focused on electrical, pipefitting and insulation in a six-hour period. (The competition no longer includes the carpentry or millwright crafts.) Journey-level professionals may NOT have competed in a prior NCC Industrial Team Competition/Demonstration; this includes competing in the same or different craft that make up the NCC Industrial Team Competition. Journey-level professionals who competed as an apprentice in the National Craft Championships ARE eligible to compete, one-time only, in the Industrial Team Competition. Controlled copies of the craft specifications and drawings will be given to the teams during the Tuesday afternoon Q&A session. These documents will be returned to the project manager and distributed again Wednesday morning at the beginning of the competition. No copies of these documents will be allowed to leave the competition area.

#### Competition Objectives

- Demonstrate safety along with craft interdependency and teamwork;
- Simulate working conditions where planning is critical to success; and
- Highlight individual leadership and workmanship skills as the project is assembled and completed.

#### Tools

Team competitors should refer to the tool lists in the individual craft competition Fact Sheets. Team competitors are responsible for bringing the listed tools to the competition and maintaining control of their own tools.

#### Judging Criteria

The teams will be judged based on the following criteria.

- Practical evaluation by subject matter experts
- 100% of the team's overall scores will be based on evaluations in the following areas:
  - Safety (individual and team);
  - Individual craft mastery;
  - Teamwork;
  - Leadership; and
  - Communication.

#### Specific Competition Eligibility

The Industrial Team Competition has no competition-specific eligibility requirements. Please refer to overall eligibility requirements listed in the guidebook.

#### Knowledge and Skills Required

The knowledge and skills for this competition are based on the NCCER Contren® Learning Series for Electrical, Insulation and Pipefitting in an industrial application.

#### 2019 Team Competition Scope of Work by Craft

##### Pipefitting Scope: Welded Pipe Fabrication

Each Pipefitter team competitor will be given a scope of work and isometric drawings from which to work and be required to use their math skills to calculate material take offs and cut lengths of pipe. There will be various types of fittings involved, such as welded fittings, valves, and gaskets that must be installed. The pipe will then be cut, cleaned and fabricated to the drawing specifications. Various hand tools and power tools will be used for this project. Utilizing a provided tack welder, the project will be tacked together.

### **Electrical Scope: Industrial Construction**

Each Electrical team competitor will be issued a written scope of work and drawings. In accordance with the drawings, the competitor will dress out and mount a junction box enclosure with lamps, lamp holders and motor control devices. The competitor may install rigid metal conduit, liquid tight flexible metal conduit, and area light. Raceways will be bent, cut, threaded, connected and secured as appropriate. Circuit conductors will be pulled, identified, and terminated per the design drawings. **All hand tools will be provided**

### **Insulation Scope: Install Vessel Insulation and Lagging**

Each Insulation team competitor will be issued a written scope, drawings, and specifications for the insulation of a vertical vessel. Competitors will select the proper material (by size and type) to be installed, fabricated and formed. All insulation shall be installed on the on the vertical vessel before any jacket can be applied. Competitors will then install jacketing and caulking to provide weather protection. Jacketing will be fastened with materials provided.