

Generally speaking, irrigation professionals are much more knowledgeable about the hydraulic aspects of an irrigation system than they are about the electrical details. And oftentimes, contractor personnel are untrained, resulting in installations with less than satisfactory workmanship.

There are many certification programs available from the Irrigation Association, equipment manufacturers, etc. that focus on product knowledge and troubleshooting. The Paige Electric Electrical Certification Program focuses on electrical theory, best recommended practices as defined by the IEEE (The Institute of Electrical and Electronics Engineers), the laws of physics, electrical code requirements, and, generally speaking, doing things right the first time. The Paige Electric program offers many benefits to irrigation consultants, contractors, distributors, and end users as follows:

- Consultants can require that the contractor personnel
 that are involved in the installation and wiring of
 electrical products be certified by Paige Electric to
 ensure some minimal level of competency. They can
 also require that a distributor's sales and service staff
 be certified as they need to be familiar with product
 and their application in order to properly advise their
 customers. A copy of the Paige Electric Certificate of
 Completion can be required before commencement of
 work on a specific project.
- 2. Contractors could greatly benefit from this program by having their personnel better trained to install the electrical equipment to the requirements of the consultant/designer specifications and in accordance with local and national electrical codes. The contractor's cost is greatly reduced if the installation is done right the first time. The training should also improve the contractor's safety record.



- 3. Distributor sales and service staffs would be better equipped to help their customers.
- 4. Higher quality projects would result which will better the reputation of the irrigation industry, which will enhance its growth.

PROPRIETARY SPECIFICATIONS

Consultants and designers write specifications that include products that they know to have a good reputation. These products are usually made by reliable manufacturers who provide excellent service. The professionals also provide detail drawings to help the installer with proper methods. And some even specify certain minimum requirements for the bidding contractors such as minimum number of years of experience, certain certifications from the Irrigation Association, etc. Oftentimes the specifications are "value engineered" by others in order to reduce cost. And sometimes, those who attempt to do this are not qualified to do so.

The specifier/consultant/designer has the right to write a specification that he/she feels is in the best interest of his/her client.

Here is a typical paragraph that can be included in a specification to require certain certifications:

TYPICAL WORDING FOR CERTIFICATION SPECIFICATION

In order to provide a minimum level of workmanship, all installation personnel who are expected to work on the electrical circuits of the irrigation system shall be certified by Paige Electric Co., LP. The certification shall cover irrigation wires, cables, proper installation and splicing methods, and protecting electronic equipment from lightning and power surges. It is the responsibility of the contractor/installer to obtain such certification and to provide a copy of the "Certificate of Completion" for each person installing electrical products on the project to the irrigation consultant prior to commencement of work. It is recommended that the contractor contact Paige Electric well in advance of commencement of work to schedule his/her attending of an already scheduled seminar or to make an appointment for a new one. See table of contacts in last page of this publication.

CERTIFICATION COURSE SUMMARY

Irrigation Wires/Cables and proper splicing methods

Various types of products used in our industry are presented along with an explanation of the pros and cons of each. This is a hands-on seminar where the student works with a small group and each person actually makes connections using the products. The handout includes charts showing various products that can be used to make specific splices for any kind of wire or cable connection. Ohm's law is also discussed in this course.

Protecting Equipment from Lightning and Power Surges

This seminar covers the requirements of the Canadian Electrical Code (CEC), the laws of physics governing this subject, and best-recommended practices as prescribed by the Institute of Electrical & Electronics Engineers (IEEE.) It sounds too technical, but we present it in a practical manner such that the average folk can understand it.

The holder of the Certificate of Completion attends a training seminar and is tested on wires, cables, proper installation and splicing methods, and protecting electronic equipment from lightning and power surges. Two exams are administered at the end of each of the above courses. In order for the student to receive this certificate, he/she must pass both exams with a minimum grade of 70%. Paige Electric does not make any claim as to the actual competency of the individual nor accepts any liability with regard to his/her actions in the course of his/her providing information, products, services, etc.

To schedule a Certification Seminar in you area, please contact:

Vince Nolletti

Phone: 559-431-2346 Cell: 559-906-9075 vnolletti@paigeelectric.com