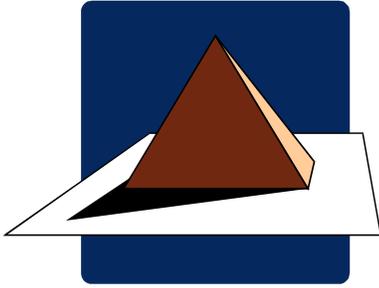


# Cornerstone Electrical Consultants, Inc.



“Service Measured To The Standard”

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## Newsletter ~ Assessment Testing

*“Our equipment doesn’t seem very reliable.” “We have too much unscheduled down time!”*

Do these statements sound familiar? These common problems are found industry-wide, and they cost millions of dollars in excessive equipment repair and lost production.

Is the problem unreliable equipment? Is it ineffective maintenance personnel? What is the answer? Where do you start looking for solutions? *This* is where the evaluation process begins.

At home, if your car has a problem, you take it to a mechanic. He uses a diagnostic computer to tell him what the problem is and how to correct it.

Unfortunately, with maintenance personnel and operating equipment, the solution is not as readily found. *We* must become the computer and perform the diagnostic testing. *We* must evaluate the condition of the equipment, the maintenance practices, and, per-

haps most importantly, the skill levels of our maintenance staff.

Is the maintenance staff familiar with the equipment? Is the staff able to recognize abnormal conditions? Do they have enough technical training to be able to perform the job effectively? If the problem is the latter, how are deficiencies identified? What plan is implemented to correct those deficiencies?

My experience and knowledge of human nature indicate that no one will openly admit that they lack knowledge or certain skills. So, some sort of reasonable, uniform skill evaluation test must be applied to help identify any shortcomings. This can be done using any number of assessment tests. These tests cover a broad range of topics to determine knowledge levels in various subjects. Or, a skill assessment test can be customized to accommodate your specific needs.

For example, in a facility with several AC motors, the skill level of an individual will indicate his troubleshooting and repair ap-

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### Disclaimer

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proach to a problem. The following are examples of assessment testing questions:

“The overloads for this motor keep tripping.” The problem most likely is:

- a. a control circuit problem
- b. a ground or short in the motor or power circuit
- c. too much mechanical demand on the motor
- d. any of the above could be the problem

“The breaker trips as soon as you try to start the motor.” The problem most likely is:

- a. a control circuit problem
- b. a ground or short in the motor or power circuit
- c. too much mechanical demand on the motor
- d. any of the above could be the problem

“When checking a 3-phase AC motor,” (circle all that apply)

- a. the resistance to ground should be very high
- b. the resistance to ground should be very low
- c. the resistance across all 3 phases should be equal
- d. there should be no continuity between the phases

“The control fuse blows as soon as you try to start the motor.” The problem most likely is:

- a. a control circuit problem
- b. a ground or short in the motor or power circuit
- c. too much mechanical demand on the motor
- d. any of the above could be the problem

These questions deal with the very basic understanding of AC motors and control. Answering any of them wrong would indicate a lack of adequate knowledge of this subject,

and, perhaps, prompt some specific training in that area.

In almost every work environment, we are exposed to people with inadequate skills to do their job effectively. The guy that doesn't know very much about AC motors doesn't get assigned to an AC motor circuit in need of repair. We acknowledge his lack of skills; perhaps even complain, but generally, nothing is done to correct the situation. He is assigned only to those jobs he is able to perform. We contend with the situation until it absolutely must be addressed. In addition to the ineffectiveness, this situation can quickly drag down the attitude and morale of your entire staff.

Initiating an assessment of skills can be a very touchy subject. People that should be adequately skilled are being required to expose their deficiencies. This must be approached in a professional, productive manner so as not to belittle, criticize, or single anyone out. The ultimate goal is to achieve a competent, productive staff.

The realities of assessment testing can include finding the time, the cost, and the disruption to your operations. Yet, how do you put a dollar value on inadequately trained personnel? More importantly, how do you justify the expense to provide the required training? Even though inadequately trained maintenance staff can result in poor production performance due to extended down time, *there is no written guarantee* that there will be any amount of improved production or profit after completion of assessment testing.

What a dilemma! A manager who is truly interested in the “big picture” knows the value of competently trained personnel. The path to an effective staff is paved with skill and knowledge assessment, followed by a

plan to obtain the proper training, and most importantly, carrying out the plan. Making a plan is easy—implementation is what separates the “talkers” from the “doers”.

Contact us to discuss how skill assessment testing can improve your facility’s efficiency, financially and by applying a standard for employee competency.