Simulation training helps PBBS solve the labor shortage

Industrial boiler service company uses Simutech Multimedia’s simulation-based training system for teaching electrical troubleshooting skills.

PBBS Equipment Corp. Services commercial and industrial boilers for facilities’ heating and process steam. The company has been operating since 1955 and currently has six locations in north-central US.

PBBS PROFILE

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With a current workforce of over 80 employees, PBBS has been hiring more staff recently, which means more work for Tom Hantke, Director of Safety and Technical Training for PBBS Equipment. Hantke heads up the safety and technical training program for the company, including compliance with the Occupational Safety and Health Administration (OSHA) and the Mine Safety and Health Administration (MSHA).

"I make sure all of our employees are trained in safety. OSHA 10, MSHA part 48, defensive driving, confined space, lockout tag out, NFPA 70e, First Aid, CPR and AED, etc...,” says Hantke. "I either give the training or get the tech signed up for online or classroom instruction.”

THE PROBLEM: IN HOT WATER

PBBS realized that many of its current service technicians will be retiring in the next 10 years. To avoid a labor shortage problem in the future, the company has been hiring younger workers.

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“You don’t find too many people on the street that can be a service tech,” says Hantke. “It typically takes about five years for a new hire to know enough to be profitable for the company and be able to fix 80 percent of boiler problems.”

At the same time, boilers have become more technologically advanced than they were 20 years ago. So, even the existing service technicians needed some retraining on how to work with HMIs and PLCs.

Hantke conducts three two-day boiler safety seminars every spring for customers and has been using the front of a Cleaver-Brooks Firetube Boiler to perform in-house electrical training. However, he observed the electrical training wasn’t as effective as he hoped, often ending with trainees blowing circuit breakers. So, he knew they needed a different way to learn how to troubleshoot electrical faults. Moreover, he saw that motivating staff to read technical manuals was challenging.

“Boiler service techs like to learn the meat and potatoes that will help them the most when on a service call at 2:00 a.m. while the customer is looking over their shoulder,” he says.

THE SEARCH FOR A SOLUTION

Hantke turned to the Internet to look for a better solution to teach troubleshooting electrical faults. In his search, he stumbled across Simutech Multimedia’s solution and liked that the training software was online.

“Personally, I did not find any others that do what (Simutech Multimedia) does,” says Hantke. “Unless it is in a classroom setting like a tech college, most are hands-on demos, not online.”

| GREATER | Knowledge retention and troubleshooting skills development |
| Quick | Maintenance staff training and on-boarding |
| Decreased | Time taken to troubleshoot and repair electrical failures |

For more information about Simutech Multimedia, please visit: www.simutechmultimedia.com
Hantke requested a demonstration of the Simutech Training System and took a tour of the simulation-based modules. He immediately liked the realistic approach the software has to electrical troubleshooting training, including the incorporation of using a meter and testing relays.

“Years ago, I drove to a tech school for a basic electrical class that was two nights a week for three hours at a time,” he says. “They really don’t offer those kind of classes anymore. There’s one technical college by our office that does, but it’s during the day, and that’s not an option for our service techs.”

**THE RESULT: A NEW PATH FORWARD**

With Simutech Multimedia’s training system, Hantke says service techs can complete the training online at their convenience and can troubleshoot electrical faults more effectively. In fact, one of PBBS’ service techs, who completed five out of six modules on the Simutech Training System, was able to impress others on one boiler service call by fixing a problem with the PLC, which he learned how to do through the Simutech training. The company has started to increase how many service techs are using the training.

“Once a service tech completes the Simutech training modules, which should reduce the tech’s time troubleshooting electrical problems on boilers, the tech may deserve a raise,” says Hantke.

Because less time spent on service calls means more service calls being completed per tech, which means those employees are more profitable for PBBS.