Rockford's job is to ensure workers understand how to maintain the safety equipment as well as the functions of that safety equipment and what can happen if that safety equipment is circumvented. (Courtesy: Rockford Combustion Solutions)
Rockford Combustion Systems offers expertise and experience to improve NFPA compliance, worker safety, efficiency, and air quality, while reducing the risk of fires and explosions.

By KENNETH CARTER, Thermal Processing editor

For the heat-treat industry, Rockford is a turnkey solutions provider, designing and delivering custom solutions as well as providing training, inspection, and annual reviews for its users so they can properly maintain, run, and operate their systems. (Courtesy: Rockford Combustion Solutions)
safety, to provide throttling, and to provide control, according to Sanderson.

“Valves are mechanical devices,” he said. “They wear out, and they leak. I like to say all valves all leak. It’s just a question of how much, and is it an acceptable level? Is one drip a year out of a faucet acceptable, or are you willing to accept three drips a week or three drips a minute? All valves leak. So, when do you replace it? That is why you need to do annual inspections.”

Rockford has a number of customers where they check and maintain the equipment, as well as provide an independent observation on how that equipment is running, according to Sanderson.

“One of the pieces of safety equipment used on fuel-fired equipment are pressure switches — high-pressure switches and low-pressure switches typically,” he said. “The low-pressure switches basically are ensuring, at the front of the fuel piping, a minimum amount of gas pressure to safely operate is there. At the other end of the train is often a high-gas pressure switch to ensure that nothing between has failed, and you’re not putting too much pressure, too much fuel, into the system — that you’re not ‘over-gassing’ it. People have to check and maintain those devices. Some people have bad practices, however. They want to do what they can to keep things going and may not realize the consequences of their actions.”

Those bad practices can result in damaged equipment or injuries when workers don’t realize the hazard they are creating when they might be annoyed by an alarm and do something to bypass it, according to Sanderson.

“One of the key things we do is go through and make sure those switches are installed correctly; make sure that they are operating correctly; that they’re arranged and set correctly; that the operators understand what those switches are for, and what to do if they’re not working,” he said. “Just because it’s going off, doesn’t mean that the switch is bad. It quite frequently is an indication that something else isn’t right.”

**PROPER TRAINING**

Rockford’s job is to ensure workers understand how to maintain the safety equipment as well as the functions of that safety equipment and what can happen if that safety equipment is circumvented, according to Sanderson.

In order to properly teach these combustion safety procedures, Rockford has a portable workshop that the company’s experts can take with them directly into a customer’s business.

“We have a hands-on workshop that we can take with us,” Sanderson said. “We’ve built it. It’s portable. It’s kind of a valve train in a suitcase. We bring it. We set it up, and we give the workers

“We view our customers as partners; we want them to have positive experiences and relationships, and build upon that to grow and move forward with us.”
hands-on safety training.”

During safety sessions, the portable workshop runs on compressed air to simulate how the system works when there is an actual fuel going through it, according to Sanderson.

“We can simulate faults and failures and show the workers exactly what’s going on, so they can understand and appreciate it and see how it’s supposed to work and what happens when it doesn’t, in a completely safe classroom environment,” he said.

**COMBUSTION OPPORTUNITIES**

Rockford was able to enter the heat-treating arena when a fuel burner and systems manufacturing company in Rockford, Illinois, went out of business, according to Sanderson.

“That was one of the ways that we were able to move into the market space,” he said. “There was a lot of knowledge and talented, experienced workers that were in the area. So, we took advantage of that.”

To that end, Sanderson said Rockford has matured with its customers, especially as COVID and other pandemic-related shortages and delays became a challenge.

“Being a fresh set of eyes, we bring a newer set of approaches to our offerings; we’ve developed a good number of partnerships with our suppliers,” he said. “I like to refer to them as partners, not suppliers, because we really do have fantastic working relationships with them. We work with them, and they bend over backwards to support us.”

And that includes finding alternate solutions for its customers as well, according to Sanderson.

“That’s something we are not shy about doing, is to help our customers by finding creative, voluntary turnkey solutions,” he said. “They may have always done it a particular way, but with COVID and other shortages — such as manpower — they may not necessarily be able to implement the same-old methods. We work with them to understand their processes and find other operations and other approaches with our turnkey offerings, to help get them out of painted corners.”

**CUSTOMERS AS PARTNERS**

In essence, Rockford is in the business of wanting its customers to safely succeed, according to Sanderson.

“We view our customers as partners; we want them to have positive experiences and relationships, and build upon that to grow and move forward with us,” he said. “We try to find creative, suggestive solutions for other ways to accomplish their tasks. We’ll do it the way they want, but sometimes, there’s another approach, because we see a lot of other ideas and applications in the industry. Some of our employees are from paint, from furnaces, from air heating, from food and beverage industries. We’ve got a lot of different skillsets. We work to cross train those experiences and bring those ideas from other market spaces to help find turnkey custom solutions.”

Since starting the combustion part of its portfolio four years ago, Sanderson said Rockford has grown tremendously and is eager to tackle any challenges the future may hold.

“I see the industry transitioning toward alternate fuels and more alternate sources of heat,” he said. “We will continue to be at the forefront of that, on the safety side, making sure people are properly addressing their fuels. Different fuels have different hazards. One can’t just switch from natural gas to propane or hydrogen without addressing the unique hazards that those different chemical com-

**MORE INFO**

www.rockfordcombustionsolutions.com

Rockford is in the business of wanting its customers to safely succeed. (Courtesy: Rockford Combustion Solutions)