

COMPANY PROFILE ///

CYPRIMUM INDUCTION

***OFFERING TURNKEY
INDUCTION
HEAT TREAT
AND FORGING
EQUIPMENT***

Cyprimum Induction performs a number of induction services, including induction heat treat coil and induction forge coil repair, and induction coil and tooling design. (Courtesy: Cyprimum Induction)

With a broad range of services from coil design, coil repairs, associated tooling builds and repairs, and transformer repairs, Cyprium Induction is dedicated to do all it can to ensure its customers get the highest quality returns.

By **KENNETH CARTER**, Thermal Processing editor

Cyprium Induction may be a new name to the induction industry, but the company more than makes up for it when it comes to what it can offer its customers.

As a matter of fact, Cyprium often ends up taking — and completing — jobs that other, more established induction companies sometimes turn down.

“I’ve made a good name for myself, and as a company, we have made tremendous strides in the short five years that I’ve been in business. We have customers that prefer to not go anywhere else because our team has achieved difficult patterns on parts that were extremely problematic for them both currently or in the past,” said James Link, president and founder of Cyprium Induction. “Manufacturing companies currently using other induction suppliers and who have not achieved acceptable pattern have reached out to Cyprium Induction, and we’ve stepped in and achieved success, many times on our first attempt.”

INDUCTION SERVICES

Cyprium Induction performs a number of induction services, including induction heat treat coil and induction forge coil repair, and induction coil and tooling design. The company supplies all new tooling as well as repair of Buss Bars, Quench heads, Quick Disconnects, and all associated tooling. Cyprium also repairs power supply isolation transformers, offers industrial electrical coatings, in-plant consultation, and much more.

“I would say to anyone in the industry using induction, that we can offer expert tooling advice,” Link said. “We almost always get pattern on the first shot with our coil designs. Very rarely do we have to modify it, but we don’t charge for modifications to our design, because we are extremely confident in applying our knowledge to designs. We also offer spare parts; we’re an OEM supplier of Jackson Transformer and Hunterdon styles as well, so we can supply brand new transformers when customers request such.”

Link also stresses that Cyprium is a full-service shop. It can supply new equipment as well as refurbish any type of old induction equipment in-house.

“Where we stand out from a lot of people is that we actually do transformer repair in-house,” Link said. “We can turn around a transformer in a week, and that just prevents a tremendous amount of downtime for our customers. We also use a proprietary coating on our transformers that extends the life and is able to take thermal shock and standard wear much better than the traditional nylon.”

SUCCESSFUL PARTNERSHIP

Another key part of Cyprium’s success is the company’s partnership with Heating Induction Services, according to Link.

“A few years ago, a couple of my customers had asked me if I had a place for power supplies or who I’d recommend,” he said. “So, I



An “M.I.Q.” coil. (Courtesy: Cyprium Induction)

went with this place called Heating Induction Services. I met the owner, who was George Haddad, and George started talking to me about things and showed me some of the machines that he had built. And I said, ‘Hey, do you want to work as a collective unit on selling heat treating and induction-forging systems?’ Because I do induction forge and induction heat treat. Once I saw how clean and well-designed his systems were, I instantly had 100-percent confidence in them. And I knew we would be a good team.”

Haddad agreed, and a collaboration began.

Cyprium Induction and Heating Induction Services also won't cut corners when designing the best equipment for its customers, according to Link.

"We are able to walk in their plant, and they simply give us a square footage of what they have to work with along with other important information (ceiling height, available power, etc.)," he said. "We can quote, design, and build a machine all the way from part loading, heating, and then unloading. So, it's not like we're just selling an induction box. We're selling a full service, turnkey induction machine. That goes for induction hardening or tempering and also forging and melting as well. George Haddad and I are a great team, due to the fact that if we go into a meeting together for a new system, you can get your questions answered thoroughly, accurately, and on the spot."

The two companies have been designing and building systems together as such, according to Link. Heating Induction Services designs and builds all the mechanical and all the power aspects of it and the material handling, and Cyprium does all the inductors, inductor design, and induction tooling associated with the machines.

"And then, we collectively offer a complete package," he said. "When we do machine quotes, both of our names are at the very top of the paper. He's a separate company; I'm a separate company, but we work in connection together to give the customer the best service and advice."

Induction is growing rapidly, but as it grows, so does the technology, according to Link.

"For example, the systems we offer are technologically advanced for this industry," he said. "We are also working on prototype data-collection software for the machines far ahead of its time. I think this can be intimidating to some of the heat-treating shops out there, which use no or very little induction. To them I would say: Take my lead; stick your neck out there, and switch to induction. We will be there with you every step of the way. We can recommend the power and frequency of a machine for your part, design induction tooling to get pattern, build the machine, and even test it and program the machine for you at Heating Induction Services' building. This might sound cliché, but when choosing to get into induction or stepping up to try more challenging work, you should ultimately choose us."

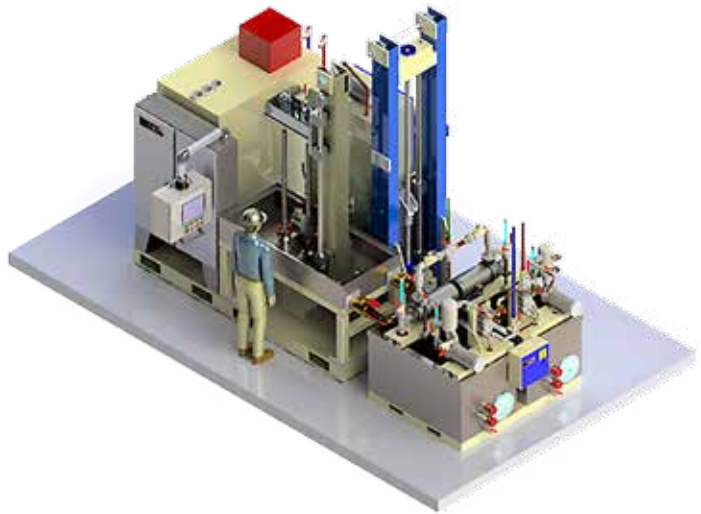
MEETING CHALLENGES HEAD ON

The collaboration between Cyprium Induction and Heating Induction Services has allowed Link to focus on what he finds the most challenging: taking on the most difficult projects.

"We take pride in taking challenging projects on, to the point where I have taken on coils such as large crankshaft coils, extremely stringent pattern profiles on types of yokes, which many of my competitors have 'no-quoted,'" he said. "They were difficult projects, but I firmly believe that to consistently advance, you must tirelessly challenge yourself, your company, and the 'norm.'"

With Cyprium's and Heating Induction Services' combined expertise, Link stressed that no challenge is too big or difficult, adding that his sales staff also have strong engineering backgrounds. They can collectively handle everything to the most demanding induction forge lines, melting lines, or any type of induction heat treating or tempering projects. They can also routinely design and build loading and unloading systems to offer a turnkey machine, and all on Solid Works for real-time rendering.

"The technical sales team that we have, we can go into a place, and if you're having issues, we aren't going to kind of look around, look at the floor and say, 'Hey, we'll beat the price. We'll give you faster turnaround,'" he said. "I've always said, 'Show me what your issue is.



This rendering of a dual spindle scanner is currently being built for a customer. The rendering, as well as progress photos of the build, will be available at Cyprium Induction's booth at Heat Treat 2019. (Courtesy: Cyprium Induction)



A transformer repair. (Courtesy: Cyprium Induction)

I am here to win your business, of course, but while I'm here, show me what you would like to see improvement in.' Whether or not you use us, you might as well take the time to ask me some questions because if I can spot your problem firsthand, I am going to tell you on the spot. One customer brought a project to me where he was getting one part every 28 seconds. He needed to speed up production, and with a total coil redesign, he was able to achieve his desired pattern in only seven seconds."

Any job that involves induction is fair game to Cyprium, according to Link.

"Before we take it on, we will tell you if it's probable or even if it is impossible, and I've had to tell people that bad news before, based on their machine parameters in relation to the part and desired pattern," he said. "We're pretty forthcoming, but pretty much I tell people, 'I guarantee you that if we take the project on, we will work

with you to get your desired pattern.”

BIG STRIDES IN A SHORT TIME

Cyprrium has accomplished quite a few things in its short lifetime, but one of the things Link finds he’s most proud of is the inroads the company has made in five years.

“I have come to the forefront of induction in just five years,” he said. “To gain a reputation in high quality in a very short amount of time is our proudest achievement.”

That constant search for the highest quality in every job it takes on is what helped Cyprrium at the beginning and what continues to push the company’s success, according to Link.

“When I started this company, I just had a couple customers that were willing to give Cyprrium Induction a chance and start giving me some work,” he said. “And those first customers that I have, we’ve held onto them, and there are some customers that choose us over all else because we’re really good at induction coil design and service. We don’t rest until we get pattern for our customers, meaning that I’ve taken coils back that didn’t get pattern and completely redesigned it on my dime, and then got pattern. We also have the best customers you could ever ask for. We have discussions with our customer regularly, and they all offer great opinions and ideas.”

WHAT’S WITH THE NAME?

Tenacity may be at the heart of Cyprrium Induction, but it’s not what it means.

Cyprrium has an ancient connection, being the word Romans used for copper alloys such as bronze. The copper was mined from Cyprus, which is where the word is derived. The word eventually

evolved into the modern “copper.”

Since copper is involved in the induction process, it made sense to Link to use the ancient word for the metal in the company name, making way for Cyprrium Induction.

And just like that resilient and highly sought-after metal, Link predicts Cyprrium’s expertise will continue to be a welcome commodity as the company moves into the future.

“I think in the next 10 to 20 years, Cyprrium Induction is going to be one of the front runners in the induction industry,” he said. “I would even say my goal is worldwide. I would say down the road in the next 10 years that we’re going to be an international, recognized name in the induction industry, and that’s kind of my goal to supply all induction machines with expert design and the highest quality repairs.”

HEAT TREAT 2019

But here in the present, Link expects Cyprrium to make a splash at this year’s Heat Treat Expo, where Cyprrium and Heating Induction Services will have adjoining booths.

“Attendees should expect to have some pretty knowledgeable discussions, and they should expect to get answers right there on the spot,” he said. “If they have a question with a part or current project they are battling with, let us look at it. I would just ask people, if they are going to come with a particular project, they should bring documentation of what their machine’s power and frequency is. Have that ready, and we can offer expert advice based on the information and have some very detailed discussions.”



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