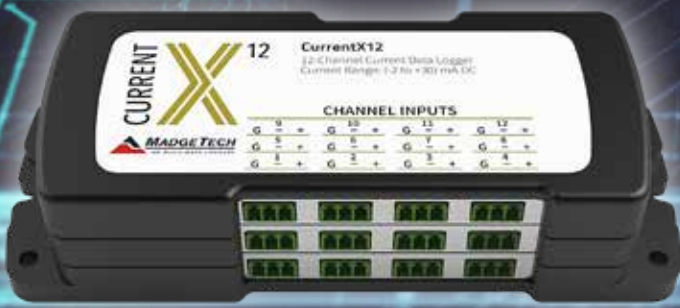


# COMPANY PROFILE ///

**MADGETECH**



# PROVIDING VALIDATION FOR COMPLIANCE AND QUALITY CONTROL



# MadgeTech is a leading manufacturer of data loggers backed by expert engineering and customer service.

By **KENNETH CARTER**, Thermal Processing editor

**I**n the heat-treating game, it's paramount that temperature and other processes are closely monitored to ensure precision results.

And when those heat-treated parts are headed to the International Space Station or keeping an eye on the temperature of life-saving vaccines, then the role of the data logger becomes all too clear.

MadgeTech has been designing and manufacturing data loggers for a quarter of a century, and it's with a sense of pride that company President Norm Carlson expresses his company's strengths.

"Everything we sell, we design and manufacture right here in Warner, New Hampshire; we don't outsource anything, and we're privately owned," he said. "All of our engineering and design is done in-house, as well as our production, manufacturing, sales, and marketing. We're lean and mean."

## IMPRESSIVE RESUME

The long list of applications MadgeTech has been responsible for over the years is impressive, and Sales Manager Ken LaPage echoes Carlson's enthusiasm on what the company has accomplished.

"For me personally, I'm an applications guy, so when I get customers with different applications, that really excites me," he said. "And for me, knowing that we have products on the International Space Station, and we've helped the Navy with jet fighters that were crashing, and we're helping scientists cure cancer, these are things that are really huge that, at the end of the day, I like to hang my hat on to show we're really making a difference in the world."

MadgeTech's data loggers are monitoring freezers and refrigerators storing COVID-19 vaccines for Pfizer, for Moderna, and for Johnson & Johnson, according to LaPage.

"It's all over the place," he said. "And that's one of the great things about working here is we get to touch so many different industries."

## DATA LOGGING ESSENTIALS

To Carlson and LaPage, every job is important, even if they don't always come with a certain notoriety. And, according to LaPage, it boils down to the core function of the data loggers MadgeTech creates.

"We monitor temperature, humidity of the applications, and processes — whether that be ovens or ambient temperatures," he said. "We monitor the extreme cold, minus-200 degrees C up to 2,000 degrees C. Any application that comes up in this industry, we have a data logger that can handle those temperatures, monitor them, and then display the data back to you with easy-to-read,

user-friendly software."

MadgeTech has a number of multi-channel thermocouple devices for mapping temperature gradients for a material or environment, which can be read in real time where a user can actually see the temperatures come through in a graph or a tabular format, according to LaPage.

"If something does go wrong in the process, you can shut it down immediately and start again," he said. "That way, you're not wasting parts."

MadgeTech also produces data loggers that take full advantage of the Internet of Things, according to LaPage.



The MadgeTech Titan S8 portable, 8-channel data acquisition system. (Courtesy: MadgeTech)

"We do have loggers that are wireless, that speak directly to the software," he said. "They can be clouded, so you can access your data remotely from anywhere in real time. We are fully integrated with a lot of other programs. If you have a temperature excursion in the process, we're able to send emails and text messages to your phone or smart device to let you know that you are having a problem with your process."

## CUSTOMER SERVICE

Part of MadgeTech's success, in addition to its quality products, is how the company treats both its customers and employees, according to Carlson.

"We always treat the employees well and treat the customers well,"





Established in 1996, MadgeTech is celebrating 25 years of business. (Courtesy: MadgeTech)

he said. “I think if we get quality products to the customer as quick as possible that works for them and they’re satisfied with them, then we’re a happy company at the end of the day.”

LaPage also emphasized that it’s important that MadgeTech listen to its customers and implement their feedback into designing the latest data logging equipment.

“When you call the factory, you speak to a human being immediately, and we can talk about your application,” he said. “And if your logger is having issues, we can take care of it right there on the spot, hopefully eliminating downtime for that customer.”

### READILY AVAILABLE EQUIPMENT

About 90 percent of MadgeTech’s products is considered off-the-shelf that the company has developed over the years, but LaPage said when the opportunity arises, that MadgeTech is willing and capable to custom design needed equipment.

“We are most certainly open to that,” he said. “We’re doing a couple of things right now with some new technologies that we can’t talk about, but it was driven by customer questions like: ‘Hey, can you do this for us?’ We jumped on it, and hopefully, we’ll be releasing that here pretty quick.”

Being able to quickly adapt to its customers’ needs has pushed MadgeTech beyond its original roots, according to Carlson.

“We’re a different company today than we were 25 years ago,” he said. “We really implement new technology as it becomes available and try to improve our designs all the time. We’re looking at the

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***“We’re a different company today than we were 25 years ago. We really implement new technology as it becomes available and try to improve our designs all the time.”***

future every day, trying to see around corners, behind trees.”

### TITAN LINE OF DATA LOGGERS

Part of MadgeTech’s innovative technology can be seen in the company’s Titan line of data loggers, according to LaPage.

“It’s multichannel and multi-sensory, so you can program individual channels for specific kinds of sensors,” he said. “One day, a channel could be accepting inputs from the tech pay thermocouple. The next day, you could be entering voltage or current or resistance, which is really cool in the thermal-processing industry, because with that same device, you can monitor temperature and process controls that put out voltage current at the same time.”

The Titan, as well as MadgeTech’s X series of data loggers, are multi-channel, real-time devices, according to LaPage.

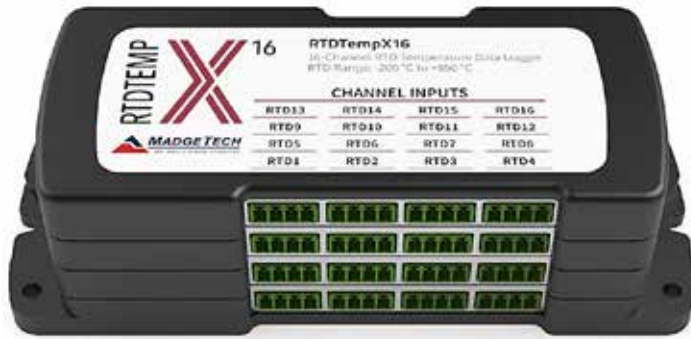
“That’s really big in the industry,” he said. “You don’t see a lot of those. You see individual loggers, but you don’t see that multi-channel, real-time instrument that’s giving you data for your validations. You’re seeing your data in real time, whether that be on a device, in the software on a computer screen, or on your phone, you’re actually seeing the temperature as the product is moving through the process. If there is something wrong with that process — such as temperatures are out of whack and it’s going to affect the quality of that part — you can shut that process down, immediately fix the problem, and then rerun parts through that process.”

And the data logger is also there to keep track of all that information being created, according to LaPage.

“It’s a historical record,” he said. “In case there’s an audit or there is an issue with the parts in the future, the specs and the data from that product run can be pulled up for auditors to check to see if the product was subject to the correct time and temperature.”



The MadgeTech Titan 58 supports thermocouple, RTD, and thermistor probes. (Courtesy: MadgeTech)



The X-Series monitors thermocouples, RTD, voltage, and current up to 16 channels. (Courtesy: MadgeTech)

## ENGINEERING EXPERTISE

Along with the latest data logging technology MadgeTech offers its customers, it also has the engineering expertise to back it up, according to LaPage.

“We have a team of customer specialists, real technical guys, and point-of-sales engineers, and they know everything there is to know about the data loggers and the applications,” he said. “They let us know their application, their times, their temperatures, and then we put a solution or multiple solutions together and let the customer choose from what we’ve offered them. After that, we can walk them through how to install software, where to put the data loggers for their validations – a complete solution for that customer. And again, it’s all customer driven. They let us know what they need. We’re not going to tell them what they need, but we’ll show them what will work good for their application.”

MadgeTech has a staff of 14 engineers with a combined experience exceeding 200 years, which translates into quick solutions for the company’s customers, according to Carlson.

“Customers will call in; they have an issue, and then we solve it,” he said. “That makes me feel really good: The fact that we solved it. Everything that we sell, we design here, but we do it in New England. We sell a lot to China, a lot to Europe, a lot to Asia, and it’s all manufactured here. We’re kind of doing the opposite of what a lot of companies are doing.”

## 25TH ANNIVERSARY

MadgeTech opened its doors in 1996 and is celebrating 25 years of business this year, according to Carlson.

“We’ve grown little by little,” he said. “I think our staff is about 83 people strong.”

And both Carlson and LaPage expect the next 25 years will keep MadgeTech on its toes as it continues to grow and offer the latest innovative data logging solutions to its customers.

“We’re watching our competitors very closely and listening to our customers,” he said. “With technology, things can change very quickly. I think the cloud is going to be a big part of our future.”

LaPage agreed while emphasizing that the bottom line for MadgeTech, no matter what the future may bring, is to be there for its customers.

“We have the technical expertise here with multiple, multiple applications in the thermal industry to have a really good idea of how to make a viable solution for that customer,” he said. 🌿



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[ctotten@aldtt.net](mailto:ctotten@aldtt.net)  
1 (810) 300-3601

**844-828-7225**

EMAIL: [sales@atp-cal.com](mailto:sales@atp-cal.com)  
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