

Q&A /// INTERVIEW WITH AN INDUSTRY INSIDER



MARK RATLIFF /// PRESIDENT /// AVION MANUFACTURING COMPANY

“Anytime you have threads or anything like that on a part that you don’t want hard and brittle, you would use my coating and paint it on there, and it prevents the carburization of that particular area.”

What’s a typical week like for you at Avion?

On Mondays, we’ll have a production meeting with all the employees involved. We’re a small company really; there are only six of us. We’ll go over what the urgent orders are, what’s in the work queue, projects that we have to get completed, quotes that we have to get completed.

And then, Tuesday, Wednesday, and Thursday are left open for possible travel days to visit customers. I’m probably on the road about two weeks every month. Then I try and leave a day for R&D projects. We do the coatings for the heat-treating industry. But we’ve branched off into other markets and industries.

If I don’t travel on Tuesday, then that’s my R&D day. A lot of times, if we get behind on some of the orders that have to be filled, because we’ve got a lot of larger captive customers like John Deere, Fiat Chrysler, indirectly with Caterpillar, but we are working as a Tier 2 supplier to Boeing company on a flame-retardant project system. So that’s been consuming a lot of my time as well.

What products and services do you offer the heat-treating industry, as in general?

Well, the bread-and-butter products that we offer are our stop-off coatings.

A stop-off coating is a coating that you paint on a metal part that prevents either carburization or nitriding in that part. A heat-treater will carburize a part, but there might be a threaded area on that part where they want to keep it soft, because when you carburize, you’re making the part harder, but you’re also making it more brittle. Anytime you have threads or anything like that on a part that you don’t want hard and brittle, you would use my coating and paint it on there, and it prevents the carburization of that particular area.

We have an anti-carb stop-off, and we also have the nitriding equivalent stop-off as well. We also have aftermarket furnace replacement parts. We make stainless steel transfer chains and conveyor chains for furnaces. We supply high temperature fans, burner combustion systems, and radiant tubes. If you go on our website, you’ll see all the products that we have to offer.

As the heat-treat industry has evolved, how do you feel Avion has evolved with it?

We’re always on top of our game. The big driving factor on product development and continuous improvement is the environment. Companies have been wanting us to try and get rid of the VOCs in our coatings, and we’ve successfully done that, both in our water-based

and our solvent-borne coatings. In the solvent-borne, we use a VOC exempt solvent, which is also non-flammable by the way, and that’s a huge selling point for us.

But that’s been the major driving point right now: the carbon footprint and the environment.

How would you approach a customer when they come to you with a challenge?

I’ll see exactly what they need, whether it’s a different kind of combustion system, or if they’re looking for a coating that has some special properties, like more heat resistance or infrared resistance. I’ll be able to tell them immediately if I have any kind of working knowledge on how to help them with what I know, maybe not necessarily what I have. But I’ve done a lot of R&D projects with a lot of thermal barrier coatings, so I have a pretty good idea of what works and what doesn’t. When they tell me their needs, I can, at that point in time, say, “Hey, I can possibly help you; give me a month or two to whip this up and get it tested.” Or, “Thanks for the opportunity, but no, I can’t help you.”



Where do you see the heat-treating industry in the next 10 years?

Well, it’s hard to tell, because I’ve been in this business for almost 30 years now. When I went out to Texas recently for a Metal Treating Institute conference, this same topic was brought up over and over again. We talk about a lot more automation in the industry, which is good.

But in terms of heat-treat, I don’t think the actual heat-treating industry is going to go away, because you’re always going to need metal parts that need to be heat-treated, no matter what. I’m sure, if you’re still building cars and you’re still building airplanes and you’re still building tractors, you’re always going to need metal parts that need to be heat-treated. So, the industry is never going to go away.

How do you see your role in that continued industry?

Well, you’ve just got to stay on top of things; you’ve got to visit customers; you have to listen to what the customer base is saying, and you have to respond to their needs. Again, you’ve got to get rid of your VOCs. That’s our R&D right now, because if we don’t, somebody else is going to do it. ♣

//////
MORE INFO avionmfg.com