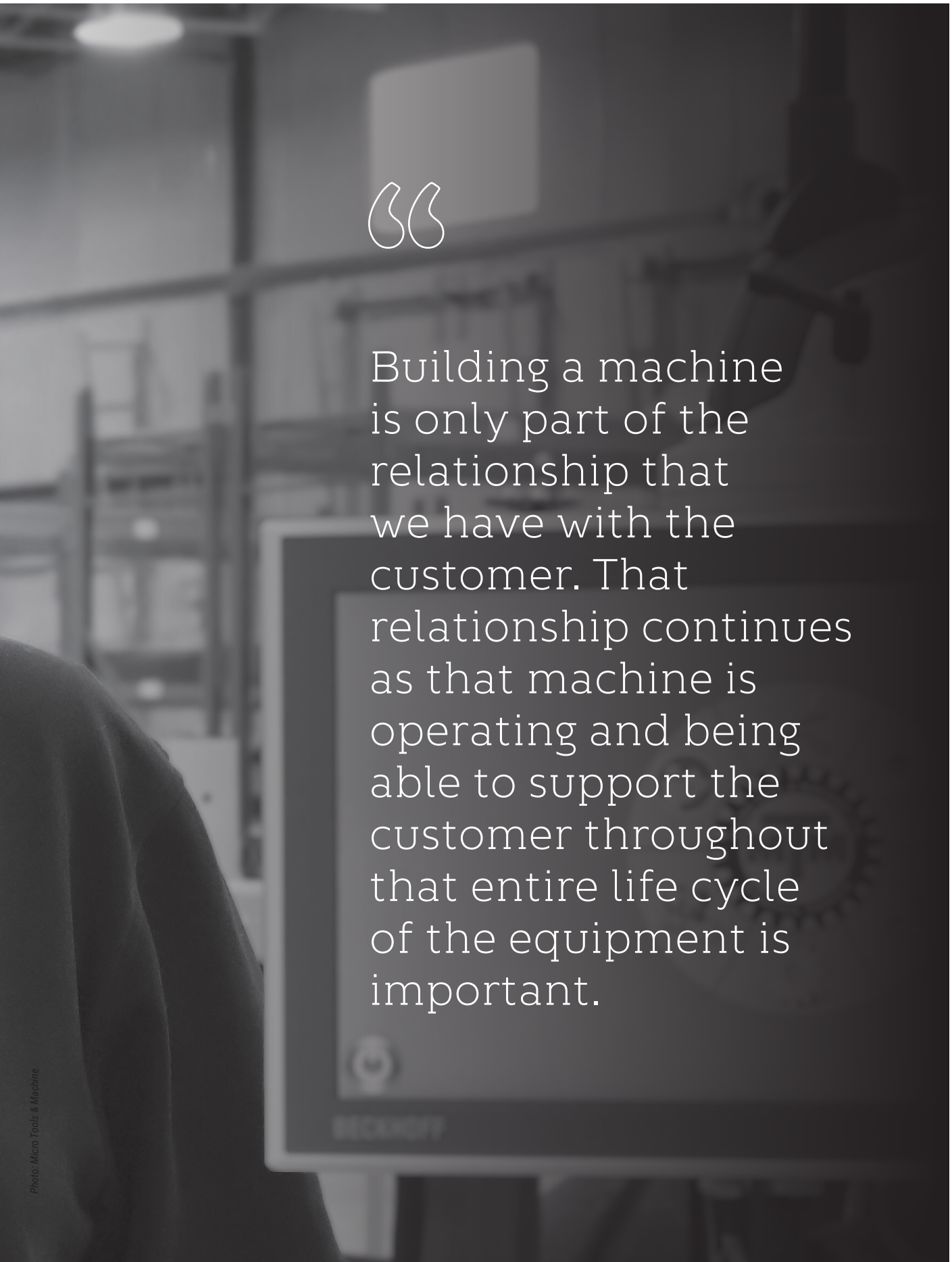
Gordon Atamanchuk



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President & CEO
of Micro Tool and Machine Ltd. (MTM)

Interview with **Gordon Atamanchuk**

My career has naturally progressed from machine development into product development, which has been an exciting transition. I studied mechanical engineering here in Winnipeg, and after graduating, I had the opportunity to work with companies like Caterpillar and General Electric. Through these roles, I gained valuable experience in product development, product testing, and field service.

Alan Ross: Gord, thank you for joining us.

Gordon Atamanchuk: Well, thank you Alan. It is a pleasure to be here.

AR You are the President of Micro Tools & Machine, but before we get to that, talk a little bit about your background and how you entered the industry.

GA My career has naturally progressed from machine development into product development, which has been an exciting transition. I studied mechanical engineering here in Winnipeg, and after graduating, I had the opportunity to work with companies like Caterpillar and General Electric. Through these roles, I gained valuable experience in product development, product testing, and field service. Each step has helped me build a strong foundation in taking concepts from design to real-world application, which is what ultimately drew me toward product development. I joined MTM in 2008 as an engineer, and I got the opportunity to work through various roles up to the position that I am now as President. Over that time, I was able to travel and visit transformer manufacturers all over the world and get involved in everything from design to business

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development, and eventually to where we are looking at all aspects of the business.

AR You said that you have had a number of different roles at MTM. Talk about the one that you think was most valuable to you right now, that is, a role you played at MTM that has given you the most insight into the industry.

GA Well, it's interesting because when I graduated from university, my first job was with Caterpillar, and that job was in product test and development. So, we took products that were being developed, and we tested them to ensure that they met specifications before being released to market. I learned a lot about what is needed from a situation of serviceability and functionality and what the final user needs in order to do their job correctly. I think that background was very valuable because it allowed me to look at the machines that we were designing and building for customers and make sure that those elements were integrated into the machine designs.

AR You joined MTM in 2008. Tell me a little bit about the history of the company. How did it get started?

GA Sure. It is interesting because we are in the middle of our 60th year right now. MTM has been around since 1964, always in Winnipeg, a Canadian-owned company. We started out manufacturing as a machine shop for the local industries here, so aerospace, agriculture, and heavy vehicle industries that are here. Over a few years, we started to build some custom machinery for a local transformer manufacturer here in Canada. And then that became the core business of what we did.

AR I love the word cost-effective. There's a lot of new products coming into the market, and they're not cost-effective.

Let's talk about the industry. When I say industry, I'm not talking about the power industry, I am talking about the transformer market because that is who you serve the most. There is now a demand curve for transformers that is skyrocketing because of the modernization of grids everywhere, because of their growth, and definitely because of data centers, especially AI data centers. They use tremendous amounts of power. Do you see the same thing, or are you concerned at all, that this new demand curve will not last?

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We have shipped equipment to about 48 countries around the world. Our primary focus, out of all those industries that we worked on, is the transformer business. And of that, we build primarily coil winding machines for distribution and medium-sized power transformer manufacturing. We also build cut-to-length lines for stacked core transformer designs, and we have a lot of tooling and fixtures that supports the wound core market that exists as well. Our focus is on delivering a cost-effective machine to the market for which the customers can very quickly realize and see a return on their investment.

GA We are downstream of the OEM, the transformer manufacturer,

downstream of the grid you could say.
But we certainly have seen and experienced an increase in inquiries and orders related to winding machines and core cutting equipment. Much of it is centered around automation and the ability to improve productivity with the equipment. There is a lot of equipment out there, but it is more manual in its operation. I think people are looking for advantages to increase production, knowing that there is perhaps a constraint on manpower.

AR I have talked to several CEOs of transformer manufacturers, and they all have similar problems. They have greater demand than they are capable to supply. But the biggest problem they seem to all have is to get quality trades or crafts people, because it is still a manual operation, as you say. How hard is it to go from a manual operation to retrofit into an automated operation, especially for windings?

GA What we have tried to do with our machines' designs is balance that technology with what we call manual tasks. We have designed interfaces that are touch screen, very intuitive in their operation. If you grew up with an iPad or an iPhone, it follows the same logic and operation. I think it makes it easy for this new generation to adapt to the machines. There are opportunities to automate a lot of things on machines, but sometimes it's just easier to do it with a less automated solution, making it more cost-effective.

AR It seems as if the transformer OEM market is trying to go from a manual to an automated system because of labor shortages. Talk a little bit about the change, as in what happens on the floor when somebody uses your machine versus a manual process.

GA One of the easiest examples would be when looking at tensioning of wires, when doing a coil winding. Traditionally, those systems are controlled with mechanical systems, springs and pulleys to tension the wire, and the operator must make a judgment call on whether those wires that are in the winding are tight. Over the past few years, we have worked to develop automated systems to control that wire tensioning aspect of the machine.
The operator can program in a desired tension value, and then that maintains it throughout the layer and throughout the whole coil design. And from an onboarding standpoint for a new operator, now they're following the prompts that are on the touch screen on what the next steps are for the coil design that they are doing. They do not have to focus on, say, tensioning which was a very subjective and a skill that was developed over time. What we have tried to do is focus on those types of elements that would help with the onboarding process and getting operators up to speed faster, making it repetitive and consistent.

AR The issue of tensioning, because it is subjective, can create problems that show up when we energize a transformer. Those are the areas that create the biggest problems, and it is extremely expensive to solve after the fact. Am I correct in saying "I'm giving you the reason why I buy your machine - if I don't solve it at a criticality point, the solution is extremely expensive."

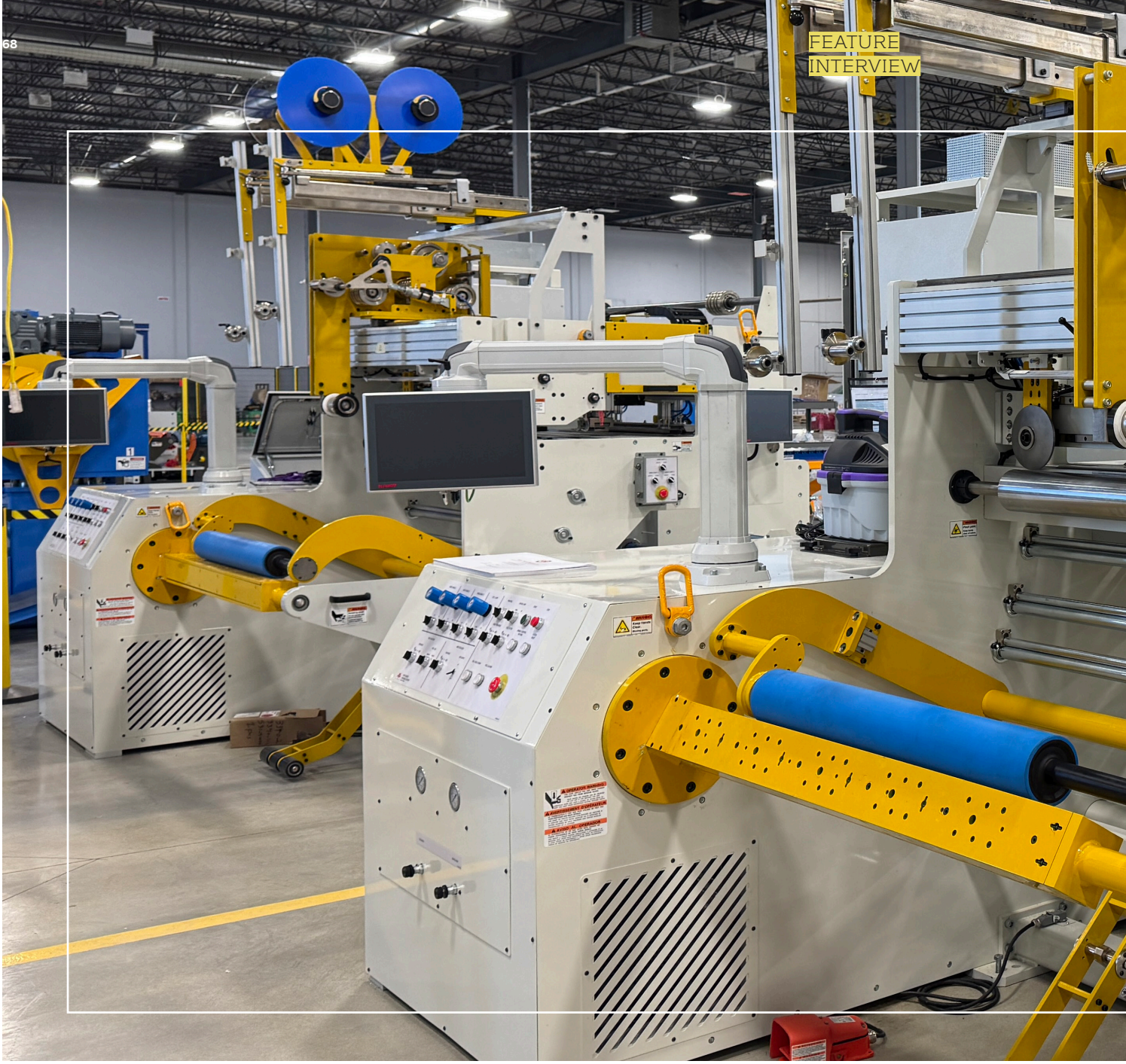
GA Yes, that is correct. I think in manufacturing it is everybody's desire to be process-driven instead of people-driven. The features that we offer in our machines allow you to do that, to standardize in how you approach in this case, the coil winding, and then you get the repeatability between machines and operators and between shifts and so forth. And depending on what happens when energized, you might not be able to fix it.

AR Gord, with every OEM we know adding capacity or building new plant, how would you approach them about your solutions?

GA The conversation usually starts off more with what your needs and requirements are, and then I would go back into the answer to that solution. What I can tell you is that MTM has what we feel is a cost-effective solution for manufacturers that are in the transformer industry. We are focused on providing the right level of automation that would allow your team to increase productivity, standardize processes and help address some of their labor market needs.

AR Do you customize every solution? Is there one standard automated system and you just implement, or do you customize for everyone? I know your 60-year pedigree started with customized solutions as a machine shop, so has that ability persisted.

GA I would say that almost every project starts off with a standard machine design, but often it is customized to meet the customers' end requirements. So various numbers of conductors, whether that's a strip conductor or wires or different technologies for insulation, all those things can be modified and integrated into one machine design.
Each manufacturer has a slightly different focus. So, whether it's high-volume low-mix or



the opposite, we can tailor machines that would align to both of those types of manufacturing requirements.

AR Looking at the industry, when you go to bed at night, what worries you? What are the things you focus on that are in your control as you said?

GA I have been trying hard to focus on the things that I can control and not so much on the things that are out of my control. We've moved into a new location. We've done a lot of things over the last year with a lot of thought and consideration where the market is going. I feel like we're really prepared for this hockey stick curve that you've indicated in your earlier statements. We see that demand coming from our customers, and we're up for the challenge to maintain what we consider the lead times to deliver that equipment. In terms of concerns or what keeps me up at night, I don't really think there is too many things. Obviously, the external noise that's going on, at any time in the world, is there, but you do your best to mitigate those items.

AR A 60-year-old company has a built-in pedigree about how you do what you do. What is the pedigree, the culture within MTM that you are trying to perpetuate or create?

GA I think that we realize that building a machine is only part of the relationship that we have with the customer. That relationship continues as that machine is operating and being able to support the customer throughout that entire life cycle of the equipment is important. So, what we are trying to instill with our employees and the culture here at MTM is that we want to provide high-quality machines, and then really look after the customer as we move forward and support them in their manufacturing.

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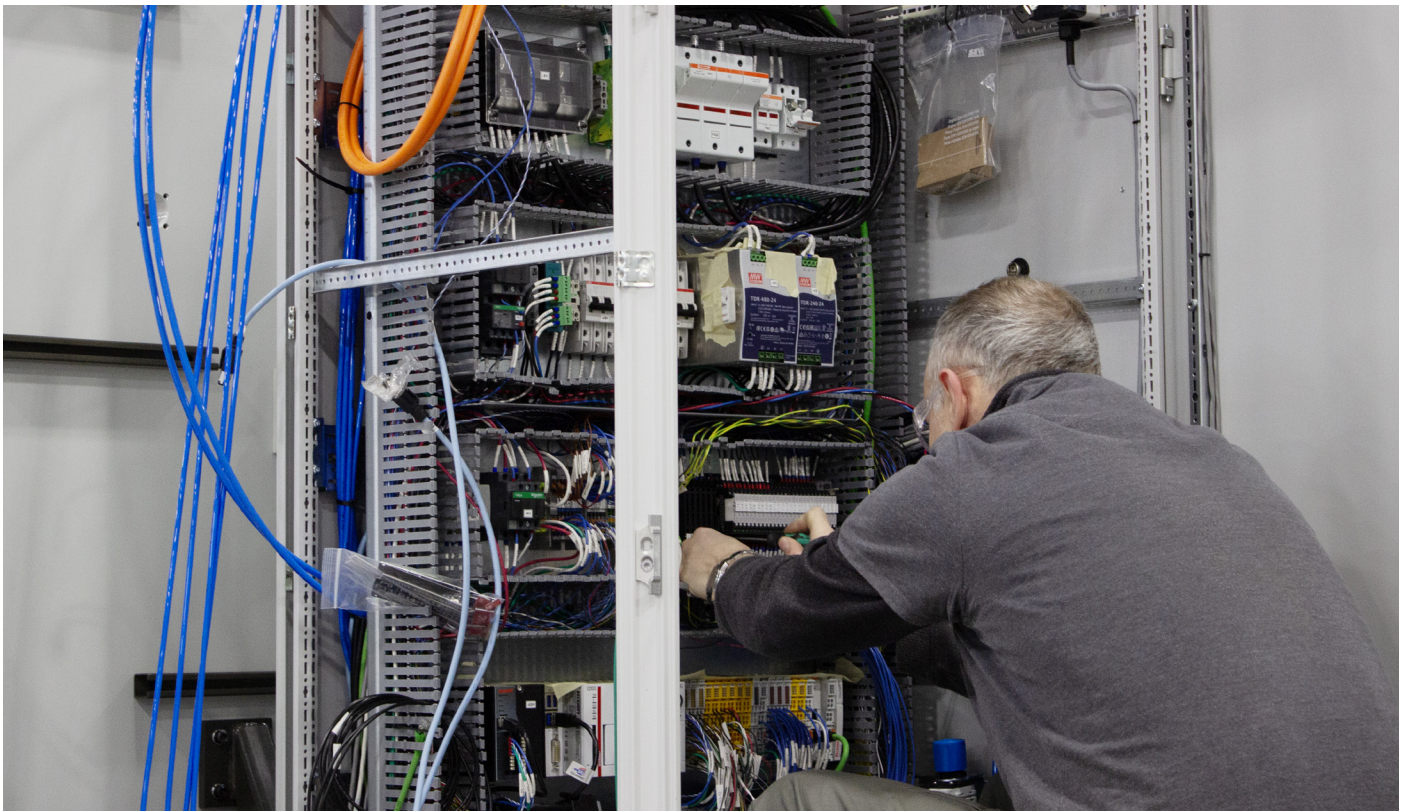
MTM can offer is what we call a flexible machine deployment strategy. We can offer a machine that can easily cover a wide range of capacities with modifications that can happen after the machine is installed or can be configured at the time of purchase.



AR That is a great solution that ends well. Gord, you mentioned before this idea of flexible machines. Talk about this idea of the flexible machines that you are bringing into the marketplace.

GA Absolutely. In our previous conversation, we talked about what are some of the challenges which transformer manufacturers are potentially seeing. One of them is a changing market. Different KVA classes of transformers are in demand. And if the OEM is purchasing equipment to meet a specific solution, but the industry changes on them, do they have the right equipment? Lead times being what they are, I think these are all things that need to be considered at a given time.

What MTM can offer is what we call a flexible machine deployment strategy. We can offer a machine that can easily cover a wide range of capacities with modifications that can happen after the machine is installed or can be configured at the time of purchase. I guess a good example would be if we had a machine that was set up to do multiple coils, for distribution manufacturing, we could do two or three coils at a time. And then if there was a need to do larger KVA classes, the machine can be very easily configured to do a single coil, giving more flexibility to that machine.

Another example would be having machines that are what we call combination machines that can do the low-voltage and high-voltage sections all on the same machine design. If you go from a situation of high-mix low-volume to the opposite, you can easily transition that machine to handle both types of scenarios with no modification in the field. This is an idea that I think gives the OEM or the transformer manufacturer the ability to use the machines to a larger range of product classes as things evolve over the years or months. We'll see how the industry goes.

AR Gord, talk a bit about deploying your technology.

GA We have a white paper on this topic. So, if there is anyone who is interested in knowing a little bit more about how we can deploy, not so much technology, but methodology for their application, and want to reach out, then we can certainly share that with them and go through that conversation.

AR Excellent. We greatly appreciate your time, Gord.

GA Thank you, Alan. It was a pleasure.

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