

Northeast Ohio Manufacturing

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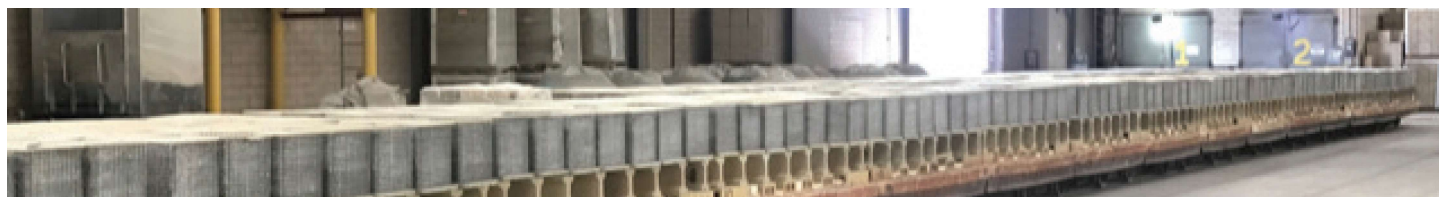
The Silicon Valley of the early 1900s, Northeast Ohio attracted innovators, leaders and companies from all over the world. Cleveland led the country in patent registrations and had its own stock exchange, while the Mahoning “Steel Valley” was one of the most productive industrial centers inter-nationally and Akron served as the global rubber capital. Our region drove America for decades – until it didn’t.

The automation, offshoring and death of big steel in the 70s and 80s not only crashed through Northeast Ohio’s industrial power, they also made us the national symbol of the middle class’s demise. And while our glamorous reputation dulled into a rusty one, the region’s people, businesses and leaders leaned into their grit and determination for which they are known to rebuild the local manufacturing industry. And this time, rather than sooty smokestack businesses, area manufacturers are a thriving network of 10,000 innovative companies making everything from aircraft parts to X-rays and everything between.

While fewer residents are in manufacturing, industry wages and productivity are higher than ever. Manufacturing alone creates 270,000 jobs; then every one of those jobs delivers four more in the community, which makes for more than one million jobs in Northeast Ohio. As a result, manufacturing drives half the regional economy. Half!

This fact alone underscores why our region’s community of manufacturers needs to return to its foundation of a legacy rich in manufacturing know-how and world class educational institutions, with its strength and resolve renewed by the more recent tough times, like The Great Recession and COVID-19 pandemic. With these qualities and experiences, manufacturers can work strategically around shared problems and toward reestablishing Northeast Ohio as the home of modern manufacturing.

As of two years ago, almost 60 percent of Northeast Ohio manufacturers said they couldn’t find the skilled workers they need to grow. This is despite COVID layoffs and before the oncoming wave of retirements, which will undoubtedly intensify workforce issues. Further while other manufacturing districts around the nation and world are harnessing emerging Industry 4.0 technologies, like collaborative robots and big data, Northeast Ohio manufacturers – particularly the small- and medium-sized companies that constitute the bulk of our industry – have been more resistant in adopting them. Smart manufacturing technologies are the only way Northeast Ohio manufacturers can compete globally on quality and price. Finally, Northeast Ohio manufacturers are not innovating far or fast enough. In fact, 75% of Northeast Ohio manufacturers say that innovation is not a top priority.



To craft and implement a solution to these problems, leaders from across many verticals – manufacturing, corporate, economic development, financial institutions and more – have banded together in support of The Blueprint for Manufacturing in Northeast Ohio. This vision offers a strategy to train a new generation of high-tech talent, technologically transform our factories and innovate to make things that haven't been made here in decades. Manufacturing offers a positive force for change; it can give everyone a pathway to prosperity; it can make Northeast Ohio one of the fastest growing and most innovative manufacturing hubs in the world. However, to unlock this future, we require massive systemic change in talent, transformation, innovation and leadership. And if we focus on all four of these pillars, the region stands on the cusp of endless opportunities. The future can be made by our people in our factories.

Knight Material Technologies (KMT), located in East Canton, Ohio, is one local company that has harnessed the power of each Blueprint pillar. Previously known as Koch Knight and part of Koch Engineered Solutions, KMT came to after a divestiture to High Street Capital in December of 2021. The new venture has allowed KMT to expand the company's offerings in innovative solutions, services and infrastructure.

Founded in 1910, Knight designs, installs, services and manufactures custom acid-resistant linings used in highly corrosive processes for the chemical and mining industries worldwide. KMT sells products in more than 40 countries with sales offices in Australia and Chile and a fabrication shop in Baytown, Texas. In addition, it produces industry-leading ceramic packing media for chemical process and regenerative thermal oxidation systems with customers in a wide range of industrial applications. It relies on the latest research, new technologies and advanced service solutions to continue its tradition of dependable and industry-leading corrosion prevention.



Kevin Brooks,
CEO KMT

Knight Material Technologies President Kevin Brooks offered us some time to talk about the challenges manufacturers everywhere are facing, but how keeping a focus on talent, innovation, transformation and leadership are improving his operations.

Talent shortages are everywhere. Can you talk about what you're doing to deal with it, how you're help drive more talent to your business?

Like everybody, we're having a lot of challenges attracting talent and trying to make a strong case that Canton is a good place to come work. Some days, that's still a hard sell, but we try to make sure candidates understand Knight Materials offers a lot of growth opportunities. When new employees come on board, they want to stay based on our culture, competitive compensation and strong benefits. We create an inviting workplace; our supervisors do a great job of finding out what matters to their staff and responding to that. In fact, when we encounter problems in our operations, rather than



try and solve it from a top-down management approach, we form problem-solving teams and let them develop their own solutions.

Finally, we also have a new HR business partner here who is working hard to integrate Knight into the community.

How has innovation – processes or products you've innovated and improved from existing ones – played a role in Knight's operations or production?

We've added a complementary lining system installation service. Everything we've done previously is based on ceramic, and now we've recently acquired two companies that provide similar products and services, but they're all based on fluoropolymers.

And, due to demand, we've been forced to innovate on how we're producing the product. So the products haven't changed, but how we're making them has.

Also, we're investing in several major pieces of equipment to move to more modern technologies for our ceramic manufacturing. Our first investment is new kiln that is on order and will be delivered this fall. The new kiln will add capacity to meet our customer's demands.

So your innovation also encompasses transformation, using Industry 4.0 (modern technology) to improve how your plant is operating?

Yes. We're in the very early days of that process, but it is certainly the vision to automate our manufacturing processes going forward.

A lot of thought and research goes into transformation to Industry 4.0. What was the impetus that helped you make the jump and what kind of work did you do to know what kind of technology you wanted to add to your equipment?

We had a variety of reasons. First, the marketplace demands it to survive; we couldn't keep up with our customers' needs if we maintained our current manufacturing operations. In addition to the need, we now we have ownership that is more supportive in investment took the helm. Finally, a lack of staff forced us to automate. There is just not enough workforce available to do it the way we used to, so we need to rely more on automation.

Leadership is the last pillar of The Blueprint's vision. From your seat as CEO, what does leadership mean to you and why does good leadership matter?

I'm fairly new to a leadership role, and one big adjustment has been moving from managing to being a leader, because they are two different things. Management is staying on top of all the details and schedules, but leadership requires more delegation of authority. I want to push authority to where it makes sense, to where the folks who have the talent and experience to make decisions can make them.

I think the other piece of leadership is that as you move others into leadership roles, make sure they have the training and desire to do it. The most talented person may not always be interested in leading a department, because some individuals are very happy using the talents they have in their current role. A strong engineer may just want to engineer and not manage people. Don't ever assume that's the case, but if you do put them in a role where they manage people and don't have a background in that, make sure to provide some training. Leadership requires a very different skill set.

You've extended your leadership outside of your facility and into the community by serving on the Black College Football Hall of Fame CEO Committee. Can you talk about why working in the community is important to you and what about this effort drove you to participate?

This year, Knight Materials was asked to be on the Stark County Community Moving Forward, an organization with 10 subcommittees, The Black College Football Hall of Fame CEO Committee being one of them. The overall purpose and mission of Stark County Community Moving Forward is coalescing the community and providing it resources as it relates to diversity and inclusion.

Historically, we didn't spend a lot of effort promoting ourselves in the local community, and a lot of it was because we have a very small, if any, local customer base. Our customers are all over the world, from Turkey to Poland to South Africa. So sometimes we spend a lot of effort staying on top of supporting those customers and less time in the local community. But what we found then is recruiting locally is difficult, because nobody knows who we are or the exciting things we do. So, with the leadership change here, we want to find ways to be more involved, and joining the organization's Black College Football Hall of Fame CEO subcommittee fits our profile.■

