# **Operational Improvements**

## A Conversation with Solve Industrial Motion Group CEO, **Ernie Lauber**

#### Matthew Jaster, Senior Editor

Since taking over as CEO of Solve Industrial Motion Group in June 2024, Ernie Lauber has focused on continuous improvement, predictive maintenance and growing the legacy brands within Solve.

Combining brands such as IPTCI, MasterDrive, PTI and TRITAN together with the LMS, SST, SPB-USA and USA Roller product lines, Solve Industrial Motion Group is a provider of high-quality metric and American Standard power transmission components and industrial-grade bearings.

With a comprehensive product catalog, highly honed supply chain, ISO 9001 certified quality control, advantageous pricing and the ability to custom manufacture bearings and components to fit virtually any need, Solve delivers products to meet demanding service requirements in areas such as agriculture, automotive, mining, aggregates, material handling, food and beverage, forestry/wood products and more.



Ernie Lauber, CEO, Solve Industrial Motion Group.



#### A Focus on Continuous Improvement

Lauber's career has prepared him for this role as CEO in the mechanical power transmission market.

"I'm a mechanical engineer undergrad, a tactile, hands-on, visual person, right? My mechanical background has always served me well, problem solving, critical thinking, analytical, etc.," Lauber said. "I spent 20 years at Danaher, and, you know, I saw the company grow from 1 billion to 24 billion. This really afforded me the ability and experience to fill my toolkit."

Lauber said he has a knack for unlocking potential. "Aspirational growth, continuous improvement, everything I do is rooted in the customer. Where is the transformation? Where does it happen? I've sat in a variety of seats from product management to manufacturing to strategic marketing to senior sales leader. I took on a president's role for a company called JBT Food Tech, a big vertical in the food processing industry. Capital equipment manufacturing and heavy aftermarket really prepared me for this opportunity at Solve."

Specific to the CEO role at Solve Industrial, Lauber is setting his own personal and company goals for continuous improvement and brand growth.

"What's going on here is rather unique. There have been five acquisitions in the last three years-really strong brands—and in the next two to three years, we want to double this. It's about being a platform, a destination, and a one stop shop for bearing and power transmissions solutions," Lauber added. "There's been heavy investment in a 300.000 square foot distribution center in Charlotte. We've invested in a new director of engineering and an engineering team, as well as the addition of myself and some other senior leaders."

#### Market Challenges and New **Technologies**

In terms of specific challenges in mechanical power transmission, Lauber cites the global supply chain and talent acquisition as two areas in need of attention.

'This supply chain has a heavy global component and a heavy Asian component. We've made investments in people, trading partners and in Asian manufacturing, so we feel that we've got good feet on the street and the right investments," Lauber said.

'We're going to be further diversifying, outside of China, outside of Taiwan, and making sure we've got a well-balanced, manufacturing portfolio. We're also being aggressive with manufacturing here in the United States and we're going to be expanding that."

By hiring new leadership and engineers, Solve Industrial will transform into an integrated, flexible destination for talent.

"It's one thing to be a \$20 million, multigenerational, family-owned company, but now, when you bring in five, six, 10, acquisitions and integrate them into our portfolio strategy it's about growth for the entire organization," Lauber said.



#### **Solve Industrial Products**

The following is a summary of a few of the product categories Solve Industrial Motion Group provides in mechanical power transmission:

#### **Ball Bearings**

Radial/Deep Groove Ball Bearings are the most common and versatile bearings. Engineers choose them for their efficiency, durability, and low maintenance needs. Their deep raceways enable them to support both radial and axial loads, making them versatile for applications requiring high speed and precision. Solve's radial/deep groove bearings are made from high-quality AISI-52100 chromium bearing steel as well, many are also produced with 440C Stainless Steel, which is ideal for corrosive and food grade applications.

#### **Spherical Roller Bearings**

Spherical Roller bearings utilize two rows of rollers operating in a common sphered outer ring raceway. This design provides a self-aligning solution that is the combination of a radial & thrust bearing that operates even if the shaft and housing are, or become, misaligned under load. This high-capacity bearing performs consistently in adverse conditions such as shock loads, shaft deflections, marginal lubrication, extreme speeds, contamination, and critical application stresses. To enhance lubrication efficiency, the outer ring of these bearings features an annular groove and lubrication holes (W33). C3 internal clearance provides component expansion during operation at moderate temperatures.

#### **MD Flex Couplings**

Solve's MasterDrive brand flexible couplings are ideal for accommodating shaft misalignment, reducing vibrations, and transmitting torque smoothly. They enhance machinery performance, prevent damage, and extend the lifespan of connected components. Features include: No lubrication or maintenance needed; quick and easy installation; allows for 4-way flexing: angular, parallel, axial, and torsional; smooth operation and quiet performance. MD Flex couplings are available in coupling sizes 3-14. Inserts are available in multiple materials, including EPDM, Neoprene, and Hytrel.

#### **Jaw Couplings**

Jaw Couplings are an excellent choice for applications that require a low-cost, general-purpose coupling. They allow for a quick and easy shaft-to-shaft connection method. Solve's portfolio of jaw type couplings provide efficient power transmission of torque, compensate for misalignment, and protect equipment from shock loads, enhancing overall machinery reliability. Two coupling hubs are used in pairs with an elastomer element (spider), each sold separately. The element eliminates metal-to-metal contact and acts as a shock absorber. The design is considered "fail-safe" because if the element fails, the load would still be carried by the hubs. Jaw couplings are available in sizes L035-L225. Available element materials include Buna-N (Rubber), Urethane, Hytrel, and Bronze.

### **Mounted Ball Bearings**

Solve offers the widest assortment of mounted bearings and ball bearing inserts in the industry. They stock popular Metric and American Standard configurations with bore sizes up to 140mm or 4". Solve is unique because it's one of the few companies that make four different types of locking collars for bearings. These types are set screw, eccentric locking collar, concentric locking collar, and adapter lock.

#### V-Belt Sheaves

Solve precision engineers a comprehensive range of single and multi-groove V-Belt Sheaves in a variety of configurations from bored-to-size and H bushed to the durable heavy-duty QD sheaves. These sheaves and bushings exceed the stringent ASTM/SAE specifications for gray iron casting. The team accurately machines each piece from high-quality gray cast iron and ensures static balance. To ensure performance, they also perform a phosphating process before painting to boost rust resistance and paint adhesion. This process yields a durable, baked enamel finish that allows for smooth, trouble-free functionality.

### **Timing Pulleys**

Some systems can't afford to have any slippage. Solve's Timing Pulleys and Belts work together perfectly, much like gears. Timing Pulleys have teeth that lock in with a corresponding toothed belt. This setup allows your machines to run at higher speeds, work more efficiently, and doesn't require lubrication. Plus, they are more convenient for places where it's hard to do maintenance. Solve offers Timing Pulleys and HTD Pulleys in various sizes and styles. This includes 'L' and 'H' Pitch as well as HTD (5M, 8M & 14M) configurations. They are supplied in solid, webbed, or spoked designs depending on size and series.



Condition monitoring and predictive/preventative maintenance will be areas that should offer technology benefits moving forward.

"Has IIoT evolved like everyone thought it was going to because of firewalls and data and all the cybersecurity risks? Maybe not, but what it has done is helped us in the MRO space. So now people have a better understanding from a predictive standpoint when you need to replace components based on vibration, heat and all these other factors," Lauber said.

Lauber also sees great potential in AI.

"As far as understanding the needs of our customers today—a lot of these new software tools have an AI interface where we can recognize what kind of equipment our customers have and this lets us have a better grasp on how we properly maintain this equipment. Do they need a bearing repaired or fully replaced? AI will be extremely beneficial in the aftermarket space moving forward."

Lauber cites a very thoughtful, lean implementation taking place across Solve Industrial.

"We're starting with our Charlotte distribution center to make sure our teams are working with a kind of kaizen mentality. How do we develop the right kind of Gemba boards, the right kind of visual management. We had someone tell us we didn't need to pull any additional data other than the data that was already in front of us. I'm a data junkie, so I'm fascinated by the notion that continuous improvement is not just on the plant floor, it's also going to be in our leadership, in the review of our initiatives and how we plan to support our customers in the future." Lauber said.

#### **Brand vs. Product**

Solve Industrial has additional expansion plans in the coming years and is also working on methods to bring other PT components under the umbrella.

"We've shifted to a product category focus versus a brand focus. And that doesn't mean we don't honor and understand the legacy of our brands. We just need to examine the notion that we have different price points and value propositions in the bearing space," Lauber said.

In addition, Lauber plans to pay close attention to what the power transmission space will look like in the coming years.

"Gearboxes, material handling, new equipment builders, for example. There's plenty of opportunities for components and systems that transmit power. So, what I can tell you is, we're not just going to focus on the bearings and the sprockets. We're going to be exploring linear motion. We'll be exploring gearboxes. We're going to examine these markets to understand what is needed out there for us to be that engineering, consultative, one stop shop we discussed earlier."

While major change isn't always seamless, Lauber believes the company is making the right kind of investments for future growth.

"People are extremely excited about our long-term plans at Solve Industrial. These legacy brands will continue to provide the right solutions for the right markets. We're investing in new technologies as well as new talent. Our vision of becoming a power transmission platform is for real. The energy and passion around here have been incredible," Lauber said.

Lastly, we asked Lauber how the organization plans to evolve in the future.

"It builds upon that reoccurring theme, creating a platform, a destination, you know, and it's easy to say, it's hard to do. Suddenly you have several new acquisitions and you're growing organically. How do you maintain the kind of support and service your customers are accustomed to at a greater scale? This is how I'm challenging the team to think," Lauber added.

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