



Each issue, a *Gear Solutions* editor talks with experienced leaders from companies across the industry to learn about their offerings, philosophy, technology, processes, and customer relationships.

Please give us a brief history on Luren Precision.

Luren Precision was established in May 1994 in Hsin-Chu Science-Based Industrial Park, due to the need for gear cutting tools in Taiwan. Luren worked with members from the mechanical labs in the Industrial Technology Research Institute (ITRI), a government-sponsored research unit in Taiwan, and acquired the design and production technologies of hobs and shaving cutters from Samputensili, Italy, to begin the production and sale of our gear cutting tools.

Through many years of production improvements and technological advancements, Luren has developed a strong R&D team, which allows us to provide solutions to all of our customers through our three business units: gear cutting tools, gear grinding machines, and spinning pumps. We've also expanded rapidly, selling our gear grinding machines internationally under the Luren brand.

Today, Luren has 270 employees in seven locations worldwide: in Taichung, Taiwan; Osaka, Japan; Shanghai, China; and three locations in Hsinchu, Taiwan. Our Schaumburg, Illinois, location near Chicago opened in 2010. We received our ISO 9001 certification in 1999 and became an American Gear Manufacturers Association (AGMA) member in 2006. Luren Precision Chicago is proud to be an SAM (System for Award Management)-approved U.S. Government Vendor.

What are the industries that Luren serves?

Gears are an essential part of any transmission machine. Luren gear cutting tools are designed for manufacturing transmission gears used in a wide range of industries, including aerospace, automotive, transportation, mining, civil engineering, and machine tools.

Describe the products that Luren offers for gear manufacturing.

Luren provides hobs, carbide hobs, shaving cutters, and shaper cutters. Luren also offers CNC machines for sharpening of hobs, shaving cutters, and shaper cutters, as well as CNC machines for profile gear grinding, generating gear grinding, and worm/thread grinding. Luren offers master gears for mesh test, gear measuring, and correction.

Luren's dual-involute shaving cutter method, also called hobbled relief, processes the tooth root relief of a shaving cutter. And Luren's plunge type of shaving cutter is designed on the cutting data that is collected from the cutting status to make the plunge type of shaving cutter more efficient.

What services does Luren offer?

Luren offers many kinds of services: resharpening for hobs and shaving cutters, modifying the profile of gear cutters, designing the customized products, and solving any technical or processing problems.

In addition to strict quality control, we carry out strict inspections of all our manufactured products and are constantly refining our production operations to produce the perfect product for our customers.

Tell us about Luren's software and technology.

Our gear cutting software was designed by our R&D group to support a complete work schedule and dramatically increase the design capabilities and gear machining precision of manufacturers. Our user-friendly interface allows the operator to enter parameters without any training in coding, and our software automates any CNC grinding program for automatic gear production.

We adapt our technology as the market changes by investing in new production equipment to expand our spinning pump operations. Designed for synthetic fiber manufacturing, our spinning pumps use only the best HSS materials that are vacuum heat treated to achieve a hardness of HRC 63 or above. This allows our dimensional and geometric accuracy to satisfy the strictest precision machining requirements in the industry.

What makes Luren stand out from others in the same industry?

For over 20 years, Luren has manufactured high-quality, high-precision gear cutting tools using the best materials at a competitive price to ensure long tool lives and satisfied customers. Luren is known for in-time problem-solving, innovative design, and technique exchange seminars according to our customers' needs, continuing to respond to the market and lead the future trends.

What are the advantages to working with Luren?

Today, the company sees the small- to medium-sized companies as its target customer base. This allows Luren to bring high-quality, highly capable gear cutting tools and gear grinding machines to a broader audience at a more affordable price point than many of the larger tool manufacturers. The capabilities of Luren's gear cutting tools and machine tools will consistently perform the required tasks to industry standards and offer a faster production time and increased quality overall to better suit the business of Luren's customers.

Luren also offers the best customized products that enable Luren to simultaneously grow and make significant contributions with customers in the competitive market.

We are a relatively new player in this market. We make our gear cutting tools to the same quality as of any other suppliers in the world with a very competitive price and lead time.

What's in the future for Luren?

For more than a decade, Luren has developed and delivered over 300 gear-related grinding machines worldwide. Owing to our resourceful strength in gear theory and precision manufacturing technologies, we will launch our bevel gear cutting and grinding machines in the market shortly, along with the recently developed continuous generating gear grinding machine, LGA-2812. 