

Ulbrich Stainless Steels & Special Metals, Inc.:

Ulbrich Stainless Steels & Special Metals, Inc., headquartered in North Haven, Connecticut (CT), is a global precision re-roller and distributor of stainless steel strip, special metals strip, UltraLite Foil®, shaped wire, fine wire, sheet, plate, bar, and PV ribbon products. Ulbrich's precision rolled strip and service center products have gained a reputation for excellent reliability and superior performance in critical applications across a variety of sectors including aerospace, automotive, chemical processing, electronics, medical, oil & gas, and power generation.

All Ulbrich products are the result of years of operational experience and metallurgical development, offering properties well beyond those of ordinary metals. The company is devoted to supplying customers with quality metals engineered to enhance and improve processes and products. Ulbrich has 12 locations in five different countries including Asia, Europe, and North America with additional sales representation worldwide.

Stainless Steel World Americas recently had the pleasure of speaking with Ryan Cei, Ulbrich's Global Marketing Manager, about the company's rich history, its impressive product offerings and why customers should continue to choose Ulbrich as their developmental partner and one-stop shop for specialty metal products.

By Candace Allison

Starting from scrap

Ulbrich Stainless Steels & Special Metals, Inc., was founded in 1924 in Wallingford, Connecticut, by Fred Ulbrich Sr. At that time Fred left his home of Wallingford, Connecticut, to gain manufacturing experience at Donora Zinc Works in Donora, Pennsylvania. At this melt mill in Donora, Fred was taken with separating scrap. He soon realized that his hometown of Wallingford was in need of a metal scrap supplier. Fred moved back to Wallingford and began his own scrap business by traveling to the surrounding farms and gathering dismantled or abandoned farm equipment, cars and appliances. He then separated the scrap based on the knowledge he had gained working in the melt mills and sold the scrap back to those very mills so the material could be re-melted into new steel.

Mr. Cei explained that Fred Sr. was in the ideal place to start-up a scrap metal business because the surrounding areas were known as the 'Silverware Capital' of the United States as there were two large silverware mills located in the vicinity. Fred mostly sold scrap metal until World War II when more opportunities came about. During the war, he won contracts to make silverware for US Army mess kits, but it was a challenge because he couldn't get the right thickness as the majority of metal was being used for ammunition and artillery. Fred audited metallurgy courses

at Yale University this time, and was able to supply the correct type of stainless steel utensils due to his metals expertise.

Cei shared, "It was then that Fred exited the scrap business, sold his silverware subsidiary and bought the very first Sendzimir rolling mill (which is a cold rolling mill) in the Northeast. That's when Ulbrich became a precision stainless steel and special metals supplier that it is known as today. Having the first Sendzimir mill allowed him to sell small quantities of high quality material to companies in Connecticut with exacting metal requirements. Ulbrich's customers included Pratt & Whitney, United Technologies and Hamilton Standard during this time. In this post-World War II era, both the aerospace and automotive markets took off and material requirements became and more and more precise as well as diverse. So Ulbrich grew from a stainless steel company to a business that now supplied titanium, nickel alloys, and many other specialty alloys. The company grew as the demand grew. We always pride ourselves on being at the forefront of the expansion in the metals marketplace."

A capabilities-driven company

Cei continued to explain that as Ulbrich grew, two of Fred's sons became involved with the business, which by that time had become a global supplier. As the customer base began to spread outside of Connecticut, Ulbrich opened service centers strategically located around North America to better service customers. As the customer specifications became more precise, so too did Ulbrich's product and service offerings; the company adapted to fit the needs of its clients. This is exactly how Ulbrich became, and continues to be, a capabilities-driven company.

One of the many impressive examples of this capability is that Ulbrich was on the forefront of sending man into space in the 1960s. There is a US Government and NASA-issued plaque hanging at Ulbrich's Corporate Headquarters from the United States thanking the company for providing materials that helped men to land on the moon in 1969 and 1971. The metal needed for the original Apollo missions had to be very high temperature-resistant alloys to withstand tremendous heat and function within burning rocket engines. In addition to that momentous milestone, the company



has been one of Pratt & Whitney's trusted suppliers since the 1950s. Today, Ulbrich provides high temperature materials for the military's new Joint Strike Fighter program.

Family-owned business

Supplying unique industrial sectors like aerospace soon led to work on a wider variety of products and applications. For instance, the company became involved with wire products because the requested product properties were too narrow or tight to be able to use strip metal, so wire was the only option. Eventually this segment of the business grew so large it became its own company, Ulbrich Shaped Wire, which currently operates out of North Haven, Connecticut. Then through acquisitions, additional facilities were purchased in Westminster, South Carolina, now named Ulbrich Specialty Wire Products. One of the many product lines available from that business center is a tinned-plated copper photovoltaic ribbon used in solar panels. PV ribbon became such a popular product that the business grew to multiple worldwide locations including Austria and Hong Kong. This solar division of Ulbrich is called Ulbrich Solar Technologies, Inc.

Despite Ulbrich Stainless Steels & Special Metals, Inc., being the parent company to these several other successful companies, Ulbrich remains very much a family company. Throughout its 94-year history, the company has maintained full family ownership. The current CEO, Chris Ulbrich, is the third generation and his four children represent the fourth. So Ulbrich remains family-centric, family-owned, and family-operated which is unique for a

global manufacturer. In fact, employment at Ulbrich features a 'family feel' despite being a large corporate business. Cei stated that at a recent sales meeting, out of the 75 employees in attendance the average tenure was well over 18 years.

Worldwide reach

Maintaining a family-like corporate culture isn't an easy task since the organization is spread over five facilities just in Connecticut alone. Cei explained, "In about a two-mile stretch between Wallingford, CT, and its neighboring town of North Haven, CT, we have five facilities. Those include our corporate office, which has about 70 people who handle our corporate functions such as accounting, IT, marketing, and the sales group for our main re-roll plant, which is located about a mile down the road. At this re-roll facility, which operates 24/7, we have another 120 employees.

That is where our rolling mills are located and all the rolling and annealing is

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— Ryan Cei, Ulbrich's Global Marketing Manager



The Ulbrich family: (from left to right) Weston, Derek, Chris, Jonathan, Jason and Mark.

The global leader in precision metals



done. Next to that building we have a service center where all the finishing, packing, and shipping is completed. Also, all of our facilities adhere to a variety of quality standards such as GE, Rolls Royce, National Aerospace and Defense Contractors Accreditation Program (Nadcap), Pratt & Whitney, etc. We service mostly the East Coast from this service center location, but we do have some customers in other areas because of our unique capabilities.”

Cei further detailed that down the road from the service center is a large warehouse that employs a handful of people and that’s where all material is delivered and then brought up to our mill for processing. Beside that warehouse is the shaped wire mill that employs approximately 50 people. That facility produces products for downhole drilling operations along with other products with unique profiles such as product seals for industrial use in the chemical processing sector.

In addition to the Connecticut locations and a sales office in Fresno, California, Ulbrich has a strip service center outside of Chicago, Illinois, known as Ulbrich of Illinois, which is impressively celebrating its 50th anniversary this year. There is also a service center out of Querétaro, Mexico, known as Ulbrinox that services Latin America and is celebrating its 20th anniversary this year. In addition to Ulbrinox, there are two more North American service centers in Montreal and Toronto, Canada.

Cei explained that the products out of those two Canadian service centers consist of long products such as bar, tube and sheets that mainly cater to the Ontario and Québec markets. Then there is the wire facility in South Carolina and the solar division in Westminster, South Carolina; and Austria. There is also a sales office in Shanghai, China, as well as local representation throughout Europe and Northern Asia.

Company strategy and expansions

When asked about the overall company strategy for all of these locations, Cei is quick to say, “We have the manufacturing sites, the eight rolling mills, straight annealed furnaces and the wire mills. Then we also have the distribution groups and the strategically located service centers. With all those different businesses we really see ourselves as a development partner to our customers. We have an understanding of the market and we have an understanding of the materials as well as the properties required for those applications. So we really partner with our customers on the innovative products and

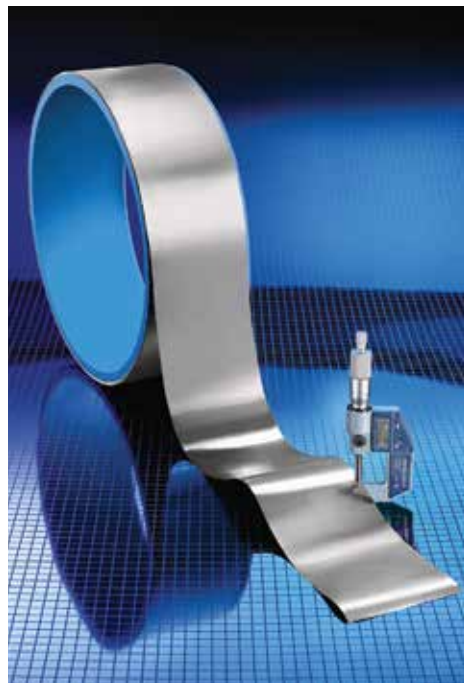
what’s always next in the market place. Recently the trend is what we call, lighter and tighter, so everything is getting smaller and everything is getting lighter in weight. For example, we produce a stainless steel wire for the medical industry that is one-tenth the thickness of a human hair by the width of a human hair. You can’t even see it run on the equipment!”

Cei said that in terms of expansion, Ulbrich is almost doubling the size of one of its wire facilities to be prepared for future equipment needs. The plan is also to warehouse raw material, so a new wire mill can assist with the products being produced for screen wire applications. As an up and coming product line, the extra space has been added to be able to handle much greater capacity.

High quality products

Cei explains that Ulbrich’s product offerings are identified by certain forms and shapes. These are strip coil, UltraLite Foil®, precision shaped wire, precision flat wire, precision fine wire and plated wire products as well as PV ribbon. All of these products are available in a variety of high precision metals. In 2017, Ulbrich processed approximately 165 different alloys, many of which are very difficult to process.

“That’s one of the unique things about Ulbrich,” maintains Cei. “Not only do we offer this breadth of alloys, but we also offer the product forms so we can service customers on both the strip items as well as the wire products. There are a lot of coatings that we do, such as electroplated silver, nickel and gold plating. But regarding the strip products, we service all of the four



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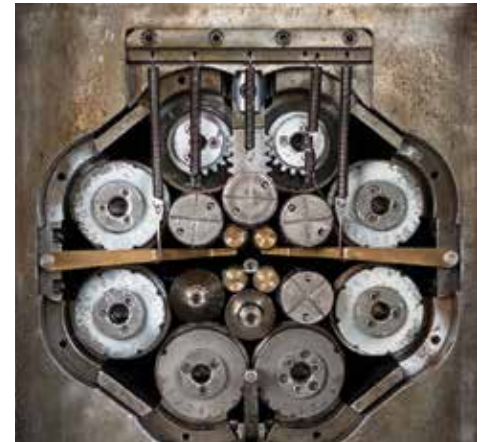
– Ryan Cei, Ulbrich’s Global Marketing Manager

families of stainless items, as well as pure nickel and nickel-based alloys, cobalt-based alloys, then commercially pure titanium, and titanium alloys as well. We are constantly looking at what’s next. We’re really a technological/material solutions company. With our products, we sell solutions.”

A developmental partner

Ulbrich also has an extensive metallurgical staff who directly support customers. A highly-skilled staff works alongside the commercial team to develop a “recipe” for success in attaining customer requirements and specifications. The benefit of an experienced, customer-facing metallurgy department is that demand is met with real-time expertise and technical support. The customers can rely on Ulbrich’s staff to work with them and define a process to ensure repeatability and quality. In this sense Ulbrich is in a development partnership with customers.

“We are essentially a development and supply chain partner to our customers. Ulbrich strives to exceed customer expectations and to help them on an intrinsic level, from the developmental stages through to trials then to certifications,” concludes Cei.



“We want to help develop a keen understanding of those requirements so we are able to follow the product lifecycle from infancy up to maturity. Ulbrich really is a capabilities-driven company that is a one-stop shop for customers from development to mass production. We work closely with clients to develop a product that works best for what our customers are trying to accomplish.”

All photos: Ulbrich Stainless Steels & Special Metals, Inc.



▶ Ulbrich Stainless at a Glance

Company name	Ulbrich Stainless Steels & Special Metals, Inc.
Years in business:	94 years
Global headquarters	153 Washington Avenue, North Haven, CT 06473
Product forms	Strip coil, UltraLite Foil®, slit coil, shaped wire, flat wire, fine wire, PV ribbon wire, sheet & plate, and bar & tube
Materials	Offers approx. 165 alloys including cobalt, controlled expansion alloys, nickel alloy, niobium, nitinol, stainless steel, tantalum, titanium, and zirconium
Additional capabilities	Sheet & plate coating, strip coil coating & plating, and wire plating
Industries	Appliances, automotive, chemical processing, commercial products, electronics, medical, oil & gas, power generation, and springs
Website	www.ulbrich.com