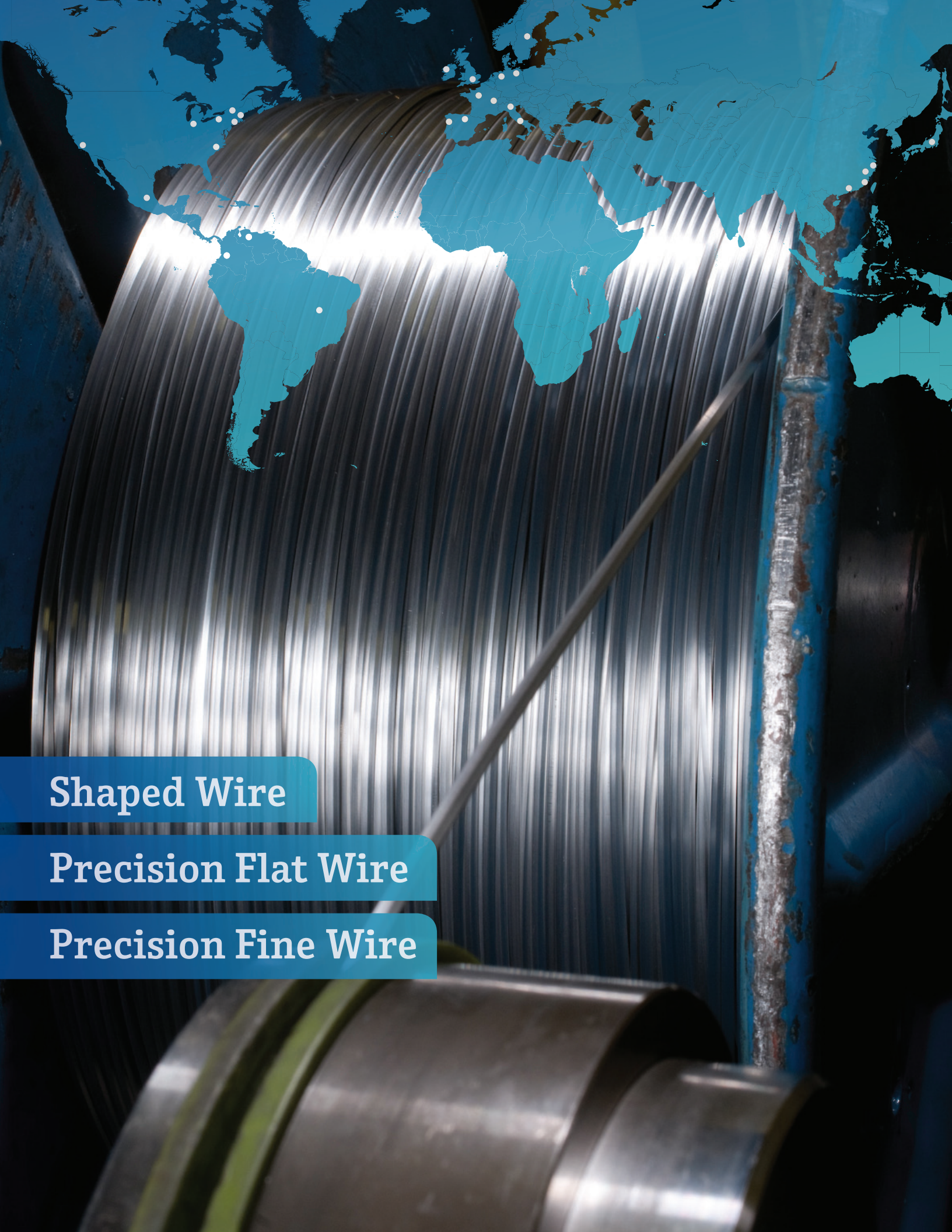




Specialty Wire Group

Ulbrich Stainless Steels and Special Metals, Inc.



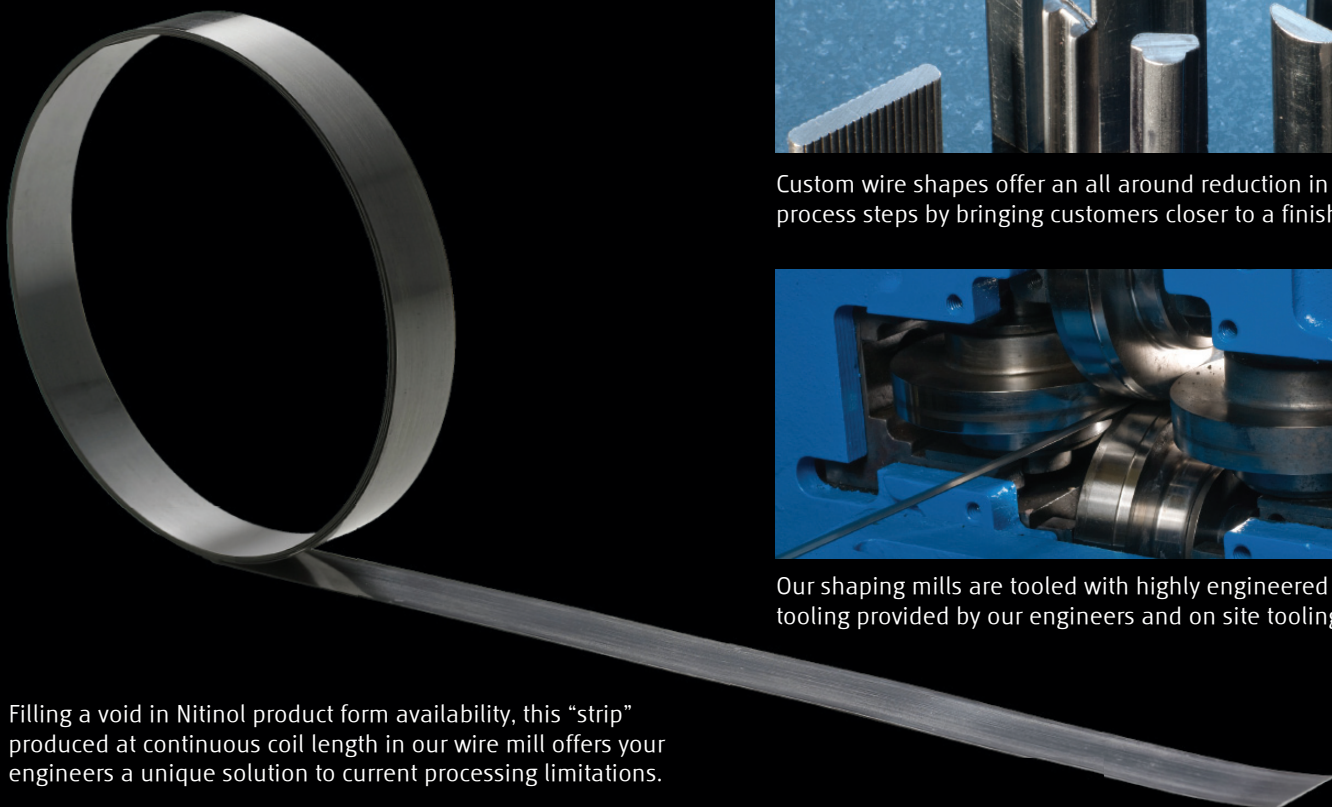
Shaped Wire

Precision Flat Wire

Precision Fine Wire

Shaped Wire

Ulbrich Shaped Wire specializes in the manufacture of custom made shapes and flats for a wide variety of industries. Depending on the complexity of the profile, shapes may be either net or near net suitable for stamping, coining, forming, or machining. All tooling is custom manufactured in-house by our state-of-the-art tooling center. We also offer metallurgical and engineering support for all customers. Ulbrich Shaped Wire supplies a wide range of alloys including Nitinol which can be provided as a flat, coiled wire product that is not readily available in the marketplace.



Filling a void in Nitinol product form availability, this “strip” produced at continuous coil length in our wire mill offers your engineers a unique solution to current processing limitations.

Alloys	Shaped Wire	Gauge Range
Stainless Steels	Rectangle	.005 to .335 inch (0.127mm to 8.509mm)
Titanium Alloys	Hexagonal	
Nickel Alloys	Octagonal	Width Range
Cobalt Alloys	Triangle	.020 to 1.50 inches (0.508mm to 38.1mm)
Nitinol Alloys	Half-Round	
& Many Others	Many Custom Profiles on Request	



Our controlled atmosphere strand annealing capabilities ensure consistent mechanical properties and a quality surface finish.



Custom wire shapes offer an all around reduction in cost and process steps by bringing customers closer to a finished part.



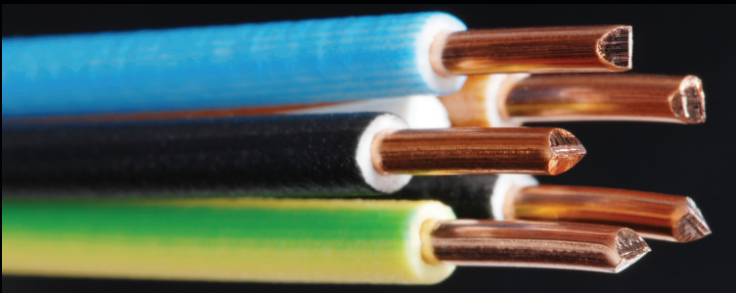
Our shaping mills are tooled with highly engineered precision tooling provided by our engineers and on site tooling center.

Precision Wire Products

P R E C I S I O N F L A T & F I N E W I R E

Our Precision Wire facilities are capable of producing round, flat, and fine wire for many demanding applications serving a variety of industries. Our “Focus Factory” approach dedicates managers and engineers along with state-of-the-art equipment to produce and manage industry-specific requirements.

Our production equipment uses the latest in “on-line” gauging and data acquisition technology that generates full statistical summaries with each production run, enabling us to control our process and offer tolerances as tight as +/- .0025mm (.0001”) on our lightest gauges. Precision spooling of fine wires onto a variety of spools or bobbins using CNC winders enables trouble-free performance in the most demanding applications. We offer a wide range of finishes for photovoltaic applications, saw blades, and certain medical applications.



Telecommunications products.



Plated products for a variety of industries.



Engineered music wire products.

		Width Range
Alloys	Gauge Range	.002 to 1.50 inches (.0508 to 38.1 mm)
Stainless Steels	.0002 to .210 inch (.00508 mm to 5.334 mm)	Surface Finishes
Aluminum Alloys		
Copper & Brass Alloys	Rounds	Tin and Lead Coated
Nickel Alloys		Heat Treated and Tempered
Carbon Steel		Bright Polish
Nitinol	.00075 to .400 inch (.019 mm to 10.16 mm)	
Applications		
Tinned copper and aluminum tabs for capacitors		
Aluminum and nickel tabs for batteries		
Gold plated products for a variety of applications in the electronics, medical and aerospace markets		
Silver-plated copper flat shielded wires for telecom cables		
Silver-plated copper wires for applications in music strings and medical devices		
Medical braidwire and mandrel applications		
Specialty music string and wire products		

Precision Wire Products

P R E C I S I O N F L A T & F I N E W I R E

Ulbrich is the perfect source for your ultra-fine wire requirements. Precision-plated or bare in various geometries including rounds, squares, and flats — all to extremely close tolerances.

We process a vast amount of materials for various markets that include: medical, electronics, telecommunications, and energy materials.

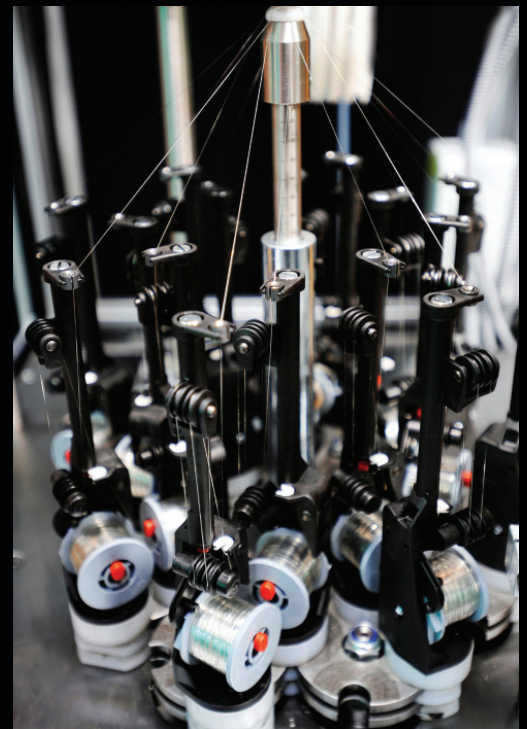
Ulbrich supplies material in a wide variety of customer packaging options: precision layer wound spools, pancake coils, and cut to length. Various traverse lengths, flange, barrel, and bore sizes are available to satisfy all of your requirements.



Our exclusive Nitinol rolling process produces a wide spectrum of coiled flat wire sizes, oxides, and mechanical properties of choice.

Alloys	Specialty Alloys		
Copper	Copper Clad	Tungsten	
Phosphorus Bronze	Copper Aluminum Clad	Titanium Alloys	
Beryllium Copper	Aluminum Clad	MP35	
Brass	Aluminum	300 Series VM	
Monel400	Nickel Plated Steel	430	
Copper Nickel Alloys	Molybdenum	FeChrome	
Kovar	Tantalum	Nickel Alloys	
Dumet	<th>Plating</th>		Plating
Pure Nickel 200/205			
Invar			Gold type I, II, III per MIL-G-45204 Solder per MIL-P-81728*
Alloy 52			Silver per QQ-S-365 and ASTM B-298 Military Standard -1276*
Other Resistant Alloys			Nickel per QQ-N-290*
	Tin per MIL-T-10727 Type 2 Solder-ability per MIL-STD-202		

*ASTM Specifications



Close-up of multiple bobbins wound on Steeger machine.



We Deliver Precision®

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