



The Ulbrich plant in South Carolina, where a substantial quantity of the world's guitar and violin string wrap wire is fabricated.

ULBRICH STEEL— AN UNSUNG HERO

Producing wrap wire for most of the industry's guitar and violin strings, Ulbrich's metal working expertise is a key component of stellar tone

WHEN GUITARISTS ANALYZE the source of great tone, they may point to tone woods, strings, vintage designs, and the luthier's art, but odds are, they'll never mention Ulbrich Stainless Steels & Special Metals. An unsung hero of the music industry, Ulbrich is a diversified metal processing firm that produces much of the wrap wire used in wound guitar strings. The company also produces wire for violin strings and speaker and microphone coils, making it one of the more important companies in the industry that no one has ever heard of.

With 700 employees in operations around the world, and sales in excess of \$250 million, Ulbrich has created a thriving business tailoring metal and wire components for highly specialized applications. Ulbrich wire can be found in solar panels, telecommunications equipment, the Space Shuttle, medical devices, and other applications too numerous to list here. The metallurgical skill and technology that allows the company to draw wire to thicknesses of .00075" (about four times thinner than a human hair) have been applied to create

the wire that gives guitar and violin strings just the right feel and resonance.

The Ulbrich Precision Flat Wire facility in Westminster, South Carolina, produces a huge assortment of string wrap wire. Varieties include aluminum and tungsten wires for bowed instruments as well as brass, bronze, nickel-plated steel, and stainless steel varieties that can be offered bare or electroplated (with silver, gold, nickel or tin) for guitar strings. Wrap wire is also produced, in round, half round, and flat configurations, and in numerous gauges. Producing this essential musical raw material involves drawing a relatively thick piece of wire through a series of dies to reduce its original diameter by as much as a factor of ten or more. The drawing process realigns the molecular structure, making the wire harder and less ductile. To counteract this and restore the proper flexibility, or "ductility" in metal working terminology, requires a heat treatment known as annealing.

Simple in theory, the practice of calibrating the drawing and annealing process to achieve the perfect balance between tensile strength (how much



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force is needed to break the wire) and ductility requires a combination of art and science. Mastery of this skill is the foundation for Ulbrich's success. Specialty Wire Product Manager Ted Davis explains, "Ulbrich has worked with more than 120 alloys and unique specifications, and we've successfully developed wire for a wide range of applications. This experience allows us to consistently deliver a high quality product."

In developing wrap wires for guitar strings, Ulbrich adheres closely to specifications generated by the string makers.

However, Davis says that merely meeting specifications is not enough: "Understanding the subtle nuances of the application and the expectation of our customers is equally important." Summing up, he adds, "It's not as straightforward as one might believe."

The origins of this broad-based metal working expertise dates back to 1924, when Fred Ulbrich opened a scrap metal yard in Wallingford, Connecticut. In the '30s he expanded the company by purchasing a rolling mill to produce stainless steel cutlery. During World War II Ulbrich made hundreds of thousands of

stainless steel knives for mess kits. Competing with much larger cutlery manufacturers, in 1950 Ulbrich exited the business to focus on rolling precision stainless steel parts. Since then, the family-owned business has branched out into specialized wire and a host of other precision metal products. Currently under the leadership of Frederick Christian Ulbrich, grandson of the founder, Ulbrich Stainless Steels & Special Metals continues to pursue all markets around the world that require precisely formed metal parts.

www.ulbrich.com

PEOPLE

▶ ED ALSTROM NAMED GCI MARKETING DIRECTOR

GCI TECHNOLOGIES HAS appointed m.i. industry veteran Ed Alstrom as its new marketing director. Alstrom will lead the effort in broadening the scope of both marketing efforts and product development for GCI's three product lines—Gemini, Cortex, and iKey—as well spearheading the development of new product lines and categories.

"I'm excited to be onboard here," Alstrom said. "I think there's a lot of potential in a lot of different areas, for us and for our dealers. Gemini is already a legacy name in the DJ world, Cortex has established a reputation for forward thinking, and the iKey name is very malleable right now and can turn into something very interesting. I look forward to getting ideas and input from our sales force and our dealers, and strengthening these relationships, so we can embark on a whole new phase of growth. This may well include expanding out into some new areas."

Alstrom most recently served as national sales manager for Fostex, where he was responsible for broadcast/AV dealers. Prior to that he handled

sales administration for Right Track Marketing, a Northeast rep firm. He



Ed Alstrom

spent 15 years with Casio, where he not only served as product and marketing manager but also played an integral role in product development, working extensively with Casio's engineers in Japan.

Alstrom is also active as a professional musician, his most notable gig now being weekend organist at Yankee Stadium.

▶ CORDOBA TAPS HAGER TO HEAD SALES

LEADING NYLON-STRING guitar manufacturer Córdoba Guitars has hired m.i. industry veteran David Hager as its new national sales manager. Formerly the national sales manager at Taylor Guitars, Hager will lead both Córdoba's and parent company Tornavoz Music's sales teams in strengthening and creat-

TESTA TO HEAD VIC FIRTH ARTIST DEPT.

JOE TESTA HAS joined drum stick maker Vic Firth as director of artist relations.



Joe Testa

A 19-year industry veteran, Testa has handled artist relations for Yamaha Corp. of America and Warner Brothers Publications. During his 12-year stint at Yamaha, he worked with many current Vic

Firth endorsers.

"Joe comes to Vic Firth, Inc. with a wealth of experience and an impeccable musical background. It is a thrill to have him join the Vic Firth team," said Vic Firth, founder and chairman. Testa plans to move to the Boston area soon.