

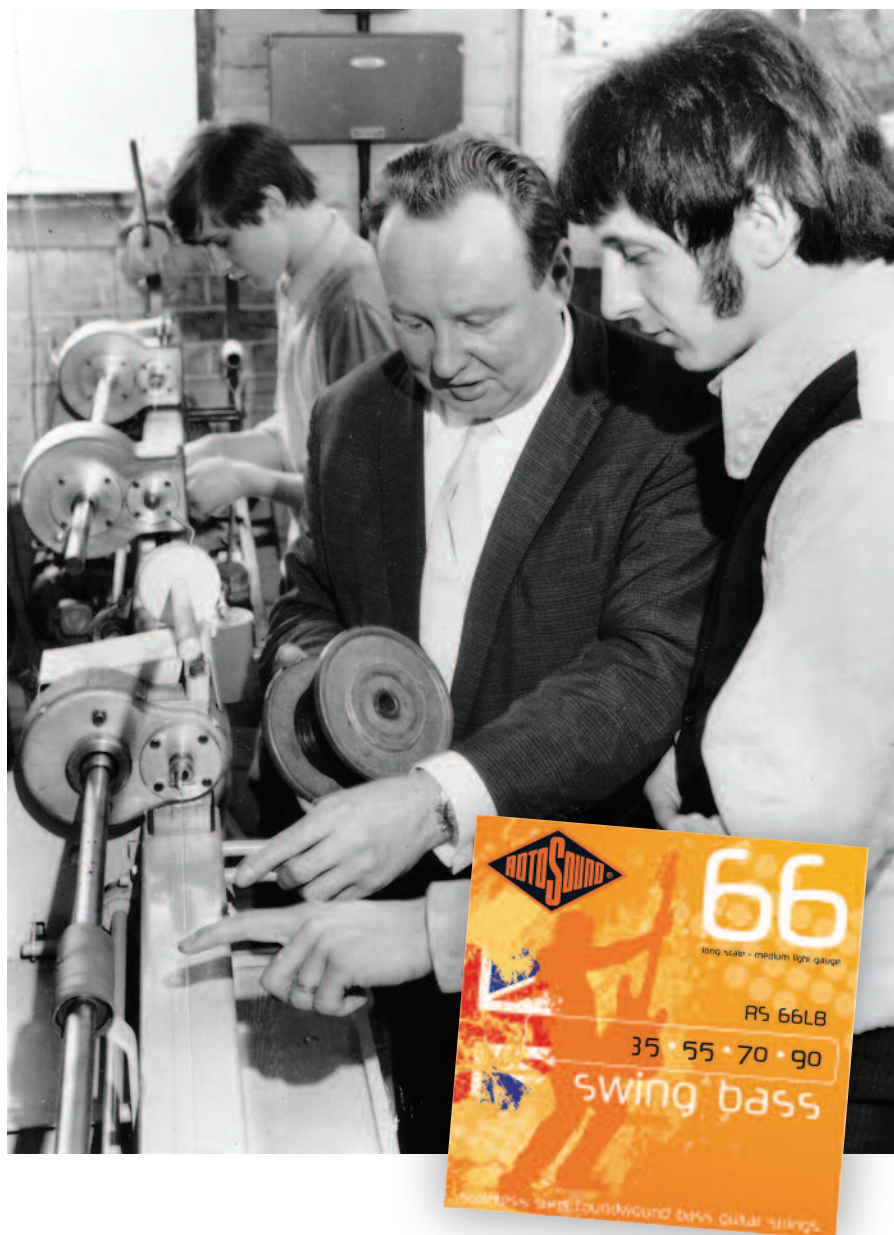


Rotosound CEO Jason How, an engineer by training, rebuilt every string-winding machine on Rotosound's factory floor, giving the string pioneer the tools to compete in the global marketplace of the present day.

Rotosound's Blend Of Art & Science

How the U.K. string maker rode the British Invasion of the '60s, faltered in the '90s, and then re-engineered itself to stage a major comeback

On The Who's 1967 album *The Who Sell Out*, there's a hidden track between the sixth and seventh songs on side 1. Written to sound like an ad spot from British "pirate radio" broadcasts of the day, the six-second jingle goes, *Hold your group together... with Rotosound strings!* This was Who bass player John Entwistle's tribute to Rotosound, the U.K. string maker that had custom-engineered his favorite strings one year before. Rotosound's breakthrough electric bass strings would later be used by Sir Paul McCartney, Roger Waters of Pink Floyd, and John Paul Jones of Led Zeppelin, among other key artists from the late British Invasion period. Founded by Londoner James How, an engineer who built all his own string-winding machines, the company is credited with a litany of "firsts" in the history of fretted instrument strings.



Close collaboration between Rotosound founder James How (left) and John Entwistle of The Who led to Rotosound's top-selling Swing Bass 66 string.

Four decades later, Rotosound has remained the quintessential British string maker—though not without overcoming a few mortal threats to its existence. Under James How and later under his sons Jason and Martyn, Rotosound has steadfastly refused to outsource production, setting up a constant struggle with high labor costs and international competitors. At one point in the early '90s, the combined toll of external factors and outdated infrastructure brought Rotosound to the brink of insolvency. After James's death in 1994, it fell in large part to

Jason How, now CEO, to rethink the entire operation. The history of Rotosound since the mid-'90s is mainly the story of how he did it.

EARLY DAYS

Before starting Rotosound, James How was an engineer at the Royal Ordnance Factory of south London, a facility run by the U.K. government for munitions work during and after World War II. The story goes that in 1952, after watching the spy film *The Third Man* with its all-zither score by Anton Karas, James became fascinated by the

zither, teaching himself to play and eventually collecting more than 200 different models. Because zither strings were hard to find in shops, he began spending his off-hours building a string-winding machine, which he completed in the shed at his home in the East End of London.

James and his brother Ron, a skilled pianist, went on to establish a commercial string company in the town of Bexleyheath, Kent, about 15 miles outside London. Under the name *Orchestral and Jazz Strings*, the company gained endorsements from the Berlin Philharmonic, the New York Philharmonic, and the London Symphony Orchestra, among others. As the string maker's scope expanded, its name was changed to *Top Strings*. That name proved impossible to copyright, however, and the company soon adopted the name *Rotop*—derived from the Latin “roto,” or “round” for the round-wound strings it specialized in—which later became *Rotosound*.

“REGULARLY, WE WERE BRINGING OUT NEW INNOVATIONS. THERE WASN'T ANYTHING ELSE OUT THERE THAT LET THE BASS PLAYER'S SOUND CUT THROUGH IN THAT WAY.”

Although Rotosound was making bass guitar strings as early as the 1950s, their time didn't really arrive until the rise of the British Invasion bands of the 1960s. To that point, says Jason, the bass player “was just the guy in the back standing next to the drummer,” and the bass string of the day produced a characteristic dull thud. With the arrival of The Beatles and Paul McCartney, the bass player was cast in a new light and demand surfaced for a better bass string. Then under contract to make strings for Burns Guitar and Vox, Rotosound would fill the void with a run of string introductions that became its most celebrated SKUs.

1962 brought the earliest version of its signature *Swing Bass* string, the



Never outsourced: All Rotosound strings are still manufactured at the company's factory in Sevenoaks, U.K.

first round-wound stainless steel bass string, which jolted the market with a clarity and brightness never before heard from the bass guitar. Swing Bass was followed shortly by two first-of-their-kind flatwounds: Jazz Bass, the first electric bass strings to use Monel alloy wrap wire; and Tru Bass, the first black nylon bass string, which would be heard on The Beatles' *Abbey Road*. "Regularly, Dad was bringing out new innovations," says Martyn How, now Rotosound's commercial director. "There wasn't anything else out there that let the bass player's sound cut through in that way. Listening to The Who, you heard Pete Townshend's guitar, but equally, you heard John Entwistle's bass."

Rotosound's big break came in 1966, when Entwistle came to James How with a request for a custom set of strings. "He was looking for a bright, twangy sound," says Jason. "John Entwistle was a very skilled player, not just on bass but on trumpet and tuba and all kinds of stuff—so he had a super-critical ear for how he wanted to sound." Entwistle spent an afternoon at the Rotosound factory, trying strings as James and his team tweaked them to his specifications. The strings Rotosound emerged with that day became its Swing Bass 66 set, still its

most popular bass strings. From there, the company drew up an endorsement contract with Entwistle, with the key conditions that Entwistle would get free strings for life and have his picture in the back of every package.

Entwistle's strings produced a "spec"—the diameter of each string as determined by the thickness of the core wire and layers of wrap wire—that Rotosound uses to this day. His endorsement sparked the interest of other top artists, guitarists as well as bass players, who all had some version of the question, "How the hell do you get that sound?" In 1967 Jimi Hendrix, then in London with The Jimi Hendrix Experience, came to Rotosound for an unusually light-gauge set of guitar strings that he favored for their "bender" feel. The collaboration produced the Cosmic Light and Micro Light sets, featuring string gauges as fine as .006"—where the lightest commercially available strings are typically no less than .008". Hendrix, who would literally bite his strings for effect in concert, is said to have commented, "I like the taste of these better."

By the late '60s, the influence of Hendrix and the British Invasion bands had popularized Rotosound strings in the United States. After a few years of patchy U.S. distribution, the company

inked its first large-scale distribution deal with New Jersey-based Meisel Music in 1970. Meisel held exclusive U.S. rights until 1980, when Rotosound opened up its distribution network, eventually adding more than a dozen distributors nationwide. During this period, Rotosound would build on its artist portfolio with ties to Phil Lynott (Thin Lizzy), Sting (The Police), and Billy Sheehan (Mr. Big, Steve Vai, David Lee Roth). After years of prolonged growth, the company also relocated to a new factory in Sevenoaks, Kent.

SIGNS OF TROUBLE

On the surface, the 1980s were high times for Rotosound. Over the first half of the decade, the value of the British pound fell steeply against the U.S. dollar, plunging from \$2.33 (dollars per pound) in 1980 to a record low of \$1.05 in February of 1985. Sales surged as Rotosound strings became absurdly inexpensive in the U.S., their largest market. In retrospect, however, it's apparent the exchange rate was masking the company's internal problems—not least of all machines that hadn't been updated since James How engineered the originals in the 1960s. "If the pound hadn't been so good to us," says Martyn, "we might have moved up a gear on building the new machines we truly needed."

By the end of the decade, the exchange rate had come back to reality, rising to \$1.78 in 1990. Pitted mainly against U.S.-based competitors that *weren't* at the mercy of the exchange rate, Rotosound began to lose ground. The onset of a recession in 1991 only compounded its problems—and when James How died of a stroke in 1994, Jason found himself in the thick of a company in serious trouble. Then in his late 20s and a relative novice at Rotosound, he remembers thinking, "What do I do now?"

For the next two years, Jason went on the road as his own sales rep, carting around a box of samples and trying to make up lost revenues with more sales. Eventually he realized it wasn't the solution he needed. "Sales had gone up but the company still wasn't making any money," he says. "I realized the real focus needed to be on production."

Ultimately Jason, who holds a degree in engineering, would spend the better part of eight years building new string-winding machines—starting with the simplest and progressing to the most complex—to replace every machine on Rotosound's factory floor.

THE MACHINES

In his best-seller *Moneyball*, author Michael Lewis profiled a professional baseball team that learned to compete against better-funded rivals by measuring variables no one had thought to measure before, finding gaps in the conventional wisdom of running a franchise and playing them to its own advantage. Jason's thought process, as he built and refined the new string-winding machines, was very similar. Studying one machine, he found it took four seconds to load in each string and reworked the process to eliminate that step—saving hundreds of man-hours per month. On another machine, he noted that it took five seconds for the motor to come to a full stop as each

string was wound and another loaded in. By installing a "brake" that stopped the mechanism dead, he shaved even more hours off the factory's monthly production time.

In the end, the machines Jason emerged with combined his father's design essentials with technology of a higher caliber. "I came up with essentially a hybrid of Dad's old machines and some new ideas I was able to incorporate," he says. Computer-controlled winding, for example, has refined consistency to a point that wasn't possible 40 years ago. Updated technology has also streamlined the production process to where many fewer workers can man the operation, allowing the company to reduce its staff by 60% since the introduction of the new machines. Only Rotosound's Tru Bass strings, which must be hand-wound to achieve their signature characteristics, are made in virtually the same way as they were 40 years ago. All told, the new machines have nearly tripled the factory's per-hour output.

Today, Rotosound's entire operation is still based at company headquarters in Sevenoaks. The company is principally owned by Jason How and his wife Kathy, Rotosound's production director, who oversees the manufacturing side through custom-designed software that tracks everything from orders to shipments to employee productivity in a single platform. Also holding shares in the company are Martyn How and John Doughty,

"I'D CUT OFF MY ARMS BEFORE I'D MOVE THE COMPANY OUT OF BRITAIN. ONCE YOU'VE DITCHED YOUR MANUFACTURING, YOU'VE SOLD OFF THE FAMILY SILVER—AND THEN WHAT DO YOU HAVE LEFT?"

world famous music strings

BILLY SHEEHAN
66
 RS 66LD
 45 65 80 105
 swing bass

BASS

MICHAEL AMOTT
10
 R10
 10 13 17 26 36 46
 roto yellows
 nickel electric guitar strings

ELECTRIC

JOHN RENBOURN
12
 S12
 12 16 24 36 44 56
 super bronze
 acoustic guitar

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Rotosound's managing director, who handles materials purchasing worldwide.

A U.K. COMPANY

About three years ago Rotosound unveiled a new string package, designed by longtime Art Director Steve Norton, combining its 50-year-old orange logo with a stylized image of the British Union Jack. In the face of rising labor costs and taxes associated with manufacturing locally, Rotosound has never considered moving production outside the U.K.—or as Jason says, “I’d cut my arms off before I’d move the company out of Britain. Once you’ve ditched your manufacturing, you’ve sold off the family silver—and then what do you have left?”

As he notes, however, production costs aren’t the only challenge in running a company out of the U.K. A British company also depends on export sales in a way that U.S. companies—with their home market of more than 300 million people—typically do not. That means constantly managing not only exchange rates and export costs, but perceptions of the brand in foreign markets.

In the United States, most critically, Rotosound has fought an uphill battle to make a place for its guitar strings alongside its better-known bass SKUs. Although acoustic and electric guitar strings now make up 80% of the company’s production, bass strings have accounted for 90% of Rotosound product sold in the U.S. Why such a discrepancy? Undoubtedly the “British Invasion” lore associated with Rotosound’s bass strings still dominates its image in the U.S., although its guitar strings can also claim their share of star power. A few years ago, for instance, the company reintroduced a classic “British Steels” set favored by Hendrix, Pete Townshend, and Brian May.

Ultimately Jason concluded that with multiple U.S. distributors, some carrying a wide range of Rotosound SKUs but many representing just one or two of its best known sets, the company’s full selection was never reaching most U.S. dealers. So in 2010, Rotosound took a calculated risk. Canceling every one of its U.S. distribution agreements,



Roger Waters of Pink Floyd was an early Rotosound endorsee.

the company began channeling all U.S. business through its own sales office in North Hollywood, California, with support from a sales team from OMG Music, a sales and distribution company with more than 20 years’ experience



The reintroduction of Rotosound’s British Steels, favored by Jimi Hendrix and Pete Townshend, highlighted the company’s legacy in guitar strings as well as its best-known bass offerings.

in the U.S. music industry. Jason believed the new arrangement would allow for a more complete showing the U.S., and the numbers bore him out: At the end of one year, U.S. sales had risen 20%. “That shows more of our product is getting to the customer,”

says Jason. “We now have dealers who were only carrying one or two SKUs becoming fully fledged Rotosound dealers. We’ve tried to remove every possible barrier.”

Now represented in more than 60 countries, Rotosound has long since outstripped its home market in sales and influence—yet it will probably always be associated with a certain place and time in music history. At the company’s Sevenoaks offices, old photographs and clippings have been preserved along with notes, ledgers, engineering schematics, and artist correspondence from the earliest years of the company. Jason, who was only a year old when his father and John Entwistle designed Rotosound’s most famous string, has made a decades-long study of company records both musical and technical. They have become his most enduring blueprint. “There’s a lot of history here,” says Jason. “Over the years I’ve learned so many things by looking through the old notes on the way the machines were built, the way the strings were made. It’s been a real exercise in art and engineering working together.”

www.rotosound.com